Heungsoo Shin

List of Publications by Year
in descending order

138 papers	10,107 citations	38742 50 h-index	36028 97 g-index
139 all docs	139 docs citations	139 times ranked	12612 citing authors

#	Article	IF	Citations
1	Biomimetic materials for tissue engineering. Biomaterials, 2003, 24, 4353-4364.	11.4	1,397
2	Matrices and scaffolds for delivery of bioactive molecules in bone and cartilage tissue engineering. Advanced Drug Delivery Reviews, 2007, 59, 339-359.	13.7	615
3	Biomimetic Scaffolds for Tissue Engineering. Advanced Functional Materials, 2012, 22, 2446-2468.	14.9	359
4	Polydopamine-mediated surface modification of scaffold materials for human neural stem cell engineering. Biomaterials, 2012, 33, 6952-6964.	11.4	311
5	Current Advances in Immunomodulatory Biomaterials for Bone Regeneration. Advanced Healthcare Materials, 2019, 8, e1801106.	7.6	264
6	Materials from Mussel-Inspired Chemistry for Cell and Tissue Engineering Applications. Biomacromolecules, 2015, 16, 2541-2555.	5.4	248
7	The stimulation of myoblast differentiation by electrically conductive sub-micron fibers. Biomaterials, 2009, 30, 2038-2047.	11.4	238
8	Current approaches to electrospun nanofibers for tissue engineering. Biomedical Materials (Bristol), 2013, 8, 014102.	3.3	216
9	In vivo bone and soft tissue response to injectable, biodegradable oligo(poly(ethylene glycol)) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	11.4	192
10	Current progress in application of polymeric nanofibers to tissue engineering. Nano Convergence, 2019, 6, 36.	12.1	188
11	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.	5.0	179
12	Development of Electroactive and Elastic Nanofibers that contain Polyaniline and Poly(<scp>L</scp>â€lactideâ€<i>co</i>â€<i>Îµ</i>â€caprolactone) for the Control of Cell Adhesion. Macromolecular Bioscience, 2008, 8, 627-637.	4.1	176
13	Effective Immobilization of BMP-2 Mediated by Polydopamine Coating on Biodegradable Nanofibers for Enhanced in Vivo Bone Formation. ACS Applied Materials & Interfaces, 2014, 6, 11225-11235.	8.0	167
14	Modulation of marrow stromal osteoblast adhesion on biomimetic oligo[poly(ethylene glycol) fumarate] hydrogels modified with Arg-Gly-Asp peptides and a poly(ethylene glycol) spacer. Journal of Biomedical Materials Research Part B, 2002, 61, 169-179.	3.1	160
15	Synthesis and Characterization of Oligo(poly(ethylene glycol) fumarate) Macromer. Macromolecules, 2001, 34, 2839-2844.	4.8	156
16	Polydopamine-mediated immobilization of multiple bioactive molecules for the development of functional vascular graft materials. Biomaterials, 2012, 33, 8343-8352.	11.4	155
17	The Development of Genipinâ€Crosslinked Poly(caprolactone) (PCL)/Gelatin Nanofibers for Tissue Engineering Applications. Macromolecular Bioscience, 2010, 10, 91-100.	4.1	153
18	In Situ Forming Hydrogels Based on Tyramine Conjugated 4-Arm-PPO-PEO via Enzymatic Oxidative Reaction. Biomacromolecules, 2010, 11, 706-712.	5.4	151

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19	Electrospun fibers immobilized with bone forming peptide-1 derived from BMP7 for guided bone regeneration. Biomaterials, 2013, 34, 5059-5069.	11.4	144
20	Mussel-Inspired Immobilization of Vascular Endothelial Growth Factor (VEGF) for Enhanced Endothelialization of Vascular Grafts. Biomacromolecules, 2012, 13, 2020-2028.	5.4	142
21	Attachment, proliferation, and migration of marrow stromal osteoblasts cultured on biomimetic hydrogels modified with an osteopontin-derived peptide. Biomaterials, 2004, 25, 895-906.	11.4	138
22	Modulation of differentiation and mineralization of marrow stromal cells cultured on biomimetic hydrogels modified with Arg-Gly-Asp containing peptides. Journal of Biomedical Materials Research Part B, 2004, 69A, 535-543.	3.1	131
23	<i>In Vitro</i> Osteogenic Differentiation of Human Mesenchymal Stem Cells and <i>In Vivo</i> Bone Formation in Composite Nanofiber Meshes. Tissue Engineering - Part A, 2008, 14, 2105-2119.	3.1	125
24	Osteogenic differentiation of rat bone marrow stromal cells cultured on Argâ€“Glyâ€“Asp modified hydrogels without dexamethasone and Î²-glycerol phosphate. Biomaterials, 2005, 26, 3645-3654.	11.4	112
25	Fabrication methods of an engineered microenvironment for analysis of cellâ€“biomaterial interactions. Biomaterials, 2007, 28, 126-133.	11.4	111
26	Nanofibrous Poly(lactic acid)/Hydroxyapatite Composite Scaffolds for Guided Tissue Regeneration. Macromolecular Bioscience, 2008, 8, 328-338.	4.1	109
27	In Vitro Cytotoxicity of Redox Radical Initiators for Cross-Linking of Oligo(poly(ethylene glycol)) Tj ETQq1 1 0.784314 rgBT /Overlock 10	5.4	107
28	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
29	In Vitro Cytotoxicity of Injectable and Biodegradable Poly(propylene fumarate)-Based Networks:Â Unreacted Macromers, Cross-Linked Networks, and Degradation Products. Biomacromolecules, 2003, 4, 1026-1033.	5.4	105
30	Use of a Folateâˆ’PPE Conjugate To Image Cancer Cellsin Vitro. Bioconjugate Chemistry, 2007, 18, 815-820.	3.6	103
31	Engineering Multiâ€Cellular Spheroids for Tissue Engineering and Regenerative Medicine. Advanced Healthcare Materials, 2020, 9, e2000608.	7.6	102
32	Control of Osteogenic Differentiation and Mineralization of Human Mesenchymal Stem Cells on Composite Nanofibers Containing Poly[lacticâ€<i>co</i>â€(glycolic acid)] and Hydroxyapatite. Macromolecular Bioscience, 2010, 10, 173-182.	4.1	101
33	In Vitro Cytotoxicity of Unsaturated Oligo[poly(ethylene glycol) fumarate] Macromers and Their Cross-Linked Hydrogels. Biomacromolecules, 2003, 4, 552-560.	5.4	99
34	Conductive biomaterials for tissue engineering applications. Journal of Industrial and Engineering Chemistry, 2017, 51, 12-26.	5.8	98
35	Modulation of Spreading, Proliferation, and Differentiation of Human Mesenchymal Stem Cells on Gelatin-Immobilized Poly(<scp>l</scp>-lactide-<i>co</i>-Ïµ-caprolactone) Substrates. Biomacromolecules, 2008, 9, 1772-1781.	5.4	89
36	Time-dependent mussel-inspired functionalization of poly(l-lactide-co-É›-caprolactone) substrates for tunable cell behaviors. Colloids and Surfaces B: Biointerfaces, 2011, 87, 79-87.	5.0	89

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37	Contractility modulates cell adhesion strengthening through focal adhesion kinase and assembly of vinculinâ€containing focal adhesions. Journal of Cellular Physiology, 2010, 223, 746-756.	4.1	88
38	Dual delivery of growth factors with coacervate-coated poly(lactic-co-glycolic acid) nanofiber improves neovascularization inÂa mouse skin flap model. Biomaterials, 2017, 124, 65-77.	11.4	87
39	Engineering spheroids potentiating cell-cell and cell-ECM interactions by self-assembly of stem cell microlayer. Biomaterials, 2018, 165, 105-120.	11.4	84
40	Modification of Oligo(poly(ethylene glycol) fumarate) Macromer with a GRGD Peptide for the Preparation of Functionalized Polymer Networks. Biomacromolecules, 2001, 2, 255-261.	5.4	77
41	Harnessing biochemical and structural cues for tenogenic differentiation of adipose derived stem cells (ADSCs) and development of an inÂvitro tissue interface mimicking tendon-bone insertion graft. Biomaterials, 2018, 165, 79-93.	11.4	75
42	Electrospun gelatin/poly(L-lactide-co-Îµ-caprolactone) nanofibers for mechanically functional tissue-engineering scaffolds. Journal of Biomaterials Science, Polymer Edition, 2008, 19, 339-357.	3.5	71
43	Heparin-coated superparamagnetic iron oxide for inÂvivo MR imaging of human MSCs. Biomaterials, 2012, 33, 4861-4871.	11.4	69
44	Hybrid-spheroids incorporating ECM like engineered fragmented fibers potentiate stem cell function by improved cell/cell and cell/ECM interactions. Acta Biomaterialia, 2017, 64, 161-175.	8.3	66
45	Hydrogels with an embossed surface: An all-in-one platform for mass production and culture of human adipose-derived stem cell spheroids. Biomaterials, 2019, 188, 198-212.	11.4	60
46	Guidance of <i>In Vitro</i> Migration of Human Mesenchymal Stem Cells and <i>In Vivo</i> Guided Bone Regeneration Using Aligned Electrospun Fibers. Tissue Engineering - Part A, 2014, 20, 2031-2042.	3.1	59
47	Electroactive Electrospun Polyaniline/Poly[(<scp>L</scp>â€lactide)<i>â€coâ€</i>(<i>Îµ</i>â€caprolactone)] Fibers for Control of Neural Cell Function. Macromolecular Bioscience, 2012, 12, 402-411.	4.1	57
48	Effects of Immobilized BMP-2 and Nanofiber Morphology on In Vitro Osteogenic Differentiation of hMSCs and In Vivo Collagen Assembly of Regenerated Bone. ACS Applied Materials & Interfaces, 2015, 7, 8798-8808.	8.0	57
49	In situ hydrogelation and RGDconjugation of tyramine-conjugated 4-arm PPOâ€“PEOblock copolymer for injectable bio-mimetic scaffolds. Soft Matter, 2011, 7, 986-992.	2.7	53
50	Fabrication and characterization of novel diopside/silk fibroin nanocomposite scaffolds for potential application in maxillofacial bone regeneration. International Journal of Biological Macromolecules, 2013, 58, 275-280.	7.5	52
51	Physical Stimuliâ€Induced Chondrogenic Differentiation of Mesenchymal Stem Cells Using Magnetic Nanoparticles. Advanced Healthcare Materials, 2015, 4, 1339-1347.	7.6	51
52	Surface engineering of titanium alloy using metal-polyphenol network coating with magnesium ions for improved osseointegration. Biomaterials Science, 2020, 8, 3404-3417.	5.4	51
53	Simple Large-Scale Synthesis of Hydroxyapatite Nanoparticles: In Situ Observation of Crystallization Process. Langmuir, 2010, 26, 384-388.	3.5	49
54	Stem cell spheroids incorporating fibers coated with adenosine and polydopamine as a modular building blocks for bone tissue engineering. Biomaterials, 2020, 230, 119652.	11.4	49

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55	Tissue Engineering and Regenerative Medicine 2017: A Year in Review. Tissue Engineering - Part B: Reviews, 2018, 24, 327-344.	4.8	47
56	Human adipose-derived stem cell spheroids incorporating platelet-derived growth factor (PDGF) and bio-minerals for vascularized bone tissue engineering. Biomaterials, 2020, 255, 120192.	11.4	47
57	Surface modification of electrospun poly(L-lactide-co-É›-caprolactone) fibrous meshes with a RGD peptide for the control of adhesion, proliferation and differentiation of the preosteoblastic cells. Macromolecular Research, 2010, 18, 472-481.	2.4	44
58	Fabrication of in vitro 3D mineralized tissue by fusion of composite spheroids incorporating biomineral-coated nanofibers and human adipose-derived stem cells. Acta Biomaterialia, 2018, 74, 464-477.	8.3	44
59	Creating Hierarchical Topographies on Fibrous Platforms Using Femtosecond Laser Ablation for Directing Myoblasts Behavior. ACS Applied Materials & Interfaces, 2016, 8, 3407-3417.	8.0	42
60	Engineering an aligned endothelial monolayer on a topologically modified nanofibrous platform with a micropatterned structure produced by femtosecond laser ablation. Journal of Materials Chemistry B, 2017, 5, 318-328.	5.8	42
61	Evaluation of the anti-oxidative and ROS scavenging properties of biomaterials coated with epigallocatechin gallate for tissue engineering. Acta Biomaterialia, 2021, 124, 166-178.	8.3	40
62	Immunomodulatory properties of stem cells and bioactive molecules for tissue engineering. Journal of Controlled Release, 2015, 219, 107-118.	9.9	39
63	Aligned Brain Extracellular Matrix Promotes Differentiation and Myelination of Human-Induced Pluripotent Stem Cell-Derived Oligodendrocytes. ACS Applied Materials & Interfaces, 2019, 11, 15344-15353.	8.0	39
64	Modulation of Osteogenic Differentiation of Human Mesenchymal Stem Cells by Poly[(<scp>L</scp>â€lactide)â€<i>co</i>â€(<i>Îµ</i>â€caprolactone)]/Gelatin Nanofibers. Macromolecular Bioscience, 2009, 9, 795-804.	4.1	35
65	Effect of immobilized collagen type IV on biological properties of endothelial cells for the enhanced endothelialization of synthetic vascular graft materials. Colloids and Surfaces B: Biointerfaces, 2015, 134, 196-203.	5.0	35
66	Transfer Printing of Cell Layers with an Anisotropic Extracellular Matrix Assembly using Cellâ€Interactive and Thermosensitive Hydrogels. Advanced Functional Materials, 2012, 22, 4060-4069.	14.9	33
67	Microcontact printing of polydopamine on thermally expandable hydrogels for controlled cell adhesion and delivery of geometrically defined microtissues. Acta Biomaterialia, 2017, 61, 75-87.	8.3	33
68	Bioâ€inspired Immobilization of Cellâ€Adhesive Ligands on Electrospun Nanofibrous Patches for Cell Delivery. Macromolecular Materials and Engineering, 2013, 298, 555-564.	3.6	32
69	Development of Functional Fibrous Matrices for the Controlled Release of Basic Fibroblast Growth Factor to Improve Therapeutic Angiogenesis. Tissue Engineering - Part A, 2010, 16, 2999-3010.	3.1	31
70	Transfer stamping of human mesenchymal stem cell patches using thermally expandable hydrogels with tunable cell-adhesive properties. Biomaterials, 2015, 54, 44-54.	11.4	30
71	Quantitatively controlled in situ formation of hydrogel membranes in microchannels for generation of stable chemical gradients. Lab on A Chip, 2012, 12, 302-308.	6.0	29
72	Mussel adhesive protein inspired coatings on temperature-responsive hydrogels for cell sheet engineering. Journal of Materials Chemistry B, 2016, 4, 6012-6022.	5.8	29

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73	Controlled Retention of BMP-2-Derived Peptide on Nanofibers Based on Mussel-Inspired Adhesion for Bone Formation. Tissue Engineering - Part A, 2017, 23, 323-334.	3.1	29
74	Mesenchymal Stem Cell-Conditioned Medium Enhances Osteogenic and Chondrogenic Differentiation of Human Embryonic Stem Cells and Human Induced Pluripotent Stem Cells by Mesodermal Lineage Induction. Tissue Engineering - Part A, 2014, 20, 1306-1313.	3.1	28
75	Fabrication of core-shell spheroids as building blocks for engineering 3D complex vascularized tissue. Acta Biomaterialia, 2019, 100, 158-172.	8.3	28
76	Enhancement of long-term angiogenic efficacy of adipose stem cells by delivery of FGF2. Microvascular Research, 2012, 84, 1-8.	2.5	27
77	The incorporation of bFGF mediated by heparin into PCL/gelatin composite fiber meshes for guided bone regeneration. Drug Delivery and Translational Research, 2015, 5, 146-159.	5.8	27
78	Enhancement of osteogenic and chondrogenic differentiation of human embryonic stem cells by mesodermal lineage induction with BMP-4 and FGF2 treatment. Biochemical and Biophysical Research Communications, 2013, 430, 793-797.	2.1	26
79	Rapid Transfer of Endothelial Cell Sheet Using a Thermosensitive Hydrogel and Its Effect on Therapeutic Angiogenesis. Biomacromolecules, 2013, 14, 4309-4319.	5.4	25
80	Mussel Adhesionâ€Inspired Reverse Transfection Platform Enhances Osteogenic Differentiation and Bone Formation of Human Adiposeâ€Derived Stem Cells. Small, 2016, 12, 6266-6278.	10.0	25
81	Fabrication and characterization of 3D scaffolds made from blends of sodium alginate and poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overlo	1.9	25
82	Directed Regeneration of Osteochondral Tissue by Hierarchical Assembly of Spatially Organized Composite Spheroids. Advanced Science, 2022, 9, e2103525.	11.2	25
83	Enhancement of cardiac myoblast responses onto electrospun PLCL fibrous matrices coated with polydopamine for gelatin immobilization. Macromolecular Research, 2011, 19, 835-842.	2.4	23
84	Graded functionalization of biomaterial surfaces using mussel-inspired adhesive coating of polydopamine. Colloids and Surfaces B: Biointerfaces, 2017, 159, 546-556.	5.0	23
85	Fabrication of Spheroids with Uniform Size by Self-Assembly of a Micro-Scaled Cell Sheet (Î¼CS): The Effect of Cell Contraction on Spheroid Formation. ACS Applied Materials & Interfaces, 2019, 11, 2802-2813.	8.0	23
86	Lotus seedpod-inspired hydrogels as an all-in-one platform for culture and delivery of stem cell spheroids. Biomaterials, 2019, 225, 119534.	11.4	21
87	Oxidative Epigallocatechin Gallate Coating on Polymeric Substrates for Bone Tissue Regeneration. Macromolecular Bioscience, 2019, 19, e1800392.	4.1	21
88	Spatially arranged encapsulation of stem cell spheroids within hydrogels for the regulation of spheroid fusion and cell migration. Acta Biomaterialia, 2022, 142, 60-72.	8.3	21
89	Engineered ECM-like microenvironment with fibrous particles for guiding 3D-encapsulated hMSC behaviours. Journal of Materials Chemistry B, 2015, 3, 2732-2741.	5.8	20
90	Development and characterization of heparin-immobilized polycaprolactone nanofibrous scaffolds for tissue engineering using gamma-irradiation. RSC Advances, 2017, 7, 8963-8972.	3.6	20

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91	Fabrication of 3D plotted scaffold with microporous strands for bone tissue engineering. Journal of Materials Chemistry B, 2020, 8, 951-960.	5.8	20
92	Bioactive Membrane Immobilized with Lactoferrin for Modulation of Bone Regeneration and Inflammation. Tissue Engineering - Part A, 2020, 26, 1243-1258.	3.1	20
93	Tissue engineering using a cyclic strain bioreactor and gelatin/PLCL scaffolds. Macromolecular Research, 2008, 16, 567-569.	2.4	19
94	Therapeutic angiogenesis by a myoblast layer harvested by tissue transfer printing from cell-adhesive, thermosensitive hydrogels. Biomaterials, 2013, 34, 8258-8268.	11.4	19
95	Genetically Engineered Myoblast Sheet for Therapeutic Angiogenesis. Biomacromolecules, 2014, 15, 361-372.	5.4	19
96	Control of adhesion, focal adhesion assembly, and differentiation of myoblasts by enzymatically crosslinked cell-interactive hydrogels. Macromolecular Research, 2011, 19, 911-920.	2.4	18
97	Delivery of a Cell Patch of Cocultured Endothelial Cells and Smooth Muscle Cells Using Thermoresponsive Hydrogels for Enhanced Angiogenesis. Tissue Engineering - Part A, 2016, 22, 182-193.	3.1	18
98	Advanced capability of radially aligned fibrous scaffolds coated with polydopamine for guiding directional migration of human mesenchymal stem cells. Journal of Materials Chemistry B, 2017, 5, 8725-8737.	5.8	18
99	Stem cell spheroid engineering with osteoinductive and ROS scavenging nanofibers for bone regeneration. Biofabrication, 2021, 13, 034101.	7.1	18
100	Release Kinetics and in vitro Bioactivity of Basic Fibroblast Growth Factor: Effect of the Thickness of Fibrous Matrices. Macromolecular Bioscience, 2011, 11, 122-130.	4.1	17
101	Fabrication of size-controllable human mesenchymal stromal cell spheroids from micro-scaled cell sheets. Biofabrication, 2019, 11, 035025.	7.1	17
102	Spatially Assembled Bilayer Cell Sheets of Stem Cells and Endothelial Cells Using Thermosensitive Hydrogels for Therapeutic Angiogenesis. Advanced Healthcare Materials, 2017, 6, 1601340.	7.6	16
103	Size-controlled human adipose-derived stem cell spheroids hybridized with single-segmented nanofibers and their effect on viability and stem cell differentiation. Biomaterials Research, 2021, 25, 14.	6.9	16
104	Fabrication of cell sheets with anisotropically aligned myotubes using thermally expandable micropatterned hydrogels. Macromolecular Research, 2016, 24, 562-572.	2.4	15
105	Preparation of Biomimetic Hydrogels with Controlled Cell Adhesive Properties and Topographical Features for the Study of Muscle Cell Adhesion and Proliferation. Macromolecular Bioscience, 2012, 12, 1502-1513.	4.1	14
106	Collagen-Immobilized Extracellular FRET Reporter for Visualizing Protease Activity Secreted by Living Cells. ACS Sensors, 2020, 5, 655-664.	7.8	14
107	Preparation and characterization of temperature-sensitive poly(N-isopropylacrylamide)-g-poly(L-lactide-co-Îµ-caprolactone) nanofibers. Macromolecular Research, 2008, 16, 139-148.	2.4	13
108	One-step harvest and delivery of micropatterned cell sheets mimicking the multi-cellular microenvironment of vascularized tissue. Acta Biomaterialia, 2021, 132, 176-187.	8.3	13

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109	Reconstruction of Vascular Structure with Multicellular Components using Cell Transfer Printing Methods. Advanced Healthcare Materials, 2014, 3, 1465-1474.	7.6	12
110	Facile Cell Sheet Harvest and Translocation Mediated by a Thermally Expandable Hydrogel with Controlled Cell Adhesion. Advanced Healthcare Materials, 2016, 5, 2320-2324.	7.6	12
111	Osteoinductive superparamagnetic Fe nanocrystal/calcium phosphate heterostructured microspheres. Nanoscale, 2017, 9, 19145-19153.	5.6	12
112	One-step delivery of a functional multi-layered cell sheet using a thermally expandable hydrogel with controlled presentation of cell adhesive proteins. Biofabrication, 2018, 10, 025001.	7.1	12
113	Agglomeration of human dermal fibroblasts with ECM mimicking nano-fragments and their effects on proliferation and cell/ECM interactions. Journal of Industrial and Engineering Chemistry, 2018, 67, 80-91.	5.8	12
114	3D printed micro-chambers carrying stem cell spheroids and pro-proliferative growth factors for bone tissue regeneration. Biofabrication, 2021, 13, 015011.	7.1	11
115	Effects of mechanical properties of gelatin methacryloyl hydrogels on encapsulated stem cell spheroids for 3D tissue engineering. International Journal of Biological Macromolecules, 2022, 194, 903-913.	7.5	11
116	Development and characterization of nanofibrous poly(lactic-co-glycolic acid)/biphasic calcium phosphate composite scaffolds for enhanced osteogenic differentiation. Macromolecular Research, 2011, 19, 172-179.	2.4	10
117	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.	5.8	10
118	Free radical-scavenging composite gelatin methacryloyl hydrogels for cell encapsulation. Acta Biomaterialia, 2022, 149, 96-110.	8.3	10
119	Surface engineering of 3D-printed scaffolds with minerals and a pro-angiogenic factor for vascularized bone regeneration. Acta Biomaterialia, 2022, 140, 730-744.	8.3	9
120	Efficacy of mechanically modified electrospun poly(l-lactide-co-Îµ-caprolactone)/gelatin membrane on full-thickness wound healing in rats. Biotechnology and Bioprocess Engineering, 2017, 22, 200-209.	2.6	8
121	Oxygen-dependent generation of a graded polydopamine coating on nanofibrous materials for controlling stem cell functions. Journal of Materials Chemistry B, 2017, 5, 8865-8878.	5.8	8
122	Adipose-derived mesenchymal stem cell spheroid sheet accelerates regeneration of ulcerated oral mucosa by enhancing inherent therapeutic properties. Journal of Industrial and Engineering Chemistry, 2020, 91, 296-310.	5.8	8
123	Polydopamine-assisted one-step modification of nanofiber surfaces with adenosine to tune the osteogenic differentiation of mesenchymal stem cells and the maturation of osteoclasts. Biomaterials Science, 2020, 8, 2825-2839.	5.4	8
124	Improvement of Differentiation and Mineralization of Preâ€Osteoblasts on Composite Nanofibers of Poly(lactic acid) and Nanosized Bovine Bone Powder. Macromolecular Bioscience, 2008, 8, 1098-1107.	4.1	7
125	The effect of a long-term cyclic strain on human dermal fibroblasts cultured in a bioreactor on chitosan-based scaffolds for the development of tissue engineered artificial dermis. Macromolecular Research, 2007, 15, 370-378.	2.4	6
126	Magnetism-controlled assembly of composite stem cell spheroids for the biofabrication of contraction-modulatory 3D tissue. Biofabrication, 2022, 14, 015007.	7.1	6

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127	In vitro andin vivo characterization of a coronary stent coated with an elastic biodegradable polymer for the sustained release of paclitaxel. Macromolecular Research, 2009, 17, 1039-1042.	2.4	5
128	Effect of spatial arrangement and structure of hierarchically patterned fibrous scaffolds generated by a femtosecond laser on cardiomyoblast behavior. Journal of Biomedical Materials Research - Part A, 2018, 106, 1732-1742.	4.0	5
129	Modulation of human mesenchymal stem cell survival on electrospun mesh with co-immobilized epithelial growth factor and gelatin. RSC Advances, 2015, 5, 55948-55956.	3.6	4
130	Effect of dual growth factor delivery using poly(lactic-co-glycolic acid) mesh on neovascularization in a mouse skin flap model. Macromolecular Research, 2016, 24, 385-391.	2.4	3
131	On/off switchable physical stimuli regulate the future direction of adherent cellular fate. Journal of Materials Chemistry B, 2021, 9, 5560-5571.	5.8	3
132	Integration of Bioinspired Fibrous Strands with 3D Spheroids for Environmental Hazard Monitoring. Small, 2022, 18, e2200757.	10.0	3
133	Frontiers in research for bone biomaterials. , 2020, , 307-332.		2
134	Sulfobetaine polymers for effective permeability into multicellular tumor spheroids (MCTSs). Journal of Materials Chemistry B, 2022, 10, 2649-2660.	5.8	2
135	Cytotoxicity of redox radical initiators for encapsulation of mesenchymal stem cells. , 0, , .		0
136	Formation of hydrogel membranes in microchannels and its applications. , 2011, , .		0
137	Stem Cells: Physical Stimuliâ€Induced Chondrogenic Differentiation of Mesenchymal Stem Cells Using Magnetic Nanoparticles (Adv. Healthcare Mater. 9/2015). Advanced Healthcare Materials, 2015, 4, 1418-1418.	7.6	0
138	A Special Dedication to Editor-in-Chief, Dr. Tony Mikos. Tissue Engineering - Part A, 2020, 26, 1223-1223.	3.1	0