Synthetic biomaterials as instructive extracellular micr in tissue engineering

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Citation Report

#	Article	IF	Citations
6	Bioassay development. , 0, , 67-84.		0
7	Discovery of a sulfated tetrapeptide that binds to vascular endothelial growth factor. Acta Biomaterialia, 2005, 1, 451-459.	4.1	73
8	Protein engineering approaches to biomaterials design. Current Opinion in Biotechnology, 2005, 16, 422-426.	3.3	171
9	Extracellular Stimulation in Tissue Engineering. Annals of the New York Academy of Sciences, 2005, 1047, 386-394.	1.8	66
10	Surface-Nucleated Assembly of Fibrillar Extracellular Matrices. Advanced Materials, 2005, 17, 2604-2608.	11.1	25
11	Quantitative Analysis of Developing Tissues. AICHE Journal, 2005, 51, 1312-1318.	1.8	11
12	Get a grip: integrins in cellâ€“biomaterial interactions. Biomaterials, 2005, 26, 7525-7529.	5.7	292
13	New proteins in a materials world. Current Opinion in Biotechnology, 2005, 16, 416-421.	3.3	34
14	Nano- and micro-fiber combined scaffolds: A new architecture for bone tissue engineering. Journal of Materials Science: Materials in Medicine, 2005, 16, 1099-1104.	1.7	310
15	Engineering biomaterials to control cell function. Materials Today, 2005, 8, 28-35.	8.3	190
17	Requirements for the Manufacturing of Scaffold Biomaterial With Features at Multiple Scales. , 2005, , 217.		0
18	Gene Therapy Progress and Prospects: In tissue engineering. Gene Therapy, 2005, 12, 1725-1733.	2.3	39
19	Synthesis of Collagen-like Peptide Polymers by Native Chemical Ligation. Macromolecules, 2005, 38, 7555-7561.	2.2	119
20	2ÂÂSurface biocompatibility. Annual Reports on the Progress of Chemistry Section C, 2005, 101, 14.	4.4	44
21	Synthetic octacalcium phosphate (OCP) is an effective scaffold to regenerate bone. International Congress Series, 2005, 1284, 290-295.	0.2	10
22	Activation of valvular interstitial cells is mediated by transforming growth factor-Î²1 interactions with matrix molecules. Matrix Biology, 2005, 24, 428-437.	1.5	108
23	Engineering a mimicry of bone marrow tissue ex vivo. Journal of Bioscience and Bioengineering, 2005, 100, 28-35.	1.1	64
24	â€œDesignerâ€•scaffolds for tissue engineering and regeneration. Israel Journal of Chemistry, 2005, 45, 487-494.	1.0	36

#	Article	IF	Citations
25	Heart Valve Tissue Engineering. Circulation Research, 2005, 97, 743-755.	2.0	282
26	Exploring and Engineering the Cell Surface Interface. Science, 2005, 310, 1135-1138.	6.0	2,383
27	Fabrication of Hyaluronic Acid Hydrogel Beads for Cell Encapsulation. Biotechnology Progress, 2006, 22, 297-302.	1.3	66
28	Dermal templates and the wound-healing paradigm: the promise of tissue regeneration. Expert Review of Medical Devices, 2006, 3, 471-484.	1.4	36
29	Recombinant Protein-co-PEG Networks as Cell-Adhesive and Proteolytically Degradable Hydrogel Matrixes. Part II:Â Biofunctional Characteristics. Biomacromolecules, 2006, 7, 3019-3029.	2.6	176
31	Applications of gene therapy and adult stem cells in bone bioengineering. Regenerative Medicine, 2006, 1, 549-561.	0.8	30
32	Investigating the cellular response to nanofibrous materials by use of a multi-walled carbon nanotube model. Journal of Experimental Nanoscience, 2006, 1, 1-12.	1.3	28
33	Inductive tissue engineering with protein and DNA-releasing scaffolds. Molecular BioSystems, 2006, 2, 36-48.	2.9	67
34	A neuroinductive biomaterial based on dopamine. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16681-16686.	3.3	39
35	Bone Regeneration with a Transitory Scaffold Modifying Local Environment. , 2006, , .		0
36	Biomimetic electrospun nanofibers for tissue regeneration. Biomedical Materials (Bristol), 2006, 1, R45-R53.	1.7	238
37	Biomaterials: A primer for surgeons. Seminars in Pediatric Surgery, 2006, 15, 276-283.	0.5	70
38	Interfaces to Control Cell-Biomaterial Adhesive Interactions. , 0, , 171-190.		77
39	Heparin Binding Nanostructures to Promote Growth of Blood Vessels. Nano Letters, 2006, 6, 2086-2090.	4.5	404
40	Hydrogels for Musculoskeletal Tissue Engineering. Advances in Polymer Science, 2006, , 95-144.	0.4	133
41	Fibronectin Functional Domains Coupled to Hyaluronan Stimulate Adult Human Dermal Fibroblast Responses Critical for Wound Healing. Tissue Engineering, 2006, 12, 601-613.	4.9	174
42	Enzyme-responsive materials: a new class of smart biomaterials. Journal of Materials Chemistry, 2006, 16, 2217.	6.7	430
43	Refolding Hydrogels Self-Assembled fromN-(2-Hydroxypropyl)methacrylamide Graft Copolymers by Antiparallel Coiled-Coil Formation. Biomacromolecules, 2006, 7, 1187-1195.	2.6	145

#	Article	IF	Citations
44	Design of Custom-Shaped Vascularized Tissues Using Microtissue Spheroids as Minimal Building Units. Tissue Engineering, 2006, 12, 2151-2160.	4.9	146
45	Fluorescent Aromatic Platforms for Cell Patterning. Langmuir, 2006, 22, 5528-5532.	1.6	19
46	Biodegradable scaffolds â€“ delivery systems for cell therapies. Expert Opinion on Biological Therapy, 2006, 6, 485-498.	1.4	37
47	Polyelectrolyte Multilayer Films as Substrates for Photoreceptor Cells. Biomacromolecules, 2006, 7, 86-94.	2.6	64
48	Modulation of Chondrocyte Phenotype for Tissue Engineering by Designing the Biologicâ”Polymer Carrier Interface. Biomacromolecules, 2006, 7, 3012-3018.	2.6	20
49	Assembly of Three-Dimensional Polymeric Constructs Containing Cells/Biomolecules Using Carbon Dioxide. Journal of the American Chemical Society, 2006, 128, 14040-14041.	6.6	16
50	A Review of New Developments in Tissue Engineering Therapy for Periodontitis. Dental Clinics of North America, 2006, 50, 265-276.	0.8	49
51	Gene Therapeutics for Periodontal Regenerative Medicine. Dental Clinics of North America, 2006, 50, 245-263.	0.8	84
52	ZOning out Tight Junctions. Cell, 2006, 126, 647-649.	13.5	34
53	Matrix Control of Stem Cell Fate. Cell, 2006, 126, 645-647.	13.5	258
54	Toward xeno-free culture of human embryonic stem cells. International Journal of Biochemistry and Cell Biology, 2006, 38, 1063-1075.	1.2	167
55	Biomimetic nanofibrous scaffolds: Preparation and characterization of chitin/silk fibroin blend nanofibers. International Journal of Biological Macromolecules, 2006, 38, 165-173.	3.6	170
56	Targeting dendritic cells with biomaterials: developing the next generation of vaccines. Trends in Immunology, 2006, 27, 573-579.	2.9	390
57	Modulating Extracellular Matrix at Interfaces of Polymeric Materials. Advances in Polymer Science, 2006, , 63-93.	0.4	36
60	Chemiluminescence as a Probe of Polymer Oxidation. Australian Journal of Chemistry, 2006, 59, 485.	0.5	23
61	Cellular responses to a nanofibrous environment. Nano Today, 2006, 1, 34-43.	6.2	58
63	Probing the role of multicellular organization in three-dimensional microenvironments. Nature Methods, 2006, 3, 369-375.	9.0	523
64	Capturing complex 3D tissue physiology in vitro. Nature Reviews Molecular Cell Biology, 2006, 7, 211-224.	16.1	2,002

#	Article	IF	Citations
65	Enhanced extracellular matrix production and differentiation of human embryonic germ cell derivatives in biodegradable poly(Îµ-caprolactone-co-ethyl ethylene phosphate) scaffold. Acta Biomaterialia, 2006, 2, 365-376.	4.1	5
66	Bioluminescent imaging: Emerging technology for non-invasive imaging of bone tissue engineering. Biomaterials, 2006, 27, 1851-1858.	5.7	43
67	Biocompatibility of cluster-assembled nanostructured TiO2 with primary and cancer cells. Biomaterials, 2006, 27, 3221-3229.	5.7	130
68	Albumin-derived nanocarriers: Substrates for enhanced cell adhesive ligand display and cell motility. Biomaterials, 2006, 27, 3589-98.	5.7	14
69	Electrospinning of chitin nanofibers: Degradation behavior and cellular response to normal human keratinocytes and fibroblasts. Biomaterials, 2006, 27, 3934-3944.	5.7	308
70	Synthesis of cell-adhesive dextran hydrogels and macroporous scaffolds. Biomaterials, 2006, 27, 5277-5285.	5.7	131
71	Integrin specificity and enhanced cellular activities associated with surfaces presenting a recombinant fibronectin fragment compared to RGD supports. Biomaterials, 2006, 27, 5459-5470.	5.7	221
72	Novel materials for bone and cartilage regeneration. Current Opinion in Chemical Biology, 2006, 10, 568-575.	2.8	110
73	Microstructured extracellular matrices in tissue engineering and development. Current Opinion in Biotechnology, 2006, 17, 518-523.	3.3	104
74	The effect of structural alterations of PEG-fibrinogen hydrogel scaffolds on 3-D cellular morphology and cellular migration. Biomaterials, 2006, 27, 1496-1506.	5.7	228
75	The effect of natural extracellular matrix deposited on synthetic polymers on cultured primary hepatocytes. Biomaterials, 2006, 27, 4519-4528.	5.7	39
76	Applications of nano-patterning to tissue engineering. Microelectronic Engineering, 2006, 83, 1577-1581.	1.1	71
77	Stem Cells and Tissue Engineering: Past, Present, and Future. Annals of the New York Academy of Sciences, 2006, 1068, 352-366.	1.8	111
78	Tissue engineering by modulated gene deliveryâ˜†. Advanced Drug Delivery Reviews, 2006, 58, 535-554.	6.6	51
79	Zonal release of proteins within tissue engineering scaffolds. Journal of Materials Science: Materials in Medicine, 2006, 17, 1049-1056.	1.7	37
80	Heart Valve Tissue Engineering: Concepts, Approaches, Progress, and Challenges. Annals of Biomedical Engineering, 2006, 34, 1799-1819.	1.3	273
81	Construction of epidermal growth factor fusion protein with cell adhesive activity. Biomaterials, 2006, 27, 3451-3458.	5.7	55
82	The use of poly(ethylene glycol) hydrogels to investigate the impact of ECM chemistry and mechanics on smooth muscle cells. Biomaterials, 2006, 27, 4881-4893.	5.7	318

#	Article	IF	Citations
83	Engineering tissues for in vitro applications. Current Opinion in Biotechnology, 2006, 17, 524-531.	3.3	124
84	Biomimetic approaches to protein and gene delivery for tissue regeneration. Trends in Biotechnology, 2006, 24, 331-337.	4.9	58
85	Bioengineered muscle constructs and tissue-based therapy for cardiac disease. Progress in Pediatric Cardiology, 2006, 21, 167-171.	0.2	2
86	Thermoreversible laminin-functionalized hydrogel for neural tissue engineering. Journal of Biomedical Materials Research - Part A, 2006, 77A, 718-725.	2.1	165
87	Surface adsorption of DNA to tissue engineering scaffolds for efficient gene delivery. Journal of Biomedical Materials Research - Part A, 2006, 77A, 50-58.	2.1	91
88	Mimicking cellâ€“cell interactions at the biomaterialâ€“cell interface for control of stem cell differentiation. Journal of Biomedical Materials Research - Part A, 2006, 79A, 94-103.	2.1	91
89	Osteoblast-like cell attachment to and calcification of novel phosphonate-containing polymeric substrates. Journal of Biomedical Materials Research - Part A, 2006, 78A, 433-440.	2.1	47
90	Octacalcium phosphate combined with collagen orthotopically enhances bone regeneration. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 79B, 210-217.	1.6	84
91	Regenerated Silk Fibroin Nanofibers: Water Vapor-Induced Structural Changes and Their Effects on the Behavior of Normal Human Cells. Macromolecular Bioscience, 2006, 6, 285-292.	2.1	144
92	Immobilized Hyperbranched Glycoacrylate Films as Bioactive Supports. Macromolecular Bioscience, 2006, 6, 658-666.	2.1	37
93	Alginate Hydrogels as Biomaterials. Macromolecular Bioscience, 2006, 6, 623-633.	2.1	1,500
94	Dual-Syringe Reactive Electrospinning of Cross-Linked Hyaluronic Acid Hydrogel Nanofibers for Tissue Engineering Applications. Macromolecular Bioscience, 2006, 6, 811-817.	2.1	125
95	Intelligent Biomatrices and Engineered Tissue Constructs: In-Vitro Models for Drug Discovery and Toxicity Testing. , 2006, , 1-51.		4
96	An Overview on Bioreactor Design, Prototyping and Process Control for Reproducible Three-Dimensional Tissue Culture. , 2006, , 53-78.		7
97	Responsive Polymers at the Biology/Materials Science Interface. Advanced Materials, 2006, 18, 3321-3328.	11.1	190
98	Tissue-engineering scaffolds: can we re-engineer mother nature?. Expert Review of Medical Devices, 2006, 3, 9-15.	1.4	27
99	Reparative medicine: from tissue engineering to joint surface regeneration. Regenerative Medicine, 2006, 1, 59-69.	0.8	15
100	Research Issues in Regenerative Medicine. , 2006, , 405-431.		0

#	Article	IF	Citations
101	Solid-Phase Synthesis of Reactive Peptide Crosslinker by Selective Deprotection. Protein and Peptide Letters, 2006, 13, 715-718.	0.4	21
102	Evaluation of 5% Na₂O-Incorporated Calcium Metaphosphate as a Scaffold for Tissue-Engineered Bone Regeneration. Key Engineering Materials, 2006, 309-311, 985-988.	0.4	2
103	Quantifying the relation between adhesion ligand-receptor bond formation and cell phenotype. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 18534-18539.	3.3	90
104	Designing a nano-interface in a microfluidic chip to probe living cells: Challenges and perspectives. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6419-6424.	3.3	64
105	Self-assembly of synthetic collagen triple helices. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 3028-3033.	3.3	281
106	Repair of full-thickness articular cartilage defects by cultured mesenchymal stem cells transfected with the transforming growth factor Î² 1 gene. Biomedical Materials (Bristol), 2006, 1, 206-215.	1.7	81
107	Renovation of the injured heart with myocardial tissue engineering. Expert Review of Cardiovascular Therapy, 2006, 4, 239-252.	0.6	43
108	Chapter 4 Challenges in Tissue Engineering. Interface Science and Technology, 2006, 8, 423-462.	1.6	2
109	The Intersection of Biology and Materials Science. MRS Bulletin, 2006, 31, 19-27.	1.7	42
110	Genetic Engineering for Skeletal Regenerative Medicine. Annual Review of Biomedical Engineering, 2007, 9, 87-119.	5.7	35
111	Commentary: Engineering of Tissue Healing and Regeneration. Tissue Engineering, 2007, 13, 1393-1398.	4.9	40
112	Engineered Cell-Adhesive Nanoparticles Nucleate Extracellular Matrix Assembly. Tissue Engineering, 2007, 13, 567-578.	4.9	7
113	Periodontal-Tissue Engineering. , 2007, , 1095-1109.		3
114	Staged in vitro reconstitution and implantation of engineered rat kidney tissue. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20938-20943.	3.3	79
115	Generation of Bioactive Nanostructured Interfaces to Mimic Cellular Microenvironments. Materials Research Society Symposia Proceedings, 2007, 1062, 1.	0.1	0
116	Effects of the Mechanical Properties of Collagen Gel on the In Vitro Formation of Microvessel Networks by Endothelial Cells. Tissue Engineering, 2007, 13, 1443-1453.	4.9	166
118	Fully Interconnected Globular Porous Biphasic Calcium Phosphate Ceramic Scaffold Facilitates Osteogenic Repair. Key Engineering Materials, 2008, 361-363, 119-122.	0.4	6
119	Modified Fibrin Hydrogel Matrices: Both, 3D-Scaffolds and Local and Controlled Release Systems to Stimulate Angiogenesis. Current Pharmaceutical Design, 2007, 13, 3597-3607.	0.9	65

#	Article	IF	Citations
120	Bio surface-engineering of titanium materials. BIOmaterialien: Offizielles Organ Der Deutschen Gesellschaft Fuer Biomaterialien, 2007, 8, .	0.1	2
121	Matrix Effects. , 2007, , 297-308.		3
122	Three-Dimensional Scaffolds. , 2007, , 359-373.		16
123	In Vitro Vascularization of Human Connective Microtissues. Methods in Molecular Medicine, 2007, 140, 153-166.	0.8	11
124	Combining tissue engineering and drug delivery. , 2007, , 129-152.		0
125	Engineering of tissues and organs. , 2007, , 269-293.		0
126	Spatially Patterned Gene Delivery for Localized Neuron Survival and Neurite Extension. Molecular Therapy, 2007, 15, 705-712.	3.7	45
127	Engineering the Follicle Microenvironment. Seminars in Reproductive Medicine, 2007, 25, 287-299.	0.5	112
128	Demystifying the Effects of a Threeâ€Dimensional Microenvironment in Tissue Morphogenesis. Methods in Cell Biology, 2007, 83, 547-583.	0.5	72
129	Cell-based cardiac pumps and tissue-engineered ventricles. Regenerative Medicine, 2007, 2, 391-406.	0.8	22
131	Novel Method to Monitor Cell Survival and Distribution in PLGA Degradable Scaffolds. , 2007, , .		1
132	Genomic and Morphological Changes of Neuroblastoma Cells in Response to Three-Dimensional Matrices. Tissue Engineering, 2007, 13, 1035-1047.	4.9	87
133	Bespoke Human Hypertrophic Chondrocytic Cell Lines Provide the Osteoinductive Signals Required for Vascularized Bone Formation. Tissue Engineering, 2007, 13, 133-145.	4.9	7
134	Applications of hydrogels for neural cell engineering. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 1223-1244.	1.9	58
135	Interstitial Flow and Its Effects in Soft Tissues. Annual Review of Biomedical Engineering, 2007, 9, 229-256.	5.7	491
136	Regional brand image and perceived wine quality: the consumer perspective. International Journal of Wine Business Research, 2007, 19, 276-297.	1.0	209
137	Tissue engineering of heart valves using decellularized xenogeneic or polymeric starter matrices. Philosophical Transactions of the Royal Society B: Biological Sciences, 2007, 362, 1505-1512.	1.8	80
138	Protein Precoating of Elastomeric Tissue-Engineering Scaffolds Increased Cellularity, Enhanced Extracellular Matrix Protein Production, and Differentially Regulated the Phenotypes of Circulating Endothelial Progenitor Cells. Circulation, 2007, 116, I55-63.	1.6	71

#	Article	IF	Citations
139	The Dynamics of Cellâ€“ECM Interactions. , 2007, , 81-99.		1
140	Engineering Functional Tissues. , 2007, , 137-153.		10
141	Development of finely dispersed Ti- and Zr-doped isotropic graphites for the divertor of next step fusion devices. Physica Scripta, 2007, T128, 60-65.	1.2	11
142	Supramolecular Biomaterials. A Modular Approach towards Tissue Engineering. Bulletin of the Chemical Society of Japan, 2007, 80, 2047-2073.	2.0	121
143	Mesenchymal stem cells in rheumatology: a regenerative approach to joint repair. Clinical Science, 2007, 113, 339-348.	1.8	46
144	Nerve bioengineering. , 2007, , 466-496.		0
145	Surface Characteristics of Plasma-Treated PLGA Nanofibers. Macromolecular Symposia, 2007, 249-250, 103-108.	0.4	20
146	Biodegradable Hydrogels. , 2007, , 5-1-5-44.		4
147	Modeling Tissue Morphogenesis and Cancer in 3D. Cell, 2007, 130, 601-610.	13.5	1,557
148	Probing the role of microenvironment for microencapsulated Sacchromyces cerevisiae under osmotic stress. Journal of Biotechnology, 2007, 128, 150-161.	1.9	23
149	Nanostructured materials for applications in drug delivery and tissue engineering. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 241-268.	1.9	897
150	Wound Repair. , 2007, , 1149-1166.		4
151	Regulating Myoblast Phenotype Through Controlled Gel Stiffness and Degradation. Tissue Engineering, 2007, 13, 1431-1442.	4.9	195
152	Biomedical and Biotechnological Applications of Elastin-Like Polypeptides. Polymer Reviews, 2007, 47, 121-154.	5.3	73
154	Laser surface treatment for porous and textured Caâ€“P bio-ceramic coating on Tiâ€“6Alâ€“4V. Biomedical Materials (Bristol), 2007, 2, 274-281.	1.7	33
155	Stem Cell Assays. Methods in Molecular Biology, 2007, , .	0.4	3
156	Bioactive Proteinaceous Hydrogels from Designed Bifunctional Building Blocks. Biomacromolecules, 2007, 8, 2990-2994.	2.6	62
157	Designed triple-helical peptides as tools for collagen biochemistry and matrix engineering. Philosophical Transactions of the Royal Society B: Biological Sciences, 2007, 362, 1281-1291.	1.8	70

#	Article	IF	Citations
159	Use of bone morphogenetic proteins for augmentation of bone regeneration. Journal of the American Veterinary Medical Association, 2007, 231, 1039-1055.	0.2	30
160	Design of Biphasic Polymeric 3-Dimensional Fiber Deposited Scaffolds for Cartilage Tissue Engineering Applications. Tissue Engineering, 2007, 13, 361-371.	4.9	50
161	Enzyme-triggered cell attachment to hydrogel surfaces. Soft Matter, 2007, 3, 547.	1.2	60
162	Biomimetic materials processing for tissue-engineering processes. Journal of Materials Chemistry, 2007, 17, 3974.	6.7	58
163	Fabrication of microfluidic hydrogels using molded gelatin as a sacrificial element. Lab on A Chip, 2007, 7, 720.	3.1	432
164	Rapid Cross-Linking of Elastin-like Polypeptides with (Hydroxymethyl)phosphines in Aqueous Solution. Biomacromolecules, 2007, 8, 1463-1470.	2.6	191
165	Substrate-Modified Hydrogels for Autonomous Sensing of Botulinum Neurotoxin Type A. Chemistry of Materials, 2007, 19, 5842-5844.	3.2	25
166	Interplay Between PEO Tether Length and Ligand Spacing Governs Cell Spreading on RGD-Modified PMMA-g-PEO Comb Copolymers. Biomacromolecules, 2007, 8, 3206-3213.	2.6	66
167	Early Keratinocyte Differentiation on Micropillar Interfaces. Nano Letters, 2007, 7, 287-294.	4.5	49
168	Switching the Electrochemical Impedance of Low-Density Self-Assembled Monolayers. Langmuir, 2007, 23, 297-304.	1.6	24
169	Inherent Antibacterial Activity of a Peptide-Based Î²-Hairpin Hydrogel. Journal of the American Chemical Society, 2007, 129, 14793-14799.	6.6	316
171	Material Properties and Cytocompatibility of Injectable MMP Degradable Poly(lactide ethylene oxide) Tj ETQq1 1 0.784314 rgBT /Ove	2.6	96
172	Biomolecular Hydrogels Formed and Degraded via Site-Specific Enzymatic Reactions. Biomacromolecules, 2007, 8, 3000-3007.	2.6	264
173	Preparation of a Functionally Flexible, Three-Dimensional, Biomimetic Poly(L-Lactic Acid) Scaffold with Improved Cell Adhesion. Tissue Engineering, 2007, 13, 1205-1217.	4.9	32
175	Polymer Therapeutics. Science, 2007, 317, 1182-1183.	6.0	78
176	The effect of novel nitrogen-rich plasma polymer coatings on the phenotypic profile of notochordal cells. BioMedical Engineering OnLine, 2007, 6, 33.	1.3	11
177	Electrostatic Interactions Modulate the Conformation of Collagen I. Biophysical Journal, 2007, 92, 2108-2119.	0.2	100
178	Experimental tissue regeneration by DDS technology of bio-signaling molecules. Journal of Dermatological Science, 2007, 47, 189-199.	1.0	15

#	Article	IF	Citations
179	Polarization of hippocampal neurons with competitive surface stimuli: contact guidance cues are preferred over chemical ligands. Journal of the Royal Society Interface, 2007, 4, 223-233.	1.5	90
180	Hydrogels as Extracellular Matrices for Skeletal Tissue Engineering: State-of-the-Art and Novel Application in Organ Printing. Tissue Engineering, 2007, 13, 1905-1925.	4.9	420
181	Cell Responses to Biomimetic Protein Scaffolds Used in Tissue Repair and Engineering. International Review of Cytology, 2007, 262, 75-150.	6.2	123
182	Engineering the heart piece by piece: state of the art in cardiac tissue engineering. Regenerative Medicine, 2007, 2, 125-144.	0.8	40
183	Electrospun matrices made of poly(Î±-hydroxy acids) for medical use. Nanomedicine, 2007, 2, 441-457.	1.7	54
184	Cell and Tissue Regenerative Engineering. , 0, , 456-467.		1
185	Mechanobiology of mesenchymal stem cells and their use in cardiovascular repair. Frontiers in Bioscience - Landmark, 2007, 12, 5098.	3.0	75
186	Postnatal Stem Cells. , 2007, , 459-468.		0
187	Finite Element Analysis of Meniscal Anatomical 3D Scaffolds: Implications for Tissue Engineering. Open Biomedical Engineering Journal, 2007, 1, 23-34.	0.7	26
188	Notch signaling pathway and tissue engineering. Frontiers in Bioscience - Landmark, 2007, 12, 5143.	3.0	22
189	Human stem cells, chromatin, and tissue engineering: Boosting relevancy in developmental toxicity testing. Birth Defects Research Part C: Embryo Today Reviews, 2007, 81, 20-40.	3.6	6
190	Integrin-dependent cell behavior on ECM peptide-conjugated chitosan membranes. Biopolymers, 2007, 88, 122-130.	1.2	39
191	Accelerated formation of multicellular 3-D structures by cell-to-cell cross-linking. Biotechnology and Bioengineering, 2007, 97, 1617-1625.	1.7	37
193	Facile Preparation of Complex Protein Architectures with Sub-100-nm Resolution on Surfaces. Angewandte Chemie - International Edition, 2007, 46, 6837-6840.	7.2	112
194	Fabrication of Cellular Multilayers with Nanometer-Sized Extracellular Matrix Films. Angewandte Chemie - International Edition, 2007, 46, 4689-4692.	7.2	185
195	Lessons from musculoskeletal stem cell research: The key to successful regenerative medicine development. Arthritis and Rheumatism, 2007, 56, 714-721.	6.7	11
198	Self-Assembling Nanostructures from Coiled-Coil Peptides. , 0, , 17-38.		9
199	Poly(Ethylene Glycol) Based Hydrogels for Intraocular Applications. Advanced Engineering Materials, 2007, 9, 1141-1149.	1.6	38

#	Article	IF	Citations
200	Multifunctional Hydrogels that Promote Osteogenic Human Mesenchymal Stem Cell Differentiation Through Stimulation and Sequestering of Bone Morphogenic Protein 2. Advanced Functional Materials, 2007, 17, 2085-2093.	7.8	91
201	Field-Driven Biofunctionalization of Polymer Fiber Surfaces during Electrospinning. Advanced Materials, 2007, 19, 87-91.	11.1	106
202	Enzyme-Responsive Polymer Hydrogel Particles for Controlled Release. Advanced Materials, 2007, 19, 1252-1256.	11.1	267
203	Myogenic Induction of Aligned Mesenchymal Stem Cell Sheets by Culture on Thermally Responsive Electrospun Nanofibers. Advanced Materials, 2007, 19, 2775-2779.	11.1	197
204	Universal Gradient Substrates for â€œClickâ€•Biofunctionalization. Advanced Materials, 2007, 19, 965-969.	11.1	124
205	The primacy of octacalcium phosphate collagen composites in bone regeneration. Journal of Biomedical Materials Research - Part A, 2007, 83A, 725-733.	2.1	55
206	Simplifying the extracellular matrix for 3-D cell culture and tissue engineering: A pragmatic approach. Journal of Cellular Biochemistry, 2007, 101, 1370-1383.	1.2	129
207	The regulation of osteogenesis by ECM rigidity in MC3T3-E1 cells requires MAPK activation. Journal of Cellular Physiology, 2007, 211, 661-672.	2.0	115
208	Cellâ€“matrix adhesion. Journal of Cellular Physiology, 2007, 213, 565-573.	2.0	788
209	Recent and Expected Roles of Plasmaâ€Polymerized Films for Biomedical Applications. Chemical Vapor Deposition, 2007, 13, 280-294.	1.4	139
210	Customized PEG-Derived Copolymers for Tissue-Engineering Applications. Macromolecular Bioscience, 2007, 7, 23-39.	2.1	183
211	Biotechnological Production of Spider-Silk Proteins Enables New Applications. Macromolecular Bioscience, 2007, 7, 401-409.	2.1	216
212	Improved Mesenchymal Stem Cell Seeding on RGD-Modified Poly(L-lactic acid) Scaffolds using Flow Perfusion. Macromolecular Bioscience, 2007, 7, 579-588.	2.1	60
213	Polymers to direct cell fate by controlling the microenvironment. Current Opinion in Biotechnology, 2007, 18, 448-453.	3.3	135
214	(iii) The relevance of mesenchymal stem cells in vivo for future orthopaedic strategies aimed at fracture repair. Orthopaedics and Trauma, 2007, 21, 262-267.	0.3	12
215	The development of high-throughput screening approaches for stem cell engineering. Current Opinion in Chemical Biology, 2007, 11, 388-393.	2.8	37
216	Matrix stiffness affects spontaneous contraction of cardiomyocytes cultured within a PEGylated fibrinogen biomaterial. Acta Biomaterialia, 2007, 3, 33-41.	4.1	146
217	Mechanisms of 3-D migration and matrix remodeling of fibroblasts within artificial ECMs. Acta Biomaterialia, 2007, 3, 615-629.	4.1	94

#	Article	IF	Citations
218	Macrophage matrix metalloproteinase-2/-9 gene and protein expression following adhesion to ECM-derived multifunctional matrices via integrin complexation. Biomaterials, 2007, 28, 285-298.	5.7	28
219	Assessment of hepatocellular function within PEG hydrogels. Biomaterials, 2007, 28, 256-270.	5.7	188
220	Primary hepatocyte survival on non-integrin-recognizable matrices without the activation of Akt signaling. Biomaterials, 2007, 28, 1093-1104.	5.7	32
221	Bone regeneration using hyaluronic acid-based hydrogel with bone morphogenic protein-2 and human mesenchymal stem cells. Biomaterials, 2007, 28, 1830-1837.	5.7	462
222	RGDâ€"Functionalized polymer brushes as substrates for the integrin specific adhesion of human umbilical vein endothelial cells. Biomaterials, 2007, 28, 2536-2546.	5.7	252
223	Controlling cell adhesion to surfaces via associating bioactive triblock proteins. Biomaterials, 2007, 28, 3325-3337.	5.7	60
224	Material-based regulation of the myofibroblast phenotype. Biomaterials, 2007, 28, 3378-3387.	5.7	61
225	Inkjet printing of macromolecules on hydrogels to steer neural stem cell differentiation. Biomaterials, 2007, 28, 3936-3943.	5.7	228
226	A multi-functional scaffold for tissue regeneration: The need to engineer a tissue analogue. Biomaterials, 2007, 28, 5093-5099.	5.7	232
227	Smart biomaterials design for tissue engineering and regenerative medicine. Biomaterials, 2007, 28, 5068-5073.	5.7	347
228	Fabrication methods of an engineered microenvironment for analysis of cellâ€"biomaterial interactions. Biomaterials, 2007, 28, 126-133.	5.7	111
229	Cell adaptation to a physiologically relevant ECM mimic with different viscoelastic properties. Biomaterials, 2007, 28, 671-679.	5.7	331
230	The influence of biomaterials on endothelial cell thrombogenicity. Biomaterials, 2007, 28, 2547-2571.	5.7	211
231	Epithelialization of hydrogels achieved by amine functionalization and co-culture with stromal cells. Biomaterials, 2007, 28, 5319-5331.	5.7	46
232	Synthetic polypeptides for biomedical applications. Progress in Polymer Science, 2007, 32, 858-875.	11.8	486
233	Smart polymeric gels: Redefining the limits of biomedical devices. Progress in Polymer Science, 2007, 32, 1083-1122.	11.8	538
234	Regulation of hepatocyte behaviors by galactose-carrying polymers through receptor-mediated mechanism. Reactive and Functional Polymers, 2007, 67, 1301-1310.	2.0	13
235	Bioresponsive hydrogels. Materials Today, 2007, 10, 40-48.	8.3	418

#	Article	IF	Citations
236	Hydrogels as smart biomaterials. Polymer International, 2007, 56, 1078-1098.	1.6	381
237	Microenvironmental regulation of biomacromolecular therapies. Nature Reviews Drug Discovery, 2007, 6, 455-463.	21.5	134
238	Tissue Engineering for Cutaneous Wounds. Journal of Investigative Dermatology, 2007, 127, 1018-1029.	0.3	436
239	Calcium phosphate surfaces promote osteogenic differentiation of mesenchymal stem cells. Journal of Cellular and Molecular Medicine, 2008, 12, 281-291.	1.6	218
240	Stem cell differentiation and expansion for clinical applications of tissue engineering. Journal of Cellular and Molecular Medicine, 2007, 11, 935-944.	1.6	96
241	Periodontal regeneration using novel glycidyl methacrylated dextran (Dex-GMA)/gelatin scaffolds containing microspheres loaded with bone morphogenetic proteins. Journal of Controlled Release, 2007, 121, 81-90.	4.8	88
242	Exogenous Recombinant Human BMP-2 Has Little Initial Effects on Human Osteoblastic Cells Cultured on Collagen Type I Coated/Noncoated Hydroxyapatite Ceramic Granules. Journal of Oral and Maxillofacial Surgery, 2007, 65, 485-493.	0.5	28
243	Stem cell therapies for heart disease: Why do we need bioengineers? [Cellular/Tissue Engineering]. IEEE Engineering in Medicine and Biology Magazine, 2007, 26, 76-79.	1.1	4
244	Synthesis and Characterization of Novel Thiol-Reactive Poly(ethylene glycol) Cross-Linkers for Extracellular-Matrix-Mimetic Biomaterials. Biomacromolecules, 2007, 8, 2883-2889.	2.6	106
245	Tethered Epidermal Growth Factor Provides a Survival Advantage to Mesenchymal Stem Cells. Stem Cells, 2007, 25, 1241-1251.	1.4	258
246	Concise Review: No Breakthroughs for Human Mesenchymal and Embryonic Stem Cell Culture: Conditioned Medium, Feeder Layer, or Feeder-Free; Medium with Fetal Calf Serum, Human Serum, or Enriched Plasma; Serum-Free, Serum Replacement Nonconditioned Medium, or Ad Hoc Formula? All That Glitters Is Not Gold!. Stem Cells, 2007, 25, 1603-1609.	1.4	272
247	Injectable matrices and scaffolds for drug delivery in tissue engineering. Advanced Drug Delivery Reviews, 2007, 59, 263-273.	6.6	565
248	Surface engineered and drug releasing pre-fabricated scaffolds for tissue engineering. Advanced Drug Delivery Reviews, 2007, 59, 249-262.	6.6	353
249	Matrices and scaffolds for delivery of bioactive molecules in bone and cartilage tissue engineering. Advanced Drug Delivery Reviews, 2007, 59, 339-359.	6.6	615
250	Matrices and scaffolds for DNA delivery in tissue engineering. Advanced Drug Delivery Reviews, 2007, 59, 292-307.	6.6	241
251	Matrices and scaffolds for protein delivery in tissue engineering. Advanced Drug Delivery Reviews, 2007, 59, 274-291.	6.6	320
252	Fibroblast mechanics in 3D collagen matricesâ˜†. Advanced Drug Delivery Reviews, 2007, 59, 1299-1305.	6.6	161
253	Cell responses to the mechanochemical microenvironmentâ€”Implications for regenerative medicine and drug deliveryâ˜†. Advanced Drug Delivery Reviews, 2007, 59, 1329-1339.	6.6	351

#	Article	IF	Citations
254	Cellular and multicellular form and functionâ˜†. Advanced Drug Delivery Reviews, 2007, 59, 1319-1328.	6.6	80
255	Micromechanical control of cell and tissue development: Implications for tissue engineeringâ˜†. Advanced Drug Delivery Reviews, 2007, 59, 1306-1318.	6.6	192
256	Enhancing sealing of fetal membrane defects using tissue engineered native amniotic scaffolds in the rabbit model. American Journal of Obstetrics and Gynecology, 2007, 196, 263.e1-263.e7.	0.7	37
258	Plasma-treated poly(lactic-co-glycolic acid) nanofibers for tissue engineering. Macromolecular Research, 2007, 15, 238-243.	1.0	106
259	VEGF165 and bFGF protein-based therapy in a slow release system to improve angiogenesis in a bioartificial dermal substitute in vitro and in vivo. Langenbeck's Archives of Surgery, 2007, 392, 305-314.	0.8	53
260	Rational design of hydrogels for tissue engineering: Impact of physical factors on cell behavior. Biomaterials, 2007, 28, 134-146.	5.7	425
261	Limits to the durability of arterial elastic tissue. Biomaterials, 2007, 28, 2021-2031.	5.7	32
262	Fluorescent resonance energy transfer: A tool for probing molecular cellâ€“biomaterial interactions in three dimensions. Biomaterials, 2007, 28, 2424-2437.	5.7	79
263	Enzymatic formation of modular cell-instructive fibrin analogs for tissue engineering. Biomaterials, 2007, 28, 3856-3866.	5.7	203
264	Biomolecular surface coating to enhance orthopaedic tissue healing and integration. Biomaterials, 2007, 28, 3228-3235.	5.7	228
265	Proteinâ€“polymer conjugates for forming photopolymerizable biomimetic hydrogels for tissue engineering. Biomaterials, 2007, 28, 3876-3886.	5.7	145
266	A new approach to the rationale discovery of polymeric biomaterials. Biomaterials, 2007, 28, 4171-4177.	5.7	91
267	A porous photocurable elastomer for cell encapsulation and culture. Biomaterials, 2007, 28, 4826-4835.	5.7	102
268	Towards understanding structure-stability and surface properties of laminin peptide YIGSR and mutants. Biophysical Chemistry, 2007, 129, 190-197.	1.5	3
269	Isothiocyanate-functionalized RGD peptides for tailoring cell-adhesive surface patterns. Biomaterials, 2008, 29, 3004-3013.	5.7	45
270	The promotion of osteoblastic differentiation of rat bone marrow stromal cells by a polyvalent plant mosaic virus. Biomaterials, 2008, 29, 4074-4081.	5.7	77
271	Endothelial cell colonization and angiogenic potential of combined nano- and micro-fibrous scaffolds for bone tissue engineering. Biomaterials, 2008, 29, 4306-4313.	5.7	167
272	Study of cell behaviour on a cellulose anti-adhesive substratum. Cellulose, 2008, 15, 347-357.	2.4	17

#	Article	IF	Citations
273	Synthesis and characterization of matrix metalloprotease sensitive-low molecular weight hyaluronic acid based hydrogels. Journal of Materials Science: Materials in Medicine, 2008, 19, 3311-3318.	1.7	76
274	Producing organs in the laboratory. Current Urology Reports, 2008, 9, 433-436.	1.0	6
275	Current progress on scaffolds of tissue engineering heart valves. Frontiers of Medicine in China, 2008, 2, 229-234.	0.1	3
276	The Inhibitory Effect of an RGD-Human Chitin-Binding Domain Fusion Protein on the Adhesion of Fibroblasts to Reacetylated Chitosan Films. Molecular Biotechnology, 2008, 40, 269-279.	1.3	5
277	Part II: Fibroblasts preferentially migrate in the direction of principal strain. Biomechanics and Modeling in Mechanobiology, 2008, 7, 215-225.	1.4	37
278	Biomaterials for tissue engineering of skin. Materials Today, 2008, 11, 26-35.	8.3	195
279	Biomaterials engineered for integration. Materials Today, 2008, 11, 44-51.	8.3	79
280	Biomimetic poly(amidoamine) hydrogels as synthetic materials for cell culture. Journal of Nanobiotechnology, 2008, 6, 14.	4.2	27
281	Manufacturing technologies of polymeric nanofibres and nanofibre yarns. Polymer International, 2008, 57, 837-845.	1.6	140
282	Control of Cell Behavior by Aligned Micro/Nanofibrous Biomaterial Scaffolds Fabricated by Spinneretâ€Based Tunable Engineered Parameters (STEP) Technique. Small, 2008, 4, 1153-1159.	5.2	67
283	Directâ€Write Nanoparticle Microarrays for Cell Assays. Small, 2008, 4, 1930-1935.	5.2	10
284	Targeted Delivery of Nanoparticles Bearing Fibroblast Growth Factorâ€2 by Ultrasonic Microbubble Destruction for Therapeutic Arteriogenesis. Small, 2008, 4, 1769-1777.	5.2	83
285	Biocompatibility and biodegradation of polyester and polyfumarate based-scaffolds for bone tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2008, 2, 33-42.	1.3	38
286	Effects of electrical stimulation in C2C12 muscle constructs. Journal of Tissue Engineering and Regenerative Medicine, 2008, 2, 279-287.	1.3	102
287	Evaluation of adult equine bone marrowâ€•and adiposeâ€derived progenitor cell chondrogenesis in hydrogel cultures. Journal of Orthopaedic Research, 2008, 26, 322-331.	1.2	186
288	Quantifying Interactions between Cell Receptors and Adhesion Ligandâ€Modified Polymers in Solution. Macromolecular Bioscience, 2008, 8, 140-145.	2.1	24
289	Structure and Properties of Ureaâ€Crosslinked Star Poly[(ethylene oxide)â€ranâ€(propylene oxide)] Hydrogels. Macromolecular Bioscience, 2008, 8, 923-931.	2.1	44
290	Photo Gelâ€“Sol/Solâ€“Gel Transition and Its Patterning of a Supramolecular Hydrogel as Stimuliâ€Responsive Biomaterials. Chemistry - A European Journal, 2008, 14, 3977-3986.	1.7	208

#	Article	IF	Citations
291	Threeâ€Dimensional Encapsulation of Live Cells by Using a Hybrid Matrix of Nanoparticles in a Supramolecular Hydrogel. Chemistry - A European Journal, 2008, 14, 10808-10815.	1.7	33
292	Electrospunâ€modified nanofibrous scaffolds for the mineralization of osteoblast cells. Journal of Biomedical Materials Research - Part A, 2008, 85A, 408-417.	2.1	121
293	Immobilized cytokines as biomaterials for manufacturing immune cell based vaccines. Journal of Biomedical Materials Research - Part A, 2008, 86A, 1033-1040.	2.1	12
294	Primary sequence of ionic selfâ€assembling peptide gels affects endothelial cell adhesion and capillary morphogenesis. Journal of Biomedical Materials Research - Part A, 2008, 87A, 494-504.	2.1	115
295	Scaffolds based on hyaluronan crosslinked with a polyaminoacid: Novel candidates for tissue engineering application. Journal of Biomedical Materials Research - Part A, 2008, 87A, 770-779.	2.1	10
296	Selfâ€assembling peptides: Sequence, secondary structure in solution and film formation. Biopolymers, 2008, 89, 906-915.	1.2	20
297	Photoinitiating polymerization to prepare biocompatible chitosan hydrogels. Journal of Applied Polymer Science, 2008, 110, 1059-1067.	1.3	30
298	Mechanicalâ€Forceâ€Induced Nucleation and Growth of Peptide Nanofibers at Liquid/Solid Interfaces. Angewandte Chemie - International Edition, 2008, 47, 4397-4400.	7.2	22
299	Ordering Transitions in Thermotropic Liquid Crystals Induced by the Interfacial Assembly and Enzymatic Processing of Oligopeptide Amphiphiles. Advanced Materials, 2008, 20, 1185-1190.	11.1	104
300	Ultrathin Coatings with Change in Reactivity over Time Enable Functional In Vitro Networks Of Insect Neurons. Advanced Materials, 2008, 20, 2751-2755.	11.1	23
301	3D Cellâ€Migration Studies using Twoâ€Photon Engineered Polymer Scaffolds. Advanced Materials, 2008, 20, 4494-4498.	11.1	222
303	Advanced biomaterials for skeletal tissue regeneration: Instructive and smart functions. Materials Science and Engineering Reports, 2008, 59, 38-71.	14.8	220
304	Gradient polymer surfaces for biomedical applications. Progress in Polymer Science, 2008, 33, 138-164.	11.8	210
305	Macromolecular monomers for the synthesis of hydrogel niches and their application in cell encapsulation and tissue engineering. Progress in Polymer Science, 2008, 33, 167-179.	11.8	209
306	Heparin intercalation into reconstituted collagen I fibrils: Impact on growth kinetics and morphology. Biomaterials, 2008, 29, 1-14.	5.7	82
307	Multiwall carbon nanotube scaffolds for tissue engineering purposes. Biomaterials, 2008, 29, 94-102.	5.7	402
308	The effect of enzymatically degradable poly(ethylene glycol) hydrogels on smooth muscle cell phenotype. Biomaterials, 2008, 29, 314-326.	5.7	129
309	Towards development of a dermal rudiment for enhanced wound healing response. Biomaterials, 2008, 29, 857-868.	5.7	70

#	Article	IF	Citations
310	Incorporation of a matrix metalloproteinase-sensitive substrate into self-assembling peptides â€“ A model for biofunctional scaffolds. Biomaterials, 2008, 29, 1713-1719.	5.7	152
311	Oxygen consumption of chondrocytes in agarose and collagen gels: A comparative analysis. Biomaterials, 2008, 29, 1484-1493.	5.7	82
312	The effect of integrin-specific bioactive coatings on tissue healing and implant osseointegration. Biomaterials, 2008, 29, 2849-2857.	5.7	208
313	Engineered extracellular matrices with cleavable crosslinkers for cell expansion and easy cell recovery. Biomaterials, 2008, 29, 4521-4531.	5.7	94
314	A graftable LDV peptidomimetic: Design, synthesis and application to a blood filtration membrane. Bioorganic and Medicinal Chemistry Letters, 2008, 18, 1084-1090.	1.0	17
315	Effects of extracellular matrix analogues on primary human fibroblast behavior. Acta Biomaterialia, 2008, 4, 67-75.	4.1	45
316	An adaptable hydrogel array format for 3-dimensional cell culture and analysis. Biomaterials, 2008, 29, 3346-3356.	5.7	99
317	Structural and functional characterisation of poly(vinyl alcohol) and heparin hydrogels. Biomaterials, 2008, 29, 4658-4664.	5.7	112
318	Stem cells and biomimetic materials strategies for tissue engineering. Materials Science and Engineering C, 2008, 28, 1189-1202.	3.8	130
319	Peptide-based biopolymers in biomedicine and biotechnology. Materials Science and Engineering Reports, 2008, 62, 125-155.	14.8	264
320	Enhancing the Reliability and Throughput of Neurosphere Culture on Hydrogel Microwell Arrays. Stem Cells, 2008, 26, 2586-2594.	1.4	73
321	Controlled drug delivery in tissue engineering. Advanced Drug Delivery Reviews, 2008, 60, 229-242.	6.6	369
322	Combinatorial and rational approaches to polymer synthesis for medicineâ˜†. Advanced Drug Delivery Reviews, 2008, 60, 971-978.	6.6	45
323	Wound repair and regeneration. Nature, 2008, 453, 314-321.	13.7	4,690
324	Materials in a cellular world. Nature Materials, 2008, 7, 617-618.	13.3	26
325	Drug-sensing hydrogels for the inducible release of biopharmaceuticals. Nature Materials, 2008, 7, 800-804.	13.3	207
326	Cellular/Tissue Engineering. IEEE Engineering in Medicine and Biology Magazine, 2008, 27, 109-113.	1.1	74
327	Oncogenic Ras-transformed human fibroblasts exhibit differential changes in contraction and migration in 3D collagen matrices. Experimental Cell Research, 2008, 314, 3081-3091.	1.2	21

#	Article	IF	Citations
328	Smart biomaterials for tissue engineering of cartilage. Injury, 2008, 39, 77-87.	0.7	104
329	Unraveling the microenvironmental influences on the normal mammary gland and breast cancer. Seminars in Cancer Biology, 2008, 18, 311-321.	4.3	236
330	Nanotechnology in vascular tissue engineering: from nanoscaffolding towards rapid vessel biofabrication. Trends in Biotechnology, 2008, 26, 338-344.	4.9	129
331	New materials for tissue engineering: towards greater control over the biological response. Trends in Biotechnology, 2008, 26, 382-392.	4.9	279
332	Synthetic Polymers. , 2008, , 604-635.		3
333	Biofunctionalization of Biomaterials for Accelerated in Situ Endothelialization: A Review. Biomacromolecules, 2008, 9, 2969-2979.	2.6	319
334	Photo-Cross-Linked PLA-PEO-PLA Hydrogels from Self-Assembled Physical Networks: Mechanical Properties and Influence of Assumed Constitutive Relationships. Biomacromolecules, 2008, 9, 2784-2791.	2.6	73
335	Rapid Prototyping of Hydrogels to Guide Tissue Formation. , 2008, , 49-65.		0
336	Microarchitecture of Three-Dimensional Scaffolds Influences Cell Migration Behavior via Junction Interactions. Biophysical Journal, 2008, 95, 4013-4024.	0.2	313
337	Cell Culture Models in Microfluidic Systems. Annual Review of Analytical Chemistry, 2008, 1, 423-449.	2.8	300
338	Advancing tissue engineering by using electrospun nanofibers. Regenerative Medicine, 2008, 3, 547-574.	0.8	60
339	Current status of regenerative medical therapy based on drug delivery technology. Reproductive BioMedicine Online, 2008, 16, 70-80.	1.1	37
340	From embryonic stem cells to blastema and MRL mice. Reproductive BioMedicine Online, 2008, 16, 425-461.	1.1	21
341	Experimental hepatology applied to stem cells. Digestive and Liver Disease, 2008, 40, 54-61.	0.4	9
342	Method to Analyze Three-Dimensional Cell Distribution and Infiltration in Degradable Scaffolds. Tissue Engineering - Part C: Methods, 2008, 14, 319-331.	1.1	149
343	De Novo Design of Strand-Swapped Î²-Hairpin Hydrogels. Journal of the American Chemical Society, 2008, 130, 4466-4474.	6.6	136
344	Three-Dimensional Fiber Deposition of Cell-Laden, Viable, Patterned Constructs for Bone Tissue Printing. Tissue Engineering - Part A, 2008, 14, 127-133.	1.6	358
345	Use of Hyaluronanâ€Derived Hydrogels for Threeâ€Dimensional Cell Culture and Tumor Xenografts. Current Protocols in Cell Biology, 2008, 40, Unit 10.14.	2.3	36

#	Article	IF	Citations
346	Compositional Alterations of Fibrin-Based Materials for RegulatingIn VitroNeural Outgrowth. Tissue Engineering - Part A, 2008, 14, 401-411.	1.6	37
347	Surface Modification of Biomaterials. , 2008, , 656-665.		3
348	Effect of chitin/silk fibroin nanofibrous bicomponent structures on interaction with human epidermal keratinocytes. International Journal of Biological Macromolecules, 2008, 42, 324-334.	3.6	77
349	Lymphoid tissue engineering: Invoking lymphoid tissue neogenesis in immunotherapy and models of immunity. Seminars in Immunology, 2008, 20, 137-146.	2.7	45
350	Cell Delivery Mechanisms for Tissue Repair. Cell Stem Cell, 2008, 2, 205-213.	5.2	316
351	Covalently immobilized biosignal molecule materials for tissue engineering. Soft Matter, 2008, 4, 46-56.	1.2	191
352	Cell Encapsulation in Biodegradable Hydrogels for Tissue Engineering Applications. Tissue Engineering - Part B: Reviews, 2008, 14, 149-165.	2.5	1,019
353	Dynamic Light Scattering Study of Self-Assembly of HPMA Hybrid Graft Copolymers. Biomacromolecules, 2008, 9, 510-517.	2.6	47
354	Synthesis and Evaluation of Novel Biodegradable Hydrogels Based on Poly(ethylene glycol) and Sebacic Acid as Tissue Engineering Scaffolds. Biomacromolecules, 2008, 9, 149-157.	2.6	121
355	Nanotechnology for regenerative medicine: nanomaterials for stem cell imaging. Nanomedicine, 2008, 3, 567-578.	1.7	200
356	Stimuli-responsive surfaces for bio-applications. Chemical Society Reviews, 2008, 37, 2512.	18.7	603
357	Morphology of Artificial Silica Matrices Formed via Autosilification of a Silaffin/Protein Polymer Chimera. Biomacromolecules, 2008, 9, 1-5.	2.6	39
358	Review of laser based biomimetic and bioactive Caâ€“P coatings. Materials Science and Technology, 2008, 24, 1144-1161.	0.8	16
359	Engineering tandem modular protein based reversible hydrogels. Chemical Communications, 2008, , 4144.	2.2	44
360	Multifunctional nanofibrous scaffold for tissue engineering. Journal of Experimental Nanoscience, 2008, 3, 329-345.	1.3	19
361	Critical factors in the design of growth factor releasing scaffolds for cartilage tissue engineering. Expert Opinion on Drug Delivery, 2008, 5, 543-566.	2.4	58
362	Chemical and biological functionalization of titanium for dental implants. Journal of Materials Chemistry, 2008, 18, 2404.	6.7	111
363	Modular self-assembling biomaterials for directing cellular responses. Soft Matter, 2008, 4, 2310.	1.2	60

#	Article	IF	Citations
364	Organization of Self-Assembled Peptideâ˜Polymer Nanofibers in Solution. Macromolecules, 2008, 41, 1430-1437.	2.2	55
365	Engineering Biomaterials for Synthetic Neural Stem Cell Microenvironments. Chemical Reviews, 2008, 108, 1787-1796.	23.0	95
366	Modeling Self-Assembly Processes Driven by Nonbonded Interactions in Soft Materials. Journal of Physical Chemistry B, 2008, 112, 10388-10398.	1.2	78
367	Cellâ€“Substrate Interactions. , 2008, , 666-685.		2
368	Direct Observation of Early-Time Hydrogelation in Î²-Hairpin Peptide Self-Assembly. Macromolecules, 2008, 41, 5763-5772.	2.2	83
369	Label-Free Optical Detection of Peptide Synthesis on a Porous Silicon Scaffold/Sensor. Langmuir, 2008, 24, 2908-2915.	1.6	18
370	Motif-Programmed Artificial Extracellular Matrix. Biomacromolecules, 2008, 9, 3098-3105.	2.6	30
371	Synthesis of Fluorogenic Polymers for Visualizing Cellular Internalization. Organic Letters, 2008, 10, 2997-3000.	2.4	62
372	An Approach to Modulate Degradation and Mesenchymal Stem Cell Behavior in Poly(ethylene glycol) Networks. Biomacromolecules, 2008, 9, 842-849.	2.6	78
373	In Situ Cross-Linking of Elastin-like Polypeptide Block Copolymers for Tissue Repair. Biomacromolecules, 2008, 9, 222-230.	2.6	151
374	Collagen-Based Biomimetic Nanofibrous Scaffolds: Preparation and Characterization of Collagen/Silk Fibroin Bicomponent Nanofibrous Structures. Biomacromolecules, 2008, 9, 1106-1116.	2.6	147
375	Integrating novel technologies to fabricate smart scaffolds. Journal of Biomaterials Science, Polymer Edition, 2008, 19, 543-572.	1.9	185
376	A Pilot Study to Evaluate a Tissue-Engineered Bilayered Cell Therapy as an Alternative to Tissue From the Palate. Journal of Periodontology, 2008, 79, 1847-1856.	1.7	92
377	cAMP/PKA pathway activation in human mesenchymal stem cells in vitro results in robust bone formation in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7281-7286.	3.3	196
378	Hydrostatic pressure effect on the electron mobility in a ZnSe/Zn _{1- x} Cd _x Se strained heterojunction. Chinese Physics B, 2008, 17, 4606-4613.	0.7	2
379	Time-Dependent 2D Modeling of Magnetron Plasma Torch in Turbulent Flow. Plasma Science and Technology, 2008, 10, 328-335.	0.7	5
380	Extracellular Matrix Protein-Coated Scaffolds Promote the Reversal of Diabetes After Extrahepatic Islet Transplantation. Transplantation, 2008, 85, 1456-1464.	0.5	133
381	Peptide modification of polysaccharide scaffolds for targeted cell signaling. , 2008, , 260-287.		1

#	Article	IF	Citations
382	Engineering a clinically-useful matrix for cell therapy. Organogenesis, 2008, 4, 42-47.	0.4	101
383	Designed PCL Nanofibers Fabricated Using a Modified Electrohydrodynamic Process for Tissue Engineering. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2008, 130, .	1.3	1
384	Electrospun gelatin/poly(L-lactide-co-Î¼-caprolactone) nanofibers for mechanically functional tissue-engineering scaffolds. Journal of Biomaterials Science, Polymer Edition, 2008, 19, 339-357.	1.9	71
385	Developments towards tissue-engineered, small-diameter arterial substitutes. Expert Review of Medical Devices, 2008, 5, 337-347.	1.4	70
386	Electrospinning: processing technique for tissue engineering scaffolding. International Materials Reviews, 2008, 53, 257-274.	9.4	147
387	Differentiation by association: is a cell's fate determined by the company it keeps?. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 294, H1503-H1504.	1.5	0
388	Myocardial tissue engineering: the extracellular matrixâ˜†. European Journal of Cardio-thoracic Surgery, 2008, 34, 229-241.	0.6	112
389	Biologically Active Chitosan Systems for Tissue Engineering and Regenerative Medicine. Current Topics in Medicinal Chemistry, 2008, 8, 354-364.	1.0	113
390	Influence of clinical application on bioresorbability: Host response. , 2008, , 267-318.		3
391	Current and Future Perspectives of Regenerative Medicine. , 2008, , 2-15.		7
392	Fundamentals of Cell-Based Therapies. , 2008, , 16-26.		4
393	Developmental Mechanisms of Regeneration. , 2008, , 100-125.		2
394	Engineering Cellular Microenvironments. , 2008, , 536-553.		0
395	Synthetic Biomaterials as Cell-Responsive Artificial Extracellular Matrices. , 2008, , 255-278.		0
396	Integrating principles of developmental biology in tissue engineering of heart valves. Future Cardiology, 2008, 4, 1-4.	0.5	0
397	Screening the Cellular Microenvironment: A Role for Microfluidics. IEEE Reviews in Biomedical Engineering, 2008, 1, 75-93.	13.1	30
399	Applications of Dendrimers in Tissue Engineering. Current Topics in Medicinal Chemistry, 2008, 8, 1225-1236.	1.0	89
400	Permeability testing of biomaterial membranes. Biomedical Materials (Bristol), 2008, 3, 034119.	1.7	13

#	Article	IF	Citations
401	Scaffold Stiffness Influences Cell Behavior: Opportunities for Skeletal Tissue Engineering. The Open Orthopaedics Journal, 2008, 2, 103-109.	0.1	170
402	Cell nutrition. , 2008, , 327-362.		6
403	Controlled release strategies in tissue engineering. , 2008, , 455-482.		2
404	Tissue engineering â€“ an introduction. , 2008, , xii-xxxvi.		11
405	Synergistic Actions of Hematopoietic and Mesenchymal Stem/Progenitor Cells in Vascularizing Bioengineered Tissues. PLoS ONE, 2008, 3, e3922.	1.1	87
406	Part 1: Scaffolds and Surfaces. Technology and Health Care, 2008, 16, 305-317.	0.5	32
407	Gene delivery systems for gene therapy in tissue engineering and central nervous system applications. International Journal of Artificial Organs, 2008, 31, 1017-1026.	0.7	7
408	Computationally assisted screening and design of cell-interactive peptides by a cell-based assay using peptide arrays and a fuzzy neural network algorithm. BioTechniques, 2008, 44, 393-402.	0.8	27
409	Skeletal Muscle Stem Cells. , 2009, , 249-257.		2
410	Dispensing of very low volumes of ultra high viscosity alginate gels: a new tool for encapsulation of adherent cells and rapid prototyping of scaffolds and implants. BioTechniques, 2009, 46, 31-43.	0.8	17
411	Mesenchymal Stromal Cells in Rheumatoid Arthritis: Biological Properties and Clinical Applications. Current Stem Cell Research and Therapy, 2009, 4, 61-69.	0.6	19
412	Cell Guidance by 3D-Gradients in Hydrogel Matrices: Importance for Biomedical Applications. Materials, 2009, 2, 1058-1083.	1.3	42
413	A Modified Consumer Inkjet for Spatiotemporal Control of Gene Expression. PLoS ONE, 2009, 4, e7086.	1.1	26
414	The Natural and Engineered 3D Microenvironment as a Regulatory Cue During Stem Cell Fate Determination. Tissue Engineering - Part B: Reviews, 2009, 15, 371-380.	2.5	158
415	X-ray ablation of hyaluronan hydrogels: Fabrication of three-dimensional microchannel networks. Journal of Applied Physics, 2009, 106, 053518.	1.1	6
416	Three-Dimensional Synthetic Niche Components to Control Germ Cell Proliferation. Tissue Engineering - Part A, 2009, 15, 255-262.	1.6	26
417	Potential of Hydrogels Based on Poly(Ethylene Glycol) and Sebacic Acid as Orthopedic Tissue Engineering Scaffolds. Tissue Engineering - Part A, 2009, 15, 2299-2307.	1.6	37
418	Electroactive surfaces based on conducting polymers for controlling cell adhesion, signaling, and proliferation. , 2009, , .		5

#	Article	IF	Citations
419	Programmed assembly of 3-dimensional microtissues with defined cellular connectivity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4606-4610.	3.3	269
420	Bone tissue engineering. , 2009, , 378-422.		3
421	Hydrogels for Tissue Engineering. , 2009, , 495-517.		8
422	W-plug via electromigration in CMOS process. Journal of Semiconductors, 2009, 30, 056001.	2.0	7
423	ECM and FGF-Dependent Assay of Embryonic SMG Epithelial Morphogenesis: Investigating Growth Factor/Matrix Regulation of Gene Expression During Submandibular Gland Development. Methods in Molecular Biology, 2009, 522, 319-330.	0.4	33
424	Cartilage and Bone Extracellular Matrix. Current Pharmaceutical Design, 2009, 15, 1334-1348.	0.9	199
425	Screening for 3D Environments That Support Human Mesenchymal Stem Cell Viability Using Hydrogel Arrays. Tissue Engineering - Part A, 2009, 15, 343-353.	1.6	71
426	Differential Maturation and Structureâ€"Function Relationships in Mesenchymal Stem Cell- and Chondrocyte-Seeded Hydrogels. Tissue Engineering - Part A, 2009, 15, 1041-1052.	1.6	196
427	The Role of Collagen Crosslinking in Differentiation of Human Mesenchymal Stem Cells and MC3T3-E1 Cells. Tissue Engineering - Part A, 2009, 15, 3857-3867.	1.6	42
428	Combinatorial Approaches to Controlling Cell Behaviour and Tissue Formation in 3D via Rapid-Prototyping and Smart Scaffold Design. Combinatorial Chemistry and High Throughput Screening, 2009, 12, 562-579.	0.6	39
429	Biochemical insights into the role of matrix metalloproteinases in regeneration: challenges and recent developments. Future Medicinal Chemistry, 2009, 1, 1095-1111.	1.1	83
430	Cellular response to the surface chemistry of nanostructured biomaterials. , 2009, , 85-113.		3
431	Integration column: Artificial ECM: expanding the cell biology toolbox in 3D. Integrative Biology (United Kingdom), 2009, 1, 235.	0.6	70
432	Application of Stem Cells for Articular Cartilage Regeneration. Journal of Knee Surgery, 2009, 22, 60-71.	0.9	42
433	Anisotropic Porous Biodegradable Scaffolds for Musculoskeletal Tissue Engineering. Materials, 2009, 2, 1674-1696.	1.3	40
434	Bone Regeneration in Craniofacial Reconstruction with Particulate Grafts Obtained Through Tissue Engineering. Particulate Science and Technology, 2009, 27, 497-518.	1.1	2
435	Biocompatibility and Mesenchymal Stem Cell Response to Poly(É›-Caprolactone) Nanowire Surfaces for Orthopedic Tissue Engineering. Tissue Engineering - Part A, 2009, 15, 2547-2559.	1.6	18
436	Repair or Replacement--A Joint Perspective. Science, 2009, 323, 47-48.	6.0	188

#	Article	IF	Citations
437	Neuroactive conducting scaffolds: nerve growth factor conjugation on active ester-functionalized polypyrrole. Journal of the Royal Society Interface, 2009, 6, 801-810.	1.5	95
438	Biomaterial technology for tissue engineering applications. Journal of the Royal Society Interface, 2009, 6, S311-24.	1.5	273
439	Simple application of fibronectinâ€“mimetic coating enhances osseointegration of titanium implants. Journal of Cellular and Molecular Medicine, 2009, 13, 2602-2612.	1.6	70
440	Translating tissue engineering technology platforms into cancer research. Journal of Cellular and Molecular Medicine, 2009, 13, 1417-1427.	1.6	122
441	Diamond Seeding and Growth of Hierarchically Structured Films for Tissue Engineering. Advanced Engineering Materials, 2009, 11, B71.	1.6	25
442	Guided Cell Migration on Microtextured Substrates with Variable Local Density and Anisotropy. Advanced Functional Materials, 2009, 19, 1579-1586.	7.8	173
443	Functionalized, Swellable Hydrogel Layers as a Platform for Cell Studies. Advanced Functional Materials, 2009, 19, 1276-1286.	7.8	51
444	Capillary Force Lithography: A Versatile Tool for Structured Biomaterials Interface Towards Cell and Tissue Engineering. Advanced Functional Materials, 2009, 19, 2699-2712.	7.8	143
445	Capturing Complex Protein Gradients on Biomimetic Hydrogels for Cellâ€Based Assays. Advanced Functional Materials, 2009, 19, 3411-3419.	7.8	60
446	Cell Migration: Guided Cell Migration on Microtextured Substrates with Variable Local Density and Anisotropy (Adv. Funct. Mater. 10/2009). Advanced Functional Materials, 2009, 19, NA-NA.	7.8	62
447	Hydrogels in Regenerative Medicine. Advanced Materials, 2009, 21, 3307-3329.	11.1	2,326
448	Naturalâ€Synthetic Polyblend Nanofibers for Biomedical Applications. Advanced Materials, 2009, 21, 2792-2797.	11.1	145
449	Artificial Stem Cell Niches. Advanced Materials, 2009, 21, 3255-3268.	11.1	203
450	Controlled Growth Factor Delivery for Tissue Engineering. Advanced Materials, 2009, 21, 3269-3285.	11.1	365
451	Manipulating Cell Migration and Proliferation with a Lightâ€Activated Polypeptide. ChemBioChem, 2009, 10, 577-584.	1.3	11
452	Characterization of lowâ€molecularâ€weight hyaluronic acidâ€based hydrogel and differential stem cell responses in the hydrogel microenvironments. Journal of Biomedical Materials Research - Part A, 2009, 88A, 967-975.	2.1	72
453	Fibrin scaffold promotes adenoviral gene transfer and controlled vector delivery. Journal of Biomedical Materials Research - Part A, 2009, 89A, 876-884.	2.1	36
454	Human osteoclast formation and activity on a xenogenous bone mineral. Journal of Biomedical Materials Research - Part A, 2009, 90A, 238-246.	2.1	38

#	Article	IF	Citations
455	Functionally graded Î²â€TCP/PCL nanocomposite scaffolds: In vitro evaluation with human fetal osteoblast cells for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 92A, 1007-1018.	2.1	27
456	Polymer fibers as contact guidance to orient microvascularization in a 3D environment. Journal of Biomedical Materials Research - Part A, 2010, 92A, 1587-1597.	2.1	14
457	Dendritic cell responses to selfâ€assembled monolayers of defined chemistries. Journal of Biomedical Materials Research - Part A, 2010, 92A, 1487-1499.	2.1	18
458	Electrospun scaffolds from silk fibroin and their cellular compatibility. Journal of Biomedical Materials Research - Part A, 2010, 93A, 976-983.	2.1	34
459	Fabrication of silk fibroin blended P(LLAâ€CL) nanofibrous scaffolds for tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 93A, 984-993.	2.1	75
460	Biomimetic PEG hydrogels crosslinked with minimal plasminâ€sensitive triâ€amino acid peptides. Journal of Biomedical Materials Research - Part A, 2010, 93A, 870-877.	2.1	27
461	Influence of FGF2 and PEG hydrogel matrix properties on hMSC viability and spreading. Journal of Biomedical Materials Research - Part A, 2010, 93A, 1110-1123.	2.1	20
462	Regeneration of ischemic heart using hyaluronic acidâ€based injectable hydrogel. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 91B, 163-171.	1.6	119
463	Geometry and force control of cell function. Journal of Cellular Biochemistry, 2009, 108, 1047-1058.	1.2	57
464	Osteoblastic bone formation is induced by using nanogelâ€crosslinking hydrogel as novel scaffold for bone growth factor. Journal of Cellular Physiology, 2009, 220, 1-7.	2.0	88
465	Matrigel supports survival and neuronal differentiation of grafted embryonic stem cellâ€derived neural precursor cells. Journal of Neuroscience Research, 2010, 88, 542-551.	1.3	115
466	Skeletal repair in rabbits using a novel biomimetic composite based on adiposeâ€derived stem cells encapsulated in collagen I gel with PLGAâ€Î²â€TCP scaffold. Journal of Orthopaedic Research, 2010, 28, 252-257.	1.2	48
467	From natural bone grafts to tissue engineering therapeutics: Brainstorming on pharmaceutical formulative requirements and challenges. Journal of Pharmaceutical Sciences, 2009, 98, 1317-1375.	1.6	151
468	Localized delivery of growth factors for periodontal tissue regeneration: Role, strategies, and perspectives. Medicinal Research Reviews, 2009, 29, 472-513.	5.0	132
469	Hybrid Multicomponent Hydrogels for Tissue Engineering. Macromolecular Bioscience, 2009, 9, 140-156.	2.1	266
470	Glucose Responsive Hydrogel Networks Based on Protein Recognition. Macromolecular Bioscience, 2009, 9, 864-868.	2.1	61
471	Strategies for Zonal Cartilage Repair using Hydrogels. Macromolecular Bioscience, 2009, 9, 1049-1058.	2.1	130
472	Recent Progress in Polyphosphoesters: From Controlled Synthesis to Biomedical Applications. Macromolecular Bioscience, 2009, 9, 1154-1164.	2.1	192

#	Article	IF	Citations
473	Hydrogels as extracellular matrix mimics for 3D cell culture. Biotechnology and Bioengineering, 2009, 103, 655-663.	1.7	2,244
474	Bioassembly of threeâ€dimensional embryonic stem cellâ€scaffold complexes using compressed gases. Biotechnology Progress, 2009, 25, 535-542.	1.3	6
475	Bone tissue engineering: A review in bone biomimetics and drug delivery strategies. Biotechnology Progress, 2009, 25, 1539-1560.	1.3	607
476	Repair, regenerative and supportive therapies of the annulus fibrosus: achievements and challenges. European Spine Journal, 2009, 18, 301-313.	1.0	177
477	Nanoscale topography of nanocrystalline diamonds promotes differentiation of osteoblasts. Acta Biomaterialia, 2009, 5, 3076-3085.	4.1	85
478	The stimulation of myoblast differentiation by electrically conductive sub-micron fibers. Biomaterials, 2009, 30, 2038-2047.	5.7	238
479	Biomimetic nanofibrous gelatin/apatite composite scaffolds for bone tissue engineering. Biomaterials, 2009, 30, 2252-2258.	5.7	483
480	Stem cells in musculoskeletal engineered tissue. Current Opinion in Biotechnology, 2009, 20, 537-544.	3.3	41
481	PEG Hydrogels for the Controlled Release of Biomolecules in Regenerative Medicine. Pharmaceutical Research, 2009, 26, 631-643.	1.7	846
482	Chemo-enzymatic synthesis of poly-N-acetyllactosamine (poly-LacNAc) structures and their characterization for CGL2-galectin-mediated binding of ECM glycoproteins to biomaterial surfaces. Glycoconjugate Journal, 2009, 26, 141-159.	1.4	66
483	Immobilization of RGD peptide on HA coating through a chemical bonding approach. Journal of Materials Science: Materials in Medicine, 2009, 20, 2349-2352.	1.7	30
484	Nanostructured 3-D collagen/nanotube biocomposites for future bone regeneration scaffolds. Nano Research, 2009, 2, 462-473.	5.8	53
485	Identification and characterization of a novel heparinâ€binding peptide for promoting osteoblast adhesion and proliferation by screening an Escherichia coli cell surface display peptide library. Journal of Peptide Science, 2009, 15, 43-47.	0.8	4
486	Hierarchical starch-based fibrous scaffold for bone tissue engineering applications. Journal of Tissue Engineering and Regenerative Medicine, 2009, 3, 37-42.	1.3	191
487	Extracellular matrix-polymer hybrid materials produced in a pulsed-flow bioreactor system. Journal of Tissue Engineering and Regenerative Medicine, 2009, 3, 188-195.	1.3	7
488	Mesenchymal stem cell differentiation and roles in regenerative medicine. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2009, 1, 97-106.	6.6	126
489	In situ crosslinked hydrogels formed using Cu(I)â€free Huisgen cycloaddition reaction. Polymer International, 2009, 58, 1190-1195.	1.6	35
490	Layerâ€Byâ€Layer Films as a Biomimetic Reservoir for rhBMPâ€2 Delivery: Controlled Differentiation of Myoblasts to Osteoblasts. Small, 2009, 5, 598-608.	5.2	239

#	Article	IF	Citations
491	Tissue engineering: state of the art in oral rehabilitation. Journal of Oral Rehabilitation, 2009, 36, 368-389.	1.3	142
492	Cellular control in two clicks. Nature, 2009, 460, 469-470.	13.7	11
493	Shining light on a new class of hydrogels. Nature Biotechnology, 2009, 27, 543-544.	9.4	26
494	Cause and express. Nature Biotechnology, 2009, 27, 544-545.	9.4	4
495	A cell-free protein-producing gel. Nature Materials, 2009, 8, 432-437.	13.3	287
496	Spotlight on hydrogels. Nature Materials, 2009, 8, 451-453.	13.3	211
497	Sequential click reactions for synthesizing and patterning three-dimensional cell microenvironments. Nature Materials, 2009, 8, 659-664.	13.3	776
499	Stem cells and future periodontal regeneration. Periodontology 2000, 2009, 51, 239-251.	6.3	107
500	Role of the elastin receptor complex (Sâ€Gal/Cathâ€A/Neuâ€1) in skin repair and regeneration. Wound Repair and Regeneration, 2009, 17, 631-638.	1.5	34
501	Electrospun nanofibers composed of poly(Îµ-caprolactone) and polyethylenimine for tissue engineering applications. Materials Science and Engineering C, 2009, 29, 1725-1731.	3.8	51
502	Self-assembled and nanostructured hydrogels for drug delivery and tissue engineering. Nano Today, 2009, 4, 429-437.	6.2	191
503	The effect of photopolymerization on stem cells embedded in hydrogels. Biomaterials, 2009, 30, 344-353.	5.7	364
504	In vitro and in vivo evaluation of the surface bioactivity of a calcium phosphate coated magnesium alloy. Biomaterials, 2009, 30, 1512-1523.	5.7	454
505	Self-assembled peptide-based hydrogels as scaffolds for anchorage-dependent cells. Biomaterials, 2009, 30, 2523-2530.	5.7	620
506	Co-assembling peptides as defined matrices for endothelial cells. Biomaterials, 2009, 30, 2400-2410.	5.7	201
507	Functional PEGâ€“peptide hydrogels to modulate local inflammation inducedby the pro-inflammatory cytokine TNFÎ±. Biomaterials, 2009, 30, 4907-4914.	5.7	140
508	In vitro model of mesenchymal condensation during chondrogenic development. Biomaterials, 2009, 30, 6530-6540.	5.7	77
509	Design and activity of multifunctional fibrils using receptor-specific small peptides. Biomaterials, 2009, 30, 6731-6738.	5.7	15

#	Article	IF	Citations
510	Nano-fiber scaffold electrodes based on PEDOT for cell stimulation. Sensors and Actuators B: Chemical, 2009, 142, 451-456.	4.0	110
511	Calcium phosphate coatings for bio-implant applications: Materials, performance factors, and methodologies. Materials Science and Engineering Reports, 2009, 66, 1-70.	14.8	559
512	Direct introduction of phosphonate by the surface modification of polymers enhances biocompatibility. Reactive and Functional Polymers, 2009, 69, 77-85.	2.0	29
513	Engineering of Synthetic Mammalian Gene Networks. Chemistry and Biology, 2009, 16, 287-297.	6.2	57
514	A Dumbbell-Shaped Small Molecule that Promotes Cell Adhesion and Growth. Chemistry and Biology, 2009, 16, 773-782.	6.2	34
515	DNA delivery from matrix metalloproteinase degradable poly(ethylene glycol) hydrogels to mouse cloned mesenchymal stem cells. Biomaterials, 2009, 30, 254-265.	5.7	95
516	Hydrogel based on interpenetrating polymer networks of dextran and gelatin for vascular tissue engineering. Biomaterials, 2009, 30, 196-207.	5.7	240
517	In vitro analog of human bone marrow from 3D scaffolds with biomimetic inverted colloidal crystal geometry. Biomaterials, 2009, 30, 1071-1079.	5.7	127
518	Multifunctional protein-encapsulated polycaprolactone scaffolds: Fabrication and in vitro assessment for tissue engineering. Biomaterials, 2009, 30, 4336-4347.	5.7	45
519	A star-PEGâ€“heparin hydrogel platform to aid cell replacement therapies for neurodegenerative diseases. Biomaterials, 2009, 30, 5049-5060.	5.7	272
520	Naturally derived myocardial matrix as an injectable scaffold for cardiac tissue engineering. Biomaterials, 2009, 30, 5409-5416.	5.7	471
521	The growth and differentiation of mesenchymal stem and progenitor cells cultured on aligned collagen matrices. Biomaterials, 2009, 30, 5950-5958.	5.7	118
522	Degradable particulate composite reinforced with nanofibres for biomedical applications. Acta Biomaterialia, 2009, 5, 1104-1114.	4.1	43
523	Twoâ€Photon polymerization for microfabrication of threeâ€dimensional scaffolds for tissue engineering application. Engineering in Life Sciences, 2009, 9, 384-390.	2.0	112
524	Nonthermal Plasma Technology as a Versatile Strategy for Polymeric Biomaterials Surface Modification: A Review. Biomacromolecules, 2009, 10, 2351-2378.	2.6	599
525	Nanomedicine for targeted drug delivery. Journal of Materials Chemistry, 2009, 19, 6294.	6.7	127
526	Degradation of synthetic polymeric scaffolds for bone and cartilage tissue repairs. Soft Matter, 2009, 5, 938.	1.2	78
527	Electrospun silk biomaterial scaffolds for regenerative medicine. Advanced Drug Delivery Reviews, 2009, 61, 988-1006.	6.6	385

#	Article	IF	Citations
528	Electrospun materials as potential platforms for bone tissue engineering. Advanced Drug Delivery Reviews, 2009, 61, 1065-1083.	6.6	438
529	Electrospun scaffolds for stem cell engineering. Advanced Drug Delivery Reviews, 2009, 61, 1084-1096.	6.6	282
530	Biofunctional Coatings via Targeted Covalent Cross-Linking of Associating Triblock Proteins. Biomacromolecules, 2009, 10, 2408-2417.	2.6	20
531	Structural Analysis and Mechanical Characterization of Hyaluronic Acid-Based Doubly Cross-Linked Networks. Macromolecules, 2009, 42, 537-546.	2.2	112
532	Self-assembly of Collagen Peptides into Microflorettes via Metal Coordination. Journal of the American Chemical Society, 2009, 131, 2706-2712.	6.6	130
533	Tailoring hydrogel degradation and drug release via neighboring amino acid controlled esterhydrolysis. Soft Matter, 2009, 5, 440-446.	1.2	66
534	De Novo Design of Saccharideâ^'Peptide Hydrogels as Synthetic Scaffolds for Tailored Cell Responses. Journal of the American Chemical Society, 2009, 131, 17638-17646.	6.6	64
535	Scleroglucan-Borax Hydrogel: A Flexible Tool for Redox Protein Immobilization. Langmuir, 2009, 25, 11097-11104.	1.6	7
536	Reversible Self-Assembly: A Key Feature for a New Class of Autodelivering Therapeutic Peptides. Molecular Pharmaceutics, 2009, 6, 1036-1039.	2.3	27
537	Molecular Dynamics Investigations on the Effect of <scp>d</scp> Amino Acid Substitution in a Triple-Helix Structure and the Stability of Collagen. Journal of Physical Chemistry B, 2009, 113, 8983-8992.	1.2	27
538	Design and Synthesis of Biomimetic Hydrogel Scaffolds with Controlled Organization of Cyclic RGD Peptides. Bioconjugate Chemistry, 2009, 20, 333-339.	1.8	95
539	Nylon-3 Copolymers that Generate Cell-Adhesive Surfaces Identified by Library Screening. Journal of the American Chemical Society, 2009, 131, 16779-16789.	6.6	51
540	Three-Dimensional Cell Cultures in Toxicology. Biotechnology and Genetic Engineering Reviews, 2009, 26, 117-138.	2.4	68
541	Wormlike Micelle Formation in Peptide-Lipid Conjugates Driven by Secondary Structure Transformation of the Headgroups. Journal of Physical Chemistry B, 2009, 113, 13711-13714.	1.2	88
542	Bidirectional extracellular matrix signaling during tissue morphogenesis. Cytokine and Growth Factor Reviews, 2009, 20, 459-465.	3.2	66
543	A home away from home: Challenges and opportunities in engineering in vitro muscle satellite cell niches. Differentiation, 2009, 78, 185-194.	1.0	115
544	A Synthetic Non-degradable Polyethylene Glycol Hydrogel Retards Adverse Post-infarct Left Ventricular Remodeling. Journal of Cardiac Failure, 2009, 15, 629-636.	0.7	137
545	Cellâ€"scaffold mechanical interplay within engineered tissue. Seminars in Cell and Developmental Biology, 2009, 20, 656-664.	2.3	140

#	Article	IF	Citations
546	Plasma-treated silk fibroin nanofibers for skin regeneration. International Journal of Biological Macromolecules, 2009, 44, 222-228.	3.6	94
547	Endothelial cell adhesion, signaling, and morphogenesis in fibroblast-derived matrix. Matrix Biology, 2009, 28, 273-283.	1.5	79
548	Smart Tissue Culture: in Situ Monitoring of the Activity of Protease Enzymes Secreted from Live Cells Using Nanostructured Photonic Crystals. Nano Letters, 2009, 9, 2021-2025.	4.5	91
549	Injectable myocardial matrix as a scaffold for myocardial tissue engineering. , 2009, 2009, 2406-8.		6
550	Vortex-Induced Injectable Silk Fibroin Hydrogels. Biophysical Journal, 2009, 97, 2044-2050.	0.2	317
551	Fibrin as a Delivery System for Therapeutic Drugs and Biomolecules. Tissue Engineering - Part B: Reviews, 2009, 15, 201-214.	2.5	128
552	Polymer Hydrogels to Enable New Medical Therapies. Springer Series on Chemical Sensors and Biosensors, 2009, , 249-266.	0.5	3
553	Polymer Brushes via Surface-Initiated Controlled Radical Polymerization: Synthesis, Characterization, Properties, and Applications. Chemical Reviews, 2009, 109, 5437-5527.	23.0	1,614
554	Polymer-Based Therapeutics. Macromolecules, 2009, 42, 3-13.	2.2	202
555	Polymer brushes and self-assembled monolayers: Versatile platforms to control cell adhesion to biomaterials (Review). Biointerphases, 2009, 4, FA3-FA16.	0.6	174
557	Extracellular Matrix Protocols. Methods in Molecular Biology, 2009, , .	0.4	6
558	Electrospun polyurethane scaffolds for proliferation and neuronal differentiation of human embryonic stem cells. Biomedical Materials (Bristol), 2009, 4, 045004.	1.7	106
559	Fabrication and evaluation of a pulse laser-induced Caâ€“P coating on a Ti alloy for bioapplication. Biomedical Materials (Bristol), 2009, 4, 015009.	1.7	28
560	Growth Factor Delivery Approaches in Hydrogels. Biomacromolecules, 2009, 10, 9-18.	2.6	235
561	Liver tissue engineering in the evaluation of drug safety. Expert Opinion on Drug Metabolism and Toxicology, 2009, 5, 1159-1174.	1.5	143
562	Engineering the CNS stem cell microenvironment. Regenerative Medicine, 2009, 4, 865-877.	0.8	31
563	Stem cell differentiation by functionalized micro- and nanostructured surfaces. Nanomedicine, 2009, 4, 65-82.	1.7	86
564	Biomineralization on an Ancient Sculpture of the Apoxyomenos: Effects of a Metal-Rich Environment on Crystal Growth in Living Organisms. Crystal Growth and Design, 2009, 9, 3671-3675.	1.4	3

#	Article	IF	Citations
565	Hydrophilic elastomeric biomaterials based on resilin-like polypeptides. Soft Matter, 2009, 5, 3412.	1.2	124
566	Substrate topography shapes cell function. Soft Matter, 2009, 5, 4072.	1.2	134
567	Sequence-Dependent Gelation Kinetics of Î²-Hairpin Peptide Hydrogels. Macromolecules, 2009, 42, 8443-8450.	2.2	54
568	Integration column: Biofunctional polymeric nanoparticles for spatio-temporal control of drug delivery and biomedical applications. Integrative Biology (United Kingdom), 2009, 1, 446.	0.6	12
569	Opportunities for nanotechnology-enabled bioactive bone implants. Journal of Materials Chemistry, 2009, 19, 2653.	6.7	79
570	A simple lift-off-based patterning method for micro- and nanostructuring of functional substrates for cell culture. Journal of Micromechanics and Microengineering, 2009, 19, 115028.	1.5	19
571	A cell migration device that maintains a defined surface with no cellular damage during wound edge generation. Lab on A Chip, 2009, 9, 2364.	3.1	43
572	Perturbation of single hematopoietic stem cell fates in artificial niches. Integrative Biology (United) Tj ETQq1 1 0.784314 rgBT /Overlo	0.6	170
573	Structural polymorphism of collagen type Iâ€“heparin cofibrils. Soft Matter, 2009, 5, 3461.	1.2	9
574	Fibroblasts in three dimensional matrices: cell migration and matrix remodeling. Experimental and Molecular Medicine, 2009, 41, 858.	3.2	141
575	Extracellular matrix and tissue engineering applications. Journal of Materials Chemistry, 2009, 19, 5474.	6.7	62
576	Designing materials to direct stem-cell fate. Nature, 2009, 462, 433-441.	13.7	1,276
577	Photodegradable Hydrogels for Dynamic Tuning of Physical and Chemical Properties. Science, 2009, 324, 59-63.	6.0	1,541
578	Hydrogels and Tissue Engineering. , 2009, , 1-8.		9
579	Chapter 21 Use of Stem Cells for Improving Nerve Regeneration. International Review of Neurobiology, 2009, 87, 393-403.	0.9	28
580	Tissue Engineering of the Liver. , 0, , 933-953.		0
581	Protease-dependent versus -independent cancer cell invasion programs: three-dimensional amoeboid movement revisited. Journal of Cell Biology, 2009, 185, 11-19.	2.3	576
582	Modulating the Gelation Properties of Self-Assembling Peptide Amphiphiles. ACS Nano, 2009, 3, 3447-3454.	7.3	86

#	Article	IF	Citations
583	Hybrid Systems Engineering: Polymerâ€“Peptide Conjugates. Advances in Chemical Engineering, 2009, , 211-222.	0.5	1
584	Protein Engineering of a Fibroblast Growth Factor 2 Protein for Targeting to Bone Mineral Hydroxyapatite. Protein and Peptide Letters, 2009, 16, 664-667.	0.4	7
585	Role of Endothelial Progenitor Cell Mobilization After Percutaneous Angioplasty Procedure. Current Pharmaceutical Design, 2009, 15, 1107-1122.	0.9	15
586	High Throughput Optimization of Stem Cell Microenvironments. Combinatorial Chemistry and High Throughput Screening, 2009, 12, 554-561.	0.6	32
587	Novel Biomaterials for Cartilage Tissue Engineering. Current Rheumatology Reviews, 2009, 5, 51-57.	0.4	21
588	CARS and SHG microscopy of artificial bioengineered tissues. , 2010, , .		1
589	Pancreatic Islet Culture and Preservation Strategies: Advances, Challenges, and Future Outlook. Cell Transplantation, 2010, 19, 1523-1535.	1.2	58
590	Preparation and mechanical property of polymer-based biomaterials. Journal of Physics: Conference Series, 2010, 240, 012152.	0.3	1
592	Cell Delivery: From Cell Transplantation to Organ Engineering. Cell Transplantation, 2010, 19, 655-665.	1.2	58
593	Biomaterial Applications in the Adult Skeletal Muscle Satellite Cell Niche: Deliberate Control of Muscle Stem Cells and Muscle Regeneration in the Aged Niche. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , 275-308.	0.7	1
594	Electrospun Pseudo Poly (Amino Acids) for Tissue Engineering Applications. , 2010, , 167-184.		0
595	MICROPATTERNED POLYMER STRUCTURES FOR CELL AND TISSUE ENGINEERING. , 2010, , 101-120.		0
596	BIOMIMETIC MATERIALS FOR ENGINEERING OF NEURAL TISSUES: CONTROL OF CELL ADHESION AND GUIDING NEURAL CELL OUTGROWTH WITH PEPTIDE-CONJUGATED POLYMER STRUCTURES. , 2010, , 347-372.		0
597	HYBRID BIOMATERIALS FOR ENGINEERING VASCULAR TISSUES. , 2010, , 373-387.		1
598	Human Mesenchymal Stem Cell Behavior on Concentrated Polymer Brushes Presenting Different Surface Stiffness. Chemistry Letters, 2010, 39, 1164-1165.	0.7	5
599	3D Matrices for Anti-Cancer Drug Testing and Development. Oncology Issues, 2010, 25, 20-25.	0.0	97
600	Silkâ€based materials for biomedical applications. Biotechnology and Applied Biochemistry, 2010, 55, 155-167.	1.4	210
601	Design of Chemically Activated Polymer Microwells by One-Step UV-Lithography for Stem Cell Adhesion. Langmuir, 2010, 26, 2050-2056.	1.6	7

#	Article	IF	Citations
602	Mining the extracellular matrix for tissue engineering applications. Regenerative Medicine, 2010, 5, 961-970.	0.8	56
603	Chitosan-based hydrogels for controlled, localized drug delivery. Advanced Drug Delivery Reviews, 2010, 62, 83-99.	6.6	2,026
604	Carbohydrate engineered cells for regenerative medicineâ˜†. Advanced Drug Delivery Reviews, 2010, 62, 671-682.	6.6	59
605	LbL Films as Reservoirs for Bioactive Molecules. Advances in Polymer Science, 2010, , 135-161.	0.4	34
606	Scaffold-free cell delivery for use in regenerative medicineâ˜†. Advanced Drug Delivery Reviews, 2010, 62, 753-764.	6.6	108
607	Designing Three-Dimensional Materials at the Interface to Biology. Advances in Polymer Science, 2010, , 163-192.	0.4	9
608	Emerging materials for tissue engineering and regenerative medicine: themed issue for Soft Matter and Journal of Materials Chemistry. Soft Matter, 2010, 6, 4962.	1.2	7
609	Self-assembling and auto-crosslinkable hyaluronic acid hydrogels with a fibrillar structure. Acta Biomaterialia, 2010, 6, 195-204.	4.1	38
610	Surface engineering of titanium with potassium hydroxide and its effects on the growth behavior of mesenchymal stem cells. Acta Biomaterialia, 2010, 6, 2314-2321.	4.1	51
611	Poly(dimethylsiloxane) elastomers with tethered peptide ligands for cell adhesion studies. Acta Biomaterialia, 2010, 6, 2898-2902.	4.1	18
612	The development of tissue-engineered bone of different origin through endochondral and intramembranous ossification following the implantation of mesenchymal stem cells and osteoblasts in a murine model. Biomaterials, 2010, 31, 242-249.	5.7	121
613	Biomaterial mediated epithelialâ€“mesenchymal interaction of salivary tissue under serum free condition. Biomaterials, 2010, 31, 288-295.	5.7	22
614	Cell recruitment and transfection in gene activated collagen matrix. Biomaterials, 2010, 31, 570-576.	5.7	20
615	Chitosanâ€“alginate 3D scaffolds as a mimic of the glioma tumor microenvironment. Biomaterials, 2010, 31, 5903-5910.	5.7	183
616	The synergistic effects of multivalent ligand display and nanotopography on osteogenic differentiation of rat bone marrow stem cells. Biomaterials, 2010, 31, 5813-5824.	5.7	97
617	The modulation of dendritic cell integrin binding and activation by RGD-peptide density gradient substrates. Biomaterials, 2010, 31, 7444-7454.	5.7	62
618	The use of vascular endothelial growth factor functionalized agarose to guide pluripotent stem cell aggregates toward blood progenitor cells. Biomaterials, 2010, 31, 8262-8270.	5.7	65
619	The effect of matrix characteristics on fibroblast proliferation in 3D gels. Biomaterials, 2010, 31, 8454-8464.	5.7	271

#	Article	IF	Citations
620	Bioengineered 3D platform to explore cellâ€“ECM interactions and drug resistance of epithelial ovarian cancer cells. Biomaterials, 2010, 31, 8494-8506.	5.7	533
621	The formation of protein concentration gradients mediated by density differences of poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock	5.7	32
622	Tissue engineering and regenerative medicine research perspectives for pediatric surgery. Pediatric Surgery International, 2010, 26, 557-573.	0.6	20
623	Effects of introducing cultured human chondrocytes into a human articular cartilage explant model. Cell and Tissue Research, 2010, 339, 421-427.	1.5	25
624	Peptide Interfacial Biomaterials Improve Endothelial Cell Adhesion and Spreading on Synthetic Polyglycolic Acid Materials. Annals of Biomedical Engineering, 2010, 38, 1965-1976.	1.3	46
625	Injectable Materials for the Treatment of Myocardial Infarction and Heart Failure: The Promise of Decellularized Matrices. Journal of Cardiovascular Translational Research, 2010, 3, 478-486.	1.1	158
626	Delivery of surface-mediated non-viral gene nanoparticles from ultrathin layer-by-layer multilayers. Science China Chemistry, 2010, 53, 508-513.	4.2	6
627	Electrospun nanofibers: Work for medicine?. Frontiers of Materials Science in China, 2010, 4, 29-33.	0.5	24
628	Analytical approaches to uptake and release of hydrogel-associated FGF-2. Journal of Materials Science: Materials in Medicine, 2010, 21, 915-923.	1.7	25
629	Design of novel 3D gene activated PEG scaffolds with ordered pore structure. Journal of Materials Science: Materials in Medicine, 2010, 21, 1013-1020.	1.7	16
630	Preparation of a novel biodegradable nanocomposite scaffold based on poly (3-hydroxybutyrate)/bioglass nanoparticles for bone tissue engineering. Journal of Materials Science: Materials in Medicine, 2010, 21, 2125-2132.	1.7	59
631	Effect of collagen II coating on mesenchymal stem cell adhesion on chitosan and on reacetylated chitosan fibrous scaffolds. Journal of Materials Science: Materials in Medicine, 2010, 21, 2479-2490.	1.7	27
632	Construction and expression of a recombinant fibronectinIII10 protein for integrin-mediated cell adhesion. Biotechnology Letters, 2010, 32, 29-33.	1.1	10
633	Controlled drug release from biodegradable thermoresponsive physical hydrogel nanofibers. Journal of Controlled Release, 2010, 143, 175-182.	4.8	206
634	Balancing cell migration with matrix degradation enhances gene delivery to cells cultured three-dimensionally within hydrogels. Journal of Controlled Release, 2010, 146, 128-135.	4.8	38
635	Designing culture surfaces based on cell anchoring mechanisms to regulate cell morphologies and functions. Biotechnology Advances, 2010, 28, 7-16.	6.0	43
636	Comprehension of ECM-Cell dynamics: A prerequisite for tissue regeneration. Biotechnology Advances, 2010, 28, 764-769.	6.0	39
637	Myogenic induction of human mesenchymal stem cells by culture on dendrimer-immobilized surface with d-glucose display. Journal of Bioscience and Bioengineering, 2010, 109, 55-61.	1.1	10

#	Article	IF	Citations
638	Promigratory and procontractile growth factor environments differentially regulate cell morphogenesis. Experimental Cell Research, 2010, 316, 232-244.	1.2	28
639	Micropatterned matrix directs differentiation of human mesenchymal stem cells towards myocardial lineage. Experimental Cell Research, 2010, 316, 1159-1168.	1.2	148
640	Biomimetic gradient hydrogels for tissue engineering. Canadian Journal of Chemical Engineering, 2010, 88, 899-911.	0.9	218
641	Bioactivation of collagen matrices through sustained VEGF release from PLGA microspheres. Journal of Biomedical Materials Research - Part A, 2010, 92A, 94-102.	2.1	68
642	Farsenolâ€modified biodegradable polyurethanes for cartilage tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 92A, 393-408.	2.1	35
643	Comparative characterization of cultures of primary human macrophages or dendritic cells relevant to biomaterial studies. Journal of Biomedical Materials Research - Part A, 2010, 92A, 791-800.	2.1	5
644	Neural differentiation directed by selfâ€assembling peptide scaffolds presenting lamininâ€derived epitopes. Journal of Biomedical Materials Research - Part A, 2010, 94A, 688-699.	2.1	26
645	Effect of macromer weight percent on neural cell growth in 2D and 3D nondegradable PEG hydrogel culture. Journal of Biomedical Materials Research - Part A, 2010, 94A, 1162-1171.	2.1	76
646	In vivo evaluation of MMP sensitive highâ€molecular weight HAâ€based hydrogels for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 95A, 673-681.	2.1	66
647	Injectable hyaluronic acidâ€dextran hydrogels and effects of implantation in ferret vocal fold. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2010, 93B, 386-393.	1.6	40
648	Optimizing stem cell culture. Journal of Cellular Biochemistry, 2010, 111, 801-807.	1.2	67
649	Rapid Generation of Biologically Relevant Hydrogels Containing Longâ€Range Chemical Gradients. Advanced Functional Materials, 2010, 20, 131-137.	7.8	92
650	Integration of a Chemicalâ€Responsive Hydrogel into a Porous Silicon Photonic Sensor for Visual Colorimetric Readout. Advanced Functional Materials, 2010, 20, 573-578.	7.8	76
651	Designed Multifunctional Nanocomposites for Biomedical Applications. Advanced Functional Materials, 2010, 20, 1599-1609.	7.8	70
652	Tuning Specific Biomolecular Interactions Using Electroâ€Switchable Oligopeptide Surfaces. Advanced Functional Materials, 2010, 20, 2657-2663.	7.8	72
653	Hierarchically Assembled Mesenchymal Stem Cell Spheroids Using Biomimicking Nanofilaments and Microstructured Scaffolds for Vascularized Adipose Tissue Engineering. Advanced Functional Materials, 2010, 20, 2303-2309.	7.8	31
654	Silicaâ€Gelatin Hybrids with Tailorable Degradation and Mechanical Properties for Tissue Regeneration. Advanced Functional Materials, 2010, 20, 3835-3845.	7.8	213
655	Controlling Stem Cell Fate with Material Design. Advanced Materials, 2010, 22, 175-189.	11.1	215

#	Article	IF	Citations
656	Dynamic Hydrogels: Switching of 3D Microenvironments Using Twoâ€Component Naturally Derived Extracellular Matrices. Advanced Materials, 2010, 22, 686-691.	11.1	148
657	Mechanical Properties of Cellularly Responsive Hydrogels and Their Experimental Determination. Advanced Materials, 2010, 22, 3484-3494.	11.1	394
658	Poly(methacrylic acid)â€Grafted Carbon Nanotube Scaffolds Enhance Differentiation of hESCs into Neuronal Cells. Advanced Materials, 2010, 22, 3542-3547.	11.1	65
659	Biomimetic Nanopatterns as Enabling Tools for Analysis and Control of Live Cells. Advanced Materials, 2010, 22, 4551-4566.	11.1	149
660	Surface Chemistry and Cell Biological Tools for the Analysis of Cell Adhesion and Migration. ChemBioChem, 2010, 11, 745-753.	1.3	33
662	Peptideâ€Based Methods for the Preparation of Nanostructured Inorganic Materials. Angewandte Chemie - International Edition, 2010, 49, 1924-1942.	7.2	428
663	Fibrillar peptide gels in biotechnology and biomedicine. Biopolymers, 2010, 94, 49-59.	1.2	132
664	Biological activity of laminin peptideâ€conjugated alginate and chitosan matrices. Biopolymers, 2010, 94, 711-720.	1.2	35
665	Photodegradation as a mechanism for controlled drug delivery. Biotechnology and Bioengineering, 2010, 107, 1012-1019.	1.7	44
666	Recent progress in the preparation, characterization, and applications of nanofibers and nanofiber membranes via electrospinning/interfacial polymerization. Journal of Applied Polymer Science, 2010, 115, 756-776.	1.3	136
667	Advances in the Elegance of Chemistry in Designing Dendrimers. Macromolecular Rapid Communications, 2010, 31, 947-974.	2.0	94
668	Synthesis of Guanidiniumâ€Modified Hyaluronic Acid Hydrogel. Macromolecular Rapid Communications, 2010, 31, 1175-1180.	2.0	30
669	Modular StarPEGâ€Heparin Gels with Bifunctional Peptide Linkers. Macromolecular Rapid Communications, 2010, 31, 1529-1533.	2.0	52
670	Two and threeâ€dimensional gene transfer from enzymatically degradable hydrogel scaffolds. Microscopy Research and Technique, 2010, 73, 910-917.	1.2	13
671	Stem Cell Microenvironments â€•Unveiling the Secret of How Stem Cell Fate is Defined. Macromolecular Bioscience, 2010, 10, 1302-1315.	2.1	74
672	Multifunctional Hybrid Threeâ€dimensionally Woven Scaffolds for Cartilage Tissue Engineering. Macromolecular Bioscience, 2010, 10, 1355-1364.	2.1	91
673	The myofibroblast: Paradigm for a mechanically active cell. Journal of Biomechanics, 2010, 43, 146-155.	0.9	544
674	Immunological substance testing on human lymphatic micro-organoids in vitro. Journal of Biotechnology, 2010, 148, 38-45.	1.9	74

#	Article	IF	Citations
675	Protein templates in hard tissue engineering. Nano Today, 2010, 5, 254-266.	6.2	87
676	Fabrication and characterization of 3-dimensional PLGA nanofiber/microfiber composite scaffolds. Polymer, 2010, 51, 1320-1327.	1.8	161
677	A biomimetic hydrogel based on methacrylated dextran-graft-lysine and gelatin for 3D smooth muscle cell culture. Biomaterials, 2010, 31, 1158-1170.	5.7	221
678	Engineering integrin signaling for promoting embryonic stem cell self-renewal in a precisely defined niche. Biomaterials, 2010, 31, 1219-1226.	5.7	127
679	The use of sulfonated silk fibroin derivatives to control binding, delivery and potency of FGF-2 in tissue regeneration. Biomaterials, 2010, 31, 1403-1413.	5.7	78
680	Enzymatically degradable poly(ethylene glycol) based hydrogels for adipose tissue engineering. Biomaterials, 2010, 31, 3957-3966.	5.7	82
681	The use of flow perfusion culture and subcutaneous implantation with fibroblast-seeded PLLA-collagen 3D scaffolds for abdominal wall repair. Biomaterials, 2010, 31, 4330-4340.	5.7	37
682	Phosphatidylserine immobilization of lentivirus for localized gene transfer. Biomaterials, 2010, 31, 4353-4359.	5.7	36
683	FGF-2 and VEGF functionalization of starPEGâ€“heparin hydrogels to modulate biomolecular and physical cues of angiogenesis. Biomaterials, 2010, 31, 7985-7994.	5.7	187
684	Dense type I collagen matrices that support cellular remodeling and microfabrication for studies of tumor angiogenesis and vasculogenesis in vitro. Biomaterials, 2010, 31, 8596-8607.	5.7	306
685	In situ thermal gelling polypeptide for chondrocytes 3D culture. Biomaterials, 2010, 31, 9266-9272.	5.7	92
686	Modular scaffolds assembled around living cells using poly(ethylene glycol) microspheres with macroporation via a non-cytotoxic porogen. Acta Biomaterialia, 2010, 6, 29-38.	4.1	81
687	Electrospun collagenâ€“chitosan nanofiber: A biomimetic extracellular matrix for endothelial cell and smooth muscle cell. Acta Biomaterialia, 2010, 6, 372-382.	4.1	335
688	Covalently immobilized RGD gradient on PEG hydrogel scaffold influences cell migration parameters. Acta Biomaterialia, 2010, 6, 2532-2539.	4.1	141
689	Hydrogel/calcium phosphate composites require specific properties for three-dimensional culture of human bone mesenchymal cells. Acta Biomaterialia, 2010, 6, 2932-2939.	4.1	28
690	Synthesis, characterization and cytotoxicity of photo-crosslinked maleic chitosanâ€“polyethylene glycol diacrylate hybrid hydrogels. Acta Biomaterialia, 2010, 6, 3908-3918.	4.1	120
691	The effect of type II collagen coating of chitosan fibrous scaffolds on mesenchymal stem cell adhesion and chondrogenesis. Acta Biomaterialia, 2010, 6, 3988-3997.	4.1	75
692	Design principles for cytokine-neutralizing gels: Cross-linking effects. Acta Biomaterialia, 2010, 6, 4708-4715.	4.1	9

#	Article	IF	Citations
693	A collagen-mimetic triple helical supramolecule that evokes integrin-dependent cell responses. Biomaterials, 2010, 31, 1925-1934.	5.7	57
694	Osteogenic differentiation of human amniotic fluid-derived stem cells induced by bone morphogenetic protein-7 and enhanced by nanofibrous scaffolds. Biomaterials, 2010, 31, 1133-1139.	5.7	116
695	Bioactive hydrogels made from step-growth derived PEGâ€“peptide macromers. Biomaterials, 2010, 31, 3736-3743.	5.7	202
696	Thermogelling chitosan and collagen composite hydrogels initiated with Î²-glycerophosphate for bone tissue engineering. Biomaterials, 2010, 31, 3976-3985.	5.7	270
697	Bioactive modification of poly(ethylene glycol) hydrogels for tissue engineering. Biomaterials, 2010, 31, 4639-4656.	5.7	1,122
698	Toward delivery of multiple growth factors in tissue engineering. Biomaterials, 2010, 31, 6279-6308.	5.7	574
699	The rapid anastomosis between prevascularized networks on silk fibroin scaffolds generated in vitro with cocultures of human microvascular endothelial and osteoblast cells and the host vasculature. Biomaterials, 2010, 31, 6959-6967.	5.7	197
700	Modular enzymatically crosslinked protein polymer hydrogels for in situ gelation. Biomaterials, 2010, 31, 7288-7297.	5.7	92
701	Non-destructive label-free monitoring of collagen gel remodeling using optical coherence tomography. Biomaterials, 2010, 31, 8210-8217.	5.7	20
702	Anti-angiogenic activity of heparin-like polysulfonated polymeric drugs in 3D human cell culture. Biomaterials, 2010, 31, 7863-7872.	5.7	33
703	Development of macroporous nanocomposite scaffolds of gelatin/bioactive glass prepared through layer solvent casting combined with lamination technique for bone tissue engineering. Ceramics International, 2010, 36, 2431-2439.	2.3	109
704	Biomimetic materials in tissue engineering. Materials Today, 2010, 13, 14-22.	8.3	251
705	Resorbable biomaterials as bone graft substitutes. Materials Today, 2010, 13, 24-30.	8.3	326
706	Synthesis and physicochemical characterization of biodegradable and pHâ€responsive hydrogels based on polyphosphoester for protein delivery. Journal of Polymer Science Part A, 2010, 48, 1919-1930.	2.5	30
707	Surface modification of a biodegradable composite by UV laser ablation:in vitrobiological performance. Journal of Tissue Engineering and Regenerative Medicine, 2010, 4, n/a-n/a.	1.3	4
708	Biophysics and dynamics of natural and engineered stem cell microenvironments. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2010, 2, 49-64.	6.6	55
709	Biological activities of cytokine-neutralizing hyaluronic acid-antibody conjugates. Wound Repair and Regeneration, 2010, 18, 302-310.	1.5	16
710	Response of osteoblastâ€like SAOSâ€2 cells to zirconia ceramics with different surface topographies. Clinical Oral Implants Research, 2010, 21, 174-181.	1.9	104

#	Article	IF	Citations
711	Biofunctionalization of titanium implants with a biomimetic active peptide (Pâ€15) promotes early osseointegration. Clinical Oral Implants Research, 2010, 21, 726-734.	1.9	71
712	Noodle gels for cells. Nature Materials, 2010, 9, 535-536.	13.3	32
713	Measurement of mechanical tractions exerted by cells in three-dimensional matrices. Nature Methods, 2010, 7, 969-971.	9.0	534
714	Synthesis of photodegradable hydrogels as dynamically tunable cell culture platforms. Nature Protocols, 2010, 5, 1867-1887.	5.5	242
715	High-throughput methods to define complex stem cell niches. BioTechniques, 2010, 48, ix-xxii.	0.8	69
716	Surface Engineered Polymeric Biomaterials with Improved Biocontact Properties. International Journal of Polymer Science, 2010, 2010, 1-22.	1.2	128
717	Two-Photon Techniques in Tissue Engineering. International Journal of Artificial Organs, 2010, 33, 219-227.	0.7	30
718	Simple and High Yielding Method for Preparing Tissue Specific Extracellular Matrix Coatings for Cell Culture. PLoS ONE, 2010, 5, e13039.	1.1	217
719	Filter-well Technology for Advanced Three-dimensional Cell Culture: Perspectives for Respiratory Research. ATLA Alternatives To Laboratory Animals, 2010, 38, 49-65.	0.7	20
720	Enabling stem cell therapies through synthetic stem cellâ€“niche engineering. Journal of Clinical Investigation, 2010, 120, 60-70.	3.9	157
721	Electrospun Functional Nanofibrous Scaffolds for Tissue Engineering. , 0, , .		3
722	An Engineered Î±1 Integrin-binding Collagenous Sequence. Journal of Biological Chemistry, 2010, 285, 31046-31054.	1.6	51
723	The myofibroblast in connective tissue repair and regeneration. , 2010, , 39-80.		10
724	Calcium Phosphate Ceramics as Bone Drug-Combined Devices. Key Engineering Materials, 0, 441, 181-201.	0.4	11
725	Wound Healing Versus Regeneration: Role of the Tissue Environment in Regenerative Medicine. MRS Bulletin, 2010, 35, 597-606.	1.7	82
726	An optical method to quantify the density of ligands for cell adhesion receptors in three-dimensional matrices. Journal of the Royal Society Interface, 2010, 7, S649-61.	1.5	11
727	Multivalent Integrin-Specific Ligands Enhance Tissue Healing and Biomaterial Integration. Science Translational Medicine, 2010, 2, 45ra60.	5.8	150
728	Regenerative Dentistry. Synthesis Lectures on Tissue Engineering, 2010, 2, 1-178.	0.3	2

#	Article	IF	Citations
729	Decoupling diffusional from dimensional control of signaling in 3D culture reveals a role for myosin in tubulogenesis. Journal of Cell Science, 2010, 123, 2877-2883.	1.2	45
730	Growth of DLD-1 Colon Cancer Cells on Variotisâ„¢ Scaffolds of Controlled Porosity: A Preliminary Study. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 0, 8, 79-89.	0.7	5
731	Bilateral comparison on the calibrations of hydrometers for liquid density between INRIMâ€“Italy and INMETROâ€“Brazil: SIM.M.D-S2. Metrologia, 2010, 47, 07011-07011.	0.6	1
732	Fabrication and characterization of tough elastomeric fibrous scaffolds for tissue engineering applications. , 2010, 2010, 3546-8.		9
733	Regenerative Medicine versus Conventional Auto/Allografts in Bone Reconstruction as an Option for Enhanced Quality of Life. , 2010, , .		0
734	Temperature-driven processing techniques for manufacturing fully interconnected porous scaffolds in bone tissue engineering. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2010, 224, 1389-1400.	1.0	38
735	ENGINEERING ARTIFICIAL STEM CELL NICHES. , 2010, , 285-309.		0
736	Functional Tissue Engineering Through Biofunctional Macromolecules and Surface Design. MRS Bulletin, 2010, 35, 584-590.	1.7	11
737	Bioartificial matrices for therapeutic vascularization. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3323-3328.	3.3	251
738	DYNAMIC CELL CULTURE METHODS FOR FUNCTIONALIZED BIOMATERIALS. , 2010, , 389-418.		0
739	Generation of Stable Co-Cultures of Vascular Cells in a Honeycomb Alginate Scaffold. Tissue Engineering - Part A, 2010, 16, 299-308.	1.6	37
740	Complex temporal regulation of capillary morphogenesis by fibroblasts. American Journal of Physiology - Cell Physiology, 2010, 299, C444-C453.	2.1	53
741	Fabrication of Porous Extracellular Matrix Scaffolds from Human Adipose Tissue. Tissue Engineering - Part C: Methods, 2010, 16, 387-396.	1.1	67
742	Scaffolds for musculoskeletal tissue engineering. , 2010, , 301-329.		0
743	Generation of Type I Collagen Gradient in Polyacrylamide Hydrogels by a Simple Diffusion-Controlled Hydrolysis of Amide Groups. Materials, 2010, 3, 2393-2404.	1.3	13
744	Long-Term Spatially Defined Coculture Within Three-Dimensional Photopatterned Hydrogels. Tissue Engineering - Part C: Methods, 2010, 16, 1621-1628.	1.1	29
745	X-Ray Imaging of Poly(Ethylene Glycol) Hydrogels Without Contrast Agents. Tissue Engineering - Part C: Methods, 2010, 16, 1597-1600.	1.1	18
746	Advances in musculoskeletal tissue engineering. Organogenesis, 2010, 6, 167-172.	0.4	94

#	Article	IF	Citations
747	Recent advances in dermal wound healing: biomedical device approaches. Expert Review of Medical Devices, 2010, 7, 143-154.	1.4	70
748	Three-Dimensional Hydrogel Model Using Adipose-Derived Stem Cells for Vocal Fold Augmentation. Tissue Engineering - Part A, 2010, 16, 535-543.	1.6	56
749	Photo-Cross-Linked PDMSstar-PEG Hydrogels: Synthesis, Characterization, and Potential Application for Tissue Engineering Scaffolds. Biomacromolecules, 2010, 11, 648-656.	2.6	101
750	Tumor Engineering: The Other Face of Tissue Engineering. Tissue Engineering - Part A, 2010, 16, 2153-2156.	1.6	86
751	Liver tissue engineering: promises and prospects of new technology. Cytotherapy, 2010, 12, 349-360.	0.3	13
752	Biomaterials as Stem Cell Niche: Cardiovascular Stem Cells. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , 173-193.	0.7	0
753	Micropatterned Hydrogels for Stem Cell Culture. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , 119-152.	0.7	3
754	Stem Cell Interaction with Topography. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , 61-87.	0.7	1
755	Functional Biomaterials for Controlling Stem Cell Differentiation. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , 19-44.	0.7	14
756	The Nanofiber Matrix as an Artificial Stem Cell Niche. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , 89-118.	0.7	3
757	Injectable Materials for Myocardial Tissue Engineering. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , 133-163.	0.7	1
758	Peptide-Functionalized Click Hydrogels with Independently Tunable Mechanics and Chemical Functionality for 3D Cell Culture. Chemistry of Materials, 2010, 22, 4783-4790.	3.2	196
759	Scalable Stirred-Suspension Bioreactor Culture of Human Pluripotent Stem Cells. Tissue Engineering - Part A, 2010, 16, 405-421.	1.6	226
760	Hydrogels in regenerative medicine: towards understanding structureâ€“function relationships. Regenerative Medicine, 2010, 5, 809-821.	0.8	24
761	Modified 3D-Fibrin Matrices in Tissue Engineering for Stimulation of Angiogenesis and Wound Healing. , 2010, , 1-26.		0
764	Restorative approaches in Parkinson's Disease: Which cell type wins the race?. Journal of the Neurological Sciences, 2010, 289, 93-103.	0.3	59
765	Nanotopography/Mechanical Induction of Stem-Cell Differentiation. Methods in Cell Biology, 2010, 98, 241-294.	0.5	64
766	Protein Engineering in the Development of Functional Hydrogels. Annual Review of Biomedical Engineering, 2010, 12, 167-186.	5.7	135

#	Article	IF	Citations
767	Scaffold Vascularization: A Challenge for Three-Dimensional Tissue Engineering. Current Medicinal Chemistry, 2010, 17, 3944-3967.	1.2	107
768	A Temperature-Responsive Antibody-Like Nanostructure. Biomacromolecules, 2010, 11, 2087-2093.	2.6	23
769	Protease-Catalyzed Oligomerization of Hydrophobic Amino Acid Ethyl Esters in Homogeneous Reaction Media Using <scp>l</scp>-Phenylalanine as a Model System. Biomacromolecules, 2010, 11, 2152-2160.	2.6	44
770	Phosphopantetheinyl Transferase-Catalyzed Formation of Bioactive Hydrogels for Tissue Engineering. Journal of the American Chemical Society, 2010, 132, 5972-5974.	6.6	73
771	Preparation of Porous Biphasic Calcium Phosphate-Gelatin Nanocomposite for Bone Tissue Engineering. Journal of Nano Research, 0, 11, 67-72.	0.8	15
772	Tailoring Thermoreversible Hyaluronan Hydrogels by â€œClickâ€•Chemistry and RAFT Polymerization for Cell and Drug Therapy. Biomacromolecules, 2010, 11, 1261-1272.	2.6	107
773	Universal Chemical Gradient Platforms Using Poly(methyl methacrylate) Based on the Biotinâ˜Streptavidin Interaction for Biological Applications. Langmuir, 2010, 26, 14154-14161.	1.6	37
774	Dynamic Presentation of Immobilized Ligands Regulated through Biomolecular Recognition. Journal of the American Chemical Society, 2010, 132, 13630-13632.	6.6	42
775	PEG-Based Hydrogels with Collagen Mimetic Peptide-Mediated and Tunable Physical Cross-Links. Biomacromolecules, 2010, 11, 2336-2344.	2.6	86
776	Synthesis and Characterization of Enzymatically Biodegradable PEG and Peptide-Based Hydrogels Prepared by Click Chemistry. Biomacromolecules, 2010, 11, 1608-1614.	2.6	112
777	The extracellular matrix at a glance. Journal of Cell Science, 2010, 123, 4195-4200.	1.2	3,130
778	Cell Motility and Mechanics in Three-Dimensional Collagen Matrices. Annual Review of Cell and Developmental Biology, 2010, 26, 335-361.	4.0	298
779	Green synthesis of chitosan-based nanofibers and their applications. Green Chemistry, 2010, 12, 1207.	4.6	103
780	Designing biomimetic scaffolds for bone regeneration: why aim for a copy of mature tissue properties if nature uses a different approach?. Soft Matter, 2010, 6, 4976.	1.2	88
781	Synthesis of artificial lymphoid tissue with immunological function. Trends in Immunology, 2010, 31, 422-428.	2.9	23
782	Induced pluripotent stem cells: A new era for hepatology. Journal of Hepatology, 2010, 53, 738-751.	1.8	77
783	Supramolecular hemoproteinâ€“gold nanoparticle conjugates. Chemical Communications, 2010, 46, 9107.	2.2	28
784	Multi-component extracellular matrices based on peptide self-assembly. Chemical Society Reviews, 2010, 39, 3413.	18.7	220

#	Article	IF	Citations
785	Rheological properties of peptide-based hydrogels for biomedical and other applications. Chemical Society Reviews, 2010, 39, 3528.	18.7	641
786	Adipose Tissue Formation in Collagen Scaffolds with Different Biodegradabilities. Journal of Biomaterials Science, Polymer Edition, 2010, 21, 463-476.	1.9	21
787	Tuning Supramolecular Rigidity of Peptide Fibers through Molecular Structure. Journal of the American Chemical Society, 2010, 132, 6041-6046.	6.6	367
788	Construction and transmembrane dissociation behavior of supramolecular assembly of quinolinocyclodextrin with porphyrin. Organic and Biomolecular Chemistry, 2010, 8, 4148.	1.5	19
789	An injectable, nanoaggregate-based system for mesenchymal stem cell (MSC) delivery: enhancement of cell adhesion and prevention of cytotoxicity. Journal of Materials Chemistry, 2010, 20, 3166.	6.7	4
790	Fabricating Microparticles/Nanofibers Composite and Nanofiber Scaffold with Controllable Pore Size by Rotating Multichannel Electrospinning. Journal of Biomaterials Science, Polymer Edition, 2010, 21, 1503-1514.	1.9	13
791	Methods to Measure the Strength of Cell Adhesion to Substrates. Journal of Adhesion Science and Technology, 2010, 24, 2027-2058.	1.4	62
792	A Structurally Tunable DNA-Based Extracellular Matrix. Journal of the American Chemical Society, 2010, 132, 14727-14729.	6.6	51
793	Synthetic hydrogels for controlled stem cell differentiation. Soft Matter, 2010, 6, 67-81.	1.2	122
794	A facile bottom-up route to self-assembled biogenic chitin nanofibers. Soft Matter, 2010, 6, 5298.	1.2	90
795	Disparate Companions: Tissue Engineering Meets Cancer Research. Cells Tissues Organs, 2010, 192, 141-157.	1.3	6
796	In Vitro and In Vivo Bioluminescent Quantification of Viable Stem Cells in Engineered Constructs. Tissue Engineering - Part C: Methods, 2010, 16, 447-458.	1.1	34
797	Biodegradable Nanofibers-Reinforced Microfibrous Composite Scaffolds for Bone Tissue Engineering. Tissue Engineering - Part A, 2010, 16, 3599-3609.	1.6	42
798	Design and Characterization of an Injectable Pericardial Matrix Gel: A Potentially Autologous Scaffold for Cardiac Tissue Engineering. Tissue Engineering - Part A, 2010, 16, 2017-2027.	1.6	177
799	Tissue-Engineered Three-Dimensional Tumor Models to Study Tumor Angiogenesis. Tissue Engineering - Part A, 2010, 16, 2147-2152.	1.6	44
800	Creating Biomimetic Surfaces through Covalent and Oriented Binding of Proteins. Langmuir, 2010, 26, 14707-14715.	1.6	37
801	Biomaterials as Stem Cell Niche. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2010, , .	0.7	3
802	Modular Approach toward Bioactive Fiber Meshes Carrying Oligosaccharides. Macromolecules, 2010, 43, 9239-9247.	2.2	40

#	Article	IF	Citations
803	Enzyme Mediated Site-Specific Surface Modification. Langmuir, 2010, 26, 11127-11134.	1.6	19
805	Artificial extracellular matrix for embryonic stem cell cultures: a new frontier of nanobiomaterials. Science and Technology of Advanced Materials, 2010, 11, 014106.	2.8	14
806	A self-assembling peptide acting as an immune adjuvant. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 622-627.	3.3	440
807	Mechanical Induction of Gene Expression in Connective Tissue Cells. Methods in Cell Biology, 2010, 98, 178-205.	0.5	46
808	Microstructured scaffold coated with hydroxyapatite/collagen nanocomposite multilayer for enhanced osteogenic induction of human mesenchymal stem cells. Journal of Materials Chemistry, 2010, 20, 8927.	6.7	37
809	Multimodal biomaterial strategies for regeneration of infarcted myocardium. Journal of Materials Chemistry, 2010, 20, 8819.	6.7	23
810	Enzymatically degradable heparin-polyethylene glycol gels with controlled mechanical properties. Chemical Communications, 2010, 46, 1141-1143.	2.2	50
811	Microfluidic Culture Models of Tumor Angiogenesis. Tissue Engineering - Part A, 2010, 16, 2143-2146.	1.6	75
812	Protein decorated membranes by specific molecular interactions. Soft Matter, 2010, 6, 2815.	1.2	28
813	A synthetic strategy for mimicking the extracellular matrix provides new insight about tumor cell migration. Integrative Biology (United Kingdom), 2010, 2, 32-40.	0.6	79
814	Emerging materials for tissue engineering and regenerative medicine: themed issue for Journal of Materials Chemistry and Soft Matter. Journal of Materials Chemistry, 2010, 20, 8729.	6.7	2
815	Type I Collagen-Functionalized Supported Lipid Bilayer as a Cell Culture Platform. Biomacromolecules, 2010, 11, 1231-1240.	2.6	51
816	Multiplexed, high-throughput analysis of 3D microtissue suspensions. Integrative Biology (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.6	45
817	Microengineering Hydrogels for Stem Cell Bioengineering and Tissue Regeneration. Journal of the Association for Laboratory Automation, 2010, 15, 440-448.	2.8	23
818	Fibronectin-mimetic peptide-amphiphile nanofiber gels support increased cell adhesion and promote ECM production. Soft Matter, 2010, 6, 5064.	1.2	34
819	In situ cross-linkable gelatinâ€“poly(ethylene glycol)â€“tyramine hydrogel via enzyme-mediated reaction for tissue regenerative medicine. Journal of Materials Chemistry, 2011, 21, 13180.	6.7	107
820	Micropatterning of bioactive heparin-based hydrogels. Soft Matter, 2011, 7, 3133-3140.	1.2	34
821	Sugar functionalised PEGA surfaces support metabolically active hepatocytes. Journal of Materials Chemistry, 2011, 21, 2901.	6.7	11

#	Article	IF	Citations
822	In situ hydrogelation and RGDconjugation of tyramine-conjugated 4-arm PPOâ€“PEOblock copolymer for injectable bio-mimetic scaffolds. Soft Matter, 2011, 7, 986-992.	1.2	53
823	Direct and cell signaling-based, geometry-induced neuronal differentiation of neural stem cells. Integrative Biology (United Kingdom), 2011, 3, 1207.	0.6	27
824	Heparin Mimetic Peptide Nanofibers Promote Angiogenesis. Biomacromolecules, 2011, 12, 3508-3519.	2.6	127
825	A chemically-controlled supramolecular protein polymer formed by a myoglobin-based self-assembly system. Chemical Science, 2011, 2, 1033.	3.7	52
826	Engineering a stem cell house into a home. Stem Cell Research and Therapy, 2011, 2, 3.	2.4	40
827	Stem cell applications in military medicine. Stem Cell Research and Therapy, 2011, 2, 40.	2.4	19
828	Tuning PEG-DA hydrogel properties via solvent-induced phase separation (SIPS). Journal of Materials Chemistry, 2011, 21, 18776.	6.7	18
829	Controllable self-assembled laminated nanoribbons from dipeptide-amphiphile bearing azobenzene moiety. Soft Matter, 2011, 7, 2762.	1.2	76
830	A multi-scaled hybrid orthopedic implant: bone ECM-shaped Sr-HA nanofibers on the microporous walls of a macroporous titanium scaffold. Nanotechnology, 2011, 22, 275603.	1.3	37
831	Indentation Versus Tensile Measurements of Young's Modulus for Soft Biological Tissues. Tissue Engineering - Part B: Reviews, 2011, 17, 155-164.	2.5	533
832	Unprecedented Access to Functional Biodegradable Polymers and Coatings. Macromolecules, 2011, 44, 6009-6016.	2.2	88
833	Facile and Biocompatible Fabrication of Chemically Solâ^'Gel Transitional Hydrogel Free-Standing Microarchitectures. Biomacromolecules, 2011, 12, 14-18.	2.6	16
834	Tunable Mechanical Stability and Deformation Response of a Resilin-Based Elastomer. Biomacromolecules, 2011, 12, 2302-2310.	2.6	118
835	Biomaterials to Enhance Stem Cell Function in the Heart. Circulation Research, 2011, 109, 910-922.	2.0	161
836	Strain-Induced Molecular Reorientation and Birefringence Reversion of a Robust, Anisotropic Double-Network Hydrogel. Macromolecules, 2011, 44, 3542-3547.	2.2	61
837	Honey based fibrous scaffold for tissue engineering application. , 2011, , .		1
838	Control of Surface Chemistry, Substrate Stiffness, and Cell Function in a Novel Terpolymer Methacrylate Library. Langmuir, 2011, 27, 1891-1899.	1.6	46
839	Tissue-Engineering Technology for Tissue Repair and Regeneration. , 2011, , 353-375.		2

#	Article	IF	Citations
840	Poly(carboxybetaine methacrylamide)-Modified Nanoparticles: A Model System for Studying the Effect of Chain Chemistry on Film Properties, Adsorbed Protein Conformation, and Clot Formation Kinetics. Biomacromolecules, 2011, 12, 3567-3580.	2.6	52
841	Biomaterial-Mediated Delivery of Microenvironmental Cues for Repair and Regeneration of Articular Cartilage. Molecular Pharmaceutics, 2011, 8, 994-1001.	2.3	60
842	Fabrication and Selective Functionalization of Amine-Reactive Polymer Multilayers on Topographically Patterned Microwell Cell Culture Arrays. Biomacromolecules, 2011, 12, 1998-2007.	2.6	46
843	Spatial control of cell fate using synthetic surfaces to potentiate TGF-Î² signaling. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11745-11750.	3.3	51
844	Biomimetic Calcium Phosphate Mineralization with Multifunctional Elastin-Like Recombinamers. Biomacromolecules, 2011, 12, 1480-1486.	2.6	59
845	Surface Immobilization of Plasmid DNA with a Cell-Responsive Tether for Substrate-Mediated Gene Delivery. Langmuir, 2011, 27, 2739-2746.	1.6	25
846	Versatile Small-Molecule Motifs for Self-Assembly in Water and the Formation of Biofunctional Supramolecular Hydrogels. Langmuir, 2011, 27, 529-537.	1.6	203
847	Dehydrothermal Crosslinking of Electrospun Collagen. Tissue Engineering - Part C: Methods, 2011, 17, 9-17.	1.1	102
848	Regenerative Medicine and the Gut. Gastroenterology, 2011, 141, 1162-1166.e2.	0.6	11
849	Elucidating the Role of Matrix Stiffness in 3D Cell Migration and Remodeling. Biophysical Journal, 2011, 100, 284-293.	0.2	291
850	Biomaterials for the Treatment of Myocardial Infarction. Journal of the American College of Cardiology, 2011, 58, 2615-2629.	1.2	207
851	Design of Nano- and Microfiber Combined Scaffolds by Electrospinning of Collagen onto Starch-Based Fiber Meshes: A Man-Made Equivalent of Natural Extracellular Matrix. Tissue Engineering - Part A, 2011, 17, 463-473.	1.6	55
852	Skin Tissue Engineering. , 2011, , 467-499.		15
854	Hydrogels in Tissue Engineering. , 2011, , 9-46.		8
856	Tissue Engineering of Organs: Brain Tissues. , 2011, , 457-492.		1
857	Decellularization and Recellularization of Whole Livers. Journal of Visualized Experiments, 2011, , .	0.2	27
858	Microscale Technologies and Modular Approaches for Tissue Engineering: Moving toward the Fabrication of Complex Functional Structures. ACS Nano, 2011, 5, 4258-4264.	7.3	61
859	The Quest for an Optimized Protocol for Whole-Heart Decellularization: A Comparison of Three Popular and a Novel Decellularization Technique and Their Diverse Effects on Crucial Extracellular Matrix Qualities. Tissue Engineering - Part C: Methods, 2011, 17, 915-926.	1.1	132

#	Article	IF	Citations
860	Responsive nematic gels from the self-assembly of aqueous nanofibres. Nature Communications, 2011, 2, 459.	5.8	105
861	Synthetic Polymers. , 2011, , 587-622.		26
862	Multifunctional Polymer Based Structures for Human Tissues Reconstruction. , 2011, , 91-112.		1
863	Adsorption of collagen onto single walled carbon nanotubes: a molecular dynamics investigation. Physical Chemistry Chemical Physics, 2011, 13, 13046.	1.3	21
864	Design properties of hydrogel tissue-engineering scaffolds. Expert Review of Medical Devices, 2011, 8, 607-626.	1.4	1,128
866	Nanoscale tissue engineering: spatial control over cell-materials interactions. Nanotechnology, 2011, 22, 212001.	1.3	100
867	Macromolecular Engineering of Polypeptides Using the Ring-Opening Polymerization of Î±-Amino Acid N-Carboxyanhydrides. , 2011, , 519-540.		6
868	Tissue Engineering in Regenerative Medicine. , 2011, , .		7
869	Regenerating the Heart. , 2011, , .		2
870	Hydrogelation of self-assembling RGD-based peptides. Soft Matter, 2011, 7, 1326-1333.	1.2	112
871	Evaluation of Substrata Effect on Cell Adhesion Properties Using Freestanding Poly(l-lactic acid) Nanosheets. Langmuir, 2011, 27, 13173-13182.	1.6	53
874	Electrospun biocomposite nanofibrous patch for cardiac tissue engineering. Biomedical Materials (Bristol), 2011, 6, 055001.	1.7	115
875	Arrangement of Type IV Collagen and Laminin on Substrates with Controlled Density of â€“OH Groups. Tissue Engineering - Part A, 2011, 17, 2245-2257.	1.6	13
876	Enhanced Rat Islet Function and SurvivalIn VitroUsing a Biomimetic Self-Assembled Nanomatrix Gel. Tissue Engineering - Part A, 2011, 17, 399-406.	1.6	30
877	Engineered microenvironments for self-renewal and musculoskeletal differentiation of stem cells. Regenerative Medicine, 2011, 6, 505-524.	0.8	31
878	Polymers of Biological Origin. , 2011, , 187-205.		2
879	Decellularized Porcine Brain Matrix for Cell Culture and Tissue Engineering Scaffolds. Tissue Engineering - Part A, 2011, 17, 2583-2592.	1.6	194
880	Design Principles in Biomaterials and Scaffolds. , 2011, , 543-556.		1

#	Article	IF	Citations
882	Engineered Bioactive Molecules. , 2011, , 131-145.		1
883	Chemically well-defined self-assembled monolayers for cell culture: toward mimicking the natural ECM. Soft Matter, 2011, 7, 9561.	1.2	66
884	Myocardial Tissue Engineering. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2011, , .	0.7	2
885	Cytocompatible Hydrogel Composed of Phospholipid Polymers for Regulation of Cell Functions. Advances in Polymer Science, 2011, , 141-165.	0.4	7
886	Materials as Artificial Stem Cell Microenvironments. , 2011, , 155-167.		0
887	Rapid spatial and temporal controlled signal delivery over large cell culture areas. Lab on A Chip, 2011, 11, 3057.	3.1	53
888	Advances in the biology of bone metastasis: How the skeleton affects tumor behavior. Bone, 2011, 48, 6-15.	1.4	164
889	Three-dimensional biomaterials for the study of human pluripotent stem cells. Nature Methods, 2011, 8, 731-736.	9.0	205
890	Growth factor delivery-based tissue engineering: general approaches and a review of recent developments. Journal of the Royal Society Interface, 2011, 8, 153-170.	1.5	1,150
891	Engineering a Collagen Matrix that Replicates the Biological Properties of Native Extracellular Matrix. Journal of Biomaterials Science, Polymer Edition, 2011, 22, 1963-1982.	1.9	8
892	Electrospun poly (É›-caprolactone)/silk fibroin core-sheath nanofibers and their potential applications in tissue engineering and drug release. International Journal of Biological Macromolecules, 2011, 49, 223-232.	3.6	134
893	Comparative analysis of gelatin scaffolds crosslinked by genipin and silane coupling agent. International Journal of Biological Macromolecules, 2011, 49, 700-706.	3.6	105
894	Materials for engineering vascularized adipose tissue. Journal of Tissue Viability, 2011, 20, 37-48.	0.9	32
896	Tissue Engineering of Heart Valves. , 2011, , 377-391.		0
897	Photoresponsive DNA-Cross-Linked Hydrogels for Controllable Release and Cancer Therapy. Langmuir, 2011, 27, 399-408.	1.6	165
898	Electrospun Nanofibrous Scaffolds-Current Status and Prospects in Drug Delivery. Advances in Polymer Science, 2011, , 241-262.	0.4	41
899	Engineering 3D cell instructive microenvironments by rational assembly of artificial extracellular matrices and cell patterning. Integrative Biology (United Kingdom), 2011, 3, 1102.	0.6	47
900	Multifactorial optimization of endothelial cell growth using modular synthetic extracellular matrices. Integrative Biology (United Kingdom), 2011, 3, 185.	0.6	108

#	Article	IF	Citations
901	Injectable hydrogel scaffold from decellularized human lipoaspirate. Acta Biomaterialia, 2011, 7, 1040-1049.	4.1	178
902	Nanocrystalline Diamond Films: Applications and Advances in Nanomedicine. , 0, , .		1
903	Role of laminins in physiological and pathological angiogenesis. International Journal of Developmental Biology, 2011, 55, 455-465.	0.3	73
904	Recent Advances in the Modeling of PEG Hydrogel Membranes for Biomedical Applications. , 0, , .		0
905	Bioartificial Stem Cell Niches: Engineering a Regenerative Microenvironment. , 2011, , 245-256.		2
906	Cell-Biomaterial Interaction: Strategies To Mimic The Extracellular Matrix. , 2011, , .		4
907	The Use of a Hydrogel Matrix as a Cellular Delivery Vehicle in Future Cell-Based Therapies: Biological and Non-Biological Considerations. , 2011, , .		0
909	Xenogenic Tissues and Biomaterials for the Skeletal System. , 2011, , 387-404.		3
910	Cell-Demanded Release of Growth Factors. , 2011, , 463-473.		1
911	Poly(amidoamine) Hydrogels as Scaffolds for Cell Culturing and Conduits for Peripheral Nerve Regeneration. International Journal of Polymer Science, 2011, 2011, 1-20.	1.2	4
912	Emerging Trends in Tissue Engineering. , 2011, , 251-263.		2
913	Artificial Acellular Feeder Layer: An Advanced Engineered Extracellular Matrix for Stem Cell Culture. , 0, , .		0
914	Multizone Paper Platform for 3D Cell Cultures. PLoS ONE, 2011, 6, e18940.	1.1	192
915	Bioreactors for Bone Tissue Engineering. International Journal of Artificial Organs, 2011, 34, 259-270.	0.7	38
916	Liver Tissue Engineering. , 2011, , 575-585.		2
917	Stem Cells and Bioactive Scaffolds as a Treatment for Traumatic Brain Injury. Current Stem Cell Research and Therapy, 2011, 6, 208-220.	0.6	15
918	Rational and Combinatorial Methods to Create Designer Protein Interfaces. , 2011, , 161-179.		0
919	Engineering the Biophysical Properties of Basement Membranes into Biomaterials: Fabrication and Effects on Cell Behavior. , 2011, , 527-546.		2

#	Article	IF	Citations
920	Novel Developed Systems and Techniques Based on Double-Network Principle. Bulletin of the Chemical Society of Japan, 2011, 84, 1295-1311.	2.0	33
921	Controlled activation of morphogenesis to generate a functional human microvasculature in a synthetic matrix. Blood, 2011, 118, 804-815.	0.6	166
922	In search of optimal scaffold for regenerative medicine and therapeutic delivery. Therapeutic Delivery, 2011, 2, 231-234.	1.2	4
924	Heart Valve Stenosis and Surgical Repair: Present and Future. , 2011, , 305-319.		0
925	Systems Biology in Biomaterials and Tissue Engineering. , 2011, , 177-188.		1
926	Effect of long-term culture of mouse embryonic stem cells under low oxygen concentration as well as on glycosaminoglycan hyaluronan on cell proliferation and differentiation. Cell Proliferation, 2011, 44, 75-85.	2.4	23
927	New dermal substitutes. Wound Repair and Regeneration, 2011, 19, s59-65.	1.5	41
928	The use of human hypertrophic chondrocytes-derived extracellular matrix for the treatment of critical-size calvarial defects. Clinical Oral Implants Research, 2011, 22, 1346-1353.	1.9	17
929	Extracellular matrix in angiogenesis: dynamic structures with translational potential. Experimental Dermatology, 2011, 20, 605-613.	1.4	55
930	Nanotechnological strategies for engineering complex tissues. Nature Nanotechnology, 2011, 6, 13-22.	15.6	1,226
931	Organ printing: the future of bone regeneration?. Trends in Biotechnology, 2011, 29, 601-606.	4.9	195
932	Novel solâ€“gel derived calcium phosphate coatings on Mg4Y alloy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 1679-1689.	1.7	47
933	Biocompatibilty of starch-based films from starch of Andean crops for biomedical applications. Materials Science and Engineering C, 2011, 31, 1737-1740.	3.8	28
934	In vivo study of dendronlike nanoparticles for stem cells â€œtune-upâ€• from nano to tissues. Nanomedicine: Nanotechnology, Biology, and Medicine, 2011, 7, 914-924.	1.7	34
935	In vivo modulation of dendritic cells by engineered materials: Towards new cancer vaccines. Nano Today, 2011, 6, 466-477.	6.2	63
936	New insights into and novel applications of release technology for periodontal reconstructive therapies. Journal of Controlled Release, 2011, 149, 92-110.	4.8	118
937	Silk fibroin as a vehicle for drug delivery applications. Journal of Controlled Release, 2011, 150, 128-141.	4.8	441
938	Unveiling the self-assembly behavior of copolymers of AAc and DMAPMA in situ to form smart hydrogels displaying nanogels-within-macrogel hierarchical morphology. Polymer, 2011, 52, 3800-3810.	1.8	18

#	Article	IF	Citations
939	Endothelial cell responses towards low-fouling surfaces bearing RGD in a three-dimensional environment. Experimental Cell Research, 2011, 317, 1994-2006.	1.2	12
940	Biomaterials meet microfluidics: building the next generation of artificial niches. Current Opinion in Biotechnology, 2011, 22, 690-697.	3.3	75
941	Three-dimensional culture of rat BMMSCs in a porous chitosan-gelatin scaffold: A promising association for bone tissue engineering in oral reconstruction. Archives of Oral Biology, 2011, 56, 1-15.	0.8	89
942	Orientation-regulated immobilization of Jagged1 on glass substrates for exÂvivo proliferation of a bone marrow cell population containing hematopoietic stem cells. Biomaterials, 2011, 32, 6920-6928.	5.7	24
943	Nanostructuring PEG-fibrinogen hydrogels to control cellular morphogenesis. Biomaterials, 2011, 32, 7839-7846.	5.7	38
944	Engineering vessel-like networks within multicellular fibrin-based constructs. Biomaterials, 2011, 32, 7856-7869.	5.7	177
945	The pro-myogenic environment provided by whole organ scale acellular scaffolds from skeletal muscle. Biomaterials, 2011, 32, 7870-7882.	5.7	101
946	Scaffold vascularization inÂvivo driven by primary human osteoblasts in concert with host inflammatory cells. Biomaterials, 2011, 32, 8150-8160.	5.7	111
947	The effect of hydration on molecular chain mobility and the viscoelastic behavior of resilin-mimetic protein-based hydrogels. Biomaterials, 2011, 32, 8462-8473.	5.7	66
948	The use of injectable sonication-induced silk hydrogel for VEGF165 and BMP-2 delivery for elevation of the maxillary sinus floor. Biomaterials, 2011, 32, 9415-9424.	5.7	255
949	Synergistic regulation of cell function by matrix rigidity and adhesive pattern. Biomaterials, 2011, 32, 9584-9593.	5.7	75
950	Graphene for Controlled and Accelerated Osteogenic Differentiation of Human Mesenchymal Stem Cells. ACS Nano, 2011, 5, 4670-4678.	7.3	819
951	Drug delivery in soft tissue engineering. Expert Opinion on Drug Delivery, 2011, 8, 1175-1188.	2.4	54
952	A Novel Method for the Fabrication of Fibrin-Based Electrospun Nanofibrous Scaffold for Tissue-Engineering Applications. Tissue Engineering - Part C: Methods, 2011, 17, 1121-1130.	1.1	48
953	Nanostructured porous siliconâ€“polymer-based hybrids: from biosensing to drug delivery. Nanomedicine, 2011, 6, 1755-1770.	1.7	103
954	Electrospun cellular microenvironments: Understanding controlled release and scaffold structure. Advanced Drug Delivery Reviews, 2011, 63, 209-220.	6.6	238
955	Substrates for cardiovascular tissue engineering. Advanced Drug Delivery Reviews, 2011, 63, 221-241.	6.6	235
956	Vascularization is the key challenge in tissue engineering. Advanced Drug Delivery Reviews, 2011, 63, 300-311.	6.6	875

#	Article	IF	Citations
957	Elastomeric electrospun scaffolds of poly(l-lactide-co-trimethylene carbonate) for myocardial tissue engineering. Journal of Materials Science: Materials in Medicine, 2011, 22, 1689-1699.	1.7	41
958	Engineering of a multi-functional extracellular matrix protein for immobilization to bone mineral hydroxyapatite. Biotechnology Letters, 2011, 33, 199-204.	1.1	10
959	Nano-Fibrous Tissue Engineering Scaffolds Capable of Growth Factor Delivery. Pharmaceutical Research, 2011, 28, 1273-1281.	1.7	57
960	Dermal substitute-assisted healing: enhancing stem cell therapy with novel biomaterial design. Archives of Dermatological Research, 2011, 303, 301-315.	1.1	49
961	Commentary: Deciphering the link between architecture and biological response of a bone graft substitute. Acta Biomaterialia, 2011, 7, 478-484.	4.1	128
962	The spreading, migration and proliferation of mouse mesenchymal stem cells cultured inside hyaluronic acid hydrogels. Biomaterials, 2011, 32, 39-47.	5.7	241
963	The effect of recombinant E-cadherin substratum on the differentiation of endoderm-derived hepatocyte-like cells from embryonic stem cells. Biomaterials, 2011, 32, 2032-2042.	5.7	47
964	Controlling the adhesion and differentiation of mesenchymal stem cells using hyaluronic acid-based, doubly crosslinked networks. Biomaterials, 2011, 32, 2466-2478.	5.7	95
965	Engineering the cellâ€“material interface for controlling stem cell adhesion, migration, and differentiation. Biomaterials, 2011, 32, 3700-3711.	5.7	288
966	The generation of biomolecular patterns in highly porous collagen-GAG scaffolds using direct photolithography. Biomaterials, 2011, 32, 3949-3957.	5.7	71
967	Cardiac Cell Therapy: The Next (Re)Generation. Stem Cell Reviews and Reports, 2011, 7, 1018-1030.	5.6	28
968	Patient-to-Patient Variability in Autologous Pericardial Matrix Scaffolds for Cardiac Repair. Journal of Cardiovascular Translational Research, 2011, 4, 545-556.	1.1	35
969	Hybrid Gel Composed of Native Heart Matrix and Collagen Induces Cardiac Differentiation of Human Embryonic Stem Cells without Supplemental Growth Factors. Journal of Cardiovascular Translational Research, 2011, 4, 605-615.	1.1	161
970	Control of adhesion, focal adhesion assembly, and differentiation of myoblasts by enzymatically crosslinked cell-interactive hydrogels. Macromolecular Research, 2011, 19, 911-920.	1.0	18
971	Application of decellularized scaffold combined with loaded nanoparticles for heart valve tissue engineering in vitro. Journal of Huazhong University of Science and Technology [Medical Sciences], 2011, 31, 88-93.	1.0	21
972	Extracellular matrix bioengineering and systems biology approaches in liver disease. Systems and Synthetic Biology, 2011, 5, 11-20.	1.0	8
973	The Use of Biomaterials in Islet Transplantation. Current Diabetes Reports, 2011, 11, 434-444.	1.7	55
974	Multiâ€functional initiator and poly(carboxybetaine methacrylamides) for building biocompatible surfaces using â€œnitroxide mediated free radical polymerizationâ€•strategies. Journal of Polymer Science Part A, 2011, 49, 1051-1060.	2.5	30

#	Article	IF	Citations
975	Multicomponent supramolecular thermoplastic elastomer with peptideâ€modified nanofibers. Journal of Polymer Science Part A, 2011, 49, 1764-1771.	2.5	33
976	Nanomaterials Can Dynamically Steer Cell Responses to Biological Ligands. Small, 2011, 7, 242-251.	5.2	5
977	Enhanced osteoblastic differentiation of mesenchymal stem cells seeded in RGD-functionalized PLLA scaffolds and cultured in a flow perfusion bioreactor. Journal of Tissue Engineering and Regenerative Medicine, 2011, 5, 464-475.	1.3	32
978	Human fetal bone cells in delivery systems for bone engineering. Journal of Tissue Engineering and Regenerative Medicine, 2011, 5, 806-814.	1.3	12
979	Nanotechnology for surgeons. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2011, 3, 223-228.	3.3	12
980	Reconstructing the Differentiation Niche of Embryonic Stem Cells Using Biomaterials. Macromolecular Bioscience, 2011, 11, 36-49.	2.1	65
981	Modulation of Material Properties of a Decellularized Myocardial Matrix Scaffold. Macromolecular Bioscience, 2011, 11, 731-738.	2.1	78
982	Biomimetic Approaches to Control Soluble Concentration Gradients in Biomaterials. Macromolecular Bioscience, 2011, 11, 483-492.	2.1	38
983	A Topographically Optimized Substrate with Wellâ€Ordered Lattice Micropatterns for Enhancing the Osteogenic Differentiation of Murine Mesenchymal Stem Cells. Macromolecular Bioscience, 2011, 11, 938-945.	2.1	21
984	Biomimetic Materials for Bone Tissue Engineering â€“ State of the Art and Future Trends. Advanced Engineering Materials, 2011, 13, B135.	1.6	61
985	Dynamic Electromechanical Hydrogel Matrices for Stem Cell Culture. Advanced Functional Materials, 2011, 21, 55-63.	7.8	84
986	Functionalization and Patterning of Proteinâ€Based Materials Using Active Ultrabithorax Chimeras. Advanced Functional Materials, 2011, 21, 2633-2640.	7.8	13
987	Solid Freeâ€Form Fabrication of Tissueâ€Engineering Scaffolds with a Poly(lacticâ€coâ€glycolic acid) Grafted Hyaluronic Acid Conjugate Encapsulating an Intact Bone Morphogenetic Proteinâ€2/Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	7.8	68
988	A Novel Family of Biodegradable Poly(ester amide) Elastomers. Advanced Materials, 2011, 23, H95-100.	11.1	41
989	Hyaluronic Acid Hydrogels for Biomedical Applications. Advanced Materials, 2011, 23, H41-56.	11.1	1,593
990	Presentation of BMPâ€2 from a Soft Biopolymeric Film Unveils its Activity on Cell Adhesion and Migration. Advanced Materials, 2011, 23, H111-8.	11.1	116
991	Clay Gels For the Delivery of Regenerative Microenvironments. Advanced Materials, 2011, 23, 3304-3308.	11.1	147
994	Biomimeticity in tissue engineering scaffolds through synthetic peptide modificationsâ€"Altering chemistry for enhanced biological response. Journal of Biomedical Materials Research - Part A, 2011, 96A, 477-491.	2.1	68

#	Article	IF	Citations
995	Surface immobilization of elastinâ€like polypeptides using fluorinated surface modifying additives. Journal of Biomedical Materials Research - Part A, 2011, 96A, 648-662.	2.1	16
996	Decellularized extracellular matrix derived from human adipose tissue as a potential scaffold for allograft tissue engineering. Journal of Biomedical Materials Research - Part A, 2011, 97A, 292-299.	2.1	116
997	Development of bioactive photocrosslinkable fibrous hydrogels. Journal of Biomedical Materials Research - Part A, 2011, 98A, 167-176.	2.1	10
998	Crosslinking of poly(<scp>L</scp>â€lactide) nanofibers with triallyl isocyanutrate by gammaâ€irradiation for tissue engineering application. Journal of Biomedical Materials Research - Part A, 2011, 99A, 655-665.	2.1	18
999	Cationized bovine serum albumin with pendant RGD groups forms efficient biocoatings for cell adhesion. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2011, 99B, 282-290.	1.6	15
1000	Characterization of surfaceâ€modified polyalkanoate films for biomedical applications. Journal of Applied Polymer Science, 2011, 119, 3286-3296.	1.3	19
1003	Modular Design in Natural and Biomimetic Soft Materials. Angewandte Chemie - International Edition, 2011, 50, 9026-9057.	7.2	195
1004	Electrostatic Control of Bioactivity. Angewandte Chemie - International Edition, 2011, 50, 6292-6295.	7.2	79
1005	Effects of extracellular matrices derived from different cell sources on chondrocyte functions. Biotechnology Progress, 2011, 27, 788-795.	1.3	31
1006	Osteoarthritic chondrocyteâ€“secreted morphogens induce chondrogenic differentiation of human mesenchymal stem cells. Arthritis and Rheumatism, 2011, 63, 148-158.	6.7	99
1007	Construction and Activity of a Synthetic Basement Membrane with Active Laminin Peptides and Polysaccharides. Chemistry - A European Journal, 2011, 17, 10500-10508.	1.7	35
1008	Individual-based modelling of angiogenesis inside three-dimensional porous biomaterials. BioSystems, 2011, 103, 372-383.	0.9	12
1009	The effect of immobilized RGD peptide in alginate scaffolds on cardiac tissue engineering. Acta Biomaterialia, 2011, 7, 152-162.	4.1	211
1010	Osteogenic differentiation of human mesenchymal stem cells synergistically enhanced by biomimetic peptide amphiphiles combined with conditioned medium. Acta Biomaterialia, 2011, 7, 675-682.	4.1	70
1011	Adhesive substrates modulate the activation and stimulatory capacity of non-obese diabetic mouse-derived dendritic cells. Acta Biomaterialia, 2011, 7, 180-192.	4.1	25
1012	Conjugation of fibronectin onto three-dimensional porous scaffolds for vascular tissue engineering applications. Acta Biomaterialia, 2011, 7, 1114-1125.	4.1	45
1013	Molecularly designed alginate hydrogels susceptible to local proteolysis as three-dimensional cellular microenvironments. Acta Biomaterialia, 2011, 7, 1674-1682.	4.1	142
1014	Perfusion electrodeposition of calcium phosphate on additive manufactured titanium scaffolds for bone engineering. Acta Biomaterialia, 2011, 7, 2310-2319.	4.1	45

#	Article	IF	Citations
1015	An in vitro study of two GAG-like marine polysaccharides incorporated into injectable hydrogels for bone and cartilage tissue engineering. Acta Biomaterialia, 2011, 7, 2119-2130.	4.1	28
1016	Towards a quantitative understanding of oxygen tension and cell density evolution in fibrin hydrogels. Biomaterials, 2011, 32, 107-118.	5.7	60
1017	Hydrogels with time-dependent material properties enhance cardiomyocyte differentiation in vitro. Biomaterials, 2011, 32, 1002-1009.	5.7	318
1018	Designing a binding interface for control of cancer cell adhesion via 3D topography and metabolic oligosaccharide engineering. Biomaterials, 2011, 32, 5427-5437.	5.7	36
1019	Long-term in vitro human pancreatic islet culture using three-dimensional microfabricated scaffolds. Biomaterials, 2011, 32, 1536-1542.	5.7	102
1020	Autologous extracellular matrix scaffolds for tissue engineering. Biomaterials, 2011, 32, 2489-2499.	5.7	174
1021	Hydrogel network design using multifunctional macromers to coordinate tissue maturation in ovarian follicle culture. Biomaterials, 2011, 32, 2524-2531.	5.7	132
1022	Homing of endogenous stem/progenitor cells for in situ tissue regeneration: Promises, strategies, and translational perspectives. Biomaterials, 2011, 32, 3189-3209.	5.7	327
1023	Modulation of fibrin matrix properties via knob:hole affinity interactions using peptideâ€“PEG conjugates. Biomaterials, 2011, 32, 4406-4414.	5.7	28
1024	Gene therapy vectors with enhanced transfection based on hydrogels modified with affinity peptides. Biomaterials, 2011, 32, 5092-5099.	5.7	30
1025	Controlled biodegradation of Self-assembling Î²-hairpin Peptide hydrogels by proteolysis with matrix metalloproteinase-13. Biomaterials, 2011, 32, 6471-6477.	5.7	97
1026	Fabrication of polymer fiber scaffolds by centrifugal spinning for cell culture studies. Microelectronic Engineering, 2011, 88, 1718-1721.	1.1	57
1027	Chitosanâ€”A versatile semi-synthetic polymer in biomedical applications. Progress in Polymer Science, 2011, 36, 981-1014.	11.8	2,262
1028	Application of two morphologically different fibrillar and filamentous insulin amyloids as a biomaterial for cell culture surfaces. Reactive and Functional Polymers, 2011, 71, 324-328.	2.0	7
1029	Vascular Precursor Cells. Genes and Cancer, 2011, 2, 1081-1084.	0.6	2
1030	Synthesis and Characterization of a Telechelic Peptide as a Precursor for Supramolecular Networks. Macromolecular Symposia, 2011, 309-310, 205-212.	0.4	0
1031	Physicochemical regulation of biofilm formation. MRS Bulletin, 2011, 36, 347-355.	1.7	457
1032	Laser-Micro/Nanofabricated 3D Polymers for Tissue Engineering Applications. Latvian Journal of Physics and Technical Sciences, 2011, 48, 32-43.	0.4	4

#	Article	IF	Citations
1033	Functional Neovascularization in Tissue Engineering with Porcine Acellular Dermal Matrix and Human Umbilical Vein Endothelial Cells. Tissue Engineering - Part C: Methods, 2011, 17, 423-433.	1.1	49
1034	Scaffold Porosity and Oxygenation of Printed Hydrogel Constructs Affect Functionality of Embedded Osteogenic Progenitors. Tissue Engineering - Part A, 2011, 17, 2473-2486.	1.6	86
1035	Surface Engineering Using Peptide Amphiphiles. , 2011, , 219-245.		2
1036	Global Gene Expression Profile of Osteoblast-Like Cells Grown on Polyester Copolymer Scaffolds. Tissue Engineering - Part A, 2011, 17, 2817-2831.	1.6	5
1037	Significance of novel bioinorganic anodic aluminum oxide nanoscaffolds for promoting cellular response. Nanotechnology, Science and Applications, 2011, 4, 11.	4.6	28
1038	Enhanced Neovascular Formation in a Novel Hydrogel Matrix Consisting of Citric Acid and Collagen. Annals of Vascular Diseases, 2011, 4, 196-203.	0.2	1
1039	Injectable nanotechnology. , 2011, , 298-322.		1
1040	Engineered tissues for wound repair. , 2011, , 463-494.		2
1041	Surface Modification of Biomaterials. , 2011, , 663-673.		12
1042	Scaffolding for Three-Dimensional Embryonic Vasculogenesis. Biological and Medical Physics Series, 2011, , 49-67.	0.3	1
1043	In Vitro Micro-Tissue and -Organ Models for Toxicity Testing. , 2011, , 551-563.		7
1044	Surface modification of biomaterials by peptide functionalisation. , 2011, , 78-101.		2
1045	Designing Tunable Artificial Matrices for Stem Cell Culture. , 2011, , 717-728.		2
1046	Experimental and simulation studies on soliton generation in a double-plasma device: role of fast ions. Plasma Physics and Controlled Fusion, 2011, 53, 065012.	0.9	8
1047	Assembly of cells and vesicles for organ engineering. Science and Technology of Advanced Materials, 2011, 12, 064703.	2.8	12
1048	Integrin-Activated Reactions to Metallic Implant Surfaces. , 2011, , 101-113.		0
1049	Multifunctional dendritic cell-targeting polymeric microparticles. Hum Vaccin, 2011, 7, 37-44.	2.4	39
1050	A bioresponsive hydrogel tuned to chondrogenesis of human mesenchymal stem cells. FASEB Journal, 2011, 25, 1486-1496.	0.2	110

#	Article	IF	Citations
1051	Temporal Exposure to Chondrogenic Factors Modulates Human Mesenchymal Stem Cell Chondrogenesis in Hydrogels. Tissue Engineering - Part A, 2011, 17, 371-380.	1.6	71
1052	Fibroblast growth factor 9 delivery during angiogenesis produces durable, vasoresponsive microvessels wrapped by smooth muscle cells. Nature Biotechnology, 2011, 29, 421-427.	9.4	107
1053	Hydrogels with self-assembling ordered structures and their functions. NPG Asia Materials, 2011, 3, 57-64.	3.8	71
1054	Spontaneous self-assembly of aromatic cyclic dipeptide into fibre bundles with high thermal stability and propensity for gelation. Supramolecular Chemistry, 2011, 23, 759-767.	1.5	31
1055	Human Amniotic Fluid Stem Cells Seeded in Fibroin Scaffold Produce In Vivo Mineralized Matrix. Tissue Engineering - Part A, 2011, 17, 2833-2843.	1.6	50
1056	Tailoring material properties of a nanofibrous extracellular matrix derived hydrogel. Nanotechnology, 2011, 22, 494015.	1.3	94
1057	Cellâ€“cell communication mimicry with poly(ethylene glycol) hydrogels for enhancing Î²-cell function. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6380-6385.	3.3	161
1058	Hydrogels in Biosensing Applications. , 2011, , 491-517.		6
1059	Preparation of poly(ethylene glycol)/polylactide hybrid fibrous scaffolds for bone tissue engineering. International Journal of Nanomedicine, 2011, 6, 3065.	3.3	42
1060	Microenvironment Design for Stem Cell Fate Determination. Advances in Biochemical Engineering/Biotechnology, 2011, 126, 227-262.	0.6	5
1061	Surface Modification of Polydimethylsiloxane Using Low Pressure Chemical Vapour Deposition of Poly-Chloro-p-Xylene. Journal of Nano Research, 2012, 20, 129-142.	0.8	2
1062	A Synthetic Matrix with Independently Tunable Biochemistry and Mechanical Properties to Study Epithelial Morphogenesis and EMT in a Lung Adenocarcinoma Model. Cancer Research, 2012, 72, 6013-6023.	0.4	155
1063	Fabrication of 3D Hierarchical Scaffolds by a Hybrid Process Combining Low-Temperature Deposition and Electrospinning. Key Engineering Materials, 2012, 522, 117-122.	0.4	0
1064	3D polylactide-based scaffolds for studying human hepatocarcinoma processesin vitro. Science and Technology of Advanced Materials, 2012, 13, 045003.	2.8	25
1065	Regenerative therapy and tissue engineering for the treatment of end-stage cardiac failure. Biomatter, 2012, 2, 1-14.	2.6	45
1066	Implanted neonatal human dermal fibroblasts influence the recruitment of endothelial cells in mice. Biomatter, 2012, 2, 43-52.	2.6	14
1067	Biomimetic materials as scaffolds for tissue engineering. , 2012, , .		0
1068	Effect of Intermittent PTH(1â€“34) on Human Periodontal Ligament Cells Transplanted into Immunocompromised Mice. Tissue Engineering - Part A, 2012, 18, 1849-1856.	1.6	15

#	Article	IF	Citations
1069	Engineering Biomaterials for Regenerative Medicine. , 2012, , .		16
1070	Collagen Intermingled Chitosan-Tripolyphosphate Nano/Micro Fibrous Scaffolds for Tissue-Engineering Application. Journal of Biomaterials Science, Polymer Edition, 2012, 23, 1923-1938.	1.9	14
1071	Self-assembled nanomaterials for tissue-engineering applications. , 2012, , 490-533.		0
1072	Biomaterial-based strategies for the engineering of mechanically active soft tissues. MRS Communications, 2012, 2, 31-39.	0.8	14
1073	Sulfated Glycosaminoglycan Building Blocks for the Design of Artificial Extracellular Matrices. ACS Symposium Series, 2012, , 315-328.	0.5	5
1075	Mechanisms of greater cardiomyocyte functions on conductive nanoengineered composites for cardiovascular application. International Journal of Nanomedicine, 2012, 7, 5653.	3.3	54
1076	Tooth Tissue Engineering: Potential and Pitfalls. Journal of Biomimetics, Biomaterials, and Tissue Engineering, 0, 12, 59-81.	0.7	6
1077	Matrix Stiffness: A Regulator of Cellular Behavior and Tissue Formation. , 2012, , 19-37.		57
1078	PLAâ€“PEOâ€“PLA Hydrogels and Their Mechanical Properties. , 2012, , 127-140.		1
1079	Stem Cell-Derived Vascular Endothelial Cells and Their Potential Application in Regenerative Medicine. Cells Tissues Organs, 2012, 195, 41-47.	1.3	19
1080	Osteodifferentiation of Human Preadipocytes Induced by Strontium Released from Hydrogels. International Journal of Biomaterials, 2012, 2012, 1-10.	1.1	20
1081	Hydrogel-Based Platforms for the Regeneration of Osteochondral Tissue and Intervertebral Disc. Polymers, 2012, 4, 1590-1612.	2.0	57
1082	Cell Encapsulating Biomaterial Regulates Mesenchymal Stromal/Stem Cell Differentiation and Macrophage Immunophenotype. Stem Cells Translational Medicine, 2012, 1, 740-749.	1.6	43
1083	Counting primary loops in polymer gels. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19119-19124.	3.3	189
1084	Triphasic mixture model of cell-mediated enzymatic degradation of hydrogels. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 1197-1210.	0.9	26
1085	Endothelial Progenitor Cells (EPCs) and Mesenchymal Stem Cells (MSCs) in Bone Healing. Current Stem Cell Research and Therapy, 2012, 7, 293-301.	0.6	43
1086	A Fiber-Optic-Based Imaging System for Nondestructive Assessment of Cell-Seeded Tissue-Engineered Scaffolds. Tissue Engineering - Part C: Methods, 2012, 18, 677-687.	1.1	16
1087	Quartz crystal microbalance with dissipation monitoring and the real-time study of biological systems and macromolecules at interfaces. Biomedical Spectroscopy and Imaging, 2012, 1, 325-338.	1.2	1

#	Article	IF	Citations
1088	Regenerative Medicine as Applied to General Surgery. Annals of Surgery, 2012, 255, 867-880.	2.1	97
1089	The PAM²system: a multilevel approach for fabrication of complex threeâ€dimensional microstructures. Rapid Prototyping Journal, 2012, 18, 299-307.	1.6	19
1090	Control of Cellular Inflammation by Layer-by-layer Nanofilms through Different Driving Forces. Chemistry Letters, 2012, 41, 523-524.	0.7	10
1091	Hyaluronan-Based Hydrogel Scaffolds. , 2012, , 165-197.		0
1092	Force-dependent cell signaling in stem cell differentiation. Stem Cell Research and Therapy, 2012, 3, 41.	2.4	130
1093	Biocompatible Hydrogels by Oxime Click Chemistry. Biomacromolecules, 2012, 13, 3013-3017.	2.6	198
1094	Printing and Prototyping of Tissues and Scaffolds. Science, 2012, 338, 921-926.	6.0	962
1095	Hydrogels in sensing applications. Progress in Polymer Science, 2012, 37, 1678-1719.	11.8	593
1096	Quantification of Protein Incorporated into Electrospun Polycaprolactone Tissue Engineering Scaffolds. ACS Applied Materials & Interfaces, 2012, 4, 2074-2081.	4.0	84
1097	Controlling Self-Renewal and Differentiation of Stem Cells via Mechanical Cues. Journal of Biomedicine and Biotechnology, 2012, 2012, 1-12.	3.0	162
1098	Photoselective Delivery of Model Therapeutics from Hydrogels. ACS Macro Letters, 2012, 1, 1330-1334.	2.3	84
1099	Optimization of electrospun TSF nanofiber alignment and diameter to promote growth and migration of mesenchymal stem cells. Applied Surface Science, 2012, 261, 320-326.	3.1	34
1100	Tissue Engineering in the Development of Replacement Technologies. Advances in Experimental Medicine and Biology, 2012, 745, 47-57.	0.8	5
1101	Controlling the structural organization of regenerated bone by tailoring tissue engineering scaffold architecture. Journal of Materials Chemistry, 2012, 22, 9721.	6.7	32
1102	Cell Instructive Microporous Scaffolds through Interface Engineering. Journal of the American Chemical Society, 2012, 134, 20103-20109.	6.6	66
1103	Biomimetic electrochemistry from conducting polymers. A review. Electrochimica Acta, 2012, 84, 112-128.	2.6	269
1104	Topâ€“down meets bottomâ€“up: A comparison of the mechanical properties of melt electrospun and self-assembled 1,3,5-benzenetrisamide fibers. Polymer, 2012, 53, 5754-5759.	1.8	9
1105	Assembly of Virus Particles and Virus-like Particles as Templates for Biomedical Applications. ACS Symposium Series, 2012, , 21-56.	0.5	1

#	Article	IF	Citations
1106	Effects of Molecular Weight and Loading on Matrix Metalloproteinase-2 Mediated Release from Poly(Ethylene Glycol) Diacrylate Hydrogels. AAPS Journal, 2012, 14, 482-490.	2.2	23
1107	Designing Cell-Compatible Hydrogels for Biomedical Applications. Science, 2012, 336, 1124-1128.	6.0	1,606
1108	Application of whole-organ tissue engineering in hepatology. Nature Reviews Gastroenterology and Hepatology, 2012, 9, 738-744.	8.2	63
1109	Hybrid Scaffolds Built From PET and Collagen as a Model For Vascular Graft Architecture. Macromolecular Bioscience, 2012, 12, 1660-1670.	2.1	26
1110	Functionally graded PCL/Î²-TCP biocomposites in a multilayered structure for bone tissue regeneration. Applied Physics A: Materials Science and Processing, 2012, 108, 949-959.	1.1	10
1111	The influence of mechanical stretching on mitosis, growth, and adipose conversion in adipocyte cultures. Biomechanics and Modeling in Mechanobiology, 2012, 11, 1029-1045.	1.4	24
1112	Multiscale Models of Breast Cancer Progression. Annals of Biomedical Engineering, 2012, 40, 2488-2500.	1.3	45
1113	Ethics in Nanotechnology: Whatâ€™s Being Done? Whatâ€™s Missing?. Journal of Business Ethics, 2012, 109, 583-598.	3.7	41
1114	Plasma Surface Modification of Biomedical Polymers: Influence on Cell-Material Interaction. Plasma Chemistry and Plasma Processing, 2012, 32, 1039-1073.	1.1	206
1115	Cellular response to poly(vinyl alcohol) nanofibers coated with biocompatible proteins and polysaccharides. Applied Surface Science, 2012, 258, 6914-6922.	3.1	14
1116	Dorsal and Ventral Stimuli in Cellâ€“Material Interactions: Effect on Cell Morphology. Biointerphases, 2012, 7, 39.	0.6	13
1117	Electrokinetic Analysis to Reveal Composition and Structure of Biohybrid Hydrogels. Analytical Chemistry, 2012, 84, 9592-9595.	3.2	9
1118	The reinforced hydrogel for drug loading: immobilization of single-walled carbon nanotubes in cross-linked polymers via multiple interactions. RSC Advances, 2012, 2, 12424.	1.7	19
1119	PDMSstarâ€“PEG hydrogels prepared via solvent-induced phase separation (SIPS) and their potential utility as tissue engineering scaffolds. Acta Biomaterialia, 2012, 8, 4324-4333.	4.1	27
1120	Electrospun microfibrous PLGA meshes coated with in situ cross-linkable gelatin hydrogels for tissue regeneration. Current Applied Physics, 2012, 12, S144-S149.	1.1	8
1121	Fabrication of novel shark collagen-pectin scaffolds for tissue engineering. , 2012, , .		4
1122	Development of Miniaturized Walking Biological Machines. Scientific Reports, 2012, 2, 857.	1.6	197
1123	Interplay Between Local Versus Soluble Transforming Growth Factor-Beta and Fibrin Scaffolds: Role of Cells and Impact on Human Mesenchymal Stem Cell Chondrogenesis. Tissue Engineering - Part A, 2012, 18, 1140-1150.	1.6	24

#	Article	IF	Citations
1124	Encoding cell-instructive cues to PEG-based hydrogels via triple helical peptide assembly. Soft Matter, 2012, 8, 10409.	1.2	23
1125	Assessing the responses of cellular proteins induced by hyaluronic acid-modified surfaces utilizing a mass spectrometry-based profiling system: Over-expression of CD36, CD44, CDK9, and PP2A. Analyst, The, 2012, 137, 4921.	1.7	17
1126	CHAPTER 8. Hydrogels for Biomedical Applications. Monographs in Supramolecular Chemistry, 2012, , 167-209.	0.2	3
1127	Enhanced Integrin Mediated Signaling and Cell Cycle Progression on Fibronectin Mimetic Peptide Amphiphile Monolayers. Langmuir, 2012, 28, 1858-1865.	1.6	31
1128	Patterning of Two-Level Topographic Cues for Observation of Competitive Guidance of Cell Alignment. ACS Applied Materials & Interfaces, 2012, 4, 3888-3892.	4.0	20
1129	Multi-gradient hydrogels produced layer by layer with capillary flow and crosslinking in open microchannels. Lab on A Chip, 2012, 12, 659-661.	3.1	39
1130	Reversible regulation of bioactive ligands presented on immobilized gold nanoparticles. Soft Matter, 2012, 8, 2812.	1.2	4
1131	Self-assembly of glutathione S-transferase into nanowires. Nanoscale, 2012, 4, 5847.	2.8	57
1132	A covalently modified hydrogel blend of hyaluronanâ€“methyl cellulose with peptides and growth factors influences neural stem/progenitor cell fate. Journal of Materials Chemistry, 2012, 22, 19402.	6.7	90
1133	Mechanisms of Vascular Endothelial Growth Factor-Induced Pathfinding by Endothelial Sprouts in Biomaterials. Tissue Engineering - Part A, 2012, 18, 320-330.	1.6	49
1134	Nanostructures of Designed Geometry and Functionality Enable Regulation of Cellular Signaling Processes. Biochemistry, 2012, 51, 5876-5893.	1.2	25
1135	Deconstructing the third dimension â€“ how 3D culture microenvironments alter cellular cues. Journal of Cell Science, 2012, 125, 3015-24.	1.2	1,301
1136	Modulation of Mesenchymal Stem Cell Shape in Enzyme-Sensitive Hydrogels Is Decoupled from Upregulation of Fibroblast Markers Under Cyclic Tension. Tissue Engineering - Part A, 2012, 18, 2365-2375.	1.6	25
1137	Slow-Release RGD-Peptide Hydrogel Monoliths. Langmuir, 2012, 28, 12575-12580.	1.6	25
1139	UV-Modulated Substrate Rigidity for Multiscale Study of Mechanoresponsive Cellular Behaviors. Langmuir, 2012, 28, 10789-10796.	1.6	28
1140	Polymer Chain Length Effects on Fibroblast Attachment on Nylon-3-Modified Surfaces. Biomacromolecules, 2012, 13, 1100-1105.	2.6	39
1141	Oxidized dextran/amino gelatin/hyaluronic Acid Semi-Interpenetrating Network Hydrogels for Tissue Engineering Application. Advanced Materials Research, 0, 627, 745-750.	0.3	9
1142	Identifying Individual Cell Types in Heterogeneous Cultures Using Secondary Ion Mass Spectrometry Imaging with C₆₀ Etching and Multivariate Analysis. Analytical Chemistry, 2012, 84, 893-900.	3.2	40

#	Article	IF	Citations
1143	Promoting Self-Assembly of Collagen-Related Peptides into Various Higher-Order Structures by Metalâ€“Histidine Coordination. Langmuir, 2012, 28, 3194-3199.	1.6	51
1144	Synthetic substrates for long-term stem cell culture. Polymer, 2012, 53, 2533-2539.	1.8	32
1145	Engineering Approaches to Immunotherapy. Science Translational Medicine, 2012, 4, 148rv9.	5.8	194
1146	Supramolecular polymeric hydrogels. Chemical Society Reviews, 2012, 41, 6195.	18.7	988
1147	Instructive Nanofiber Scaffolds with VEGF Create a Microenvironment for Arteriogenesis and Cardiac Repair. Science Translational Medicine, 2012, 4, 146ra109.	5.8	136
1148	Injectable and biodegradable hydrogels: gelation, biodegradation and biomedical applications. Chemical Society Reviews, 2012, 41, 2193-2221.	18.7	1,190
1149	Chemical Functionalization of Bioceramics To Enhance Endothelial Cells Adhesion for Tissue Engineering. Journal of Medicinal Chemistry, 2012, 55, 7988-7997.	2.9	21
1150	Enhancement of bone regeneration through facile surface functionalization of solid freeform fabrication-based three-dimensional scaffolds using mussel adhesive proteins. Acta Biomaterialia, 2012, 8, 2578-2586.	4.1	76
1151	Thiolâ€“ene-based biological/synthetic hybrid biomatrix for 3-D living cell culture. Acta Biomaterialia, 2012, 8, 2504-2516.	4.1	57
1152	Acidic peptide hydrogel scaffolds enhance calcium phosphate mineral turnover into bone tissue. Acta Biomaterialia, 2012, 8, 2466-2475.	4.1	50
1153	Engineered endothelial cell adhesion via VCAM1 and E-selectin antibody-presenting alginate hydrogels. Acta Biomaterialia, 2012, 8, 2697-2703.	4.1	10
1154	Gas anti-solvent precipitation assisted salt leaching for generation of micro- and nano-porous wall in bio-polymeric 3D scaffolds. Materials Science and Engineering C, 2012, 32, 1632-1639.	3.8	30
1155	Factorial analysis of adaptable properties of self-assembling peptide matrix on cellular proliferation and neuronal differentiation of pluripotent embryonic carcinoma. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 748-756.	1.7	14
1156	Building stem cell niches from the molecule up through engineered peptide materials. Neuroscience Letters, 2012, 519, 138-146.	1.0	65
1157	InÂvitro observations of self-assembled ECM-mimetic bioceramic nanoreservoir delivering rFN/CDH to modulate osteogenesis. Biomaterials, 2012, 33, 7468-7477.	5.7	20
1158	Improved skin wound epithelialization by topical delivery of soluble factors from fibroblast aggregates. Burns, 2012, 38, 541-550.	1.1	11
1159	Bioengineering Methods for Analysis of Cells In Vitro. Annual Review of Cell and Developmental Biology, 2012, 28, 385-410.	4.0	38
1160	Glycosaminoglycan-Binding Hydrogels Enable Mechanical Control of Human Pluripotent Stem Cell Self-Renewal. ACS Nano, 2012, 6, 10168-10177.	7.3	135

#	Article	IF	Citations
1161	In Situ SVVYGLR Peptide Conjugation into Injectable Gelatin-Poly(ethylene glycol)-Tyramine Hydrogel via Enzyme-Mediated Reaction for Enhancement of Endothelial Cell Activity and Neo-Vascularization. Bioconjugate Chemistry, 2012, 23, 2042-2050.	1.8	55
1162	The Design of a Heterocellular 3D Architecture and its Application to Monitoring the Behavior of Cancer Cells in Response to the Spatial Distribution of Endothelial Cells. Advanced Materials, 2012, 24, 5339-5344.	11.1	19
1163	Fibrous Supramolecular Hemoprotein Assemblies Connected with Synthetic Heme Dimer and Apohemoprotein Dimer. Chemistry and Biodiversity, 2012, 9, 1684-1692.	1.0	11
1164	Microâ€Engineered 3D Scaffolds for Cell Culture Studies. Macromolecular Bioscience, 2012, 12, 1301-1314.	2.1	109
1165	Stem cell bioengineering at the interface of systemsâ€based models and highâ€throughput platforms. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2012, 4, 525-545.	6.6	2
1166	A feeder-free, human plasma-derived hydrogel for maintenance of a human embryonic stem cell phenotype in vitro. Cell Regeneration, 2012, 1, 1:6.	1.1	4
1167	Supramolecular assembling systems formed by hemeâ€“heme pocket interactions in hemoproteins. Chemical Communications, 2012, 48, 11714.	2.2	68
1168	Resilin in the Engineering of Elastomeric Biomaterials. , 2012, , 105-116.		2
1172	Chemical and physical properties of regenerative medicine materials controlling stem cell fate. Annals of Medicine, 2012, 44, 635-650.	1.5	71
1173	Hydrogels with a macroscopic-scale liquid crystal structure by self-assembly of a semi-rigid polyion complex. Polymer Journal, 2012, 44, 503-511.	1.3	13
1174	Biomimetic Polymers (for Biomedical Applications). , 2012, , 339-361.		1
1175	Tissue-Engineered Airway: A Regenerative Solution. Clinical Pharmacology and Therapeutics, 2012, 91, 81-93.	2.3	90
1176	Therapeutic potential of bone marrow-derived mesenchymal stem cells for cutaneous wound healing. Frontiers in Immunology, 2012, 3, 192.	2.2	84
1177	Programming Cells with Synthetic Polymers. , 2012, , 485-495.		0
1178	Computational Modeling of Mass Transport and Its Relation to Cell Behavior in Tissue Engineering Constructs. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2012, , 85-105.	0.7	3
1179	7.7 Biophysics of Three-Dimensional Cell Motility. , 2012, , 88-103.		0
1180	Cholinesterase-Responsive Supramolecular Vesicle. Journal of the American Chemical Society, 2012, 134, 10244-10250.	6.6	390
1181	Dual-source dual-power electrospinning and characteristics of multifunctional scaffolds for bone tissue engineering. Journal of Materials Science: Materials in Medicine, 2012, 23, 2381-2397.	1.7	43

#	Article	IF	Citations
1182	Employing the Biology of Successful Fracture Repair to Heal Critical Size Bone Defects. Current Topics in Microbiology and Immunology, 2012, 367, 113-132.	0.7	39
1183	From nano- to macro-scale: nanotechnology approaches for spatially controlled delivery of bioactive factors for bone and cartilage engineering. Nanomedicine, 2012, 7, 1045-1066.	1.7	57
1185	Design of Biomimetic Cell-Interactive Substrates Using Hyaluronic Acid Hydrogels with Tunable Mechanical Properties. Biomacromolecules, 2012, 13, 1818-1827.	2.6	116
1186	Biomimicry via Electrospinning. Critical Reviews in Solid State and Materials Sciences, 2012, 37, 94-114.	6.8	100
1187	The translational imperative: Making cell therapy simple and effective. Acta Biomaterialia, 2012, 8, 4200-4207.	4.1	42
1188	Microarrayed materials for stem cells. Materials Today, 2012, 15, 444-452.	8.3	14
1189	Engineering ECM signals into biomaterials. Materials Today, 2012, 15, 454-459.	8.3	179
1190	Nanomanufacturing of biomaterials. Materials Today, 2012, 15, 478-485.	8.3	51
1191	Biomaterial delivery of morphogens to mimic the natural healing cascade in bone. Advanced Drug Delivery Reviews, 2012, 64, 1257-1276.	6.6	210
1192	Catheter-Deliverable Hydrogel Derived From Decellularized Ventricular Extracellular Matrix Increases Endogenous Cardiomyocytes and Preserves Cardiac Function Post-Myocardial Infarction. Journal of the American College of Cardiology, 2012, 59, 751-763.	1.2	334
1193	Light activated cell migration in synthetic extracellular matrices. Biomaterials, 2012, 33, 8040-8046.	5.7	26
1194	Mimicking dynamic in vivo environments with stimuli-responsive materials for cell culture. Trends in Biotechnology, 2012, 30, 426-439.	4.9	103
1195	Facile fabrication of the glutaraldehyde cross-linked collagen/chitosan porous scaffold for skin tissue engineering. Materials Science and Engineering C, 2012, 32, 2361-2366.	3.8	103
1196	Structure and Biology of the Cellular Environment: The Extracellular Matrix. Fundamental Biomedical Technologies, 2012, , 3-23.	0.2	2
1197	Plasmon Resonance Energy Transfer from Metallic Nanoparticles to Biomolecules. , 2012, , 2126-2126.		0
1198	Secondary Structure of rhBMP-2 in a Protective Biopolymeric Carrier Material. Biomacromolecules, 2012, 13, 3620-3626.	2.6	34
1199	Thermoresponsive hydrogels for cellular delivery. Therapeutic Delivery, 2012, 3, 1395-1407.	1.2	25
1200	PLA-PEO-PLA Hydrogels: Chemical Structure, Self-Assembly and Mechanical Properties. ACS Symposium Series, 2012, , 313-324.	0.5	2

#	Article	IF	Citations
1201	A single cell bioengineering approach to elucidate mechanisms of adult stem cell self-renewal. Integrative Biology (United Kingdom), 2012, 4, 360-367.	0.6	16
1202	Maintenance of Pluripotency in Mouse Stem Cells: Use of Hyaluronan in the Long-Term Culture. Stem Cells and Cancer Stem Cells, 2012, , 123-133.	0.1	1
1203	Strategies of Regenerative Medicine. , 2012, , 229-260.		0
1204	Carbon nanotube interaction with extracellular matrix proteins producing scaffolds for tissue engineering. International Journal of Nanomedicine, 2012, 7, 4511.	3.3	71
1205	A facile method to in situ formation of hydroxyapatite single crystal architecture for enhanced osteoblast adhesion. Journal of Materials Chemistry, 2012, 22, 19081.	6.7	25
1207	Biocompatibility of Electrospun Halloysite Nanotube-Doped Poly(Lactic-co-Glycolic Acid) Composite Nanofibers. Journal of Biomaterials Science, Polymer Edition, 2012, 23, 299-313.	1.9	86
1208	Lessons from the Embryonic Neural Stem Cell Niche for Neural Lineage Differentiation of Pluripotent Stem Cells. Stem Cell Reviews and Reports, 2012, 8, 813-829.	5.6	45
1209	Synthetic Gene Networks. Methods in Molecular Biology, 2012, , .	0.4	2
1210	Electrodeposition of Polymer Nanodots with Controlled Density and Their Reversible Functionalization by Polyhistidine-Tag Proteins. Langmuir, 2012, 28, 13968-13975.	1.6	5
1211	Bottom-up engineering of the surface roughness of nanostructured cubic zirconia to control cell adhesion. Nanotechnology, 2012, 23, 475101.	1.3	43
1212	Tissue Engineering III: Cell - Surface Interactions for Tissue Culture. Advances in Biochemical Engineering/Biotechnology, 2012, , .	0.6	8
1214	Microfabricated photocrosslinkable polyelectrolyte-complex of chitosan and methacrylated gellan gum. Journal of Materials Chemistry, 2012, 22, 17262.	6.7	44
1215	Organic Conducting Polymerâ€"Protein Interactions. Chemistry of Materials, 2012, 24, 828-839.	3.2	79
1216	Stem Cells and Cancer Stem Cells, Volume 7. Stem Cells and Cancer Stem Cells, 2012, , .	0.1	0
1217	Electrospinning of polyvinyl alcohol/gelatin nanofiber composites and cross-linking for bone tissue engineering application. Journal of Biomaterials Applications, 2012, 27, 255-266.	1.2	102
1218	Chemical approaches to synthetic polymer surface biofunctionalization for targeted cell adhesion using small binding motifs. Soft Matter, 2012, 8, 7323-7347.	1.2	64
1219	Bio-inspired materials for parsing matrix physicochemical control of cell migration: A Review. Integrative Biology (United Kingdom), 2012, 4, 37-52.	0.6	37
1220	Piezoelectric Effect at Nanoscale. , 2012, , 2085-2099.		2

#	Article	IF	Citations
1222	The influence of plasma technology coupled to chemical grafting on the cell growth compliance of 3D hydroxyapatite scaffolds. Journal of Materials Science: Materials in Medicine, 2012, 23, 2727-2738.	1.7	7
1223	Propylene Glycol Methyl Ether Acetate (PGMEA). , 2012, , 2180-2180.		0
1224	Polymer Coatings. , 2012, , 2167-2174.		1
1225	Diagnostic microchip to assay 3D colony-growth potential of captured circulating tumor cells. Lab on A Chip, 2012, 12, 2313.	3.1	49
1226	Injectable cell/hydrogel microspheres induce the formation of fat lobule-like microtissues and vascularized adipose tissue regeneration. Biofabrication, 2012, 4, 045003.	3.7	35
1227	Covalently tethered transforming growth factor beta in PEG hydrogels promotes chondrogenic differentiation of encapsulated human mesenchymal stem cells. Drug Delivery and Translational Research, 2012, 2, 305-312.	3.0	66
1228	Advances in biomimetic regeneration of elastic matrix structures. Drug Delivery and Translational Research, 2012, 2, 323-350.	3.0	29
1229	Engineered Polymeric Biomaterials for Tissue Engineering. Current Tissue Engineering, 2012, 1, 41-53.	0.2	17
1230	Hydrogel Films on Optical Fiber Core: Properties, Challenges, and Prospects for Future Applications. , 2012, , .		1
1231	Synthetic PEG Hydrogels as Extracellular Matrix Mimics for Tissue Engineering Applications. , 0, , .		11
1232	Engineering Tissue Model for Anti-Breast Cancer Pharmacotherapy. Current Tissue Engineering, 2012, 1, 15-23.	0.2	0
1233	Preparation of PHEMA Copolymers Containing Cell-binding Peptides as Graft Chains and Their Cell Adhesive Properties. Transactions of the Materials Research Society of Japan, 2012, 37, 533-536.	0.2	4
1234	Delivery Strategies for Stem Cell-Based Therapy. Journal of Healthcare Engineering, 2012, 3, 1-20.	1.1	4
1235	Microvascular Guidance: A Challenge to Support the Development of Vascularised Tissue Engineering Construct. Scientific World Journal, The, 2012, 2012, 1-10.	0.8	23
1236	Minimally invasive cell-seeded biomaterial systems for injectable/epicardial implantation in ischemic heart disease. International Journal of Nanomedicine, 2012, 7, 5969.	3.3	33
1237	Synergistic Control of Mesenchymal Stem Cell Differentiation by Nanoscale Surface Geometry and Immobilized Growth Factors on TiO₂ Nanotubes. Small, 2012, 8, 98-107.	5.2	118
1238	Ordered and disordered proteins as nanomaterial building blocks. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2012, 4, 204-218.	3.3	24
1239	Development of tissue engineered vascular grafts and application of nanomedicine. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2012, 4, 257-272.	3.3	46

#	Article	IF	Citations
1240	Microengineered synthetic cellular microenvironment for stem cells. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2012, 4, 414-427.	3.3	11
1241	Hydrogels and microtechnologies for engineering the cellular microenvironment. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2012, 4, 235-246.	3.3	58
1242	Hydrogels for in vivoâ€like threeâ€dimensional cellular studies. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2012, 4, 351-365.	6.6	92
1243	Bio-inspired materials for biosensing and tissue engineering. Polymer International, 2012, 61, 680-685.	1.6	12
1244	Differentiation of Embryonic Stem Cells into Endoderm-Derived Hepatocytes. , 2012, , 57-69.		0
1245	Characterization of Surface Properties and Cytocompatibility of Ion-etched Chitosan Films. Langmuir, 2012, 28, 7223-7232.	1.6	11
1246	A Facile Way to Tune Mechanical Properties of Artificial Elastomeric Proteins-Based Hydrogels. Langmuir, 2012, 28, 8260-8265.	1.6	43
1247	Nanofibrous gelatinâ€“silica hybrid scaffolds mimicking the native extracellular matrix (ECM) using thermally induced phase separation. Journal of Materials Chemistry, 2012, 22, 14133.	6.7	104
1248	In Vitro Biosynthesis of Metal Nanoparticles in Microdroplets. ACS Nano, 2012, 6, 6998-7008.	7.3	42
1249	Structure and function of ECM-inspired composite collagen type I scaffolds. Soft Matter, 2012, 8, 10200.	1.2	51
1250	Covalent attachment of P15 peptide to titanium surfaces enhances cell attachment, spreading, and osteogenic gene expression. Journal of Orthopaedic Research, 2012, 30, 1626-1633.	1.2	30
1251	Functionalized Synthetic Biodegradable Polymer Scaffolds for Tissue Engineering. Macromolecular Bioscience, 2012, 12, 911-919.	2.1	246
1252	Synthesis and Characterization of PEGâ€Based Drugâ€Responsive Biohybrid Hydrogels. Macromolecular Rapid Communications, 2012, 33, 1280-1285.	2.0	14
1253	Studies of in situâ€forming hydrogels by blending PLAâ€PEGâ€PLA copolymer with silk fibroin solution. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1983-1989.	2.1	28
1254	Student Award for Outstanding Research Winner in the Ph.D. Category for the 9th World Biomaterials Congress, Chengdu, China, June 1â€5, 2012. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1097-1106.	2.1	7
1255	Differential effects of substrate modulus on human vascular endothelial, smooth muscle, and fibroblastic cells. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1356-1367.	2.1	45
1256	Zwitterionic polycarboxybetaine coating functionalized with REDV peptide to improve selectivity for endothelial cells. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1387-1397.	2.1	81
1257	Preparation and characterization of decellularized tendon slices for tendon tissue engineering. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1448-1456.	2.1	89

#	Article	IF	Citations
1259	A novel method to fabricate thermoresponsive microstructures with improved cell attachment/detachment properties. Journal of Biomedical Materials Research - Part A, 2012, 100A, 1946-1953.	2.1	7
1260	In vitro mineralization and bone osteogenesis in poly(Îµâ€caprolactone)/gelatin nanofibers. Journal of Biomedical Materials Research - Part A, 2012, 100A, 3008-3019.	2.1	55
1261	Shaping scaffold structures in rapid manufacturing implants: A modeling approach toward mechanoâ€biologically optimized configurations for large bone defect. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2012, 100B, 1736-1745.	1.6	28
1262	Hyaluronic acid-based hydrogels: from a natural polysaccharide to complex networks. Soft Matter, 2012, 8, 3280.	1.2	463
1263	Mesenchymal Stem Cells Differentiation on Hierarchically Micro/Nanoâ€Structured Titanium Substrates. Advanced Engineering Materials, 2012, 14, B216.	1.6	36
1264	Functional Human Vascular Network Generated in Photocrosslinkable Gelatin Methacrylate Hydrogels. Advanced Functional Materials, 2012, 22, 2027-2039.	7.8	618
1265	Using Mean Field Theory to Guide Biofunctional Materials Design. Advanced Functional Materials, 2012, 22, 1391-1398.	7.8	61
1266	A Versatile Synthetic Platform for a Wide Range of Functionalized Biomaterials. Advanced Functional Materials, 2012, 22, 2812-2820.	7.8	41
1267	Cationic Hybrid Hydrogels from Aminoâ€Acidâ€Based Poly(ester amide): Fabrication, Characterization, and Biological Properties. Advanced Functional Materials, 2012, 22, 3815-3823.	7.8	90
1268	3D Porous Chitosanâ€“Alginate Scaffolds: A New Matrix for Studying Prostate Cancer Cellâ€–Lymphocyte Interactions In Vitro. Advanced Healthcare Materials, 2012, 1, 590-599.	3.9	76
1269	Hierarchical Formation of Supramolecular Transient Networks in Water: A Modular Injectable Delivery System. Advanced Materials, 2012, 24, 2703-2709.	11.1	247
1270	Multifunctional Materials through Modular Protein Engineering. Advanced Materials, 2012, 24, 3923-3940.	11.1	184
1271	Fluorinated Graphene for Promoting Neuroâ€Induction of Stem Cells. Advanced Materials, 2012, 24, 4285-4290.	11.1	315
1272	Microfluidic Spinning of Flat Alginate Fibers with Grooves for Cellâ€Aligning Scaffolds. Advanced Materials, 2012, 24, 4271-4277.	11.1	219
1275	Dynamic 3D Patterning of Biochemical Cues by using Photoinduced Bioorthogonal Reactions. Angewandte Chemie - International Edition, 2012, 51, 4004-4005.	7.2	5
1276	Smart Selfâ€Assembled Hybrid Hydrogel Biomaterials. Angewandte Chemie - International Edition, 2012, 51, 7396-7417.	7.2	276
1277	Perfusion bioreactor studies of chondrocyte growth in alginateâ€“chitosan capsules. Biotechnology and Applied Biochemistry, 2012, 59, 142-152.	1.4	15
1278	Scanning-fiber-based imaging method for tissue engineering. Journal of Biomedical Optics, 2012, 17, 066010.	1.4	13

#	Article	IF	Citations
1279	Rapid casting of patterned vascular networks for perfusable engineered three-dimensional tissues. Nature Materials, 2012, 11, 768-774.	13.3	1,661
1280	Advances in Bioactive Hydrogels to Probe and Direct Cell Fate. Annual Review of Chemical and Biomolecular Engineering, 2012, 3, 421-444.	3.3	296
1281	Fluorescent Chemosensors Based on Spiroring-Opening of Xanthenes and Related Derivatives. Chemical Reviews, 2012, 112, 1910-1956.	23.0	1,795
1282	Carbon Nanotubes as Electrical Interfaces to Neurons. Fundamental Biomedical Technologies, 2012, , 187-207.	0.2	3
1283	In Situ Supramolecular Assembly and Modular Modification of Hyaluronic Acid Hydrogels for 3D Cellular Engineering. ACS Nano, 2012, 6, 2960-2968.	7.3	229
1284	Viscoelastic properties of mineralized alginate hydrogel beads. Journal of Materials Science: Materials in Medicine, 2012, 23, 1619-1627.	1.7	26
1285	A Cell Culture System for the Structure and Hydrogel Properties of Basement Membranes: Application to Capillary Walls. Cellular and Molecular Bioengineering, 2012, 5, 194-204.	1.0	14
1286	In situ guided tissue regeneration in musculoskeletal diseases and aging. Cell and Tissue Research, 2012, 347, 725-735.	1.5	24
1287	Engineering membrane scaffolds with both physical and biomolecular signaling. Acta Biomaterialia, 2012, 8, 998-1009.	4.1	41
1288	Modular polymer design to regulate phenotype and oxidative response of human coronary artery cells for potential stent coating applications. Acta Biomaterialia, 2012, 8, 559-569.	4.1	14
1289	TiO2 nanotubes as drug nanoreservoirs for the regulation of mobility and differentiation of mesenchymal stem cells. Acta Biomaterialia, 2012, 8, 439-448.	4.1	142
1290	Effects of structural properties of electrospun TiO2 nanofiber meshes on their osteogenic potential. Acta Biomaterialia, 2012, 8, 878-885.	4.1	59
1291	Transferable cell-secreted extracellular matrices enhance osteogenic differentiation. Acta Biomaterialia, 2012, 8, 744-752.	4.1	54
1292	Fine-tuning of substrate architecture and surface chemistry promotes muscle tissue development. Acta Biomaterialia, 2012, 8, 1481-1489.	4.1	88
1293	Mussel-inspired surface modification of poly(l-lactide) electrospun fibers for modulation of osteogenic differentiation of human mesenchymal stem cells. Colloids and Surfaces B: Biointerfaces, 2012, 91, 189-197.	2.5	179
1294	On the thermodynamics of biomolecule surface transformations. Journal of Colloid and Interface Science, 2012, 375, 1-11.	5.0	18
1295	Enhancement of mesenchymal stem cell angiogenic capacity and stemness by a biomimetic hydrogel scaffold. Biomaterials, 2012, 33, 80-90.	5.7	340
1296	Engineering of adult human neural stem cells differentiation through surface micropatterning. Biomaterials, 2012, 33, 504-514.	5.7	172

#	Article	IF	Citations
1297	A hybrid nanofiber matrix to control the survival and maturation of brain neurons. Biomaterials, 2012, 33, 545-555.	5.7	86
1298	Gradient nanofibrous chitosan/poly É›-caprolactone scaffolds as extracellular microenvironments for vascular tissue engineering. Biomaterials, 2012, 33, 762-770.	5.7	184
1299	Cell adhesion on an artificial extracellular matrix using aptamer-functionalized PEG hydrogels. Biomaterials, 2012, 33, 1353-1362.	5.7	79
1300	The beneficial effects of deferred delivery on the efficiency of hydrogel therapy post myocardial infarction. Biomaterials, 2012, 33, 2060-2066.	5.7	56
1301	The effect of vitronectin on the differentiation of embryonic stem cells in a 3D culture system. Biomaterials, 2012, 33, 2032-2040.	5.7	52
1302	Regulation of the differentiation of mesenchymal stem cells inÂvitro and osteogenesis inÂvivo by microenvironmental modification of titanium alloyÂsurfaces. Biomaterials, 2012, 33, 3515-3528.	5.7	131
1303	Microfabrication of complex porous tissue engineering scaffolds using 3D projection stereolithography. Biomaterials, 2012, 33, 3824-3834.	5.7	560
1304	The impact of adhesion peptides within hydrogels on the phenotype and signaling of normal and cancerous mammary epithelial cells. Biomaterials, 2012, 33, 3548-3559.	5.7	48
1305	Temperature-responsive poly(N-isopropylacrylamide)-grafted microcarriers for large-scale non-invasive harvest of anchorage-dependent cells. Biomaterials, 2012, 33, 3803-3812.	5.7	65
1306	Reconstitution of laminin-111 biological activity using multiple peptide coupled to chitosan scaffolds. Biomaterials, 2012, 33, 4241-4250.	5.7	21
1307	Injectable and thermo-sensitive PEG-PCL-PEG copolymer/collagen/n-HA hydrogel composite for guided bone regeneration. Biomaterials, 2012, 33, 4801-4809.	5.7	232
1308	Combining adult stem cells and polymeric devices for tissue engineering in infarcted myocardium. Biomaterials, 2012, 33, 5683-5695.	5.7	95
1309	Spatial control of cell-mediated degradation to regulate vasculogenesis and angiogenesis in hyaluronan hydrogels. Biomaterials, 2012, 33, 6123-6131.	5.7	129
1310	Implantable enzyme amperometric biosensors. Biosensors and Bioelectronics, 2012, 35, 14-26.	5.3	129
1311	Adult stem cell coatings for regenerative medicine. Materials Today, 2012, 15, 60-66.	8.3	22
1312	Advanced reconstructive technologies for periodontal tissue repair. Periodontology 2000, 2012, 59, 185-202.	6.3	130
1313	Microscopic characterization of peptide nanostructures. Micron, 2012, 43, 69-84.	1.1	41
1314	Efficient and toxicity-free surface immobilization of nano-hydroxyapatite for bone-regenerative composite scaffolds by grafting polyvinyl pyrrolidone. Materials Science and Engineering C, 2012, 32, 1032-1036.	3.8	12

#	Article	IF	Citations
1315	Polymers used to influence cell fate in 3D geometry: New trends. Progress in Polymer Science, 2012, 37, 645-658.	11.8	62
1316	Bone targeting for the treatment of osteoporosis. Journal of Controlled Release, 2012, 161, 198-213.	4.8	79
1317	Human stem cell neuronal differentiation on silk-carbon nanotube composite. Nanoscale Research Letters, 2012, 7, 126.	3.1	54
1318	In vitro and in vivo evaluations on osteogenesis and biodegradability of a Î²â€tricalcium phosphate coated magnesium alloy. Journal of Biomedical Materials Research - Part A, 2012, 100A, 293-304.	2.1	47
1319	³¹P and ¹³C solidâ€state NMR spectroscopy to study collagen synthesis and biomineralization in polymerâ€based bone implants. NMR in Biomedicine, 2012, 25, 464-475.	1.6	28
1320	Characterization of a Hierarchical Network of Hyaluronic Acid/Gelatin Composite for use as a Smart Injectable Biomaterial. Macromolecular Bioscience, 2012, 12, 202-210.	2.1	43
1321	â€œOneâ€stepâ€•Preparation of Thiolâ€Ene Clickable PEGâ€Based Thermoresponsive Hyperbranched Copolymer for In Situ Crosslinking Hybrid Hydrogel. Macromolecular Rapid Communications, 2012, 33, 120-126.	2.0	84
1322	Tuning Elasticity of Openâ€Cell Solid Foams and Bone Scaffolds via Randomized Vertex Connectivity. Advanced Engineering Materials, 2012, 14, 120-124.	1.6	10
1323	â€œLivingâ€•Microvascular Stamp for Patterning of Functional Neovessels; Orchestrated Control of Matrix Property and Geometry. Advanced Materials, 2012, 24, 58-63.	11.1	62
1324	Density Gradient Multilayer Polymerization for Creating Complex Tissue. Advanced Materials, 2012, 24, 1466-1470.	11.1	43
1325	Maleimide Crossâ€Linked Bioactive PEG Hydrogel Exhibits Improved Reaction Kinetics and Crossâ€Linking for Cell Encapsulation and In Situ Delivery. Advanced Materials, 2012, 24, 64-70.	11.1	458
1326	Designing biomaterials for in situ periodontal tissue regeneration. Biotechnology Progress, 2012, 28, 3-20.	1.3	42
1327	Functionalization of a protein surface with perâ€Oâ€•methylated Î²â€cyclodextrin. Biopolymers, 2012, 97, 11-20.	1.2	7
1328	Electrospun composite scaffolds containing poly(octanediolâ€coâ€citrate) for cardiac tissue engineering. Biopolymers, 2012, 97, 529-538.	1.2	62
1329	Self-Assembled Peptides: Characterisation and In Vivo Response. Biointerphases, 2012, 7, 2.	0.6	45
1330	Deutsche Gesellschaft fÃ¼r Experimentelle und Klinische Pharmakologie und Toxikologie e.V.. Naunyn-Schmiedeberg's Archives of Pharmacology, 2012, 385, 1-116.	1.4	4
1331	Electrochemical release of hepatocyte-on-hydrogel microstructures from ITO substrates. Analytical and Bioanalytical Chemistry, 2012, 402, 1847-1856.	1.9	11
1332	PEG-based bioresponsive hydrogels with redox-mediated formation and degradation. Journal of Materials Science: Materials in Medicine, 2012, 23, 697-710.	1.7	16

#	Article	IF	Citations
1333	Exogenous phytoestrogenic molecule icaritin incorporated into a porous scaffold for enhancing bone defect repair. Journal of Orthopaedic Research, 2013, 31, 164-172.	1.2	46
1334	Scaffolds based on hydroxypropyl starch: Processing, morphology, characterization, and biological behavior. Journal of Applied Polymer Science, 2013, 127, 1475-1484.	1.3	18
1335	Plasmaâ€Sprayed Ceramic Coatings for Osseointegration. International Journal of Applied Ceramic Technology, 2013, 10, 1-10.	1.1	35
1336	â€œSmartâ€•microspheres for self-renewal of embryonic stem cells. Macromolecular Research, 2013, 21, 134-136.	1.0	3
1337	Encapsulation and 3D culture of human adipose-derived stem cells in an in-situ crosslinked hybrid hydrogel composed of PEG-based hyperbranched copolymer and hyaluronic acid. Stem Cell Research and Therapy, 2013, 4, 32.	2.4	120
1338	Organ Regeneration. Methods in Molecular Biology, 2013, , .	0.4	0
1339	Engineered liver for transplantation. Current Opinion in Biotechnology, 2013, 24, 893-899.	3.3	27
1340	Injectable laminin-functionalized hydrogel for nucleus pulposus regeneration. Biomaterials, 2013, 34, 7381-7388.	5.7	96
1341	Kinetics of Free-Radical Cross-Linking Polymerization: Comparative Experimental and Numerical Study. Macromolecules, 2013, 46, 5831-5841.	2.2	22
1342	Characterization of the mechanical properties of microgels acting as cellular microenvironments. Soft Matter, 2013, 9, 2959.	1.2	37
1343	Genipin-cross-linked poly(l-lysine)-based hydrogels: Synthesis, characterization, and drug encapsulation. Colloids and Surfaces B: Biointerfaces, 2013, 111, 423-431.	2.5	34
1344	Tuning Gold Nanoparticles Interfaces by Specific Peptide Interaction for Surface Enhanced Raman Spectroscopy (SERS) and Separation Applications. ACS Applied Materials & Interfaces, 2013, 5, 7915-7922.	4.0	14
1345	Resilin-Based Materials for Biomedical Applications. ACS Macro Letters, 2013, 2, 635-640.	2.3	59
1346	Colloid-matrix assemblies in regenerative medicine. Current Opinion in Colloid and Interface Science, 2013, 18, 393-405.	3.4	9
1348	Diverse applications of fibers surface-functionalized with nano- and microparticles. Composites Science and Technology, 2013, 79, 77-86.	3.8	6
1349	Fiber-based tissue engineering: Progress, challenges, and opportunities. Biotechnology Advances, 2013, 31, 669-687.	6.0	386
1350	Biomimetic Materials and Scaffolds for Myocardial Tissue Regeneration. Macromolecular Bioscience, 2013, 13, 984-1019.	2.1	81
1351	A tunable synthetic hydrogel system for culture of retinal ganglion cells and amacrine cells. Acta Biomaterialia, 2013, 9, 7622-7629.	4.1	24

#	Article	IF	Citations
1352	Emulsion electrospun nanofibers as substrates for cardiomyogenic differentiation of mesenchymal stem cells. Journal of Materials Science: Materials in Medicine, 2013, 24, 2577-2587.	1.7	26
1353	Effects of silk fibroin fiber incorporation on mechanical properties, endothelial cell colonization and vascularization of PDLLA scaffolds. Biomaterials, 2013, 34, 4573-4581.	5.7	56
1354	Biochemical and Physical Signal Gradients in Hydrogels to Control Stem Cell Behavior. Advanced Materials, 2013, 25, 6366-6372.	11.1	88
1355	Biosensing with electroconductive biomimetic soft materials. Journal of Materials Chemistry B, 2013, 1, 5083.	2.9	10
1356	Surface-Immobilized Biomolecules. , 2013, , 339-349.		7
1357	Bio-responsive polymer hydrogels homeostatically regulate blood coagulation. Nature Communications, 2013, 4, 2168.	5.8	132
1358	Design and development of reactive injectable and settable polymeric biomaterials. Journal of Biomedical Materials Research - Part A, 2013, 101, 3630-3645.	2.1	10
1359	Computational Modeling in Tissue Engineering. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2013, , .	0.7	24
1360	Micromechanical Design Criteria for Tissue Engineering Biomaterials. , 2013, , 1165-1178.		1
1361	Microengineered PEG Hydrogels: 3D Scaffolds for Guided Cell Growth. Macromolecular Bioscience, 2013, 13, 562-572.	2.1	13
1362	Hierarchical approaches for systems modeling in cardiac development. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2013, 5, 289-305.	6.6	8
1363	Functionalization of biomaterials with small osteoinductive moieties. Acta Biomaterialia, 2013, 9, 8773-8789.	4.1	79
1364	In vivo hemostatic efficacy of polyurethane foam compared to collagen and gelatin. Clinical Oral Investigations, 2013, 17, 1273-1278.	1.4	14
1365	Mechanical Properties and Degradation of Chain and Step-Polymerized Photodegradable Hydrogels. Macromolecules, 2013, 46, 2785-2792.	2.2	147
1366	Hydrogel Composite Materials for Tissue Engineering Scaffolds. Jom, 2013, 65, 505-516.	0.9	78
1369	Hydrogels in calcium phosphate moldable and injectable bone substitutes: Sticky excipients or advanced 3-D carriers?. Acta Biomaterialia, 2013, 9, 5421-5430.	4.1	77
1370	Patterned prevascularised tissue constructs by assembly of polyelectrolyte hydrogel fibres. Nature Communications, 2013, 4, 2353.	5.8	119
1371	Decoupling geometrical and chemical cues directing epidermal stem cell fate on polymer brush-based cell micro-patterns. Integrative Biology (United Kingdom), 2013, 5, 899-910.	0.6	45

#	Article	IF	Citations
1372	Electrospun composites of PHBV, silk fibroin and nano-hydroxyapatite for bone tissue engineering. Materials Science and Engineering C, 2013, 33, 4905-4916.	3.8	131
1373	The independent roles of mechanical, structural and adhesion characteristics of 3D hydrogels on the regulation of cancer invasion and dissemination. Biomaterials, 2013, 34, 9486-9495.	5.7	101
1374	Resorbable, amino acid-based poly(ester urea)s crosslinked with osteogenic growth peptide with enhanced mechanical properties and bioactivity. Acta Biomaterialia, 2013, 9, 5132-5142.	4.1	69
1375	A tissue-engineered gastric cancer model for mechanistic study of anti-tumor drugs. Biomedical Materials (Bristol), 2013, 8, 045003.	1.7	0
1376	Biomimetic Coatings to Control Cellular Function through Cell Surface Engineering. Advanced Functional Materials, 2013, 23, 4437-4453.	7.8	106
1377	Adsorbed BMP-2 in polyelectrolyte multilayer films for enhanced early osteogenic differentiation of mesenchymal stem cells. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 434, 110-117.	2.3	21
1379	Collagen Stimulating Effect of Peptide Amphiphile C₁₆â€“KTTKS on Human Fibroblasts. Molecular Pharmaceutics, 2013, 10, 1063-1069.	2.3	58
1380	Tissue engineering on the nanoscale: lessons from the heart. Current Opinion in Biotechnology, 2013, 24, 664-671.	3.3	83
1381	Bioactive films produced from self-assembling peptide amphiphiles as versatile substrates for tuning cell adhesion and tissue architecture in serum-free conditions. Journal of Materials Chemistry B, 2013, 1, 6157.	2.9	40
1382	An amphiphilic degradable polymer/hydroxyapatite composite with enhanced handling characteristics promotes osteogenic gene expression in bone marrow stromal cells. Acta Biomaterialia, 2013, 9, 8354-8364.	4.1	59
1383	The influence of substrate topography on the migration of corneal epithelial wound borders. Biomaterials, 2013, 34, 9244-9251.	5.7	30
1384	Thiol-ene Michael-type formation of gelatin/poly(ethylene glycol) biomatrices for three-dimensional mesenchymal stromal/stem cell administration to cutaneous wounds. Acta Biomaterialia, 2013, 9, 8802-8814.	4.1	89
1385	Macroscale delivery systems for molecular and cellular payloads. Nature Materials, 2013, 12, 1004-1017.	13.3	251
1386	Calcium Orthophosphate-Based Bioceramics. Materials, 2013, 6, 3840-3942.	1.3	219
1387	In vitro osteogenic differentiation of human amniotic fluid-derived stem cells on a poly(lactide- co -glycolide) (PLGA)â€“bladder submucosa matrix (BSM) composite scaffold for bone tissue engineering. Biomedical Materials (Bristol), 2013, 8, 014107.	1.7	30
1388	Research on the Structure of Fish Collagen Nanofibers Influenced Cell Growth. Journal of Nanomaterials, 2013, 2013, 1-6.	1.5	6
1389	Deconstructing Dimensionality. Science, 2013, 339, 402-404.	6.0	88
1391	Forced protein unfolding leads to highly elastic and tough protein hydrogels. Nature Communications, 2013, 4, 2974.	5.8	134

#	Article	IF	Citations
1392	Surface engineering of titanium substrates with chitosanâ€atorvastatin conjugate for reduced inflammation responses and improved cytocompatibility. Journal of Biomedical Materials Research - Part A, 2013, 101A, 2005-2014.	2.1	6
1393	Reinforcement of Shear Thinning Protein Hydrogels by Responsive Block Copolymer Selfâ€Assembly. Advanced Functional Materials, 2013, 23, 1182-1193.	7.8	118
1394	Biological Implants in Abdominal Wall Hernia Surgery. CirugÃa EspaÃ±ola (English Edition), 2013, 91, 217-223.	0.1	3
1395	In situ cell manipulation through enzymatic hydrogel photopatterning. Nature Materials, 2013, 12, 1072-1078.	13.3	282
1396	Assembled 3D cell niches in chitosan hydrogel network to mimic extracellular matrix. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 434, 78-87.	2.3	17
1397	Migration rate of rabbit bone-marrow stromal cells and rabbit dermal fibroblasts in different gels and activity of their MMPS. Cell and Tissue Biology, 2013, 7, 426-432.	0.2	0
1398	Heading off with the herd: how cancer cells might maneuver supernumerary centrosomes for directional migration. Cancer and Metastasis Reviews, 2013, 32, 269-287.	2.7	70
1399	Directed cell migration in multi-cue environments. Integrative Biology (United Kingdom), 2013, 5, 1306-1323.	0.6	76
1400	Nitric oxide synthase mediates PC12 differentiation induced by the surface topography of nanostructured TiO2. Journal of Nanobiotechnology, 2013, 11, 35.	4.2	59
1401	Photocrosslinkable Kappaâ€Carrageenan Hydrogels for Tissue Engineering Applications. Advanced Healthcare Materials, 2013, 2, 895-907.	3.9	178
1402	Agarose Hydrogels Embedded with pH-Responsive Diblock Copolymer Micelles for Triggered Release of Substances. Biomacromolecules, 2013, 14, 2713-2723.	2.6	38
1403	New paradigms in hierarchical porous scaffold design for tissue engineering. Materials Science and Engineering C, 2013, 33, 1759-1772.	3.8	102
1404	Design standards for engineered tissues. Biotechnology Advances, 2013, 31, 632-637.	6.0	11
1405	A Therapeutic Potential for Marine Skeletal Proteins in Bone Regeneration. Marine Drugs, 2013, 11, 1203-1220.	2.2	36
1407	Hyperthin nanochains composed of self-polymerizing protein shackles. Nature Communications, 2013, 4, 2211.	5.8	35
1408	Capillary morphogenesis in PEG-collagen hydrogels. Biomaterials, 2013, 34, 9331-9340.	5.7	65
1409	A Versatile Approach to Engineering Biomoleculeâ€Presenting Cellular Microenvironments. Advanced Healthcare Materials, 2013, 2, 292-296.	3.9	37
1410	High-content adhesion assay to address limited cell samples. Integrative Biology (United Kingdom), 2013, 5, 720.	0.6	13

#	Article	IF	Citations
1411	Ammonia plasma treatment of polystyrene surfaces enhances proliferation of primary human mesenchymal stem cells and human endothelial cells. Biotechnology Journal, 2013, 8, 327-337.	1.8	29
1412	Polysaccharideâ€Based Polyanionâ€“Polycationâ€“Polyanion Ternary Systems in the Concentrated Regime and Hydrogel Form. Macromolecular Chemistry and Physics, 2013, 214, 1309-1320.	1.1	14
1413	Dorsal and ventral stimuli in sandwichâ€like microenvironments. Effect on cell differentiation. Biotechnology and Bioengineering, 2013, 110, 3048-3058.	1.7	15
1414	Polysaccharide hydrogels with tunable stiffness and provasculogenic properties via Î±-helix to Î²-sheet switch in secondary structure. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12887-12892.	3.3	91
1415	Citrate-based biodegradable injectable hydrogel composites for orthopedic applications. Biomaterials Science, 2013, 1, 52-64.	2.6	57
1416	Preparation and characterization of multi-layered poly(Îµ-caprolactone)/chitosan scaffolds fabricated with a combination of melt-plotting/in situ plasma treatment and a coating method for hard tissue regeneration. Journal of Materials Chemistry B, 2013, 1, 5831.	2.9	24
1417	Tissue adhesives and sealants for surgical applications. , 2013, , 449-490.		7
1418	Controllably degradable Î²-sheet nanofibers and gels from self-assembling depsipeptides. Biomaterials Science, 2013, 1, 1037.	2.6	36
1419	Human Mesenchymal Stemâ€Cell Behaviour On Direct Laser Micropatterned Electrospun Scaffolds with Hierarchical Structures. Macromolecular Bioscience, 2013, 13, 299-310.	2.1	47
1420	Surface- and Hydrogel-Mediated Delivery of Nucleic Acid Nanoparticles. Methods in Molecular Biology, 2013, 948, 149-169.	0.4	11
1421	Nanotopography-guided tissue engineering and regenerative medicine. Advanced Drug Delivery Reviews, 2013, 65, 536-558.	6.6	346
1422	Resilin-like polypeptide hydrogels engineered for versatile biological function. Soft Matter, 2013, 9, 665-673.	1.2	106
1423	Tissues, the Extracellular Matrix, and Cellâ€“Biomaterial Interactions. , 2013, , 452-474.		6
1424	The Concept and Assessment of Biocompatibility. , 2013, , 588-592.		2
1425	Hydrogels. , 2013, , 166-179.		13
1426	Graphene and its derivatives for cell biotechnology. Analyst, The, 2013, 138, 72-86.	1.7	48
1427	Interfacing biodegradable molecular hydrogels with liquid crystals. Soft Matter, 2013, 9, 1188-1193.	1.2	14
1428	Controlled delivery of heparin-binding EGF-like growth factor yields fast and comprehensive wound healing. Journal of Controlled Release, 2013, 166, 124-129.	4.8	136

#	Article	IF	Citations
1429	Photoreactive nanotool for cell aggregation and immobilization. Journal of Biomaterials Science, Polymer Edition, 2013, 24, 714-725.	1.9	2
1430	Laser 3D micro/nanofabrication of polymers for tissue engineering applications. Optics and Laser Technology, 2013, 45, 518-524.	2.2	47
1431	The effect of growth factor environment on fibroblast morphological response to substrate stiffness. Biomaterials, 2013, 34, 965-974.	5.7	31
1432	The Effect of Fibrinogen, Collagen Type I, and Fibronectin on Mesenchymal Stem Cell Growth and Differentiation into Osteoblasts. Tissue Engineering - Part A, 2013, 19, 1416-1423.	1.6	77
1433	Evaluation of two decellularization methods in the development of a wholeâ€organ decellularized rat liver scaffold. Liver International, 2013, 33, 448-458.	1.9	103
1434	Resilinâ€Based Hybrid Hydrogels for Cardiovascular Tissue Engineering. Macromolecular Chemistry and Physics, 2013, 214, 203-213.	1.1	86
1435	Pharmacologically tunable polyethylene-glycol-based cell growth substrate. Acta Biomaterialia, 2013, 9, 8272-8278.	4.1	12
1436	Cell specific ingrowth hydrogels. Biomaterials, 2013, 34, 6797-6803.	5.7	36
1437	Towards constructing extracellular matrix-mimetic hydrogels: An elastic hydrogel constructed from tandem modular proteins containing tenascin FnIII domains. Acta Biomaterialia, 2013, 9, 6481-6491.	4.1	45
1438	Extracellular matrix protein adsorption to phosphate-functionalized gels from serum promotes osteogenic differentiation of human mesenchymal stem cells. Acta Biomaterialia, 2013, 9, 4525-4534.	4.1	59
1439	Fibroblast cluster formation on 3D collagen matrices requires cell contraction dependent fibronectin matrix organization. Experimental Cell Research, 2013, 319, 546-555.	1.2	29
1440	Constructing stem cell microenvironments using bioengineering approaches. Physiological Genomics, 2013, 45, 1123-1135.	1.0	43
1441	Strain-induced reversible isotropicâ€“anisotropic structural transition of imogolite hydrogels. Polymer, 2013, 54, 2489-2492.	1.8	33
1442	ECM modulated early kidney development in embryonic organ culture. Biomaterials, 2013, 34, 6670-6682.	5.7	24
1443	Designing a gas foamed scaffold for keratoprosthesis. Materials Science and Engineering C, 2013, 33, 3396-3403.	3.8	20
1444	Influence of rod-surface structure on biological interactions between TiO2 nanorod films and proteins/cells. Thin Solid Films, 2013, 544, 285-290.	0.8	8
1445	Survival and structural evaluations of three-dimensional tissues fabricated by the hierarchical cell manipulation technique. Acta Biomaterialia, 2013, 9, 4698-4706.	4.1	29
1446	hE-cadherinâ€“Fc fusion protein coated surface enhances the adhesion and proliferation of human mesenchymal stem cells. Colloids and Surfaces B: Biointerfaces, 2013, 109, 97-102.	2.5	18

#	Article	IF	Citations
1447	Remodeling of tissue-engineered bone structures in vivo. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 119-129.	2.0	52
1448	Adsorption state of fibronectin on poly(dimethylsiloxane) surfaces with varied stiffness can dominate adhesion density of fibroblasts. Acta Biomaterialia, 2013, 9, 5493-5501.	4.1	68
1449	Preventive midline laparotomy closure with a new bioabsorbable mesh: An experimental study. Journal of Surgical Research, 2013, 181, 160-169.	0.8	25
1450	A layer-by-layer approach to natural polymer-derived bioactive coatings on magnesium alloys. Acta Biomaterialia, 2013, 9, 8690-8703.	4.1	144
1451	Enhanced infarct stabilization and neovascularization mediated by VEGF-loaded PEGylated fibrinogen hydrogel in a rodent myocardial infarction model. Biomaterials, 2013, 34, 8195-8202.	5.7	79
1452	Tunable and dynamic soft materials for three-dimensional cell culture. Soft Matter, 2013, 9, 6737-6746.	1.2	29
1453	The effect of scaffold-cell entrapment capacity and physico-chemical properties on cartilage regeneration. Biomaterials, 2013, 34, 4259-4265.	5.7	39
1454	Hydrogel scaffolds to study cell biology in four dimensions. MRS Bulletin, 2013, 38, 260-268.	1.7	32
1455	Functional Living Biointerphases. Advanced Healthcare Materials, 2013, 2, 1213-1218.	3.9	12
1456	Elastomeric biomaterials for tissue engineering. Progress in Polymer Science, 2013, 38, 584-671.	11.8	450
1457	Activin/BMP2 chimeric ligands direct adipose-derived stem cells to chondrogenic differentiation. Stem Cell Research, 2013, 10, 464-476.	0.3	23
1458	Hydrophilization of synthetic biodegradable polymer scaffolds for improved cell/tissue compatibility. Biomedical Materials (Bristol), 2013, 8, 014101.	1.7	105
1459	Emerging strategies for spatiotemporal control of stem cell fate and morphogenesis. Trends in Biotechnology, 2013, 31, 78-84.	4.9	44
1460	Synthetically Tractable Click Hydrogels for Three-Dimensional Cell Culture Formed Using Tetrazineâ€“Norbornene Chemistry. Biomacromolecules, 2013, 14, 949-953.	2.6	232
1461	Proteinâ€“Hydrogel Interactions in Tissue Engineering: Mechanisms and Applications. Tissue Engineering - Part B: Reviews, 2013, 19, 160-171.	2.5	66
1462	Toward a 3D Cellular Model for Studying In Vitro the Outcome of Photodynamic Treatments: Accounting for the Effects of Tissue Complexity. Tissue Engineering - Part A, 2013, 19, 1665-1674.	1.6	34
1463	Solâ€“gel derived nanoscale bioactive glass (NBG) particles reinforced poly(Îµ-caprolactone) composites for bone tissue engineering. Materials Science and Engineering C, 2013, 33, 1102-1108.	3.8	44
1464	Fibrinogen promotes resorption of chitosan by human osteoclasts. Acta Biomaterialia, 2013, 9, 6553-6562.	4.1	15

#	Article	IF	Citations
1465	Controlled Release Strategies for Bone, Cartilage, and Osteochondral Engineeringâ€"Part I: Recapitulation of Native Tissue Healing and Variables for the Design of Delivery Systems. Tissue Engineering - Part B: Reviews, 2013, 19, 308-326.	2.5	131
1466	Engineered Proteins for Controlling Gene Expression. , 2013, , 125-138.		1
1467	Developmental Mechanisms of Regeneration. , 2013, , 155-178.		0
1468	Carbon-Nanotube-Embedded Hydrogel Sheets for Engineering Cardiac Constructs and Bioactuators. ACS Nano, 2013, 7, 2369-2380.	7.3	789
1469	The modulation of endothelial cell morphology, function, and survival using anisotropic nanofibrillar collagen scaffolds. Biomaterials, 2013, 34, 4038-4047.	5.7	82
1470	Microfluidic Synthesis of Cell-Type-Specific Artificial Extracellular Matrix Hydrogels. Biomacromolecules, 2013, 14, 1122-1131.	2.6	81
1471	Designing Tunable Artificial Matrices for Stem Cell Culture. , 2013, , 927-935.		0
1472	Problems in (nano)medical mechanics. International Journal of Non-Linear Mechanics, 2013, 56, 3-19.	1.4	6
1473	Glycated collagen and altered glucose increase endothelial cell adhesion strength. Journal of Cellular Physiology, 2013, 228, 1727-1736.	2.0	14
1474	Bioreactor engineering of stem cell environments. Biotechnology Advances, 2013, 31, 1020-1031.	6.0	53
1475	Peptide hydrogels. RSC Advances, 2013, 3, 9117.	1.7	270
1476	Bioresponsive hydrogel scaffolding systems for 3D constructions in tissue engineering and regenerative medicine. Nanomedicine, 2013, 8, 655-668.	1.7	33
1477	Nanoporous microspheres: from controllable synthesis to healthcare applications. Journal of Materials Chemistry B, 2013, 1, 2222.	2.9	82
1478	Scaffolds for bone tissue engineering: role of surface patterning on osteoblast response. RSC Advances, 2013, 3, 11073.	1.7	93
1479	Self-Assembled Proteins and Peptides for Regenerative Medicine. Chemical Reviews, 2013, 113, 4837-4861.	23.0	255
1480	Bone tissue engineering in osteoporosis. Maturitas, 2013, 75, 118-124.	1.0	50
1481	Hyperbranched Polyester Hydrogels with Controlled Drug Release and Cell Adhesion Properties. Biomacromolecules, 2013, 14, 1299-1310.	2.6	110
1482	Electrospun Acetalated Dextran Scaffolds for Temporal Release of Therapeutics. Langmuir, 2013, 29, 7957-7965.	1.6	29

#	Article	IF	Citations
1483	Supramolecular control of cell adhesion via ferroceneâ€“cucurbit[7]uril hostâ€“guest binding on gold surfaces. Chemical Communications, 2013, 49, 3679.	2.2	69
1484	Preparation and Evaluation of Natural Scaffold Materials for Kidney Regenerative Applications. Methods in Molecular Biology, 2013, 1001, 133-143.	0.4	3
1485	Environmentally responsive hydrogels with dynamically tunable properties as extracellular matrix mimetic. Reviews in Chemical Engineering, 2013, 29, .	2.3	11
1486	Engineering Functional Epithelium for Regenerative Medicine and In Vitro Organ Models: A Review. Tissue Engineering - Part B: Reviews, 2013, 19, 529-543.	2.5	57
1487	Clay: New Opportunities for Tissue Regeneration and Biomaterial Design. Advanced Materials, 2013, 25, 4069-4086.	11.1	271
1488	Time-dependent cellular morphogenesis and matrix stiffening in proteolytically responsive hydrogels. Acta Biomaterialia, 2013, 9, 7630-7639.	4.1	25
1489	Low dose BMP-2 treatment for bone repair using a PEGylated fibrinogen hydrogel matrix. Biomaterials, 2013, 34, 2902-2910.	5.7	96
1490	Differentiation Patterns of Embryonic Stem Cells in Two- versus Three-Dimensional Culture. Cells Tissues Organs, 2013, 197, 399-410.	1.3	61
1491	The use of the mechanical microenvironment of phospholipid polymer hydrogels to control cell behavior. Biomaterials, 2013, 34, 5891-5896.	5.7	51
1492	Study on the potential of RGD- and PHSRN-modified alginates as artificial extracellular matrices for engineering bone. Journal of Artificial Organs, 2013, 16, 284-293.	0.4	42
1493	Hyperbranched polyglycerols at the biointerface. Progress in Surface Science, 2013, 88, 213-236.	3.8	26
1494	Structure and mechanical response of protein hydrogels reinforced by block copolymer self-assembly. Soft Matter, 2013, 9, 6814.	1.2	34
1495	Tissue Engineering and the Role of Biomaterial Scaffolds. , 2013, , 43-67.		2
1496	Cellâ€“material interactions on biphasic polyurethane matrix. Journal of Biomedical Materials Research - Part A, 2013, 101A, 2151-2163.	2.1	13
1497	Cryopreservation effects on recombinant myoblasts encapsulated in adhesive alginate hydrogels. Acta Biomaterialia, 2013, 9, 6814-6822.	4.1	21
1498	A Stiff Injectable Biodegradable Elastomer. Advanced Functional Materials, 2013, 23, 1527-1533.	7.8	54
1499	Gradients of physical and biochemical cues on polyelectrolyte multilayer films generated via microfluidics. Lab on A Chip, 2013, 13, 1562.	3.1	58
1500	Mechanobiochemistry: harnessing biomacromolecules for force-responsive materials. Polymer Chemistry, 2013, 4, 3916.	1.9	44

#	Article	IF	Citations
1501	Mild and Efficient Strategy for Site-Selective Aldehyde Modification of Glycosaminoglycans: Tailoring Hydrogels with Tunable Release of Growth Factor. Biomacromolecules, 2013, 14, 2427-2432.	2.6	55
1502	A Molecular Toolkit for the Functionalization of Titaniumâ€Based Biomaterials That Selectively Control Integrinâ€Mediated Cell Adhesion. Chemistry - A European Journal, 2013, 19, 9218-9223.	1.7	53
1503	Cell-Laden Poly(É›-caprolactone)/Alginate Hybrid Scaffolds Fabricated by an Aerosol Cross-Linking Process for Obtaining Homogeneous Cell Distribution: Fabrication, Seeding Efficiency, and Cell Proliferation and Distribution. Tissue Engineering - Part C: Methods, 2013, 19, 784-793.	1.1	42
1504	Immobilization of chondroitin sulfate to lipid membranes and its interactions with ECM proteins. Journal of Colloid and Interface Science, 2013, 390, 258-266.	5.0	12
1505	Real-time maps of fluid flow fields in porous biomaterials. Biomaterials, 2013, 34, 1980-1986.	5.7	11
1506	Cell interaction study method using novel 3D silica nanoneedle gradient arrays. Colloids and Surfaces B: Biointerfaces, 2013, 102, 111-116.	2.5	20
1507	Minimal Peptide Motif for Non-covalent Peptideâ€“Heparin Hydrogels. Journal of the American Chemical Society, 2013, 135, 2919-2922.	6.6	62
1508	Design, Synthesis, and Application of Stimulusâ€Sensing Biohybrid Hydrogels. Macromolecular Rapid Communications, 2013, 34, 1594-1610.	2.0	16
1509	In situ tissue regeneration through host stem cell recruitment. Experimental and Molecular Medicine, 2013, 45, e57-e57.	3.2	202
1510	Advances in Biomaterialâ€™s Modification and Thrombosis Inhibition. Advanced Materials Research, 0, 873, 635-641.	0.3	0
1511	Biomaterial strategies to modulate cancer. , 2013, , 417-444.		0
1512	Characterizing the viscoelastic behaviour of poly(lactide-co-glycolide acid)â€“hydroxyapatite foams. Journal of Cellular Plastics, 2013, 49, 497-505.	1.2	5
1513	Quantitative characterization of functionally modified micronâ€“submicron fibers for tissue regeneration: a review. Textile Reseach Journal, 2013, 83, 1999-2022.	1.1	7
1514	Structural and molecular micropatterning of dual hydrogel constructs for neural growth models using photochemical strategies. Biomedical Microdevices, 2013, 15, 49-61.	1.4	25
1515	In situ fabrication and wettability of Ca₂SiO₄/CaTiO₃ biocoating by laser cladding technology on Tiâ€“6Alâ€“4V alloy. Materials Science and Technology, 2013, 29, 598-604.	0.8	6
1516	Assembly of complex cell microenvironments using geometrically docked hydrogel shapes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4551-4556.	3.3	76
1517	Synthesis and Self-Assembly of Well-Defined Block Copolypeptides via Controlled NCA Polymerization. Advances in Polymer Science, 2013, , 1-37.	0.4	22
1518	Repair of bone defects using a new biomimetic construction fabricated by adipose-derived stem cells, collagen I, and porous beta-tricalcium phosphate scaffolds. Experimental Biology and Medicine, 2013, 238, 1331-1343.	1.1	28

#	Article	IF	Citations
1519	A Library of Multifunctional Polyesters with â€œPeptide-Likeâ€•Pendant Functional Groups. Biomacromolecules, 2013, 14, 2489-2493.	2.6	51
1520	Electrospinning collagen/chitosan/poly(<scp>L</scp>â€lactic acidâ€coâ€Ïâ€caprolactone) to form a vascular graft: Mechanical and biological characterization. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1292-1301.	2.1	106
1521	Mechanical characterization of bioprinted in vitro soft tissue models. Biofabrication, 2013, 5, 045010.	3.7	60
1522	Construction of microenvironment onto titanium substrates to regulate the osteoblastic differentiation of bone marrow stromal cells in vitro and osteogenesis in vivo. Journal of Biomedical Materials Research - Part A, 2013, 101A, 653-666.	2.1	6
1523	Plateletâ€rich plasmaâ€loaded chitosan scaffolds: Preparation and growth factor release kinetics. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 28-35.	1.6	63
1524	A Strategy for the Construction of Controlled, Threeâ€Dimensional, Multilayered, Tissueâ€Like Structures. Advanced Functional Materials, 2013, 23, 42-46.	7.8	71
1525	Modular Multifunctional Poly(ethylene glycol) Hydrogels for Stem Cell Differentiation. Advanced Functional Materials, 2013, 23, 575-582.	7.8	50
1526	Neovascularization in Biodegradable Inverse Opal Scaffolds with Uniform and Precisely Controlled Pore Sizes. Advanced Healthcare Materials, 2013, 2, 145-154.	3.9	117
1527	Engineering the Regenerative Microenvironment with Biomaterials. Advanced Healthcare Materials, 2013, 2, 57-71.	3.9	329
1528	Spatiotemporal Characterization of Extracellular Matrix Microstructures in Engineered Tissue: A Whole-Field Spectroscopic Imaging Approach. Journal of Nanotechnology in Engineering and Medicine, 2013, 4, 110051-110059.	0.8	3
1529	Biomimetic hydrogels as scaffolds for tissue-engineering applications. , 2013, , 238-275.		4
1530	Synthesis and Characterization of Drug-Loaded Poly(<mml:math) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 312 Td (xmlns:mml=" Nanofibrous Scaffolds. Journal of Nanomaterials, 2013, 2013, 1-12.	1.5	8
1531	Surface functionalization of biomaterials with tissue-inductive artificial extracellular matrices. BioNanoMaterials, 2013, 14, .	1.4	1
1532	Delivery of EPC embedded in HA-hydrogels for treatment of acute kidney injury. Biomatter, 2013, 3, e23284.	2.6	13
1533	Microbead-based biomimetic synthetic neighbors enhance survival and function of rat pancreatic Î²-cells. Scientific Reports, 2013, 3, 2863.	1.6	36
1534	Hierarchically engineered fibrous scaffolds for bone regeneration. Journal of the Royal Society Interface, 2013, 10, 20130684.	1.5	34
1536	Hydrogel scaffolds for tissue engineering: Progress and challenges. Global Cardiology Science & Practice, 2013, 2013, 38.	0.3	604
1537	Fundamentals of cell and matrix biology for tissue engineering. , 2013, , 3-17.		0

#	Article	IF	Citations
1538	Hierarchical Macromolecular Structures: 60 Years after the Staudinger Nobel Prize I. Advances in Polymer Science, 2013, , .	0.4	0
1539	Biomimetic scaffolds for skin tissue and wound repair. , 2013, , 153-180.		1
1540	Hybrid Microfabrication of Nanofiber-Based Sheets and Rods for Tissue Engineering Applications. Journal of the Association for Laboratory Automation, 2013, 18, 494-503.	2.8	10
1541	Laser Surface Modification of Poly (e-caprolactone) Scaffold for Artificial Skin Applications. American Journal of Biomedical Sciences, 0, , 1-13.	0.2	2
1542	Engineering a Biocompatible Scaffold with Either Micrometre or Nanometre Scale Surface Topography for Promoting Protein Adsorption and Cellular Response. International Journal of Biomaterials, 2013, 2013, 1-16.	1.1	68
1543	Modeling controlled photodegradation in optically thick hydrogels. Journal of Polymer Science Part A, 2013, 51, 1899-1911.	2.5	37
1544	Physical Properties and Erosion Behavior of Poly(trimethylene carbonateâ€coâ€Îµâ€caprolactone) Networks. Macromolecular Bioscience, 2013, 13, 573-583.	2.1	13
1545	Plant-Derived Recombinant Human Collagen: A Strategic Approach for Generating Safe Human ECM-Based Scaffold. Tissue Engineering - Part A, 2013, 19, 1489-1490.	1.6	5
1546	Poly(vinyl alcohol)-heparin biosynthetic microspheres produced by microfluidics and ultraviolet photopolymerisation. Biomicrofluidics, 2013, 7, 44109.	1.2	23
1547	Increased curvature of hollow fiber membranes could upâ€regulate differential functions of renal tubular cell layers. Biotechnology and Bioengineering, 2013, 110, 2173-2183.	1.7	26
1548	Electrospun collagenâ€“poly(<scp>L</scp>-lactic acid-co-Îµ-caprolactone) membranes for cartilage tissue engineering. Regenerative Medicine, 2013, 8, 425-436.	0.8	39
1549	The role of singleâ€cell analyses in understanding cell lineage commitment. Biotechnology Journal, 2013, 8, 397-407.	1.8	3
1550	Bioprinting and Tissue Engineering: Recent Advances and Future Perspectives. Israel Journal of Chemistry, 2013, 53, 795-804.	1.0	39
1551	Pro-angiogenic and Anti-inflammatory Regulation by Functional Peptides Loaded in Polymeric Implants for Soft Tissue Regeneration. Tissue Engineering - Part A, 2013, 19, 437-447.	1.6	32
1552	Physics of engineered protein hydrogels. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 587-601.	2.4	31
1553	Improved <scp>MIN</scp>6 Î²â€<scp>C</scp>ell Function on Selfâ€<scp>A</scp>ssembled Peptide Amphiphile Nanomatrix Inscribed with Extracellular Matrixâ€<scp>D</scp>erived Cell Adhesive Ligands. Macromolecular Bioscience, 2013, 13, 1404-1412.	2.1	11
1554	Clickable Poly(ethylene glycol)â€Microsphereâ€Based Cell Scaffolds. Macromolecular Chemistry and Physics, 2013, 214, 948-956.	1.1	17
1555	The Influence of Matrix Degradation and Functionality on Cell Survival and Morphogenesis in <scp>PEG</scp>â€<scp>B</scp>ased Hydrogels. Macromolecular Bioscience, 2013, 13, 1048-1058.	2.1	40

#	Article	IF	Citations
1556	Characterizing the Effects of Heparin Gel Stiffness on Function of Primary Hepatocytes. Tissue Engineering - Part A, 2013, 19, 2655-2663.	1.6	74
1557	Adhesion, proliferation, and differentiation of mesenchymal stem cells on RGD nanopatterns of varied nanospacings. Organogenesis, 2013, 9, 280-286.	0.4	49
1558	NANOTOPOGRAPHICAL MODULATION OF CELL PHENOTYPE AND FUNCTION. Nano LIFE, 2013, 03, 1340003.	0.6	1
1559	Smart Design of Stable Extracellular Matrix Mimetic Hydrogel: Synthesis, Characterization, and In Vitro and In Vivo Evaluation for Tissue Engineering. Advanced Functional Materials, 2013, 23, 1273-1280.	7.8	110
1560	Proangiogenic Hydrogels Within Macroporous Scaffolds Enhance Islet Engraftment in an Extrahepatic Site. Tissue Engineering - Part A, 2013, 19, 2544-2552.	1.6	69
1561	A multiscale road map of cancer spheroids â€“ incorporating experimental and mathematical modelling to understand cancer progression. Journal of Cell Science, 2013, 126, 2761-71.	1.2	27
1562	Integration and Regression of Implanted Engineered Human Vascular Networks During Deep Wound Healing. Stem Cells Translational Medicine, 2013, 2, 297-306.	1.6	41
1563	Encapsulation of Mesenchymal Stem Cells by Bioscaffolds Protects Cell Survival and Attenuates Neuroinflammatory Reaction in Injured Brain Tissue after Transplantation. Cell Transplantation, 2013, 22, 67-82.	1.2	41
1564	Cellular Properties of Mesenchymal Cells Derived from the Decidua of Human Term Placenta and Their Applications in Regenerative Medicine. , 2013, , 240-260.		1
1565	Trachea and Larynx in Regenerative Medicine. , 2013, , 353-379.		4
1566	Blood-derived Biomaterials: What Role Can They Play in Regenerative Medicine and Stem Cell Therapy?. , 2013, , 77-98.		0
1568	Control of Olfactory Ensheathing Cell Behaviors by Electrospun Silk Fibroin Fibers. Cell Transplantation, 2013, 22, 39-50.	1.2	19
1569	Microwave-assisted Functionalization of Poly(ethylene glycol) and On-resin Peptides for Use in Chain Polymerizations and Hydrogel Formation. Journal of Visualized Experiments, 2013, , e50890.	0.2	21
1570	Translational Research and Therapeutic Applications of Stem Cell Transplantation in Periodontal Regenerative Medicine. Cell Transplantation, 2013, 22, 205-229.	1.2	32
1572	Applications of Microfabrication and Microfluidic Techniques in Mesenchymal Stem Cell Research. , 2013, , 69-95.		0
1573	Application of Microfluidics in Stem Cell and Tissue Engineering. , 2013, , 241-291.		0
1574	Physicochemical regulation of endothelial sprouting in a 3D microfluidic angiogenesis model. Journal of Biomedical Materials Research - Part A, 2013, 101, 2948-2956.	2.1	70
1575	Defined Polymerâ€“Peptide Conjugates to Form Cellâ€Instructive starPEGâ€“Heparin Matrices In Situ. Advanced Materials, 2013, 25, 2606-2610.	11.1	141

#	Article	IF	Citations
1576	A tissue-engineered subcutaneous pancreatic cancer model for antitumor drug evaluation. International Journal of Nanomedicine, 2013, 8, 1167.	3.3	16
1577	Sterilization using Electrolyzed Water Highly Retains the Biological Properties in Tissue-Engineered Porcine Liver Scaffold. International Journal of Artificial Organs, 2013, 36, 781-792.	0.7	25
1578	Preparation and Characterization of a Novel Injectable Hydrogel. Advancements in Genetic Engineering, 2013, 02, .	0.1	0
1579	The conjugation of nonsteroidal anti-inflammatory drugs (NSAID) to small peptides for generating multifunctional supramolecular nanofibers/hydrogels. Beilstein Journal of Organic Chemistry, 2013, 9, 908-917.	1.3	63
1580	Extracellular Matrix Aggregates from Differentiating Embryoid Bodies as a Scaffold to Support ESC Proliferation and Differentiation. PLoS ONE, 2013, 8, e61856.	1.1	43
1581	A Novel In Vitro Model for Microvasculature Reveals Regulation of Circumferential ECM Organization by Curvature. PLoS ONE, 2013, 8, e81061.	1.1	26
1582	Deciphering the Combinatorial Roles of Geometric, Mechanical, and Adhesion Cues in Regulation of Cell Spreading. PLoS ONE, 2013, 8, e81113.	1.1	12
1583	The Spatiotemporal Development of Intercalated Disk in Three-Dimensional Engineered Heart Tissues Based on Collagen/Matrigel Matrix. PLoS ONE, 2013, 8, e81420.	1.1	9
1584	Stem Cells in Tissue Engineering. , 2013, , .		4
1585	Bridging Polymer Science and Medicine Through Supramolecular Nanoassemblies. Advances in Polymer Science, 2013, , 249-262.	0.4	1
1586	Functionalized poly(ethylene glycol) hydrogels for controlling stem cell fate. , 0, , 263-278.		0
1588	Rapid Patterning of 1-D Collagenous Topography as an ECM Protein Fibril Platform for Image Cytometry. PLoS ONE, 2014, 9, e93590.	1.1	25
1589	Apple Derived Cellulose Scaffolds for 3D Mammalian Cell Culture. PLoS ONE, 2014, 9, e97835.	1.1	162
1590	Facile Bench-Top Fabrication of Enclosed Circular Microchannels Provides 3D Confined Structure for Growth of Prostate Epithelial Cells. PLoS ONE, 2014, 9, e99416.	1.1	20
1591	Cell Microenvironment Engineering and Monitoring for Tissue Engineering and Regenerative Medicine: The Recent Advances. BioMed Research International, 2014, 2014, 1-18.	0.9	176
1592	Mesoporous magnesium silicate-incorporated poly(ε-caprolactone)-poly(ethylene glycol)-poly(ε-caprolactone) bioactive composite beneficial to osteoblast behaviors. International Journal of Nanomedicine, 2014, 9, 2665.	3.3	12
1593	Preparation and characterization of polylactide/poly(ε-caprolactone)-poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1 engineering. International Journal of Nanomedicine, 2014, 9, 1991.	3.3	14
1594	Cell Therapy with Human MSCs Isolated from the Umbilical Cord Wharton Jelly Associated to a PVA Membrane in the Treatment of Chronic Skin Wounds. International Journal of Medical Sciences, 2014, 11, 979-987.	1.1	53

#	Article	IF	Citations
1595	Nanotechnology Biomimetic Cartilage Regenerative Scaffolds. Archives of Plastic Surgery, 2014, 41, 231-240.	0.4	40
1596	Siliceous mesostructured cellular foams/ poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) composite biomaterials for bone regeneration. International Journal of Nanomedicine, 2014, 9, 4795.	3.3	9
1597	Nanotechnology and picotechnology to increase tissue growth: a summary of in vivo studies. International Journal of Nanomedicine, 2014, 9 Suppl 1, 7.	3.3	1
1598	Nanoengineered Platforms to Guide Pluripotent Stem Cell Fate. Journal of Nanomedicine & Nanotechnology, 2014, 05, .	1.1	3
1602	Neural ECM mimetics. Progress in Brain Research, 2014, 214, 391-413.	0.9	19
1603	Liver Regeneration. , 2014, , 333-352.		1
1604	Dynamics of filopodium-like protrusion and endothelial cellular motility on one-dimensional extracellular matrix fibrils. Interface Focus, 2014, 4, 20130060.	1.5	17
1606	Investigation of sizeâ€“dependent cell adhesion on nanostructured interfaces. Journal of Nanobiotechnology, 2014, 12, 54.	4.2	56
1607	Design of a microscopic electrical impedance tomography system for 3D continuous non-destructive monitoring of tissue culture. BioMedical Engineering OnLine, 2014, 13, 142.	1.3	17
1608	Mesenchymal stem cells support hepatocyte function in engineered liver grafts. Organogenesis, 2014, 10, 268-277.	0.4	48
1609	Controlled Release Strategies in Tissue Engineering. , 2014, , 347-392.		1
1610	Microfabrication Technology in Tissue Engineering. , 2014, , 283-310.		7
1611	Materiomics. , 2014, , 253-281.		6
1612	Comparison of growth factor adsorbed scaffold and conventional scaffold with growth factor supplemented media for primary human articular chondrocyte 3D culture. BMC Biotechnology, 2014, 14, 108.	1.7	14
1613	Dual growth factor-loaded core-shell polymer microcapsules can promote osteogenesis and angiogenesis. Macromolecular Research, 2014, 22, 1320-1329.	1.0	15
1614	Designer functionalised self-assembling peptide nanofibre scaffolds for cartilage tissue engineering. Expert Reviews in Molecular Medicine, 2014, 16, e12.	1.6	32
1615	Tissue Engineering Concept in the Research of the Tumor Biology. Technology in Cancer Research and Treatment, 2014, 13, 149-159.	0.8	4
1616	Wound repair and regeneration: Mechanisms, signaling, and translation. Science Translational Medicine, 2014, 6, 265sr6.	5.8	2,114

#	Article	IF	Citations
1617	Microvasculature: An essential component for organ-on-chip systems. MRS Bulletin, 2014, 39, 51-59.	1.7	38
1618	Postnatal Stem Cells in Tissue Engineering. , 2014, , 639-653.		0
1619	New Methods in Tissue Engineering: Improved Models for Viral Infection. Annual Review of Virology, 2014, 1, 475-499.	3.0	23
1620	Electrochemical Control of the Enzymatic Polymerization of PEG Hydrogels: Formation of Spatially Controlled Biological Microenvironments. Advanced Healthcare Materials, 2014, 3, 508-514.	3.9	16
1621	Advancements in stem cells treatment of skeletal muscle wasting. Frontiers in Physiology, 2014, 5, 48.	1.3	18
1622	Three-dimensional systems for in vitro follicular culture: overview of alginate-based matrices. Reproduction, Fertility and Development, 2014, 26, 915.	0.1	46
1623	Photopolymerizable hydrogels for implants: Monte-Carlo modeling and experimentalin vitrovalidation. Journal of Biomedical Optics, 2014, 19, 035004.	1.4	15
1624	Enzyme-responsive multifunctional surfaces for controlled uptake/release of (bio)molecules. Colloids and Surfaces B: Biointerfaces, 2014, 123, 89-95.	2.5	3
1625	Fabrication of self-assembling peptide nanofiber hydrogels for myocardial repair. RSC Advances, 2014, 4, 53801-53811.	1.7	22
1626	Preparation of Three-Dimensional Vascularized MSC Cell Sheet Constructs for Tissue Regeneration. BioMed Research International, 2014, 2014, 1-10.	0.9	55
1627	Applications of Dendrimers in Drug Delivery Agents, Diagnosis, Therapy, and Detection. Journal of Nanomaterials, 2014, 2014, 1-19.	1.5	147
1628	Mussel-inspired ultrathin film on oxidized Tiâ€“6Alâ€“4V surface for enhanced BMSC activities and antibacterial capability. RSC Advances, 2014, 4, 55790-55799.	1.7	15
1629	Polyelectrolyte Multilayers: Towards Single Cell Studies. Polymers, 2014, 6, 1502-1527.	2.0	46
1630	Mesoscale Characterization of Supramolecular Transient Networks Using SAXS and Rheology. International Journal of Molecular Sciences, 2014, 15, 1096-1111.	1.8	37
1631	Characterization of Silk Fibroin Modified Surface: A Proteomic View of Cellular Response Proteins Induced by Biomaterials. BioMed Research International, 2014, 2014, 1-13.	0.9	20
1632	Expression pattern analysis and activity determination of matrix metalloproteinase derived from human macrophage subsets. Clinical Hemorheology and Microcirculation, 2014, 58, 147-158.	0.9	19
1633	Heart Regeneration. , 2014, , 445-455.		2
1634	3D niche microarrays for systems-level analyses of cell fate. Nature Communications, 2014, 5, 4324.	5.8	210

#	Article	IF	Citations
1635	Synthesis and characterization of well-defined PAAâ€“PEG multi-responsive hydrogels by ATRP and click chemistry. RSC Advances, 2014, 4, 54631-54640.	1.7	12
1636	BIOINSPIRED ENGINEERING OF MULTIFUNCTIONAL DEVICES. World Scientific Series in Nanoscience and Nanotechnology, 2014, , 31-63.	0.1	0
1637	BIOMIMETIC HUMAN LUNG MODELS. World Scientific Series in Nanoscience and Nanotechnology, 2014, , 1017-1036.	0.1	0
1638	Degradable thiol-acrylate hydrogels as tunable matrices for three-dimensional hepatic culture. Journal of Biomedical Materials Research - Part A, 2014, 102, 3813-3827.	2.1	40
1639	Control of extracellular microenvironments using polymer/protein nanofilms for the development of three-dimensional human tissue chips. Polymer Journal, 2014, 46, 524-536.	1.3	19
1640	Engineering of tissues and organs. , 2014, , 347-386.		0
1641	Photoâ€crosslinkable PEGâ€Based Microribbons for Forming 3D Macroporous Scaffolds with Decoupled Niche Properties. Advanced Materials, 2014, 26, 1757-1762.	11.1	31
1642	Matrix Effects. , 2014, , 407-421.		2
1643	Preparation and development of block copolypeptide vesicles and hydrogels for biological and medical applications. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2014, 6, 283-297.	3.3	33
1644	Materials for perfusion bioreactors used in tissue engineering. , 2014, , 224-251.		0
1645	Bone formation in adiposeâ€derived stem cells isolated from elderly patients with osteoporosis: a preliminary study. Cell Biology International, 2014, 38, 97-105.	1.4	6
1646	Twoâ€Photonâ€Responsive Supramolecular Hydrogel for Controlling Materials Motion in Micrometer Space. Angewandte Chemie - International Edition, 2014, 53, 7264-7267.	7.2	57
1647	Combinatorial Fibronectin and Laminin Signaling Promote Highly Efficient Cardiac Differentiation of Human Embryonic Stem Cells. BioResearch Open Access, 2014, 3, 150-161.	2.6	26
1648	Digital Plasmonic Patterning for Localized Tuning of Hydrogel Stiffness. Advanced Functional Materials, 2014, 24, 4922-4926.	7.8	39
1649	Cellâ€Surface Engineering by a Conjugationâ€andâ€Release Approach Based on the Formation and Cleavage of Oxime Linkages upon Mild Electrochemical Oxidation and Reduction. Angewandte Chemie - International Edition, 2014, 53, 9487-9492.	7.2	44
1650	Catechol Chemistry Inspired Approach to Construct Self-Cross-Linked Polymer Nanolayers as Versatile Biointerfaces. Langmuir, 2014, 30, 14905-14915.	1.6	54
1651	Topography Design Concept of a Tissue Engineering Scaffold for Controlling Cell Function and Fate Through Actin Cytoskeletal Modulation. Tissue Engineering - Part B: Reviews, 2014, 20, 609-627.	2.5	63
1653	Microtubules stabilize cell polarity by localizing rear signals. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16383-16388.	3.3	57

#	Article	IF	Citations
1654	The Role of Bone Morphogenetic Proteins in Tissue Engineering Particulate Bone Grafts. Particulate Science and Technology, 2014, 32, 377-383.	1.1	6
1655	Deconstructing the Effects of Matrix Elasticity and Geometry in Mesenchymal Stem Cell Lineage Commitment. Advanced Functional Materials, 2014, 24, 2396-2403.	7.8	35
1656	Cartilage tissue engineering. , 2014, , 541-564.		0
1657	Fabrication and characterization of all hydrogel cantilevers for atomic force microscopy applications. , 2014, , .		1
1658	Untangling the Effects of Peptide Sequences and Nanotopographies in a Biomimetic Niche for Directed Differentiation of iPSCs by Assemblies of Genetically Engineered Viral Nanofibers. Nano Letters, 2014, 14, 6850-6856.	4.5	78
1659	Photoâ€Click Living Strategy for Controlled, Reversible Exchange of Biochemical Ligands. Advanced Materials, 2014, 26, 2521-2526.	11.1	124
1660	Silk scaffolds for three-dimensional (3D) tumor modeling. , 2014, , 472-502.		1
1661	3D Electrospun Fibrous Structures from Biopolymers. ACS Symposium Series, 2014, , 103-126.	0.5	2
1662	In vitro response to functionalized selfâ€assembled peptide scaffolds for threeâ€dimensional cell culture. Biopolymers, 2014, 102, 197-205.	1.2	41
1663	Optimal design and manufacture of biomedical foam pore structure for tissue engineering applications. , 2014, , 71-100.		4
1664	Introduction to biomedical foams. , 2014, , 3-39.		12
1665	Click functionalization of methacrylate-based hydrogels and their cellular response. Journal of Polymer Science Part A, 2014, 52, 1781-1789.	2.5	9
1667	25th Anniversary Article: Designer Hydrogels for Cell Cultures: A Materials Selection Guide. Advanced Materials, 2014, 26, 125-148.	11.1	368
1668	Nanofiber Orientation and Surface Functionalization Modulate Human Mesenchymal Stem Cell BehaviorIn Vitro. Tissue Engineering - Part A, 2014, 20, 398-409.	1.6	49
1669	Rationally Designed Dynamic Protein Hydrogels with Reversibly Tunable Mechanical Properties. Advanced Functional Materials, 2014, 24, 7310-7317.	7.8	73
1670	Synthetic nanowire/nanotube-based solid substrates for controlled cell growth. Nano Convergence, 2014, 1, .	6.3	10
1671	Myocardial Tissue Engineering: In Vitro Models. Cold Spring Harbor Perspectives in Medicine, 2014, 4, a014076-a014076.	2.9	97
1672	Endothelial Matrix Assembly during Capillary Morphogenesis. Journal of Histochemistry and Cytochemistry, 2014, 62, 774-790.	1.3	2

#	Article	IF	Citations
1673	Material-induced chondrogenic differentiation of mesenchymal stem cells is material-dependent. Experimental and Therapeutic Medicine, 2014, 7, 1147-1150.	0.8	10
1674	Morphology and electrostatics play active role in neuronal differentiation processes on flexible conducting substrates. Organogenesis, 2014, 10, 1-5.	0.4	14
1675	Impurity-driven multilayer formation in inverted aluminum-induced layer exchange of silicon. Japanese Journal of Applied Physics, 2014, 53, 050303.	0.8	3
1676	Smart Hydrogels. NIMS Monographs, 2014, , 9-65.	0.1	50
1677	Dexterous nanomanipulation of 2D hydrogel microstructure for 3D assembly by multi-robot cooperation. , 2014, , .		0
1678	Synthetic control of mammalian-cell motility by engineering chemotaxis to an orthogonal bioinert chemical signal. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5896-5901.	3.3	95
1679	Development of functional biomaterials with micro- and nanoscale technologies for tissue engineering and drug delivery applications. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 1-14.	1.3	86
1680	In vitroandin vivoevaluation of a biphasic calcium phosphate scaffold coated with a native allogeneic extracellular matrix. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 620-628.	1.3	2
1681	Scaffold biomaterials for nano-pathophysiology. Advanced Drug Delivery Reviews, 2014, 74, 104-114.	6.6	12
1682	Combinatorial plasma polymerization approach to produce thin films for testing cell proliferation. Colloids and Surfaces B: Biointerfaces, 2014, 113, 320-329.	2.5	15
1683	Carbon nanotube-based substrates for modulation of human pluripotent stem cell fate. Biomaterials, 2014, 35, 5098-5109.	5.7	29
1684	Mesoporous bioactive glass doped-poly (3-hydroxybutyrate-co-3-hydroxyhexanoate) composite scaffolds with 3-dimensionally hierarchical pore networks for bone regeneration. Colloids and Surfaces B: Biointerfaces, 2014, 116, 72-80.	2.5	45
1685	Engineered Biomaterials Control Differentiation and Proliferation of Human-Embryonic-Stem-Cell-Derived Cardiomyocytes via Timed Notch Activation. Stem Cell Reports, 2014, 2, 271-281.	2.3	38
1686	Osteochondral regeneration using a novel aragonite-hyaluronate bi-phasic scaffold in a goat model. Knee Surgery, Sports Traumatology, Arthroscopy, 2014, 22, 1452-1464.	2.3	57
1687	Ex vivo bio-compatibility of honey-alginate fibrous matrix for HaCaT and 3T3 with prime molecular expressions. Journal of Materials Science: Materials in Medicine, 2014, 25, 2659-2667.	1.7	14
1688	PEGâ€“Maleimide Hydrogels for Protein and Cell Delivery in Regenerative Medicine. Annals of Biomedical Engineering, 2014, 42, 312-322.	1.3	50
1689	Stem cell engineering in bioreactors for largeâ€scale bioprocessing. Engineering in Life Sciences, 2014, 14, 4-15.	2.0	56
1690	Sculpting the blank slate: How fibrinâ€™s support of vascularization can inspire biomaterial design. Acta Biomaterialia, 2014, 10, 1515-1523.	4.1	48

#	Article	IF	Citations
1691	Vibrational spectroscopy for probing molecular-level interactions in organic films mimicking biointerfaces. Advances in Colloid and Interface Science, 2014, 207, 199-215.	7.0	35
1692	Scientific principles of regenerative medicine and their application in the female reproductive system. Maturitas, 2014, 77, 12-19.	1.0	22
1693	Modeling the tumor extracellular matrix: Tissue engineering tools repurposed towards new frontiers in cancer biology. Journal of Biomechanics, 2014, 47, 1969-1978.	0.9	76
1694	Designing ECM-mimetic materials using protein engineering. Acta Biomaterialia, 2014, 10, 1751-1760.	4.1	87
1695	Viscoelastic analysis of single-component and composite PEG and alginate hydrogels. Acta Mechanica Sinica/Lixue Xuebao, 2014, 30, 7-14.	1.5	14
1696	Scaffolds with tuneable hydrophilicity from electrospun microfibers of polylactide and poly(ethylene glycol) mixtures: morphology, drug release behavior, and biocompatibility. Journal of Polymer Research, 2014, 21, 1.	1.2	19
1697	Bio-chemo-mechanical models for nuclear deformation in adherent eukaryotic cells. Biomechanics and Modeling in Mechanobiology, 2014, 13, 929-943.	1.4	25
1698	The Number of Lines a Cell Contacts and Cell Contractility Drive the Efficiency of Contact Guidance. Cellular and Molecular Bioengineering, 2014, 7, 122-135.	1.0	10
1699	Interaction of magnetic cobalt based titanium dioxide nanofibers with muscle cells: in vitro cytotoxicity evaluation. Journal of Sol-Gel Science and Technology, 2014, 69, 338-344.	1.1	1
1700	A molecular dynamics study on the nucleation of calcium phosphate regulated by collagen. Journal of Materials Science, 2014, 49, 3099-3106.	1.7	15
1701	Biomolecule Delivery to Engineer the Cellular Microenvironment for Regenerative Medicine. Annals of Biomedical Engineering, 2014, 42, 1557-1572.	1.3	17
1702	Polymer brush coatings regulating cell behavior: Passive interfaces turn into active. Acta Biomaterialia, 2014, 10, 2367-2378.	4.1	74
1703	Synthesis and patterning of tunable multiscale materials with engineered cells. Nature Materials, 2014, 13, 515-523.	13.3	329
1704	Titania nanotubes dimensionsâ€dependent protein adsorption and its effect on the growth of osteoblasts. Journal of Biomedical Materials Research - Part A, 2014, 102, 3598-3608.	2.1	38
1705	Wound Repair. , 2014, , 1595-1617.		7
1706	Bone regeneration using photocrosslinked hydrogel incorporating rhBMP-2 loaded 2-N, 6-O-sulfated chitosan nanoparticles. Biomaterials, 2014, 35, 2730-2742.	5.7	108
1707	Controlling Mechanical Properties of Cellâ€Laden Hydrogels by Covalent Incorporation of Graphene Oxide. Small, 2014, 10, 514-523.	5.2	183
1708	Differential effects of cell adhesion, modulus and VEGFR-2 inhibition on capillary network formation in synthetic hydrogel arrays. Biomaterials, 2014, 35, 2149-2161.	5.7	62

#	Article	IF	Citations
1709	3D Scaffolds. , 2014, , 475-494.		7
1710	Bone Regeneration. , 2014, , 1201-1221.		13
1711	Specific control of cellâ€“material interactions: Targeting cell receptors using ligand-functionalized polymer substrates. Progress in Polymer Science, 2014, 39, 1312-1347.	11.8	57
1712	Modulation of Biointeractions by Electrically Switchable Oligopeptide Surfaces: Structural Requirements and Mechanism. Advanced Materials Interfaces, 2014, 1, 1300085.	1.9	20
1713	Reversible Nonâ€Stick Behaviour of a Bacterial Protein Polymer Provides a Tuneable Molecular Mimic for Cell and Tissue Engineering. Advanced Materials, 2014, 26, 2704-2709.	11.1	17
1714	Gelatin carriers for drug and cell delivery in tissue engineering. Journal of Controlled Release, 2014, 190, 210-218.	4.8	299
1715	Engineering liver. Hepatology, 2014, 60, 1426-1434.	3.6	46
1716	Polymers in cell encapsulation from an enveloped cell perspective. Advanced Drug Delivery Reviews, 2014, 67-68, 15-34.	6.6	237
1718	The strategy and method in modulating finger regeneration. Regenerative Medicine, 2014, 9, 231-242.	0.8	11
1719	A Novel Poly(amido amine)â€Dendrimerâ€Based Hydrogel as a Mimic for the Extracellular Matrix. Advanced Materials, 2014, 26, 4163-4167.	11.1	51
1720	Enzymatic conjugation of a bioactive peptide into an injectable hyaluronic acidâ€“tyramine hydrogel system to promote the formation of functional vasculature. Acta Biomaterialia, 2014, 10, 2539-2550.	4.1	45
1721	Bioengineering approaches to guide stem cell-based organogenesis. Development (Cambridge), 2014, 141, 1794-1804.	1.2	116
1722	Composite hydrogel scaffolds incorporating decellularized adipose tissue for soft tissue engineering with adipose-derived stem cells. Biomaterials, 2014, 35, 1914-1923.	5.7	174
1723	Cryopreserved dentin matrix as a scaffold material for dentin-pulp tissue regeneration. Biomaterials, 2014, 35, 4929-4939.	5.7	66
1724	Advances in hydrogel delivery systems for tissue regeneration. Materials Science and Engineering C, 2014, 45, 690-697.	3.8	157
1725	Supramolecular soft biomaterials for biomedical applications. Materials Today, 2014, 17, 194-202.	8.3	105
1726	Islet cell xenotransplantation: a serious look toward the clinic. Xenotransplantation, 2014, 21, 221-229.	1.6	45
1727	Heart Regeneration with Engineered Myocardial Tissue. Annual Review of Biomedical Engineering, 2014, 16, 1-28.	5.7	69

#	Article	IF	Citations
1728	In Situ Generation of Tunable Porosity Gradients in Hydrogelâ€Based Scaffolds for Microfluidic Cell Culture. Advanced Healthcare Materials, 2014, 3, 1655-1670.	3.9	21
1730	Adiposeâ€derived stem cellâ€containing hyaluronic acid/alginate hydrogel improves vocal fold wound healing. Laryngoscope, 2014, 124, E64-72.	1.1	62
1731	Installing logic-gate responses to a variety of biological substances in supramolecular hydrogelâ€"enzyme hybrids. Nature Chemistry, 2014, 6, 511-518.	6.6	370
1732	Physicochemical perspective on â€œpolydopamineâ€•and â€œpoly(catecholamine)â€•films for their applications in biomaterial coatings (Review). Biointerphases, 2014, 9, 030801.	0.6	39
1733	Drug discovery through stem cell-based organoid models. Advanced Drug Delivery Reviews, 2014, 69-70, 19-28.	6.6	172
1734	Bioactive Supramolecular Peptide Nanofibers for Regenerative Medicine. Advanced Healthcare Materials, 2014, 3, 1357-1376.	3.9	90
1735	Controlled release and gradient formation of human glial-cell derived neurotrophic factor from heparinated poly(ethylene glycol) microsphere-based scaffolds. Biomaterials, 2014, 35, 6473-6481.	5.7	39
1736	Bioreactor technologies to support liver function in vitro. Advanced Drug Delivery Reviews, 2014, 69-70, 132-157.	6.6	116
1737	A nanopatterned cell-seeded cardiac patch prevents electro-uncoupling and improves the therapeutic efficacy of cardiac repair. Biomaterials Science, 2014, 2, 567.	2.6	45
1738	25th Anniversary Article: Scalable Multiscale Patterned Structures Inspired by Nature: the Role of Hierarchy. Advanced Materials, 2014, 26, 675-700.	11.1	212
1739	Multiscale Patterning of a Biomimetic Scaffold Integrated with Composite Microspheres. Small, 2014, 10, 3943-3953.	5.2	41
1740	Gelatin-Based Biomaterial Engineering with Anhydride-Containing Oligomeric Cross-Linkers. Biomacromolecules, 2014, 15, 2104-2118.	2.6	32
1741	Preparation and evaluation of novel nano-bioglass/gelatin conduit for peripheral nerve regeneration. Journal of Materials Science: Materials in Medicine, 2014, 25, 363-373.	1.7	55
1742	Bioactivated Materials for Cell and Tissue Guidance. , 2014, , 137-150.		3
1743	The effect of bioartificial constructs that mimic myocardial structure and biomechanical properties on stem cell commitment towards cardiac lineage. Biomaterials, 2014, 35, 92-104.	5.7	27
1744	In situ forming biodegradable electroactive hydrogels. Polymer Chemistry, 2014, 5, 2880-2890.	1.9	109
1745	Fibronectin-matrix sandwich-like microenvironments to manipulate cell fate. Biomaterials Science, 2014, 2, 381-389.	2.6	14
1746	Combined Effects of PEG Hydrogel Elasticity and Cell-Adhesive Coating on Fibroblast Adhesion and Persistent Migration. Biomacromolecules, 2014, 15, 195-205.	2.6	74

#	Article	IF	Citations
1747	Biomaterial design motivated by characterization of natural extracellular matrices. MRS Bulletin, 2014, 39, 18-24.	1.7	3
1748	Hydrogel based injectable scaffolds for cardiac tissue regeneration. Biotechnology Advances, 2014, 32, 449-461.	6.0	148
1749	Injectable MMP-Sensitive Alginate Hydrogels as hMSC Delivery Systems. Biomacromolecules, 2014, 15, 380-390.	2.6	93
1750	A novel therapeutic design of microporous-structured biopolymer scaffolds for drug loading and delivery. Acta Biomaterialia, 2014, 10, 1238-1250.	4.1	48
1751	Micro- and nanofabrication of chitosan structures for regenerative engineering. Acta Biomaterialia, 2014, 10, 1632-1645.	4.1	102
1752	Visible light cured thiol-vinyl hydrogels with tunable degradation for 3D cell culture. Acta Biomaterialia, 2014, 10, 104-114.	4.1	93
1753	In vitro models of tumor vessels and matrix: Engineering approaches to investigate transport limitations and drug delivery in cancer. Advanced Drug Delivery Reviews, 2014, 69-70, 205-216.	6.6	60
1754	Three-dimensional perfused cell culture. Biotechnology Advances, 2014, 32, 243-254.	6.0	64
1755	In situ-forming injectable hydrogels for regenerative medicine. Progress in Polymer Science, 2014, 39, 1973-1986.	11.8	435
1756	Gellan Gum-Hyaluronic Acid Spongy-like Hydrogels and Cells from Adipose Tissue Synergize Promoting Neoskin Vascularization. ACS Applied Materials & Interfaces, 2014, 6, 19668-19679.	4.0	94
1757	GFOGER-Modified MMP-Sensitive Polyethylene Glycol Hydrogels Induce Chondrogenic Differentiation of Human Mesenchymal Stem Cells. Tissue Engineering - Part A, 2014, 20, 1165-1174.	1.6	54
1758	Stimuli responsive elastin-like polypeptides and applications in medicine and biotechnology. Journal of Biomaterials Science, Polymer Edition, 2014, 25, 101-120.	1.9	7
1759	Surface-Initiated Polymer Brushes in the Biomedical Field: Applications in Membrane Science, Biosensing, Cell Culture, Regenerative Medicine and Antibacterial Coatings. Chemical Reviews, 2014, 114, 10976-11026.	23.0	499
1760	Hydrogelâ€“fibre composites with independent control over cell adhesion to gel and fibres as an integral approach towards a biomimetic artificial ECM. Biofabrication, 2014, 6, 024106.	3.7	14
1761	Adipose tissue: A valuable resource of biomaterials for soft tissue engineering. Macromolecular Research, 2014, 22, 932-947.	1.0	21
1762	Human Epidermal Keratinocyte Cell Response on Integrinâ€Specific Artificial Extracellular Matrix Proteins. Macromolecular Bioscience, 2014, 14, 1125-1134.	2.1	21
1763	Effect of surfactant types on the biocompatibility of electrospun HAp/PHBV composite nanofibers. Journal of Materials Science: Materials in Medicine, 2014, 25, 2677-2689.	1.7	21
1764	Direct Observation of Reversible Biomolecule Switching Controlled By Electrical Stimulus. Advanced Materials Interfaces, 2014, 1, 1-4.	1.9	39

#	Article	IF	Citations
1765	Spatiotemporally Controllable and Cytocompatible Approach Builds 3D Cell Culture Matrix by Photoâ€Uncagedâ€Thiol Michael Addition Reaction. Advanced Materials, 2014, 26, 3912-3917.	11.1	85
1766	Randomized standard-of-care-controlled trial of a silica gel fibre matrix in the treatment of chronic venous leg ulcers. European Journal of Dermatology, 2014, 24, 210-216.	0.3	11
1767	Effect of Solvent Evaporation on Fiber Morphology in Rotary Jet Spinning. Langmuir, 2014, 30, 13369-13374.	1.6	84
1768	Bioactive agarose carbonâ€nanotube composites are capable of manipulating brainâ€“implant interface. Journal of Applied Polymer Science, 2014, 131, .	1.3	16
1769	A modular approach to easily processable supramolecular bilayered scaffolds with tailorable properties. Journal of Materials Chemistry B, 2014, 2, 2483-2493.	2.9	61
1770	The construction of cell-density controlled three-dimensional tissues by coating micrometer-sized collagen fiber matrices on single cell surfaces. RSC Advances, 2014, 4, 46141-46144.	1.7	17
1771	Enzymatic formation of a novel cell-adhesive hydrogel based on small peptides with a laterally grafted<scp>l</scp>-3,4-dihydroxyphenylalanine group. Nanoscale, 2014, 6, 1277-1280.	2.8	14
1772	Suspended Micro/Nanofiber Hierarchical Biological Scaffolds Fabricated Using Non-Electrospinning STEP Technique. Langmuir, 2014, 30, 13641-13649.	1.6	73
1773	Bioceramics for skeletal bone regeneration. , 2014, , 180-216.		18
1774	Cartilage grafts for bone repair and regeneration. , 2014, , 219-243.		1
1775	Metal Cation Cross-Linked Nanocellulose Hydrogels as Tissue Engineering Substrates. ACS Applied Materials & Interfaces, 2014, 6, 18502-18510.	4.0	107
1776	A nanocomposite approach to develop biodegradable thermogels exhibiting excellent cell-compatibility for injectable cell delivery. Biomaterials Science, 2014, 2, 1057.	2.6	26
1777	Stem cell delivery systems inspired by tissue-specific niches. Journal of Controlled Release, 2014, 193, 42-50.	4.8	27
1778	Alternate layer-by-layer assembly of graphene oxide nanosheets and fibrinogen nanofibers on a silicon substrate for a biomimetic three-dimensional hydroxyapatite scaffold. Journal of Materials Chemistry B, 2014, 2, 7360-7368.	2.9	72
1779	Enzyme-Responsive Hydrogels for Biomedical Applications. RSC Soft Matter, 2014, , 112-134.	0.2	7
1780	Promoting cell adhesion on slippery phosphorylcholine hydrogel surfaces. Journal of Materials Chemistry B, 2014, 2, 620-624.	2.9	14
1781	Single molecule microscopy in 3D cell cultures and tissues. Advanced Drug Delivery Reviews, 2014, 79-80, 79-94.	6.6	6
1782	Molecular self-assembly guides the fabrication of peptide nanofiber scaffolds for nerve repair. RSC Advances, 2014, 4, 23610-23621.	1.7	28

#	Article	IF	Citations
1783	Chemical strategies for the presentation and delivery of growth factors. Journal of Materials Chemistry B, 2014, 2, 2381-2394.	2.9	32
1784	Switching specific biomolecular interactions on surfaces under complex biological conditions. Analyst, The, 2014, 139, 5400-5408.	1.7	21
1785	Modelling of a targeted nanotherapeutic â€˜stromaâ€™ to deliver the cytokine LIF, or XAV939, a potent inhibitor of Wntâ€“Î²-catenin signalling, for use in human fetal dopaminergic grafts in Parkinsonâ€™s disease. DMM Disease Models and Mechanisms, 2014, 7, 1193-203.	1.2	16
1786	Hierarchically Ordered Nanopatterns for Spatial Control of Biomolecules. ACS Nano, 2014, 8, 11846-11853.	7.3	23
1787	Multi-responsive hydrogels for drug delivery and tissue engineering applications. International Journal of Energy Production and Management, 2014, 1, 57-65.	1.9	135
1788	Design of thiolâ€“ene photoclick hydrogels using facile techniques for cell culture applications. Biomaterials Science, 2014, 2, 1612-1626.	2.6	98
1789	Electrically-driven modulation of surface-grafted RGD peptides for manipulation of cell adhesion. Chemical Communications, 2014, 50, 15589-15592.	2.2	24
1790	Supramolecular hydrogels assembled from nonionic poly(ethylene glycol)-b-polypeptide diblocks containing OEGylated poly-<scp>l</scp>-glutamate. Polymer Chemistry, 2014, 5, 3346-3351.	1.9	48
1791	Thixotropic silk nanofibril-based hydrogel with extracellular matrix-like structure. Biomaterials Science, 2014, 2, 1338-1342.	2.6	59
1792	Local control of hepatic phenotype with growth factor-encoded surfaces. Integrative Biology (United) Tj ETQq1 1 0.784314 rgBT /Ove	0.6	7
1793	Capillary Force Seeding of Hydrogels for Adipose-Derived Stem Cell Delivery in Wounds. Stem Cells Translational Medicine, 2014, 3, 1079-1089.	1.6	100
1794	Surface-engineered nanogel assemblies with integrated blood compatibility, cell proliferation and antibacterial property: towards multifunctional biomedical membranes. Polymer Chemistry, 2014, 5, 5906-5919.	1.9	73
1795	Development of bioactive hydrogel capsules for the 3D expansion of pluripotent stem cells in bioreactors. Biomaterials Science, 2014, 2, 176-183.	2.6	25
1796	Microgel film dynamics modulate cell adhesion behavior. Soft Matter, 2014, 10, 1356-1364.	1.2	40
1797	Fibronectin-tethered graphene oxide as an artificial matrix for osteogenesis. Biomedical Materials (Bristol), 2014, 9, 065003.	1.7	34
1798	One-pot synthesis of elastin-like polypeptide hydrogels with grafted VEGF-mimetic peptides. Biomaterials Science, 2014, 2, 757-765.	2.6	76
1799	Concise Review: Bridging the Gap: Bone Regeneration Using Skeletal Stem Cell-Based Strategiesâ€”Where Are We Now?. Stem Cells, 2014, 32, 35-44.	1.4	109
1800	Macro/Nano-Gel Composite as an Injectable and Bioactive Bulking Material for the Treatment of Urinary Incontinence. Biomacromolecules, 2014, 15, 1979-1984.	2.6	25

#	Article	IF	Citations
1801	Strong Collagen Hydrogels by Oxidized Dextran Modification. ACS Sustainable Chemistry and Engineering, 2014, 2, 1318-1324.	3.2	86
1802	Polymeric Biomaterials in Tissue Engineering and Regenerative Medicine. , 2014, , 351-371.		48
1803	Microfluidicâ€Based Generation of Sizeâ€Controlled, Biofunctionalized Synthetic Polymer Microgels for Cell Encapsulation. Advanced Materials, 2014, 26, 3003-3008.	11.1	174
1804	Enzyme-responsive polymers: properties, synthesis and applications. , 2014, , 166-203.		5
1805	Engineering of biomimetic nanofibrous matrices for drug delivery and tissue engineering. Journal of Materials Chemistry B, 2014, 2, 7828-7848.	2.9	78
1807	Hydrogels to model 3D in vitro microenvironment of tumor vascularization. Advanced Drug Delivery Reviews, 2014, 79-80, 19-29.	6.6	125
1808	Engineered Tissues as Customized Organ Germs. Tissue Engineering - Part A, 2014, 20, 1132-1133.	1.6	27
1809	Composite pullulanâ€“dextran polysaccharide scaffold with interfacial polyelectrolyte complexation fibers: A platform with enhanced cell interaction and spatial distribution. Acta Biomaterialia, 2014, 10, 4410-4418.	4.1	38
1810	Bifunctional Designed Peptides Induce Mineralization and Binding to TiO₂. Langmuir, 2014, 30, 4716-4724.	1.6	15
1811	Expanding Functionality of Recombinant Human Collagen Through Engineered Non-Native Cysteines. Biomacromolecules, 2014, 15, 3540-3549.	2.6	13
1812	Biosynthetic support based on dendritic poly(L-lysine) improves human skin fibroblasts attachment. Journal of Biomaterials Science, Polymer Edition, 2014, 25, 136-149.	1.9	12
1813	Hybrid Elastin-like Polypeptideâ€“Polyethylene Glycol (ELP-PEG) Hydrogels with Improved Transparency and Independent Control of Matrix Mechanics and Cell Ligand Density. Biomacromolecules, 2014, 15, 3421-3428.	2.6	85
1814	Electropolymerization of dopamine for surface modification of complex-shaped cardiovascular stents. Biomaterials, 2014, 35, 7679-7689.	5.7	183
1815	Microporous Polymeric 3D Scaffolds Templated by the Layerâ€byâ€Layer Selfâ€Assembly. Macromolecular Rapid Communications, 2014, 35, 1408-1413.	2.0	32
1816	Development of Intrinsically Photoluminescent and Photostable Polylactones. Advanced Materials, 2014, 26, 4491-4496.	11.1	55
1817	High throughput assessment and chemometric analysis of the interaction of epithelial and fibroblast cells with a polymer library. Applied Surface Science, 2014, 313, 926-935.	3.1	14
1818	Injectable biodegradable hydrogels and microgels based on methacrylated poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 107 Td (encapsulation. Journal of Materials Chemistry B, 2014, 2, 3674.	2.9	82
1819	Synthesis and High-Throughput Processing of Polymeric Hydrogels for 3D Cell Culture. Bioconjugate Chemistry, 2014, 25, 1581-1601.	1.8	46

#	Article	IF	Citations
1820	Multifunctional Adhesive Silk Fibroin with Blending of RGD-Bioconjugated Mussel Adhesive Protein. Biomacromolecules, 2014, 15, 1390-1398.	2.6	37
1821	Vascular tissue engineering: from in vitro to in situ. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2014, 6, 61-76.	6.6	135
1822	Coatings and Films Made of Silk Proteins. ACS Applied Materials & Interfaces, 2014, 6, 15611-15625.	4.0	94
1823	A Cell-Surface-Anchored Ratiometric Fluorescent Probe for Extracellular pH Sensing. ACS Applied Materials & Interfaces, 2014, 6, 15329-15334.	4.0	99
1824	A Comprehensive Review of Advanced Biopolymeric Wound Healing Systems. Journal of Pharmaceutical Sciences, 2014, 103, 2211-2230.	1.6	211
1825	Hydrogels for tissue engineering and regenerative medicine. Journal of Materials Chemistry B, 2014, 2, 5319-5338.	2.9	289
1826	Introducing a combinatorial DNA-toolbox platform constituting defined protein-based biohybrid-materials. Biomaterials, 2014, 35, 8767-8779.	5.7	32
1827	The instructive role of the vasculature in stem cell niches. Biomaterials Science, 2014, 2, 1562-1573.	2.6	28
1828	Porous Poly(Îµ-Caprolactone) Scaffolds for Retinal Pigment Epithelium Transplantation. , 2014, 55, 1754.		54
1829	Hyaluronic acid/polyâ€Lâ€lysine multilayers coated with gold nanoparticles: cellular response and permeability study. Polymers for Advanced Technologies, 2014, 25, 1342-1348.	1.6	10
1830	Engineering strategies to mimic the glioblastoma microenvironment. Advanced Drug Delivery Reviews, 2014, 79-80, 172-183.	6.6	118
1831	Self-Organized ECM-Mimetic Model Based on an Amphiphilic Multiblock Silk-Elastin-Like Corecombinamer with a Concomitant Dual Physical Gelation Process. Biomacromolecules, 2014, 15, 3781-3793.	2.6	77
1832	Biomineralized matrix-assisted osteogenic differentiation of human embryonic stem cells. Journal of Materials Chemistry B, 2014, 2, 5676.	2.9	28
1833	Microscale Bioadhesive Hydrogel Arrays for Cell Engineering Applications. Cellular and Molecular Bioengineering, 2014, 7, 394-408.	1.0	37
1834	Comparative in vitro study regarding the biocompatibility of titanium-base composites infiltrated with hydroxyapatite or silicatitanate. Journal of Biological Engineering, 2014, 8, 14.	2.0	32
1835	In vitro pre-vascularisation of tissue-engineered constructs A co-culture perspective. Vascular Cell, 2014, 6, 13.	0.2	79
1836	Osteoarthritic cartilage explants affect extracellular matrix production and composition in cocultured bone marrow-derived mesenchymal stem cells and articular chondrocytes. Stem Cell Research and Therapy, 2014, 5, 77.	2.4	31
1837	Effect of Side-Chain Carbonyl Groups on the Interface of Vinyl Polymers with Water. Langmuir, 2014, 30, 1215-1219.	1.6	46

#	Article	IF	Citations
1838	Multi-modal delivery of therapeutics using biomaterial scaffolds. Journal of Materials Chemistry B, 2014, 2, 6692-6707.	2.9	36
1839	Rational Design of MMP Degradable Peptide-Based Supramolecular Filaments. Biomacromolecules, 2014, 15, 1419-1427.	2.6	65
1840	A simple material model to generate epidermal and dermal layers in vitro for skin regeneration. Journal of Materials Chemistry B, 2014, 2, 5256-5264.	2.9	30
1841	A computational model for cell/ECM growth on 3D surfaces using the level set method: a bone tissue engineering case study. Biomechanics and Modeling in Mechanobiology, 2014, 13, 1361-1371.	1.4	92
1842	From In Vitro to In Situ Tissue Engineering. Annals of Biomedical Engineering, 2014, 42, 1537-1545.	1.3	73
1843	Microfluidic direct writer with integrated declogging mechanism for fabricating cell-laden hydrogel constructs. Biomedical Microdevices, 2014, 16, 387-395.	1.4	61
1844	â€œClickâ€•Immobilization of a VEGF-Mimetic Peptide on Decellularized Endothelial Extracellular Matrix to Enhance Angiogenesis. ACS Applied Materials & Interfaces, 2014, 6, 8401-8406.	4.0	35
1846	Proteins and Poly(Amino Acids). , 2014, , 43-65.		11
1847	Smart hydrogels as functional biomimetic systems. Biomaterials Science, 2014, 2, 603-618.	2.6	193
1848	Chitosan-Based Thermoreversible Hydrogel as anin VitroTumor Microenvironment for Testing Breast Cancer Therapies. Molecular Pharmaceutics, 2014, 11, 2134-2142.	2.3	34
1849	Engineered microenvironments provide new insights into ovarian and prostate cancer progression and drug responses. Advanced Drug Delivery Reviews, 2014, 79-80, 193-213.	6.6	45
1850	Immobilization of RGD peptide onto the surface of apatite-wollastonite ceramic for enhanced osteoblast adhesion and bone regeneration. Journal Wuhan University of Technology, Materials Science Edition, 2014, 29, 626-634.	0.4	8
1851	Carbon Nanotube Thin Film-Supported Fibroblast and Pluripotent Stem Cell Growth. BioNanoScience, 2014, 4, 288-300.	1.5	5
1852	Multistage porous silicon for cancer therapy. , 2014, , 374-402.		1
1853	A Dual-Cure, Solid-State Photoresist Combining a Thermoreversible Dielsâ€“Alder Network and a Chain Growth Acrylate Network. Macromolecules, 2014, 47, 3473-3482.	2.2	42
1854	Combinatorial MAPLE gradient thin film assemblies signalling to human osteoblasts. Biofabrication, 2014, 6, 035010.	3.7	39
1855	Blood activation and compatibility on single-molecular-layer biointerfaces. Journal of Materials Chemistry B, 2014, 2, 4911-4921.	2.9	53
1856	Skeletal tissue regeneration: where can hydrogels play a role?. International Orthopaedics, 2014, 38, 1861-1876.	0.9	42

#	Article	IF	Citations
1857	Multi-lineage MSC Differentiation via Engineered Morphogen Fields. Journal of Dental Research, 2014, 93, 1250-1257.	2.5	24
1858	Combined multi-nozzle deposition and freeze casting process to superimpose two porous networks for hierarchical three-dimensional microenvironment. Biofabrication, 2014, 6, 015007.	3.7	11
1860	Biomimetic porous scaffolds for bone tissue engineering. Materials Science and Engineering Reports, 2014, 80, 1-36.	14.8	854
1861	Bone regeneration using an alpha 2 beta 1 integrin-specific hydrogel as a BMP-2 delivery vehicle. Biomaterials, 2014, 35, 5453-5461.	5.7	156
1862	Hemoprotein-based supramolecular assembling systems. Current Opinion in Chemical Biology, 2014, 19, 154-161.	2.8	76
1863	Establishment of a human 3D lung cancer model based on a biological tissue matrix combined with a Boolean inÂsilico model. Molecular Oncology, 2014, 8, 351-365.	2.1	74
1864	Genetically engineered silkâ€“collagen-like copolymer for biomedical applications: Production, characterization and evaluation of cellular response. Acta Biomaterialia, 2014, 10, 3620-3629.	4.1	31
1865	The bioactivity of agaroseâ€“PEGDA interpenetrating network hydrogels with covalently immobilized RGD peptides and physically entrapped aggrecan. Biomaterials, 2014, 35, 3558-3570.	5.7	83
1866	Cell adhesion mechanisms on laterally mobile polymer films. Biomaterials, 2014, 35, 4827-4834.	5.7	26
1867	Nanoclay-Enriched Poly(É›-caprolactone) Electrospun Scaffolds for Osteogenic Differentiation of Human Mesenchymal Stem Cells. Tissue Engineering - Part A, 2014, 20, 2088-2101.	1.6	133
1868	The Potential of Cellulose Nanocrystals in Tissue Engineering Strategies. Biomacromolecules, 2014, 15, 2327-2346.	2.6	417
1869	The Nanoscale Geometrical Maturation of Focal Adhesions Controls Stem Cell Differentiation and Mechanotransduction. Nano Letters, 2014, 14, 3945-3952.	4.5	87
1870	Synthesis of Poly(ethylene glycol)-based Hydrogels via Amine-Michael Type Addition with Tunable Stiffness and Postgelation Chemical Functionality. Chemistry of Materials, 2014, 26, 3624-3630.	3.2	41
1871	The development of the bioartificial lung. British Medical Bulletin, 2014, 110, 35-45.	2.7	21
1873	Nanoscale architecture and cellular adhesion of biomimetic collagen substrates. Journal of Biomaterials Applications, 2014, 28, 1354-1365.	1.2	8
1874	Three-dimensional scaffolds: an in vitro strategy for the biomimetic modelling of in vivo tumour biology. Journal of Materials Science, 2014, 49, 5809-5820.	1.7	4
1875	Hypoxia-inducible hydrogels. Nature Communications, 2014, 5, 4075.	5.8	142
1876	Are in vitro estimates of cell diffusivity and cell proliferation rate sensitive to assay geometry?. Journal of Theoretical Biology, 2014, 356, 71-84.	0.8	56

#	Article	IF	Citations
1877	Initiation and early control of tissue regeneration â€“ bone healing as a model system for tissue regeneration. Expert Opinion on Biological Therapy, 2014, 14, 247-259.	1.4	82
1878	The Use of Transesterification Method for Obtaining Phosphorusâ€Containing Polymers. Advances in Polymer Technology, 2014, 33, .	0.8	11
1879	Proteaseâ€Sensitive PEG Hydrogels Regulate Vascularization In Vitro and In Vivo. Macromolecular Bioscience, 2014, 14, 1368-1379.	2.1	47
1880	Mimicking the extracellular matrix with functionalized, metal-assembled collagen peptide scaffolds. Biomaterials, 2014, 35, 7363-7373.	5.7	67
1881	Screening of hyaluronic acidâ€“poly(ethylene glycol) composite hydrogels to support intervertebral disc cell biosynthesis using artificial neural network analysis. Acta Biomaterialia, 2014, 10, 3421-3430.	4.1	40
1882	Carrier interactions with the biological barriers of the lung: Advanced in vitro models and challenges for pulmonary drug delivery. Advanced Drug Delivery Reviews, 2014, 75, 129-140.	6.6	100
1883	N2/H2 plasma surface modifications of polystyrene inhibit the adhesion of multidrug resistant bacteria. Surface and Coatings Technology, 2014, 245, 84-91.	2.2	20
1884	Topologically defined composites of collagen types I and V as in vitro cell culture scaffolds. Acta Biomaterialia, 2014, 10, 2693-2702.	4.1	60
1885	Integration of microfluidic chip with biomimetic hydrogel for 3D controlling and monitoring of cell alignment and migration. Journal of Biomedical Materials Research - Part A, 2014, 102, 1164-1172.	2.1	29
1886	Vertical bone augmentation procedures: Basics and techniques in dental implantology. Journal of Biomedical Materials Research - Part A, 2014, 102, 1605-1613.	2.1	46
1887	In SituTissue Regeneration: Chemoattractants for Endogenous Stem Cell Recruitment. Tissue Engineering - Part B: Reviews, 2014, 20, 28-39.	2.5	126
1888	Phage-based nanomaterials for biomedical applications. Acta Biomaterialia, 2014, 10, 1741-1750.	4.1	48
1889	Layer-by-layer assembly of thin organic films on PTFE activated by cold atmospheric plasma. Open Chemistry, 2015, 13, .	1.0	5
1890	Chapter 9: Cell Behavior on Electrospun Scaffolds: Factors at Play on Nanoscale. Frontiers in Nanobiomedical Research, 2014, , 393-434.	0.1	1
1891	Chapter 10: The Convergence of Biomimetic Nanofibers and Cells for Functional Tissue Formation. Frontiers in Nanobiomedical Research, 2014, , 435-471.	0.1	0
1892	Composite Hydrogel Materials. , 2014, , 24-61.		2
1893	Processing large-diameter poly(L-lactic acid) microfiber mesh/mesenchymal stromal cell constructs via resin embedding: an efficient histologic method. Biomedical Materials (Bristol), 2014, 9, 045007.	1.7	3
1894	Microfluidic Synthesis of Pharmacologically Responsive Supramolecular Biohybrid Microgels. Macromolecular Bioscience, 2014, 14, 1730-1734.	2.1	3

#	Article	IF	Citations
1895	Mechanical/optical behaviors of imogolite hydrogels depending on their compositions and oriented structures. Journal of Applied Polymer Science, 2015, 132, .	1.3	12
1896	Nanostructures for Musculoskeletal Tissue Engineering. , 2014, , 407-434.		1
1899	Physicochemical characterization of gelatin-immobilized, acrylic acid-bacterial cellulose nanofibers as cell scaffolds using gamma-irradiation. Biotechnology and Bioprocess Engineering, 2015, 20, 942-947.	1.4	3
1900	3D Photo-Fabrication for Tissue Engineering and Drug Delivery. Engineering, 2015, 1, 090-112.	3.2	105
1901	3D bioprinting of photocrosslinkable hydrogel constructs. Journal of Applied Polymer Science, 2015, 132, .	1.3	160
1902	Multistimuli-responsive Hydrogel Particles Prepared via the Self-assembly of PEG-based Hyperbranched Polymers. Chemistry Letters, 2015, 44, 677-679.	0.7	7
1903	Electroactive Tissue Scaffolds with Aligned Pores as Instructive Platforms for Biomimetic Tissue Engineering. Bioengineering, 2015, 2, 15-34.	1.6	51
1904	Muscle tissue engineering and regeneration through epigenetic reprogramming and scaffold manipulation. Scientific Reports, 2015, 5, 16333.	1.6	25
1905	Comparative assessment of bone regeneration by histometry and a histological scoring system / Evaluarea comparativÄƒ a regenerÄƒrii osoase utilizÃ¢nd histometria È™i un scor de vindecare histologicÄƒ. Romanian Journal of Laboratory Medicine, 2015, 23, .	0.1	4
1906	Mechanosensitive Kinases Regulate Stiffness-Induced Cardiomyocyte Maturation. Scientific Reports, 2014, 4, 6425.	1.6	56
1907	An Injectable and Drug-loaded Supramolecular Hydrogel for Local Catheter Injection into the Pig Heart. Journal of Visualized Experiments, 2015, , e52450.	0.2	14
1909	Important topics in the future of biomaterials and stem cells for bone tissue engineering: Comments from the participants of the International Symposium on Recent Trend of Biomaterials and Stem Cells for Bone Tissue Engineering at Changchun, China. International Journal of Energy Production and Management, 2015, 2, 153-158.	1.9	1
1910	Integrins Direct Cell Adhesion in a Substrate-Dependent Manner. Cellular and Molecular Bioengineering, 2015, 8, 488-495.	1.0	2
1911	Nanoenhanced hydrogel system with sustained release capabilities. Journal of Biomedical Materials Research - Part A, 2015, 103, 2416-2426.	2.1	28
1912	Bioinspired Phospholipid Polymer Hydrogel System for Cellular Engineering. Macromolecular Symposia, 2015, 351, 69-77.	0.4	2
1913	pH/temperature double responsive behaviors and mechanical strength of laponite-crosslinked poly(DEA-co -DMAEMA) nanocomposite hydrogels. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 876-884.	2.4	34
1914	Microfluidic Spinning of Cellâ€Responsive Grooved Microfibers. Advanced Functional Materials, 2015, 25, 2250-2259.	7.8	130
1915	Protein Fragment Reconstitution as a Driving Force for Selfâ€Assembling Reversible Protein Hydrogels. Advanced Functional Materials, 2015, 25, 5593-5601.	7.8	27

#	Article	IF	Citations
1916	Hybrid Microgels with Thermoâ€Tunable Elasticity for Controllable Cell Confinement. Advanced Healthcare Materials, 2015, 4, 1841-1848.	3.9	32
1917	Conducting polymer-based multilayer films for instructive biomaterial coatings. Future Science OA, 2015, 1, FSO79.	0.9	12
1918	Chineseâ€Noodleâ€Inspired Muscle Myofiber Fabrication. Advanced Functional Materials, 2015, 25, 5999-6008.	7.8	56
1919	Facile Fabrication of Egg White Macroporous Sponges for Tissue Regeneration. Advanced Healthcare Materials, 2015, 4, 2281-2290.	3.9	41
1920	Supramolecular Protein Immobilization on Lipid Bilayers. Chemistry - A European Journal, 2015, 21, 18466-18473.	1.7	26
1921	â€œOnâ€“Offâ€•RGD Signaling Using Azobenzene Photoswitchâ€Modified Surfaces. ChemPlusChem, 2015, 80, 1547-1555.	1.3	12
1922	Biomaterial Approaches for Stem Cell-Based Myocardial Tissue Engineering. Biomarker Insights, 2015, 10s1, BMI.S20313.	1.0	35
1923	Hyaluronic Acid/Polyâ€‹<scp>l</scp>â€Lysine Multilayers as Reservoirs for Storage and Release of Small Charged Molecules. Macromolecular Bioscience, 2015, 15, 1357-1363.	2.1	21
1924	Electrospinning of gelatin fibers using solutions with low acetic acid concentration: Effect of solvent composition on both diameter of electrospun fibers and cytotoxicity. Journal of Applied Polymer Science, 2015, 132, .	1.3	90
1925	Grapheneâ€Based Materials in Regenerative Medicine. Advanced Healthcare Materials, 2015, 4, 1451-1468.	3.9	136
1926	Highly Ordered 1D Fullerene Crystals for Concurrent Control of Macroscopic Cellular Orientation and Differentiation toward Largeâ€Scale Tissue Engineering. Advanced Materials, 2015, 27, 4020-4026.	11.1	119
1927	Layer-by-layer assembly for biomedical applications in the last decade. Nanotechnology, 2015, 26, 422001.	1.3	109
1928	Cell viability and angiogenic potential of a bioartificial adipose substitute. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 702-713.	1.3	2
1929	Solventâ€Free Liquid Crystals and Liquids Based on Genetically Engineered Supercharged Polypeptides with High Elasticity. Advanced Materials, 2015, 27, 2459-2465.	11.1	34
1930	Adaptable Hydrogel Networks with Reversible Linkages for Tissue Engineering. Advanced Materials, 2015, 27, 3717-3736.	11.1	557
1932	Betaâ€Sheetâ€Forming, Selfâ€Assembled Peptide Nanomaterials towards Optical, Energy, and Healthcare Applications. Small, 2015, 11, 3623-3640.	5.2	161
1933	9. Zelltherapien in der Regenerativen Medizin. , 2015, , 291-341.		1
1934	Obtaining of Hydrogels using PVA and HEC for Adipose Tissue Regeneration. Journal of Tissue Science & Engineering, 2015, 06, .	0.2	6

#	Article	IF	Citations
1935	Functionalized Biomaterials - Oxygen Releasing Scaffolds. Journal of Biotechnology & Biomaterials, 2015, 05, .	0.3	3
1936	Hydrogels with dynamically tunable properties. , 2015, , 90-109.		1
1937	Substrate-Bound Protein Gradients to Study Haptotaxis. Frontiers in Bioengineering and Biotechnology, 2015, 3, 40.	2.0	41
1938	Grafting Techniques towards Production of Peptide-Tethered Hydrogels, a Novel Class of Materials with Biomedical Interest. Gels, 2015, 1, 194-218.	2.1	14
1939	Supracolloidal Assemblies as Sacrificial Templates for Porous Silk-Based Biomaterials. International Journal of Molecular Sciences, 2015, 16, 20511-20522.	1.8	6
1940	Multi-Functional Macromers for Hydrogel Design in Biomedical Engineering and Regenerative Medicine. International Journal of Molecular Sciences, 2015, 16, 27677-27706.	1.8	42
1941	Bioengineering Beige Adipose Tissue Therapeutics. Frontiers in Endocrinology, 2015, 6, 164.	1.5	26
1942	Layer-by-layer paper-stacking nanofibrous membranes to deliver adipose-derived stem cells for bone regeneration. International Journal of Nanomedicine, 2015, 10, 1273.	3.3	25
1943	The Biophysical Properties of Basal Lamina Gels Depend on the Biochemical Composition of the Gel. PLoS ONE, 2015, 10, e0118090.	1.1	17
1944	Cell-Substrate Interactions Feedback to Direct Cell Migration along or against Morphological Polarization. PLoS ONE, 2015, 10, e0133117.	1.1	5
1945	Nanocellulosic Materials in Tissue Engineering Applications. , 0, , .		4
1946	Electrospun gelatin/polycaprolactone nanofibrous membranes combined with a coculture of bone marrow stromal cells and chondrocytes for cartilage engineering. International Journal of Nanomedicine, 2015, 10, 2089.	3.3	51
1947	Enhanced Critical Size Defect Repair in Rabbit Mandible by Electrospun Gelatin/Î²-TCP Composite Nanofibrous Membranes. Journal of Nanomaterials, 2015, 2015, 1-9.	1.5	11
1948	Characterization of Olfactory Ensheathing Glial Cells Cultured on Polyurethane/Polylactide Electrospun Nonwovens. International Journal of Polymer Science, 2015, 2015, 1-10.	1.2	12
1950	Coextruded, Aligned, and Gradient-Modified Poly(Îµ-caprolactone) Fibers as Platforms for Neural Growth. Biomacromolecules, 2015, 16, 860-867.	2.6	45
1951	Acellular implantable and injectable hydrogels for vascular regeneration. Biomedical Materials (Bristol), 2015, 10, 034001.	1.7	26
1952	Tissue Engineering Strategies for Fetal Myelomeningocele Repair in Animal Models. Fetal Diagnosis and Therapy, 2015, 37, 197-205.	0.6	103
1953	Robust imogolite hydrogels with tunable physical properties. RSC Advances, 2015, 5, 46493-46500.	1.7	12

#	Article	IF	Citations
1954	Biomimetic poly(glycerol sebacate)/poly(l-lactic acid) blend scaffolds for adipose tissue engineering. Acta Biomaterialia, 2015, 18, 40-49.	4.1	94
1955	Towards the design of 3D multiscale instructive tissue engineering constructs: Current approaches and trends. Biotechnology Advances, 2015, 33, 842-855.	6.0	49
1956	Living biointerfaces based on non-pathogenic bacteria to direct cell differentiation. Scientific Reports, 2014, 4, 5849.	1.6	15
1957	Construction of extracellular microenvironment to improve surface endothelialization of NiTi alloy substrate. Materials Science and Engineering C, 2015, 55, 1-7.	3.8	12
1958	A Self-Assembling Peptide Scaffold for the Multivalent Presentation of Antigens. Biomacromolecules, 2015, 16, 2188-2197.	2.6	31
1959	Stem cell niche engineering through droplet microfluidics. Current Opinion in Biotechnology, 2015, 35, 86-93.	3.3	73
1960	3D Printed Programmable Release Capsules. Nano Letters, 2015, 15, 5321-5329.	4.5	140
1961	Biodegradable PEG-Based Amphiphilic Block Copolymers for Tissue Engineering Applications. ACS Biomaterials Science and Engineering, 2015, 1, 463-480.	2.6	139
1962	Phosphorylcholine-Modified Chitosan Films as Effective Promoters of Cell Aggregation: Correlation Between the Films Properties and Cellular Response. Macromolecular Bioscience, 2015, 15, 490-500.	2.1	6
1964	Tuning cellular response by modular design of bioactive domains in collagen. Biomaterials, 2015, 53, 309-317.	5.7	22
1965	Accelerated wound healing by injectable microporous gel scaffolds assembled fromÂannealed building blocks. Nature Materials, 2015, 14, 737-744.	13.3	698
1966	Cardiac tissue engineering and regeneration using cell-based therapy. Stem Cells and Cloning: Advances and Applications, 2015, 8, 81.	2.3	34
1967	Self-assembly of a dual functional bioactive peptide amphiphile incorporating both matrix metalloprotease substrate and cell adhesion motifs. Soft Matter, 2015, 11, 3115-3124.	1.2	20
1968	Miniature probe for the delivery and monitoring of a photopolymerizable material. Journal of Biomedical Optics, 2015, 20, 127001.	1.4	14
1969	Progress in material design for biomedical applications. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14444-14451.	3.3	201
1970	Hydrogel-laden paper scaffold system for origami-based tissue engineering. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15426-15431.	3.3	87
1971	Advancing Ultrasound Technologies for Tissue Engineering. , 2015, , 1-26.		3
1972	Glycosaminoglycan functionalization of mechanically and topologically defined collagen I matrices. Journal of Materials Chemistry B, 2015, 3, 8902-8910.	2.9	31

#	Article	IF	Citations
1973	Collagen Fibril Structure and Strength in Acellular Dermal Matrix Materials of Bovine, Porcine, and Human Origin. ACS Biomaterials Science and Engineering, 2015, 1, 1026-1038.	2.6	38
1974	In quest of optimal drug-supported and targeted bone regeneration in the cranio facial area: a review of techniques and methods. Drug Metabolism Reviews, 2015, 47, 455-469.	1.5	7
1975	Creation of Highly Defined Mesenchymal Stem Cell Patterns in Three Dimensions by Laser-Assisted Bioprinting. Journal of Nanotechnology in Engineering and Medicine, 2015, 6, .	0.8	20
1976	bFGF binding cardiac extracellular matrix promotes the repair potential of bone marrow mesenchymal stem cells in a rabbit model for acute myocardial infarction. Biomedical Materials (Bristol), 2015, 10, 065018.	1.7	14
1977	3D bioprinting of BMSC-laden methacrylamide gelatin scaffolds with CBD-BMP2-collagen microfibers. Biofabrication, 2015, 7, 044104.	3.7	120
1978	In-Situ Gelling Polymers. Series in Bioengineering, 2015, , .	0.3	3
1979	A near-infrared light-controlled system for reversible presentation of bioactive ligands using polypeptide-engineered functionalized gold nanorods. Chemical Communications, 2015, 51, 2569-2572.	2.2	20
1980	Molecularly Engineered Selfâ€Assembling Membranes for Cellâ€Mediated Degradation. Advanced Healthcare Materials, 2015, 4, 602-612.	3.9	20
1981	Acellular matrix in urethral reconstruction. Advanced Drug Delivery Reviews, 2015, 82-83, 38-46.	6.6	53
1982	Going Beyond Compromises in Multifunctionality of Biomaterials. Advanced Healthcare Materials, 2015, 4, 642-645.	3.9	7
1983	Novel human-derived extracellular matrix induces inÂvitro and inÂvivo vascularization and inhibits fibrosis. Biomaterials, 2015, 49, 37-46.	5.7	45
1984	Functional Augmentation of Naturally-Derived Materials for Tissue Regeneration. Annals of Biomedical Engineering, 2015, 43, 555-567.	1.3	33
1985	Extracellular Matrix-Inspired Growth Factor Delivery Systems for Skin Wound Healing. Advances in Wound Care, 2015, 4, 479-489.	2.6	187
1986	Engineering poly(lactic-co-glycolic acid)/hydroxyapatite microspheres with diverse macropores patterns and the cellular responses. RSC Advances, 2015, 5, 17466-17473.	1.7	8
1987	1H HR-MAS NMR spectroscopy as a simple tool to characterize peptide â€“ Functionalized hydrogels as a function of cross linker density. Polymer, 2015, 56, 141-146.	1.8	7
1988	The Use of Biologic Scaffolds in the Treatment of Chronic Nonhealing Wounds. Advances in Wound Care, 2015, 4, 490-500.	2.6	127
1989	Micro-structured, spontaneously eroding hydrogels accelerate endothelialization through presentation of conjugated growth factors. Biomaterials, 2015, 49, 113-124.	5.7	19
1990	Self-assembled hydrogels utilizing polymerâ€“nanoparticle interactions. Nature Communications, 2015, 6, 6295.	5.8	425

#	Article	IF	Citations
1991	Development of Polymer/Nanodiamond Composite Coatings to Control Cell Adhesion, Growth, and Functions. Behavior Research Methods, 2015, 21, 1-26.	2.3	3
1992	Biocompatible small peptide super-hydrogelators bearing carbazole functionalities. Journal of Materials Chemistry B, 2015, 3, 2277-2280.	2.9	37
1993	Cell effects on the formation of collagen triple helix fibers inside collagen gels or on cell surfaces. Polymer Journal, 2015, 47, 391-399.	1.3	16
1994	Nanofibrous Heparin and Heparin-Mimicking Multilayers as Highly Effective Endothelialization and Antithrombogenic Coatings. Biomacromolecules, 2015, 16, 992-1001.	2.6	74
1995	Polymorphism in Self-Assembly of Peptide-Based Î²-Hairpin Contributes to Network Morphology and Hydrogel Mechanical Rigidity. Journal of Physical Chemistry B, 2015, 119, 482-490.	1.2	37
1996	Hydrogel Patterning by Diffusion through the Matrix and Subsequent Light-Triggered Chemical Immobilization. ACS Applied Materials & Interfaces, 2015, 7, 1194-1206.	4.0	26
1999	Dreidimensional gedruckte, zellbeladene Konstrukte aus Spinnenseide. Angewandte Chemie, 2015, 127, 2858-2862.	1.6	5
2000	Osteocalcin/fibronectinâ€functionalized collagen matrices for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2015, 103, 2133-2140.	2.1	6
2001	Microengineered Liver Tissues for Drug Testing. Journal of the Association for Laboratory Automation, 2015, 20, 216-250.	2.8	92
2002	Biofabrication of Cellâ€Loaded 3D Spider Silk Constructs. Angewandte Chemie - International Edition, 2015, 54, 2816-2820.	7.2	207
2003	Trap Effect of Threeâ€Dimensional Fibers Network for High Efficient Cancerâ€Cell Capture. Advanced Healthcare Materials, 2015, 4, 838-843.	3.9	53
2004	Fibroblast adhesion on ECM-derived peptide modified poly(2-hydroxyethyl methacrylate) brushes: Ligand co-presentation and 3D-localization. Biomaterials, 2015, 44, 24-35.	5.7	49
2005	Development of a Cellularly Degradable PEG Hydrogel to Promote Articular Cartilage Extracellular Matrix Deposition. Advanced Healthcare Materials, 2015, 4, 702-713.	3.9	139
2006	Regenerative medicine for oesophageal reconstruction after cancer treatment. Lancet Oncology, The, 2015, 16, e84-e92.	5.1	30
2007	Modular and orthogonal synthesis of hybrid polymers and networks. Chemical Communications, 2015, 51, 5218-5237.	2.2	40
2008	Epitope topography controls bioactivity in supramolecular nanofibers. Biomaterials Science, 2015, 3, 520-532.	2.6	43
2009	Mobility of the Arg-Gly-Asp ligand on the outermost surface of biomaterials suppresses integrin-mediated mechanotransduction and subsequent cell functions. Acta Biomaterialia, 2015, 13, 42-51.	4.1	15
2010	Degradable Glycineâ€Based Photoâ€Polymerizable Polyphosphazenes for Use as Scaffolds for Tissue Regeneration. Macromolecular Bioscience, 2015, 15, 351-363.	2.1	35

#	Article	IF	Citations
2011	Nanofibrous Hydrogels with Spatially Patterned Biochemical Signals to Control Cell Behavior. Advanced Materials, 2015, 27, 1356-1362.	11.1	153
2012	Density gradients at hydrogel interfaces for enhanced cell penetration. Biomaterials Science, 2015, 3, 586-591.	2.6	16
2013	Cellâ€"Cell Crosslinking by Bioâ€Molecular Recognition of Heparinâ€Based Layerâ€byâ€Layer Nanofilms. Macromolecular Bioscience, 2015, 15, 312-317.	2.1	6
2015	Novel self-assembly-induced 3D plotting for macro/nano-porous collagen scaffolds comprised of nanofibrous collagen filaments. Materials Letters, 2015, 143, 265-268.	1.3	15
2016	Creeping Proteins in Microporous Structures: Polymer Brushâ€Assisted Fabrication of 3D Gradients for Tissue Engineering. Advanced Healthcare Materials, 2015, 4, 1169-1174.	3.9	39
2017	Myogenic stem cell-laden hydrogel scaffold in wound healing of the disrupted external anal sphincter. International Urogynecology Journal, 2015, 26, 893-904.	0.7	21
2018	Noncovalent Hydrogel Beads as Microcarriers for Cell Culture. Angewandte Chemie - International Edition, 2015, 54, 3962-3966.	7.2	42
2019	A photoreversible protein-patterning approach for guiding stem cell fate in three-dimensional gels. Nature Materials, 2015, 14, 523-531.	13.3	376
2020	Lyophilized Silk Sponges: A Versatile Biomaterial Platform for Soft Tissue Engineering. ACS Biomaterials Science and Engineering, 2015, 1, 260-270.	2.6	146
2021	Remote Control of Tissue Interactions via Engineered Photo-switchable Cell Surfaces. Scientific Reports, 2014, 4, 6313.	1.6	41
2022	Fibrin Hydrogel Based Bone Substitute Tethered with BMP-2 and BMP-2/7 Heterodimers. Materials, 2015, 8, 977-991.	1.3	16
2023	Active Peptide-Conjugated Chitosan Matrices as an Artificial Basement Membrane. Polymers, 2015, 7, 281-297.	2.0	6
2024	How does the pathophysiological context influence delivery of bone growth factors?. Advanced Drug Delivery Reviews, 2015, 84, 68-84.	6.6	21
2025	Status and headway of the clinical application of artificial ligaments. Asia-Pacific Journal of Sports Medicine, Arthroscopy, Rehabilitation and Technology, 2015, 2, 15-26.	0.4	13
2026	Biomimetic scaffolds for regeneration of volumetric muscle loss in skeletal muscle injuries. Acta Biomaterialia, 2015, 25, 2-15.	4.1	178
2027	In vitro and ex vivo hemocompatibility of off-the-shelf modified poly(vinyl alcohol) vascular grafts. Acta Biomaterialia, 2015, 25, 97-108.	4.1	65
2028	Potential of Centrifugal Seeding Method in Improving Cells Distribution and Proliferation on Demineralized Cancellous Bone Scaffolds for Tissue-Engineered Meniscus. ACS Applied Materials & Interfaces, 2015, 7, 15294-15302.	4.0	28
2029	Extremely strong and tough hydrogels as prospective candidates for tissue repair â€“ A review. European Polymer Journal, 2015, 72, 344-364.	2.6	129

#	Article	IF	Citations
2030	In Vitro Epithelial Organoid Generation Induced by Substrate Nanotopography. Scientific Reports, 2015, 5, 9293.	1.6	23
2031	Covalent Modification of Synthetic Hydrogels with Bioactive Proteins via Sortase-Mediated Ligation. Biomacromolecules, 2015, 16, 2316-2326.	2.6	88
2032	Optimization of Matrigel-based culture for expansion of neural stem cells. Animal Cells and Systems, 2015, 19, 175-180.	0.8	29
2033	Effect of fiber diameter on the assembly of functional 3D cardiac patches. Nanotechnology, 2015, 26, 291002.	1.3	43
2034	Stem Cells for Temporomandibular Joint Repair and Regeneration. Stem Cell Reviews and Reports, 2015, 11, 728-742.	5.6	34
2035	Natural polysaccharides promote chondrocyte adhesion and proliferation on magnetic nanoparticle/PVA composite hydrogels. Colloids and Surfaces B: Biointerfaces, 2015, 132, 146-154.	2.5	49
2036	Fabrication of Thermo-Responsive Molecular Layers from Self-Assembling Elastin-Like Oligopeptides Containing Cell-Binding Domain for Tissue Engineering. Polymers, 2015, 7, 134-146.	2.0	15
2037	The effect of silk gland sericin protein incorporation into electrospun polycaprolactone nanofibers on in vitro and in vivo characteristics. Journal of Materials Chemistry B, 2015, 3, 859-870.	2.9	15
2038	Biomaterials as carrier, barrier and reactor for cell-based regenerative medicine. Protein and Cell, 2015, 6, 638-653.	4.8	64
2039	Regulation of tissue ingrowth into proteolytically degradable hydrogels. Acta Biomaterialia, 2015, 24, 44-52.	4.1	15
2040	Imine Hydrogels with Tunable Degradability for Tissue Engineering. Biomacromolecules, 2015, 16, 2101-2108.	2.6	112
2041	A rapid crosslinking injectable hydrogel for stem cell delivery, from multifunctional hyperbranched polymers via RAFT homopolymerization of PEGDA. Polymer Chemistry, 2015, 6, 6182-6192.	1.9	46
2042	Retinal pigment epithelial cell proliferation. Experimental Biology and Medicine, 2015, 240, 1079-1086.	1.1	58
2043	Ultrasoft Alginate Hydrogels Support Long-Term Three-Dimensional Functional Neuronal Networks. Tissue Engineering - Part A, 2015, 21, 2177-2185.	1.6	46
2044	Activation of the Ubiquitin Proteasome Pathway by Silk Fibroin Modified Chitosan Nanoparticles in Hepatic Cancer Cells. International Journal of Molecular Sciences, 2015, 16, 1657-1676.	1.8	10
2045	â€œOff-the-shelfâ€•thermoresponsive hydrogel design: tuning hydrogel properties by mixing precursor polymers with different lower-critical solution temperatures. RSC Advances, 2015, 5, 33364-33376.	1.7	29
2046	Cells for musculoskeletal tissue engineering. , 2015, , 25-42.		1
2047	Muscle tissue engineering. , 2015, , 239-268.		2

#	Article	IF	Citations
2048	Hydrosoluble, UV-crosslinkable and injectable chitosan for patterned cell-laden microgel and rapid transdermal curing hydrogel in vivo. Acta Biomaterialia, 2015, 22, 59-69.	4.1	139
2049	Injectable hydrogels based on poly(ethylene glycol) and derivatives as functional biomaterials. RSC Advances, 2015, 5, 35469-35486.	1.7	138
2050	Injectable and mechanically robust 4-arm PPOâ€“PEO/graphene oxide composite hydrogels for biomedical applications. Chemical Communications, 2015, 51, 8876-8879.	2.2	31
2051	Natural Cardiac Extracellular Matrix Sheet as a Biomaterial for Cardiomyocyte Transplantation. Transplantation Proceedings, 2015, 47, 751-756.	0.3	12
2052	Substrate elasticity modulates the responsiveness of mesenchymal stem cells to commitment cues. Integrative Biology (United Kingdom), 2015, 7, 1135-1142.	0.6	33
2053	Pluronic F-127 hydrogel as a promising scaffold for encapsulation of dental-derived mesenchymal stem cells. Journal of Materials Science: Materials in Medicine, 2015, 26, 153.	1.7	146
2054	Material-based strategies to engineer fibronectin matrices for regenerative medicine. International Materials Reviews, 2015, 60, 245-264.	9.4	20
2055	Recent advances in crosslinking chemistry of biomimetic poly(ethylene glycol) hydrogels. RSC Advances, 2015, 5, 39844-39853.	1.7	82
2056	Enhancing orthopedic implant bioactivity: refining the nanotopography. Nanomedicine, 2015, 10, 1327-1341.	1.7	34
2057	Supramolecular Polymer Networks and Gels. Advances in Polymer Science, 2015, , .	0.4	39
2058	Supramolecular Nanofibrillar Polymer Hydrogels. Advances in Polymer Science, 2015, , 167-208.	0.4	24
2059	The Biocompatibility of Implant Materials. , 2015, , 37-51.		26
2060	Integrating mechanical and biological control of cell proliferation through bioinspired multieffector materials. Nanomedicine, 2015, 10, 873-891.	1.7	20
2061	Poly(Î³-Glutamic Acid) as an Exogenous Promoter of Chondrogenic Differentiation of Human Mesenchymal Stem/Stromal Cells. Tissue Engineering - Part A, 2015, 21, 1869-1885.	1.6	11
2062	MicroRNAs in skin tissue engineering. Advanced Drug Delivery Reviews, 2015, 88, 16-36.	6.6	39
2063	Photopatterning of hydrogel scaffolds coupled to filter materials using stereolithography for perfused 3D culture of hepatocytes. Biotechnology and Bioengineering, 2015, 112, 777-787.	1.7	67
2064	Interaction of responsive/switchable surfaces with cells. , 2015, , 189-201.		5
2065	Vascularization of hollow channel-modified porous silk scaffolds with endothelial cells for tissue regeneration. Biomaterials, 2015, 56, 68-77.	5.7	132

#	Article	IF	Citations
2066	The application of engineered liver tissues for novel drug discovery. Expert Opinion on Drug Discovery, 2015, 10, 519-540.	2.5	38
2067	Thiol Click Modification of Cyclic Disulfide Containing Biodegradable Polyurethane Urea Elastomers. Biomacromolecules, 2015, 16, 1622-1633.	2.6	32
2068	Aptamer-Based Polyvalent Ligands for Regulated Cell Attachment on the Hydrogel Surface. Biomacromolecules, 2015, 16, 1382-1389.	2.6	29
2069	Modeling and Validation of Multilayer Poly(Lactide-Co-Glycolide) Scaffolds for In Vitro Directed Differentiation of Juxtaposed Cartilage and Bone. Tissue Engineering - Part A, 2015, 21, 2228-2240.	1.6	10
2070	Micropatterned bioimplant with guided neuronal cells to promote tissue reconstruction and improve functional recovery after primary motor cortex insult. Biomaterials, 2015, 58, 46-53.	5.7	35
2071	Rapid Selfâ€Integrating, Injectable Hydrogel for Tissue Complex Regeneration. Advanced Healthcare Materials, 2015, 4, 1491-1495.	3.9	155
2072	Poly(norepinephrine) as a functional bio-interface for neuronal differentiation on electrospun fibers. Physical Chemistry Chemical Physics, 2015, 17, 9446-9453.	1.3	38
2073	Knowing one's place: a free-energy approach to pattern regulation. Journal of the Royal Society Interface, 2015, 12, 20141383.	1.5	153
2074	Dual Ionic and Photo-Crosslinked Alginate Hydrogels for Micropatterned Spatial Control of Material Properties and Cell Behavior. Bioconjugate Chemistry, 2015, 26, 1339-1347.	1.8	60
2075	Marine-derived biological macromolecule-based biomaterials for wound healing and skin tissue regeneration. International Journal of Biological Macromolecules, 2015, 77, 24-35.	3.6	122
2076	Self-Assembled Peptide Amphiphile Nanofibers and PEG Composite Hydrogels as Tunable ECM Mimetic Microenvironment. Biomacromolecules, 2015, 16, 1247-1258.	2.6	69
2077	Selection of animal models for pre-clinical strategies in evaluating the fracture healing, bone graft substitutes and bone tissue regeneration and engineering. Connective Tissue Research, 2015, 56, 175-194.	1.1	78
2078	A gene expression-based comparison of cell adhesion to extracellular matrix and RGD-terminated monolayers. Biomaterials, 2015, 52, 385-394.	5.7	23
2080	Self healing hydrogels composed of amyloid nano fibrils for cell culture and stem cell differentiation. Biomaterials, 2015, 54, 97-105.	5.7	162
2081	Photoreactive Polymers Bearing a Zwitterionic Phosphorylcholine Group for Surface Modification of Biomaterials. ACS Applied Materials & Interfaces, 2015, 7, 17489-17498.	4.0	75
2082	Encapsulation of PEGylated low-molecular-weight PEI polyplexes in hyaluronic acid hydrogels reduces aggregation. Acta Biomaterialia, 2015, 28, 45-54.	4.1	30
2083	Into the groove: instructive silk-polypyrrole films with topographical guidance cues direct DRG neurite outgrowth. Journal of Biomaterials Science, Polymer Edition, 2015, 26, 1327-1342.	1.9	27
2084	A modular, plasmin-sensitive, clickable poly(ethylene glycol)-heparin-laminin microsphere system for establishing growth factor gradients in nerve guidance conduits. Biomaterials, 2015, 72, 112-124.	5.7	38

#	Article	IF	Citations
2085	Micropatterned Azopolymer Surfaces Modulate Cell Mechanics and Cytoskeleton Structure. ACS Applied Materials & Interfaces, 2015, 7, 21503-21510.	4.0	25
2086	Fabrication of three-dimensional multi-protein microstructures for cell migration and adhesion enhancement. Biomedical Optics Express, 2015, 6, 480.	1.5	30
2087	Temperature-Induced Gels from Worms Made by RAFT-Mediated Emulsion Polymerization. ACS Symposium Series, 2015, , 79-90.	0.5	3
2088	Thermoplasmonic effect of silver nanoparticles modulates peptide amphiphile fiber into nanowreath-like assembly. Nanoscale, 2015, 7, 20238-20248.	2.8	32
2089	Epidermis recreation in spongy-like hydrogels. Materials Today, 2015, 18, 468-469.	8.3	5
2090	Biomaterial-Assisted Stem Cell Engineering for Tissue Construction and Regeneration. Translational Medicine Research, 2015, , 247-273.	0.0	1
2091	Cell-Laden 3D Printed Scaffolds for Bone Tissue Engineering. Clinical Reviews in Bone and Mineral Metabolism, 2015, 13, 245-255.	1.3	24
2092	Control of Surface Structure and Dynamics of Polymers Based on Precision Synthesis. , 2015, , 861-880.		0
2093	Engineering Pre-vascularized Scaffolds for Bone Regeneration. Advances in Experimental Medicine and Biology, 2015, 881, 79-94.	0.8	90
2094	Stimuli-Responsive Supramolecular Hydrogels with High Extensibility and Fast Self-Healing via Precoordinated Mussel-Inspired Chemistry. Chemistry of Materials, 2015, 27, 7627-7635.	3.2	136
2095	Polymers for Bioprinting. , 2015, , 229-248.		60
2096	Calcium orthophosphate bioceramics. Ceramics International, 2015, 41, 13913-13966.	2.3	201
2097	Biodegradable Polymer Nanogels for Drug/Nucleic Acid Delivery. Chemical Reviews, 2015, 115, 8564-8608.	23.0	401
2098	Current Trends and Challenges in Biointerfaces Science and Engineering. Annual Review of Chemical and Biomolecular Engineering, 2015, 6, 161-186.	3.3	27
2099	Spheroid and Tissue Assembly via Click Chemistry in Microfluidic Flow. Bioconjugate Chemistry, 2015, 26, 1939-1949.	1.8	43
2100	Peptide self-assembly for nanomaterials: the old new kid on the block. Chemical Society Reviews, 2015, 44, 8288-8300.	18.7	212
2101	Designer hydrogels for precision control of oxygen tension and mechanical properties. Journal of Materials Chemistry B, 2015, 3, 7939-7949.	2.9	23
2103	N₂/H₂o Plasma Assisted Functionalization of Poly(Îµâ€caprolactone) Porous Scaffolds: Acidic/Basic Character versus Cell Behavior. Plasma Processes and Polymers, 2015, 12, 786-798.	1.6	14

#	Article	IF	Citations
2105	A Biosynthetic Scaffold that Facilitates Chondrocyte-Mediated Degradation and Promotes Articular Cartilage Extracellular Matrix Deposition. Regenerative Engineering and Translational Medicine, 2015, 1, 11-21.	1.6	28
2106	Growth Factor-Bearing Polymer Brushes - Versatile Bioactive Substrates Influencing Cell Response. Biomacromolecules, 2015, 16, 3530-3542.	2.6	31
2107	Highly adjustable biomaterial networks from three-armed biodegradable macromers. Acta Biomaterialia, 2015, 26, 82-96.	4.1	12
2108	Controlled drug release for tissue engineering. Journal of Controlled Release, 2015, 219, 119-128.	4.8	173
2109	Materials from Mussel-Inspired Chemistry for Cell and Tissue Engineering Applications. Biomacromolecules, 2015, 16, 2541-2555.	2.6	248
2112	Toward the Broad Adoption of 3D Tumor Models in the Cancer Drug Pipeline. ACS Biomaterials Science and Engineering, 2015, 1, 877-894.	2.6	72
2113	Approaches to Corneal Tissue Engineering: Top-down or Bottom-up?. Procedia Engineering, 2015, 110, 15-20.	1.2	16
2114	Substrate-Independent Robust and Heparin-Mimetic Hydrogel Thin Film Coating via Combined LbL Self-Assembly and Mussel-Inspired Post-Cross-linking. ACS Applied Materials & Interfaces, 2015, 7, 26050-26062.	4.0	81
2115	Early Initiation of Endochondral Ossification of Mouse Femur Cultured in Hydrogel with Different Mechanical Stiffness. Tissue Engineering - Part C: Methods, 2015, 21, 567-575.	1.1	12
2116	Photopatterning of Multifunctional Hydrogels to Direct Adult Neural Precursor Cells. Advanced Healthcare Materials, 2015, 4, 516-521.	3.9	22
2117	Photosynthetic biomaterials: A pathway towards autotrophic tissue engineering. Acta Biomaterialia, 2015, 15, 39-47.	4.1	79
2118	Designing compartmentalized hydrogel microparticles for cell encapsulation and scalable 3D cell culture. Journal of Materials Chemistry B, 2015, 3, 353-360.	2.9	86
2119	In vitro and in vivo assessments of a 3-(3,4-dihydroxyphenyl)-2-propenoic acid bioconjugated gelatin-based injectable hydrogel for biomedical applications. Journal of Materials Chemistry B, 2015, 3, 1230-1244.	2.9	30
2120	A novel poly(Î³-glutamic acid)/silk-sericin hydrogel for wound dressing: Synthesis, characterization and biological evaluation. Materials Science and Engineering C, 2015, 48, 533-540.	3.8	63
2121	Spatial Control of Cell Gene Expression by siRNA Gradients in Biodegradable Hydrogels. Advanced Healthcare Materials, 2015, 4, 714-722.	3.9	25
2122	Formation of Spatially and Geometrically Controlled Three-Dimensional Tissues in Soft Gels by Sacrificial Micromolding. Tissue Engineering - Part C: Methods, 2015, 21, 541-547.	1.1	19
2123	A novel pH-responsive hydrogel based on natural polysaccharides for controlled release of protein drugs. RSC Advances, 2015, 5, 3157-3167.	1.7	26
2124	Direct comparison of different coating matrix on the hepatic differentiation from adipose-derived stem cells. Biochemical and Biophysical Research Communications, 2015, 456, 938-944.	1.0	28

#	Article	IF	Citations
2125	Injectable, spontaneously assembling, inorganic scaffolds modulate immune cells in vivo and increase vaccine efficacy. Nature Biotechnology, 2015, 33, 64-72.	9.4	436
2126	Ex Vivo Culture of Primary Intestinal Stem Cells in Collagen Gels and Foams. ACS Biomaterials Science and Engineering, 2015, 1, 37-42.	2.6	45
2127	Polymeric scaffolds as stem cell carriers in bone repair. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 1093-1119.	1.3	41
2128	Microfluidic Gradients Reveal Enhanced Neurite Outgrowth but Impaired Guidance within 3D Matrices with High Integrin Ligand Densities. Small, 2015, 11, 722-730.	5.2	26
2129	Effect of different hydroxyapatite incorporation methods on the structural and biological properties of porous collagen scaffolds for bone repair. Journal of Anatomy, 2015, 227, 732-745.	0.9	46
2130	Influence of substrate composition on human embryonic stem cell differentiation and extracellular matrix production in embryoid bodies. Biotechnology Progress, 2015, 31, 212-219.	1.3	13
2131	Engineered VEGF-releasing PEGâ€“MAL hydrogel for pancreatic islet vascularization. Drug Delivery and Translational Research, 2015, 5, 125-136.	3.0	96
2132	Material ecologies for synthetic biology: Biomineralization and the state space of design. CAD Computer Aided Design, 2015, 60, 28-39.	1.4	6
2133	Biomimicry in metalâ€“organic materials. Coordination Chemistry Reviews, 2015, 293-294, 327-356.	9.5	128
2134	Biomimetic honeycomb-patterned surface as the tunable cell adhesion scaffold. Biomaterials Science, 2015, 3, 85-93.	2.6	33
2135	Biological materials and molecular biomimetics â€“ filling up the empty soft materials space for tissue engineering applications. Journal of Materials Chemistry B, 2015, 3, 13-24.	2.9	49
2136	Considerations on Designing Scaffold for Tissue Engineering. , 2015, , 133-148.		11
2137	Multi-Tissue Interface Bioengineering. , 2015, , 593-602.		1
2138	Coculture of Stem Cells from Apical Papilla and Human Umbilical Vein Endothelial Cell Under Hypoxia Increases the Formation of Three-Dimensional Vessel-Like Structuresin Vitro. Tissue Engineering - Part A, 2015, 21, 1163-1172.	1.6	86
2139	Biomaterials for Cardiac Regeneration. , 2015, , .		5
2140	Silk fibroinâ€“keratin based 3D scaffolds as a dermal substitute for skin tissue engineering. Integrative Biology (United Kingdom), 2015, 7, 53-63.	0.6	139
2141	Functionalization of Polycaprolactone Scaffolds with Hyaluronic Acid and Î²-TCP Facilitates Migration and Osteogenic Differentiation of Human Dental Pulp Stem Cells In Vitro. Tissue Engineering - Part A, 2015, 21, 729-739.	1.6	50
2142	Direct laser writing: Principles and materials for scaffold 3D printing. Microelectronic Engineering, 2015, 132, 83-89.	1.1	272

#	Article	IF	Citations
2143	Mechanical Changes in Human Dental Pulp Stem Cells duringÂEarly Odontogenic Differentiation. Journal of Endodontics, 2015, 41, 50-55.	1.4	12
2144	Microscale screening systems for 3D cellular microenvironments: platforms, advances, and challenges. Cellular and Molecular Life Sciences, 2015, 72, 237-249.	2.4	67
2145	Fibroblast extracellular matrix and adhesion on microtextured polydimethylsiloxane scaffolds. , 2015, 103, 861-869.		12
2146	Preparation and characterization of polyhydroxybutyrateâ€coâ€hydroxyvalerate/silk fibroin nanofibrous scaffolds for skin tissue engineering. Polymer Engineering and Science, 2015, 55, 907-916.	1.5	34
2147	Self-Assembled Peptide Nanostructures for the Fabrication of Cell Scaffolds. , 2015, , 33-61.		2
2148	Rotator cuff repair using a decellularized tendon slices graft: an in vivo study in a rabbit model. Knee Surgery, Sports Traumatology, Arthroscopy, 2015, 23, 1524-1535.	2.3	35
2149	A Supramolecular Vesicle Based on the Complexation of pâ€Sulfonatocalixarene with Protamine and its Trypsinâ€Triggered Controllableâ€Release Properties. Chemistry - A European Journal, 2016, 22, 1475-1483.	1.7	74
2150	Dynamic three-dimensional micropatterned cell co-cultures within photocurable and chemically degradable hydrogels. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, 690-699.	1.3	15
2151	Pluripotent Stem Cells: Differentiation Potential and Therapeutic Efficacy for Cartilage Repair. , 2016, , .		1
2153	Exploring the Extracellular Matrix to Create Biomaterials. , 0, , .		8
2154	Self-Assembly of Peptides into Hydrogel. Journal of Organic & Inorganic Chemistry, 2016, 2, .	0.0	3
2155	Micro/nanofiber-based scaffolds for soft tissue engineering applications. , 2016, , 201-229.		2
2156	Cell-mediated remodeling of biomimetic encapsulating hydrogels triggered by adipogenic differentiation of adipose stem cells. Journal of Tissue Engineering, 2016, 7, 204173141667048.	2.3	15
2157	Characterization of tissue scaffolds drug release profiles. , 2016, , 149-168.		1
2158	Evaluation of biocompatibility of random or aligned electrospun polyhydroxybutyrate scaffolds combined with human mesenchymal stem cells. Turkish Journal of Biology, 2016, 40, 410-419.	2.1	13
2159	Fundamentals of In Situ Tissue Regeneration. , 2016, , 3-17.		8
2160	Microfluidics and Artificial Blood Vessels as Vascular Prostheses: One Small Step for Vascular Research, One Giant Leap for Patient-Kind. Journal of Biomolecular Research & Therapeutics, 2016, 05, .	0.2	0
2161	Resilin in the Engineering of Elastomeric Biomaterials. , 2016, , .		0

#	Article	IF	Citations
2162	Advances in Engineered Liver Models for Investigating Drug-Induced Liver Injury. BioMed Research International, 2016, 2016, 1-20.	0.9	47
2163	Stem Cell Tracking with Nanoparticles for Regenerative Medicine Purposes: An Overview. Stem Cells International, 2016, 2016, 1-23.	1.2	71
2164	Dynamics of Actin Stress Fibers and Focal Adhesions during Slow Migration in Swiss 3T3 Fibroblasts: Intracellular Mechanism of Cell Turning. BioMed Research International, 2016, 2016, 1-16.	0.9	7
2165	Graphene oxide scaffold accelerates cellular proliferative response and alveolar bone healing of tooth extraction socket. International Journal of Nanomedicine, 2016, 11, 2265.	3.3	63
2166	Gel-Trapped Lymphorganogenic Chemokines Trigger Artificial Tertiary Lymphoid Organs and Mount Adaptive Immune Responses In Vivo. Frontiers in Immunology, 2016, 7, 316.	2.2	35
2167	Synovial Joint. , 2016, , 253-273.		0
2168	iPS Cellsâ€"The Triumphs and Tribulations. Dentistry Journal, 2016, 4, 19.	0.9	8
2169	Design of Decorated Self-Assembling Peptide Hydrogels as Architecture for Mesenchymal Stem Cells. Materials, 2016, 9, 727.	1.3	32
2170	Engineered Polymeric Hydrogels for 3D Tissue Models. Polymers, 2016, 8, 23.	2.0	33
2171	Construction of a tissue-specific transcription factor-tethered extracellular matrix protein via coiled-coil helix formation. Journal of Materials Chemistry B, 2016, 4, 2512-2518.	2.9	8
2172	3D Cell Culture in a Self-Assembled Nanofiber Environment. PLoS ONE, 2016, 11, e0162853.	1.1	7
2173	In situâ€"formed bioactive hydrogels for delivery of stem cells and biomolecules for wound healing. , 2016, , 289-307.		1
2174	Non-thermal Plasma Technology for the Improvement of Scaffolds for Tissue Engineering and Regenerative Medicine - A Review. , 0, , .		6
2175	A Biomimetic Strategy to Design Biomaterials for In Situ Tissue Regeneration. , 2016, , 185-201.		7
2176	Three-dimensional protein assemblies directed by orthogonal non-covalent interactions. Chemical Communications, 2016, 52, 9687-9690.	2.2	6
2177	Heart valve regeneration: the need for systems approaches. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2016, 8, 169-182.	6.6	23
2178	Highly Fluorescent and Photostable Polymeric Nanofibers as Scaffolds for Cell Interfacing and Longâ€Term Tracking. Advanced Healthcare Materials, 2016, 5, 529-533.	3.9	18
2179	Flagellin based biomimetic coatings: From cell-repellent surfaces to highly adhesive coatings. Acta Biomaterialia, 2016, 42, 66-76.	4.1	17

#	Article	IF	Citations
2180	Bioactive Nanomaterials for Neural Engineering. , 2016, , 181-206.		1
2181	Increasing 3D Matrix Rigidity Strengthens Proliferation and Spheroid Development of Human Liver Cells in a Constant Growth Factor Environment. Journal of Cellular Biochemistry, 2016, 117, 708-720.	1.2	29
2182	Bioreactors for heart valve tissue engineering: a review. Journal of Chemical Technology and Biotechnology, 2016, 91, 847-856.	1.6	14
2183	Designing Visible Lightâ€Cured Thiolâ€Acrylate Hydrogels for Studying the HIPPO Pathway Activation in Hepatocellular Carcinoma Cells. Macromolecular Bioscience, 2016, 16, 496-507.	2.1	19
2184	Neural Engineering. , 2016, , .		8
2185	Matrix directed adipogenesis and neurogenesis of mesenchymal stem cells derived from adipose tissue and bone marrow. Acta Biomaterialia, 2016, 42, 46-55.	4.1	52
2186	Gelatin- and starch-based hydrogels. Part A: Hydrogel development, characterization and coating. Carbohydrate Polymers, 2016, 152, 129-139.	5.1	81
2187	Osteogenic potential and synergistic effects of growth factors delivered from a bionic composite system. Journal of Biomedical Materials Research - Part A, 2016, 104, 659-668.	2.1	6
2188	Recombinant Resilinâ€Based Bioelastomers for Regenerative Medicine Applications. Advanced Healthcare Materials, 2016, 5, 266-275.	3.9	41
2189	Textile Technologies and Tissue Engineering: A Path Toward Organ Weaving. Advanced Healthcare Materials, 2016, 5, 751-766.	3.9	161
2190	Tailoring Hydrogel Adhesiveness to Cells, Proteins, and Bacteria. , 2016, , 175-199.		2
2191	Use of Hydrogels in the Engineering of Lung Tissue. , 2016, , 397-426.		0
2192	Hydrogels for Hepatic Tissue Engineering. , 2016, , 427-462.		0
2193	Natural Polysaccharide-Based Hydrogels for Controlled Localized Drug Delivery. , 2016, , 35-59.		2
2194	3D Cancer Models on Hydrogels. , 2016, , 207-256.		1
2195	Dual Role of Mesenchymal Stem Cells Allows for Microvascularized Bone Tissueâ€Like Environments in PEG Hydrogels. Advanced Healthcare Materials, 2016, 5, 489-498.	3.9	51
2196	Anchoring Cytochrome b₅₆₂ on a Gold Nanoparticle by a Hemeâ€“Heme Pocket Interaction. European Journal of Inorganic Chemistry, 2016, 2016, 3454-3459.	1.0	3
2197	Recent advances in magnetic hydrogels. Polymer International, 2016, 65, 1365-1372.	1.6	67

#	Article	IF	Citations
2198	Self-Healing Elastinâ€“Bioglass Hydrogels. Biomacromolecules, 2016, 17, 2619-2625.	2.6	53
2199	Hybrid chitosanâ€“ÃŸâ€glycerol phosphateâ€“gelatin nanoâ€micro fibrous scaffolds with suitable mechanical and biological properties for tissue engineering. Biopolymers, 2016, 105, 163-175.	1.2	16
2200	Type III secretion as a generalizable strategy for the production of fullâ€length biopolymerâ€forming proteins. Biotechnology and Bioengineering, 2016, 113, 2313-2320.	1.7	26
2201	Mimicking Tissue Boundaries by Sharp Multiparameter Matrix Interfaces. Advanced Healthcare Materials, 2016, 5, 1861-1867.	3.9	22
2202	3D Biomaterial Microarrays for Regenerative Medicine: Current Stateâ€ofâ€theâ€Art, Emerging Directions and Future Trends. Advanced Materials, 2016, 28, 771-781.	11.1	80
2203	Responsive Biomaterials: Advances in Materials Based on Shapeâ€Memory Polymers. Advanced Materials, 2016, 28, 5717-5724.	11.1	138
2204	A Perturbation Analysis to Understand the Mechanism How Migrating Cells Sense and Respond to a Topography in the Extracellular Environment. Analytical Sciences, 2016, 32, 1207-1211.	0.8	1
2205	In situ formation of poly(vinyl alcohol)â€“heparin hydrogels for mild encapsulation and prolonged release of basic fibroblast growth factor and vascular endothelial growth factor. Journal of Tissue Engineering, 2016, 7, 204173141667713.	2.3	25
2206	Modification of a commercial thromboelastography instrument to measure coagulation dynamics with three-dimensional biomaterials. Biointerphases, 2016, 11, 029602.	0.6	3
2207	Nanostructured scaffold as a determinant of stem cell fate. Stem Cell Research and Therapy, 2016, 7, 188.	2.4	99
2208	Extracellular matrix stiffness dictates Wnt expression through integrin pathway. Scientific Reports, 2016, 6, 20395.	1.6	155
2209	Innovative in vitro models for breast cancer drug discovery. Drug Discovery Today: Disease Models, 2016, 21, 11-16.	1.2	3
2211	Multiscale approach for the construction of equilibrated all-atom models of a poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 262 T	0.6	6
2213	Scaffold Free Bio-orthogonal Assembly of 3-Dimensional Cardiac Tissue via Cell Surface Engineering. Scientific Reports, 2016, 6, 39806.	1.6	53
2214	Probing the luminal microenvironment of reconstituted epithelial microtissues. Scientific Reports, 2016, 6, 33148.	1.6	7
2215	Two-dimensional arrays of cell-laden polymer hydrogel modules. Biomicrofluidics, 2016, 10, 014110.	1.2	12
2216	Mimicking biological functionality with polymers for biomedical applications. Nature, 2016, 540, 386-394.	13.7	389
2217	Synthetic Capillaries to Control Microscopic Blood Flow. Scientific Reports, 2016, 6, 21885.	1.6	15

#	Article	IF	Citations
2218	Injectable SVF-loaded porcine extracellular matrix powders for adipose tissue engineering. RSC Advances, 2016, 6, 53034-53042.	1.7	2
2219	Engineering Biomaterials for Enhanced Tissue Regeneration. Current Stem Cell Reports, 2016, 2, 140-146.	0.7	34
2220	Graphene-based materials for tissue engineering. Advanced Drug Delivery Reviews, 2016, 105, 255-274.	6.6	537
2221	Biomaterials for 4D stem cell culture. Current Opinion in Solid State and Materials Science, 2016, 20, 212-224.	5.6	47
2222	A morphospace for synthetic organs and organoids: the possible and the actual. Integrative Biology (United Kingdom), 2016, 8, 485-503.	0.6	48
2223	Nanofibrous poly(3-hydroxybutyrate)/poly(3-hydroxyoctanoate) scaffolds provide a functional microenvironment for cartilage repair. Journal of Biomaterials Applications, 2016, 31, 77-91.	1.2	47
2224	Fabrication and inÂvitro characterization of electrospun poly (Î³-glutamic acid)-silica hybrid scaffolds for bone regeneration. Polymer, 2016, 91, 106-117.	1.8	28
2225	RGD and BMP-2 mimetic peptide crosstalk enhances osteogenic commitment of human bone marrow stem cells. Acta Biomaterialia, 2016, 36, 132-142.	4.1	100
2226	Nanostructured injectable cell microcarriers for tissue regeneration. Nanomedicine, 2016, 11, 1611-1628.	1.7	42
2227	Ovine tendon collagen: Extraction, characterisation and fabrication of thin films for tissue engineering applications. Materials Science and Engineering C, 2016, 68, 163-171.	3.8	83
2228	Injectable shear-thinning nanoengineered hydrogels for stem cell delivery. Nanoscale, 2016, 8, 12362-12372.	2.8	150
2229	Biodegradable and bioerodible polymers for medical applications. , 2016, , 63-83.		11
2230	Biocomposite macroporous cryogels as potential carrier scaffolds for bone active agents augmenting bone regeneration. Journal of Controlled Release, 2016, 235, 365-378.	4.8	45
2231	Rationally Designed Dynamic Protein Hydrogels with Reversibly Tunable Mechanical Properties. Biophysical Journal, 2016, 110, 40a.	0.2	2
2232	Molecular composition of GAG-collagen I multilayers affects remodeling of terminal layers and osteogenic differentiation of adipose-derived stem cells. Acta Biomaterialia, 2016, 41, 86-99.	4.1	42
2233	Eco-friendly photolithography using water-developable pure silk fibroin. RSC Advances, 2016, 6, 39330-39334.	1.7	43
2234	Hierarchically structured self-supported latex films for flexible and semi-transparent electronics. Applied Surface Science, 2016, 364, 37-44.	3.1	3
2235	Surface modification with E-cadherin fusion protein for mesenchymal stem cell culture. Journal of Materials Chemistry B, 2016, 4, 4267-4277.	2.9	14

#	Article	IF	Citations
2236	Apoptosis or senescence? Which exit route do epithelial cells and fibroblasts preferentially follow?. Mechanisms of Ageing and Development, 2016, 156, 17-24.	2.2	23
2237	Insight into hydrogels. Designed Monomers and Polymers, 2016, 19, 456-478.	0.7	78
2238	Gelatin methacrylate/carboxybetaine methacrylate hydrogels with tunable crosslinking for controlled drug release. Journal of Materials Chemistry B, 2016, 4, 2304-2313.	2.9	78
2239	Preparing neural stem/progenitor cells in PuraMatrix hydrogel for transplantation after brain injury in rats: A comparative methodological study. Brain Research, 2016, 1642, 197-208.	1.1	34
2240	Fibrous proteins: At the crossroads of genetic engineering and biotechnological applications. Biotechnology and Bioengineering, 2016, 113, 913-929.	1.7	23
2241	Synthetic hydrogels with stiffness gradients for durotaxis study and tissue engineering scaffolds. Tissue Engineering and Regenerative Medicine, 2016, 13, 126-139.	1.6	32
2242	Airway tissue engineering for congenital laryngotracheal disease. Seminars in Pediatric Surgery, 2016, 25, 186-190.	0.5	10
2243	Cell attachment and proliferation of osteoblast-like MG63 cells on silk fibroin membrane for guided bone regeneration. Maxillofacial Plastic and Reconstructive Surgery, 2016, 38, 17.	0.7	32
2244	A Mini Review on the Functional Biomaterials Based on Poly(lactic acid) Stereocomplex. Polymer Reviews, 2016, 56, 262-286.	5.3	81
2245	Construction and myogenic differentiation of 3D myoblast tissues fabricated by fibronectin-gelatin nanofilm coating. Biochemical and Biophysical Research Communications, 2016, 474, 515-521.	1.0	27
2246	Three-dimensional models for studying development and disease: moving on from organisms to organs-on-a-chip and organoids. Integrative Biology (United Kingdom), 2016, 8, 672-683.	0.6	94
2247	A practical guide to hydrogels for cell culture. Nature Methods, 2016, 13, 405-414.	9.0	1,348
2248	Engineering Approaches for Understanding Osteogenesis: Hydrogels as Synthetic Bone Microenvironments. Hormone and Metabolic Research, 2016, 48, 726-736.	0.7	7
2249	Creating biomaterials with spatially organized functionality. Experimental Biology and Medicine, 2016, 241, 1025-1032.	1.1	8
2250	Programmed Transport and Release of Cells by Self-Propelled Micromotors. Langmuir, 2016, 32, 9381-9388.	1.6	27
2251	Hydrogels bearing bioengineered mimetic embryonic microenvironments for tumor reversion. Journal of Materials Chemistry B, 2016, 4, 6183-6191.	2.9	15
2252	One-Dimensional Supramolecular Nanoplatforms for Theranostics Based on Co-Assembly of Peptide Amphiphiles. Biomacromolecules, 2016, 17, 3234-3243.	2.6	31
2253	Biodegradation-Resistant Multilayers Coated with Gold Nanoparticles. Toward a Tailor-made Artificial Extracellular Matrix. ACS Applied Materials & Interfaces, 2016, 8, 24345-24349.	4.0	19

#	Article	IF	Citations
2254	Tissue engineering-based therapeutic strategies for vocal fold repair and regeneration. Biomaterials, 2016, 108, 91-110.	5.7	75
2255	Micro- and nanocarriers by electrofludodynamic technologies for cell and molecular therapies. Process Biochemistry, 2016, 51, 2143-2154.	1.8	31
2256	Stem Cell Differentiation Mediated by Biomaterials/Surfaces. , 2016, , 187-251.		0
2257	Electroconductive natural polymer-based hydrogels. Biomaterials, 2016, 111, 40-54.	5.7	287
2259	Diversification and enrichment of clinical biomaterials inspired by Darwinian evolution. Acta Biomaterialia, 2016, 42, 33-45.	4.1	9
2260	Mobility of lysozyme in poly(l-lysine)/hyaluronic acid multilayer films. Colloids and Surfaces B: Biointerfaces, 2016, 147, 343-350.	2.5	28
2261	Engineering Protein Hydrogels Using SpyCatcher-SpyTag Chemistry. Biomacromolecules, 2016, 17, 2812-2819.	2.6	75
2262	Macromolecule and Particle Dynamics in Confined Media. Macromolecules, 2016, 49, 5755-5772.	2.2	105
2263	Electrospun silk fibroin/poly (L-lactide-Îµ-caplacton) graft with platelet-rich growth factor for inducing smooth muscle cell growth and infiltration. International Journal of Energy Production and Management, 2016, 3, 239-245.	1.9	19
2264	Advancing Ultrasound Technologies for Tissue Engineering. , 2016, , 1101-1126.		1
2265	Injectable Hydrogels by Physical Crosslinking. , 2016, , 97-154.		1
2266	Strategies for bioengineered scaffolds that support adipose stem cells in regenerative therapies. Regenerative Medicine, 2016, 11, 589-599.	0.8	2
2267	Change in surface roughness by dynamic shape-memory acrylate networks enhances osteoblast differentiation. Biomaterials, 2016, 110, 34-44.	5.7	36
2268	A mechanistic study on tumour spheroid formation in thermosensitive hydrogels: experiments and mathematical modelling. RSC Advances, 2016, 6, 73282-73291.	1.7	27
2269	Molecular nanofibers of paclitaxel form supramolecular hydrogel for preventing tumor growth in vivo. RSC Advances, 2016, 6, 80847-80850.	1.7	2
2270	Generation of a Scaffold-Free Three-Dimensional Liver Tissue via a Rapid Cell-to-Cell Click Assembly Process. Bioconjugate Chemistry, 2016, 27, 1991-1998.	1.8	15
2271	Surface-Functionalized Silk Fibroin Films as a Platform To Guide Neuron-like Differentiation of Human Mesenchymal Stem Cells. ACS Applied Materials & Interfaces, 2016, 8, 22849-22859.	4.0	64
2272	Laterally Confined Microfluidic Patterning of Cells for Engineering Spatially Defined Vascularization. Small, 2016, 12, 5132-5139.	5.2	21

#	Article	IF	Citations
2273	GlycosaminoglycanâEBased Biohybrid Hydrogels: A Sweet and Smart Choice for Multifunctional Biomaterials. Advanced Materials, 2016, 28, 8861-8891.	11.1	156
2274	TwoâEDimensional Fluorinated Graphene: Synthesis, Structures, Properties and Applications. Advanced Science, 2016, 3, 1500413.	5.6	469
2275	Effect of amino acid supplementation on titer and glycosylation distribution in hybridoma cell culturesâ€"Systems biologyâEbased interpretation using genomeâEscale metabolic flux balance model and multivariate data analysis. Biotechnology Progress, 2016, 32, 1163-1173.	1.3	10
2276	Hyperbranched poly(glycidol)/poly(ethylene oxide) crosslinked hydrogel for tissue engineering scaffold using eâEbeams. Journal of Biomedical Materials Research - Part A, 2016, 104, 48-56.	2.1	15
2277	Controlling gelation with sequence: Towards programmable peptide hydrogels. Acta Biomaterialia, 2016, 43, 30-37.	4.1	15
2278	Role of mechanical factors in applications of stimuli-responsive polymer gels â€“ Status and prospects. Polymer, 2016, 101, 415-449.	1.8	33
2279	Promotion of adhesion and proliferation of endothelial progenitor cells on decellularized valves by covalent incorporation of RGD peptide and VEGF. Journal of Materials Science: Materials in Medicine, 2016, 27, 142.	1.7	14
2280	Photo-Dimerization Induced Dynamic Viscoelastic Changes in ABA Triblock Copolymer-Based Hydrogels for 3D Cell Culture. Chemistry of Materials, 2016, 28, 6401-6408.	3.2	51
2281	Cell-Mediated Proteolytic Release of Growth Factors from Poly(Ethylene Glycol) Matrices. Macromolecular Bioscience, 2016, 16, 1703-1713.	2.1	19
2282	Three-dimensional bioprinting of cell-laden constructs with polycaprolactone protective layers for using various thermoplastic polymers. Biofabrication, 2016, 8, 035013.	3.7	64
2284	Improved Mechanical Properties and Sustained Release Behavior of Cationic Cellulose Nanocrystals Reinforced Cationic Cellulose Injectable Hydrogels. Biomacromolecules, 2016, 17, 2839-2848.	2.6	87
2285	In Situ Construction and Characterization of Chlorin-Based Supramolecular Aggregates in Tumor Cells. ACS Applied Materials & Interfaces, 2016, 8, 22875-22883.	4.0	15
2286	Mussel-inspired polydopamine for bio-surface functionalization. Biosurface and Biotribology, 2016, 2, 121-136.	0.6	283
2287	Cancer cells become less deformable and more invasive with activation of Î²-adrenergic signaling. Journal of Cell Science, 2016, 129, 4563-4575.	1.2	63
2288	Particle Hydrogels Based on Hyaluronic Acid Building Blocks. ACS Biomaterials Science and Engineering, 2016, 2, 2034-2041.	2.6	112
2289	Biomineralised interpenetrating network hydrogels for bone tissue engineering. Bioinspired, Biomimetic and Nanobiomaterials, 2016, 5, 12-23.	0.7	13
2290	Solid organ fabrication: comparison of decellularization to 3D bioprinting. Biomaterials Research, 2016, 20, 27.	3.2	77
2291	New Trends in Bioactive Glasses: The Importance of Mesostructure. , 2016, , 95-130.		0

#	Article	IF	Citations
2292	Surfaceâ€Crafted Nanogel Arrays Direct Cell Adhesion and Motility. Advanced Materials Interfaces, 2016, 3, 1600455.	1.9	14
2293	Engineering a Dual-Layer Chitosanâ€“Lactide Hydrogel To Create Endothelial Cell Aggregate-Induced Microvascular Networks In Vitro and Increase Blood Perfusion In Vivo. ACS Applied Materials & Interfaces, 2016, 8, 19245-19255.	4.0	13
2294	EphrinB2 Stabilizes Vascularlike Structures Generated by Endothelial Cells and Stem Cells from Apical Papilla. Journal of Endodontics, 2016, 42, 1362-1370.	1.4	12
2295	Nanocomposite Hydrogels as Platform for Cells Growth, Proliferation, and Chemotaxis. Small, 2016, 12, 4881-4893.	5.2	47
2296	Protein Engineering Strategies for Modular, Responsive, and Spatially Organized Biomaterials. , 2016, , 287-314.		1
2297	Design, clinical translation and immunological response of biomaterials in regenerative medicine. Nature Reviews Materials, 2016, 1, .	23.3	208
2298	Engineering complex tissue-like microgel arrays for evaluating stem cell differentiation. Scientific Reports, 2016, 6, 30445.	1.6	31
2299	Three-dimensional cell culture models for investigating human viruses. Virologica Sinica, 2016, 31, 363-379.	1.2	23
2300	Modular and Adaptable Tumor Niche Prepared from Visible Light Initiated Thiol-Norbornene Photopolymerization. Biomacromolecules, 2016, 17, 3872-3882.	2.6	50
2301	Laser thin films deposition and characterization for biomedical applications. , 2016, , 77-125.		25
2303	Injectable, Biomolecule-Responsive Polypeptide Hydrogels for Cell Encapsulation and Facile Cell Recovery through Triggered Degradation. ACS Applied Materials & Interfaces, 2016, 8, 30692-30702.	4.0	58
2304	The potential of nanoparticles in stem cell differentiation and further therapeutic applications. Biotechnology Journal, 2016, 11, 1550-1560.	1.8	43
2305	Biologically Inspired Nanomaterials and Nanobiomagnetism: A Synergy among New Emerging Concepts in Regenerative Medicine. , 2016, , 15-34.		0
2306	Aromatic Ï€-Conjugated Curcumin on Surface Modified Polyaniline/Polyhydroxyalkanoate Based 3D Porous Scaffolds for Tissue Engineering Applications. ACS Biomaterials Science and Engineering, 2016, 2, 2365-2377.	2.6	31
2307	Graphene Oxide promotes embryonic stem cell differentiation to haematopoietic lineage. Scientific Reports, 2016, 6, 25917.	1.6	59
2308	Hydrogel films and coatings by swelling-induced gelation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13295-13300.	3.3	21
2309	Highly Stretchable and Notch-Insensitive Hydrogel Based on Polyacrylamide and Milk Protein. ACS Applied Materials & Interfaces, 2016, 8, 29220-29226.	4.0	81
2310	Cell-laden microfluidic microgels for tissue regeneration. Lab on A Chip, 2016, 16, 4482-4506.	3.1	133

#	Article	IF	Citations
2311	Lowâ€temperature processing of polymer nanoparticles for bioactive composites. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 2514-2520.	2.4	8
2312	Cross-Linking and Bundling of Self-Assembled Protein-Based Polymer Fibrils via Heterodimeric Coiled Coils. Biomacromolecules, 2016, 17, 3893-3901.	2.6	10
2313	Factor XIII Cross-Linked Hyaluronan Hydrogels for Cartilage Tissue Engineering. ACS Biomaterials Science and Engineering, 2016, 2, 2176-2184.	2.6	58
2314	Synergistic interactions of blood-borne immune cells, fibroblasts and extracellular matrix drive repair in an in vitro peri-implant wound healing model. Scientific Reports, 2016, 6, 21071.	1.6	29
2316	Advances in printing biomaterials and living cells. Current Opinion in Organ Transplantation, 2016, 21, 467-475.	0.8	31
2317	Hydrogels Constructed from Engineered Proteins. Small, 2016, 12, 973-987.	5.2	62
2318	Dynamic Behavior in Enzymeâ€“Polymer Surfactant Hydrogel Films. Advanced Materials, 2016, 28, 1597-1602.	11.1	14
2319	Biomaterialâ€Enhanced Cell and Drug Delivery: Lessons Learned in the Cardiac Field and Future Perspectives. Advanced Materials, 2016, 28, 5648-5661.	11.1	63
2320	Rapid Assembly of Heterogeneous 3D Cell Microenvironments in a Microgel Array. Advanced Materials, 2016, 28, 3543-3548.	11.1	90
2321	Effect of spacer length and type on the biological activity of peptideâ€“polysaccharide matrices. Biopolymers, 2016, 106, 512-520.	1.2	9
2322	Synthetic Morphogenesis. Cold Spring Harbor Perspectives in Biology, 2016, 8, a023929.	2.3	84
2323	Biodegradable polyester networks including hydrophilic groups favor BMSCs differentiation and can be eroded by macrophage action. Polymer Degradation and Stability, 2016, 130, 38-46.	2.7	5
2324	Characterization of maghemite (Î³-Fe2O3)-loaded poly-l-lactic acid/thermoplastic polyurethane electrospun mats for soft tissue engineering. Journal of Materials Science, 2016, 51, 8361-8381.	1.7	7
2325	A Tunable Scaffold of Microtubular Graphite for 3D Cell Growth. ACS Applied Materials & Interfaces, 2016, 8, 14980-14985.	4.0	23
2326	Mechanochemical functionalization of disulfide linked hydrogels. Materials Horizons, 2016, 3, 447-451.	6.4	33
2327	Real-Time Monitoring of Wound Healing on Nano-Patterned Substrates: Non-Invasive Impedance Spectroscopy Technique. IEEE Nanotechnology Magazine, 2016, 15, 791-800.	1.1	8
2328	Tuning stiffness of cell-laden hydrogel via hostâ€“guest interactions. Journal of Materials Chemistry B, 2016, 4, 4969-4974.	2.9	46
2329	Bionanomaterials for Skin Regeneration. SpringerBriefs in Bioengineering, 2016, , .	0.8	18

#	Article	IF	Citations
2330	Synthesis of Functional Tertiary Lymphoid Organs. , 2016, , 151-169.		1
2331	Surface functionalization and dynamics of polymeric cell culture substrates. Current Opinion in Biotechnology, 2016, 40, 164-169.	3.3	15
2332	In vitro degradation and mechanical properties of PLA-PCL copolymer unit cell scaffolds generated by two-photon polymerization. Biomedical Materials (Bristol), 2016, 11, 015011.	1.7	84
2333	Biomimetic Microstructure Morphology in Electrospun Fiber Mats is Critical for Maintaining Healthy Cardiomyocyte Phenotype. Cellular and Molecular Bioengineering, 2016, 9, 107-115.	1.0	8
2334	The essential role of inorganic substrate in the migration and osteoblastic differentiation of mesenchymal stem cells. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 59, 353-365.	1.5	12
2335	Heparin as a Bundler in a Self-Assembled Fibrous Network of Functionalized Protein-Based Polymers. Biomacromolecules, 2016, 17, 2063-2072.	2.6	14
2336	Investigation of human cell response to covalently attached RADA16-I peptide on silicon surfaces. Colloids and Surfaces B: Biointerfaces, 2016, 145, 470-478.	2.5	8
2337	The effect of acoustic radiation force on osteoblasts in cell/hydrogel constructs for bone repair. Experimental Biology and Medicine, 2016, 241, 1149-1156.	1.1	18
2338	Biomaterials control of pluripotent stem cell fate for regenerative therapy. Progress in Materials Science, 2016, 82, 234-293.	16.0	40
2339	Photo-induced in situ crosslinking of polymer brushes with dimethyl maleimide moieties for dynamically stimulating stem cell differentiation. Journal of Biomaterials Science, Polymer Edition, 2016, 27, 1331-1340.	1.9	4
2341	Challenges and Opportunities to Harnessing the (Hematopoietic) Stem Cell Niche. Current Stem Cell Reports, 2016, 2, 85-94.	0.7	19
2342	Polyampholyteâ€•and nanosilicateâ€based soft bionanocomposites with tailorable mechanical and cell adhesion properties. Journal of Biomedical Materials Research - Part A, 2016, 104, 1379-1386.	2.1	13
2343	In situ supramolecular hydrogel based on hyaluronic acid and dextran derivatives as cell scaffold. Journal of Biomedical Materials Research - Part A, 2016, 104, 2263-2270.	2.1	21
2344	Nanochitosan and the Skin. SpringerBriefs in Bioengineering, 2016, , 69-78.	0.8	2
2345	Modulating properties of chemically crosslinked PEG hydrogels via physical entrapment of silk fibroin. Journal of Applied Polymer Science, 2016, 133, .	1.3	10
2346	Shaping PEDOT nanoparticles for use in 3D tissue phantoms. Journal of Applied Polymer Science, 2016, 133, .	1.3	2
2347	Engineering of microscale three-dimensional pancreatic islet modelsin vitroand their biomedical applications. Critical Reviews in Biotechnology, 2016, 36, 619-629.	5.1	17
2348	Anchoring a cytoactive factor in a wound bed promotes healing. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, 1012-1020.	1.3	44

#	Article	IF	Citations
2349	A triphasic constrained mixture model of engineered tissue formation under in vitro dynamic mechanical conditioning. Biomechanics and Modeling in Mechanobiology, 2016, 15, 293-316.	1.4	25
2350	Cross-Linked Hydrogels Formed through Dielsâ€“Alder Coupling of Furan- and Maleimide-Modified Poly(methyl vinyl ether-alt-maleic acid). Langmuir, 2016, 32, 1863-1870.	1.6	34
2351	Polyelectrolyte multilayer film modification for chemo-mechano-regulation of endothelial cell response. RSC Advances, 2016, 6, 8811-8828.	1.7	11
2352	Role of pore size and morphology in musculo-skeletal tissue regeneration. Materials Science and Engineering C, 2016, 61, 922-939.	3.8	305
2353	Fabrication of conductive gelatin methacrylateâ€“polyaniline hydrogels. Acta Biomaterialia, 2016, 33, 122-130.	4.1	90
2354	Developing multi-cellular tumor spheroid model (MCTS) in the chitosan/collagen/alginate (CCA) fibrous scaffold for anticancer drug screening. Materials Science and Engineering C, 2016, 62, 215-225.	3.8	39
2355	Surface modification of a POSS-nanocomposite material to enhance cellular integration of a synthetic bioscaffold. Biomaterials, 2016, 83, 283-293.	5.7	54
2356	A double-network poly(NÉ›-acryloyl l-lysine)/hyaluronic acid hydrogel as a mimic of the breast tumor microenvironment. Acta Biomaterialia, 2016, 33, 131-141.	4.1	44
2357	Solâ€“gel based materials for biomedical applications. Progress in Materials Science, 2016, 77, 1-79.	16.0	608
2358	Poly(ethylene glycol) hydrogels with cell cleavable groups for autonomous cell delivery. Biomaterials, 2016, 77, 186-197.	5.7	57
2359	Fabrication of hydrophobic structures on stent by direct three-beam laser interference lithography. Optik, 2016, 127, 5211-5214.	1.4	19
2360	Formation and self-assembly of 3D nanofibrous networks based on oppositely charged jets. Materials and Design, 2016, 97, 126-130.	3.3	34
2361	Chondrocytes, Mesenchymal Stem Cells, and Their Combination in Articular Cartilage Regenerative Medicine. Annals of Biomedical Engineering, 2016, 44, 1325-1354.	1.3	76
2362	Insight on stem cell preconditioning and instructive biomaterials to enhance cell adhesion, retention, and engraftment for tissue repair. Biomaterials, 2016, 90, 85-115.	5.7	94
2363	Synthesis and Characterization of Poly(vinylphosphonic acid-co-acrylic acid) Copolymers for Application in Bone Tissue Scaffolds. Macromolecules, 2016, 49, 2656-2662.	2.2	33
2364	Adhesive peptides conjugated PAMAM dendrimer as a coating polymeric material enhancing cell responses. Chinese Chemical Letters, 2016, 27, 1473-1478.	4.8	13
2365	Polymer microarray technology for stem cell engineering. Acta Biomaterialia, 2016, 34, 60-72.	4.1	21
2366	Magnetic assembly of 3D cell clusters: visualizing the formation of an engineered tissue. Cell Proliferation, 2016, 49, 134-144.	2.4	29

#	Article	IF	Citations
2367	In Situ Transformation of Chitosan Films into Microtubular Structures on the Surface of Nanoengineered Titanium Implants. Biomacromolecules, 2016, 17, 1261-1271.	2.6	15
2368	Wide-range stiffness gradient PVA/HA hydrogel to investigate stem cell differentiation behavior. Acta Biomaterialia, 2016, 35, 23-31.	4.1	141
2369	Handling and managing bleeding wounds using tissue adhesive hydrogel: a comparative assessment on two different hydrogels. RSC Advances, 2016, 6, 19973-19981.	1.7	14
2370	Excavating the Role of Aloe Vera Wrapped Mesoporous Hydroxyapatite Frame Ornamentation in Newly Architectured Polyurethane Scaffolds for Osteogenesis and Guided Bone Regeneration with Microbial Protection. ACS Applied Materials & Interfaces, 2016, 8, 5941-5960.	4.0	31
2371	Substrate Fluidity Regulates Cell Adhesion and Morphology on Poly(Îµ-caprolactone)-Based Materials. ACS Biomaterials Science and Engineering, 2016, 2, 446-453.	2.6	34
2372	Characterization of the crosslinking kinetics of multi-arm poly(ethylene glycol) hydrogels formed via Michael-type addition. Soft Matter, 2016, 12, 2076-2085.	1.2	86
2373	Surface modification of 3D-printed porous scaffolds via mussel-inspired polydopamine and effective immobilization of rhBMP-2 to promote osteogenic differentiation for bone tissue engineering. Acta Biomaterialia, 2016, 40, 182-191.	4.1	175
2374	Rupture force of cell adhesion ligand tethers modulates biological activities of a cell-laden hydrogel. Chemical Communications, 2016, 52, 4757-4760.	2.2	6
2375	High throughput approaches for controlled stem cell differentiation. Acta Biomaterialia, 2016, 34, 21-29.	4.1	18
2376	Advanced Artificial Extracellular Matrices Using Amphiphilic Nanogel-Cross-Linked Thin Films To Anchor Adhesion Proteins and Cytokines. ACS Biomaterials Science and Engineering, 2016, 2, 375-384.	2.6	13
2377	Extracellular matrix-based biomaterial scaffolds and the host response. Biomaterials, 2016, 86, 68-82.	5.7	372
2378	Silk as a Biomaterial to Support Long-Term Three-Dimensional Tissue Cultures. ACS Applied Materials & Interfaces, 2016, 8, 21861-21868.	4.0	90
2379	Regenerative Medicine: Charting a New Course in Wound Healing. Advances in Wound Care, 2016, 5, 314-328.	2.6	60
2380	Correction: Centimeter-sized biomimetic bone constructs fabricated via CBD-BMP2-collagen microcarriers and BMSC-gelatin microspheres. Journal of Materials Chemistry B, 2016, 4, 1368-1368.	2.9	2
2381	Glycosaminoglycan-Mimetic Signals Direct the Osteo/Chondrogenic Differentiation of Mesenchymal Stem Cells in a Three-Dimensional Peptide Nanofiber Extracellular Matrix Mimetic Environment. Biomacromolecules, 2016, 17, 1280-1291.	2.6	27
2382	Spatiotemporal control of cardiac anisotropy using dynamic nanotopographic cues. Biomaterials, 2016, 86, 1-10.	5.7	59
2383	In Situ â€œClickableâ€•Zwitterionic Starch-Based Hydrogel for 3D Cell Encapsulation. ACS Applied Materials & Interfaces, 2016, 8, 4442-4455.	4.0	91
2384	On-Demand Guided Bone Regeneration with Microbial Protection of Ornamented SPU Scaffold with Bismuth-Doped Single Crystalline Hydroxyapatite: Augmentation and Cartilage Formation. ACS Applied Materials & Interfaces, 2016, 8, 4086-4100.	4.0	35

#	Article	IF	Citations
2385	Preparation, tribological properties and biocompatibility of fluorinated graphene/ultrahigh molecular weight polyethylene composite materials. Applied Surface Science, 2016, 370, 201-208.	3.1	48
2386	A 3D boost. Nature Materials, 2016, 15, 259-261.	13.3	5
2387	A carboxymethyl chitosan and peptide-decorated polyetheretherketone ternary biocomposite with enhanced antibacterial activity and osseointegration as orthopedic/dental implants. Journal of Materials Chemistry B, 2016, 4, 1878-1890.	2.9	55
2388	Enhanced mechanical properties and increased corrosion resistance of a biodegradable magnesium alloy by plasma electrolytic oxidation (PEO). Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2016, 208, 39-46.	1.7	75
2389	Organoids as Models for Neoplastic Transformation. Annual Review of Pathology: Mechanisms of Disease, 2016, 11, 199-220.	9.6	64
2390	Facile formation of hydrogels by using functional precursor polymers and the chemoselective Staudinger coupling. Polymer, 2016, 86, 189-196.	1.8	6
2391	Foams Made of Engineered Recombinant Spider Silk Proteins as 3D Scaffolds for Cell Growth. ACS Biomaterials Science and Engineering, 2016, 2, 517-525.	2.6	45
2392	Bio-inspired 3D microenvironments: a new dimension in tissue engineering. Biomedical Materials (Bristol), 2016, 11, 022001.	1.7	82
2393	Applications of piezoresponse force microscopy in materials research: from inorganic ferroelectrics to biopiezoelectrics and beyond. International Materials Reviews, 2016, 61, 46-70.	9.4	80
2394	Centimeter-sized biomimetic bone constructs fabricated via CBD-BMP2-collagen microcarriers and BMSC-gelatin microspheres. Journal of Materials Chemistry B, 2016, 4, 461-470.	2.9	6
2395	Preparation and characterization of nanofunctionalized alginate/methacrylated gelatin hybrid hydrogels. RSC Advances, 2016, 6, 27879-27884.	1.7	23
2396	Stem cells and injectable hydrogels: Synergistic therapeutics in myocardial repair. Biotechnology Advances, 2016, 34, 362-379.	6.0	106
2397	Preparation of collagen/hydroxyapatite/alendronate hybrid hydrogels as potential scaffolds for bone regeneration. Colloids and Surfaces B: Biointerfaces, 2016, 143, 81-87.	2.5	85
2398	Bio-safe processing of polylactic-co-caprolactone and polylactic acid blends to fabricate fibrous porous scaffolds for in vitro mesenchymal stem cells adhesion and proliferation. Materials Science and Engineering C, 2016, 63, 512-521.	3.8	19
2399	Supramolecular GAG-like Self-Assembled Glycopeptide Nanofibers Induce Chondrogenesis and Cartilage Regeneration. Biomacromolecules, 2016, 17, 679-689.	2.6	73
2400	Determining the mechanical properties of electrospun poly-Îµ-caprolactone (PCL) nanofibers using AFM and a novel fiber anchoring technique. Materials Science and Engineering C, 2016, 59, 203-212.	3.8	171
2401	Easy fabrication of aligned PLLA nanofibers-based 2D scaffolds suitable for cell contact guidance studies. Materials Science and Engineering C, 2016, 62, 301-306.	3.8	13
2402	Mechanically Stiff Nanocomposite Hydrogels at Ultralow Nanoparticle Content. ACS Nano, 2016, 10, 246-256.	7.3	184

#	Article	IF	Citations
2403	3D scaffolds in breast cancer research. Biomaterials, 2016, 81, 135-156.	5.7	145
2404	Gelatin hydrogels via thiol-ene chemistry. Monatshefte FÃ¼r Chemie, 2016, 147, 587-592.	0.9	24
2405	Photoregulated Hydrazone-Based Hydrogel Formation for Biochemically Patterning 3D Cellular Microenvironments. ACS Macro Letters, 2016, 5, 19-23.	2.3	49
2406	Defined three-dimensional microenvironments boost induction of pluripotency. Nature Materials, 2016, 15, 344-352.	13.3	233
2407	DNA orientation-specific adhesion and patterning of living mammalian cells on self-assembled DNA monolayers. Chemical Science, 2016, 7, 2722-2727.	3.7	31
2408	Preparation of polymer-based porous scaffolds for tissue engineering. , 2016, , 105-125.		2
2409	Mechanobiology of cell migration in the context of dynamic two-way cellâ€“matrix interactions. Journal of Biomechanics, 2016, 49, 1355-1368.	0.9	42
2410	Proving the suitability of magnetoelectric stimuli for tissue engineering applications. Colloids and Surfaces B: Biointerfaces, 2016, 140, 430-436.	2.5	126
2411	Synergistic role of three dimensional niche and hypoxia on conservation of cancer stem cell phenotype. International Journal of Biological Macromolecules, 2016, 90, 20-26.	3.6	14
2412	Cell sensing of physical properties at the nanoscale: Mechanisms and control of cell adhesion and phenotype. Acta Biomaterialia, 2016, 30, 26-48.	4.1	152
2413	Hydrogels with tunable stress relaxation regulate stem cell fate and activity. Nature Materials, 2016, 15, 326-334.	13.3	1,650
2414	Injection of Human Cord Blood Cells With Hyaluronan Improves Postinfarction Cardiac Repair in Pigs. Stem Cells Translational Medicine, 2016, 5, 56-66.	1.6	23
2415	Review of cellular mechanotransduction on micropost substrates. Medical and Biological Engineering and Computing, 2016, 54, 249-271.	1.6	9
2416	Mechanically reinforced cell-laden scaffolds formed using alginate-based bioink printed onto the surface of a PCL/alginate mesh structure for regeneration of hard tissue. Journal of Colloid and Interface Science, 2016, 461, 359-368.	5.0	45
2417	Engineering Mechanical, Biochemical, and Topographical Niche Cues by Photocrosslinkable, Microribbon-Like Hydrogels. , 2016, , 249-266.		0
2418	Spatial Patterning of Stem Cells to Engineer Microvascular Networks. , 2016, , 143-166.		1
2419	The adhesion of normal human dermal fibroblasts to the cyclopropylamine plasma polymers studied by holographic microscopy. Surface and Coatings Technology, 2016, 295, 70-77.	2.2	31
2420	Polystyrene scaffolds based on microfibers as a bone substitute; development and in vitro study. Acta Biomaterialia, 2016, 29, 380-388.	4.1	28

#	Article	IF	Citations
2421	Virtual design of electrospun-like gelatin scaffolds: the effect of three-dimensional fibre orientation on elasticity behaviour. Soft Matter, 2016, 12, 602-613.	1.2	8
2422	Strategies and Molecular Design Criteria for 3D Printable Hydrogels. Chemical Reviews, 2016, 116, 1496-1539.	23.0	580
2423	The many ways adherent cells respond to applied stretch. Journal of Biomechanics, 2016, 49, 1347-1354.	0.9	29
2424	A review of hydrogel-based composites for biomedical applications: enhancement of hydrogel properties by addition of rigid inorganic fillers. Journal of Materials Science, 2016, 51, 271-310.	1.7	252
2425	The Application of Sheet Technology in Cartilage Tissue Engineering. Tissue Engineering - Part B: Reviews, 2016, 22, 114-124.	2.5	17
2426	Bioengineered silk scaffolds in 3D tissue modeling with focus on mammary tissues. Materials Science and Engineering C, 2016, 59, 1168-1180.	3.8	42
2427	Microscale Technologies for Cell Engineering. , 2016, , .		3
2428	Hydrogels for therapeutic cardiovascular angiogenesis. Advanced Drug Delivery Reviews, 2016, 96, 31-39.	6.6	71
2429	Myofibroblasts. Experimental Eye Research, 2016, 142, 56-70.	1.2	323
2430	Autologous Bone Marrow Aspirate Therapy in Wound Healing. Advances in Wound Care, 2016, 5, 102-105.	2.6	3
2431	Advancing biomaterials of human origin for tissue engineering. Progress in Polymer Science, 2016, 53, 86-168.	11.8	817
2432	Stem Cells in Skin Wound Healing: Are We There Yet?. Advances in Wound Care, 2016, 5, 164-175.	2.6	95
2433	In vitro chondrogenic commitment of human Wharton's jelly stem cells by co-culture with human articular chondrocytes. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 1876-1887.	1.3	11
2434	Electrospun fibrinogen-PLA nanofibres for vascular tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 2774-2784.	1.3	35
2435	A novel honeycomb cell assay kit designed for evaluating horizontal cell migration in response to functionalized self-assembling peptide hydrogels. Frontiers of Materials Science, 2017, 11, 13-21.	1.1	0
2436	Macroporous materials: microfluidic fabrication, functionalization and applications. Chemical Society Reviews, 2017, 46, 855-914.	18.7	126
2437	Self-assembling peptide nanostructures on aligned poly(lactide-co-glycolide) nanofibers for the functional regeneration of sciatic nerve. Nanomedicine, 2017, 12, 219-235.	1.7	24
2438	Gold nanoparticles for regulation of cell function and behavior. Nano Today, 2017, 13, 40-60.	6.2	86

#	Article	IF	Citations
2439	Biocompatible Polymeric Analogues of DMSO Prepared by Atom Transfer Radical Polymerization. Biomacromolecules, 2017, 18, 475-482.	2.6	54
2440	Modified porous scaffolds of silk fibroin with mimicked microenvironment based on decellularized pulp/fibronectin for designed performance biomaterials in maxillofacial bone defect. Journal of Biomedical Materials Research - Part A, 2017, 105, 1624-1636.	2.1	17
2441	Developing a biomimetic tooth bud model. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 3326-3336.	1.3	40
2442	Dual peptide-presenting hydrogels for controlling the phenotype of PC12 cells. Colloids and Surfaces B: Biointerfaces, 2017, 152, 36-41.	2.5	13
2443	3D bioprinting: improvingin vitromodels of metastasis with heterogeneous tumor microenvironments. DMM Disease Models and Mechanisms, 2017, 10, 3-14.	1.2	123
2444	Dynamic assembly of ultrasoft colloidal networks enables cell invasion within restrictive fibrillar polymers. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 885-890.	3.3	45
2445	Xenogeneic Bioâ€Root Prompts the Constructive Process Characterized by Macrophage Phenotype Polarization in Rodents and Nonhuman Primates. Advanced Healthcare Materials, 2017, 6, 1601112.	3.9	24
2446	Cold flow of three-dimensional confined polymer systems. Polymer, 2017, 111, 67-72.	1.8	3
2447	Characterization of rat or human hepatocytes cultured in microphysiological systems (MPS) to identify hepatotoxicity. Toxicology in Vitro, 2017, 40, 170-183.	1.1	34
2448	The influence of surface modified poly(<scp>l</scp>-lactic acid) films on the differentiation of human monocytes into macrophages. Biomaterials Science, 2017, 5, 551-560.	2.6	24
2449	Instructing Human Macrophage Polarization by Stiffness and Glycosaminoglycan Functionalization in 3D Collagen Networks. Advanced Healthcare Materials, 2017, 6, 1600967.	3.9	124
2450	Biomanufacturing Seamless Tubular and Hollow Collagen Scaffolds with Unique Design Features and Biomechanical Properties. Advanced Healthcare Materials, 2017, 6, 1601136.	3.9	16
2451	Vascularization of LBL structured nanofibrous matrices with endothelial cells for tissue regeneration. RSC Advances, 2017, 7, 11462-11477.	1.7	21
2452	Tuneable hydrolytic degradation of poly(l-lactide) scaffolds triggered by ZnO nanoparticles. Materials Science and Engineering C, 2017, 75, 714-720.	3.8	19
2453	Assessment of the toxicity and inflammatory effects of different-sized zinc oxide nanoparticles in 2D and 3D cell cultures. RSC Advances, 2017, 7, 12437-12445.	1.7	28
2454	Digital light procession three-dimensional printing acrylate/collagen composite airway stent for tracheomalacia. Journal of Bioactive and Compatible Polymers, 2017, 32, 429-442.	0.8	4
2455	Macrophages Influence Vessel Formation in 3D Bioactive Hydrogels. Advanced Biology, 2017, 1, 1600021.	3.0	29
2456	Mimicking Hierarchical Complexity of the Osteochondral Interface Using Electrospun Silkâ€“Bioactive Glass Composites. ACS Applied Materials & Interfaces, 2017, 9, 8000-8013.	4.0	89

#	Article	IF	Citations
2457	Converging biofabrication and organoid technologies: the next frontier in hepatic and intestinal tissue engineering?. Biofabrication, 2017, 9, 013001.	3.7	78
2458	Janus nanoparticles for T cell activation: clustering ligands to enhance stimulation. Journal of Materials Chemistry B, 2017, 5, 4410-4415.	2.9	34
2459	The development of polymeric biomaterials inspired by the extracellular matrix. Journal of Biomaterials Science, Polymer Edition, 2017, 28, 1051-1069.	1.9	19
2460	Fabrication and design of bioactive agent coated, highly-aligned electrospun matrices for nerve tissue engineering: Preparation, characterization and application. Applied Surface Science, 2017, 424, 359-367.	3.1	16
2461	Study on a series of water-soluble photoinitiators for fabrication of 3D hydrogels by two-photon polymerization. Dyes and Pigments, 2017, 141, 413-419.	2.0	63
2462	Continuous Fabrication and Assembly of Spatial Cell-Laden Fibers for a Tissue-Like Construct via a Photolithographic-Based Microfluidic Chip. ACS Applied Materials & Interfaces, 2017, 9, 14606-14617.	4.0	61
2463	Coaxial electrospinning multicomponent functional controlled-release vascular graft: Optimization of graft properties. Colloids and Surfaces B: Biointerfaces, 2017, 152, 432-439.	2.5	37
2464	Peptide coating applied on the spot improves osseointegration of titanium implants. Journal of Materials Chemistry B, 2017, 5, 2096-2105.	2.9	11
2465	In Vitro Analysis of the Co-Assembly of Type-I and Type-III Collagen. Cellular and Molecular Bioengineering, 2017, 10, 41-53.	1.0	4
2466	Facile Fabrication, Structures, and Properties of Laserâ€Marked Polyacrylamide/Bi₂O₃ Hydrogels. Advanced Engineering Materials, 2017, 19, 1600826.	1.6	13
2467	Fabrication of PLGA nanofibers on PDMS micropillars for neuron culture studies. Microelectronic Engineering, 2017, 175, 67-72.	1.1	4
2468	Synergetic effect of topological cue and periodic mechanical tension-stress on osteogenic differentiation of rat bone mesenchymal stem cells. Colloids and Surfaces B: Biointerfaces, 2017, 154, 1-9.	2.5	15
2469	Cytocompatibility of Wood-Derived Cellulose Nanofibril Hydrogels with Different Surface Chemistry. Biomacromolecules, 2017, 18, 1238-1248.	2.6	61
2470	In vitro development of zebrafish vascular networks. Reproductive Toxicology, 2017, 70, 102-115.	1.3	5
2471	Regulation of human nucleus pulposus cells by peptide-coupled substrates. Acta Biomaterialia, 2017, 55, 100-108.	4.1	36
2472	Vision for Functionally Decorated and Molecularly Imprinted Polymers in Regenerative Engineering. Regenerative Engineering and Translational Medicine, 2017, 3, 166-175.	1.6	30
2473	Advanced biomaterials and microengineering technologies to recapitulate the stepwise process of cancer metastasis. Biomaterials, 2017, 133, 176-207.	5.7	79
2474	Bioinspired fabrication of high strength hydrogels from non-covalent interactions. Progress in Polymer Science, 2017, 71, 1-25.	11.8	379

#	Article	IF	Citations
2475	A gelatin composite scaffold strengthened by drug-loaded halloysite nanotubes. Materials Science and Engineering C, 2017, 78, 362-369.	3.8	45
2476	Incorporation of well-dispersed calcium phosphate nanoparticles into PLGA electrospun nanofibers to enhance the osteogenic induction potential. RSC Advances, 2017, 7, 23982-23993.	1.7	11
2477	Microstructure based prediction of the deformation behavior of soft collagenous membranes. Soft Matter, 2017, 13, 5107-5116.	1.2	23
2478	Cardiac tissue engineering: from matrix design to the engineering of bionic hearts. Regenerative Medicine, 2017, 12, 275-284.	0.8	11
2479	Electrospun poly(vinylidene fluoride-trifluoroethylene)/zinc oxide nanocomposite tissue engineering scaffolds with enhanced cell adhesion and blood vessel formation. Nano Research, 2017, 10, 3358-3376.	5.8	146
2480	Affinityâ€Immobilization of VEGF on Laminin Porous Sponge Enhances Angiogenesis in the Ischemic Brain. Advanced Healthcare Materials, 2017, 6, 1700183.	3.9	23
2481	Induction of Chondrogenic Differentiation of Human Mesenchymal Stem Cells by Biomimetic Gold Nanoparticles with Tunable RGD Density. Advanced Healthcare Materials, 2017, 6, 1700317.	3.9	26
2482	Light-responsive polymer brushes: active topographic cues for cell culture applications. Polymer Chemistry, 2017, 8, 3271-3278.	1.9	29
2483	Mesoâ€Functionalization of Silk Fibroin by Upconversion Fluorescence and Near Infrared In Vivo Biosensing. Advanced Functional Materials, 2017, 27, 1700628.	7.8	48
2484	Silk/agarose scaffolds with tunable properties via SDS assisted rapid gelation. RSC Advances, 2017, 7, 21740-21748.	1.7	16
2485	Lightâ€Responsive Hierarchically Structured Liquid Crystal Polymer Networks for Harnessing Cell Adhesion and Migration. Advanced Materials, 2017, 29, 1606407.	11.1	90
2486	On-demand dissolution of modular, synthetic extracellular matrix reveals local epithelial-stromal communication networks. Biomaterials, 2017, 130, 90-103.	5.7	83
2487	Pancreatic differentiation of induced pluripotent stem cells in activin A-grafted gelatin-poly(lactide-co-glycolide) nanoparticle scaffolds with induction of LY294002 and retinoic acid. Materials Science and Engineering C, 2017, 77, 384-393.	3.8	22
2488	Engineered 3D-scaffolds of photocrosslinked chitosan-gelatin hydrogel hybrids for chronic wound dressings and regeneration. Materials Science and Engineering C, 2017, 78, 690-705.	3.8	133
2491	Biocompatibility Pathways: Biomaterials-Induced Sterile Inflammation, Mechanotransduction, and Principles of Biocompatibility Control. ACS Biomaterials Science and Engineering, 2017, 3, 2-35.	2.6	76
2492	The controlled release of simvastatin from TiO2 nanotubes to promote osteoblast differentiation and inhibit osteoclast resorption. Applied Surface Science, 2017, 396, 1741-1751.	3.1	32
2493	Modeling Physiological Events in 2D vs. 3D Cell Culture. Physiology, 2017, 32, 266-277.	1.6	1,069
2494	Nanotexturing of Conjugated Polymers via One-Step Maskless Oxygen Plasma Etching for Enhanced Tunable Wettability. Langmuir, 2017, 33, 6885-6894.	1.6	26

#	Article	IF	Citations
2495	Classification of Hydrogels Based on Their Source: A Review and Application in Stem Cell Regulation. Jom, 2017, 69, 1340-1347.	0.9	40
2496	Calcium Orthophosphate-Based Bioceramics and Its Clinical Applications. , 2017, , 123-226.		5
2497	Bone tissue regenerative medicine via bioactive nanomaterials. , 2017, , 769-792.		3
2498	Biophysical Regulation of Cell Behaviorâ€"Cross Talk between Substrate Stiffness and Nanotopography. Engineering, 2017, 3, 36-54.	3.2	193
2499	Human umbilical cord derived matrix: AÂscaffold suitable for tissue engineering application. Bio-Medical Materials and Engineering, 2017, 28, S95-S100.	0.4	2
2500	Covalently Adaptable Elastinâ€Like Proteinâ€"Hyaluronic Acid (ELPâ€"HA) Hybrid Hydrogels with Secondary Thermoresponsive Crosslinking for Injectable Stem Cell Delivery. Advanced Functional Materials, 2017, 27, 1605609.	7.8	187
2501	Biologically Triggered Delivery of EGF from Polymer Fiber Patches. ACS Macro Letters, 2017, 6, 593-597.	2.3	12
2502	Writing with Fluid: Structuring Hydrogels with Micrometer Precision by AFM in Combination with Nanofluidics. Small, 2017, 13, 1700962.	5.2	14
2503	The fabrication of iron oxide nanoparticleâ€nanofiber composites by electrospinning and their applications in tissue engineering. Biotechnology Journal, 2017, 12, 1600693.	1.8	38
2504	A₂B-Miktoarm Glycopolymer Fibers and Their Interactions with Tenocytes. Bioconjugate Chemistry, 2017, 28, 1955-1964.	1.8	17
2505	Biosensing of hepatitis B antigen with poly(acrylic acid) hydrogel immobilized with antigens and antibodies. Sensors and Actuators B: Chemical, 2017, 252, 409-417.	4.0	21
2506	Laser-induced micropore formation and modification of cartilage structure in osteoarthritis healing. Journal of Biomedical Optics, 2017, 22, 091515.	1.4	17
2507	A comparative study of the influence of two types of PHEMA stents on the differentiation of ASCs to myocardial cells. Molecular Medicine Reports, 2017, 16, 507-514.	1.1	1
2508	Chemical synthesis of biomimetic hydrogels for tissue engineering. Polymer International, 2017, 66, 1787-1799.	1.6	16
2509	Application of advanced sampling and analysis methods to predict the structure of adsorbed protein on a material surface. Biointerphases, 2017, 12, 02D409.	0.6	12
2510	Icariin immobilized electrospinning poly(l-lactide) fibrous membranes via polydopamine adhesive coating with enhanced cytocompatibility and osteogenic activity. Materials Science and Engineering C, 2017, 79, 399-409.	3.8	49
2511	Biocompatibility of hydrogel-based scaffolds for tissue engineering applications. Biotechnology Advances, 2017, 35, 530-544.	6.0	579
2512	Clinical Applications of Biomaterials. , 2017, , .		9

#	Article	IF	Citations
2513	Rhoâ€kinase regulates extracellular matrixâ€mediated osteogenic differentiation of periodontal ligament cells. Cell Biology International, 2017, 41, 651-658.	1.4	5
2514	Reduced arterial elasticity due to surgical skeletonization is ameliorated by abluminal PEG hydrogel. Bioengineering and Translational Medicine, 2017, 2, 222-232.	3.9	8
2515	Toward Advanced Therapy Medicinal Products (ATMPs) Combining Bone Morphogenetic Proteins (BMP) and Cells for Bone Regeneration. , 2017, , 127-169.		2
2516	Nerve Cells Decide to Orient inside an Injectable Hydrogel with Minimal Structural Guidance. Nano Letters, 2017, 17, 3782-3791.	4.5	165
2517	3D chitinous scaffolds derived from cultivated marine demosponge Aplysina aerophoba for tissue engineering approaches based on human mesenchymal stromal cells. International Journal of Biological Macromolecules, 2017, 104, 1966-1974.	3.6	59
2518	Transformable Nanomaterials as an Artificial Extracellular Matrix for Inhibiting Tumor Invasion and Metastasis. ACS Nano, 2017, 11, 4086-4096.	7.3	165
2519	Engineering a Cell Home for Stem Cell Homing and Accommodation. Advanced Biology, 2017, 1, e1700004.	3.0	31
2520	Characterization and cell response of electrospun <scp>R</scp>ana chensinensis skin collagen/poly(<scp>l</scp>â€lactide) scaffolds with different fiber orientations. Journal of Applied Polymer Science, 2017, 134, 45109.	1.3	16
2522	The culture of HaCaT cells on liquid substrates is mediated by a mechanically strong liquidâ€“liquid interface. Faraday Discussions, 2017, 204, 367-381.	1.6	28
2523	Compositions Including Synthetic and Natural Blends for Integration and Structural Integrity: Engineered for Different Vascular Graft Applications. Advanced Healthcare Materials, 2017, 6, 1700001.	3.9	25
2524	Bioinspired assembly of small molecules in cell milieu. Chemical Society Reviews, 2017, 46, 2421-2436.	18.7	188
2525	New advances in probing cellâ€“extracellular matrix interactions. Integrative Biology (United) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.8	52
2526	Supramolecular biofunctional materials. Biomaterials, 2017, 129, 1-27.	5.7	196
2527	Bioresorbable polypeptide-based comb-polymers efficiently improves the stability and pharmacokinetics of proteins in vivo. Biomaterials Science, 2017, 5, 837-848.	2.6	45
2528	Mixed Reversible Covalent Crosslink Kinetics Enable Precise, Hierarchical Mechanical Tuning of Hydrogel Networks. Advanced Materials, 2017, 29, 1605947.	11.1	121
2529	Injectable Polypeptide Hydrogel as Biomimetic Scaffolds with Tunable Bioactivity and Controllable Cell Adhesion. Biomacromolecules, 2017, 18, 1411-1418.	2.6	57
2530	Fabrication and characterization of Antheraea pernyi silk fibroin-blended P(LLA-CL) nanofibrous scaffolds for peripheral nerve tissue engineering. Frontiers of Materials Science, 2017, 11, 22-32.	1.1	17
2532	Multiscale microenvironmental perturbation of pluripotent stem cell fate and self-organization. Scientific Reports, 2017, 7, 44711.	1.6	33

#	Article	IF	Citations
2533	Bimodal morphological analyses of native and engineered tissues. Materials Science and Engineering C, 2017, 76, 543-550.	3.8	5
2534	The case for applying tissue engineering methodologies to instruct human organoid morphogenesis. Acta Biomaterialia, 2017, 54, 35-44.	4.1	51
2535	Heparin-hyaluronic acid hydrogel in support of cellular activities of 3D encapsulated adipose derived stem cells. Acta Biomaterialia, 2017, 49, 284-295.	4.1	107
2536	Assessing the Potential of Folded Globular Polyproteins As Hydrogel Building Blocks. Biomacromolecules, 2017, 18, 636-646.	2.6	35
2537	F-Doped Micropore/Nanorod Hierarchically Patterned Coatings for Improving Antibacterial and Osteogenic Activities of Bone Implants in Bacteria-Infected Cases. ACS Biomaterials Science and Engineering, 2017, 3, 1437-1450.	2.6	26
2538	Thermoresponsive Semi-IPN Hydrogel Microfibers from Continuous Fluidic Processing with High Elasticity and Fast Actuation. ACS Applied Materials & Interfaces, 2017, 9, 901-908.	4.0	99
2539	Self-Assembly of Thermoreversible Hydrogels via Molecular Recognition toward a Spatially Organized Coculture System. Biomacromolecules, 2017, 18, 281-287.	2.6	8
2540	Polysaccharides/mesoporous silica nanoparticles hybrid composite hydrogel beads for sustained drug delivery. Journal of Materials Science, 2017, 52, 3095-3109.	1.7	28
2541	Biophysical regulation of mouse embryonic stem cell fate and genomic integrity by feeder derived matrices. Biomaterials, 2017, 119, 9-22.	5.7	21
2542	Primordial germ cell differentiation of nuclear transfer embryonic stem cells using surface modified electroconductive scaffolds. In Vitro Cellular and Developmental Biology - Animal, 2017, 53, 371-380.	0.7	3
2543	3D Fabrication of Polymeric Scaffolds for Regenerative Therapy. ACS Biomaterials Science and Engineering, 2017, 3, 1175-1194.	2.6	105
2544	Responsive Nanogel Probe for Ratiometric Fluorescent Sensing of pH and Strain in Hydrogels. ACS Macro Letters, 2017, 6, 1245-1250.	2.3	33
2545	In Vitro Design of Nanoparticles Using an Artificial 3D-Blood Vessel Wall Model for Atherosclerosis Treatment. ACS Symposium Series, 2017, , 195-225.	0.5	0
2546	Biological responses to nanomaterials: understanding nano-bio effects on cell behaviors. Drug Delivery, 2017, 24, 1-15.	2.5	67
2547	Directing the osteoblastic and chondrocytic differentiations of mesenchymal stem cells: matrix vs. induction media. International Journal of Energy Production and Management, 2017, 4, 269-279.	1.9	17
2548	Hydrogels that listen to cells: a review of cell-responsive strategies in biomaterial design for tissue regeneration. Materials Horizons, 2017, 4, 1020-1040.	6.4	144
2549	Synthesis and characterization of well-defined hydrogel matrices and their application to intestinal stem cell and organoid culture. Nature Protocols, 2017, 12, 2263-2274.	5.5	98
2550	Controlling Enzymatic Polymerization from Surfaces with Switchable Bioaffinity. Biomacromolecules, 2017, 18, 4261-4270.	2.6	31

#	Article	IF	Citations
2551	From Biomaterial, Biomimetic, and Polymer to Biodegradable and Biocompatible Liquid Crystal Elastomer Cell Scaffolds. ACS Symposium Series, 2017, , 3-45.	0.5	7
2552	Degradable and biocompatible hydrogels bearing a hindered urea bond. Biomaterials Science, 2017, 5, 2398-2402.	2.6	18
2553	Functional and Biomimetic Materials for Engineering of the Three-Dimensional Cell Microenvironment. Chemical Reviews, 2017, 117, 12764-12850.	23.0	582
2554	From supramolecular polymers to multi-component biomaterials. Chemical Society Reviews, 2017, 46, 6621-6637.	18.7	311
2555	Constructing an Anisotropic Triple-Pass Tubular Framework within a Lyophilized Porous Gelatin Scaffold Using Dexamethasone-Loaded Functionalized Whatman Paper To Reinforce Its Mechanical Strength and Promote Osteogenesis. Biomacromolecules, 2017, 18, 3788-3801.	2.6	6
2556	Designing Bioactive Scaffolds for Dental Tissue Engineering. , 2017, , 423-447.		2
2557	Development of magnetically active scaffolds as intrinsically-deformable bioreactors. MRS Communications, 2017, 7, 367-374.	0.8	3
2558	In vitro remodeling and structural characterization of degradable polymer scaffold-based tissue-engineered vascular grafts using optical coherence tomography. Cell and Tissue Research, 2017, 370, 417-426.	1.5	9
2559	Inverse poroelasticity as a fundamental mechanism in biomechanics and mechanobiology. Nature Communications, 2017, 8, 1002.	5.8	69
2560	Self-Healing Hydrogels Formed by Complexation between Calcium Ions and Bisphosphonate-Functionalized Star-Shaped Polymers. Macromolecules, 2017, 50, 8698-8706.	2.2	39
2561	Immobilization of Recombinant E. coli Cells in a Bacterial Celluloseâ€“Silk Composite Matrix To Preserve Biological Function. ACS Biomaterials Science and Engineering, 2017, 3, 2278-2292.	2.6	23
2562	Cucurbiturilâ€mediated immobilization of fluorescent proteins on supramolecular biomaterials. Journal of Polymer Science Part A, 2017, 55, 3607-3616.	2.5	9
2563	Molecular modeling to predict peptide accessibility for peptide-functionalized hydrogels. Biointerphases, 2017, 12, 031008.	0.6	4
2564	Mechanically dynamic PDMS substrates to investigate changing cell environments. Biomaterials, 2017, 145, 23-32.	5.7	68
2565	Biomaterials and Cells for Revascularization. Molecular and Translational Medicine, 2017, , 139-172.	0.4	2
2566	Preparation and biocompatibility of electrospinning PDLLA/Î²-TCP/collagen for peripheral nerve regeneration. RSC Advances, 2017, 7, 41593-41602.	1.7	18
2567	Intermediate Filaments and the Regulation of Cell Motility during Regeneration and Wound Healing. Cold Spring Harbor Perspectives in Biology, 2017, 9, a022046.	2.3	82
2568	Patterning Bioactive Proteins or Peptides on Hydrogel Using Photochemistry for Biological Applications. Journal of Visualized Experiments, 2017, , .	0.2	1

#	Article	IF	Citations
2569	Biomimetic Stress Sensitive Hydrogel Controlled by DNA Nanoswitches. Biomacromolecules, 2017, 18, 3310-3317.	2.6	31
2570	Dendrimers and Dendrimers-Grafted Superparamagnetic Iron Oxide Nanoparticles: Synthesis, Characterization, Functionalization, and Biological Applications in Drug Delivery Systems. , 2017, , 75-94.		5
2571	Fibronectin in Layer-by-Layer Assembled Films Switches Tumor Cells between 2D and 3D Morphology. ACS Biomaterials Science and Engineering, 2017, 3, 2559-2569.	2.6	5
2572	Surface characterization and biodegradation behavior of magnesium implanted poly(l) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 52	0.6	2
2573	Advanced Biotechnologies Toward Engineering a Cell Home for Stem Cell Accommodation. Advanced Materials Technologies, 2017, 2, 1700022.	3.0	9
2574	Collagen Fibril Intermolecular Spacing Changes with 2-Propanol: A Mechanism for Tissue Stiffness. ACS Biomaterials Science and Engineering, 2017, 3, 2524-2532.	2.6	12
2575	Displacement and hybridization reactions in aptamer-functionalized hydrogels for biomimetic protein release and signal transduction. Chemical Science, 2017, 8, 7306-7311.	3.7	24
2576	Hydrogel substrate stress-relaxation regulates the spreading and proliferation of mouse myoblasts. Acta Biomaterialia, 2017, 62, 82-90.	4.1	120
2577	The effect of HPMC and MC as pore formers on the rheology of the implant microenvironment and the drug release in vitro. Carbohydrate Polymers, 2017, 177, 433-442.	5.1	12
2578	Collagen Fibril Response to Strain in Scaffolds from Ovine Forestomach for Tissue Engineering. ACS Biomaterials Science and Engineering, 2017, 3, 2550-2558.	2.6	14
2579	Matrix degradability controls multicellularity of 3D cell migration. Nature Communications, 2017, 8, 371.	5.8	192
2580	Endothelial Cell Culture Under Perfusion On A Polyester-Toner Microfluidic Device. Scientific Reports, 2017, 7, 10466.	1.6	20
2581	Programming Cell Adhesion for On-Chip Sequential Boolean Logic Functions. Journal of the American Chemical Society, 2017, 139, 10176-10179.	6.6	103
2582	Use of human aortic extracellular matrix as a scaffold for construction of a patient-specific tissue engineered vascular patch. Biomedical Materials (Bristol), 2017, 12, 065006.	1.7	21
2583	Key players in the immune response to biomaterial scaffolds for regenerative medicine. Advanced Drug Delivery Reviews, 2017, 114, 184-192.	6.6	259
2584	Impermeable Robust Hydrogels via Hybrid Lamination. Advanced Healthcare Materials, 2017, 6, 1700520.	3.9	58
2586	Beyond organoids: In vitro vasculogenesis and angiogenesis using cells from mammals and zebrafish. Reproductive Toxicology, 2017, 73, 292-311.	1.3	23
2587	Spatially and temporally controlled hydrogels for tissue engineering. Materials Science and Engineering Reports, 2017, 119, 1-35.	14.8	151

#	Article	IF	Citations
2588	3D Printing Polymers with Supramolecular Functionality for Biological Applications. Biomacromolecules, 2017, 18, 2669-2687.	2.6	90
2589	Aligned fibers direct collective cell migration to engineer closing and nonclosing wound gaps. Molecular Biology of the Cell, 2017, 28, 2579-2588.	0.9	40
2590	Production of rotary jet spun ultrathin fibers of poly-butylene adipate-co-terephthalate (PBAT) filled with nanocomposites. , 2017, , .		0
2591	Engineering Advanced Models of the Glioblastoma Microenvironment Using Biomaterials. Biology of Extracellular Matrix, 2017, , 75-89.	0.3	0
2592	A comparison of tracheal scaffold strategies for pediatric transplantation in a rabbit model. Laryngoscope, 2017, 127, E449-E457.	1.1	31
2593	Deriving vascular smooth muscle cells from mesenchymal stromal cells: Evolving differentiation strategies and current understanding of their mechanisms. Biomaterials, 2017, 145, 9-22.	5.7	38
2594	Hydrogel scaffolds for differentiation of adipose-derived stem cells. Chemical Society Reviews, 2017, 46, 6255-6275.	18.7	268
2596	Challenges and opportunities in the manufacture and expansion of cells for therapy. Expert Opinion on Biological Therapy, 2017, 17, 1221-1233.	1.4	13
2597	Polarity Conversion of Conjugated Polymer for Lysosome Escaping. ACS Applied Materials & Interfaces, 2017, 9, 27427-27432.	4.0	8
2599	Advances in bioprinted cell-laden hydrogels for skin tissue engineering. Biomanufacturing Reviews, 2017, 2, 1.	4.8	72
2600	Preparation and characterization of nanoparticle reinforced alginate fibers with high porosity for potential wound dressing application. RSC Advances, 2017, 7, 39349-39358.	1.7	27
2601	Improved survival of cardiac cells on surface modified electrospun nanofibers. Polymer Science - Series A, 2017, 59, 515-523.	0.4	8
2602	Use of Tethered Hydrogel Microcoatings for Mesenchymal Stem Cell Equilibrium, Differentiation, and Selfâ€Organization into Microtissues. Advanced Biology, 2017, 1, e1700116.	3.0	3
2604	Designer biomaterials for mechanobiology. Nature Materials, 2017, 16, 1164-1168.	13.3	144
2605	Autologous Cell Seeding in Tracheal Tissue Engineering. Current Stem Cell Reports, 2017, 3, 279-289.	0.7	30
2606	Injectable Polymeric Cytokine-Binding Nanowires Are Effective Tissue-Specific Immunomodulators. ACS Nano, 2017, 11, 11433-11440.	7.3	17
2607	Rising influence of synthetic biology in regenerative medicine. Engineering Biology, 2017, 1, 24-29.	0.8	3
2608	Mask-free fabrication of a versatile microwell chip for multidimensional cellular analysis and drug screening. Lab on A Chip, 2017, 17, 4243-4252.	3.1	30

#	Article	IF	Citations
2609	Inverse Opal Scaffolds and Their Biomedical Applications. Advanced Materials, 2017, 29, 1701115.	11.1	127
2610	Poly(ethylene glycol)-Mediated Collagen Gel Mechanics Regulates Cellular Phenotypes in a Microchanneled Matrix. Biomacromolecules, 2017, 18, 2315-2323.	2.6	3
2611	Bacterial Cellulose Shifts Transcriptome and Proteome of Cultured Endothelial Cells Towards Native Differentiation. Molecular and Cellular Proteomics, 2017, 16, 1563-1577.	2.5	18
2612	Acquisition of anoikis resistance promotes alterations in the Ras/ERK and PI3K/Akt signaling pathways and matrix remodeling in endothelial cells. Apoptosis: an International Journal on Programmed Cell Death, 2017, 22, 1116-1137.	2.2	41
2613	Decellularized extracellular matrix: a step towards the next generation source for bioink manufacturing. Biofabrication, 2017, 9, 034104.	3.7	163
2614	From molecular design to 3D printed life-like materials with unprecedented properties. Current Opinion in Biomedical Engineering, 2017, 2, 43-48.	1.8	13
2615	6.20 Skin Tissue Engineering â˜†. , 2017, , 334-382.		3
2616	Forbidden Chemistry: Two-Photon Pathway in [2+2] Cycloaddition of Maleimides. Journal of the American Chemical Society, 2017, 139, 10184-10187.	6.6	17
2617	Self-assembly of bioactive peptides, peptide conjugates, and peptide mimetic materials. Organic and Biomolecular Chemistry, 2017, 15, 5867-5876.	1.5	136
2618	Peptide-functionalized poly[oligo(ethylene glycol) methacrylate] brushes on dopamine-coated stainless steel for controlled cell adhesion. Acta Biomaterialia, 2017, 59, 108-116.	4.1	37
2619	Structureâ€“property relationships of Thai silkâ€“microcrystalline cellulose biocomposite materials fabricated from ionic liquid. International Journal of Biological Macromolecules, 2017, 104, 919-928.	3.6	26
2620	Sodium Alginate/Carboxyl-Functionalized Graphene Composite Hydrogel Via Neodymium Ions Coordination. Journal of Materials Science and Technology, 2017, 33, 821-826.	5.6	28
2621	Effects of Structural Variations on the Cellular Response and Mechanical Properties of Biocompatible, Biodegradable, and Porous Smectic Liquid Crystal Elastomers. Macromolecular Bioscience, 2017, 17, 1600278.	2.1	28
2622	Novel approaches toward the generation of bioscaffolds as a potential therapy in cardiovascular tissue engineering. International Journal of Cardiology, 2017, 228, 319-326.	0.8	24
2623	Experimental research on laser interference micro/nano fabrication of hydrophobic modification of stent surface. Lasers in Medical Science, 2017, 32, 221-227.	1.0	12
2624	Mechanoresponsive materials for drug delivery: Harnessing forces for controlled release. Advanced Drug Delivery Reviews, 2017, 108, 68-82.	6.6	84
2625	Hydrogel with Orthogonal Reactive Units: 2D and 3D Crossâ€Linking Modulation. Macromolecular Rapid Communications, 2017, 38, 1600570.	2.0	9
2626	Patterned Poly(dopamine) Films for Enhanced Cell Adhesion. Bioconjugate Chemistry, 2017, 28, 75-80.	1.8	20

#	Article	IF	Citations
2627	Role of non-mulberry silk fibroin in deposition and regulation of extracellular matrix towards accelerated wound healing. Acta Biomaterialia, 2017, 48, 157-174.	4.1	174
2628	Metal Chelation Dynamically Regulates the Mechanical Properties of Engineered Protein Hydrogels. ACS Biomaterials Science and Engineering, 2017, 3, 742-749.	2.6	26
2629	Cell delivery for regenerative medicine by using bioresorbable polymers. , 2017, , 365-389.		1
2630	Biodegradable and biomimetic elastomeric scaffolds for tissue-engineered heart valves. Acta Biomaterialia, 2017, 48, 2-19.	4.1	67
2631	Enzyme-mediated stiffening hydrogels for probing activation of pancreatic stellate cells. Acta Biomaterialia, 2017, 48, 258-269.	4.1	64
2632	Electrically conductive graphene/polyacrylamide hydrogels produced by mild chemical reduction for enhanced myoblast growth and differentiation. Acta Biomaterialia, 2017, 48, 100-109.	4.1	142
2633	Selfâ€Assembled Peptideâ€Based Hydrogels as Scaffolds for Proliferation and Multiâ€Differentiation of Mesenchymal Stem Cells. Macromolecular Bioscience, 2017, 17, 1600192.	2.1	33
2634	Shape Memory Silk Protein Sponges for Minimally Invasive Tissue Regeneration. Advanced Healthcare Materials, 2017, 6, 1600762.	3.9	46
2635	Electrospinning versus microfluidic spinning of functional fibers for biomedical applications. Biomaterials, 2017, 114, 121-143.	5.7	287
2636	Polysaccharide-based materials in macromolecular prodrug design and development. International Materials Reviews, 2017, 62, 78-98.	9.4	24
2637	Microengineered 3D cellâ€laden thermoresponsive hydrogels for mimicking cell morphology and orientation in cartilage tissue engineering. Biotechnology and Bioengineering, 2017, 114, 217-231.	1.7	61
2638	Innovative encapsulation platform based on pancreatic extracellular matrix achieve substantial insulin delivery. Journal of Controlled Release, 2017, 257, 91-101.	4.8	75
2639	In vivo periodontal tissue regeneration by periodontal ligament stem cells and endothelial cells in threeâ€dimensional cell sheet constructs. Journal of Periodontal Research, 2017, 52, 408-418.	1.4	43
2640	A Clinical, Biological, and Biomaterials Perspective into Tendon Injuries and Regeneration. Tissue Engineering - Part B: Reviews, 2017, 23, 44-58.	2.5	110
2641	Biological activity of peptideâ€conjugated polyion complex matrices consisting of alginate and chitosan. Biopolymers, 2017, 108, e22983.	1.2	4
2642	Photoâ€crosslinked poly(ethylene glycol) diacrylate (<scp>PEGDA</scp>) hydrogels from low molecular weight prepolymer: Swelling and permeation studies. Journal of Applied Polymer Science, 2017, 134, .	1.3	92
2643	Synthetic niche substrates engineered via two-photon laser polymerization for the expansion of human mesenchymal stromal cells. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 2836-2845.	1.3	32
2644	Dynamically tunable cell culture platforms for tissue engineering and mechanobiology. Progress in Polymer Science, 2017, 65, 53-82.	11.8	149

#	Article	IF	Citations
2645	Biomaterial microarchitecture: a potent regulator of individual cell behavior and multicellular organization. Journal of Biomedical Materials Research - Part A, 2017, 105, 640-661.	2.1	53
2646	Biochemical and Biophysical Cues in Matrix Design for Chronic and Diabetic Wound Treatment. Tissue Engineering - Part B: Reviews, 2017, 23, 9-26.	2.5	30
2647	Guiding hMSC Adhesion and Differentiation on Supported Lipid Bilayers. Advanced Healthcare Materials, 2017, 6, 1600862.	3.9	27
2648	Guiding Cell Attachment in 3D Microscaffolds Selectively Functionalized with Two Distinct Adhesion Proteins. Advanced Materials, 2017, 29, 1604342.	11.1	123
2649	Automated Robotic Liquid Handling Assembly of Modular DNA Devices. Journal of Visualized Experiments, 2017, , .	0.2	14
2650	3.7 Raman Spectroscopy. , 2017, , 108-127.		0
2651	Poly(ethylene glycol) and Co-polymer Based-Hydrogels for Craniofacial Bone Tissue Engineering. , 2017, , 225-246.		2
2652	Cell migration guided by a groove with branches. Journal of Biomechanical Science and Engineering, 2017, 12, 16-00613-16-00613.	0.1	1
2653	A bone-on-a-chip microdevice for long-term spontaneous 3D bone tissue formation and cancer bone metastasis. , 2017, , .		1
2654	Tissue-Engineered Solutions in Plastic and Reconstructive Surgery: Principles and Practice. Frontiers in Surgery, 2017, 4, 4.	0.6	37
2655	Polymer Design and Development. , 2017, , 295-314.		20
2656	Advances in the Development of Supramolecular Polymeric Biomaterials. , 2017, , 255-282.		1
2657	2.21 Xenogenic Tissues and Biomaterials for the Skeletal System â˜†. , 2017, , 471-504.		0
2658	Electrospun scaffolds for vascular tissue engineering. , 2017, , 261-287.		3
2659	Challenges and Strategies for Improving the Regenerative Effects of Mesenchymal Stromal Cell-Based Therapies. International Journal of Molecular Sciences, 2017, 18, 2087.	1.8	178
2660	Biosynthetic PCL-graft-Collagen Bulk Material for Tissue Engineering Applications. Materials, 2017, 10, 693.	1.3	45
2661	Nucleobase-Containing Polymers: Structure, Synthesis, and Applications. Polymers, 2017, 9, 666.	2.0	32
2662	4.9 Integrin-Activated Reactions to Metallic Implant Surfaces â˜†. , 2017, , 130-151.		0

#	Article	IF	Citations
2663	Porous scaffolds. , 2017, , 27-59.		7
2664	Employing Microfluidic Devices to Induce Concentration Gradients. , 2017, , 429-442.		4
2665	Remodeling the Human Adult Stem Cell Niche for Regenerative Medicine Applications. Stem Cells International, 2017, 2017, 1-10.	1.2	17
2666	Intestinal Stem Cell Niche Insights Gathered from BothIn Vivoand NovelIn VitroModels. Stem Cells International, 2017, 2017, 1-10.	1.2	14
2667	6.15 Tissue Engineering of Heart Valves. , 2017, , 256-272.		1
2668	Regeneration concerns in craniofacial cartilage and bone defects. , 2017, , 429-443.		1
2669	Artificial Cardiac Muscle with or without the Use of Scaffolds. BioMed Research International, 2017, 2017, 1-15.	0.9	7
2670	Rapid In Situ MRI Traceable Gel-forming Dual-drug Delivery for Synergistic Therapy of Brain Tumor. Theranostics, 2017, 7, 2524-2536.	4.6	21
2671	7.32 Engineering the Neural Interface. , 2017, , 642-660.		4
2672	Perspectives of bioinspired materials in regenerative medicine. , 2017, , 139-175.		0
2673	4.32 Gene Editing Tools. , 2017, , 589-599.		0
2674	2.9 Materials as Artificial Stem Cell Microenvironments â˜†. , 2017, , 179-201.		0
2675	4.14 Rational and Combinatorial Methods to Create Designer Protein Interfaces â˜†. , 2017, , 221-247.		1
2676	4.31 Cell-Demanded Release of Growth Factors â˜†. , 2017, , 571-588.		1
2677	4.22 Engineering the Biophysical Properties of Basement Membranes Into Biomaterials: Fabrication and Effects on Cell Behavior â˜†. , 2017, , 404-429.		3
2678	Immunological challenges associated with artificial skin grafts: available solutions and stem cells in future design of synthetic skin. Journal of Biological Engineering, 2017, 11, 49.	2.0	68
2679	Biometrology in Tissue Engineering: Thoughts and Concepts. Journal of Scientific and Industrial Metrology, 2017, 01, .	0.1	1
2680	Designing Stem Cell Niche for Liver Development and Regeneration. , 2017, , 581-600.		2

#	Article	IF	Citations
2681	Nerve guidance conduit with a hybrid structure of a PLGA microfibrous bundle wrapped in a micro/nanostructured membrane. International Journal of Nanomedicine, 2017, Volume 12, 421-432.	3.3	36
2682	Thermal Transport in Soft PAAm Hydrogels. Polymers, 2017, 9, 688.	2.0	73
2683	Three dimensional tumor models for cancer studies. Frontiers in Bioscience - Elite, 2017, 9, 162-173.	0.9	11
2684	Biomimetic Polymers (for Biomedical Applications). , 2017, , .		0
2685	Recent advances on gradient hydrogels in biomimetic cartilage tissue engineering. F1000Research, 2017, 6, 2158.	0.8	12
2686	Supramolecular Gelators in a Biomedical Context. , 2017, , 213-225.		1
2687	Magnetic steering of liquid metal mobiles. Soft Matter, 2018, 14, 3236-3245.	1.2	37
2688	Quantifying orientational regeneration of injured neurons by natural product concentration gradients in a 3D microfluidic device. Lab on A Chip, 2018, 18, 971-978.	3.1	15
2689	Self-assembled supramolecular systems for bone engineering applications. Current Opinion in Colloid and Interface Science, 2018, 35, 104-111.	3.4	12
2690	Polymer on Top: Current Limits and Future Perspectives of Quantitatively Evaluating Surface Grafting. Advanced Materials, 2018, 30, e1706321.	11.1	70
2691	Production-scale fibronectin nanofibers promote wound closure and tissue repair in a dermal mouse model. Biomaterials, 2018, 166, 96-108.	5.7	72
2692	A new â€˜stickingâ€™ coating method for the in situ formation of nanofiber networks on micrometer to millimeter-sized surfaces. Nanoscale, 2018, 10, 6277-6281.	2.8	2
2693	Polylactic Acid Nanopillar Array-Driven Osteogenic Differentiation of Human Adipose-Derived Stem Cells Determined by Pillar Diameter. Nano Letters, 2018, 18, 2243-2253.	4.5	92
2694	Novel Microfluidic Colon with an Extracellular Matrix Membrane. ACS Biomaterials Science and Engineering, 2018, 4, 1377-1385.	2.6	26
2695	3D Jet Writing: Functional Microtissues Based on Tessellated Scaffold Architectures. Advanced Materials, 2018, 30, e1707196.	11.1	58
2696	Azobenzene-based polymers: emerging applications as cell culture platforms. Biomaterials Science, 2018, 6, 990-995.	2.6	46
2697	A Fast, Reversible, and Robust Gradient Nanocomposite Hydrogel Actuator with Waterâ€Promoted Thermal Response. Macromolecular Rapid Communications, 2018, 39, e1700863.	2.0	60
2698	Molecularly Selective Regulation of Delivery Fluxes by Employing Supramolecular Interactions in Layerâ€byâ€Layer Films. Chemistry - an Asian Journal, 2018, 13, 1067-1073.	1.7	6

#	Article	IF	Citations
2699	Layers and Multilayers of Self-Assembled Polymers: Tunable Engineered Extracellular Matrix Coatings for Neural Cell Growth. Langmuir, 2018, 34, 8709-8730.	1.6	33
2700	Mesoporous Silica Nanoparticlesâ€Reinforced Hydrogel Scaffold together with Pinacidil Loading to Improve Stem Cell Adhesion. ChemNanoMat, 2018, 4, 631-641.	1.5	37
2701	Simulation and Fabrication of Stronger, Larger, and Faster Walking Biohybrid Machines. Advanced Functional Materials, 2018, 28, 1801145.	7.8	61
2702	Protective therapeutic effects of peptide nanofiber and hyaluronic acid hybrid membrane in in vivo osteoarthritis model. Acta Biomaterialia, 2018, 73, 263-274.	4.1	29
2703	Degradation rate affords a dynamic cue to regulate stem cells beyond varied matrix stiffness. Biomaterials, 2018, 178, 467-480.	5.7	118
2704	Double network hydrogel for tissue engineering. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2018, 10, e1520.	3.3	104
2705	Mechanical characteristics of beta sheet-forming peptide hydrogels are dependent on peptide sequence, concentration and buffer composition. Royal Society Open Science, 2018, 5, 171562.	1.1	31
2706	Synthesis and peptide functionalization of hyperbranched poly(arylene oxindole) towards versatile biomaterials. Polymer Chemistry, 2018, 9, 2775-2784.	1.9	7
2707	Coding Cell Micropatterns Through Peptide Inkjet Printing for Arbitrary Biomineralized Architectures. Advanced Functional Materials, 2018, 28, 1800228.	7.8	31
2708	Protein Bricks: 2D and 3D Bioâ€Nanostructures with Shape and Function on Demand. Advanced Materials, 2018, 30, e1705919.	11.1	50
2709	3D functional scaffolds for skin tissue engineering. , 2018, , 345-365.		36
2710	Construction of scaffolds composed of acellular cardiac extracellular matrix for myocardial tissue engineering. Biologicals, 2018, 53, 10-18.	0.5	28
2711	Injectable polypeptide hydrogels via methionine modification for neural stem cell delivery. Biomaterials, 2018, 178, 527-545.	5.7	43
2712	Instructive microenvironments in skin wound healing: Biomaterials as signal releasing platforms. Advanced Drug Delivery Reviews, 2018, 129, 95-117.	6.6	127
2713	The effects of hydroxyapatite nanoparticles embedded in a MMP-sensitive photoclickable PEG hydrogel on encapsulated MC3T3-E1 pre-osteoblasts. Biomedical Materials (Bristol), 2018, 13, 045009.	1.7	30
2714	Application of minimally invasive injectable conductive hydrogels as stimulating scaffolds for myocardial tissue engineering. Polymer International, 2018, 67, 975-982.	1.6	15
2715	Tissue engineering of retina and Bruchâ€™s membrane: a review of cells, materials and processes. British Journal of Ophthalmology, 2018, 102, 1182-1187.	2.1	17
2716	Control of thiol-maleimide reaction kinetics in PEG hydrogel networks. Acta Biomaterialia, 2018, 70, 120-128.	4.1	83

#	Article	IF	Citations
2717	Delivery of cellular factors to regulate bone healing. Advanced Drug Delivery Reviews, 2018, 129, 285-294.	6.6	51
2718	A Spontaneous 3D Boneâ€Onâ€aâ€Chip for Bone Metastasis Study of Breast Cancer Cells. Small, 2018, 14, e1702787.	5.2	138
2719	Neural stem cell encapsulation and differentiation in strain promoted crosslinked polyethylene glycol-based hydrogels. Journal of Biomaterials Applications, 2018, 32, 1222-1230.	1.2	21
2720	A thermoresponsive, citrateâ€based macromolecule for bone regenerative engineering. Journal of Biomedical Materials Research - Part A, 2018, 106, 1743-1752.	2.1	14
2721	Hydrodynamically Guided Hierarchical Selfâ€Assembly of Peptideâ€“Protein Bioinks. Advanced Functional Materials, 2018, 28, 1703716.	7.8	78
2722	Regulation of skeletal myotube formation and alignment by nanotopographically controlled cellâ€secreted extracellular matrix. Journal of Biomedical Materials Research - Part A, 2018, 106, 1543-1551.	2.1	26
2723	Feasibility of Defect Tunable Bone Engineering Using Electroblown Bioactive Fibrous Scaffolds with Dental Stem Cells. ACS Biomaterials Science and Engineering, 2018, 4, 1019-1028.	2.6	15
2724	Heart valve tissue engineering: an overview of heart valve decellularization processes. Regenerative Medicine, 2018, 13, 41-54.	0.8	36
2725	Recent Advances in Cell Electrospining of Natural and Synthetic Nanofibers for Regenerative Medicine. Drug Research, 2018, 68, 425-435.	0.7	35
2726	Design and fabrication of injectable microcarriers composed of acellular cartilage matrix and chitosan. Journal of Biomaterials Science, Polymer Edition, 2018, 29, 683-700.	1.9	25
2727	Heterogeneous adhesion of cells on polymer surfaces with underlying amorphous/crystalline phases. Journal of Materials Chemistry B, 2018, 6, 903-907.	2.9	6
2728	Large and Small Assembly: Combining Functional Macromolecules with Small Peptides to Control the Morphology of Skeletal Muscle Progenitor Cells. Biomacromolecules, 2018, 19, 825-837.	2.6	26
2729	Logic Catalytic Interconversion of G-Molecular Hydrogel. ACS Applied Materials & Interfaces, 2018, 10, 4512-4518.	4.0	47
2730	Parallel droplet microfluidics for high throughput cell encapsulation and synthetic microgel generation. Microsystems and Nanoengineering, 2018, 4, .	3.4	110
2731	Composite Bijel-Templated Hydrogels for Cell Delivery. ACS Biomaterials Science and Engineering, 2018, 4, 587-594.	2.6	33
2732	Scarring vs. functional healing: Matrix-based strategies to regulate tissue repair. Advanced Drug Delivery Reviews, 2018, 129, 407-419.	6.6	80
2733	Secret handshakes: cellâ€“cell interactions and cellular mimics. Current Opinion in Cell Biology, 2018, 50, 14-19.	2.6	16
2734	Rationally designed synthetic protein hydrogels with predictable mechanical properties. Nature Communications, 2018, 9, 620.	5.8	145

#	Article	IF	Citations
2735	Nanocomposite injectable gels capable of self-replenishing regenerative extracellular microenvironments for in vivo tissue engineering. Biomaterials Science, 2018, 6, 550-561.	2.6	30
2736	Layer-by-layer 3-dimensional nanofiber tissue scaffold with controlled gap by electrospinning. Materials Research Express, 2018, 5, 025401.	0.8	4
2737	Recombinant collagen scaffolds as substrates for human neural stem/progenitor cells. Journal of Biomedical Materials Research - Part A, 2018, 106, 1363-1372.	2.1	31
2738	Catheter Injected Bone Marrow Mesenchymal Stem Cells Induce Efficacious Occlusion of Arteriovenous Nidus in a Swine Model. European Journal of Vascular and Endovascular Surgery, 2018, 55, 433-442.	0.8	5
2739	Influence of topography of nanofibrous scaffolds on functionality of engineered neural tissue. Journal of Materials Chemistry B, 2018, 6, 930-939.	2.9	26
2740	Hierarchical Design of Tissue Regenerative Constructs. Advanced Healthcare Materials, 2018, 7, e1701067.	3.9	68
2741	Electric fields control the orientation of peptides irreversibly immobilized on radical-functionalized surfaces. Nature Communications, 2018, 9, 357.	5.8	77
2742	An integrated multi-layer 3D-fabrication of PDA/RGD coated graphene loaded PCL nanoscaffold for peripheral nerve restoration. Nature Communications, 2018, 9, 323.	5.8	255
2743	A Mineralized Collagen-Polycaprolactone Composite Promotes Healing of a Porcine Mandibular Defect. Tissue Engineering - Part A, 2018, 24, 943-954.	1.6	23
2744	Recent Progress in Developing Injectable Matrices for Enhancing Cell Delivery and Tissue Regeneration. Advanced Healthcare Materials, 2018, 7, e1701065.	3.9	59
2745	Acellular dermal matrix collagen responds to strain by intermolecular spacing contraction with fibril extension and rearrangement. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 79, 1-8.	1.5	12
2746	Assessing multiparametric drug response in tissue engineered tumor microenvironment models. Methods, 2018, 134-135, 20-31.	1.9	21
2747	Effect of resveratrol release kinetic from electrospun nanofibers on osteoblast and osteoclast differentiation. European Polymer Journal, 2018, 99, 289-297.	2.6	35
2749	Integrated Experimental and Modeling Study of Enzymatic Degradation Using Novel Autofluorescent BSA Microspheres. Langmuir, 2018, 34, 191-197.	1.6	1
2750	Ultrastiff, Thermoresponsive Nanocomposite Hydrogels Composed of Ternary Polymerâ€“Clayâ€“Silica Networks. Macromolecules, 2018, 51, 529-539.	2.2	62
2751	Natural Humicâ€Acidâ€Based Phototheranostic Agent. Advanced Healthcare Materials, 2018, 7, e1701202.	3.9	31
2752	Volumetric muscle loss injury repair using in situ fibrin gel cast seeded with muscle-derived stem cells (MDSCs). Stem Cell Research, 2018, 27, 65-73.	0.3	61
2753	Injectable thermogel for 3D culture of stem cells. Biomaterials, 2018, 159, 91-107.	5.7	85

#	Article	IF	Citations
2754	About Chemical Strategies to Fabricate Cellâ€Instructive Biointerfaces with Static and Dynamic Complexity. Advanced Healthcare Materials, 2018, 7, e1701192.	3.9	25
2755	Recent biomedical applications of bio-sourced materials. Bio-Design and Manufacturing, 2018, 1, 26-44.	3.9	13
2756	Silk Fibroin-Based Hydrogels and Scaffolds for Osteochondral Repair and Regeneration. Advances in Experimental Medicine and Biology, 2018, 1058, 305-325.	0.8	27
2757	Biofabrication strategies for 3D in vitro models and regenerative medicine. Nature Reviews Materials, 2018, 3, 21-37.	23.3	502
2758	Muscle stem cell intramuscular delivery within hyaluronan methylcellulose improves engraftment efficiency and dispersion. Biomaterials, 2018, 173, 34-46.	5.7	34
2759	Transplantation of autologous esophageal mucosa to prevent stricture after circumferential endoscopic submucosal dissection of early esophageal cancer (with video). Gastrointestinal Endoscopy, 2018, 88, 543-546.	0.5	39
2760	Recent studies on electrospinning preparation of patterned, coreâ€“shell, and aligned scaffolds. Journal of Applied Polymer Science, 2018, 135, 46570.	1.3	22
2761	Osteochondral Tissue Engineering. Advances in Experimental Medicine and Biology, 2018, , .	0.8	2
2762	Anti-thrombogenicity and permeability of polyethersulfone hollow fiber membrane with sulfonated alginate toward blood purification. International Journal of Biological Macromolecules, 2018, 116, 364-377.	3.6	24
2763	Leftâ€Right Symmetry or Asymmetry of Cells on Stripeâ€Like Micropatterned Material Surfaces. Chinese Journal of Chemistry, 2018, 36, 605-611.	2.6	13
2764	Decellularized Cartilage Directs Chondrogenic Differentiation: Creation of a Fracture Callus Mimetic. Tissue Engineering - Part A, 2018, 24, 1364-1376.	1.6	15
2765	Switchable Thermal Responsive Interpenetrated Polymer Network Gels of Poly(N-vinylacetamide) and Poly(N-vinylisobutyramide). Chemistry Letters, 2018, 47, 591-593.	0.7	3
2766	Composite scaffold of micronized porcine cartilage/poly(lacticâ€‘coâ€‘glycolic acid) enhances anti-inflammatory effect. Materials Science and Engineering C, 2018, 88, 46-52.	3.8	11
2767	Engineering the Cell Microenvironment Using Novel Photoresponsive Hydrogels. ACS Applied Materials & Interfaces, 2018, 10, 12374-12389.	4.0	48
2768	Interconnectable Dynamic Compression Bioreactors for Combinatorial Screening of Cell Mechanobiology in Three Dimensions. ACS Applied Materials & Interfaces, 2018, 10, 13293-13303.	4.0	36
2769	Simulated embryonic and fetal cellular dynamics inside structured biomaterials. Applied Materials Today, 2018, 11, 291-307.	2.3	1
2770	Dynamically crosslinked carbon dots/biopolymer hydrogels exhibiting fluorescence and multi-stimuli logic-gate responses. Polymer Chemistry, 2018, 9, 2478-2483.	1.9	22
2771	Thermosensitive and photocrosslinkable hydroxypropyl chitin-based hydrogels for biomedical applications. Carbohydrate Polymers, 2018, 192, 10-18.	5.1	80

#	Article	IF	Citations
2772	3D printing strategies for peripheral nerve regeneration. Biofabrication, 2018, 10, 032001.	3.7	75
2773	Engineered Human Liver Cocultures for Investigating Drug-Induced Liver Injury. Methods in Pharmacology and Toxicology, 2018, , 213-248.	0.1	2
2774	Photoresponsive fiber scaffolds with a coreâ€“sheath nanostructure for regulating cell behaviors. Journal of Materials Chemistry B, 2018, 6, 2052-2056.	2.9	9
2775	Nanotechnologies for tissue engineering and regeneration. , 2018, , 93-206.		12
2776	M0 and M2 Macrophages Enhance Vascularization of Tissue Engineering Scaffolds. Regenerative Engineering and Translational Medicine, 2018, 4, 51-61.	1.6	25
2777	Macroporous click-elastin-like hydrogels for tissue engineering applications. Materials Science and Engineering C, 2018, 88, 140-147.	3.8	30
2778	A perspective on the physical, mechanical and biological specifications of bioinks and the development of functional tissues in 3D bioprinting. Bioprinting, 2018, 9, 19-36.	2.9	101
2779	A three-dimensional in vitro dynamic micro-tissue model of cardiac scar formation. Integrative Biology (United Kingdom), 2018, 10, 174-183.	0.6	33
2780	Patterned superhydrophobic surfaces to process and characterize biomaterials and 3D cell culture. Materials Horizons, 2018, 5, 379-393.	6.4	51
2781	Material Strategies for Modulating Epithelial to Mesenchymal Transitions. ACS Biomaterials Science and Engineering, 2018, 4, 1149-1161.	2.6	20
2782	Three-Dimensional Bioprinting Strategies for Tissue Engineering. Cold Spring Harbor Perspectives in Medicine, 2018, 8, a025718.	2.9	67
2783	Regulation of Breast Cancer Progression by Extracellular Matrix Mechanics: Insights from 3D Culture Models. ACS Biomaterials Science and Engineering, 2018, 4, 302-313.	2.6	36
2784	Limb derived cells as a paradigm for engineering selfâ€assembling skeletal tissues. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 794-807.	1.3	8
2785	High-throughput approaches for screening and analysis of cell behaviors. Biomaterials, 2018, 153, 85-101.	5.7	52
2786	Evaluation of photochemistry reaction kinetics to pattern bioactive proteins on hydrogels for biological applications. Bioactive Materials, 2018, 3, 64-73.	8.6	20
2787	Design of electrospun nanofibrous mats for osteogenic differentiation of mesenchymal stem cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 2505-2520.	1.7	60
2788	Sculpting neurotransmission during synaptic development by 2D nanostructured interfaces. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 2521-2532.	1.7	28
2789	The role of the microenvironment in the biophysics of cancer. Seminars in Cell and Developmental Biology, 2018, 73, 107-114.	2.3	53

#	Article	IF	Citations
2790	Nanotechnology and Nanomaterials for Improving Neural Interfaces. Advanced Functional Materials, 2018, 28, 1700905.	7.8	56
2791	Next generation organoids for biomedical research and applications. Biotechnology Advances, 2018, 36, 132-149.	6.0	91
2792	Biomedical applications of acrylic-based nanohydrogels. Journal of Materials Science, 2018, 53, 2303-2325.	1.7	25
2793	Multicomponent, Semi-interpenetrating-Polymer-Network and Interpenetrating-Polymer-Network Hydrogels: Smart Materials for Biomedical Applications. Springer Series on Polymer and Composite Materials, 2018, , 281-342.	0.5	6
2794	The Healthy and Diseased Microenvironments Regulate Oligodendrocyte Properties. American Journal of Pathology, 2018, 188, 39-52.	1.9	9
2795	Alginate nanobeads interspersed fibrin network as in situ forming hydrogel for soft tissue engineering. Bioactive Materials, 2018, 3, 194-200.	8.6	45
2796	Biomaterials and Tissue Engineering. , 2018, , 17-51.		28
2797	An engineered tendon/ligament bioscaffold derived from decellularized and demineralized cortical bone matrix. Journal of Biomedical Materials Research - Part A, 2018, 106, 468-478.	2.1	16
2798	Functionalized <scp>PVA</scp> â€“silk blended nanofibrous mats promote diabetic wound healing via regulation of extracellular matrix and tissue remodelling. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e1559-e1570.	1.3	85
2799	Physicochemical properties and antimicrobial activity of biocompatible carboxymethylcelluloseâ€silver nanoparticle hybrids for wound dressing and epidermal repair. Journal of Applied Polymer Science, 2018, 135, 45812.	1.3	36
2800	Use of RGD-Functionalized Sandwich Cultures to Promote Redifferentiation of Human Pancreatic Beta Cells AfterIn VitroExpansion. Tissue Engineering - Part A, 2018, 24, 394-406.	1.6	11
2801	Threeâ€Ðimensional Models of the Human Brain Development and Diseases. Advanced Healthcare Materials, 2018, 7, 1700723.	3.9	73
2802	Superabsorbent crosslinked carboxymethyl cellulose-PEG hydrogels for potential wound dressing applications. International Journal of Biological Macromolecules, 2018, 106, 1218-1234.	3.6	292
2803	The Advancement of Biomaterials in Regulating Stem Cell Fate. Stem Cell Reviews and Reports, 2018, 14, 43-57.	5.6	56
2804	The unique calcium chelation property of poly(vinyl phosphonic acidâ€coâ€acrylic acid) and effects on osteogenesis in vitro. Journal of Biomedical Materials Research - Part A, 2018, 106, 168-179.	2.1	15
2805	Controlling Differentiation of Stem Cells for Developing Personalized Organâ€onâ€Chip Platforms. Advanced Healthcare Materials, 2018, 7, 1700426.	3.9	65
2806	Poly(vinylphosphonic acidâ€coâ€acrylic acid) hydrogels: The effect of copolymer composition on osteoblast adhesion and proliferation. Journal of Biomedical Materials Research - Part A, 2018, 106, 255-264.	2.1	35
2807	Modulation of microenvironment for controlling the fate of periodontal ligament cells: the role of Rho/ROCK signaling and cytoskeletal dynamics. Journal of Cell Communication and Signaling, 2018, 12, 369-378.	1.8	25

#	Article	IF	Citations
2808	Isomeric control of the mechanical properties of supramolecular filament hydrogels. Biomaterials Science, 2018, 6, 216-224.	2.6	6
2809	3Dâ€Bioprinted Osteoblastâ€Laden Nanocomposite Hydrogel Constructs with Induced Microenvironments Promote Cell Viability, Differentiation, and Osteogenesis both In Vitro and In Vivo. Advanced Science, 2018, 5, 1700550.	5.6	142
2810	Fabrication Aspects of Porous Biomaterials in Orthopedic Applications: A Review. ACS Biomaterials Science and Engineering, 2018, 4, 1-39.	2.6	130
2811	Multilineage Constructs for Scaffoldâ€Based Tissue Engineering: A Review of Tissueâ€Specific Challenges. Advanced Healthcare Materials, 2018, 7, 1700734.	3.9	23
2812	Microâ€Nanostructures of Celluloseâ€Collagen for Critical Sized Bone Defect Healing. Macromolecular Bioscience, 2018, 18, 1700263.	2.1	20
2813	Dynamic and Responsive Growth Factor Delivery from Electrospun and Hydrogel Tissue Engineering Materials. Advanced Healthcare Materials, 2018, 7, 1700836.	3.9	54
2814	Zwitterionic starch-based hydrogel for the expansion and â€œstemnessâ€•maintenance of brown adipose derived stem cells. Biomaterials, 2018, 157, 149-160.	5.7	39
2815	Fibril growth kinetics link buffer conditions and topology of 3D collagen I networks. Acta Biomaterialia, 2018, 67, 206-214.	4.1	28
2816	Liquid crystal elastomer foams with elastic properties specifically engineered as biodegradable brain tissue scaffolds. Soft Matter, 2018, 14, 354-360.	1.2	55
2817	Functional hepatocyte clusters on bioactive blend silk matrices towards generating bioartificial liver constructs. Acta Biomaterialia, 2018, 67, 167-182.	4.1	56
2818	Bioengineered Liver Models for Drug Testing and Cell Differentiation Studies. Cellular and Molecular Gastroenterology and Hepatology, 2018, 5, 426-439.e1.	2.3	131
2819	Influence of brush length of <scp>PVP</scp> chains immobilized on silicon wafers on their blood compatibility. Polymers for Advanced Technologies, 2018, 29, 835-842.	1.6	2
2820	Polymeric Biomaterials Based on Polylactide, Chitosan and Hydrogels in Medicine. , 2018, , 119-147.		0
2821	Supramolecular polymeric biomaterials. Biomaterials Science, 2018, 6, 10-37.	2.6	129
2822	3D neural tissue models: From spheroids to bioprinting. Biomaterials, 2018, 154, 113-133.	5.7	207
2823	Preventing Obstructions of Nanosized Drug Delivery Systems by the Extracellular Matrix. Advanced Healthcare Materials, 2018, 7, 1700739.	3.9	27
2824	The spatial patterning of RGD and BMPâ€2 mimetic peptides at the subcellular scale modulates human mesenchymal stem cells osteogenesis. Journal of Biomedical Materials Research - Part A, 2018, 106, 959-970.	2.1	19
2825	Syndecan-1 in mechanosensing of nanotopological cues in engineered materials. Biomaterials, 2018, 155, 13-24.	5.7	16

#	Article	IF	Citations
2826	Biomaterials-based 3D cell printing for next-generation therapeutics and diagnostics. Biomaterials, 2018, 156, 88-106.	5.7	190
2827	In vivo evaluation of modified silk fibroin scaffolds with a mimicked microenvironment of fibronectin/decellularized pulp tissue for maxillofacial surgery. Biomedical Materials (Bristol), 2018, 13, 015009.	1.7	15
2828	Reversible hydrogels with tunable mechanical properties for optically controlling cell migration. Nano Research, 2018, 11, 5556-5565.	5.8	91
2829	Rebooting the collagen gel: Artificial hydrogels for the study of epithelial mesenchymal transformation. Developmental Dynamics, 2018, 247, 332-339.	0.8	5
2830	Chemical Functionalization of Polysaccharidesâ€"Towards Biocompatible Hydrogels for Biomedical Applications. Chemistry - A European Journal, 2018, 24, 1231-1240.	1.7	85
2831	Decellularization in Heart Valve Tissue Engineering. , 2018, , 289-317.		2
2832	In Vitro Human Tissues via Multi-material 3-D Bioprinting. ATLA Alternatives To Laboratory Animals, 2018, 46, 209-215.	0.7	14
2833	Artificial lung. Journal of Thoracic Disease, 2018, 10, S2329-S2332.	0.6	7
2835	Concept of Hematopoietic and Stromal Niches for Cell-Based Diagnostics and Regenerative Medicine (a) Tj ETQq0 0 0 rgBT /Overlock 10	0.9	13
2836	Synthetic hydrogels formed by thiolâ€"ene crosslinking of vinyl sulfone-functional poly(methyl vinyl) Tj ETQq1 1 0.784314 rgBT /Over	1.2	22
2837	Introductory Chapter: Multi-Aspect Bibliographic Analysis of the Synergy of Technical, Biological and Medical Sciences Concerning Materials and Technologies Used for Medical and Dental Implantable Devices. , 0, , .		4
2838	Enhancement of osteogenesis of rabbit bone marrow derived mesenchymal stem cells by transfection of human BMPâ€'2 and EGFP recombinant adenovirus via Wnt signaling pathway. Experimental and Therapeutic Medicine, 2018, 16, 4030-4036.	0.8	5
2839	In Vitro Screening of Molecularly Engineered Polyethylene Glycol Hydrogels for Cartilage Tissue Engineering using Periosteum-Derived and ATDC5 Cells. International Journal of Molecular Sciences, 2018, 19, 3341.	1.8	11
2840	3D Inkjet Printing of Complex, Cell-Laden Hydrogel Structures. Scientific Reports, 2018, 8, 17099.	1.6	96
2841	Angiogenic and Osteogenic Synergy of Human Mesenchymal Stem Cells and Human Umbilical Vein Endothelial Cells Cocultured on a Nanomatrix. Scientific Reports, 2018, 8, 15749.	1.6	29
2843	A DSSS Signal Detection Method Based on Wavelet Decomposition and Delay Multiplication. , 2018, , .		4
2844	Microenvironmental Rigidity of 3D Scaffolds and Influence on Glioblastoma Cells: A Biomaterial Design Perspective. Frontiers in Bioengineering and Biotechnology, 2018, 6, 131.	2.0	16
2845	The Effect of Scaffold Modulus on the Morphology and Remodeling of Fetal Mesenchymal Stem Cells. Frontiers in Physiology, 2018, 9, 1555.	1.3	13

#	Article	IF	Citations
2846	Porcineâ€Derived Biomaterials in Tissue Engineering and Reconstructive Surgery: Considerations and Alternatives in Muslim Patients. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 253-260.	1.3	2
2847	Engineered Biomaterials for Chronic Wound Healing. Recent Clinical Techniques, Results, and Research in Wounds, 2018, , 51-74.	0.1	3
2848	Bioengineered peptide-functionalized hydrogels for tissue regeneration and repair. , 2018, , 101-125.		11
2849	Labelâ€Free Quantification Proteomics for the Identification of Mesenchymal Stromal Cell Matrisome Inside 3D Poly(Ethylene Glycol) Hydrogels. Advanced Healthcare Materials, 2018, 7, e1800534.	3.9	21
2850	Sustained Release of IGF-1 by 3D Mesoporous Scaffolds Promoting Cardiac Stem Cell Migration and Proliferation. Cellular Physiology and Biochemistry, 2018, 49, 2358-2370.	1.1	11
2851	Natural Sources of Extracellular Matrix for Cardiac Repair. Advances in Experimental Medicine and Biology, 2018, 1098, 115-130.	0.8	10
2852	Microfluidicsâ€Assisted Fabrication of Microtissues with Tunable Physical Properties for Developing an In Vitro Multiplex Tissue Model. Advanced Biology, 2018, 2, 1800236.	3.0	19
2854	Mechanisms of Diffusion in Associative Polymer Networks: Evidence for Chain Hopping. Journal of the American Chemical Society, 2018, 140, 14185-14194.	6.6	30
2855	Investigation the in vitro biological performance of graphene/bioactive glass scaffolds using MC3T3-E1 and ATDC5 cells. Materials Technology, 2018, 33, 854-864.	1.5	5
2856	Bi-directional cell-pericellular matrix interactions direct stem cell fate. Nature Communications, 2018, 9, 4049.	5.8	90
2857	Oxygen Regulation in Development: Lessons from Embryogenesis towards Tissue Engineering. Cells Tissues Organs, 2018, 205, 350-371.	1.3	74
2858	Calcium-orthophosphate-based bioactive ceramics. , 2018, , 297-405.		4
2859	Selfâ€Assembled Nanomedicines for Anticancer and Antibacterial Applications. Advanced Healthcare Materials, 2018, 7, e1800670.	3.9	63
2860	Recent progress in the structural modification of chitosan for applications in diversified biomedical fields. European Polymer Journal, 2018, 109, 402-434.	2.6	147
2861	Multi-compartment scaffold fabricated via 3D-printing as in vitro co-culture osteogenic model. Scientific Reports, 2018, 8, 15130.	1.6	30
2862	Biomimetic Extracellular Matrices and Scaffolds Prepared from Cultured Cells. Advances in Experimental Medicine and Biology, 2018, 1078, 465-474.	0.8	4
2863	Cellular Response to Surface Morphology: Electrospinning and Computational Modeling. Frontiers in Bioengineering and Biotechnology, 2018, 6, 155.	2.0	65
2864	NIPAM-based Microgel Microenvironment Regulates the Therapeutic Function of Cardiac Stromal Cells. ACS Applied Materials & Interfaces, 2018, 10, 37783-37796.	4.0	32

#	Article	IF	Citations
2865	Simvastatin delivery on PEEK for bioactivity and osteogenesis enhancements. Journal of Biomaterials Science, Polymer Edition, 2018, 29, 2237-2251.	1.9	9
2866	DNA-Based Nanodevices Controlled by Purely Entropic Linker Domains. Journal of the American Chemical Society, 2018, 140, 14725-14734.	6.6	36
2867	Current Advances in Immunomodulatory Biomaterials for Bone Regeneration. Advanced Healthcare Materials, 2019, 8, e1801106.	3.9	264
2868	Comparative cytocompatibility of multiple candidate cell types to photoencapsulation in PEGNB/PEGDA macroscale or microscale hydrogels. Biomedical Materials (Bristol), 2018, 13, 065012.	1.7	11
2869	Responsive Protein Hydrogels Assembled from Spider Silk Carboxyl-Terminal Domain and Resilin Copolymers. Polymers, 2018, 10, 915.	2.0	14
2870	A Bioprinted Cardiac Patch Composed of Cardiacâ€Specific Extracellular Matrix and Progenitor Cells for Heart Repair. Advanced Healthcare Materials, 2018, 7, e1800672.	3.9	181
2871	Recent Advancements in Decellularized Matrix-Based Biomaterials for Musculoskeletal Tissue Regeneration. Advances in Experimental Medicine and Biology, 2018, 1077, 149-162.	0.8	9
2872	Self-Cross-Linking p(APM-co-AA) Microstructured Thin Films as Biomimetic Scaffolds. ACS Applied Bio Materials, 2018, 1, 1512-1522.	2.3	7
2873	Î²â€Aminoacrylate Synthetic Hydrogels: Easily Accessible and Operationally Simple Biomaterials Networks. Angewandte Chemie - International Edition, 2018, 57, 16026-16029.	7.2	37
2874	Î²â€Aminoacrylate Synthetic Hydrogels: Easily Accessible and Operationally Simple Biomaterials Networks. Angewandte Chemie, 2018, 130, 16258-16261.	1.6	9
2875	Decellularised tissues obtained by a CO2-philic detergent and supercritical CO2. , 2018, 36, 81-95.		25
2876	Thermally Assisted Electrohydrodynamic Jet Highâ€Resolution Printing of Highâ€Molecular Weight Biopolymer 3D Structures. Macromolecular Materials and Engineering, 2018, 303, 1800345.	1.7	18
2877	Development of a novel hybrid bioactive hydrogel for future clinical applications. Journal of Biomaterials Applications, 2018, 33, 447-465.	1.2	12
2878	Proteoglycan Chemical Diversity Drives Multifunctional Cell Regulation and Therapeutics. Chemical Reviews, 2018, 118, 9152-9232.	23.0	253
2879	Bioactive composites based on double network approach with tailored mechanical, physicoâ€chemical, and biological features. Journal of Biomedical Materials Research - Part A, 2018, 106, 3079-3089.	2.1	32
2880	Molecular Crowding â€“ (in Cell Culture). , 2018, , 1-27.		1
2881	Mesenchymal stem cell interacted with PLCL braided scaffold coated with polyâ€<scp>l</scp>â€lysine/hyaluronic acid for ligament tissue engineering. Journal of Biomedical Materials Research - Part A, 2018, 106, 3042-3052.	2.1	17
2882	Electrospinning of Functional Nanofibers for Regenerative Medicine: From Bench to Commercial Scale. , 0, , .		1

#	Article	IF	Citations
2883	Electrospunâ€electrosprayed hydroxyapatite nanostructured composites for bone tissue regeneration. Journal of Applied Polymer Science, 2018, 135, 46756.	1.3	14
2884	Self-Healing Boronic Acid-Based Hydrogels for 3D Co-cultures. ACS Macro Letters, 2018, 7, 1105-1110.	2.3	126
2885	Zinc(II)â€“Histidine Induced Collagen Peptide Assemblies: Morphology Modulation and Hydrolytic Catalysis Evaluation. Biomacromolecules, 2018, 19, 2629-2637.	2.6	27
2886	Extracellular matrix-based materials for regenerative medicine. Nature Reviews Materials, 2018, 3, 159-173.	23.3	572
2887	Microfabrication of liver and heart tissues for drug development. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170225.	1.8	14
2888	Spatial Micropatterning of Growth Factors in 3D Hydrogels for Locationâ€Specific Regulation of Cellular Behaviors. Small, 2018, 14, e1800579.	5.2	39
2889	Controlling the Interfacial Chemical and Physical Properties for Stem Cell Culture. Topics in Catalysis, 2018, 61, 1139-1147.	1.3	1
2890	Creating Biomimetic Anisotropic Architectures with Co-Aligned Nanofibers and Macrochannels by Manipulating Ice Crystallization. ACS Nano, 2018, 12, 5780-5790.	7.3	69
2892	Fibronectin modified TiO₂ nanotubes modulate endothelial cell behavior. Journal of Biomaterials Applications, 2018, 33, 44-51.	1.2	13
2893	4D Biofabrication: Materials, Methods, and Applications. Advanced Healthcare Materials, 2018, 7, e1800412.	3.9	80
2894	Wundtherapie. , 2018, , 2179-2188.		0
2895	Recombinant Spider Silk Functionalized Silkworm Silk Matrices as Potential Bioactive Wound Dressings and Skin Grafts. ACS Applied Materials & Interfaces, 2018, 10, 23560-23572.	4.0	64
2896	Fabrication and characterization of silk microfiber-reinforced methacrylated gelatin hydrogel with tunable properties. Journal of Biomaterials Science, Polymer Edition, 2018, 29, 2068-2082.	1.9	10
2897	Vascularized Liver Organoids Generated Using Induced Hepatic Tissue and Dynamic Liverâ€Specific Microenvironment as a Drug Testing Platform. Advanced Functional Materials, 2018, 28, 1801954.	7.8	100
2898	Biomedical Applications of Graphene Nanomaterials and Beyond. ACS Biomaterials Science and Engineering, 2018, 4, 2653-2703.	2.6	161
2899	Enzyme-Responsive Hydrogels. Polymers and Polymeric Composites, 2018, , 1-23.	0.6	0
2900	A Simple Pipetting-based Method for Encapsulating Live Cells into Multi-layered Hydrogel Droplets. Biochip Journal, 2018, 12, 184-192.	2.5	2
2901	Electrospun three-dimensional aligned nanofibrous scaffolds for tissue engineering. Materials Science and Engineering C, 2018, 92, 995-1005.	3.8	91

#	Article	IF	Citations
2902	Drug delivery for cardiac regeneration. , 2018, , 283-321.		2
2903	Biomimetic tumor microenvironments based on collagen matrices. Biomaterials Science, 2018, 6, 2009-2024.	2.6	63
2904	DNA Hydrogel Assemblies: Bridging Synthesis Principles to Biomedical Applications. Advanced Therapeutics, 2018, 1, 1800042.	1.6	61
2905	3D Spatiotemporal Mechanical Microenvironment: A Hydrogelâ€Based Platform for Guiding Stem Cell Fate. Advanced Materials, 2018, 30, e1705911.	11.1	162
2906	Applications of de novo designed peptides. , 2018, , 51-86.		15
2907	Compressed collagen and decellularized tissue â€“ novel components in a pipeline approach for the study of cancer metastasis. BMC Cancer, 2018, 18, 622.	1.1	9
2908	Biosynthetic Hydrogels for Cell Encapsulation. Springer Series in Biomaterials Science and Engineering, 2018, , 1-29.	0.7	3
2909	Colloidal gelatin microgels with tunable elasticity support the viability and differentiation of mesenchymal stem cells under proâ€inflammatory conditions. Journal of Biomedical Materials Research - Part A, 2018, 106, 2753-2761.	2.1	13
2910	Self-assembled peptide nanostructures and their gels for regenerative medicine applications. , 2018, , 455-473.		1
2911	3D bioprinting of skin tissue: From pre-processing to final product evaluation. Advanced Drug Delivery Reviews, 2018, 132, 270-295.	6.6	122
2912	Modeling Tissue Polarity in Context. Journal of Molecular Biology, 2018, 430, 3613-3628.	2.0	16
2913	Coaxial extrusion bioprinted shell-core hydrogel microfibers mimic glioma microenvironment and enhance the drug resistance of cancer cells. Colloids and Surfaces B: Biointerfaces, 2018, 171, 291-299.	2.5	83
2914	Customizable biomaterials as tools for advanced anti-angiogenic drug discovery. Biomaterials, 2018, 181, 53-66.	5.7	4
2915	Bioprinting of Stem Cells: Interplay of Bioprinting Process, Bioinks, and Stem Cell Properties. ACS Biomaterials Science and Engineering, 2018, 4, 3108-3124.	2.6	31
2916	Adaptable Fast Relaxing Boronateâ€Based Hydrogels for Probing Cellâ€“Matrix Interactions. Advanced Science, 2018, 5, 1800638.	5.6	143
2917	The fabrication of biomineralized fiber-aligned PLGA scaffolds and their effect on enhancing osteogenic differentiation of UCMSC cells. Journal of Materials Science: Materials in Medicine, 2018, 29, 117.	1.7	12
2918	Nano-biphasic calcium phosphate/polyvinyl alcohol composites with enhanced bioactivity for bone repair via low-temperature three-dimensional printing and loading with platelet-rich fibrin. International Journal of Nanomedicine, 2018, Volume 13, 505-523.	3.3	55
2919	Liquid-crystalline nanoarchitectures for tissue engineering. Beilstein Journal of Nanotechnology, 2018, 9, 205-215.	1.5	15

#	Article	IF	Citations
2920	Application of Bio-Based Wrinkled Surfaces as Cell Culture Scaffolds. Colloids and Interfaces, 2018, 2, 15.	0.9	15
2921	Transfer of cells with uptaken nanocomposite, magnetite-nanoparticle functionalized capsules with electromagnetic tweezers. Biomaterials Science, 2018, 6, 2219-2229.	2.6	34
2922	ECM Decorated Electrospun Nanofiber for Improving Bone Tissue Regeneration. Polymers, 2018, 10, 272.	2.0	37
2923	Designing Smart Biomaterials for Tissue Engineering. International Journal of Molecular Sciences, 2018, 19, 17.	1.8	188
2924	Biomimetic Layer-by-Layer Self-Assembly of Nanofilms, Nanocoatings, and 3D Scaffolds for Tissue Engineering. International Journal of Molecular Sciences, 2018, 19, 1641.	1.8	62
2925	Surface-Bound Gradient Deposition of Protein Nanoparticles for Cell Motility Studies. ACS Applied Materials & Interfaces, 2018, 10, 25779-25786.	4.0	9
2926	Modulating Viscoelasticity, Stiffness, and Degradation of Synthetic Cellular Niches via Stoichiometric Tuning of Covalent versus Dynamic Noncovalent Cross-Linking. ACS Central Science, 2018, 4, 971-981.	5.3	33
2927	Mediating the invasion of smooth muscle cells into a cell-responsive hydrogel under the existence of immune cells. Biomaterials, 2018, 180, 193-205.	5.7	44
2928	Surface Modification of Polymeric Scaffolds for Tissue Engineering Applications. Regenerative Engineering and Translational Medicine, 2018, 4, 75-91.	1.6	18
2929	Size-dependent effects of graphene oxide on the osteogenesis of human adipose-derived mesenchymal stem cells. Colloids and Surfaces B: Biointerfaces, 2018, 169, 20-29.	2.5	33
2930	Free-Standing Nanopatterned Poly(Ïµ-Caprolactone) Thin Films as a Multifunctional Scaffold. IEEE Nanotechnology Magazine, 2018, 17, 389-392.	1.1	3
2931	Osteostimulation scaffolds of stem cells: BMPâ€7â€derived peptideâ€decorated alginate porous scaffolds promote the aggregation and osteoâ€differentiation of human mesenchymal stem cells. Biopolymers, 2018, 109, e23223.	1.2	16
2932	Fibrous Topography-Potentiated Canonical Wnt Signaling Directs the Odontoblastic Differentiation of Dental Pulp-Derived Stem Cells. ACS Applied Materials & Interfaces, 2018, 10, 17526-17541.	4.0	37
2933	Characterization and evaluation of graphene oxide scaffold for periodontal wound healing of class II furcation defects in dog. International Journal of Nanomedicine, 2018, Volume 13, 2365-2376.	3.3	38
2934	Bioactivation of Spider Silk with Basic Fibroblast Growth Factor for in Vitro Cell Culture: A Step toward Creation of Artificial ECM. ACS Biomaterials Science and Engineering, 2018, 4, 3384-3396.	2.6	12
2935	Recent Advances of Multifunctional Cellulose-Based Hydrogels. Polymers and Polymeric Composites, 2018, , 1-28.	0.6	0
2936	3D Bioprinting and its application to organ-on-a-chip. Microelectronic Engineering, 2018, 200, 1-11.	1.1	51
2937	Tailoring Collagen to Engineer the Cellular Microenvironment. Biotechnology Journal, 2018, 13, 1800140.	1.8	5

#	Article	IF	Citations
2938	Enzyme-mediated self-assembly. , 2018, , 399-417.		1
2939	Injectable Platelet-, Leukocyte-, and Fibrin-Rich Plasma (iL-PRF) in the Management of Androgenetic Alopecia. Dermatologic Surgery, 2018, 44, 1183-1190.	0.4	20
2940	Advances in Engineered Human Liver Platforms for Drug Metabolism Studies. Drug Metabolism and Disposition, 2018, 46, 1626-1637.	1.7	42
2941	Silsesquioxane polymer as a potential scaffold for laryngeal reconstruction. Materials Science and Engineering C, 2018, 92, 565-574.	3.8	11
2942	Can porous polymeric scaffolds be functionalized by stem cells leading to osteogenic differentiation? A systematic review of in vitro studies. Journal of Materials Science, 2018, 53, 15757-15768.	1.7	7
2943	A New Approach to Design Artificial 3D Microniches with Combined Chemical, Topographical, and Rheological Cues. Advanced Biology, 2018, 2, 1700237.	3.0	12
2944	Poly (ethylene glycol) hydrogel elasticity influences human mesenchymal stem cell behavior. International Journal of Energy Production and Management, 2018, 5, 167-175.	1.9	38
2945	Structural Characteristics and Diffusion Coefficient of Alginate Hydrogels Used for Cell Based Drug Delivery. MRS Advances, 2018, 3, 2399-2408.	0.5	11
2946	An Injectable Decellularized Matrix That Improves Mesenchymal Stem Cell Engraftment for Therapeutic Angiogenesis. ACS Biomaterials Science and Engineering, 2018, 4, 2571-2581.	2.6	10
2947	Human Neural Stem/Progenitor Cells Derived From Epileptic Human Brain in a Self-Assembling Peptide Nanoscaffold Improve Traumatic Brain Injury in Rats. Molecular Neurobiology, 2018, 55, 9122-9138.	1.9	39
2948	Stem cells technology: a powerful tool behind new brain treatments. Drug Delivery and Translational Research, 2018, 8, 1564-1591.	3.0	4
2949	Bioactive Poly(ethylene Glycol) Acrylate Hydrogels for Regenerative Engineering. Regenerative Engineering and Translational Medicine, 2019, 5, 167-179.	1.6	36
2950	Engineered microenvironments and microdevices for modeling the pathophysiology of type 1 diabetes. Biomaterials, 2019, 198, 49-62.	5.7	11
2951	Bioceramics to regulate stem cells and their microenvironment for tissue regeneration. Materials Today, 2019, 24, 41-56.	8.3	144
2952	3D culture models for studying branching morphogenesis in the mammary gland and mammalian lung. Biomaterials, 2019, 198, 135-145.	5.7	20
2953	Surface Modification of Biomaterials. , 2019, , 651-660.		12
2954	Skeletal Muscle Stem Cells. , 2019, , 273-293.		3
2955	Cellâ€“Substrate Interactions. , 2019, , 437-468.		10

#	Article	IF	Citations
2956	Synthetic Polymers. , 2019, , 559-590.		45
2957	Near-physiological microenvironment simulation on chip to evaluate drug resistance of different loci in tumour mass. Talanta, 2019, 191, 67-73.	2.9	18
2958	Bioengineering Scaffolds for Regenerative Engineering. , 2019, , 444-461.		2
2959	Microporous methacrylated glycol chitosan-montmorillonite nanocomposite hydrogel for bone tissue engineering. Nature Communications, 2019, 10, 3523.	5.8	273
2960	3D Bioprinting Technologies. , 2019, , 1-66.		1
2961	Engineering of a Functional Tendon Using Collagen As a Natural Polymer. ACS Biomaterials Science and Engineering, 2019, 5, 5218-5228.	2.6	9
2962	Nanocellulose/bioactive glass cryogels as scaffolds for bone regeneration. Nanoscale, 2019, 11, 19842-19849.	2.8	93
2963	Strategies for Hyaluronic Acid-Based Hydrogel Design in Drug Delivery. Pharmaceutics, 2019, 11, 407.	2.0	177
2964	Drugâ€Loaded Elastinâ€Like Polypeptideâ€“Collagen Hydrogels with High Modulus for Bone Tissue Engineering. Macromolecular Bioscience, 2019, 19, e1900142.	2.1	33
2965	Materials as Bioinks and Bioink Design. , 2019, , 67-100.		7
2966	Fabrication of 3D scaffolds reproducing intestinal epithelium topography by high-resolution 3D stereolithography. Biomaterials, 2019, 221, 119404.	5.7	105
2967	Biofunctionalized cellulose paper matrix for cell delivery applications. International Journal of Biological Macromolecules, 2019, 139, 114-127.	3.6	11
2968	Hydrogels: soft matters in photomedicine. Photochemical and Photobiological Sciences, 2019, 18, 2613-2656.	1.6	42
2969	A rhBMP-2-loaded three-dimensional mesoporous bioactive glass nanotubular scaffold prepared from bacterial cellulose. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 581, 123838.	2.3	8
2970	Effect of gradient biomineral concentrations on osteogenic and chondrogenic differentiation of adipose derived stem cells. Journal of Industrial and Engineering Chemistry, 2019, 80, 784-794.	2.9	10
2971	Rational Design and Development of Anisotropic and Mechanically Strong Gelatinâ€Based Stress Relaxing Hydrogels for Osteogenic/Chondrogenic Differentiation. Macromolecular Bioscience, 2019, 19, 1900099.	2.1	13
2972	A specific affinity cyclic peptide enhances the adhesion, expansion and proliferation of rat bone mesenchymal stem cells on Î²â€‘tricalcium phosphate scaffolds. Molecular Medicine Reports, 2019, 20, 1157-1166.	1.1	8
2973	Scaffolds for bioengineered uterus. , 2019, , 283-316.		1

#	Article	IF	Citations
2974	Design of fibronectin type III domains fused to an elastin-like polypeptide for the osteogenic differentiation of human mesenchymal stem cells. Acta Biochimica Et Biophysica Sinica, 2019, 51, 856-863.	0.9	9
2975	Plasmonic nano surface for neuronal differentiation and manipulation. Nanomedicine: Nanotechnology, Biology, and Medicine, 2019, 21, 102048.	1.7	8
2976	Evolution of Bioengineered Lung Models: Recent Advances and Challenges in Tissue Mimicry for Studying the Role of Mechanical Forces in Cell Biology. Advanced Functional Materials, 2019, 29, 1903114.	7.8	40
2977	Sensor-free and Sensor-based Heart-on-a-chip Platform: A Review of Design and Applications. Current Pharmaceutical Design, 2019, 24, 5375-5385.	0.9	11
2978	Composite of Peptideâ€Supramolecular Polymer and Covalent Polymer Comprises a New Multifunctional, Bioâ€Inspired Soft Material. Macromolecular Rapid Communications, 2019, 40, e1900175.	2.0	37
2979	Natural Polymerâ€Based Hydrogels with Enhanced Mechanical Performances: Preparation, Structure, and Property. Advanced Healthcare Materials, 2019, 8, e1900670.	3.9	178
2980	Constructing Geneâ€Enhanced Tissue Engineering for Regeneration and Repair of Osteochondral Defects. Advanced Biology, 2019, 3, 1900004.	3.0	1
2981	Nanobiomaterial Advances in Cardiovascular Tissue Engineering. , 2019, , 79-106.		0
2982	Mechanobiologically optimization of a 3D titanium-mesh implant for mandibular large defect: A simulated study. Materials Science and Engineering C, 2019, 104, 109934.	3.8	35
2983	Dual Crosslinked Gelatin Methacryloyl Hydrogels for Photolithography and 3D Printing. Gels, 2019, 5, 34.	2.1	27
2984	High-throughput stem cell-based phenotypic screening through microniches. Biomaterials Science, 2019, 7, 3471-3479.	2.6	8
2985	Multiphoton 3D Printing of Biopolymer-Based Hydrogels. ACS Biomaterials Science and Engineering, 2019, 5, 6161-6170.	2.6	39
2986	Using 3-D Printing and Bioprinting Technologies for Personalized Implants. , 2019, , 269-286.		2
2987	Temperature-Induced Mechanomodulation of Interpenetrating Networks of Star Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 11, 41862-41874.	4.0	12
2988	Osteogenic potential of human dental pulp stem cells cultured onto poly-Îµ-caprolactone/poly (rotaxane) scaffolds. Dental Materials, 2019, 35, 1740-1749.	1.6	17
2989	Evaluation of PEG-Based Hydrogel Influence on Estrogen-Receptor-Driven Responses in MCF7 Breast Cancer Cells. ACS Biomaterials Science and Engineering, 2019, 5, 6089-6098.	2.6	13
2990	Biological and Bio-inspired Nanomaterials. Advances in Experimental Medicine and Biology, 2019, , .	0.8	8
2992	Injectable Polymerâ€“Nanoparticle Hydrogels for Local Immune Cell Recruitment. Biomacromolecules, 2019, 20, 4430-4436.	2.6	58

#	Article	IF	Citations
2993	Equip the hydrogel with armor: strong and super tough biomass reinforced hydrogels with excellent conductivity and anti-bacterial performance. Journal of Materials Chemistry A, 2019, 7, 26917-26926.	5.2	93
2994	Electrospun nanofibers for the fabrication of engineered vascular grafts. Journal of Biological Engineering, 2019, 13, 83.	2.0	35
2995	Double-Network Hydrogels Including Enzymatically Crosslinked Poly-(2-alkyl-2-oxazoline)s for 3D Bioprinting of Cartilage-Engineering Constructs. Biomacromolecules, 2019, 20, 4502-4511.	2.6	54
2996	Rapid Production of Cellâ€Laden Microspheres Using a Flexible Microfluidic Encapsulation Platform. Small, 2019, 15, e1902058.	5.2	37
2997	Tuning Tissue Ingrowth into Proangiogenic Hydrogels via Dual Modality Degradation. ACS Biomaterials Science and Engineering, 2019, 5, 5430-5438.	2.6	5
2998	Tumor Cells Develop Defined Cellular Phenotypes After 3D-Bioprinting in Different Bioinks. Cells, 2019, 8, 1295.	1.8	31
2999	Designing a Tenascin-C-Inspired Short Bioactive Peptide Scaffold to Direct and Control Cellular Behavior. ACS Biomaterials Science and Engineering, 2019, 5, 6497-6510.	2.6	17
3000	Towards clinical application of tissue engineering for erectile penile regeneration. Nature Reviews Urology, 2019, 16, 734-744.	1.9	11
3001	Injectable polypeptide hydrogel/inorganic nanoparticle composites for bone tissue engineering. PLoS ONE, 2019, 14, e0210285.	1.1	36
3002	Synthetic hydrogels identify matrix physicochemical properties required for renal epithelial cell tubulogenesis. Journal of Cell Science, 2019, 132, .	1.2	12
3003	Self-assembling peptide-based nanodrug delivery systems. Biomaterials Science, 2019, 7, 4888-4911.	2.6	51
3004	Molecular-Level Interactions between Engineered Materials and Cells. International Journal of Molecular Sciences, 2019, 20, 4142.	1.8	12
3005	Antigen-specific immune decoys intercept and exhaust autoimmunity to prevent disease. Biomaterials, 2019, 222, 119440.	5.7	11
3006	Neurovascular Organotypic Culture Models Using Induced Pluripotent Stem Cells to Assess Adverse Chemical Exposure Outcomes. Applied in Vitro Toxicology, 2019, 5, 92-110.	0.6	4
3007	In situ-forming, mechanically resilient hydrogels for cell delivery. Journal of Materials Chemistry B, 2019, 7, 5742-5761.	2.9	25
3008	The Role of Stiffness in Cell Reprogramming: A Potential Role for Biomaterials in Inducing Tissue Regeneration. Cells, 2019, 8, 1036.	1.8	72
3009	Incorporation of a silicon-based polymer to PEG-DA templated hydrogel scaffolds for bioactivity and osteoinductivity. Acta Biomaterialia, 2019, 99, 100-109.	4.1	24
3010	Photopolymerizable Resins for 3D-Printing Solid-Cured Tissue Engineered Implants. Current Drug Targets, 2019, 20, 823-838.	1.0	30

#	Article	IF	Citations
3011	Bio-functional G-molecular hydrogels for accelerated wound healing. Materials Science and Engineering C, 2019, 105, 110067.	3.8	29
3012	A fully degradable and photocrosslinked polysaccharide-polyphosphate hydrogel for tissue engineering. Carbohydrate Polymers, 2019, 225, 115257.	5.1	26
3013	Controlling silk fibroin conformation for dynamic, responsive, multifunctional, micropatterned surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21361-21368.	3.3	75
3014	An injectable peptide hydrogel for reconstruction of the human trabecular meshwork. Acta Biomaterialia, 2019, 100, 244-254.	4.1	29
3015	Platelet-rich gel-incorporated silk scaffold promotes meniscus regeneration in a rabbit total meniscectomy model. Regenerative Medicine, 2019, 14, 753-768.	0.8	5
3016	Developing quantitative MRI parameters to characterize host response and tissue ingrowth into collagen scaffolds. NMR in Biomedicine, 2019, 32, e4059.	1.6	0
3017	Visualizing cellâ€laden fibrinâ€based hydrogels using cryogenic scanning electron microscopy and confocal microscopy. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 587-598.	1.3	8
3018	Guided assembly, nanostructuring and functionalization with brushes of microscale polymer cubes for tailored 3-D cell microenvironments. European Polymer Journal, 2019, 113, 47-51.	2.6	7
3019	Macromolecular crowding tunes 3D collagen architecture and cell morphogenesis. Biomaterials Science, 2019, 7, 618-633.	2.6	37
3020	Tunable biomaterials from synthetic, sequence-controlled polymers. Biomaterials Science, 2019, 7, 490-505.	2.6	54
3021	An injectable silk fibroin nanofiber hydrogel hybrid system for tumor upconversion luminescence imaging and photothermal therapy. New Journal of Chemistry, 2019, 43, 2213-2219.	1.4	27
3022	Dynamic hydrogels mediated by macrocyclic hostâ€“guest interactions. Journal of Materials Chemistry B, 2019, 7, 1526-1540.	2.9	87
3023	Customizing Morphology, Size, and Response Kinetics of Matrix Metalloproteinase-Responsive Nanostructures by Systematic Peptide Design. ACS Nano, 2019, 13, 1555-1562.	7.3	34
3024	Electrospun Nanofibers for Drug Delivery. , 2019, , 735-764.		5
3025	A biofunctionalized viral delivery patch for spatially defined transfection. Chemical Communications, 2019, 55, 2317-2320.	2.2	6
3026	Efficient Synthesis of Heparinoid Bioconjugates for Tailoring FGF2 Activity at the Stem Cellâ€“Matrix Interface. Bioconjugate Chemistry, 2019, 30, 833-840.	1.8	5
3027	A Col I and BCP ceramic bi-layer scaffold implant promotes regeneration in osteochondral defects. RSC Advances, 2019, 9, 3740-3748.	1.7	8
3028	Macroporous hydrogels derived from aqueous dynamic phase separation. Biomaterials, 2019, 200, 56-65.	5.7	49

#	Article	IF	Citations
3029	Vascularized Tissue Regenerative Engineering Using 3D Bioprinting Technology. , 2019, , 696-706.		2
3030	Evaluation of cytotoxicity, hemocompatibility and spectral studies of chitosan assisted polyurethanes prepared with various diisocyanates. International Journal of Biological Macromolecules, 2019, 129, 116-126.	3.6	25
3031	Bioinspired mineralization of a functionalized injectable dense collagen hydrogel through silk sericin incorporation. Biomaterials Science, 2019, 7, 1064-1077.	2.6	34
3032	Emerging applications of peptideâ€“oligonucleotide conjugates: bioactive scaffolds, self-assembling systems, and hybrid nanomaterials. Organic and Biomolecular Chemistry, 2019, 17, 1668-1682.	1.5	49
3033	Fine-Tuning the Linear Release Rate of Paclitaxel-Bearing Supramolecular Filament Hydrogels through Molecular Engineering. ACS Nano, 2019, 13, 7780-7790.	7.3	60
3034	Systematically Designed Periodic Electrophoretic Deposition for Decorating 3D Carbon-Based Scaffolds with Bioactive Nanoparticles. ACS Biomaterials Science and Engineering, 2019, 5, 4393-4404.	2.6	10
3035	Inherent Photodegradability of Polymethacrylate Hydrogels: Straightforward Access to Biocompatible Soft Microstructures. Advanced Functional Materials, 2019, 29, 1902906.	7.8	11
3036	Rational design of gelatin/nanohydroxyapatite cryogel scaffolds for bone regeneration by introducing chemical and physical cues to enhance osteogenesis of bone marrow mesenchymal stem cells. Materials Science and Engineering C, 2019, 104, 109855.	3.8	38
3037	Expanded skeletal stem and progenitor cells promote and participate in induced bone regeneration at subcritical BMP-2 dose. Biomaterials, 2019, 217, 119278.	5.7	29
3038	Quantifying Solvent Effects on Polymer Surface Grafting. ACS Macro Letters, 2019, 8, 800-805.	2.3	16
3039	Tissue engineering scaffolds. , 2019, , 165-185.		6
3040	Scaffold for bone tissue engineering. , 2019, , 189-209.		14
3041	Scaffold for facial nerve reconstruction. , 2019, , 95-121.		1
3042	Scaffolds for retinal repairs. , 2019, , 673-691.		2
3043	Scaffolds for liver regeneration. , 2019, , 741-764.		2
3044	Scaffolds for tissue engineering of functional cardiac muscle. , 2019, , 685-703.		4
3045	State-of-the-art and future perspectives of functional polymers. , 2019, , 383-395.		3
3046	Evaluation of double network hydrogel of poloxamer-heparin/gellan gum for bone marrow stem cells delivery carrier. Colloids and Surfaces B: Biointerfaces, 2019, 181, 879-889.	2.5	28

#	Article	IF	Citations
3047	Conformational manipulation of scale-up prepared single-chain polymeric nanogels for multiscale regulation of cells. Nature Communications, 2019, 10, 2705.	5.8	60
3048	Hybrid crossâ€linked hydrogels as a technology platform forinvitrorelease of cephradine. Polymers for Advanced Technologies, 2019, 30, 2414-2424.	1.6	59
3049	Photocleavable Peptideâ€“Poly(2-hydroxyethyl methacrylate) Hybrid Graft Copolymer via Postpolymerization Modification by Click Chemistry To Modulate the Cell Affinities of 2D and 3D Materials. ACS Applied Materials & Interfaces, 2019, 11, 24577-24587.	4.0	15
3050	VEGF â€“ Supplemented extracellular matrix is sufficient to induce endothelial differentiation of human iPSC. Biomaterials, 2019, 216, 119283.	5.7	36
3051	Polymeric Approaches to Reduce Tissue Responses Against Devices Applied for Islet-Cell Encapsulation. Frontiers in Bioengineering and Biotechnology, 2019, 7, 134.	2.0	61
3052	Evaluation of the effects of Î²-tricalcium phosphate on physical, mechanical and biological properties of Poly (3-hydroxybutyrate)/chitosan electrospun scaffold for cartilage tissue engineering applications. Materials Technology, 2019, 34, 615-625.	1.5	36
3053	Precise Construction of Cell-Instructive 3D Microenvironments by Photopatterning a Biodegradable Hydrogel. Chemistry of Materials, 2019, 31, 4710-4719.	3.2	43
3054	Synthesis of a photocurable acrylated poly(ethylene glycol)-co-poly(xylitol sebacate) copolymers hydrogel 3D printing ink for tissue engineering. RSC Advances, 2019, 9, 18394-18405.	1.7	13
3055	Nutraceuticals for Wound Healing: A Special Focus on Chromolaena odorata as Guardian of Health with Broad Spectrum of Biological Activities. , 2019, , 541-562.		3
3056	Effect of laser induced topography with moderate stiffness on human mesenchymal stem cell behavior. JPhys Materials, 2019, 2, 034006.	1.8	5
3057	Fabrication and preliminary in vitro evaluation of ultraviolet-crosslinked electrospun fish scale gelatin nanofibrous scaffolds. Journal of Materials Science: Materials in Medicine, 2019, 30, 62.	1.7	16
3058	Hyperphysiological compression of articular cartilage induces an osteoarthritic phenotype in a cartilage-on-a-chip model. Nature Biomedical Engineering, 2019, 3, 545-557.	11.6	126
3059	The preparation and biocompatible evaluation of injectable dual crosslinking hyaluronic acid hydrogels as cytoprotective agents. Journal of Materials Chemistry B, 2019, 7, 4413-4423.	2.9	32
3060	Characterization of Biocompatible Poly(Ethylene Glycol)-Dimethacrylate Hydrogels for Tissue Engineering. Applied Mechanics and Materials, 0, 890, 290-300.	0.2	7
3061	Decellularized porcine coronary artery with adipose stem cells for vascular tissue engineering. Biomedical Materials (Bristol), 2019, 14, 045014.	1.7	15
3062	Engineering Artificial Niches for Regenerative Medicine. , 2019, , 103-103.		0
3063	A New Approach for Glyco-Functionalization of Collagen-Based Biomaterials. International Journal of Molecular Sciences, 2019, 20, 1747.	1.8	7
3064	3D gelatin-chitosan hybrid hydrogels combined with human platelet lysate highly support human mesenchymal stem cell proliferation and osteogenic differentiation. Journal of Tissue Engineering, 2019, 10, 204173141984585.	2.3	59

#	Article	IF	Citations
3065	Bioactive site-specifically modified proteins for 4D patterning of gel biomaterials. Nature Materials, 2019, 18, 1005-1014.	13.3	168
3066	Isolation and propagation of primary human cholangiocyte organoids for the generation of bioengineered biliary tissue. Nature Protocols, 2019, 14, 1884-1925.	5.5	67
3067	Design of self-assembly dipeptide hydrogels and machine learning via their chemical features. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11259-11264.	3.3	95
3068	Switching of Cell Proliferation/Differentiation in Thiolâ€“Maleimide Clickable Microcapsules Triggered by in Situ Conjugation of Biomimetic Peptides. Biomacromolecules, 2019, 20, 2350-2359.	2.6	15
3069	Polyhydroxyalkanoate (PHA): applications in drug delivery and tissue engineering. Expert Review of Medical Devices, 2019, 16, 467-482.	1.4	106
3070	FibrinogenâEBased Hydrogel Modulus and Ligand Density Effects on Cell Morphogenesis in TwoâEDimensional and ThreeâEDimensional Cell Cultures. Advanced Healthcare Materials, 2019, 8, 1801436.	3.9	16
3071	Renal subcapsular transplantation of hepatocyte growth factor-producing mesothelial cell sheets improves ischemia-reperfusion injury. American Journal of Physiology - Renal Physiology, 2019, 317, F229-F239.	1.3	10
3072	Sustained Release of Two Bioactive Factors from Supramolecular Hydrogel Promotes Periodontal Bone Regeneration. ACS Nano, 2019, 13, 5616-5622.	7.3	143
3073	Effective Suppression of Oxidative Stress on Living Cells in Hydrogel Particles Containing a Physically Immobilized WS₂ Radical Scavenger. ACS Applied Materials & Interfaces, 2019, 11, 18817-18824.	4.0	8
3074	Poly (ethylene glycol) hydrogel scaffolds with multiscale porosity for culture of human adipose-derived stem cells. Journal of Biomaterials Science, Polymer Edition, 2019, 30, 895-918.	1.9	9
3075	Reviewâ€”Biosensing and Biomedical Applications of Graphene: A Review of Current Progress and Future Prospect. Journal of the Electrochemical Society, 2019, 166, B505-B520.	1.3	36
3076	Bioreabsorbable polymers for tissue engineering: PLA, PGA, and their copolymers. , 2019, , 83-116.		13
3077	Generation of Human Stem Cell-Derived Pancreatic Organoids (POs) for Regenerative Medicine. Advances in Experimental Medicine and Biology, 2019, 1212, 179-220.	0.8	11
3078	Cell Printing in Complex Hydrogel Scaffolds. IEEE Transactions on Nanobioscience, 2019, 18, 265-268.	2.2	3
3079	P34HB electrospun fibres promote bone regeneration in vivo. Cell Proliferation, 2019, 52, e12601.	2.4	23
3080	Engineered microscale hydrogels for drug delivery, cell therapy, and sequencing. Biomedical Microdevices, 2019, 21, 31.	1.4	50
3081	Dental Pulp Stem Cells: Isolation, Characterization, Expansion, and Odontoblast Differentiation for Tissue Engineering. Methods in Molecular Biology, 2019, 1922, 91-101.	0.4	19
3082	Functional selenium modified microgels: temperature-induced phase transitions and network morphology. Soft Matter, 2019, 15, 3227-3240.	1.2	17

#	Article	IF	Citations
3083	Magneto- and photo-responsive hydrogels from the co-assembly of peptides, cyclodextrins, and superparamagnetic nanoparticles. Faraday Discussions, 2019, 219, 220-228.	1.6	23
3084	Crafting Polymeric and Peptidic Hydrogels for Improved Wound Healing. Advanced Healthcare Materials, 2019, 8, e1900104.	3.9	70
3085	Regulating Mechanotransduction in Three Dimensions using Subâ€Cellular Scale, Crosslinkable Fibers of Controlled Diameter, Stiffness, and Alignment. Advanced Functional Materials, 2019, 29, 1808967.	7.8	23
3086	Recellularization of auricular cartilage via elastase-generated channels. Biofabrication, 2019, 11, 035012.	3.7	9
3087	Surface- and Hydrogel-Mediated Delivery of Nucleic Acid Nanoparticles. Methods in Molecular Biology, 2019, 1943, 177-197.	0.4	2
3088	Emerging Trends in Informationâ€Driven Engineering of Complex Biological Systems. Advanced Materials, 2019, 31, 1806898.	11.1	11
3089	Engineering three-dimensional microenvironments towards in vitro disease models of the central nervous system. Biofabrication, 2019, 11, 032003.	3.7	37
3090	Graphene in Neuroscience. , 2019, , 337-351.		3
3091	Bio-based nanocomposites. , 2019, , 205-244.		7
3092	Skeletal Muscle Regenerative Engineering. Regenerative Engineering and Translational Medicine, 2019, 5, 233-251.	1.6	26
3093	Platelet-Rich Fibrin Scaffolds for Cartilage and Tendon Regenerative Medicine: From Bench to Bedside. International Journal of Molecular Sciences, 2019, 20, 1701.	1.8	47
3096	Novel surface modification of three-dimensional bacterial nanocellulose with cell-derived adhesion proteins for soft tissue engineering. Materials Science and Engineering C, 2019, 100, 697-705.	3.8	41
3097	Improving cellular migration in tissue-engineered laryngeal scaffolds. Journal of Laryngology and Otology, 2019, 133, 135-148.	0.4	6
3098	Varying PEG density to control stress relaxation in alginate-PEG hydrogels for 3D cell culture studies. Biomaterials, 2019, 200, 15-24.	5.7	172
3099	Flow Blurring-Enabled Production of Polymer Filaments from Poly(ethylene oxide) Solutions. ACS Omega, 2019, 4, 2693-2701.	1.6	13
3100	Bio-functional electrospun nanomaterials: From topology design to biological applications. Progress in Polymer Science, 2019, 91, 1-28.	11.8	92
3101	Plasma Irradiation of Polymers: Surface to Biological Mitigation. Springer Series on Polymer and Composite Materials, 2019, , 319-350.	0.5	0
3102	Radiation Effects in Polymeric Materials. Springer Series on Polymer and Composite Materials, 2019, , .	0.5	19

#	Article	IF	Citations
3103	Electrospun Polymeric Nanostructures With Applications in Nanomedicine. , 2019, , 261-297.		0
3104	Injectable hierarchical micro/nanofibrous collagen-based scaffolds. Chemical Engineering Journal, 2019, 365, 220-230.	6.6	19
3105	Chitosan ascorbate hydrogel improves water uptake capacity and cell adhesion of electrospun poly(epsilon-caprolactone) membranes. International Journal of Pharmaceutics, 2019, 559, 420-426.	2.6	43
3106	Approaches to mimic the complexity of the skeletal mesenchymal stem/stromal cell niche in vitro. , 2019, 37, 88-112.		5
3107	Transformer Hydrogels: A Review. Advanced Materials Technologies, 2019, 4, 1900043.	3.0	207
3109	Spinning and Applications of Bioinspired Fiber Systems. ACS Nano, 2019, 13, 2749-2772.	7.3	151
3110	Recent Advances in High-throughput Platforms with Engineered Biomaterial Microarrays for Screening of Cell and Tissue Behavior. Current Pharmaceutical Design, 2019, 24, 5458-5470.	0.9	7
3111	Gelatin Type A from Porcine Skin Used as Co-Initiator in a Radical Photo-Initiating System. Polymers, 2019, 11, 1901.	2.0	12
3112	Human stroma and epithelium co-culture in a microfluidic model of a human prostate gland. Biomicrofluidics, 2019, 13, 064116.	1.2	18
3113	A new PEGDA/CNF aerogel-wet hydrogel scaffold fabricated by a two-step method. Soft Matter, 2019, 15, 8092-8101.	1.2	21
3114	Geometrically customizable alginate hydrogel nanofibers for cell culture platforms. Journal of Materials Chemistry B, 2019, 7, 6556-6563.	2.9	32
3115	Porous Biomimetic Hyaluronic Acid and Extracellular Matrix Protein Nanofiber Scaffolds for Accelerated Cutaneous Tissue Repair. ACS Applied Materials & Interfaces, 2019, 11, 45498-45510.	4.0	54
3116	Carbon-nanotube reinforcement of DNA-silica nanocomposites yields programmable and cell-instructive biocoatings. Nature Communications, 2019, 10, 5522.	5.8	34
3117	Atomic force acoustic microscopy reveals the influence of substrate stiffness and topography on cell behavior. Beilstein Journal of Nanotechnology, 2019, 10, 2329-2337.	1.5	9
3118	A Novel Conductive and Micropatterned PEG-Based Hydrogel Enabling the Topographical and Electrical Stimulation of Myoblasts. ACS Applied Materials & Interfaces, 2019, 11, 47695-47706.	4.0	44
3119	11. Antimicrobial testing methods. , 2019, , 241-262.		0
3120	Polymers with controlled assembly and rigidity made with click-functional peptide bundles. Nature, 2019, 574, 658-662.	13.7	79
3121	Fabrication of Poly(l-Lactic Acid)/Chitosan Scaffolds by Solidâ€“Liquid Phase Separation Method for Nerve Tissue Engineering: An In Vitro Study on Human Neuroblasts. Journal of Craniofacial Surgery, 2019, 30, 784-789.	0.3	24

#	Article	IF	Citations
3122	Sustainable Nanostructural Materials for Tissue Engineering. , 2019, , 75-100.		0
3123	Tissue Engineering Technology for Tissue Repair and Regeneration. , 2019, , 173-201.		0
3124	Topographical patterning: characteristics of current processing techniques, controllable effects on material properties and co-cultured cell fate, updated applications in tissue engineering, and improvement strategies. Journal of Materials Chemistry B, 2019, 7, 7090-7109.	2.9	29
3125	Introduction to Regenerative Engineering. , 2019, , 624-630.		0
3126	Self-Assembling Multidomain Peptides: Design and Characterization of Neutral Peptide-Based Materials with pH and Ionic Strength Independent Self-Assembly. ACS Biomaterials Science and Engineering, 2019, 5, 977-985.	2.6	42
3127	Dual Therapy Coating on Micro/Nanoscale Porous Polyetheretherketone to Eradicate Biofilms and Accelerate Bone Tissue Repair. Macromolecular Bioscience, 2019, 19, e1800376.	2.1	21
3128	Biomaterials for repair and regeneration of the cartilage tissue. Bio-Design and Manufacturing, 2019, 2, 41-49.	3.9	27
3129	Self-Assembling Peptides as Building Blocks of Functional Materials for Biomedical Applications. Bulletin of the Chemical Society of Japan, 2019, 92, 391-399.	2.0	83
3130	Matrix-assisted cell transplantation for tissue vascularization. Advanced Drug Delivery Reviews, 2019, 146, 155-169.	6.6	18
3131	Lineageâ€Specific Commitment of Stem Cells with Organic and Graphene Oxideâ€"Functionalized Nanofibers. Advanced Functional Materials, 2019, 29, 1806694.	7.8	12
3132	A collagen-coated sponge silk scaffold for functional meniscus regeneration. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 156-173.	1.3	34
3133	Injectable Biodegradable Chitosanâ€Alginate 3D Porous Gel Scaffold for mRNA Vaccine Delivery. Macromolecular Bioscience, 2019, 19, e1800242.	2.1	44
3134	Induction of Chondrogenic Differentiation in Human Mesenchymal Stem Cells Cultured on Human Demineralized Bone Matrix Scaffold under Hydrostatic Pressure. Tissue Engineering and Regenerative Medicine, 2019, 16, 69-80.	1.6	20
3135	Cascade enzymes within self-assembled hybrid nanogel mimicked neutrophil lysosomes for singlet oxygen elevated cancer therapy. Nature Communications, 2019, 10, 240.	5.8	143
3136	Recent Advances of Multifunctional Cellulose-Based Hydrogels. Polymers and Polymeric Composites, 2019, , 37-64.	0.6	2
3137	Enzyme-Responsive Hydrogels. Polymers and Polymeric Composites, 2019, , 309-330.	0.6	4
3138	Design and applications of man-made biomimetic fibrillar hydrogels. Nature Reviews Materials, 2019, 4, 99-115.	23.3	253
3139	Predictions of Thermoâ€Mechanical Properties of Crossâ€Linked Polyacrylamide Hydrogels Using Molecular Simulations. Advanced Theory and Simulations, 2019, 2, 1800153.	1.3	52

#	Article	IF	Citations
3140	Cell force-mediated matrix reorganization underlies multicellular network assembly. Scientific Reports, 2019, 9, 12.	1.6	90
3141	Biomimetic Designer Scaffolds Made of D,L-Lactide-É›-Caprolactone Polymers by 2-Photon Polymerization. Tissue Engineering - Part B: Reviews, 2019, 25, 167-186.	2.5	17
3142	Antibacterial ability, cytocompatibility and hemocompatibility of fluorinated graphene. Colloids and Surfaces B: Biointerfaces, 2019, 173, 681-688.	2.5	27
3143	Droplet-based microfluidics for cell encapsulation and delivery. , 2019, , 307-335.		9
3144	Jammed Microgel Inks for 3D Printing Applications. Advanced Science, 2019, 6, 1801076.	5.6	270
3145	Micro/Nanometerâ€Structured Scaffolds for Regeneration of Both Cartilage and Subchondral Bone. Advanced Functional Materials, 2019, 29, 1806068.	7.8	79
3146	Development of an Injectable Nitric Oxide Releasing Poly(ethylene) Glycol-Fibrin Adhesive Hydrogel. ACS Biomaterials Science and Engineering, 2019, 5, 959-969.	2.6	31
3147	Electron Microscopy for 3D Scaffoldsâ€“Cell Biointerface Characterization. Advanced Biology, 2019, 3, e1800103.	3.0	21
3148	Effects of acrylate/acrylamide polymers on the adhesion, growth and differentiation of Muse cells. Biomedical Materials (Bristol), 2019, 14, 015003.	1.7	3
3149	Fabrication and characterization of thiol-triacrylate polymer via Michael addition reaction for biomedical applications. Biomedical Materials (Bristol), 2019, 14, 015001.	1.7	8
3150	Novel bioactive porous starchâ€“siloxane matrix for bone regeneration: Physicochemical, mechanical, and in vitro properties. Biotechnology and Applied Biochemistry, 2019, 66, 43-52.	1.4	26
3151	Nanoengineered biomaterials for retinal repair. , 2019, , 215-264.		5
3152	Bone Substitute Materials. , 2019, , 513-529.		3
3153	Preparation and properties of high performance gelatin-based hydrogels with chitosan or hydroxyethyl cellulose for tissue engineering applications. International Journal of Polymeric Materials and Polymeric Biomaterials, 2019, 68, 183-192.	1.8	25
3154	Hydrogels for Advanced Stem Cell Therapies: A Biomimetic Materials Approach for Enhancing Natural Tissue Function. IEEE Reviews in Biomedical Engineering, 2019, 12, 333-351.	13.1	38
3155	Injectable Silk Protein Microparticle-based Fillers: A Novel Material for Potential Use in Glottic Insufficiency. Journal of Voice, 2019, 33, 773-780.	0.6	27
3156	A Gelâ€Based Model of Selective Cell Motility: Implications for Cell Sorting, Diagnostics, and Screening. Advanced Functional Materials, 2020, 30, 1807106.	7.8	3
3157	Direct cell imprint lithography in superconductive carbon black polymer composites: process optimization, characterization and in vitro toxicity analysis. Bioinspiration and Biomimetics, 2020, 15, 016002.	1.5	9

#	Article	IF	Citations
3158	BMP2â€•mimicking peptide modified with E7 coupling to calcined bovine bone enhanced bone regeneration associating with activation of the Runx2/SP7 signaling axis. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 80-93.	1.6	7
3159	Nanotechnology-based biomaterials for orthopaedic applications: Recent advances and future prospects. Materials Science and Engineering C, 2020, 106, 110154.	3.8	147
3160	Biomaterials for Personalized Cell Therapy. Advanced Materials, 2020, 32, e1902005.	11.1	76
3161	A three-dimensional printed silk-based biomimetic tri-layered meniscus for potential patient-specific implantation. Biofabrication, 2020, 12, 015003.	3.7	49
3162	Glycosaminoglycan-based hydrogels with programmable host reactions. Biomaterials, 2020, 228, 119557.	5.7	29
3163	Grayscale maskâ€assisted photochemical crosslinking for a dense collagen construct with stiffness gradient. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 1000-1009.	1.6	7
3164	Extracellular matrix-derived biomaterials in engineering cell function. Biotechnology Advances, 2020, 42, 107421.	6.0	163
3165	Composite Nano-fiber Mats Consisting of Biphasic Calcium Phosphate Loaded Polyvinyl Alcoholâ€"Gelatin for Bone Tissue Engineering. IFMBE Proceedings, 2020, , 301-305.	0.2	0
3166	Mimicking the Brain Extracellular Matrix in Vitro: A Review of Current Methodologies and Challenges. Israel Journal of Chemistry, 2020, 60, 1141-1151.	1.0	35
3167	Thermo-sensitive gellan maleate/N-isopropylacrylamide hydrogels: initial â€œin vitroâ€•and â€œin vivoâ€• evaluation as ocular inserts. Polymer Bulletin, 2020, 77, 741-755.	1.7	17
3168	Electroactive composite scaffold with locally expressed osteoinductive factor for synergistic bone repair upon electrical stimulation. Biomaterials, 2020, 230, 119617.	5.7	162
3169	Silk fibroin for skin injury repair: Where do things stand?. Advanced Drug Delivery Reviews, 2020, 153, 28-53.	6.6	139
3170	Customizable Composite Fibers for Engineering Skeletal Muscle Models. ACS Biomaterials Science and Engineering, 2020, 6, 1112-1123.	2.6	29
3171	Chemically modified xanthan and gellan for preparation of biomaterials for ophthalmic applications. Polymer International, 2020, 69, 1051-1057.	1.6	4
3172	Multi-directional cellular alignment in 3D guided by electrohydrodynamically-printed microlattices. Acta Biomaterialia, 2020, 101, 141-151.	4.1	34
3173	Recreating Physiological Environments In Vitro: Design Rules for MicrofluidicâEBased Vascularized Tissue Constructs. Small, 2020, 16, 1905055.	5.2	22
3174	Synthesis of strong and highly stretchable, electrically conductive hydrogel with multiple stimuli responsive shape memory behavior. Polymer, 2020, 188, 122147.	1.8	25
3175	Engineering Helical Modular Polypeptide-Based Hydrogels as Synthetic Extracellular Matrices for Cell Culture. Biomacromolecules, 2020, 21, 566-580.	2.6	23

#	Article	IF	Citations
3176	Design framework for mechanically tunable soft biomaterial composites enhanced by modified horseshoe lattice structures. Soft Matter, 2020, 16, 1473-1484.	1.2	23
3177	Hydrogel scaffolds for tissue engineering: the importance of polymer choice. Polymer Chemistry, 2020, 11, 184-219.	1.9	331
3178	Facile terminal functionalization of peptides by protease-catalyzed chemoenzymatic polymerization toward synthesis of polymeric architectures consisting of peptides. Polymer Chemistry, 2020, 11, 560-567.	1.9	8
3179	Palladium-bridged polymers as CO-biosignal-responsive self-healing hydrogels. Polymer Chemistry, 2020, 11, 779-783.	1.9	6
3180	Nanomanufacturing of biopolymers using electron and ion beams. Journal of Micromechanics and Microengineering, 2020, 30, 033001.	1.5	8
3182	Multiphasicmicrogel-in-gelmaterials to recapitulate cellular mesoenvironmentsin vitro. Biomaterials Science, 2020, 8, 101-108.	2.6	20
3183	Recent progress in supramolecular peptide assemblies as virus mimics for cancer immunotherapy. Biomaterials Science, 2020, 8, 1045-1057.	2.6	20
3184	An atmospheric pressure plasma jet to tune the bioactive peptide coupling to polycaprolactone electrospun layers. Applied Surface Science, 2020, 507, 144713.	3.1	19
3185	Synthesis of poly(acrylamide)-based hydrogel for bio-sensing of hepatitis B core antigen. Materials Chemistry and Physics, 2020, 243, 122578.	2.0	18
3186	Experiments and modeling of the viscoelastic behavior of polymeric gels. Journal of the Mechanics and Physics of Solids, 2020, 137, 103829.	2.3	31
3187	Bio-orthogonal click reaction-enabled highly specific in situ cellularization of tissue engineering scaffolds. Biomaterials, 2020, 230, 119615.	5.7	21
3188	Spontaneously and reversibly forming phospholipid polymer hydrogels as a matrix for cell engineering. Biomaterials, 2020, 230, 119628.	5.7	28
3189	Engineered extracellular matrices: Emerging strategies for decoupling structural and molecular signals that regulate epithelial branching morphogenesis. Current Opinion in Biomedical Engineering, 2020, 13, 103-112.	1.8	5
3191	Controlled curcumin release from nanofibers based on amphiphilic-block segmented polyurethanes. International Journal of Pharmaceutics, 2020, 575, 118947.	2.6	33
3192	Osteoclasts degrade fibrinogen scaffolds and induce mesenchymal stem/stromal osteogenic differentiation. Journal of Biomedical Materials Research - Part A, 2020, 108, 851-862.	2.1	8
3193	Pectin-GPTMS-Based Biomaterial: toward a Sustainable Bioprinting of 3D scaffolds for Tissue Engineering Application. Biomacromolecules, 2020, 21, 319-327.	2.6	51
3194	Microfluidic Printing of Three-Dimensional Graphene Electroactive Microfibrous Scaffolds. ACS Applied Materials & Interfaces, 2020, 12, 2049-2058.	4.0	31
3195	A stage-specific cell-manipulation platform for inducing endothelialization on demand. National Science Review, 2020, 7, 629-643.	4.6	38

#	Article	IF	Citations
3196	Stimuli-responsive chitosan as an advantageous platform for efficient delivery of bioactive agents. Journal of Controlled Release, 2020, 317, 216-231.	4.8	79
3197	Thermofluidic heat exchangers for actuation of transcription in artificial tissues. Science Advances, 2020, 6, .	4.7	14
3198	How Much Physical Guidance is Needed to Orient Growing Axons in 3D Hydrogels?. Advanced Healthcare Materials, 2020, 9, e2000886.	3.9	14
3199	Fabrication and characterization of polylactic acid/polycaprolactone composite macroporous micro-nanofiber scaffolds by phase separation. New Journal of Chemistry, 2020, 44, 17382-17390.	1.4	20
3200	Enhancement of the Mechanical Properties of Hydrogels with Continuous Fibrous Reinforcement. ACS Biomaterials Science and Engineering, 2020, 6, 5453-5473.	2.6	37
3201	Comparison of intestinal leak pressure between cadaveric canine and commercial synthetic intestinal tissue that did and did not undergo enterotomy. American Journal of Veterinary Research, 2020, 81, 827-831.	0.3	1
3202	Construction of a 3D brain extracellular matrix model to study the interaction between microglia and T cells in coâ€culture. European Journal of Neuroscience, 2021, 53, 4034-4050.	1.2	6
3203	Engineered tissues and strategies to overcome challenges in drug development. Advanced Drug Delivery Reviews, 2020, 158, 116-139.	6.6	26
3204	A simplified approach to control cell adherence on biologically derived in vitro cell culture scaffolds by direct UV-mediated RGD linkage. Journal of Materials Science: Materials in Medicine, 2020, 31, 89.	1.7	9
3205	Largeâ€Scale Assembly of Peptideâ€Based Hierarchical Nanostructures and Their Antiferroelectric Properties. Small, 2020, 16, e2003986.	5.2	6
3206	3D printing in tissue engineering: a state of the art review of technologies and biomaterials. Rapid Prototyping Journal, 2020, 26, 1313-1334.	1.6	67
3207	The effect of selective mineralization of PLLA in simulated body fluid induced by ArF excimer laser irradiation: Tailored composites with potential in bone tissue engineering. Composites Science and Technology, 2020, 197, 108279.	3.8	11
3208	Tuning of TiO2 nanoparticles incorporation in poly methyl methacrylate for synthesis of polymer nanocomposites for promising biomedical application. Materials Today: Proceedings, 2020, 30, 137-144.	0.9	6
3209	A versatile cell-friendly approach to produce PLA-based 3D micro-macro-porous blends for tissue engineering scaffolds. Materialia, 2020, 9, 100615.	1.3	12
3210	Soft Hydrogels for Balancing Cell Proliferation and Differentiation. ACS Biomaterials Science and Engineering, 2020, 6, 4687-4701.	2.6	37
3211	Photoresponsive hybrid hydrogel with a dual network of agarose and a self-assembling peptide. Soft Matter, 2020, 16, 7299-7304.	1.2	25
3212	Functional Tissue Architecture, Homeostasis, and Responses to Injury. , 2020, , 683-700.		1
3213	The Extracellular Matrix and Cellâ€“Biomaterial Interactions. , 2020, , 701-715.		6

#	Article	IF	Citations
3214	The Concept and Assessment of Biocompatibility. , 2020, , 843-849.		3
3215	Tissue Engineering Scaffolds. , 2020, , 1317-1334.		4
3216	Micromechanical Design Criteria for Tissue-Engineering Biomaterials. , 2020, , 1335-1350.		0
3217	Dynamic azopolymeric interfaces for photoactive cell instruction. Biophysics Reviews, 2020, 1, .	1.0	10
3218	3D printing of metalâ€“organic framework incorporated porous scaffolds to promote osteogenic differentiation and bone regeneration. Nanoscale, 2020, 12, 24437-24449.	2.8	72
3219	Photoencapsulated-BMP2 in visible light-cured thiol-acrylate hydrogels for craniofacial bone tissue engineering. Regenerative Medicine, 2020, 15, 2099-2113.	0.8	4
3220	Modeling the effects of hyaluronic acid degradation on the regulation of human astrocyte phenotype using multicomponent interpenetrating polymer networks (mIPNs). Scientific Reports, 2020, 10, 20734.	1.6	8
3221	DNA origami directed fabrication of shape-controllable nanomaterials. APL Materials, 2020, 8, .	2.2	9
3222	Alignment of magnetic particles in hydrogel matrix: A novel anisotropic magnetic hydrogels for soft robotics. Journal of Intelligent Material Systems and Structures, 2021, 32, 1432-1440.	1.4	6
3223	In vitro 3D Systems to Model Tumor Angiogenesis and Interactions With Stromal Cells. Frontiers in Cell and Developmental Biology, 2020, 8, 594903.	1.8	34
3224	Chicken egg white: Hatching of a new old biomaterial. Materials Today, 2020, 40, 193-214.	8.3	60
3225	Change of Phase Transition Temperature in Band Engineered Ferroelectric Lanthanum-Modified Bismuth Titanates. Journal of Nanoscience and Nanotechnology, 2020, 20, 7135-7139.	0.9	2
3226	Human Microphysiological Models of Intestinal Tissue and Gut Microbiome. Frontiers in Bioengineering and Biotechnology, 2020, 8, 725.	2.0	46
3227	Optimizing material and manufacturing process for PEGDA/CNF aerogel scaffold. Journal of Porous Materials, 2020, 27, 1623-1637.	1.3	8
3228	Rapid Microfluidic Formation of Uniform Patient-Derived Breast Tumor Spheroids. ACS Applied Bio Materials, 2020, 3, 6273-6283.	2.3	27
3229	Design of Hydrolytically Degradable Polyethylene Glycol Crosslinkers for Facile Control of Hydrogel Degradation. Macromolecular Bioscience, 2020, 20, 2000085.	2.1	14
3230	Antimicrobial Activity of Polymeric Microfibers Containing Coix Lacryma-Jobi Extract. Macromolecular Research, 2020, 28, 869-876.	1.0	3
3231	Granular Cellulose Nanofibril Hydrogel Scaffolds for 3D Cell Cultivation. Macromolecular Rapid Communications, 2020, 41, 2000191.	2.0	15

#	Article	IF	Citations
3232	Hydrogels: The Next Generation Body Materials for Microfluidic Chips?. Small, 2020, 16, e2003797.	5.2	56
3233	The silk of gorse spider mite Tetranychus lintearius represents a novel natural source of nanoparticles and biomaterials. Scientific Reports, 2020, 10, 18471.	1.6	7
3234	Nanofibrous asymmetric collagen/curcumin membrane containing aspirin-loaded PLGA nanoparticles for guided bone regeneration. Scientific Reports, 2020, 10, 18200.	1.6	85
3235	Topography: A Biophysical Approach to Direct the Fate of Mesenchymal Stem Cells in Tissue Engineering Applications. Nanomaterials, 2020, 10, 2070.	1.9	74
3236	Biomaterials for Bioprinting Microvasculature. Chemical Reviews, 2020, 120, 10887-10949.	23.0	51
3237	Evolutionarily conserved sequence motif analysis guides development of chemically defined hydrogels for therapeutic vascularization. Science Advances, 2020, 6, eaaz5894.	4.7	17
3238	Measurements of Elastic Properties of Biological Hydrogels using Atomic Force Microscopy. Journal of Physics: Conference Series, 2020, 1455, 012012.	0.3	1
3239	Screening method to identify hydrogel formulations that facilitate myotube formation from encapsulated primary myoblasts. Bioengineering and Translational Medicine, 2020, 5, e10181.	3.9	9
3240	Metallic Nanoparticle-Decorated Polydopamine Thin Films and Their Cell Proliferation Characteristics. Coatings, 2020, 10, 802.	1.2	6
3241	Temperature-Responsive Methylcelluloseâ€“Hyaluronic Hydrogel as a 3D Cell Culture Matrix. Biomacromolecules, 2020, 21, 4737-4746.	2.6	19
3242	Smurf1-targeting miR-19b-3p-modified BMSCs combined PLLA composite scaffold to enhance osteogenic activity and treat critical-sized bone defects. Biomaterials Science, 2020, 8, 6069-6081.	2.6	19
3243	Recent advances and future perspectives of solâ€“gel derived porous bioactive glasses: a review. RSC Advances, 2020, 10, 33782-33835.	1.7	108
3244	RGD- and VEGF-Mimetic Peptide Epitope-Functionalized Self-Assembling Peptide Hydrogels Promote Dentin-Pulp Complex Regeneration . International Journal of Nanomedicine, 2020, Volume 15, 6631-6647.	3.3	42
3245	In vitro and in vivo biocompatibility and inflammation response of methacrylated and maleated hyaluronic acid for wound healing. RSC Advances, 2020, 10, 32183-32192.	1.7	16
3246	Molecular Crowding â€“ (in Cell Culture). , 2020, , 483-509.		2
3247	Self-Assembled Supramolecular Hybrid Hydrogels Based on Hostâ€“Guest Interaction: Formation and Application in 3D Cell Culture. ACS Applied Bio Materials, 2020, 3, 6768-6778.	2.3	11
3248	Elastin-Collagen Based Hydrogels as Model Scaffolds to Induce Three-Dimensional Adipocyte Culture from Adipose Derived Stem Cells. Bioengineering, 2020, 7, 110.	1.6	14
3249	Injectable Drugâ€Releasing Microporous Annealed Particle Scaffolds for Treating Myocardial Infarction. Advanced Functional Materials, 2020, 30, 2004307.	7.8	57

#	Article	IF	Citations
3250	Novel antimicrobial phosphate-free glassâ€“ceramic scaffolds for bone tissue regeneration. Scientific Reports, 2020, 10, 13171.	1.6	12
3251	ECM-based microfluidic gradient generator for tunable surface environment by interstitial flow. Biomicrofluidics, 2020, 14, 044106.	1.2	8
3252	Collagen-Based Materials Modified by Phenolic Acidsâ€”A Review. Materials, 2020, 13, 3641.	1.3	30
3253	Mapping Photochemical Reactivity Profiles on Surfaces. Journal of the American Chemical Society, 2020, 142, 21651-21655.	6.6	8
3254	Development of Epidermal Equivalent from Electrospun Synthetic Polymers for In Vitro Irritation/Corrosion Testing. Nanomaterials, 2020, 10, 2528.	1.9	6
3255	Engineering Biomaterials to Guide Heart Cells for Matured Cardiac Tissue. Coatings, 2020, 10, 925.	1.2	17
3256	Oral delivery of self-assembling bioactive peptides to target gastrointestinal tract disease. Food and Function, 2020, 11, 9468-9488.	2.1	6
3257	Biomimetic Design for Bio-Matrix Interfaces and Regenerative Organs. Tissue Engineering - Part B: Reviews, 2021, 27, 411-429.	2.5	5
3258	Stepwise construction of dynamic microscale concentration gradients around hydrogel-encapsulated cells in a microfluidic perfusion culture device. Royal Society Open Science, 2020, 7, 200027.	1.1	2
3259	Polymer Hydrogels to Guide Organotypic and Organoid Cultures. Advanced Functional Materials, 2020, 30, 2000097.	7.8	61
3260	Biocompatible in situ-forming glycopolypeptide hydrogels. Science China Technological Sciences, 2020, 63, 992-1004.	2.0	6
3261	Wistar rat dermis recellularization. Research in Veterinary Science, 2020, 131, 222-231.	0.9	5
3262	Synergistic Effect of Cell-Derived Extracellular Matrices and Topography on Osteogenesis of Mesenchymal Stem Cells. ACS Applied Materials & Interfaces, 2020, 12, 25591-25603.	4.0	41
3263	Graphene-based 2D constructs for enhanced fibroblast support. PLoS ONE, 2020, 15, e0232670.	1.1	14
3264	Controlled Dynamics of Neural Tumor Cells by Templated Liquid Crystalline Polymer Networks. Advanced Healthcare Materials, 2020, 9, e2000487.	3.9	17
3265	Multiple particle tracking microrheological characterization: Fundamentals, emerging techniques and applications. Journal of Applied Physics, 2020, 127, 201101.	1.1	36
3266	Skin and pollution: the smart nano-based cosmeceutical-tissues to save the planetâ€™ ecosystem. , 2020, , 287-303.		0
3267	Injectable and in situ crosslinkable gelatin microribbon hydrogels for stem cell delivery and bone regeneration in vivo. Theranostics, 2020, 10, 6035-6047.	4.6	32

#	Article	IF	Citations
3268	A comparative study of materials assembled from recombinant K31 and K81 and extracted human hair keratins. Biomedical Materials (Bristol), 2020, 15, 065006.	1.7	2
3269	Ultra stretchable, tough and self-healable poly(acrylic acid) hydrogels cross-linked by self-enhanced high-density hydrogen bonds. Polymer, 2020, 199, 122603.	1.8	22
3270	Bioprinting: From Tissue and Organ Development to in Vitro Models. Chemical Reviews, 2020, 120, 10547-10607.	23.0	185
3271	Biofunctional hydrogels based on hostâ€“guest interactions. Polymer Journal, 2020, 52, 839-859.	1.3	45
3272	Thermo-irreversible glycol chitosan/hyaluronic acid blend hydrogel for injectable tissue engineering. Carbohydrate Polymers, 2020, 244, 116432.	5.1	51
3273	From Arteries to Capillaries: Approaches to Engineering Human Vasculature. Advanced Functional Materials, 2020, 30, 1910811.	7.8	74
3274	Tissue engineering of the biliary tract and modelling of cholestatic disorders. Journal of Hepatology, 2020, 73, 918-932.	1.8	14
3275	Current methods of collagen cross-linking: Review. International Journal of Biological Macromolecules, 2020, 161, 550-560.	3.6	143
3276	A Mussel-Inspired Extracellular Matrix-Mimicking Composite Scaffold for Diabetic Wound Healing. ACS Applied Bio Materials, 2020, 3, 4052-4061.	2.3	16
3277	Biomimetic reconstruction of the hematopoietic stem cell niche for in vitro amplification of human hematopoietic stem cells. PLoS ONE, 2020, 15, e0234638.	1.1	12
3278	Vascularization strategies for skin tissue engineering. Biomaterials Science, 2020, 8, 4073-4094.	2.6	69
3279	Hydrogels. , 2020, , 153-166.		55
3280	Cryo-Electron microscopy for the study of self-assembled poly(ionic liquid) nanoparticles and protein supramolecular structures. Colloid and Polymer Science, 2020, 298, 707-717.	1.0	13
3281	Self-recovering dual cross-linked hydrogels based on bioorthogonal click chemistry and ionic interactions. Journal of Materials Chemistry B, 2020, 8, 5912-5920.	2.9	7
3282	Effect of the C-terminal amino acid of the peptide on the structure and mechanical properties of alginateâ€“peptide hydrogels across length-scales. Soft Matter, 2020, 16, 6155-6162.	1.2	6
3283	Osteogenic potential of poly(ethylene glycol)-amorphous calcium phosphate composites on human mesenchymal stem cells. Journal of Tissue Engineering, 2020, 11, 204173142092684.	2.3	30
3284	Vapor-deposited functional polymer thin films in biological applications. Journal of Materials Chemistry B, 2020, 8, 6588-6609.	2.9	48
3285	Directly use conductive materials in tissue engineering applications. Journal of Cellular Biotechnology, 2020, 6, 23-46.	0.1	1

#	Article	IF	Citations
3286	Synthesis, characterization and applications of poly-aliphatic amine dendrimers and dendrons. Journal of the Iranian Chemical Society, 2020, 17, 2717-2736.	1.2	10
3287	Bioactive micropatterning of biomaterials for induction of endothelial progenitor cell differentiation: Acceleration of in situ endothelialization. Journal of Biomedical Materials Research - Part A, 2020, 108, 1479-1492.	2.1	4
3288	Polymer- and Hybrid-Based Biomaterials for Interstitial, Connective, Vascular, Nerve, Visceral and Musculoskeletal Tissue Engineering. Polymers, 2020, 12, 620.	2.0	62
3289	Elastinâ€Like Recombinamers: Deconstructing and Recapitulating the Functionality of Extracellular Matrix Proteins Using Recombinant Protein Polymers. Advanced Functional Materials, 2020, 30, 1909050.	7.8	29
3290	Pre-culture of mesenchymal stem cells within RGD-modified hyaluronic acid hydrogel improves their resilience to ischaemic conditions. Acta Biomaterialia, 2020, 107, 78-90.	4.1	22
3291	Designer Selfâ€Assembling Peptide Hydrogels to Engineer 3D Cell Microenvironments for Cell Constructs Formation and Precise Oncology Remodeling in Ovarian Cancer. Advanced Science, 2020, 7, 1903718.	5.6	77
3292	Hyaluronic acid vinyl esters: A toolbox toward controlling mechanical properties of hydrogels for 3D microfabrication. Journal of Polymer Science, 2020, 58, 1288-1298.	2.0	20
3293	In Situ Phase Transition of Elastin-Like Polypeptide Chains Regulates Thermoresponsive Properties of Elastomeric Protein-Based Hydrogels. Biomacromolecules, 2020, 21, 2258-2267.	2.6	25
3294	3D Extracellular Matrix Mimics: Fundamental Concepts and Role of Materials Chemistry to Influence Stem Cell Fate. Biomacromolecules, 2020, 21, 1968-1994.	2.6	297
3295	In Situ 3D-Printing using a Bio-ink of Proteinâ€“photosensitizer Conjugates for Single-cell Manipulation. ACS Applied Bio Materials, 2020, 3, 2378-2384.	2.3	8
3296	Inducing Endogenous Cardiac Regeneration: Can Biomaterials Connect the Dots?. Frontiers in Bioengineering and Biotechnology, 2020, 8, 126.	2.0	30
3297	Surface-Immobilized Biomolecules. , 2020, , 539-551.		2
3298	Magnetic Bioreactor for Magneto-, Mechano- and Electroactive Tissue Engineering Strategies. Sensors, 2020, 20, 3340.	2.1	21
3299	Healing Mechanism of Ruptured Fetal Membrane. Frontiers in Physiology, 2020, 11, 623.	1.3	8
3300	A Bibliometric Review of Artificial Extracellular Matrices Based on Tissue Engineering Technology Literature: 1990 through 2019. Materials, 2020, 13, 2891.	1.3	12
3301	Cellâ€“biomaterial interactions: the role of ligand functionalization. , 2020, , 139-173.		1
3302	Polymorphic calcium alginate microfibers assembled using a programmable microfluidic field for cell regulation. Lab on A Chip, 2020, 20, 3158-3166.	3.1	11
3303	Self-Organized Liver Microtissue on a Bio-Functional Surface: The Role of Human Adipose-Derived Stromal Cells in Hepatic Function. International Journal of Molecular Sciences, 2020, 21, 4605.	1.8	3

#	Article	IF	Citations
3304	Natural polymers-based light-induced hydrogels: Promising biomaterials for biomedical applications. Coordination Chemistry Reviews, 2020, 420, 213432.	9.5	116
3305	High Throughput Screening of Cell Mechanical Response Using a Stretchable 3D Cellular Microarray Platform. Small, 2020, 16, e2000941.	5.2	16
3306	Distinct differences in hypoxic responses between human oral mucosa and skin fibroblasts in a 3D collagen matrix. In Vitro Cellular and Developmental Biology - Animal, 2020, 56, 452-479.	0.7	5
3307	Natural Multimerization Rules the Performance of Affinity-Based Physical Hydrogels for Stem Cell Encapsulation and Differentiation. Biomacromolecules, 2020, 21, 3081-3091.	2.6	3
3308	Hyaluronic acid bioinspired polymers for the regulation of cell chondrogenic and osteogenic differentiation. International Journal of Biological Macromolecules, 2020, 161, 1011-1020.	3.6	7
3309	Perspectives on Synthetic Materials to Guide Tissue Regeneration for Osteochondral Defect Repair. ACS Biomaterials Science and Engineering, 2020, 6, 4324-4336.	2.6	30
3310	Engineered biomaterials for in situ tissue regeneration. Nature Reviews Materials, 2020, 5, 686-705.	23.3	420
3311	Flexible Water-Absorbing Silk-Fibroin Biomaterial Sponges with Unique Pore Structure for Tissue Engineering. ACS Biomaterials Science and Engineering, 2020, 6, 1641-1649.	2.6	22
3312	A complementary energy approach accommodates scale differences in soft tissues. Journal of the Mechanics and Physics of Solids, 2020, 138, 103895.	2.3	5
3313	Cell engraftment, vascularization, and inflammation after treatment of equine distal limb wounds with endothelial colony forming cells encapsulated within hydrogel microspheres. BMC Veterinary Research, 2020, 16, 43.	0.7	9
3314	Development and Evaluation of Biomimetic 3D Coated Composite Scaffold for Application as Skin Substitutes. Macromolecular Materials and Engineering, 2020, 305, 1900848.	1.7	18
3315	2D or 3D? How cell motility measurements are conserved across dimensions in vitro and translate in vivo. Bioengineering and Translational Medicine, 2020, 5, e10148.	3.9	23
3316	Pre-screening the intrinsic angiogenic capacity of biomaterials in an optimised ex ovo chorioallantoic membrane model. Journal of Tissue Engineering, 2020, 11, 204173142090162.	2.3	23
3317	3D printing of hydrogels: Rational design strategies and emerging biomedical applications. Materials Science and Engineering Reports, 2020, 140, 100543.	14.8	494
3318	Advances in regenerative therapy: A review of the literature and future directions. Regenerative Therapy, 2020, 14, 136-153.	1.4	92
3319	Design principles of food gels. Nature Food, 2020, 1, 106-118.	6.2	261
3320	Synthetic Biology and Tissue Engineering: Toward Fabrication of Complex and Smart Cellular Constructs. Advanced Functional Materials, 2020, 30, 1909882.	7.8	19
3321	Simple One Pot Preparation of Chemical Hydrogels from Cellulose Dissolved in Cold LiOH/Urea. Polymers, 2020, 12, 373.	2.0	20

#	Article	IF	Citations
3322	Cellâ€Instructive Multiphasic Gelâ€inâ€Gel Materials. Advanced Functional Materials, 2020, 30, 1908857.	7.8	34
3323	Dynamic Covalent Câ•C Bond, Cross-Linked, Injectable, and Self-Healable Hydrogels via Knoevenagel Condensation. Biomacromolecules, 2020, 21, 1234-1242.	2.6	22
3324	Accelerating bone defects healing in calvarial defect model using 3D cultured bone marrowâ€derived mesenchymal stem cells on demineralized bone particle scaffold. Journal of Tissue Engineering and Regenerative Medicine, 2020, 14, 563-574.	1.3	0
3325	Low molecular weight fucoidan alleviates diabetic nephropathy by binding fibronectin and inhibiting ECM-receptor interaction in human renal mesangial cells. International Journal of Biological Macromolecules, 2020, 150, 304-314.	3.6	36
3326	Stack-Based Hydrogels with Mechanical Enhancement, High Stability, Self-Healing Property, and Thermoplasticity from Poly(<scp>l</scp>-glutamic acid) and Ureido-Pyrimidinone. ACS Biomaterials Science and Engineering, 2020, 6, 1715-1726.	2.6	14
3327	Programmed Multiresponsive Hydrogel Assemblies with Lightâ€Tunable Mechanical Properties, Actuation, and Fluorescence. Advanced Functional Materials, 2020, 30, 1909359.	7.8	43
3328	Orbital seeding of mesenchymal stromal cells increases osteogenic differentiation and boneâ€like tissue formation. Journal of Orthopaedic Research, 2020, 38, 1228-1237.	1.2	24
3329	3D Scaffoldâ€Based Macrophage Fibroblast Coculture Model Reveals ILâ€10 Dependence of Wound Resolution Phase. Advanced Biology, 2020, 4, e1900220.	3.0	23
3330	Engineering Biomaterials with Micro/Nanotechnologies for Cell Reprogramming. ACS Nano, 2020, 14, 1296-1318.	7.3	39
3331	Dynamic and Programmable Cellular-Scale Granules Enable Tissue-like Materials. Matter, 2020, 2, 948-964.	5.0	30
3332	In situ covalent bonding in polymerization to construct robust hydrogel lubrication coating on surface of silicone elastomer. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 599, 124753.	2.3	15
3333	Polyhedral Oligomeric Silsesquioxane-Incorporated Gelatin Hydrogel Promotes Angiogenesis during Vascularized Bone Regeneration. ACS Applied Materials & Interfaces, 2020, 12, 22410-22425.	4.0	64
3334	Fundamentals of Extracellular Matrix Biomaterial Assimilation. Plastic and Reconstructive Surgery - Global Open, 2020, 8, e2635.	0.3	2
3335	Strategies for large-scale expansion of clinical-grade human multipotent mesenchymal stromal cells. Biochemical Engineering Journal, 2020, 159, 107601.	1.8	20
3336	Wound repair: basic biology to tissue engineering. , 2020, , 1309-1329.		4
3337	Peptides as biopolymersâ€”past, present, and future. , 2020, , 87-104.		3
3338	Morphogenesis and tissue engineering. , 2020, , 133-144.		1
3339	Polymer scaffold fabrication. , 2020, , 295-315.		2

#	Article	IF	Citations
3340	Three-dimensional scaffolds. , 2020, , 343-360.		12
3341	Tendon and ligament tissue engineering. , 2020, , 989-1005.		9
3342	A biodegradable multifunctional nanofibrous membrane for periodontal tissue regeneration. Acta Biomaterialia, 2020, 108, 207-222.	4.1	96
3343	Composition and Mechanism of Three-Dimensional Hydrogel System in Regulating Stem Cell Fate. Tissue Engineering - Part B: Reviews, 2020, 26, 498-518.	2.5	28
3344	In Vivo Evaluation of the Wound Healing Activity of Extracts and Bioactive Constituents of the Marine Isopod Ceratothoa oestroides. Marine Drugs, 2020, 18, 219.	2.2	9
3345	A bone matrixâ€simulating scaffold to alleviate replicative senescence of mesenchymal stem cells during longâ€term expansion. Journal of Biomedical Materials Research - Part A, 2020, 108, 1955-1967.	2.1	7
3346	Engineered Biomaterials for Enhanced Function of Insulinâ€Secreting Î²â€Cell Organoids. Advanced Functional Materials, 2020, 30, 2000134.	7.8	16
3347	Evolution of Dip-Pen Nanolithography (DPN): From Molecular Patterning to Materials Discovery. Chemical Reviews, 2020, 120, 6009-6047.	23.0	107
3348	Biomaterials- and Microfluidics-Based Tissue Engineered 3D Models. Advances in Experimental Medicine and Biology, 2020, , .	0.8	6
3349	Cells-Grab-on Particles: A Novel Approach to Control Cell Focal Adhesion on Hybrid Thermally Annealed Hydrogels. ACS Biomaterials Science and Engineering, 2020, 6, 3933-3944.	2.6	31
3350	Biomaterials and Culture Systems for Development of Organoid and Organ-on-a-Chip Models. Annals of Biomedical Engineering, 2020, 48, 2002-2027.	1.3	33
3351	Nanomaterials combination for wound healing and skin regeneration. , 2020, , 159-217.		3
3352	A practical guide to microfabrication and patterning of hydrogels for biomimetic cell culture scaffolds. Organs-on-a-Chip, 2020, 2, 100003.	1.8	51
3353	Polymer-based porous microcarriers as cell delivery systems for applications in bone and cartilage tissue engineering. International Materials Reviews, 2021, 66, 77-113.	9.4	45
3354	Polycaprolactone fumarate acts as an artificial neural network to promote the biological behavior of neural stem cells. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 246-256.	1.6	8
3355	Exploiting synergistic effect of externally loaded bFGF and endogenous growth factors for accelerated wound healing using heparin functionalized PCL/gelatin co-spun nanofibrous patches. Chemical Engineering Journal, 2021, 404, 126518.	6.6	51
3356	Matrix Stiffness Modulates Patient-Derived Glioblastoma Cell Fates in Three-Dimensional Hydrogels. Tissue Engineering - Part A, 2021, 27, 390-401.	1.6	36
3357	Channeled polysaccharide-based hydrogel reveals influence of curvature to guide endothelial cell arrangement in vessel-like structures. Materials Science and Engineering C, 2021, 118, 111369.	3.8	13

#	Article	IF	Citations
3358	Materials control of the epigenetics underlying cell plasticity. Nature Reviews Materials, 2021, 6, 69-83.	23.3	49
3359	Regenerated cellulose nanofibers from cellulose acetate: Incorporating hydroxyapatite (HAp) and silver (Ag) nanoparticles (NPs), as a scaffold for tissue engineering applications. Materials Science and Engineering C, 2021, 118, 111547.	3.8	70
3360	Nanoengineered shear-thinning and bioprintable hydrogel as a versatile platform for biomedical applications. Biomaterials, 2021, 267, 120476.	5.7	76
3361	Corneal endothelium tissue engineering: An evolution of signaling molecules, cells, and scaffolds toward 3D bioprinting and cell sheets. Journal of Cellular Physiology, 2021, 236, 3275-3303.	2.0	20
3362	One-pot, self-catalyzed synthesis of self-adherent hydrogels for photo-thermal, antimicrobial wound treatment. Journal of Materials Chemistry B, 2021, 9, 159-169.	2.9	52
3363	Bioactive 3D porous cobalt-doped alginate/waterborne polyurethane scaffolds with a coral reef-like rough surface for nerve tissue engineering application. Journal of Materials Chemistry B, 2021, 9, 322-335.	2.9	25
3364	Tissue-specific engineering: 3D bioprinting in regenerative medicine. Journal of Controlled Release, 2021, 329, 237-256.	4.8	45
3365	Dynamic cell-adaptable hydrogels with a moderate level of elasticity promote 3D development of encapsulated cells. Applied Materials Today, 2021, 22, 100892.	2.3	9
3366	Tunable Hybrid Matrices Drive Epithelial Morphogenesis and YAP Translocation. Advanced Science, 2021, 8, 2003380.	5.6	13
3367	Mast Cellâ€“Biomaterial Interactions and Tissue Repair. Tissue Engineering - Part B: Reviews, 2021, 27, 590-603.	2.5	21
3368	Biomimetic bone-like composites as osteo-odonto-keratoprosthesis skirt substitutes. Journal of Biomaterials Applications, 2021, 35, 1043-1060.	1.2	7
3369	Engineering a Chemically Defined Hydrogel Bioink for Direct Bioprinting of Microvasculature. Biomacromolecules, 2021, 22, 275-288.	2.6	20
3370	Neural tissue engineering: the influence of scaffold surface topography and extracellular matrix microenvironment. Journal of Materials Chemistry B, 2021, 9, 567-584.	2.9	74
3371	An Engineered Biomimetic Peptide Regulates Cell Behavior by Synergistic Integrin and Growth Factor Signaling. Advanced Healthcare Materials, 2021, 10, 2001757.	3.9	16
3372	Controlling Growth Factor Diffusion by Modulating Water Content in Injectable Hydrogels. Tissue Engineering - Part A, 2021, 27, 714-723.	1.6	8
3373	Biomoleculeâ€Directed Carbon Nanotube Selfâ€Assembly. Advanced Healthcare Materials, 2021, 10, e2001162.	3.9	24
3375	Recent Progress in the Design and Application of Supramolecular Peptide Hydrogels in Cancer Therapy. Advanced Healthcare Materials, 2021, 10, e2001239.	3.9	25
3376	Enhanced antibacterial properties and promoted cell proliferation in glass ionomer cement by modified with fluorinated graphene-doped. Journal of Applied Biomaterials and Functional Materials, 2021, 19, 228080002110374.	0.7	8

#	Article	IF	Citations
3377	Angiogenesis: Aspects in wound healing. , 2021, , 77-90.		3
3378	Covalent Cellâ€Loading Injectable Hydrogel Scaffold Significantly Promotes Tissue Regeneration In Vivo Compared with a Conventional Physical Cellâ€Loading Hydrogel Scaffold. Advanced Biology, 2021, 5, 2000106.	1.4	4
3379	Effects of miR-672 on the angiogenesis of adipose-derived mesenchymal stem cells during bone regeneration. Stem Cell Research and Therapy, 2021, 12, 85.	2.4	8
3380	User-defined, temporal presentation of bioactive molecules on hydrogel substrates using supramolecular coiled coil complexes. Biomaterials Science, 2021, 9, 4374-4387.	2.6	7
3381	Photodegradable avidin-biotinylated polymer conjugate hydrogels for cell manipulation. Biomaterials Science, 2021, 9, 6416-6424.	2.6	5
3382	Future Directions and Requirements for Tissue Engineering Biomaterials. , 2022, , 195-218.		8
3383	From Secondary Intent to Accelerated Regenerative Healing: Emergence of the Bio-intelligent Scaffold Vasculogenic Strategy for Skin Reconstruction. Reference Series in Biomedical Engineering, 2021, , 205-271.	0.1	0
3384	A versatile click chemistry-based approach for functionalizing biomaterials of diverse nature with bioactive peptides. Chemical Communications, 2021, 57, 982-985.	2.2	7
3385	Influence of residual chirality on the conformation and enzymatic degradation of glycopolypeptide based biomaterials. Science China Technological Sciences, 2021, 64, 641-650.	2.0	6
3386	Injectable oligomer-cross-linked gelatine hydrogels via anhydrideâ€“amine-conjugation. Journal of Materials Chemistry B, 2021, 9, 2295-2307.	2.9	9
3387	Electrospun hydrogels for dynamic culture systems: advantages, progress, and opportunities. Biomaterials Science, 2021, 9, 4228-4245.	2.6	15
3388	Coaxial nanofibrous scaffolds mimicking the extracellular matrix transition in the wound healing process promoting skin regeneration through enhancing immunomodulation. Journal of Materials Chemistry B, 2021, 9, 1395-1405.	2.9	16
3389	Heparin-based nanocomposites for tissue engineering. , 2021, , 81-101.		0
3390	Guestâ€“host interlinked PEG-MAL granular hydrogels as an engineered cellular microenvironment. Biomaterials Science, 2021, 9, 2480-2493.	2.6	25
3391	Chapter 12. Bioinspired and Bioinstructive Surfaces to Control Mesenchymal Stem Cells. RSC Soft Matter, 2021, , 301-325.	0.2	0
3392	Injectable nanofibrillar hydrogels based on charge-complementary peptide co-assemblies. Biomaterials Science, 2021, 9, 2494-2507.	2.6	7
3393	On-demand retrieval of cells three-dimensionally seeded in injectable thioester-based hydrogels. RSC Advances, 2021, 11, 23637-23643.	1.7	11
3394	3D bioprinting in cardiac tissue engineering. Theranostics, 2021, 11, 7948-7969.	4.6	56

#	Article	IF	Citations
3395	Safety and health issues of biocomposites. , 2021, , 421-440.		0
3396	Electrospun Scaffold for Biomimic Culture of Caco-2 Cell Monolayer as an In Vitro Intestinal Model. ACS Applied Bio Materials, 2021, 4, 1340-1349.	2.3	11
3397	Nanohydroxyapatite-doped polycaprolactone-based nanoscaffolds as a viable drug delivery agent in bone tissue engineering. Journal of Materials Research, 2021, 36, 420-430.	1.2	5
3398	Biomanufacturing. , 2021, , 137-170.		1
3399	Challenges and solutions for fabrication of three-dimensional cocultures of neural cell-loaded biomimetic constructs. Biointerphases, 2021, 16, 011202.	0.6	0
3400	Resonant acoustic rheometry for non-contact characterization of viscoelastic biomaterials. Biomaterials, 2021, 269, 120676.	5.7	12
3402	Bioactive Electrospun Fibers: Fabrication Strategies and a Critical Review of Surface-Sensitive Characterization and Quantification. Chemical Reviews, 2021, 121, 11194-11237.	23.0	41
3403	Vascular Network Formation on Macroporous Polydioxanone Scaffolds. Tissue Engineering - Part A, 2021, 27, 1239-1249.	1.6	7
3404	Macroâ€encapsulation of mesenchymal stem cells in acute and chronic liver injury animal models. Journal of Gastroenterology and Hepatology (Australia), 2021, 36, 1997-2007.	1.4	5
3405	Engineering the MSC Secretome: A Hydrogel Focused Approach. Advanced Healthcare Materials, 2021, 10, e2001948.	3.9	65
3406	Bioactive Polymeric Materials for the Advancement of Regenerative Medicine. Journal of Functional Biomaterials, 2021, 12, 14.	1.8	16
3407	Rational Design of Biomolecules/Polymer Hybrids by Reversible Deactivation Radical Polymerization (RDRP) for Biomedical Applications. Chinese Journal of Polymer Science (English Edition), 2021, 39, 1093-1109.	2.0	5
3408	Second-generation lung-on-a-chip with an array of stretchable alveoli made with a biological membrane. Communications Biology, 2021, 4, 168.	2.0	161
3409	Algae: A natural active material for biomedical applications. View, 2021, 2, 20200189.	2.7	44
3410	Nanofibrillar Hydrogel Recapitulates Changes Occurring in the Fibrotic Extracellular Matrix. Biomacromolecules, 2021, 22, 2352-2362.	2.6	17
3412	Recent Progress on Biodegradable Tissue Engineering Scaffolds Prepared by Thermally-Induced Phase Separation (TIPS). International Journal of Molecular Sciences, 2021, 22, 3504.	1.8	50
3413	Viscoelastic Cell Microenvironment: Hydrogelâ€Based Strategy for Recapitulating Dynamic ECM Mechanics. Advanced Functional Materials, 2021, 31, 2100848.	7.8	80
3415	Matrix stiffness primes lymphatic tube formation directed by vascular endothelial growth factorâ€. FASEB Journal, 2021, 35, e21498.	0.2	28

#	Article	IF	Citations
3416	Elastic Mineralized 3D Electrospun PCL Nanofibrous Scaffold for Drug Release and Bone Tissue Engineering. ACS Applied Bio Materials, 2021, 4, 3639-3648.	2.3	25
3417	Genipin crosslinked chitosan/PEO nanofibrous scaffolds exhibiting an improved microenvironment for the regeneration of articular cartilage. Journal of Biomaterials Applications, 2021, 36, 503-516.	1.2	9
3418	Designing Elastic Modulus of Cell Culture Substrate to Regulate YAP and RUNX2 Localization for Controlling Differentiation of Human Mesenchymal Stem Cells. Analytical Sciences, 2021, 37, 447-451.	0.8	7
3419	Recent Advances in Fiberâ€"Hydrogel Composites for Wound Healing and Drug Delivery Systems. Antibiotics, 2021, 10, 248.	1.5	33
3420	Multivalent display of chemical signals on <scp>selfâ€assembled</scp> peptide scaffolds. Peptide Science, 2021, 113, e24224.	1.0	8
3421	Engineering Tissue Barrier Models on Hydrogel Microfluidic Platforms. ACS Applied Materials & Interfaces, 2021, 13, 13920-13933.	4.0	42
3422	Enzymatically Cross-linked Hydrogels Based on Synthetic Poly(Î±-amino acid)s Functionalized with RGD Peptide for 3D Mesenchymal Stem Cell Culture. Biomacromolecules, 2021, 22, 1417-1431.	2.6	11
3423	Nanofibrous Gelatin-Based Biomaterial with Improved Biomimicry Using D-Periodic Self-Assembled Atelocollagen. Biomimetics, 2021, 6, 20.	1.5	5
3424	Enhanced Regeneration of Vascularized Adipose Tissue with Dual 3D-Printed Elastic Polymer/dECM Hydrogel Complex. International Journal of Molecular Sciences, 2021, 22, 2886.	1.8	22
3425	Three-dimensional endothelial cell incorporation within bioactive nanofibrous scaffolds through concurrent emulsion electrospinning and coaxial cell electrospraying. Acta Biomaterialia, 2021, 123, 312-324.	4.1	22
3426	Peptide-based scaffolds for the culture and maintenance of primary human hepatocytes. Scientific Reports, 2021, 11, 6772.	1.6	25
3429	Metformin-loaded nanospheres-laden photocrosslinkable gelatin hydrogel for bone tissue engineering. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 116, 104293.	1.5	29
3430	Guestâ€"Host Supramolecular Assembly of Injectable Hydrogel Nanofibers for Cell Encapsulation. ACS Biomaterials Science and Engineering, 2021, 7, 4164-4174.	2.6	28
3431	Ultrathin polymer fibers hybridized with bioactive ceramics: A review on fundamental pathways of electrospinning towards bone regeneration. Materials Science and Engineering C, 2021, 123, 111853.	3.8	28
3432	Surface engineering of biomaterials in orthopedic and dental implants: Strategies to improve osteointegration, bacteriostatic and bactericidal activities. Biotechnology Journal, 2021, 16, e2000116.	1.8	64
3433	A hydrogel reveals an elusive cancer stem cell. Cell Death and Disease, 2021, 12, 415.	2.7	0
3434	Synthesis of end group-functionalized PGMA-peptide brush platforms for specific cell attachment by interface-mediated dissociative electron transfer reversible addition-fragmentation chain transfer radical (DET-RAFT) polymerization. European Polymer Journal, 2021, 148, 110370.	2.6	6
3436	Clip Chemistry: Diverse (Bio)(macro)molecular and Material Function through Breaking Covalent Bonds. Chemical Reviews, 2021, 121, 7059-7121.	23.0	75

#	Article	IF	Citations
3437	Ultrashort Peptide Hydrogels Display Antimicrobial Activity and Enhance Angiogenic Growth Factor Release by Dental Pulp Stem/Stromal Cells. Materials, 2021, 14, 2237.	1.3	12
3438	Collagen Pentablock Copolymers Form Smectic Liquid Crystals as Precursors for Mussel Byssus Fabrication. ACS Nano, 2021, 15, 6829-6838.	7.3	12
3439	Printing of Woodpile Scaffold Using Fresnel Lens for Tissue Engineering. International Journal of Precision Engineering and Manufacturing - Green Technology, 2022, 9, 507-522.	2.7	3
3440	A Versatile Surface Modification Method via Vapor-phase Deposited Functional Polymer Films for Biomedical Device Applications. Biotechnology and Bioprocess Engineering, 2021, 26, 165-178.	1.4	16
3441	Sprayable hydrogel dressing accelerates wound healing with combined reactive oxygen species-scavenging and antibacterial abilities. Acta Biomaterialia, 2021, 124, 219-232.	4.1	179
3442	Combined Analytical Approaches to Standardize and Characterize Biomaterials Formulations: Application to Chitosan-Gelatin Cross-Linked Hydrogels. Biomolecules, 2021, 11, 683.	1.8	11
3443	Effect of Biomedical Materials in the Implementation of a Long and Healthy Life Policy. Processes, 2021, 9, 865.	1.3	21
3444	Computational study of extrusion bioprinting with jammed gelatin microgel-based composite ink. Additive Manufacturing, 2021, 41, 101963.	1.7	19
3445	In Situ Construction of Functional Assemblies in Living Cells for Cancer Therapy. Advanced Healthcare Materials, 2021, 10, 2100381.	3.9	4
3446	Reversed-engineered human alveolar lung-on-a-chip model. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	144
3447	A highly biocompatible bio-ink for 3D hydrogel scaffolds fabrication in the presence of living cells by two-photon polymerization. European Polymer Journal, 2021, 153, 110505.	2.6	13
3448	Evaluating the Effect of Tissue Selection on the Characteristics of Extracellular Matrix Hydrogels from Decellularized Porcine Bladders. Applied Sciences (Switzerland), 2021, 11, 5820.	1.3	2
3449	Neovascularization of engineered tissues for clinical translation: Where we are, where we should be?. APL Bioengineering, 2021, 5, 021503.	3.3	12
3450	Advances in carbohydrate-based polymers for the design of suture materials: A review. Carbohydrate Polymers, 2021, 261, 117860.	5.1	18
3451	Mechanobiology of Dental Pulp Stem Cells at the Interface of Aqueous-Based Fabricated ZIF8 Thin Film. ACS Applied Bio Materials, 2021, 4, 4885-4895.	2.3	1
3452	Synthetic extracellular matrices with tailored adhesiveness and degradability support lumen formation during angiogenic sprouting. Nature Communications, 2021, 12, 3402.	5.8	31
3453	Aptamerâ€functionalized hydrogels: An emerging class of biomaterials for protein delivery, cell capture, regenerative medicine, and molecular biosensing. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2021, 13, e1731.	3.3	12
3454	Carbon nanotubes reinforced with natural/synthetic polymers to mimic the extracellular matrices of bone â€“ a review. Materials Today Chemistry, 2021, 20, 100420.	1.7	17

#	Article	IF	Citations
3456	Enhanced mechanosensing of cells in synthetic 3D matrix with controlled biophysical dynamics. Nature Communications, 2021, 12, 3514.	5.8	92
3457	Droplet microarrays for cell culture: effect of surface properties and nanoliter culture volume on global transcriptomic landscape. Materials Today Bio, 2021, 11, 100112.	2.6	7
3458	Nanoâ€•and Microscale Optical and Electrical Biointerfaces and Their Relevance to Energy Research. Small, 2021, 17, e2100165.	5.2	7
3460	A Hybrid Injectable and Selfâ€Healable Hydrogel System as 3D Cell Culture Scaffold. Macromolecular Bioscience, 2021, 21, e2100079.	2.1	5
3461	Porosity parameters in biomaterial science: Definition, impact, and challenges in tissue engineering. Frontiers of Materials Science, 2021, 15, 352-373.	1.1	23
3462	<scp>Chitosanâ€based</scp> nanocomposites for medical applications. Journal of Polymer Science, 2021, 59, 1610-1642.	2.0	43
3463	Biocompatible grapheneâ€embedded <scp>PCL</scp>/<scp>PGS</scp>â€based nanofibrous scaffolds: A potential application for cardiac tissue regeneration. Journal of Applied Polymer Science, 2021, 138, 51177.	1.3	19
3464	Composite Materials by Building Block Chemistry Using Weak Interaction. Bulletin of the Chemical Society of Japan, 2021, 94, 1903-1921.	2.0	35
3465	3D Printing: Advancement in Biogenerative Engineering to Combat Shortage of Organs and Bioapplicable Materials. Regenerative Engineering and Translational Medicine, 2022, 8, 173-199.	1.6	25
3466	Precise Tuning of Polymeric Fiber Dimensions to Enhance the Mechanical Properties of Alginate Hydrogel Matrices. Polymers, 2021, 13, 2202.	2.0	10
3467	A review of regulated self-organizing approaches for tissue regeneration. Progress in Biophysics and Molecular Biology, 2021, 167, 63-78.	1.4	5
3468	Sizeâ€Confined Effects of Nanostructures on Fibronectinâ€Induced Macrophage Inflammation on Titanium Implants. Advanced Healthcare Materials, 2021, 10, e2100994.	3.9	17
3469	Bacterial cellulose nanofiber reinforced poly(glycerol-sebacate) biomimetic matrix for 3D cell culture. Cellulose, 2021, 28, 8483-8492.	2.4	9
3470	In SituBiosynthesis of a Metal Nanoparticle Encapsulated in Alginate Gel for Imageable Drug-Delivery System. ACS Applied Materials & Interfaces, 2021, 13, 36697-36708.	4.0	14
3471	Bioinspired Microstructure Platform for Modular Cellâ€Laden Microgel Fabrication. Macromolecular Bioscience, 2021, 21, 2100110.	2.1	2
3472	Recent Progress Toward Clinical Translation of Tissue-Engineered Heart Valves. Canadian Journal of Cardiology, 2021, 37, 1064-1077.	0.8	26
3473	Engineering the Dynamics of Cell Adhesion Cues in Supramolecular Hydrogels for Facile Control over Cell Encapsulation and Behavior. Advanced Materials, 2021, 33, e2008111.	11.1	52
3474	Light-Responsive Dynamic Protein Hydrogels Based on LOVTRAP. Langmuir, 2021, 37, 10214-10222.	1.6	12

#	Article	IF	Citations
3475	Poly(ethylene glycol) Hydrogel Crosslinking Chemistries Identified via Atmospheric Solids Analysis Probe Mass Spectrometry. Macromolecules, 2021, 54, 7754-7764.	2.2	4
3476	Fibrillar biopolymer-based scaffolds to study macrophage-fibroblast crosstalk in wound repair. Biological Chemistry, 2021, 402, 1309-1324.	1.2	3
3477	From vesicles to materials: bioinspired strategies for fabricating hierarchically structured soft matter. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200338.	1.6	6
3478	3D bioprinting of molecularly engineered PEG-based hydrogels utilizing gelatin fragments. Biofabrication, 2021, 13, 045008.	3.7	26
3479	Liver Organoids: Updates on Disease Modeling and Biomedical Applications. Biology, 2021, 10, 835.	1.3	10
3480	Modeling of the Human Bone Environment: Mechanical Stimuli Guide Mesenchymal Stem Cellâ€“Extracellular Matrix Interactions. Materials, 2021, 14, 4431.	1.3	15
3481	Advancing models of neural development with biomaterials. Nature Reviews Neuroscience, 2021, 22, 593-615.	4.9	60
3482	Electroactive electrospun nanofibers for tissue engineering. Nano Today, 2021, 39, 101196.	6.2	112
3483	Evaluation of the effect of alginate matrices combination on insulin-secreting MIN-6Âcell viability. Journal of Drug Delivery Science and Technology, 2021, 64, 102569.	1.4	0
3484	Gelatin-Polyvinyl Alcohol Film for Tissue Engineering: A Concise Review. Biomedicines, 2021, 9, 979.	1.4	47
3485	Immunomodulation and Biomaterials: Key Players to Repair Volumetric Muscle Loss. Cells, 2021, 10, 2016.	1.8	8
3486	Stem Cell Microarrays for Assessing Growth Factor Signaling in Engineered Glycan Microenvironments. Advanced Healthcare Materials, 2022, 11, e2101232.	3.9	1
3487	Electrospinning and Electrospraying with Cells for Applications in Biomanufacturing. Nano LIFE, 0, , 2141003.	0.6	1
3488	Reversible dynamic mechanics of hydrogels for regulation of cellular behavior. Acta Biomaterialia, 2021, 136, 88-98.	4.1	11
3489	HA-coated collagen nanofibers for urethral regeneration via in situ polarization of M2 macrophages. Journal of Nanobiotechnology, 2021, 19, 283.	4.2	17
3490	Approaches to inhibit biofilm formation applying natural and artificial silk-based materials. Materials Science and Engineering C, 2021, 131, 112458.	3.8	9
3491	Plenty of Room at the Top: A Multiâ€Scale Understanding of nmâ€Resolution Polymer Patterning on 2D Materials. Angewandte Chemie, 2021, 133, 25640-25648.	1.6	1
3492	Recent Advances on Stimuli-Responsive Hydrogels Based on Tissue-Derived ECMs and Their Components: Towards Improving Functionality for Tissue Engineering and Controlled Drug Delivery. Polymers, 2021, 13, 3263.	2.0	6

#	Article	IF	Citations
3493	The Importance of Interfaces in Multiâ€Material Biofabricated Tissue Structures. Advanced Healthcare Materials, 2021, 10, e2101021.	3.9	12
3494	Thiolactone-Functional Pullulan for In Situ Forming Biogels. Biomacromolecules, 2021, 22, 4262-4273.	2.6	5
3495	A pH-driven genipin gelator to engineer decellularized extracellular matrix-based tissue adhesives. Acta Biomaterialia, 2021, 131, 211-221.	4.1	20
3496	Sequestered cell-secreted extracellular matrix proteins improve murine folliculogenesis and oocyte maturation for fertility preservation. Acta Biomaterialia, 2021, 132, 313-324.	4.1	25
3497	Silk fibroin incorporated with methylcellulose as mutually functional scaffolds: Bone nucleation and biological signal attachment. MRS Communications, 2021, 11, 596-602.	0.8	0
3498	Multicomponent Peptide Hydrogels as an Innovative Platform for Cell-Based Tissue Engineering in the Dental Pulp. Pharmaceutics, 2021, 13, 1575.	2.0	13
3499	Viscoelasticity and Adhesion Signaling in Biomaterials Control Human Pluripotent Stem Cell Morphogenesis in 3D Culture. Advanced Materials, 2021, 33, e2101966.	11.1	60
3500	Drug metabolic stability in early drug discovery to develop potential lead compounds. Drug Metabolism Reviews, 2021, 53, 459-477.	1.5	26
3501	Guiding cell adhesion and motility by modulating cross-linking and topographic properties of microgel arrays. PLoS ONE, 2021, 16, e0257495.	1.1	5
3502	Plenty of Room at the Top: A Multiâ€Scale Understanding of nmâ€Resolution Polymer Patterning on 2D Materials. Angewandte Chemie - International Edition, 2021, 60, 25436-25444.	7.2	10
3503	Self-assembling peptide hydrogels facilitate vascularization in two-component scaffolds. Chemical Engineering Journal, 2021, 422, 130145.	6.6	18
3504	Fibroblasts upregulate expression of adhesion molecules and promote lymphocyte retention in 3D fibroin/gelatin scaffolds. Bioactive Materials, 2021, 6, 3449-3460.	8.6	8
3505	Biomaterials-based bioengineering strategies for bioelectronic medicine. Materials Science and Engineering Reports, 2021, 146, 100630.	14.8	18
3506	Gradient chondroitin sulfate/poly (Î³-glutamic acid) hydrogels inducing differentiation of stem cells for cartilage tissue engineering. Carbohydrate Polymers, 2021, 270, 118330.	5.1	22
3507	A review of strategies for development of tissue engineered meniscal implants. Biomaterials and Biosystems, 2021, 4, 100026.	1.0	12
3508	Capturing dynamic biological signals via bio-mimicking hydrogel for precise remodeling of soft tissue. Bioactive Materials, 2021, 6, 4506-4516.	8.6	36
3509	Tracheal Replacement and Tissue Engineered Airways. , 2022, , 779-787.		0
3510	Click-functionalized hydrogel design for mechanobiology investigations. Molecular Systems Design and Engineering, 2021, 6, 670-707.	1.7	15

#	Article	IF	Citations
3511	Polysaccharides and Applications in Regenerative Medicine. , 2021, , 1-33.		0
3512	Gel-Inks for 3D Printing in Corneal Tissue Engineering. Gels Horizons: From Science To Smart Materials, 2021, , 161-190.	0.3	1
3513	Development of a library of laminin-mimetic peptide hydrogels for control of nucleus pulposus cell behaviors. Journal of Tissue Engineering, 2021, 12, 204173142110212.	2.3	8
3514	KulturgefÃÃŸe und ihre Behandlung. , 2021, , 67-85.		0
3515	Magneto-responsive hydrogels by self-assembly of low molecular weight peptides and crosslinking with iron oxide nanoparticles. Soft Matter, 2021, 17, 2857-2864.	1.2	25
3516	Interactions Between 2D Materials and Living Matter: A Review on Graphene and Hexagonal Boron Nitride Coatings. Frontiers in Bioengineering and Biotechnology, 2021, 9, 612669.	2.0	21
3520	Stimuli-Responsive Polymer Brushes. , 0, , 125-144.		2
3521	PEG/HA Hybrid Hydrogels for Biologically and Mechanically Tailorable Bone Marrow Organoids. Advanced Functional Materials, 2020, 30, 1910282.	7.8	48
3522	From Molecules to Matrix: Construction and Evaluation of Molecularly Defined Bioscaffolds. Advances in Experimental Medicine and Biology, 2006, 585, 279-295.	0.8	54
3523	Phage Display as a Strategy for Designing Organic/Inorganic Biomaterials. , 2009, , 115-132.		5
3524	Extracellular Matrix-derived Ligand for Selective Integrin Binding to Control Cell Function. , 2009, , 133-156.		3
3525	Three-dimensional Culture of Human Embryonic Stem Cells. Human Cell Culture, 2007, , 149-172.	0.1	1
3526	Composite Hydrogels for Scaffold Design, Tissue Engineering, and Prostheses. , 2010, , 227-245.		9
3527	Heterotopic Ossification Following Musculoskeletal Trauma: Modeling Stem and Progenitor Cells in Their Microenvironment. Advances in Experimental Medicine and Biology, 2011, 720, 39-50.	0.8	17
3528	Tissue Engineering Strategies for Vocal Fold Repair and Regeneration. , 2012, , 253-284.		1
3529	Nonviral Gene Delivery for Applications in Regenerative Medicine. , 2012, , 285-319.		1
3530	Oxygen Supply for Tissue Engineering. , 2012, , 41-86.		6
3531	Heparin-Functionalized Materials in Tissue Engineering Applications. , 2012, , 225-250.		6

#	Article	IF	Citations
3532	Preparation of Decellularized Biological Scaffolds for 3D Cell Culture. Methods in Molecular Biology, 2017, 1612, 15-27.	0.4	10
3533	Characterizing ECM Production by Cells Encapsulated in Hydrogels. Methods in Molecular Biology, 2009, 522, 349-362.	0.4	10
3534	Synthesis and Primary Characterization of Self-Assembled Peptide-Based Hydrogels. Methods in Molecular Biology, 2008, 474, 61-77.	0.4	36
3535	Cartilage Tissue Engineering. Methods in Molecular Biology, 2007, 407, 351-373.	0.4	56
3536	Vascular Differentiation of Human Embryonic Stem Cells in Bioactive Hydrogel-Based Scaffolds. Methods in Molecular Biology, 2009, 584, 333-354.	0.4	7
3537	Regenerating Heart Valves. , 2011, , 403-442.		6
3538	Tissue Engineering Strategies for Cardiac Regeneration. , 2011, , 443-475.		1
3539	The Role of Mechanical Forces in Guiding Tissue Differentiation. , 2011, , 77-97.		3
3540	Phenotypic Screening of iPSC-Derived Cardiomyocytes for Cardiotoxicity Testing and Therapeutic Target Discovery. , 2019, , 19-34.		1
3541	Biomaterials and Microfluidics for Drug Discovery and Development. Advances in Experimental Medicine and Biology, 2020, 1230, 121-135.	0.8	8
3542	Spatial and Electrical Factors Regulating Cardiac Regeneration and Assembly. , 2015, , 71-92.		3
3543	Hard-Soft Tissue Interface Engineering. Advances in Experimental Medicine and Biology, 2015, 881, 187-204.	0.8	10
3545	Biomaterials Approaches in Vascular Engineering: a Review of Past and Future Trends. , 2011, , 457-487.		1
3546	Bioelastomers in Tissue Engineering. , 2011, , 75-118.		8
3547	Microscale Biomaterials for Tissue Engineering. , 2011, , 119-138.		1
3548	Development of Provisional Extracellular Matrix on Biomaterials Interface: Lessons from In Vitro Cell Culture. NATO Science for Peace and Security Series A: Chemistry and Biology, 2010, , 19-43.	0.5	3
3549	Introduction to Ideal Characteristics and Advanced Biomedical Applications of Biomaterials. , 2019, , 171-204.		4
3550	Bio Mimicking of Extracellular Matrix. Advances in Experimental Medicine and Biology, 2019, 1174, 371-399.	0.8	10

#	Article	IF	Citations
3551	Supramolecular Soft Biomaterials for Biomedical Applications. Series in Bioengineering, 2015, , 107-125.	0.3	10
3552	Hydrogels for Stem Cell Fate Control and Delivery in Regenerative Medicine. Series in Bioengineering, 2015, , 187-214.	0.3	6
3553	Nanofiber composites in cartilage tissue engineering. , 2017, , 325-344.		5
3554	Biomaterials for on-chip organ systems. , 2020, , 669-707.		5
3555	Cluster-Assembled Materials: From Fabrication to Function. , 2018, , 417-427.		5
3556	Synthesis of temperature and light sensitive mixed polymer brushes via combination of surface-initiated PETâ€“ATRP and interface-mediated RAFT polymerization for cell sheet application. Applied Surface Science, 2020, 511, 145572.	3.1	18
3557	Mimicked extracellular matrix of calcified soft tissue based on chitosan/gelatin/compounded calcium phosphate hydrogel to design ex vivo model for heterotopic ossification. Materials and Design, 2017, 134, 486-493.	3.3	14
3559	Essential materials science. , 0, , 29-128.		1
3560	Gradient and Dynamic Hydrogel Materials to Probe Dynamics in Cancer Stem Cell Phenotypes. ACS Applied Bio Materials, 2021, 4, 711-720.	2.3	9
3561	Hierarchically-structured metalloprotein composite coatings biofabricated from co-existing condensed liquid phases. Nature Communications, 2020, 11, 862.	5.8	41
3562	CHAPTER 4. Designing Enzyme-responsive Biomaterials. RSC Soft Matter, 2020, , 76-125.	0.2	2
3563	Optical sensing of mechanical pressure based on diffusion measurement in polyacrylamide cell-like barometers. Soft Matter, 2017, 13, 4210-4213.	1.2	10
3564	Viscoelastic hydrogels for 3D cell culture. Biomaterials Science, 2017, 5, 1480-1490.	2.6	230
3565	Hydrogels as artificial matrices for cell seeding in microfluidic devices. RSC Advances, 2020, 10, 43682-43703.	1.7	62
3566	Three-dimensional prostate tumor model based on a hyaluronic acid-alginate hydrogel for evaluation of anti-cancer drug efficacy. Journal of Biomaterials Science, Polymer Edition, 2017, 28, 1603-1616.	1.9	25
3567	Three-Dimensional Fiber Deposition of Cell-Laden, Viable, Patterned Constructs for Bone Tissue Printing. Tissue Engineering, 2008, 14, 127-133.	4.9	30
3568	Design of Biphasic Polymeric 3-Dimensional Fiber Deposited Scaffolds for Cartilage Tissue Engineering Applications. Tissue Engineering, 2006, .	4.9	1
3569	Primary tissue for cellular brain repair in Parkinson's disease: Promise, problems and the potential of biomaterials. European Journal of Neuroscience, 2019, 49, 472-486.	1.2	18

#	Article	IF	Citations
3570	A Sulfated Nanofibrous Mesh Supporting the Osteogenic Differentiation of Periosteum-Derived Cells. Journal of Biomaterials and Tissue Engineering, 2013, 3, 486-493.	0.0	5
3572	Nanostructures for Musculoskeletal Tissue Engineering. , 2008, , 329-351.		2
3574	Tissue Engineering Using Ceramics and Polymers. , 2007, , .		10
3575	Modular Biomimetic Drug Delivery Systems. , 2013, , 85-122.		3
3576	Second Harmonic Generation Reveals Collagen Fibril Remodeling in Fibroblast-populated Collagen Gels. Cell Structure and Function, 2013, 38, 229-238.	0.5	15
3577	Recent advances on gradient hydrogels in biomimetic cartilage tissue engineering. F1000Research, 2017, 6, 2158.	0.8	13
3578	Derivation of Chondrogenically-Committed Cells from Human Embryonic Cells for Cartilage Tissue Regeneration. PLoS ONE, 2008, 3, e2498.	1.1	115
3579	Modulation of Hepatocarcinoma Cell Morphology and Activity by Parylene-C Coating on PDMS. PLoS ONE, 2010, 5, e9667.	1.1	18
3580	Hybrid Titanium/Biodegradable Polymer Implants with an Hierarchical Pore Structure as a Means to Control Selective Cell Movement. PLoS ONE, 2011, 6, e20480.	1.1	23
3581	Regulation of Epithelial Cell Morphology and Functions Approaching To More In Vivo-Like by Modifying Polyethylene Glycol on Polysulfone Membranes. PLoS ONE, 2012, 7, e36110.	1.1	2
3582	Phenotypic Characterization of Prostate Cancer LNCaP Cells Cultured within a Bioengineered Microenvironment. PLoS ONE, 2012, 7, e40217.	1.1	75
3583	The Therapeutic Role of Monocyte Chemoattractant Protein-1 in a Renal Tissue Engineering Strategy for Diabetic Patients. PLoS ONE, 2013, 8, e57635.	1.1	7
3584	LEGOÂ® Bricks as Building Blocks for Centimeter-Scale Biological Environments: The Case of Plants. PLoS ONE, 2014, 9, e100867.	1.1	23
3585	A Molecular Smart Surface for Spatio-Temporal Studies of Cell Mobility. PLoS ONE, 2015, 10, e0118126.	1.1	13
3586	Proliferation and Differentiation Potential of Human Adipose-Derived Stem Cells Grown on Chitosan Hydrogel. PLoS ONE, 2015, 10, e0120803.	1.1	50
3587	In vitro evaluation of decontamination effects on mechanical properties of fibrin membrane. Medical Journal of the Islamic Republic of Iran, 2018, 32, 6-12.	0.9	4
3588	Calcium Orthophosphate (CaPO4) Scaffolds for Bone Tissue Engineering Applications. Journal of Biotechnology and Biomedical Science, 2018, 1, 25-93.	0.6	22
3589	OA cartilage derived chondrocytes encapsulated in poly(ethylene glycol) diacrylate (PEGDA) for the evaluation of cartilage restoration and apoptosis in an in vitro model. Histology and Histopathology, 2011, 26, 1265-78.	0.5	58

#	Article	IF	Citations
3590	Interpenetrating polymer network hydrogels as bioactive scaffolds for tissue engineering. Reviews in Chemical Engineering, 2022, 38, 347-361.	2.3	28
3591	THE INFLUENCE OF THE ADDITION OF COLLAGEN ON THE RHEOLOGICAL PROPERTIES OF CHITOSAN CHLORIDE SOLUTIONS. Progress on Chemistry and Application of Chitin and Its Derivatives, 2017, XXII, 176-189.	0.1	10
3592	APPLICATIONS OF CHITOSANâ€“GRAPHENE OXIDE NANOCOMPOSITES IN MEDICAL SCIENCE: A REVIEW. Progress on Chemistry and Application of Chitin and Its Derivatives, 2018, XXIII, 5-24.	0.1	5
3593	The analysis of the proliferative activity of cells on microparticles obtained from decellularized liver and kidney tissue. Vestnik Transplantologii I Iskusstvennykh Organov, 2019, 20, 69-75.	0.1	2
3594	Hydrogels for Cardiac Tissue Repair and Regeneration. Journal of Cardiovascular Medicine and Cardiology, 0, , 049-057.	0.1	4
3595	Identification and functional activity of matrix-remodeling associated 5 (MXRA5) in benign hyperplastic prostate. Aging, 2020, 12, 8605-8621.	1.4	23
3596	Heart Regeneration with Embryonic Cardiac Progenitor Cells and Cardiac Tissue Engineering. Journal of Stem Cell and Transplantation Biology, 2015, 01, .	0.2	17
3597	Adult Stem Cells and Biocompatible Scaffolds as Smart Drug Delivery Tools for Cardiac Tissue Repair. Current Medicinal Chemistry, 2013, 20, 3429-3447.	1.2	11
3598	The Potential Application of Biomaterials in Cardiac Stem Cell Therapy. Current Medicinal Chemistry, 2016, 23, 589-602.	1.2	4
3599	Glycan Carriers As Glycotools for Medicinal Chemistry Applications. Current Medicinal Chemistry, 2019, 26, 6349-6398.	1.2	5
3600	Hybrid Organic-Inorganic Scaffolding Biomaterials for Regenerative Therapies. Current Organic Chemistry, 2014, 18, 2299-2314.	0.9	36
3601	Drug Delivery Systems for Wound Healing. Current Pharmaceutical Biotechnology, 2015, 16, 621-629.	0.9	46
3602	The Crosstalk between Tissue Engineering and Pharmaceutical Biotechnology: Recent Advances and Future Directions. Current Pharmaceutical Biotechnology, 2015, 16, 1012-1023.	0.9	9
3603	The Role of 3D Modelling and Printing in Orthopaedic Tissue Engineering: A Review of the Current Literature. Current Stem Cell Research and Therapy, 2017, 12, 225-232.	0.6	21
3604	Angiogenic competency of biodegradable hydrogels fabricated from polyethylene glycol-crosslinked tyrosine-derived polycarbonates. , 2008, 15, 77-87.		12
3605	Three-dimensional cultures of osteogenic and chondrogenic cells: A tissue engineering approach to mimic bone and cartilage in vitro. , 2009, 17, 1-14.		104
3606	Visible light photoinitiation of mesenchymal stem cell-laden bioresponsive hydrogels. , 2011, 22, 43-55.		182
3607	Injectable skeletal muscle matrix hydrogel promotes neovascularization and muscle cell infiltration in a hindlimb ischemia model. , 2012, 23, 400-412.		132

#	Article	IF	Citations
3608	Tissue engineering for articular cartilage repair â€“ the state of the art. , 2013, 25, 248-267.		305
3609	Low Level Fluoride Stimulates Epithelial-Mesenchymal Interaction in Oral Mucosa. Journal of Hard Tissue Biology, 2013, 22, 59-66.	0.2	6
3610	Fabrication of three-dimensional cell scaffolds with spatial gradients of biomolecules. Inflammation and Regeneration, 2007, 27, 102-106.	1.5	4
3611	Mesenchymal stromal cell activation by breast cancer secretomes in bioengineered 3D microenvironments. Life Science Alliance, 2019, 2, e201900304.	1.3	37
3612	Bioengineering of Artificial Lymphoid Organs. Acta Naturae, 2016, 8, 10-23.	1.7	8
3613	FOUR-DIMENSIONAL BIOPRINTING FOR REGENERATIVE MEDICINE: MECHANISMS TO INDUCE SHAPE VARIATION AND POTENTIAL APPLICATIONS. European Medical Journal Innovations, 0, , 36-43.	2.0	8
3614	Electrospun Nanofibers of Natural and Synthetic Polymers as Artificial Extracellular Matrix for Tissue Engineering. Nanomaterials, 2021, 11, 21.	1.9	115
3615	Cancer Stem Cell Microenvironment Models with Biomaterial Scaffolds In Vitro. Processes, 2021, 9, 45.	1.3	8
3616	Spheroids of Endothelial Cells and Vascular Smooth Muscle Cells Promote Cell Migration in Hyaluronic Acid and Fibrinogen Composite Hydrogels. Research, 2020, 2020, 8970480.	2.8	17
3617	BIODEGRADABLE POLYMERS FOR CONTROLLED RELEASE OF GENE DELIVERY SYSTEMS. Acta Polymerica Sinica, 2009, 009, 97-103.	0.0	4
3618	A Full Skin Defect Model to Evaluate Vascularization of Biomaterials In Vivo. Journal of Visualized Experiments, 2014, , .	0.2	13
3619	Static and Dynamic Mechanical Behavior of Hydroxyapatite-Polyacrylic Acid Composites Under Simulated Body Fluid. American Journal of Biochemistry and Biotechnology, 2006, 2, 73-79.	0.1	19
3621	Modular Hydrogels for Drug Delivery. Journal of Biomaterials and Nanobiotechnology, 2012, 03, 185-199.	1.0	53
3622	Electrospun Gelatin Constructs with Tunable Fiber Orientation Promote Directed Angiogenesis. Open Journal of Regenerative Medicine, 2014, 03, 1-12.	0.5	4
3623	Engineering stem cell niches in bioreactors. World Journal of Stem Cells, 2013, 5, 124.	1.3	34
3624	New Era in Health Care: Tissue Engineering. Journal of Stem Cells and Regenerative Medicine, 2006, 1, 8-24.	2.2	38
3625	Cellulose Nanocrystals as Advanced "Green" Materials for Biological and Biomedical Engineering. Journal of Biosystems Engineering, 2015, 40, 373-393.	1.2	35
3626	The concept of biologically active microporous engineering materials and composite biological-engineering materials for regenerative medicine and dentistry. Archives of Materials Science and Engineering, 2016, 80, 64-85.	0.7	13

#	Article	IF	Citations
3627	Role of Modern Technologies in Tissue Engineering. Archives of Neuroscience, 2020, 7, .	0.1	5
3628	Optimization of Three Dimensional Culturing of the HepG2 Cell Line in Fibrin Scaffold. Hepatitis Monthly, 2015, 15, e22731.	0.1	8
3629	Three-Dimensional (3D) Cell Culture Conditions, Present and Future Improvements. Razavi International Journal of Medicine, 2014, , .	0.1	2
3630	The Review on Electrospun Gelatin Fiber Scaffold. Journal of Research Updates in Polymer Science, 2013, 1, 59-71.	0.3	29
3631	Recent Applications of Polymeric Biomaterials and Stem Cells in Tissue Engineering and Regenerative Medicine. Porrime, 2014, 38, 113-128.	0.0	6
3632	Constraining the Pluripotent Fate of Human Embryonic Stem Cells for Tissue Engineering and Cell Therapy â€“ The Turning Point of Cell-Based Regenerative Medicine. British Biotechnology Journal, 2013, 3, 424-457.	0.4	5
3633	Regulation of stem cell fate using nanostructure-mediated physical signals. Chemical Society Reviews, 2021, 50, 12828-12872.	18.7	35
3634	Nanofiber-Mediated Stem Cell Osteogenesis: Prospects in Bone Tissue Regeneration. , 2021, , 47-67.		3
3635	Biomaterials-based Approaches for Cardiac Regeneration. Korean Circulation Journal, 2021, 51, 943.	0.7	15
3636	Tip-Viscid Electrohydrodynamic Jet 3D Printing of Composite Osteochondral Scaffold. Nanomaterials, 2021, 11, 2694.	1.9	4
3637	Magnesium cationic cue enriched interfacial tissue microenvironment nurtures the osseointegration of gamma-irradiated allograft bone. Bioactive Materials, 2022, 10, 32-47.	8.6	10
3638	A framework for developing sex-specific engineered heart models. Nature Reviews Materials, 2022, 7, 295-313.	23.3	22
3639	Recent Advances in Three-Dimensional Stem Cell Culture Systems and Applications. Stem Cells International, 2021, 2021, 1-13.	1.2	23
3640	Biomedical Applications of Carbon Nanomaterials: Fullerenes, Quantum Dots, Nanotubes, Nanofibers, and Graphene. Materials, 2021, 14, 5978.	1.3	97
3641	Design of Custom-Shaped Vascularized Tissues Using Microtissue Spheroids as Minimal Building Units. Tissue Engineering, 2006, .	4.9	0
3642	Bespoke Human Hypertrophic Chondrocytic Cell Lines Provide the Osteoinductive Signals Required for Vascularized Bone Formation. Tissue Engineering, 2006, .	4.9	0
3643	Bespoke Human Hypertrophic Chondrocytic Cell Lines Provide the Osteoinductive Signals Required for Vascularized Bone Formation. Tissue Engineering, 2006, .	4.9	0
3644	Engineered Cell-Adhesive Nanoparticles Nucleate Extracellular Matrix Assembly. Tissue Engineering, 2007, .	4.9	0

#	Article	IF	Citations
3645	Compositional Alterations of Fibrin-Based Materials for RegulatingIn VitroNeural Outgrowth. Tissue Engineering, 0, , 110306233438005.	4.9	0
3646	Control of Adult Stem Cell Function in Bioengineered Artificial Niches. , 2008, , 175-197.		0
3647	Method to Analyze Three-Dimensional Cell Distribution and Infiltration in Degradable Scaffolds. Tissue Engineering - Part A, 0, , 110306231138043.	1.6	1
3648	Drug Delivery Systems. , 2008, , .		0
3649	Possibilities of Using Cord Blood for Improving the Biocompatibility of Implants. , 2009, , 319-330.		0
3650	Mechanismen der Wundheilung. Fortschritte Der Praktischen Dermatologie Und Venerologie, 2009, , 25-29.	0.0	0
3651	Postnatal Stem Cells in Tissue Engineering. , 2009, , 583-590.		0
3652	Nanostructured Materials Constructed from Polypeptides. , 2009, , 96-127.		0
3653	Nanoscale Mechanisms for Assembly of Biomaterials. , 2009, , 43-75.		0
3654	Potential Applications of Tissue Engineering in Hand Surgery. , 2009, , 13-29.		0
3655	Nanoscale Control of Hetero-biointerfaces. Hyomen Kagaku, 2009, 30, 193-201.	0.0	0
3656	Inherently Antibacterial Hydrogels: Altering Activity via Tryptophan/Arginine Interactions. FASEB Journal, 2009, 23, 863.14.	0.2	1
3657	Chapter 8. Fibrin-based Matrices to Support Stem Cell-Based Tissue Regeneration. , 2010, , 159-177.		0
3658	TISSUE ENGINEERING IN PEDIATRIC UROLOGY. , 2010, , 205-211.		0
3660	Chemical Microenvironmental Factors. , 2010, , 97-119.		0
3661	Stem Cells in Cardiac Tissue Engineering. , 2010, , 611-635.		1
3662	Hypoxia and Matrix Manipulation for Vascular Engineering. Biological and Medical Physics Series, 2011, , 127-165.	0.3	0
3663	Skeletal Muscle Engineering: The Need for a Suitable Niche. , 2011, , 197-209.		0

#	Article	IF	Citations
3664	Fabrication of Dynamic Self-Assembled Monolayers for Cell Migration and Adhesion Studies. Methods in Molecular Biology, 2011, 751, 421-436.	0.4	0
3665	Skeletal Muscle Stem Cells. , 2011, , 347-363.		0
3666	Engineered Proteins for Controlling Gene Expression. , 2011, , 159-176.		0
3667	Extracellular Matrix as Biomimetic Biomaterial: Biological Matrices for Tissue Regeneration. , 2011, , 361-367.		2
3668	Bioinspired Strategies for Hard Tissue Regeneration. , 0, , .		0
3670	Synthetic Gene Networks as Blueprint for Smart Hydrogels. Methods in Molecular Biology, 2012, 813, 377-389.	0.4	0
3671	Scaffold-Based Approaches to Maintain the Potential of Transplanted Stem Cells. Biotechnology and Bioprocessing Series, 2011, , 259-280.	0.0	0
3672	Wundheilung. , 2012, , 1978-1988.		0
3673	Smart Biomaterial Scaffold for In Situ Tissue Regeneration. , 2012, , 79-100.		1
3674	Spatially Designed Nanofibrous Membranes for Periodontal Tissue Regeneration. , 2012, , 141-168.		0
3675	Pre-Clinical Modeling of Breast Cancer: Which Model to Choose?. , 2013, , 161-175.		0
3676	Cell Mechanobiology in Regenerative Medicine. , 2012, , 1-16.		0
3677	The Biological Significance of â€œNanoâ€•interactions. Springer Series in Biophysics, 2013, , 1-20.	0.4	0
3678	Stammzellen und Tissue Engineering. , 2013, , 243-261.		0
3679	Combining Osteochondral Stem Cells and Biodegradable Hydrogels for Bone Regeneration. , 2013, , 326-348.		0
3680	KulturgefÃÃŸe und ihre Behandlung. , 2013, , 53-67.		0
3682	Use of Adult Stem Cells in Biomaterials Research. Journal of Biotechnology & Biomaterials, 2013, 03, .	0.3	0
3684	Ring Opening Metathesis Polymerization is a Versatile Technique for Making Polymeric Biomaterials. , 2013, , 193-227.		0

#	Article	IF	Citations
3685	Structure, Function, and Development of Blood Vessels: Lessons for Tissue Engineering. , 2014, , 155-182.		3
3686	The Instructive Role of Biomaterials in Cell-Based Therapy and Tissue Engineering. RSC Soft Matter, 2014, , 73-94.	0.2	0
3687	The Potential Use of Three-Dimensional Cellular Multilayers as a Blood Vessel Model. Nanomedicine and Nanotoxicology, 2014, , 95-129.	0.1	0
3689	Cross-linkable and water-soluble phospholipid polymer as artificial extracellular matrix. Biomaterials and Biomechanics in Bioengineering, 2014, 1, 163-174.	0.1	1
3690	Growth Factor Delivery Matrices for Cardiovascular Regeneration. , 2015, , 159-214.		0
3691	Design Concept of Topographical and Mechanical Properties of Synthetic Extracellular Matrix to Control Cell Functions and Fates Through Actin Cytoskeletal Modulation. Frontiers of Biomechanics, 2015, , 159-186.	0.1	1
3692	Chemical and Physical Properties of Polymers for Biomedical Use. , 2015, , 67-90.		1
3693	Usage of Parallel Algorithms Based on CUDA Technology for Realisation of Reaction-Diffusion Models of Two-Dimensional Cellular Ensemble. Mathematical Biology and Bioinformatics, 2014, 9, 491-503.	0.1	0
3695	Collagen network and the mechanical microenvironment of cancer cells. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 058201.	0.2	1
3696	Emerging Engineering Strategies for Studying the Stem Cell Niche. Pancreatic Islet Biology, 2015, , 57-106.	0.1	0
3697	Medical Applications of Hierarchical Composites. , 2015, , 203-237.		1
3698	Synthesis of Functional Materials for Bone Regeneration. , 2015, , 1-8.		0
3699	Temperature-responsive bioactive hydrogels based on a multifunctional recombinant elastin-like polymer. Biomaterials and Biomechanics in Bioengineering, 2015, 2, 47-59.	0.1	1
3700	Cardiac ECM Structureâ€Mimetic Electrospun Scaffolds Reinstate Healthy Cardiomyocyte Phenotype. FASEB Journal, 2015, 29, 946.10.	0.2	0
3701	Synthesis of Functional Materials for Bone Regeneration. , 2016, , 4010-4017.		0
3702	Modular Biomimetic Drug Delivery Systems. , 0, , 4786-4814.		0
3703	Functional Polymers, Active: Synthetic Strategy of Contact. , 0, , 3494-3508.		0
3704	In vitro Osteoinduction Potential of a novel Silica Coated Hydroxyapatite Bioscaffold Seeded with Rabbit Mesenchymal Stem Cell. Journal of Stem Cell Research & Therapeutics, 2016, 1, .	0.1	2

#	Article	IF	Citations
3705	Vascular Tissue Engineering: Nanofibrous Materials. , 0, , 8194-8212.		0
3706	Scaffolds, Porous Polymer: Tissue Engineering. , 0, , 7085-7092.		0
3707	Functionalized Surfaces: Biomolecular Surface Modification with Functional Polymers. , 0, , 3526-3556.		0
3709	Devices: Safety Assurance. , 0, , 2620-2628.		0
3710	Structural and thermal characteristics of photocrosslinked silk fibroin - PEG hydrogel. International Journal of Industrial Entomology, 2016, 32, 35-40.	0.1	1
3711	Biomolecular Regulation of Elastic Matrix Regeneration and Repair. , 2016, , 117-164.		0
3712	Biomaterial-Based Tissue Engineering for Tooth-Supportive Complex Regeneration. Korean Journal of Dental Materials, 2016, 43, 207-214.	0.2	0
3713	Tissue Engineering Therapies for Ocular Regeneration. , 2016, , 173-197.		0
3714	Nanotechnology Approaches to Regenerative Engineering. , 2016, , 3-12.		0
3715	Polymers in Dental Applications. , 2016, , 25-38.		0
3716	Combinatorial Plasma Polymerization: Carbon-Based Films. , 2016, , 294-306.		0
3717	Tissue Engineering with Electroporation. , 2017, , 1579-1599.		0
3718	Use of Stem Cells in Toxicology. , 2017, , 177-194.		0
3719	Biomaterials for Cell Encapsulation: Progress Toward Clinical Applications. , 2017, , 425-458.		1
3723	Scaffolds, Porous Polymer: Tissue Engineering. , 2017, , 1374-1381.		0
3724	Biomimetic Materials. , 2017, , 189-213.		0
3725	Functionalized Surfaces: Biomolecular Surface Modification with Functional Polymers. , 2017, , 585-615.		0
3726	Holding Solutions, Conditions, and Additives to Optimize Hair Follicle Viability and Function. , 2018, , 87-105.		0

#	Article	IF	Citations
3729	Hypoxia and Matrix Manipulation for Vascular Engineering. Biological and Medical Physics Series, 2018, , 73-119.	0.3	2
3732	Sacralizaciones artÃsticas en los autos sacramentales de Lope. El caso de La puente del mundo. Revista De Literatura, 2018, 80, 569.	0.0	0
3733	Hard Material Modulation for (Skeletal) Tissue Engineering Purposes. , 2019, , 1-18.		0
3734	In Vitro Micro Tissue and Organ Models for Toxicity Testing. , 2019, , 535-549.		0
3735	Nanotechnology-Based Stem Cell Tissue Engineering with a Focus on Regeneration of Cardiovascular Systems. , 2019, , 1-67.		1
3738	Clinical Functions of Regenerative Dentistry and Tissue Engineering in Treatment of Oral and Maxillofacial Soft Tissues. , 2020, , 223-238.		0
3740	Hylozoic by Design: Converging Material and Biological Complexities for Cellâ€Ðriven Living Materials with 4D Behaviors. Advanced Functional Materials, 2022, 32, 2108057.	7.8	9
3741	In vivo performance of electrospun tubular hyaluronic acid/collagen nanofibrous scaffolds for vascular reconstruction in the rabbit model. Journal of Nanobiotechnology, 2021, 19, 349.	4.2	13
3742	Immunological and Hematological Response to Local Transplantation of Stem Cells in Injured Radial Nerve of Dogs. The Iraqi Journal of Veterinary Medicine, 2020, 44, 45-55.	0.0	1
3743	Heterotypic Supramolecular Hydrogels Formed by Noncovalent Interactions in Inflammasomes. Molecules, 2021, 26, 77.	1.7	5
3744	Preliminary Results of a Reverse Thermal Gel Patch for Fetal Ovine Myelomeningocele Repair. Journal of Surgical Research, 2022, 270, 113-123.	0.8	4
3745	Glycoconjugate for Tissue Engineering. , 2021, , 1-26.		0
3746	A rhabdomyosarcoma hydrogel model to unveil cell-extracellular matrix interactions. Biomaterials Science, 2021, 10, 124-137.	2.6	3
3747	Hard Material Modulation for (Skeletal) Tissue Engineering Purposes. , 2020, , 449-466.		0
3748	Scaffold Engineering Using the Amniotic Membrane. Learning Materials in Biosciences, 2020, , 323-346.	0.2	2
3749	From Secondary Intent to Accelerated Regenerative Healing: Emergence of the Bio-intelligent Scaffold Vasculogenic Strategy for Skin Reconstruction. , 2020, , 1-68.		2
3750	Glycosaminoglycans as Novel Targets for in vivo Contrast-Enhanced Magnetic Resonance Imaging of Atherosclerosis. Journal of Cardiology and Cardiovascular Medicine, 2020, 5, 080-088.	0.1	0
3751	Regenerative Engineering: Current Applications and Future Perspectives. Frontiers in Surgery, 2021, 8, 731031.	0.6	11

#	Article	IF	Citations
3752	Nanobiotechnology Overview. , 2008, , 3-15.		0
3753	Prospects of Cell Immobilization in Cancer Research and Immunotherapy. Gels Horizons: From Science To Smart Materials, 2021, , 165-193.	0.3	0
3754	In Vitro Mechanobiology of Glioma: Mimicking the Brain Blood Vessels and White Matter Tracts Invasion Paths. Neuromethods, 2021, , 159-196.	0.2	3
3755	ToF-SIMS imaging of dual biomolecular monolayer gradients. Biointerphases, 2020, 15, 061014.	0.6	2
3762	Clinical results of implanted tissue engineered heart valves. HSR Proceedings in Intensive Care & Cardiovascular Anesthesia, 2012, 4, 225-31.	0.6	17
3763	in vitro Decellularization of Rabbit Lung Tissue. Cell Journal, 2013, 15, 83-8.	0.2	9
3764	Bioengineering of Artificial Lymphoid Organs. Acta Naturae, 2016, 8, 10-23.	1.7	5
3767	Biochemical Methods in Production of Three-Dimensional Scaffolds from Human Skin: A Window in Aesthetic Surgery. World Journal of Plastic Surgery, 2018, 7, 204-211.	0.2	5
3768	Development of An Artificial Male Germ Cell Niche Using Electrospun Poly Vinyl Alcohol/Human Serum Albumin/Gelatin Fibers. Cell Journal, 2019, 21, 300-306.	0.2	5
3769	Surface modification of decellularized trachea matrix with collagen and laser micropore technique to promote cartilage regeneration. American Journal of Translational Research (discontinued), 2019, 11, 5390-5403.	0.0	8
3770	Modified halloysite nanotubes with Chitosan incorporated PVA/PVP bionanocomposite films: Thermal, mechanical properties and biocompatibility for tissue engineering. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 634, 127941.	2.3	32
3771	Bidirectional Relationship Between Cardiac Extracellular Matrix and Cardiac Cells in Ischemic Heart Disease. Stem Cells, 2021, 39, 1650-1659.	1.4	2
3772	3D Cell Culture Systems: Tumor Application, Advantages, and Disadvantages. International Journal of Molecular Sciences, 2021, 22, 12200.	1.8	152
3773	Efficient protein incorporation and release by a jigsaw-shaped self-assembling peptide hydrogel for injured brain regeneration. Nature Communications, 2021, 12, 6623.	5.8	26
3774	Tissue Engineered Neurovascularization Strategies for Craniofacial Tissue Regeneration. ACS Applied Bio Materials, 2022, 5, 20-39.	2.3	14
3775	Molecular Origin of the Biologically Accelerated Mineralization of Hydroxyapatite on Bacterial Cellulose for More Robust Nanocomposites. Nano Letters, 2021, 21, 10292-10300.	4.5	19
3776	Graphene family nanomaterials- opportunities and challenges in tissue engineering applications. FlatChem, 2021, 30, 100315.	2.8	20
3777	Induction and Maturation of Hepatocyte-Like Cells In Vitro: Focus on Technological Advances and Challenges. Frontiers in Cell and Developmental Biology, 2021, 9, 765980.	1.8	13

#	Article	IF	Citations
3778	A review on recent advances of Protein-Polymer hydrogels. European Polymer Journal, 2022, 162, 110881.	2.6	47
3779	Biobridge: An Outlook on Translational Bioinks for 3D Bioprinting. Advanced Science, 2022, 9, e2103469.	5.6	21
3780	Fabrication, characterization and evaluation of the effect of <scp>PLGA</scp> and <scp>PLGAâ€“PEG</scp> biomaterials on the proliferation and neurogenesis potential of human neural <scp>SHâ€SY5Y</scp> cells. Microscopy Research and Technique, 2022, 85, 1433-1443.	1.2	6
3781	Amine Plasma-Polymerization of 3D Polycaprolactone/Î²-Tricalcium Phosphate Scaffold to Improving Osteogenic Differentiation In Vitro. Materials, 2022, 15, 366.	1.3	6
3782	Bioinspired tunable hydrogels: An update on methods of preparation, classification, and biomedical and therapeutic applications. International Journal of Pharmaceutics, 2022, 612, 121368.	2.6	15
3783	Bioactive rare earth-based inorganic-organic hybrid biomaterials for wound healing and repair. Applied Materials Today, 2022, 26, 101304.	2.3	16
3784	Proliferation of human spermatogonial stem cells on optimized PCL/Gelatin nanofibrous scaffolds. Andrologia, 2022, 54, e14380.	1.0	10
3785	Light controlled biomaterials for regulating cell migration and differentiation. Smart Materials in Medicine, 2022, 3, 209-216.	3.7	8
3786	Closer to Nature: The Role of MSCs in Recreating the Microenvironment of the Hematopoietic Stem Cell Niche in vitro. Transfusion Medicine and Hemotherapy, 2022, 49, 258-267.	0.7	1
3787	Effect of Polymer Topology and Residue Chirality on Biodegradability of Polypeptide Hydrogels. ACS Biomaterials Science and Engineering, 2022, 8, 626-637.	2.6	4
3788	Facile and Versatile Method for Micropatterning Poly(acrylamide) Hydrogels Using Photocleavable Comonomers. ACS Applied Materials & Interfaces, 2022, 14, 3643-3652.	4.0	10
3789	Functionalized Microgel Rods Interlinked into Soft Macroporous Structures for 3D Cell Culture. Advanced Science, 2022, 9, e2103554.	5.6	29
3790	Recent advances in 3D hydrogel culture systems for mesenchymal stem cell-based therapy and cell behavior regulation. Journal of Materials Chemistry B, 2022, 10, 1486-1507.	2.9	23
3792	Preservation of the naÃ¯ve features of mesenchymal stromal cells in vitro: Comparison of cell- and bone-derived decellularized extracellular matrix. Journal of Tissue Engineering, 2022, 13, 204173142210744.	2.3	8
3793	Regulation of Tumor Invasion by the Physical Microenvironment: Lessons from Breast and Brain Cancer. Annual Review of Biomedical Engineering, 2022, 24, 29-59.	5.7	11
3794	2D Materials for Cardiac Tissue Repair and Regeneration. Frontiers in Cardiovascular Medicine, 2022, 9, 802551.	1.1	13
3795	Synthesis and Characterization of Cationic Hydrogels from Thiolated Copolymers for Independent Manipulation of Mechanical and Chemical Properties of Cell Substrates. Macromolecular Bioscience, 2022, , 2100453.	2.1	2
3796	Intra-socket application of Hyaluronic acid reduces pain and swelling following wisdom teeth removal. Journal of Oral Medicine and Oral Surgery, 2022, 28, 14.	0.2	0

#	Article	IF	Citations
3798	Composites in Hydrogel State with Nanostructured Components for Biomedical Applications. Materials Horizons, 2022, , 427-477.	0.3	0
3799	Glycoconjugate for Tissue Engineering. , 2022, , 1187-1211.		0
3800	Hybrid Biomaterials in Drug Delivery and Biomedical Applications. , 2022, , 409-434.		2
3801	Enzyme-instructed self-assembly (EISA) assists the self-assembly and hydrogelation of hydrophobic peptides. Journal of Materials Chemistry B, 2022, 10, 3242-3247.	2.9	13
3802	Nonswelling and Hydrolytically Stable Hydrogels Uncover Cellular Mechanosensing in 3D. Advanced Science, 2022, 9, e2105325.	5.6	11
3803	Electroactive Scaffolds to Improve Neural Stem Cell Therapy for Spinal Cord Injury. Frontiers in Medical Technology, 2022, 4, 693438.	1.3	10
3804	Influence of extracellular cues of hydrogel biomaterials on stem cell fate. Journal of Biomaterials Science, Polymer Edition, 2022, 33, 1324-1347.	1.9	2
3805	Biomimetic hydrogel supports initiation and growth of patient-derived breast tumor organoids. Nature Communications, 2022, 13, 1466.	5.8	48
3806	Î²-Sheet to Random Coil Transition in Self-Assembling Peptide Scaffolds Promotes Proteolytic Degradation. Biomolecules, 2022, 12, 411.	1.8	5
3807	Synthesis, selective decoration and photocrosslinking of <scp>selfâ€immolative</scp> poly(thioester)â€PEG hydrogels. Polymer International, 2022, 71, 906-911.	1.6	5
3808	Supramolecular Biomaterials in the Netherlands. Tissue Engineering - Part A, 2022, , .	1.6	3
3810	RGD-modified dextran hydrogel promotes follicle growth in three-dimensional ovarian tissue culture in mice. Theriogenology, 2022, 183, 120-131.	0.9	7
3811	Hierarchical Membranes Selfâ€Assembled at the Interface between Peptides and Polymer Aqueous Solutions. Israel Journal of Chemistry, 2022, 62, .	1.0	1
3812	3D printing of Ti₃C₂-MXene-incorporated composite scaffolds for accelerated bone regeneration. Biomedical Materials (Bristol), 2022, 17, 035002.	1.7	28
3813	Application of elastin-like polypeptide (ELP) containing extra-cellular matrix (ECM) binding ligands in regenerative medicine. International Journal of Biological Macromolecules, 2022, 207, 443-453.	3.6	5
3814	Pectin-Based Scaffolds for Tissue Engineering Applications. , 0, , .		4
3815	Guided Self-Assembly of ES-Derived Lung Progenitors into Biomimetic Tube Structures That Impact Cell Differentiation. Bioengineering, 2021, 8, 209.	1.6	2
3816	von Willebrand factor D and EGF domains regulate ameloblast differentiation and enamel formation. Journal of Cellular Physiology, 2022, 237, 1964-1979.	2.0	4

#	Article	IF	Citations
3817	Towards organoid culture without Matrigel. Communications Biology, 2021, 4, 1387.	2.0	127
3818	Advanced Biomaterials for Regulating Polarization of Macrophages in Wound Healing. Advanced Functional Materials, 2022, 32, .	7.8	68
3819	Organic Bioelectronics for In Vitro Systems. Chemical Reviews, 2022, 122, 4700-4790.	23.0	49
3821	Research progress on the biological modifications of implant materials in 3D printed intervertebral fusion cages. Journal of Materials Science: Materials in Medicine, 2022, 33, 2.	1.7	13
3822	Hybridizing gellan/alginate and thixotropic magnesium phosphate-based hydrogel scaffolds for enhanced osteochondral repair. Materials Today Bio, 2022, 14, 100261.	2.6	15
3823	Pushing the Natural Frontier: Progress on the Integration of Biomaterial Cues toward Combinatorial Biofabrication and Tissue Engineering. Advanced Materials, 2022, 34, e2105645.	11.1	21
3835	Mapping and exploring the organoid state space using synthetic biology. Seminars in Cell and Developmental Biology, 2022, , .	2.3	3
3838	Recent advances in graphene-based polymer composite scaffolds for bone/cartilage tissue engineering. Journal of Drug Delivery Science and Technology, 2022, 72, 103360.	1.4	5
3839	Elastomerâ€“Hydrogel Systems: From Bio-Inspired Interfaces to Medical Applications. Polymers, 2022, 14, 1822.	2.0	10
3840	3D Bioprinting of Human Hollow Organs. AAPS PharmSciTech, 2022, 23, 139.	1.5	15
3841	Shedding light on 3D printing: Printing photo-crosslinkable constructs for tissue engineering. Biomaterials, 2022, 286, 121566.	5.7	34
3842	Gradual Stress-Relaxation of Hydrogel Regulates Cell Spreading. International Journal of Molecular Sciences, 2022, 23, 5170.	1.8	4
3843	Implications of Three-Dimensional Cell Culture in Cancer Therapeutic Research. Frontiers in Oncology, 2022, 12, .	1.3	15
3845	Recent Development of Conductive Hydrogels for Tissue Engineering: Review and Perspective. Macromolecular Bioscience, 2022, 22, e2200051.	2.1	18
3846	Nanometer-Scale Precision Polymer Patterning of PDMS: Multiscale Insights into Patterning Efficiency Using Alkyldiynamines. ACS Applied Materials & Interfaces, 2022, 14, 22634-22642.	4.0	5
3847	Redox signaling induces laminin receptor ribosomal protein-SA expression to improve cell adhesion following radiofrequency glow discharge treatments. Scientific Reports, 2022, 12, 7742.	1.6	1
3848	Current insights into the bone marrow niche: From biology in vivo to bioengineering ex vivo. Biomaterials, 2022, 286, 121568.	5.7	16
3849	Angiogenic Hydrogels to Accelerate Early Wound Healing. Macromolecular Bioscience, 2022, 22, e2200067.	2.1	5

#	Article	IF	Citations
3850	3D printing of bio-instructive materials: Toward directing the cell. Bioactive Materials, 2023, 19, 292-327.	8.6	31
3851	Biomaterial-based treatments for the prevention of preterm birth after iatrogenic rupture of the fetal membranes. Biomaterials Science, 2022, 10, 3695-3715.	2.6	5
3852	Tissue engineering approaches for the in vitro production of spermatids to treat male infertility: A review. European Polymer Journal, 2022, 174, 111318.	2.6	4
3853	Extracellular matrix-mimicking nanofibrous chitosan microspheres as cell micro-ark for tissue engineering. Carbohydrate Polymers, 2022, 292, 119693.	5.1	12
3855	Development and Characterization of 3D Hybrid Spheroids for the Investigation of the Crosstalk Between B-Cell Non-Hodgkin Lymphomas and Mesenchymal Stromal Cells. OncoTargets and Therapy, 0, Volume 15, 683-697.	1.0	4
3856	Self-assembling Molecular Medicine for the Subacute Phase of Ischemic Stroke. Neurochemical Research, 2022, 47, 2488-2498.	1.6	5
3857	Advances in Translational 3D Printing for Cartilage, Bone, and Osteochondral Tissue Engineering. Small, 2022, 18, .	5.2	39
3858	A Tunable Tumor Microenvironment through Recombinant Bacterial Collagen-Hyaluronic Acid Hydrogels. ACS Applied Bio Materials, 0, , .	2.3	2
3859	Liquid Crystal Modified Polylactic Acid Improves Cytocompatibility and M2 Polarization of Macrophages to Promote Osteogenesis. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	1
3861	In Vitro and Ectopic In Vivo Studies toward the Utilization of Rapidly Isolated Human Nasal Chondrocytes for Single-Stage Arthroscopic Cartilage Regeneration Therapy. International Journal of Molecular Sciences, 2022, 23, 6900.	1.8	0
3862	Tunable Synthesis of Hydrogel Microfibers via Interfacial Tetrazine Ligation. Biomacromolecules, 2022, 23, 3017-3030.	2.6	4
3863	Injectable conductive nanocomposite hydrogels for cardiac tissue engineering: Focusing on carbon and metal-based nanostructures. European Polymer Journal, 2022, 174, 111336.	2.6	11
3864	Hemoglobin-catalyzed atom transfer radical polymerization for ultrasensitive electrochemical DNA detection. Biosensors and Bioelectronics, 2022, 213, 114485.	5.3	3
3865	Engineered vascularized tissue organs. , 2022, , 301-316.		0
3866	Skin wound healing: The critical role of angiogenesis. , 2022, , 439-463.		0
3867	Global Trends in Natural Biopolymers in the 21st Century: A Scientometric Review. Frontiers in Chemistry, 0, 10, .	1.8	9
3868	Recombinant collagen hydrogels induced by disulfide bonds. Journal of Biomedical Materials Research - Part A, 2022, 110, 1774-1785.	2.1	3
3869	Myocyte Culture with Decellularized Skeletal Muscle Sheet with Observable Interaction with the Extracellular Matrix. Bioengineering, 2022, 9, 309.	1.6	1

#	Article	IF	Citations
3870	Profiling the impact of choline chloride on the self-assembly of collagen mimetic peptide (Pro-Hyp-Gly)10. Process Biochemistry, 2022, 121, 26-34.	1.8	0
3872	Amnion Cells in Tailored Hydrogels Deposit Human Amnion Native Extracellular Matrix. Advanced Functional Materials, 2022, 32, .	7.8	3
3873	A chiral microenvironment promotes retinal progenitor cell proliferation by activating the Akt and ERK pathways. Biomaterials Science, 2022, 10, 5938-5946.	2.6	3
3874	Adhesive peptide and polymer density modulate 3D cell traction forces within synthetic hydrogels. Biomaterials, 2022, 288, 121710.	5.7	3
3875	Glucocorticoids increase the risk of preterm premature rupture of membranes possibly by inducing ITGA8 gene expression in the amnion. Placenta, 2022, 128, 73-82.	0.7	4
3876	The effect of resolvin D1 on bone regeneration in a rat calvarial defect model. Journal of Tissue Engineering and Regenerative Medicine, 2022, 16, 987-997.	1.3	8
3877	Self-Healing Injectable Hydrogels for Tissue Regeneration. Chemical Reviews, 2023, 123, 834-873.	23.0	190
3878	Macroporous Aligned Hydrogel Microstrands for 3D Cell Guidance. ACS Biomaterials Science and Engineering, 2022, 8, 3871-3882.	2.6	10
3879	Bioprinting for Bone Tissue Engineering. , 2022, , 1-9.		0
3880	Mechanical properties and chemical stability of alginate-based anisotropic capillary hydrogels. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 134, 105397.	1.5	6
3881	Contributions of Ti-xTa cold spray composite interface to in-vitro cell growth. , 2023, 1, 100007.		0
3882	Clickable polysaccharides for biomedical applications: A comprehensive review. Progress in Polymer Science, 2022, 133, 101590.	11.8	11
3883	Scavenging ROS and inflammation produced during treatment to enhance the wound repair efficacy of photothermal injectable hydrogel. , 2022, 141, 213096.		8
3884	3D bioprinting: Materials, processes, and applications. CIRP Annals - Manufacturing Technology, 2022, 71, 577-597.	1.7	12
3885	In-Situ Characterization of the Mechanical Microenvironment and Mechano-Regulation in Tissue Engineering. SSRN Electronic Journal, 0, , .	0.4	0
3886	Design and construction of protein and peptide-based self-assembled nanostructures. , 2022, , 193-204.		0
3887	Immobilization of modular peptides on graphene cocktail for differentiation of human mesenchymal stem cells to hepatic-like cells. Frontiers in Chemistry, 0, 10, .	1.8	8
3888	Tuning the Cell-Adhesive Properties of Two-Component Hybrid Hydrogels to Modulate Cancer Cell Behavior, Metastasis, and Death Pathways. Biomacromolecules, 2022, 23, 4254-4267.	2.6	1

#	Article	IF	Citations
3889	Construction of Solâ€“Gel Phase-Reversible Hydrogels with Tunable Properties with Native Nanofibrous Protein as Building Blocks. ACS Applied Materials & Interfaces, 2022, 14, 44125-44135.	4.0	3
3890	Calcium Orthophosphate (CaPO4)-Based Bioceramics: Preparation, Properties, and Applications. Coatings, 2022, 12, 1380.	1.2	23
3891	Morphing-to-Adhesion Polysaccharide Hydrogel for Adaptive Biointerfaces. ACS Applied Materials & Interfaces, 2022, 14, 42420-42429.	4.0	15
3892	Materials and Biomedical Applications of Implantable Electronic Devices. Advanced Materials Technologies, 2023, 8, .	3.0	6
3893	Controlling tosylation versus chlorination during end group modification of PCL. European Polymer Journal, 2022, 180, 111576.	2.6	2
3894	Mechanobiology and Applications in Biomaterials for Soft Tissue Repair and Regeneration. , 2022, , .		0
3895	Current strategies for enhancement of the bioactivity of artificial ligaments: A mini-review. Journal of Orthopaedic Translation, 2022, 36, 205-215.	1.9	3
3896	Hydrogel on a Smart Nanomaterial Interface to Carry Therapeutics for Digitalized Glioma Treatment. Gels, 2022, 8, 664.	2.1	2
3897	Chondrogenesis of Adipose-Derived Stem Cells Using an Arrayed Spheroid Format. Cellular and Molecular Bioengineering, 0, , .	1.0	1
3898	Engineering collagenous analogs of connective tissue extracellular matrix. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	1
3899	Evaluation of the Formation of an Ionic-Complementary Self-assembling Peptide Hydrogel for the Three-Dimensional Culture of Mammalian Cells in Vitro. IFMBE Proceedings, 2023, , 721-728.	0.2	0
3900	Nanofibrous topography-driven altered responsiveness to Wnt5a mediates the three-dimensional polarization of odontoblasts. Materials Today Bio, 2022, 17, 100479.	2.6	3
3901	An interdisciplinary framework for the characterization of extracellular matrix-hydrogels for biomedical applications. Matter, 2022, 5, 3659-3705.	5.0	5
3902	DAR 16-II Primes Endothelial Cells for Angiogenesis Improving Bone Ingrowth in 3D-Printed BCP Scaffolds and Regeneration of Critically Sized Bone Defects. Biomolecules, 2022, 12, 1619.	1.8	0
3903	Biocompatibility evaluation of peo-treated magnesium alloy implants placed in rabbit femur condyle notches and paravertebral muscles. Biomaterials Research, 2022, 26, .	3.2	10
3904	Matrix-bound growth factors in tissue repair. Swiss Medical Weekly, 0, , .	0.8	9
3906	Biomimetic Hierarchical Nanocomposite Hydrogels: From Design to Biomedical Applications. Journal of Composites Science, 2022, 6, 340.	1.4	4
3907	Advancements in the Use of Hydrogels for Regenerative Medicine: Properties and Biomedical Applications. International Journal of Biomaterials, 2022, 2022, 1-16.	1.1	16

#	Article	IF	Citations
3908	In vitro evaluation of modified halloysite nanotubes with sodium alginate-reinforced PVA/PVP nanocomposite films for tissue engineering applications. Applied Nanoscience (Switzerland), 0, , .	1.6	1
3909	A model for mechanosensitive cell migration in dynamically morphing soft tissues. Extreme Mechanics Letters, 2022, , 101926.	2.0	0
3911	Self-healing cyclic peptide hydrogels. Journal of Materials Chemistry B, 2023, 11, 606-617.	2.9	2
3912	Composite silk fibroin hydrogel scaffolds for cartilage tissue regeneration. Journal of Drug Delivery Science and Technology, 2023, 79, 104018.	1.4	9
3913	Chapter 5. Mimicking Chemical Features of the Tumor Microenvironment. Biomaterials Science Series, 2022, , 97-140.	0.1	0
3914	Biomaterials for Organoid Modeling and Tumor Spheroids. Journal of Physical Chemistry and Functional Materials:, 0, , .	0.0	0
3915	Collagen-Based Biomimetic Systems to Study the Biophysical Tumour Microenvironment. Cancers, 2022, 14, 5939.	1.7	1
3916	Atherosclerosis and endothelial mechanotransduction: current knowledge and models for future research. American Journal of Physiology - Cell Physiology, 2023, 324, C488-C504.	2.1	8
3917	Functionalization of the Surface of Porous Nickelâ€“Titanium Alloy with Macrocyclic Compounds. Materials, 2023, 16, 66.	1.3	3
3919	Polymeric Nanofibers for Drug Delivery Applications: A Recent Review. Journal of Materials Science: Materials in Medicine, 2022, 33, .	1.7	19
3920	Cell Adhesion Motif-Functionalized Lipopeptides: Nanostructure and Selective Myoblast Cytocompatibility. Biomacromolecules, 2023, 24, 213-224.	2.6	4
3921	Encapsulation of Gold-Based Anticancer Agents in Protease-Degradable Peptide Nanofilaments Enhances Their Potency. Journal of the American Chemical Society, 2023, 145, 234-246.	6.6	15
3922	Recombinant protein-based injectable materials for biomedical applications. Advanced Drug Delivery Reviews, 2023, 193, 114673.	6.6	9
3923	Engineered Plateletâ€Derived Growth Factorâ€Releasing Hydrogels Promote Fetal Membrane Healing In Vivo. Advanced Functional Materials, 0, , 2208910.	7.8	1
3924	A study on the material properties of novel PEGDA/gelatin hybrid hydrogels polymerized by electron beam irradiation. Frontiers in Chemistry, 0, 10, .	1.8	6
3925	Four-Dimensional Bioprinting for Regenerative Medicine: Mechanisms to Induce Shape Variation and Potential Applications. European Medical Journal Innovations, 0, , 36-43.	2.0	4
3926	Hippo-YAP/TAZ signaling in osteogenesis and macrophage polarization: Therapeutic implications in bone defect repair. Genes and Diseases, 2023, 10, 2528-2539.	1.5	2
3927	Regulation and functions of cell division in the intestinal tissue. Seminars in Cell and Developmental Biology, 2023, 150-151, 3-14.	2.3	3

#	Article	IF	Citations
3928	Degradable Selfâ€healable Networks for Use in Biomedical Applications. Advanced Functional Materials, 2023, 33, .	7.8	15
3929	Bioprinting microporous functional living materials from protein-based core-shell microgels. Nature Communications, 2023, 14, .	5.8	14
3930	Silk-Based Biomaterials for Designing Bioinspired Microarchitecture for Various Biomedical Applications. Biomimetics, 2023, 8, 55.	1.5	8
3931	Polymeric Nanocomposite Hydrogel Scaffolds in Craniofacial Bone Regeneration: A Comprehensive Review. Biomolecules, 2023, 13, 205.	1.8	5
3932	Controlled release strategies in tissue engineering. , 2023, , 387-430.		0
3933	Microfabrication technology in tissue engineering. , 2023, , 329-353.		0
3934	3D Culturing of Stem Cells: An Emerging Technique for Advancing Fundamental Research in Regenerative Medicine. Biochemistry, 0, , .	0.8	1
3935	Strain-Stiffening Hydrogels with Dynamic, Secondary Cross-Linking. Langmuir, 2023, 39, 2659-2666.	1.6	5
3936	Design, Synthesis, and Application of a Waterâ€soluble Photocage for Aqueous Cyclopentadieneâ€based Dielsâ€Alder Photoclick Chemistry in Hydrogels. Angewandte Chemie - International Edition, 2023, 62, .	7.2	2
3937	A small-diameter vascular graft immobilized peptides for capturing endothelial colony-forming cells. Frontiers in Bioengineering and Biotechnology, 0, 11, .	2.0	1
3938	Methacrylated fibrinogen hydrogels for 3D cell culture and delivery. Acta Biomaterialia, 2023, 164, 94-110.	4.1	6
3939	Advantages of Material Biofunctionalization Using Nucleic Acid Aptamers in Tissue Engineering and Regenerative Medicine. Molecular Biotechnology, 0, , .	1.3	0
3940	Harnessing cell-material interactions to control stem cell secretion for osteoarthritis treatment. Biomaterials, 2023, 296, 122091.	5.7	1
3941	Cyclodextrin regulated natural polysaccharide hydrogels for biomedical applications-a review. Carbohydrate Polymers, 2023, 313, 120760.	5.1	9
3943	Progress on Electrospun Composite Fibers Incorporating Bioactive Glass: An Overview. Advanced Engineering Materials, 2023, 25, 2201103.	1.6	1
3944	Novel hydrogels: are they poised to transform 3D cell-based assay systems in early drug discovery?. Expert Opinion on Drug Discovery, 2023, 18, 335-346.	2.5	1
3945	Biomanufacturing of biomimetic three-dimensional nanofibrous multicellular constructs for tissue regeneration. Colloids and Surfaces B: Biointerfaces, 2023, 223, 113189.	2.5	4
3946	3D multicellular systems in disease modelling: From organoids to organ-on-chip. Frontiers in Cell and Developmental Biology, 0, 11, .	1.8	5

#	Article	IF	Citations
3947	Insights into the promising prospect of medicinal chemistry studies against neurodegenerative disorders. Chemico-Biological Interactions, 2023, 373, 110375.	1.7	1
3948	Tailorable and Biocompatible Supramolecularâ€Based Hydrogels Featuring two Dynamic Covalent Chemistries. Angewandte Chemie - International Edition, 2023, 62, .	7.2	6
3949	Tailorable and Biocompatible Supramolecularâ€Based Hydrogels Featuring two Dynamic Covalent Chemistries. Angewandte Chemie, 2023, 135, .	1.6	1
3950	Development of bioactive composite material based on bambusuril and porous titanium nickelide. Voprosy Materialovedeniya, 2023, , 35-42.	0.0	1
3951	Userâ€Controlled 4D Biomaterial Degradation with Substrateâ€Selective Sortase Transpeptidases for Singleâ€Cell Biology. Advanced Materials, 2023, 35, .	11.1	11
3952	The renaissance of one-dimensional carbon nanotubes in tissue engineering. Nano Today, 2023, 49, 101784.	6.2	17
3953	Indirect coâ€culture of islet cells in 3D biocompatible collagen/laminin scaffold with angiomiRs transfected mesenchymal stem cells. Cell Biochemistry and Function, 2023, 41, 296-308.	1.4	0
3954	Design, Synthesis, and Application of a Waterâ€soluble Photocage for Aqueous Cyclopentadieneâ€based Dielsâ€Alder Photoclick Chemistry in Hydrogels. Angewandte Chemie, 2023, 135, .	1.6	0
3955	Bioengineering liver tissue by repopulation of decellularised scaffolds. World Journal of Hepatology, 0, 15, 151-179.	0.8	1
3956	Biofunctionalization and Applications of Polymeric Nanofibers in Tissue Engineering and Regenerative Medicine. Polymers, 2023, 15, 1202.	2.0	17
3957	Reconfigurable scaffolds for adaptive tissue regeneration. Nanoscale, 2023, 15, 6105-6120.	2.8	3
3958	Response of mesenchymal stem cells to surface topography of scaffolds and the underlying mechanisms. Journal of Materials Chemistry B, 2023, 11, 2550-2567.	2.9	6
3959	Engineering synthetic poly(ethylene) glycolâ€based hydrogels compatible with injection molding biofabrication. Journal of Biomedical Materials Research - Part A, 2023, 111, 814-824.	2.1	5
3960	Preclinical and clinical orthotopic transplantation of decellularized/engineered tracheal scaffolds: A systematic literature review. Journal of Tissue Engineering, 2023, 14, 204173142311518.	2.3	9
3961	Systematic Comparison of Commercial Hydrogels Revealed That a Synergy of Laminin and Strain-Stiffening Promotes Directed Migration of Neural Cells. ACS Applied Materials & Interfaces, 2023, 15, 12678-12695.	4.0	4
3962	Tissue-Adhesive Decellularized Extracellular Matrix Patches Reinforced by a Supramolecular Gelator to Repair Abdominal Wall Defects. Biomacromolecules, 2023, 24, 1545-1554.	2.6	6
3963	Current possibilities and future opportunities provided by three-dimensional lung ECM-derived hydrogels. Frontiers in Pharmacology, 0, 14, .	1.6	4
3964	Biodegradable Polymer Electrospinning for Tendon Repairment. Polymers, 2023, 15, 1566.	2.0	3

#	Article	IF	Citations
3965	Human-derived Biomaterials for Biomedical and Tissue Engineering Applications. Current Pharmaceutical Design, 2023, 29, 584-603.	0.9	1
3967	Study on the influence of scaffold morphology and structure on osteogenic performance. Frontiers in Bioengineering and Biotechnology, 0, 11, .	2.0	5
3968	Gelatin Methacryloyl Based Injectable Cryogels with Tunable Degradability for Cell Delivery. Macromolecular Bioscience, 2024, 24, .	2.1	4
3969	Mineralization of Bone Extracellular Matrix-like Scaffolds Fabricated as Silk Sericin-Functionalized Dense Collagenâ€“Fibrin Hybrid Hydrogels. Pharmaceutics, 2023, 15, 1087.	2.0	3
3970	Key aspects for conception and construction of co-culture models of tumor-stroma interactions. Frontiers in Bioengineering and Biotechnology, 0, 11, .	2.0	2
3971	Innovative Approaches and Advances for Hair Follicle Regeneration. ACS Biomaterials Science and Engineering, 2023, 9, 2251-2276.	2.6	5
3972	Therapeutic angiogenesis based on injectable hydrogel for protein delivery in ischemic heart disease. IScience, 2023, 26, 106577.	1.9	2
3973	Application of Biomaterials in Cancer Research. Biological and Medical Physics Series, 2023, , 245-289.	0.3	0
3974	Electronic tissue technologies for seamless biointerfaces. Journal of Polymer Science, 2023, 61, 1707-1712.	2.0	1
3976	Superabsorbent Polymer's Role in Nanomedicines. , 2023, , 201-229.		0
3986	The Diamond Concept Enigma: Recent Trends of Its Implementation in Cross-linked Chitosan-Based Scaffolds for Bone Tissue Engineering. ACS Applied Bio Materials, 2023, 6, 2515-2545.	2.3	1
3992	Measuring and modelling tumour heterogeneity across scales. , 2023, 1, 712-730.		2
3995	Cardiac organoid: multiple construction approaches and potential applications. Journal of Materials Chemistry B, 0, , .	2.9	2
3999	Scaffolds Fabrication Processes: From Classical to Advanced Techniques. Pancreatic Islet Biology, 2023, , 305-315.	0.1	0
4005	Microbial accumulation of bioplastics from waste stream: recent advancements and applications. International Journal of Environmental Science and Technology, 0, , .	1.8	0
4009	Heparin-based nanocomposite hydrogels. , 2024, , 233-248.		0
4013	Recent advancement of nanostructured materials: a compatible therapy of tissue engineering and drug delivery system. Polymer Bulletin, 2024, 81, 5679-5702.	1.7	0
4019	Protein adsorption on polymeric surfaces. , 2023, , 57-85.		0

#	Article	IF	Citations
4023	Hydrogels for Cardiac Restorative Support: Relevance of Gelation Mechanisms for Prospective Clinical Use. Current Heart Failure Reports, 2023, 20, 519-529.	1.3	1
4024	An overview of the production of tissue extracellular matrix and decellularization process. Cell and Tissue Banking, 2024, 25, 369-387.	0.5	0
4031	Recent Advancement of Gelatin for Tissue Engineering Applications. , 2023, , 821-837.		0
4035	Stem Cell Differentiation Mediated by Biomaterials/Surfaces. , 2023, , 307-375.		0
4040	Engineering native biological complexity from the insideâ€“out and outsideâ€“in. , 2024, 1, 2-5.		0
4041	Nonmulberry silk-based biomaterials: biomedical applications, current status, and future perspective. , 2024, , 55-87.		0
4053	Tuning conductivity while maintaining mechanical properties in perylene bisimide hydrogels at physiological pH. Chemical Communications, 2024, 60, 3027-3030.	2.2	0
4056	Bioengineered Vascularized Insulin Producing Endocrine Tissues. , 2023, , 151-177.		0
4066	Stem Cells and Extracellular Vesicles in Epithelial Repair: Hints for Improving Chronic Wound Healing. , 2024, , .		0