Guoping Chen

List of Publications by Citations

216 papers	10,198 citations	51 h-index	94 g-index
233 ext. papers	11,248 ext. citations	7 avg, IF	6.43 L-index

#	Paper	IF	Citations
216	Graft copolymers that exhibit temperature-induced phase transitions over a wide range of pH. *Nature*, **1995**, 373, 49-52	50.4	1125
215	Scaffold Design for Tissue Engineering. *Macromolecular Bioscience*, **2002**, 2, 67-77	5.5	501
214	Growth factor combination for chondrogenic induction from human mesenchymal stem cell. *Biochemical and Biophysical Research Communications*, **2004**, 320, 914-9	3.4	327
213	Decellularized matrices for tissue engineering. *Expert Opinion on Biological Therapy*, **2010**, 10, 1717-28	5.4	223
212	Pore size effect of collagen scaffolds on cartilage regeneration. *Acta Biomaterialia*, **2014**, 10, 2005-13	10.8	208
211	Silicate bioceramics induce angiogenesis during bone regeneration. *Acta Biomaterialia*, **2012**, 8, 341-9	10.8	206
210	The influence of structural design of PLGA/collagen hybrid scaffolds in cartilage tissue engineering. *Biomaterials*, **2010**, 31, 2141-52	15.6	197
209	Optical Properties of Rectangular Cross-sectional ZnS Nanowires. *Nano Letters*, **2004**, 4, 1663-1668	11.5	185
208	Development of biodegradable porous scaffolds for tissue engineering. *Materials Science and Engineering C*, **2001**, 17, 63-69	8.3	174
207	A biodegradable hybrid sponge nested with collagen microsponges. *Journal of Biomedical Materials Research Part B*, **2000**, 51, 273-9		164
206	Cultured cell-derived extracellular matrix scaffolds for tissue engineering. *Biomaterials*, **2011**, 32, 9658-66	15.6	163
205	Culturing of skin fibroblasts in a thin PLGA-collagen hybrid mesh. *Biomaterials*, **2005**, 26, 2559-66	15.6	162
204	Cellular control of tissue architectures using a three-dimensional tissue fabrication technique. *Biomaterials*, **2007**, 28, 4939-46	15.6	160
203	Autologous extracellular matrix scaffolds for tissue engineering. *Biomaterials*, **2011**, 32, 2489-99	15.6	157
202	Stimulatory effects of the ionic products from Ca-Mg-Si bioceramics on both osteogenesis and angiogenesis in vitro. *Acta Biomaterialia*, **2013**, 9, 8004-14	10.8	148
201	Gold nanoparticle size and shape influence on osteogenesis of mesenchymal stem cells. *Nanoscale*, **2016**, 8, 7992-8007	7.7	147
200	Tissue engineering of cartilage using a hybrid scaffold of synthetic polymer and collagen. *Tissue Engineering*, **2004**, 10, 323-30		139

199	Preparation and properties of thermoreversible, phase-separating enzyme-oligo(N-isopropylacrylamide) conjugates. *Bioconjugate Chemistry*, **1993**, 4, 509-14	6.3	138
198	The use of a novel PLGA fiber/collagen composite web as a scaffold for engineering of articular cartilage tissue with adjustable thickness. *Journal of Biomedical Materials Research - Part A*, **2003**, 67, 1170-80	5.4	137
197	Preparation of poly(L-lactic acid) and poly(DL-lactic-co-glycolic acid) foams by use of ice microparticulates. *Biomaterials*, **2001**, 22, 2563-7	15.6	125
196	Gold nanoparticles with different charge and moiety induce differential cell response on mesenchymal stem cell osteogenesis. *Biomaterials*, **2015**, 54, 226-36	15.6	123
195	Functional Hydrogels With Tunable Structures and Properties for Tissue Engineering Applications. *Frontiers in Chemistry*, **2018**, 6, 499	5	110
194	3D Culture of Chondrocytes in Gelatin Hydrogels with Different Stiffness. *Polymers*, **2016**, 8,	4.5	100
193	Engineering multi-layered skeletal muscle tissue by using 3D microgrooved collagen scaffolds. *Biomaterials*, **2015**, 73, 23-31	15.6	99
192	Electrospun PHBV/collagen composite nanofibrous scaffolds for tissue engineering. *Journal of Biomaterials Science, Polymer Edition*, **2007**, 18, 81-94	3.5	98
191	Optical antenna effect in semiconducting nanowires. *Nano Letters*, **2008**, 8, 1341-6	11.5	96
190	Decellularized Extracellular Matrix as an In Vitro Model to Study the Comprehensive Roles of the ECM in Stem Cell Differentiation. *Stem Cells International*, **2016**, 2016, 6397820	5	95
189	Development of stepwise osteogenesis-mimicking matrices for the regulation of mesenchymal stem cell functions. *Journal of Biological Chemistry*, **2009**, 284, 31164-73	5.4	94
188	Adipogenic differentiation of individual mesenchymal stem cell on different geometric micropatterns. *Langmuir*, **2011**, 27, 6155-62	4	92
187	Heterotypic cell interactions on a dually patterned surface. *Biochemical and Biophysical Research Communications*, **2006**, 348, 937-44	3.4	90
186	Gradient micropattern immobilization of EGF to investigate the effect of artificial juxtacrine stimulation. *Biomaterials*, **2001**, 22, 2453-7	15.6	86
185	Spatial immobilization of bone morphogenetic protein-4 in a collagen-PLGA hybrid scaffold for enhanced osteoinductivity. *Biomaterials*, **2012**, 33, 6140-6	15.6	82
184	Preparation of dexamethasone-loaded biphasic calcium phosphate nanoparticles/collagen porous composite scaffolds for bone tissue engineering. *Acta Biomaterialia*, **2018**, 67, 341-353	10.8	80
183	In vitro evaluation of biodegradation of poly(lactic-co-glycolic acid) sponges. *Biomaterials*, **2008**, 29, 3438-48	15.6	75
182	Cartilage tissue engineering using funnel-like collagen sponges prepared with embossing ice particulate templates. *Biomaterials*, **2010**, 31, 5825-35	15.6	74

181	Preparation of a biphasic scaffold for osteochondral tissue engineering. *Materials Science and Engineering C*, **2006**, 26, 118-123	8.3	73
180	Poly(DL-lactic-co-glycolic acid) sponge hybridized with collagen microsponges and deposited apatite particulates. *Journal of Biomedical Materials Research Part B*, **2001**, 57, 8-14		73
179	Photo-immobilization of epidermal growth factor enhances its mitogenic effect by artificial juxtacrine signaling. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **1997**, 1358, 200-8	4.9	72
178	Chondrogenic differentiation of human mesenchymal stem cells cultured in a cobweb-like biodegradable scaffold. *Biochemical and Biophysical Research Communications*, **2004**, 322, 50-5	3.4	72
177	Chondrogenic differentiation of human mesenchymal stem cells on photoreactive polymer-modified surfaces. *Biomaterials*, **2008**, 29, 23-32	15.6	69
176	Regulating the stemness of mesenchymal stem cells by tuning micropattern features. *Journal of Materials Chemistry B*, **2016**, 4, 37-45	7.3	68
175	Biodegradable polymer with collagen microsponge serves as a new bioengineered cardiovascular prosthesis. *Journal of Thoracic and Cardiovascular Surgery*, **2004**, 128, 472-9	1.5	68
174	Development of extracellular matrices mimicking stepwise adipogenesis of mesenchymal stem cells. *Advanced Materials*, **2010**, 22, 3042-7	24	67
173	Insight into the interactions between nanoparticles and cells. *Biomaterials Science*, **2017**, 5, 173-189	7.4	66
172	Gelatin Scaffolds with Controlled Pore Structure and Mechanical Property for Cartilage Tissue Engineering. *Tissue Engineering - Part C: Methods*, **2016**, 22, 189-98	2.9	66
171	Redifferentiation of dedifferentiated bovine chondrocytes when cultured in vitro in a PLGA-collagen hybrid mesh. *FEBS Letters*, **2003**, 542, 95-9	3.8	61
170	Influence of stepwise chondrogenesis-mimicking 3D extracellular matrix on chondrogenic differentiation of mesenchymal stem cells. *Biomaterials*, **2015**, 52, 199-207	15.6	60
169	The balance of osteogenic and adipogenic differentiation in human mesenchymal stem cells by matrices that mimic stepwise tissue development. *Biomaterials*, **2012**, 33, 2025-31	15.6	59
168	Comparison of decellularization techniques for preparation of extracellular matrix scaffolds derived from three-dimensional cell culture. *Journal of Biomedical Materials Research - Part A*, **2012**, 100, 2507-16	5.4	55
167	PLLA-collagen and PLLA-gelatin hybrid scaffolds with funnel-like porous structure for skin tissue engineering. *Science and Technology of Advanced Materials*, **2012**, 13, 064210	7.1	52
166	A hybrid network of synthetic polymer mesh and collagen sponge. *Chemical Communications*, **2000**, 1505-1506	5.8	50
165	Influence of cell size on cellular uptake of gold nanoparticles. *Biomaterials Science*, **2016**, 4, 970-8	7.4	50
164	Tissue-engineered urinary bladder wall using PLGA mesh-collagen hybrid scaffolds: a comparison study of collagen sponge and gel as a scaffold. *Journal of Pediatric Surgery*, **2003**, 38, 1781-4	2.6	49

163	Synthesis of carboxylated poly(NIPAAm) oligomers and their application to form thermo-reversible polymer-enzyme conjugates. *Journal of Biomaterials Science, Polymer Edition*, **1994**, 5, 371-82	3.5	49
162	Tracheal defect repair using a PLGA-collagen hybrid scaffold reinforced by a copolymer stent with bFGF-impregnated gelatin hydrogel. *Pediatric Surgery International*, **2010**, 26, 575-80	2.1	48
161	In vitro proliferation and osteogenic differentiation of human bone marrow-derived mesenchymal stem cells cultured with hardystonite (Ca2ZnSi 2O7) and {beta}-TCP ceramics. *Journal of Biomaterials Applications*, **2010**, 25, 39-56	2.9	47
160	Uptake and intracellular distribution of collagen-functionalized single-walled carbon nanotubes. *Biomaterials*, **2013**, 34, 2472-9	15.6	46
159	TEMPO-Conjugated Gold Nanoparticles for Reactive Oxygen Species Scavenging and Regulation of Stem Cell Differentiation. *ACS Applied Materials & Interfaces*, **2017**, 9, 35683-35692	9.5	45
158	A cell leakproof PLGA-collagen hybrid scaffold for cartilage tissue engineering. *Biotechnology Progress*, **2010**, 26, 819-26	2.8	45
157	Evaluation of PLLA□collagen hybrid sponge as a scaffold for cartilage tissue engineering. *Materials Science and Engineering C*, **2004**, 24, 365-372	8.3	44
156	Composite scaffolds of gelatin and gold nanoparticles with tunable size and shape for photothermal cancer therapy. *Journal of Materials Chemistry B*, **2017**, 5, 245-253	7.3	43
155	Discriminating the Independent Influence of Cell Adhesion and Spreading Area on Stem Cell Fate Determination Using Micropatterned Surfaces. *Scientific Reports*, **2016**, 6, 28708	4.9	43
154	Preparation of Novel Collagen Sponges Using an Ice Particulate Template. *Journal of Bioactive and Compatible Polymers*, **2010**, 25, 360-373	2	42
153	Preparation of porous collagen scaffolds with micropatterned structures. *Advanced Materials*, **2012** , 24, 4311-6	24	40
152	Preparation of chitosan scaffolds with a hierarchical porous structure. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2010**, 93, 341-50	3.5	40
151	Dependence of Spreading and Differentiation of Mesenchymal Stem Cells on Micropatterned Surface Area. *Journal of Nanomaterials*, **2011**, 2011, 1-9	3.2	39
150	Preparation of collagen scaffolds with controlled pore structures and improved mechanical property for cartilage tissue engineering. *Journal of Bioactive and Compatible Polymers*, **2013**, 28, 426-438	2	38
149	Effect of cell density on adipogenic differentiation of mesenchymal stem cells. *Biochemical and Biophysical Research Communications*, **2009**, 381, 322-7	3.4	38
148	The combined influence of substrate elasticity and surface-grafted molecules on the ex vivo expansion of hematopoietic stem and progenitor cells. *Biomaterials*, **2013**, 34, 7632-44	15.6	37
147	Fabrication of Highly Crosslinked Gelatin Hydrogel and Its Influence on Chondrocyte Proliferation and Phenotype. *Polymers*, **2017**, 9,	4.5	37
146	The osteogenic differentiation of mesenchymal stem cells by controlled cell-cell interaction on micropatterned surfaces. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 3388-95	5.4	37

145	A novel cylinder-type poly(L-lactic acid)-collagen hybrid sponge for cartilage tissue engineering. *Tissue Engineering - Part C: Methods*, **2010**, 16, 329-38	2.9	37
144	Influence of Sulfate-Reducing Bacteria on the Passivity of Type 304 Austenitic Stainless Steel. *Journal of the Electrochemical Society*, **1997**, 144, 3140-3146	3.9	37
143	Osteogenic differentiation of human mesenchymal stem cells on chargeable polymer-modified surfaces. *Journal of Biomedical Materials Research - Part A*, **2008**, 87, 903-12	5.4	37
142	Fabrication of multi-biofunctional gelatin-based electrospun fibrous scaffolds for enhancement of osteogenesis of mesenchymal stem cells. *Colloids and Surfaces B: Biointerfaces*, **2016**, 138, 26-31	6	35
141	Preparation of collagen porous scaffolds with a gradient pore size structure using ice particulates. *Materials Letters*, **2013**, 107, 280-283	3.3	35
140	Three-dimensional Cultures of Rat Pancreatic RIN-5F Cells in Porous PLGA-collagen Hybrid Scaffolds. *Journal of Bioactive and Compatible Polymers*, **2009**, 24, 25-42	2	35
139	Facile preparation of albumin-stabilized gold nanostars for the targeted photothermal ablation of cancer cells. *Journal of Materials Chemistry B*, **2015**, 3, 5806-5814	7.3	34
138	Influence of micropattern width on differentiation of human mesenchymal stem cells to vascular smooth muscle cells. *Colloids and Surfaces B: Biointerfaces*, **2014**, 122, 316-323	6	33
137	Maintenance of cartilaginous gene expression on extracellular matrix derived from serially passaged chondrocytes during in vitro chondrocyte expansion. *Journal of Biomedical Materials Research - Part A*, **2012**, 100, 694-702	5.4	33
136	Photolithographic Synthesis of Hydrogels. *Macromolecules*, **1998**, 31, 4379-4381	5.5	33
135	Nanoencapsulation of individual mammalian cells with cytoprotective polymer shell. *Biomaterials*, **2017**, 133, 253-262	15.6	32
134	Biodegradable porous scaffolds for tissue engineering. *Journal of Artificial Organs*, **2002**, 5, 77-83	1.8	32
133	Encapsulation of individual living cells with enzyme responsive polymer nanoshell. *Biomaterials*, **2019**, 197, 317-326	15.6	31
132	Superior disinfection effect of Escherichia coli by hydrothermal synthesized TiO-based composite photocatalyst under LED irradiation: Influence of environmental factors and disinfection mechanism. *Environmental Pollution*, **2019**, 247, 847-856	9.3	30
131	PEG assisted P/Ag/Ag2O/Ag3PO4/TiO2 photocatalyst with enhanced elimination of emerging organic pollutants in salinity condition under solar light illumination. *Chemical Engineering Journal*, **2020**, 385, 123765	14.7	30
130	Preparation of collagen-glycosaminoglycan sponges with open surface porous structures using ice particulate template method. *Macromolecular Bioscience*, **2010**, 10, 860-71	5.5	29
129	Structural changes and biodegradation of PLLA, PCL, and PLGA sponges during in vitro incubation. *Polymer Engineering and Science*, **2010**, 50, 1895-1903	2.3	29
128	Sub-10 nm gold nanoparticles promote adipogenesis and inhibit osteogenesis of mesenchymal stem cells. *Journal of Materials Chemistry B*, **2017**, 5, 1353-1362	7.3	28

127	Influence of cell protrusion and spreading on adipogenic differentiation of mesenchymal stem cells on micropatterned surfaces. *Soft Matter*, **2013**, 9, 4160	3.6	28
126	Effects of extracellular matrices derived from different cell sources on chondrocyte functions. *Biotechnology Progress*, **2011**, 27, 788-95	2.8	28
125	Osteochondral tissue engineering using a PLGA□collagen hybrid mesh. *Materials Science and Engineering C*, **2006**, 26, 124-129	8.3	28
124	Interplay between chemical state, electric properties, and ferromagnetism in Fe-doped ZnO films. *Journal of Applied Physics*, **2013**, 113, 104503	2.5	27
123	Influence of microporous gelatin hydrogels on chondrocyte functions. *Journal of Materials Chemistry B*, **2017**, 5, 5753-5762	7.3	26
122	Polyethylene glycol (PEG)-modified Ag/AgO/AgPO/BiWO photocatalyst film with enhanced efficiency and stability under solar light. *Journal of Colloid and Interface Science*, **2020**, 569, 101-113	9.3	26
121	Preparation of gelatin/FeO composite scaffolds for enhanced and repeatable cancer cell ablation. *Journal of Materials Chemistry B*, **2016**, 4, 5664-5672	7.3	26
120	Matrices secreted during simultaneous osteogenesis and adipogenesis of mesenchymal stem cells affect stem cells differentiation. *Acta Biomaterialia*, **2016**, 35, 185-93	10.8	26
119	Biomimetic Assembly of Vascular Endothelial Cells and Muscle Cells in Microgrooved Collagen Porous Scaffolds. *Tissue Engineering - Part C: Methods*, **2017**, 23, 367-376	2.9	25
118	Surface modification of porous scaffolds with nanothick collagen layer by centrifugation and freeze-drying. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2009**, 90, 864-72	3.5	25
117	Porous Scaffolds for Regeneration of Cartilage, Bone and Osteochondral Tissue. *Advances in Experimental Medicine and Biology*, **2018**, 1058, 171-191	3.6	24
116	Regulation of mesenchymal stem cell functions by micro-nano hybrid patterned surfaces. *Journal of Materials Chemistry B*, **2018**, 6, 5424-5434	7.3	24
115	Thermoresponsive Microtextured Culture Surfaces Facilitate Fabrication of Capillary Networks. *Advanced Materials*, **2007**, 19, 3633-3636	24	24
114	Custom-shaping system for bone regeneration by seeding marrow stromal cells onto a web-like biodegradable hybrid sheet. *Cell and Tissue Research*, **2004**, 316, 141-53	4.2	24
113	Influence of Cell Spreading Area on the Osteogenic Commitment and Phenotype Maintenance of Mesenchymal Stem Cells. *Scientific Reports*, **2019**, 9, 6891	4.9	23
112	Application of PLGA-collagen hybrid mesh for three-dimensional culture of canine anterior cruciate ligament cells. *Materials Science and Engineering C*, **2004**, 24, 861-866	8.3	23
111	Manipulating Cell Nanomechanics Using Micropatterns. *Advanced Functional Materials*, **2016**, 26, 7634-7643	15.6	23
110	PLGA-collagen-ECM hybrid scaffolds functionalized with biomimetic extracellular matrices secreted by mesenchymal stem cells during stepwise osteogenesis-co-adipogenesis. *Journal of Materials Chemistry B*, **2019**, 7, 7195-7206	7.3	23

109	Solution viscosity regulates chondrocyte proliferation and phenotype during 3D culture. *Journal of Materials Chemistry B*, **2019**, 7, 7713-7722	7.3	23
108	Ligand density-dependent influence of arginine□glycine□aspartate functionalized gold nanoparticles on osteogenic and adipogenic differentiation of mesenchymal stem cells. *Nano Research*, **2018**, 11, 1247-1261	10	23
107	Single mammalian cell encapsulation by in situ polymerization. *Journal of Materials Chemistry B*, **2016**, 4, 7662-7668	7.3	22
106	Influence of surfaces modified with biomimetic extracellular matrices on adhesion and proliferation of mesenchymal stem cells and osteosarcoma cells. *Colloids and Surfaces B: Biointerfaces*, **2015**, 126, 381-6	6	21
105	Grid pattern of nanothick microgel network. *Langmuir*, **2007**, 23, 5864-7	4	21
104	Bifunctional scaffolds for the photothermal therapy of breast tumor cells and adipose tissue regeneration. *Journal of Materials Chemistry B*, **2018**, 6, 7728-7736	7.3	21
103	Induction of Chondrogenic Differentiation of Human Mesenchymal Stem Cells by Biomimetic Gold Nanoparticles with Tunable RGD Density. *Advanced Healthcare Materials*, **2017**, 6, 1700317	10.1	20
102	Collagen scaffolds with controlled insulin release and controlled pore structure for cartilage tissue engineering. *BioMed Research International*, **2014**, 2014, 623805	3	20
101	Exploring adipogenic differentiation of a single stem cell on poly(acrylic acid) and polystyrene micropatterns. *Soft Matter*, **2012**, 8, 8429	3.6	19
100	The influence of carbon-encapsulated iron nanoparticles on elastic modulus of living human mesenchymal stem cells examined by atomic force microscopy. *Micron*, **2018**, 108, 41-48	2.3	18
99	Mechanism of regulation of PPARG expression of mesenchymal stem cells by osteogenesis-mimicking extracellular matrices. *Bioscience, Biotechnology and Biochemistry*, **2011**, 75, 2099-104	2.1	18
98	Cell response to single-walled carbon nanotubes in hybrid porous collagen sponges. *Colloids and Surfaces B: Biointerfaces*, **2015**, 126, 63-9	6	17
97	Layered Ag/Ag2O/BiPO4/Bi2WO6 heterostructures by two-step method for enhanced photocatalysis. *Journal of Catalysis*, **2020**, 387, 28-38	7.3	16
96	Collagen microgel-assisted dexamethasone release from PLLA-collagen hybrid scaffolds of controlled pore structure for osteogenic differentiation of mesenchymal stem cells. *Journal of Biomaterials Science, Polymer Edition*, **2014**, 25, 1374-86	3.5	16
95	Stem cell culture using cell-derived substrates. *Biomaterials Science*, **2014**, 2, 1595-1603	7.4	16
94	Adipogenic differentiation of mesenchymal stem cells on micropatterned polyelectrolyte surfaces. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 230-9	1.3	16
93	Influence of Cell Morphology on Mesenchymal Stem Cell Transfection. *ACS Applied Materials & Interfaces*, **2019**, 11, 1932-1941	9.5	16
92	Long-term stem cell labeling by collagen-functionalized single-walled carbon nanotubes. *Nanoscale*, **2014**, 6, 1552-9	7.7	15

91	Coating of collagen on a poly(l-lactic acid) sponge surface for tissue engineering. *Materials Science and Engineering C*, **2012**, 32, 290-295	8.3	15
90	Enhanced spin injection and voltage bias in (Zn,Co)O/MgO/(Zn,Co)O magnetic tunnel junctions. *Applied Physics Letters*, **2009**, 95, 232508	3.4	15
89	Morphological and Mechanical Properties of Osteosarcoma Microenvironment Cells Explored by Atomic Force Microscopy. *Analytical Sciences*, **2016**, 32, 1177-1182	1.7	15
88	Photothermal Ablation of Cancer Cells by Albumin-Modified Gold Nanorods and Activation of Dendritic Cells. *Materials*, **2018**, 12,	3.5	15
87	PLGA-collagen-ECM hybrid meshes mimicking stepwise osteogenesis and their influence on the osteogenic differentiation of hMSCs. *Biofabrication*, **2020**, 12, 025027	10.5	14
86	Highly active porous scaffolds of collagen and hyaluronic acid prepared by suppression of polyion complex formation. *Journal of Materials Chemistry B*, **2014**, 2, 5612-5619	7.3	14
85	Preparation of dexamethasone-loaded calcium phosphate nanoparticles for the osteogenic differentiation of human mesenchymal stem cells. *Journal of Materials Chemistry B*, **2017**, 5, 6801-6810	7.3	14
84	Chondrogenic differentiation of mesenchymal stem cells in a leakproof collagen sponge. *Materials Science and Engineering C*, **2008**, 28, 195-201	8.3	14
83	Preparation of PLGA-collagen hybrid scaffolds with controlled pore structures for cartilage tissue engineering. *Progress in Natural Science: Materials International*, **2020**, 30, 642-650	3.6	14
82	Effect of high molecular weight hyaluronic acid on chondrocytes cultured in collagen/hyaluronic acid porous scaffolds. *RSC Advances*, **2015**, 5, 94405-94410	3.7	13
81	Spatially guided angiogenesis by three-dimensional collagen scaffolds micropatterned with vascular endothelial growth factor. *Journal of Biomaterials Science, Polymer Edition*, **2012**, 23, 2185-95	3.5	13
80	Promoted Angiogenesis and Osteogenesis by Dexamethasone-loaded Calcium Phosphate Nanoparticles/Collagen Composite Scaffolds with Microgroove Networks. *Scientific Reports*, **2018**, 8, 14143	4.9	13
79	From mouse to mouse-ear cress: Nanomaterials as vehicles in plant biotechnology. *Exploration*, **2021**, 1, 9-20		13
78	Variation of mechanical property of single-walled carbon nanotubes-treated cells explored by atomic force microscopy. *Journal of Biomedical Nanotechnology*, **2014**, 10, 651-9	4	12
77	Cell adhesion of bone marrow cells, chondrocytes, ligament cells and synovial cells on a PLGA□collagen hybrid mesh. *Materials Science and Engineering C*, **2004**, 24, 867-873	8.3	12
76	InGaAs quantum wells on wafer-bonded InP□GaAs substrates. *Journal of Applied Physics*, **2005**, 98, 093526	2.5	12
75	IGF-2 coated porous collagen microwells for the culture of pancreatic islets. *Journal of Materials Chemistry B*, **2017**, 5, 220-225	7.3	11
74	Preparation of collagen porous scaffolds with controlled and sustained release of bioactive insulin. *Journal of Bioactive and Compatible Polymers*, **2014**, 29, 95-109	2	11

73	Effect of single-wall carbon nanotubes on mechanical property of chondrocytes. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 2459-65	1.3	11
72	Preparation of cylinder-shaped porous sponges of poly(L-lactic acid), poly(DL-lactic-co-glycolic acid), and poly(□caprolactone). *BioMed Research International*, **2014**, 2014, 106082	3	11
71	Culture of bovine articular chondrocytes in funnel-like collagen-PLGA hybrid sponges. *Biomedical Materials (Bristol)*, **2011**, 6, 045011	3.5	11
70	Nuclear deformation and expression change of cartilaginous genes during in vitro expansion of chondrocytes. *Biochemical and Biophysical Research Communications*, **2008**, 374, 688-92	3.4	11
69	ECM scaffolds mimicking extracellular matrices of endochondral ossification for the regulation of mesenchymal stem cell differentiation. *Acta Biomaterialia*, **2020**, 114, 158-169	10.8	11
68	Nanomaterials and their composite scaffolds for photothermal therapy and tissue engineering applications. *Science and Technology of Advanced Materials*, **2021**, 22, 404-428	7.1	11
67	Promotion of muscle regeneration by myoblast transplantation combined with the controlled and sustained release of bFGFcpr. *Journal of Tissue Engineering and Regenerative Medicine*, **2016**, 10, 325-33	4.4	11
66	Cellular effects of magnetic nanoparticles explored by atomic force microscopy. *Biomaterials Science*, **2015**, 3, 1284-90	7.4	10
65	Development of an oyster shell and lignite modified zeolite (OLMZ) fixed bioreactor coupled with intermittent light stimulation for high efficient ammonium-rich anaerobic digestion process. *Chemical Engineering Journal*, **2020**, 398, 125637	14.7	10
64	Cellular uptake of single-walled carbon nanotubes in 3D extracellular matrix-mimetic composite collagen hydrogels. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 2487-92	1.3	10
63	Effects of extracellular matrix proteins in chondrocyte-derived matrices on chondrocyte functions. *Biotechnology Progress*, **2013**, 29, 1331-6	2.8	9
62	Effects of Structural Change Induced by Physical Aging on the Biodegradation Behavior of PLGA Films at Physiological Temperature. *Macromolecular Materials and Engineering*, **2011**, 296, 1028-1034	3.9	9
61	Interconnected collagen porous scaffolds prepared with sacrificial PLGA sponge templates for cartilage tissue engineering. *Journal of Materials Chemistry B*, **2021**, 9, 8491-8500	7.3	9
60	Synthesis of photo-reactive poly (vinyl alcohol) and construction of scaffold-free cartilage like pellets. *International Journal of Energy Production and Management*, **2018**, 5, 159-166	5.3	8
59	Targeting ligand-functionalized photothermal scaffolds for cancer cell capture and in situ ablation. *Biomaterials Science*, **2017**, 5, 2276-2284	7.4	8
58	Differentiation of PC12 cells in three-dimensional collagen sponges with micropatterned nerve growth factor. *Biotechnology Progress*, **2012**, 28, 773-9	2.8	8
57	Hysteretic giant magnetoresistance curves induced by interlayer magnetostatic coupling in [Pd/Co]/Cu/Co/Cu/[Co/Pd] dual spin valves. *Journal of Applied Physics*, **2010**, 107, 083902	2.5	8
56	Influence of the Mn concentration on the electromechanical response d33 of Mn-doped ZnO films. *Physica Status Solidi - Rapid Research Letters*, **2010**, 4, 209-211	2.5	8

55	First-Principles Study on the Electronic Structure and Elastic Properties of YCu, DyCu and YAg. *Materials Transactions*, **2008**, 49, 2480-2483	1.3	8
54	Equal Channel Angular Pressing Die Outer Corner Angle Influence on Flow and Strain Homogeneity. *Advanced Engineering Materials*, **2007**, 9, 572-576	3.5	8
53	The varied influences of cell adhesion and spreading on gene transfection of mesenchymal stem cells on a micropatterned substrate. *Acta Biomaterialia*, **2021**, 125, 100-111	10.8	8
52	Micropattern-controlled chirality of focal adhesions regulates the cytoskeletal arrangement and gene transfection of mesenchymal stem cells. *Biomaterials*, **2021**, 271, 120751	15.6	8
51	Preparation of Stepwise Adipogenesis-Mimicking ECM-Deposited PLGA-Collagen Hybrid Meshes and Their Influence on Adipogenic Differentiation of hMSCs. *ACS Biomaterials Science and Engineering*, **2019**, 5, 6099-6108	5.5	7
50	Fabrication of gelatin-micropatterned surface and its effect on osteogenic differentiation of hMSCs. *Journal of Materials Chemistry B*, **2018**, 6, 1018-1025	7.3	7
49	Cartilage tissue engineering with controllable shape using a poly(lactic-co-glycolic acid)/collagen hybrid scaffold. *Journal of Bioactive and Compatible Polymers*, **2013**, 28, 247-257	2	7
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47	Folic Acid-Functionalized Composite Scaffolds of Gelatin and Gold Nanoparticles for Photothermal Ablation of Breast Cancer Cells. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 589905	5.8	7
46	Composite scaffolds of black phosphorus nanosheets and gelatin with controlled pore structures for photothermal cancer therapy and adipose tissue engineering. *Biomaterials*, **2021**, 275, 120923	15.6	7
45	One-pot synthesis of polyaniline doped with transition metal ions using H2O2 as oxidant. *Polymers for Advanced Technologies*, **2014**, 25, 1391-1395	3.2	6
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43	X-ray photoelectron spectroscopy analysis of Mo metal surface exposed to sulfate-reducing bacteria. *Surface and Interface Analysis*, **1999**, 27, 230-235	1.5	6
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