Jason A Burdick

List of Publications by Year
in descending order

305 papers	41,297 citations	1238 110 h-index	2684 193 g-index
314 all docs	314 docs citations	314 times ranked	32130 citing authors

#	Article	IF	Citations
1	Hyaluronic Acid Hydrogels for Biomedical Applications. Advanced Materials, 2011, 23, H41-56.	21.0	1,593
2	A practical guide to hydrogels for cell culture. Nature Methods, 2016, 13, 405-414.	19.0	1,348
3	Degradation-mediated cellular traction directs stem cell fate in covalently crosslinked three-dimensional hydrogels. Nature Materials, 2013, 12, 458-465.	27.5	982
4	Photoencapsulation of osteoblasts in injectable RGD-modified PEG hydrogels for bone tissue engineering. Biomaterials, 2002, 23, 4315-4323.	11.4	906
5	Direct 3D Printing of Shearâ€Thinning Hydrogels into Selfâ€Healing Hydrogels. Advanced Materials, 2015, 27, 5075-5079.	21.0	831
6	Shear-thinning hydrogels for biomedical applications. Soft Matter, 2012, 8, 260-272.	2.7	712
7	Controlled Degradation and Mechanical Behavior of Photopolymerized Hyaluronic Acid Networks. Biomacromolecules, 2005, 6, 386-391.	5.4	669
8	Engineering cartilage tissue. Advanced Drug Delivery Reviews, 2008, 60, 243-262.	13.7	650
9	Hydrogel microparticles for biomedical applications. Nature Reviews Materials, 2020, 5, 20-43.	48.7	646
10	Hyaluronic acid hydrogel for controlled self-renewal and differentiation of human embryonic stem cells. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11298-11303.	7.1	615
11	Stiffening hydrogels to probe short- and long-term cellular responses to dynamic mechanics. Nature Communications, 2012, 3, 792.	12.8	574
12	The potential to improve cell infiltration in composite fiber-aligned electrospun scaffolds by the selective removal of sacrificial fibers. Biomaterials, 2008, 29, 2348-2358.	11.4	557
13	Review: Photopolymerizable and Degradable Biomaterials for Tissue Engineering Applications. Tissue Engineering, 2007, 13, 2369-2385.	4.6	556
14	Biofabrication: reappraising the definition of an evolving field. Biofabrication, 2016, 8, 013001.	7.1	523
15	Biofabrication strategies for 3D in vitro models and regenerative medicine. Nature Reviews Materials, 2018, 3, 21-37.	48.7	502
16	3D Printing of Shear-Thinning Hyaluronic Acid Hydrogels with Secondary Cross-Linking. ACS Biomaterials Science and Engineering, 2016, 2, 1743-1751.	5.2	473
17	Biofabrication: A Guide to Technology and Terminology. Trends in Biotechnology, 2018, 36, 384-402.	9.3	465
18	Cell-mediated fibre recruitment drives extracellular matrix mechanosensing inÂengineered fibrillar microenvironments. Nature Materials, 2015, 14, 1262-1268.	27.5	464

#	Article	IF	Citations
19	Moving from static to dynamic complexity in hydrogel design. Nature Communications, 2012, 3, 1269.	12.8	445
20	Hydrogel design for cartilage tissue engineering: A case study with hyaluronic acid. Biomaterials, 2011, 32, 8771-8782.	11.4	443
21	Recent advances in hyaluronic acid hydrogels for biomedical applications. Current Opinion in Biotechnology, 2016, 40, 35-40.	6.6	441
22	Engineered Microenvironments for Controlled Stem Cell Differentiation. Tissue Engineering - Part A, 2009, 15, 205-219.	3.1	429
23	Injectable and bioresponsive hydrogels for on-demand matrix metalloproteinase inhibition. Nature Materials, 2014, 13, 653-661.	27.5	419
24	A Generalizable Strategy for the 3D Bioprinting of Hydrogels from Nonviscous Photoâ€crosslinkable Inks. Advanced Materials, 2017, 29, 1604983.	21.0	414
25	Influence of Three-Dimensional Hyaluronic Acid Microenvironments on Mesenchymal Stem Cell Chondrogenesis. Tissue Engineering - Part A, 2009, 15, 243-254.	3.1	408
26	Shear-thinning and self-healing hydrogels as injectable therapeutics and for 3D-printing. Nature Protocols, 2017, 12, 1521-1541.	12.0	382
27	Nuclear-Import Receptors Reverse Aberrant Phase Transitions of RNA-Binding Proteins with Prion-like Domains. Cell, 2018, 173, 677-692.e20.	28.9	376
28	Rational Design of Network Properties in Guestâ€"Host Assembled and Shear-Thinning Hyaluronic Acid Hydrogels. Biomacromolecules, 2013, 14, 4125-4134.	5.4	349
29	Hydrogels that mimic developmentally relevant matrix and N-cadherin interactions enhance MSC chondrogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10117-10122.	7.1	344
30	Fabrication of Gradient Hydrogels Using a Microfluidics/Photopolymerization Process. Langmuir, 2004, 20, 5153-5156.	3.5	338
31	Enhanced MSC chondrogenesis following delivery of TGF-Î²3 from alginate microspheres within hyaluronic acid hydrogels in vitro and in vivo. Biomaterials, 2011, 32, 6425-6434.	11.4	327
32	Swellingâ€Induced Surface Patterns in Hydrogels with Gradient Crosslinking Density. Advanced Functional Materials, 2009, 19, 3038-3045.	14.9	305
33	The bioprinting roadmap. Biofabrication, 2020, 12, 022002.	7.1	291
34	Smart Biomaterials. Science, 2004, 305, 1923-1924.	12.6	281
35	Shearâ€Thinning Supramolecular Hydrogels with Secondary Autonomous Covalent Crosslinking to Modulate Viscoelastic Properties In Vivo. Advanced Functional Materials, 2015, 25, 636-644.	14.9	278
36	Local nascent protein deposition and remodelling guide mesenchymal stromal cell mechanosensing and fate in three-dimensional hydrogels. Nature Materials, 2019, 18, 883-891.	27.5	273

#	Article	IF	Citations
37	Jammed Microgel Inks for 3D Printing Applications. Advanced Science, 2019, 6, 1801076.	11.2	270
38	Injectable hydrogel properties influence infarct expansion and extent of postinfarction left ventricular remodeling in an ovine model. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11507-11512.	7.1	267
39	The influence of hyaluronic acid hydrogel crosslinking density and macromolecular diffusivity on human MSC chondrogenesis and hypertrophy. Biomaterials, 2013, 34, 413-421.	11.4	265
40	Synthesis and orthogonal photopatterning of hyaluronic acid hydrogels with thiol-norbornene chemistry. Biomaterials, 2013, 34, 9803-9811.	11.4	263
41	N-cadherin adhesive interactions modulate matrix mechanosensing and fate commitment of mesenchymal stem cells. Nature Materials, 2016, 15, 1297-1306.	27.5	262
42	Methods To Assess Shear-Thinning Hydrogels for Application As Injectable Biomaterials. ACS Biomaterials Science and Engineering, 2017, 3, 3146-3160.	5.2	261
43	Patterning network structure to spatially control cellular remodeling and stem cell fate within 3-dimensional hydrogels. Biomaterials, 2010, 31, 8228-8234.	11.4	258
44	Spatially controlled hydrogel mechanics to modulate stem cell interactions. Soft Matter, 2010, 6, 136-143.	2.7	253
45	3D bioprinting of high cell-density heterogeneous tissue models through spheroid fusion within self-healing hydrogels. Nature Communications, 2021, 12, 753.	12.8	247
46	Dimensionality and spreading influence MSC YAP/TAZ signaling in hydrogel environments. Biomaterials, 2016, 103, 314-323.	11.4	240
47	Coculture of Human Mesenchymal Stem Cells and Articular Chondrocytes Reduces Hypertrophy and Enhances Functional Properties of Engineered Cartilage. Tissue Engineering - Part A, 2011, 17, 1137-1145.	3.1	235
48	Injectable and Cytocompatible Tough Doubleâ€Network Hydrogels through Tandem Supramolecular and Covalent Crosslinking. Advanced Materials, 2016, 28, 8419-8424.	21.0	233
49	Injectable Granular Hydrogels with Multifunctional Properties for Biomedical Applications. Advanced Materials, 2018, 30, e1705912.	21.0	224
50	Fundamentals and Applications of Photo-Cross-Linking in Bioprinting. Chemical Reviews, 2020, 120, 10662-10694.	47.7	222
51	Hydrogels with Reversible Mechanics to Probe Dynamic Cell Microenvironments. Angewandte Chemie - International Edition, 2017, 56, 12132-12136.	13.8	220
52	Threeâ€dimensional extrusion bioprinting of singleâ€and doubleâ€network hydrogels containing dynamic covalent crosslinks. Journal of Biomedical Materials Research - Part A, 2018, 106, 865-875.	4.0	218
53	Delivery of osteoinductive growth factors from degradable PEG hydrogels influences osteoblast differentiation and mineralization. Journal of Controlled Release, 2002, 83, 53-63.	9.9	217
54	Lightâ€Responsive Biomaterials: Development and Applications. Macromolecular Bioscience, 2010, 10, 339-348.	4.1	217

#	Article	IF	Citations
55	Chemically Modified Biopolymers for the Formation of Biomedical Hydrogels. Chemical Reviews, 2021, 121, 10908-10949.	47.7	216
56	Controlling Stem Cell Fate with Material Design. Advanced Materials, 2010, 22, 175-189.	21.0	215
57	Fibrous hyaluronic acid hydrogels that direct MSC chondrogenesis through mechanical and adhesive cues. Biomaterials, 2013, 34, 5571-5580.	11.4	211
58	Micro-bioreactor array for controlling cellular microenvironments. Lab on A Chip, 2007, 7, 710.	6.0	208
59	The influence of degradation characteristics of hyaluronic acid hydrogels on in vitro neocartilage formation by mesenchymal stem cells. Biomaterials, 2009, 30, 4287-4296.	11.4	205
60	Micromolding of photocrosslinkable hyaluronic acid for cell encapsulation and entrapment. Journal of Biomedical Materials Research - Part A, 2006, 79A, 522-532.	4.0	203
61	Engineering synthetic hydrogel microenvironments to instruct stem cells. Current Opinion in Biotechnology, 2013, 24, 841-846.	6.6	201
62	Progress in material design for biomedical applications. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14444-14451.	7.1	201
63	Stimulation of neurite outgrowth by neurotrophins delivered from degradable hydrogels. Biomaterials, 2006, 27, 452-459.	11.4	198
64	Differential Maturation and Structureâ€"Function Relationships in Mesenchymal Stem Cell- and Chondrocyte-Seeded Hydrogels. Tissue Engineering - Part A, 2009, 15, 1041-1052.	3.1	196
65	The control of stem cell morphology and differentiation by hydrogel surface wrinkles. Biomaterials, 2010, 31, 6511-6518.	11.4	193
66	Matrix degradability controls multicellularity of 3D cell migration. Nature Communications, 2017, 8, 371.	12.8	192
67	Recent advances in shearâ€thinning and selfâ€healing hydrogels for biomedical applications. Journal of Applied Polymer Science, 2020, 137, 48668.	2.6	192
68	Molded polyethylene glycol microstructures for capturing cells within microfluidic channels. Lab on A Chip, 2004, 4, 425.	6.0	190
69	Engineering on the Straight and Narrow: The Mechanics of Nanofibrous Assemblies for Fiber-Reinforced Tissue Regeneration. Tissue Engineering - Part B: Reviews, 2009, 15, 171-193.	4.8	188
70	Sustained miRNA delivery from an injectable hydrogel promotes cardiomyocyte proliferation and functional regeneration after ischaemic injury. Nature Biomedical Engineering, 2017, 1, 983-992.	22.5	184
71	Matching material and cellular timescales maximizes cell spreading on viscoelastic substrates. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2686-E2695.	7.1	183
72	Engineering ECM signals into biomaterials. Materials Today, 2012, 15, 454-459.	14.2	179

#	Article	IF	Citations
73	Stiffening hydrogels for investigating the dynamics of hepatic stellate cell mechanotransduction during myofibroblast activation. Scientific Reports, 2016, 6, 21387.	3.3	176
74	Synthesis and Characterization of in Situ Cross-Linkable Hyaluronic Acid-Based Hydrogels with Potential Application for Vocal Fold Regeneration. Macromolecules, 2004, 37, 3239-3248.	4.8	173
75	High mesenchymal stem cell seeding densities in hyaluronic acid hydrogels produce engineered cartilage with native tissue properties. Acta Biomaterialia, 2012, 8, 3027-3034.	8.3	173
76	Injectable shear-thinning hydrogels engineered with a self-assembling Dock-and-Lock mechanism. Biomaterials, 2012, 33, 2145-2153.	11.4	173
77	Hydrolytically Degradable Hyaluronic Acid Hydrogels with Controlled Temporal Structures. Biomacromolecules, 2008, 9, 1088-1092.	5.4	171
78	Complex 3Dâ€Printed Microchannels within Cellâ€Degradable Hydrogels. Advanced Functional Materials, 2018, 28, 1801331.	14.9	171
79	Sequential crosslinking to control cellular spreading in 3-dimensional hydrogels. Soft Matter, 2009, 5, 1601.	2.7	170
80	Mechanically Robust and Bioadhesive Collagen and Photocrosslinkable Hyaluronic Acid Semi-Interpenetrating Networks. Tissue Engineering - Part A, 2009, 15, 1645-1653.	3.1	167
81	Controlled activation of morphogenesis to generate a functional human microvasculature in a synthetic matrix. Blood, 2011, 118, 804-815.	1.4	166
82	Supramolecular Guestâ€"Host Interactions for the Preparation of Biomedical Materials. Bioconjugate Chemistry, 2015, 26, 2279-2289.	3.6	162
83	To Serve and Protect: Hydrogels to Improve Stem Cell-Based Therapies. Cell Stem Cell, 2016, 18, 13-15.	11.1	158
84	Expanding and optimizing 3D bioprinting capabilities using complementary network bioinks. Science Advances, 2020, 6, .	10.3	156
85	Nanofibrous Hydrogels with Spatially Patterned Biochemical Signals to Control Cell Behavior. Advanced Materials, 2015, 27, 1356-1362.	21.0	153
86	Bioprinting for the Biologist. Cell, 2021, 184, 18-32.	28.9	152
87	Patterning hydrogels in three dimensions towards controlling cellular interactions. Soft Matter, 2011, 7, 830-838.	2.7	151
88	Combinatorial hydrogels with biochemical gradients for screening 3D cellular microenvironments. Nature Communications, 2018, 9, 614.	12.8	150
89	Sustained release of endothelial progenitor cell-derived extracellular vesicles from shear-thinning hydrogels improves angiogenesis and promotes function after myocardial infarction. Cardiovascular Research, 2018, 114, 1029-1040.	3.8	147
90	Enhanced Release of Small Molecules from Near-Infrared Light Responsive Polymerâ^'Nanorod Composites. ACS Nano, 2011, 5, 2948-2956.	14.6	146

#	Article	IF	Citations
91	Sacrificial nanofibrous composites provide instruction without impediment and enable functional tissue formation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 14176-14181.	7.1	145
92	Enhancing Biopolymer Hydrogel Functionality through Interpenetrating Networks. Trends in Biotechnology, 2021, 39, 519-538.	9.3	138
93	Injectable Acellular Hydrogels for Cardiac Repair. Journal of Cardiovascular Translational Research, 2011, 4, 528-542.	2.4	136
94	A Combinatorial Library of Photocrosslinkable and Degradable Materials. Advanced Materials, 2006, 18, 2614-2618.	21.0	135
95	Neurotrophin-Induced Differentiation of Human Embryonic Stem Cells on Three-Dimensional Polymeric Scaffolds. Tissue Engineering, 2005, 11, 506-512.	4.6	133
96	Engineering Stem and Stromal Cell Therapies for Musculoskeletal Tissue Repair. Cell Stem Cell, 2018, 22, 325-339.	11.1	132
97	Reversible Control of Network Properties in Azobenzene-Containing Hyaluronic Acid-Based Hydrogels. Bioconjugate Chemistry, 2018, 29, 905-913.	3.6	132
98	Photoinitiated crosslinked degradable copolymer networks for tissue engineering applications. Biomaterials, 2003, 24, 2485-2495.	11.4	131
99	Spatial control of cell-mediated degradation to regulate vasculogenesis and angiogenesis in hyaluronan hydrogels. Biomaterials, 2012, 33, 6123-6131.	11.4	129
100	Protease-degradable electrospun fibrous hydrogels. Nature Communications, 2015, 6, 6639.	12.8	126
101	Recent Advances in Enabling Technologies in 3D Printing for Precision Medicine. Advanced Materials, 2020, 32, e1902516.	21.0	126
102	Epicardial YAP/TAZ orchestrate an immunosuppressive response following myocardial infarction. Journal of Clinical Investigation, 2017, 127, 899-911.	8.2	126
103	Hydrophilic elastomeric biomaterials based on resilin-like polypeptides. Soft Matter, 2009, 5, 3412.	2.7	124
104	Solvent induced transition from wrinkles to creases in thin film gels with depth-wise crosslinking gradients. Soft Matter, 2010, 6, 5795.	2.7	122
105	Dynamic Compressive Loading Enhances Cartilage Matrix Synthesis and Distribution and Suppresses Hypertrophy in hMSC-Laden Hyaluronic Acid Hydrogels. Tissue Engineering - Part A, 2012, 18, 715-724.	3.1	121
106	Influence of gel properties on neocartilage formation by auricular chondrocytes photoencapsulated in hyaluronic acid networks. Journal of Biomedical Materials Research - Part A, 2006, 77A, 518-525.	4.0	120
107	Influence of Injectable Hyaluronic Acid Hydrogel Degradation Behavior on Infarction-Induced Ventricular Remodeling. Biomacromolecules, 2011, 12, 4127-4135.	5.4	119
108	Synergistic effects of SDF-1Î± chemokine and hyaluronic acid release from degradable hydrogels on directing bone marrow derived cell homing to the myocardium. Biomaterials, 2012, 33, 7849-7857.	11.4	119

#	Article	IF	Citations
109	Injectable and Conductive Granular Hydrogels for 3D Printing and Electroactive Tissue Support. Advanced Science, 2019, 6, 1901229.	11.2	118
110	Modular Synthesis of Biodegradable Diblock Copolymers for Designing Functional Polymersomes. Journal of the American Chemical Society, 2010, 132, 3654-3655.	13.7	116
111	Modulating hydrogel crosslink density and degradation to control bone morphogenetic protein delivery and in vivo bone formation. Journal of Controlled Release, 2014, 191, 63-70.	9.9	115
112	An anisotropic nanofiber/microsphere composite with controlled release of biomolecules for fibrous tissue engineering. Biomaterials, 2010, 31, 4113-4120.	11.4	114
113	Photocrosslinkable hydrogel for myocyte cell culture and injection. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 81B, 312-322.	3.4	113
114	Acellular Biomaterials: An Evolving Alternative to Cell-Based Therapies. Science Translational Medicine, 2013, 5, 176ps4.	12.4	113
115	Injectable shear-thinning hydrogels used to deliver endothelial progenitor cells, enhance cell engraftment, and improve ischemic myocardium. Journal of Thoracic and Cardiovascular Surgery, 2015, 150, 1268-1277.	0.8	113
116	Sustained small molecule delivery from injectable hyaluronic acid hydrogels through hostâ€“guest mediated retention. Journal of Materials Chemistry B, 2015, 3, 8010-8019.	5.8	111
117	Advances in nanofibrous scaffolds for biomedical applications: From electrospinning to self-assembly. Nano Today, 2014, 9, 722-742.	11.9	109
118	Differential Behavior of Auricular and Articular Chondrocytes in Hyaluronic Acid Hydrogels. Tissue Engineering - Part A, 2008, 14, 1121-1131.	3.1	108
119	Genomic, epigenomic, and biophysical cues controlling the emergence of the lung alveolus. Science, 2021, 371, .	12.6	108
120	3D bioprinting via an in situ crosslinking technique towards engineering cartilage tissue. Scientific Reports, 2019, 9, 19987.	3.3	107
121	Effects of Auricular Chondrocyte Expansion on Neocartilage Formation in Photocrosslinked Hyaluronic Acid Networks. Tissue Engineering, 2006, 12, 2665-2673.	4.6	104
122	Kinetic study of swelling-induced surface pattern formation and ordering in hydrogel films with depth-wise crosslinking gradient. Soft Matter, 2010, 6, 2044.	2.7	104
123	Bioactive factors for cartilage repair and regeneration: Improving delivery, retention, and activity. Acta Biomaterialia, 2019, 93, 222-238.	8.3	101
124	Sustained Release of Engineered Stromal Cellâ€“Derived Factor 1-Î± From Injectable Hydrogels Effectively Recruits Endothelial Progenitor Cells and Preserves Ventricular Function After Myocardial Infarction. Circulation, 2013, 128, S79-86.	1.6	100
125	Influence of hyaluronic acid modification on CD44 binding towards the design of hydrogel biomaterials. Biomaterials, 2019, 222, 119451.	11.4	100
126	Injectable Shear-Thinning Hydrogels for Minimally Invasive Delivery to Infarcted Myocardium to Limit Left Ventricular Remodeling. Circulation: Cardiovascular Interventions, 2016, 9, .	3.9	98

#	Article	IF	Citations
127	Conversion and temperature profiles during the photoinitiated polymerization of thick orthopaedic biomaterials. Biomaterials, 2001, 22, 1779-1786.	11.4	97
128	Lightâ€Induced Temperature Transitions in Biodegradable Polymer and Nanorod Composites. Small, 2009, 5, 1830-1834.	10.0	96
129	Programmed biomolecule delivery to enable and direct cell migration for connective tissue repair. Nature Communications, 2017, 8, 1780.	12.8	96
130	Biodegradable Fibrous Scaffolds with Tunable Properties Formed from Photo-Cross-Linkable Poly(glycerol sebacate). ACS Applied Materials & Interfaces, 2009, 1, 1878-1886.	8.0	94
131	Local Hydrogel Release of Recombinant TIMP-3 Attenuates Adverse Left Ventricular Remodeling After Experimental Myocardial Infarction. Science Translational Medicine, 2014, 6, 223ra21.	12.4	94
132	An initial investigation of photocurable three-dimensional lactic acid based scaffolds in a critical-sized cranial defect. Biomaterials, 2003, 24, 1613-1620.	11.4	92
133	Gradients with Depth in Electrospun Fibrous Scaffolds for Directed Cell Behavior. Biomacromolecules, 2011, 12, 2344-2350.	5.4	92
134	Enhanced mechanosensing of cells in synthetic 3D matrix with controlled biophysical dynamics. Nature Communications, 2021, 12, 3514.	12.8	92
135	MRI evaluation of injectable hyaluronic acid-based hydrogel therapy to limit ventricular remodeling after myocardial infarction. Biomaterials, 2015, 69, 65-75.	11.4	91
136	Surface and bulk modifications to photocrosslinked polyanhydrides to control degradation behavior. Journal of Biomedical Materials Research Part B, 2000, 51, 352-359.	3.1	89
137	Multiscale model predicts increasing focal adhesion size with decreasing stiffness in fibrous matrices. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4549-E4555.	7.1	88
138	Electrospun Fibrous Scaffolds with Multiscale and Photopatterned Porosity. Macromolecular Bioscience, 2010, 10, 265-270.	4.1	87
139	Secondary Photocrosslinking of Injectable Shearâ€Thinning Dockâ€andâ€Lock Hydrogels. Advanced Healthcare Materials, 2013, 2, 1028-1036.	7.6	85
140	Harnessing Interfacial Phenomena to Program the Release Properties of Hollow Microcapsules. Advanced Functional Materials, 2012, 22, 131-138.	14.9	84
141	Hydrogels with differential and patterned mechanics to study stiffness-mediated myofibroblastic differentiation of hepatic stellate cells. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 38, 198-208.	3.1	84
142	Injectable and protease-degradable hydrogel for siRNA sequestration and triggered delivery to the heart. Journal of Controlled Release, 2018, 285, 152-161.	9.9	84
143	Gallol-derived ECM-mimetic adhesive bioinks exhibiting temporal shear-thinning and stabilization behavior. Acta Biomaterialia, 2019, 95, 165-175.	8.3	84
144	Influence of Microgel Fabrication Technique on Granular Hydrogel Properties. ACS Biomaterials Science and Engineering, 2021, 7, 4269-4281.	5.2	84

#	Article	IF	Citations
145	Stem Cell Response to Spatially and Temporally Displayed and Reversible Surface Topography. Advanced Healthcare Materials, 2013, 2, 155-164.	7.6	81
146	Selective Proteolytic Degradation of Guestâ€“Host Assembled, Injectable Hyaluronic Acid Hydrogels. ACS Biomaterials Science and Engineering, 2015, 1, 277-286.	5.2	79
147	Engineered Hydrogels for Local and Sustained Delivery of RNAâ€Interference Therapies. Advanced Healthcare Materials, 2017, 6, 1601041.	7.6	79
148	Fabrication and Modeling of Dynamic Multipolymer Nanofibrous Scaffolds. Journal of Biomechanical Engineering, 2009, 131, 101012.	1.3	78
149	New Directions in Photopolymerizable Biomaterials. MRS Bulletin, 2002, 27, 130-136.	3.5	73
150	Lightâ€Sensitive Polypeptide Hydrogel and Nanorod Composites. Small, 2010, 6, 1608-1611.	10.0	72
151	Hyaluronic acid hydrogel stiffness and oxygen tension affect cancer cell fate and endothelial sprouting. Biomaterials Science, 2014, 2, 655.	5.4	72
152	Cartilage Repair and Subchondral Bone Remodeling in Response to Focal Lesions in a Mini-Pig Model: Implications for Tissue Engineering. Tissue Engineering - Part A, 2015, 21, 850-860.	3.1	72
153	Gradually softening hydrogels for modeling hepatic stellate cell behavior during fibrosis regression. Integrative Biology (United Kingdom), 2016, 8, 720-728.	1.3	72
154	One-Step Generation of Multifunctional Polyelectrolyte Microcapsules <i>via</i> Nanoscale Interfacial Complexation in Emulsion (NICE). ACS Nano, 2015, 9, 8269-8278.	14.6	70
155	Mechanically dynamic PDMS substrates to investigate changing cell environments. Biomaterials, 2017, 145, 23-32.	11.4	68
156	Biodegradable and radically polymerized elastomers with enhanced processing capabilities. Biomedical Materials (Bristol), 2008, 3, 034104.	3.3	67
157	3D printing of photocurable poly(glycerol sebacate) elastomers. Biofabrication, 2016, 8, 045004.	7.1	67
158	Injectable, Guestâ€“Host Assembled Polyethylenimine Hydrogel for siRNA Delivery. Biomacromolecules, 2017, 18, 77-86.	5.4	67
159	Synthesis and characterization of tetrafunctional lactic acid oligomers: A potentialin situ forming degradable orthopaedic biomaterial. Journal of Polymer Science Part A, 2001, 39, 683-692.	2.3	66
160	Injectable Supramolecular Hydrogel/Microgel Composites for Therapeutic Delivery. Macromolecular Bioscience, 2019, 19, e1800248.	4.1	65
161	Formulation and surface modification of poly(ester-anhydride) micro- and nanospheres. Biomaterials, 2005, 26, 117-124.	11.4	63
162	Fiber alignment directs cell motility over chemotactic gradients. Biotechnology and Bioengineering, 2013, 110, 1249-1254.	3.3	63

#	Article	IF	Citations
163	Synergistic Effects of SDF-1Î± and BMP-2 Delivery from Proteolytically Degradable Hyaluronic Acid Hydrogels for Bone Repair. Macromolecular Bioscience, 2015, 15, 1218-1223.	4.1	61
164	Local immunotherapy via delivery of interleukin-10 and transforming growth factor Î² antagonist for treatment of chronic kidney disease. Journal of Controlled Release, 2015, 206, 131-139.	9.9	60
165	Electrospinning of photocrosslinked and degradable fibrous scaffolds. Journal of Biomedical Materials Research - Part A, 2008, 87A, 1034-1043.	4.0	58
166	Improved cartilage repair via<i>in vitro</i>pre-maturation of MSC-seeded hyaluronic acid hydrogels. Biomedical Materials (Bristol), 2012, 7, 024110.	3.3	57
167	Hydrogel mediated delivery of trophic factors for neural repair. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2009, 1, 128-139.	6.1	56
168	Kinetic Chain Lengths in Highly Cross-Linked Networks Formed by the Photoinitiated Polymerization of Divinyl Monomers:Â A Gel Permeation Chromatography Investigation. Biomacromolecules, 2003, 4, 149-156.	5.4	55
169	High-Throughput and Combinatorial Technologies for Tissue Engineering Applications. Tissue Engineering - Part B: Reviews, 2009, 15, 225-239.	4.8	54
170	Modification of Infarct Material Properties Limits Adverse Ventricular Remodeling. Annals of Thoracic Surgery, 2011, 92, 617-624.	1.3	54
171	A Bioengineered Hydrogel System Enables Targeted and Sustained Intramyocardial Delivery of Neuregulin, Activating the Cardiomyocyte Cell Cycle and Enhancing Ventricular Function in a Murine Model of Ischemic Cardiomyopathy. Circulation: Heart Failure, 2014, 7, 619-626.	3.9	53
172	Estimating passive mechanical properties in a myocardial infarction using MRI and finite element simulations. Biomechanics and Modeling in Mechanobiology, 2015, 14, 633-647.	2.8	53
173	Engineered Biomaterial Platforms to Study Fibrosis. Advanced Healthcare Materials, 2020, 9, e1901682.	7.6	53
174	Harnessing Tissue-derived Extracellular Vesicles for Osteoarthritis Theranostics. Theranostics, 2022, 12, 207-231.	10.0	53
175	Mimicking the topography of the epidermalâ€“dermal interface with elastomer substrates. Integrative Biology (United Kingdom), 2016, 8, 21-29.	1.3	52
176	Alginateâ€Boronic Acid: pHâ€Triggered Bioinspired Glue for Hydrogel Assembly. Advanced Functional Materials, 2020, 30, 1908497.	14.9	52
177	Magnitude and presentation of mechanical signals influence adult stem cell behavior in 3-dimensional macroporous hydrogels. Soft Matter, 2012, 8, 8113.	2.7	51
178	<sup />Thermosensitive Poly(N-vinylcaprolactam) Injectable Hydrogels for Cartilage Tissue Engineering. Tissue Engineering - Part A, 2017, 23, 935-945.	3.1	51
179	Dose and Timing of Nâ€Cadherin Mimetic Peptides Regulate MSC Chondrogenesis within Hydrogels. Advanced Healthcare Materials, 2018, 7, e1701199.	7.6	51
180	An investigation of the cytotoxicity and histocompatibility ofin situ forming lactic acid based orthopedic biomaterials. Journal of Biomedical Materials Research Part B, 2002, 63, 484-491.	3.1	50

#	Article	IF	Citations
181	Highâ€throughput screening of a small molecule library for promoters and inhibitors of mesenchymal stem cell osteogenic differentiation. Biotechnology and Bioengineering, 2011, 108, 163-174.	3.3	50
182	Jagged1 immobilization to an osteoconductive polymer activates the Notch signaling pathway and induces osteogenesis. Journal of Biomedical Materials Research - Part A, 2014, 102, 1558-1567.	4.0	50
183	Delivery of interleukin-10 via injectable hydrogels improves renal outcomes and reduces systemic inflammation following ischemic acute kidney injury in mice. American Journal of Physiology - Renal Physiology, 2016, 311, F362-F372.	2.7	50
184	Granular hydrogels for endogenous tissue repair. Biomaterials and Biosystems, 2021, 1, 100008.	2.2	50
185	Influence of macromer molecular weight and chemistry on poly(Î²â€amino ester) network properties and initial cell interactions. Journal of Biomedical Materials Research - Part A, 2008, 85A, 731-741.	4.0	49
186	Metabolic Labeling to Probe the Spatiotemporal Accumulation of Matrix at the Chondrocyteâ€"Hydrogel Interface. Advanced Functional Materials, 2020, 30, 1909802.	14.9	48
187	Anisotropic Rodâ€Shaped Particles Influence Injectable Granular Hydrogel Properties and Cell Invasion. Advanced Materials, 2022, 34, e2109194.	21.0	48
188	Extracellular vesicles mediate improved functional outcomes in engineered cartilage produced from MSC/chondrocyte cocultures. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1569-1578.	7.1	47
189	Injectable hyaluronic acid and platelet lysate-derived granular hydrogels for biomedical applications. Acta Biomaterialia, 2021, 119, 101-113.	8.3	47
190	Incorporation of sulfated hyaluronic acid macromers into degradable hydrogel scaffolds for sustained molecule delivery. Biomaterials Science, 2014, 2, 693-702.	5.4	46
191	Fibrous Scaffolds with Varied Fiber Chemistry and Growth Factor Delivery Promote Repair in a Porcine Cartilage Defect Model. Tissue Engineering - Part A, 2015, 21, 2680-2690.	3.1	46
192	Norbornene-modified poly(glycerol sebacate) as a photocurable and biodegradable elastomer. Polymer Chemistry, 2017, 8, 5091-5099.	3.9	46
193	Sticking Together: Injectable Granular Hydrogels with Increased Functionality via Dynamic Covalent Interâ€Particle Crosslinking. Small, 2022, 18, e2201115.	10.0	45
194	Immunotherapy with injectable hydrogels to treat obstructive nephropathy. Journal of Biomedical Materials Research - Part A, 2014, 102, 2173-2180.	4.0	44
195	Experimental and Computational Investigation of Altered Mechanical Properties in Myocardium after Hydrogel Injection. Annals of Biomedical Engineering, 2014, 42, 1546-1556.	2.5	44
196	From Repair to Regeneration: Biomaterials to Reprogram the Meniscus Wound Microenvironment. Annals of Biomedical Engineering, 2015, 43, 529-542.	2.5	44
197	Delivery of a matrix metalloproteinase-responsive hydrogel releasing TIMP-3 after myocardial infarction: effects on left ventricular remodeling. American Journal of Physiology - Heart and Circulatory Physiology, 2018, 315, H814-H825.	3.2	44
198	Mechanochemical Adhesion and Plasticity in Multifiber Hydrogel Networks. Advanced Materials, 2020, 32, e1905719.	21.0	43

#	Article	IF	Citations
199	Engineered Fibrous Networks To Investigate the Influence of Fiber Mechanics on Myofibroblast Differentiation. ACS Biomaterials Science and Engineering, 2019, 5, 3899-3908.	5.2	42
200	Controlling poly(Î²-amino ester) network properties through macromer branching. Acta Biomaterialia, 2008, 4, 207-217.	8.3	41
201	Integration and Regression of Implanted Engineered Human Vascular Networks During Deep Wound Healing. Stem Cells Translational Medicine, 2013, 2, 297-306.	3.3	41
202	Photopatterned Hydrogels to Investigate the Endothelial Cell Response to Matrix Stiffness Heterogeneity. ACS Biomaterials Science and Engineering, 2017, 3, 3007-3016.	5.2	41
203	Tunable hydrogel-microsphere composites that modulate local inflammation and collagen bulking. Acta Biomaterialia, 2012, 8, 3218-3227.	8.3	40
204	Nanofibrous hyaluronic acid scaffolds delivering TGF-Î²3 and SDF-1Î± for articular cartilage repair in a large animal model. Acta Biomaterialia, 2021, 126, 170-182.	8.3	40
205	Methods to Characterize Granular Hydrogel Rheological Properties, Porosity, and Cell Invasion. ACS Biomaterials Science and Engineering, 2022, 8, 1427-1442.	5.2	39
206	Facile Biofabrication of Heterogeneous Multilayer Tubular Hydrogels by Fast Diffusion-Induced Gelation. ACS Applied Materials & Interfaces, 2018, 10, 12424-12430.	8.0	37
207	A biofabrication method to align cells within bioprinted photocrosslinkable and cell-degradable hydrogel constructs via embedded fibers. Biofabrication, 2021, 13, 044108.	7.1	37
208	Poly(ester-anhydride):poly(Î²-amino ester) micro- and nanospheres: DNA encapsulation and cellular transfection. International Journal of Pharmaceutics, 2005, 304, 210-219.	5.2	36
209	Photocleavable side groups to spatially alter hydrogel properties and cellular interactions. Journal of Materials Chemistry, 2010, 20, 8920.	6.7	36
210	Rutheniumâ€Crosslinked Hydrogels with Rapid, Visibleâ€Light Degradation. Chemistry - A European Journal, 2018, 24, 2328-2333.	3.3	36
211	Tailoring supramolecular guestâ€“host hydrogel viscoelasticity with covalent fibrinogen double networks. Journal of Materials Chemistry B, 2019, 7, 1753-1760.	5.8	36
212	Nuclear softening expedites interstitial cell migration in fibrous networks and dense connective tissues. Science Advances, 2020, 6, eaax5083.	10.3	36
213	Programmable and contractile materials through cell encapsulation in fibrous hydrogel assemblies. Science Advances, 2021, 7, eabi8157.	10.3	36
214	Cellular Encapsulation in 3D Hydrogels for Tissue Engineering. Journal of Visualized Experiments, 2009, , .	0.3	35
215	Infarct Restraint to Limit Adverse Ventricular Remodeling. Journal of Cardiovascular Translational Research, 2011, 4, 73-81.	2.4	35
216	Effects of Mesenchymal Stem Cell and Growth Factor Delivery on Cartilage Repair in a Mini-Pig Model. Cartilage, 2016, 7, 174-184.	2.7	35

#	Article	IF	Citations
217	Fabrication of MSC-laden composites of hyaluronic acid hydrogels reinforced with MEW scaffolds for cartilage repair. Biofabrication, 2022, 14, 014106.	7.1	34
218	Membrane Stabilization of Biodegradable Polymersomes. Langmuir, 2009, 25, 4429-4434.	3.5	33
219	Influence of Fiber Stiffness on Meniscal Cell Migration into Dense Fibrous Networks. Advanced Healthcare Materials, 2020, 9, e1901228.	7.6	33
220	Nuclear envelope wrinkling predicts mesenchymal progenitor cell mechano-response in 2D and 3D microenvironments. Biomaterials, 2021, 270, 120662.	11.4	33
221	Delayed delivery of endothelial progenitor cell-derived extracellular vesicles via shear thinning gel improves postinfarct hemodynamics. Journal of Thoracic and Cardiovascular Surgery, 2020, 159, 1825-1835.e2.	0.8	32
222	Detecting and Monitoring Hydrogels with Medical Imaging. ACS Biomaterials Science and Engineering, 2021, 7, 4027-4047.	5.2	30
223	Temporal Changes in Infarct Material Properties: An InÂVivo Assessment Using Magnetic Resonance Imaging and Finite Element Simulations. Annals of Thoracic Surgery, 2015, 100, 582-589.	1.3	28
224	Engineered Fullâ€Length Fibronectinâ€"Hyaluronic Acid Hydrogels for Stem Cell Engineering. Advanced Healthcare Materials, 2020, 9, e2000989.	7.6	28
225	Programming hydrogels to probe spatiotemporal cell biology. Cell Stem Cell, 2022, 29, 678-691.	11.1	28
226	The Influence of Fibrous Elastomer Structure and Porosity on Matrix Organization. PLoS ONE, 2010, 5, e15717.	2.5	27
227	In situ forming lactic acid based orthopaedic biomaterials: Influence of oligomer chemistry on osteoblast attachment and function. Journal of Biomaterials Science, Polymer Edition, 2001, 12, 1253-1265.	3.5	26
228	Understanding multivinyl monomer photopolymerization kinetics through modeling and GPC investigation of degradable networks. Polymer, 2005, 46, 6226-6234.	3.8	26
229	Biodegradable fibrous scaffolds with diverse properties by electrospinning candidates from a combinatorial macromer library. Acta Biomaterialia, 2010, 6, 1219-1226.	8.3	24
230	Targeted Injection of a Biocomposite Material Alters Macrophage and Fibroblast Phenotype and Function following Myocardial Infarction: Relation to Left Ventricular Remodeling. Journal of Pharmacology and Experimental Therapeutics, 2014, 350, 701-709.	2.5	24
231	Enhanced nutrient transport improves the depth-dependent properties of tri-layered engineered cartilage constructs with zonal co-culture of chondrocytes and MSCs. Acta Biomaterialia, 2017, 58, 1-11.	8.3	24
232	Introduction: Polymeric Biomaterials. Chemical Reviews, 2021, 121, 10789-10791.	47.7	24
233	Transdermal gelation of methacrylated macromers with near-infrared light and gold nanorods. Nanotechnology, 2014, 25, 014004.	2.6	23
234	Electrospinning Fibrous Polymer Scaffolds for Tissue Engineering and Cell Culture. Journal of Visualized Experiments, 2009, , .	0.3	22

#	Article	IF	Citations
235	Ordered, adherent layers of nanofibers enabled by supramolecular interactions. Journal of Materials Chemistry B, 2014, 2, 8110-8115.	5.8	22
236	Editorial: Special Issue on 3D Printing of Biomaterials. ACS Biomaterials Science and Engineering, 2016, 2, 1658-1661.	5.2	22
237	Delivery of progenitor cells with injectable shear-thinning hydrogel maintains geometry and normalizes strain to stabilize cardiac function after ischemia. Journal of Thoracic and Cardiovascular Surgery, 2019, 157, 1479-1490.	0.8	22
238	Imaging of Injectable Hydrogels Delivered into Myocardium with SPECT/CT. Advanced Healthcare Materials, 2020, 9, e2000294.	7.6	22
239	Single Cell Imaging to Probe Mesenchymal Stem Cell N-Cadherin Mediated Signaling within Hydrogels. Annals of Biomedical Engineering, 2016, 44, 1921-1930.	2.5	21
240	Evolution of hierarchical porous structures in supramolecular guestâ€“host hydrogels. Soft Matter, 2016, 12, 7839-7847.	2.7	21
241	Microstructured Hydrogels to Guide Selfâ€Assembly and Function of Lung Alveolospheres. Advanced Materials, 2022, 34, e2202992.	21.0	21
242	Near-infrared light triggered release of molecules from supramolecular hydrogel-nanorod composites. Nanomedicine, 2016, 11, 1579-1590.	3.3	20
243	Novel Treatment for Glioblastoma Delivered by a Radiation Responsive and Radiopaque Hydrogel. ACS Biomaterials Science and Engineering, 2021, 7, 3209-3220.	5.2	20
244	Simultaneous Oneâ€Pot Interpenetrating Network Formation to Expand 3D Processing Capabilities. Advanced Materials, 2022, 34, e2202261.	21.0	20
245	Nanofiberâ€“nanorod composites exhibiting light-induced reversible lower critical solution temperature transitions. Nanotechnology, 2011, 22, 494009.	2.6	19
246	Visualization of Injectable Hydrogels Using Chemical Exchange Saturation Transfer MRI. ACS Biomaterials Science and Engineering, 2015, 1, 227-237.	5.2	19
247	Hydrogels with Reversible Mechanics to Probe Dynamic Cell Microenvironments. Angewandte Chemie, 2017, 129, 12300-12304.	2.0	19
248	Soft biodegradable polymersomes from caprolactone-derived polymers. Soft Matter, 2012, 8, 10853.	2.7	18
249	Effects of using the unloaded configuration in predicting the <i>in vivo</i> diastolic properties of the heart. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 1714-1720.	1.6	18
250	Computational Modeling of Healthy Myocardium in Diastole. Annals of Biomedical Engineering, 2016, 44, 980-992.	2.5	18
251	Effects of hydrogel injection on borderzone contractility post-myocardial infarction. Biomechanics and Modeling in Mechanobiology, 2018, 17, 1533-1542.	2.8	18
252	Stabilization of Damaged Articular Cartilage with Hydrogelâ€Mediated Reinforcement and Sealing. Advanced Healthcare Materials, 2021, 10, 2100315.	7.6	17

#	Article	IF	Citations
253	Role Played by Prx1â€Dependent Extracellular Matrix Properties in Vascular Smooth Muscle Development in Embryonic Lungs. Pulmonary Circulation, 2015, 5, 382-397.	1.7	16
254	Antisecretory Factorâ€"Mediated Inhibition of Cell Volume Dynamics Produces Antitumor Activity in Glioblastoma. Molecular Cancer Research, 2018, 16, 777-790.	3.4	16
255	Moving hydrogels to the fourth dimension. Nature Materials, 2019, 18, 914-915.	27.5	16
256	How hydrogel inclusions modulate the local mechanical response in early and fully formed post-infarcted myocardium. Acta Biomaterialia, 2020, 114, 296-306.	8.3	16
257	Computational Modeling and Experimental Characterization of Extrusion Printing into Suspension Baths. Advanced Healthcare Materials, 2022, 11, e2101679.	7.6	16
258	Controlling the Cell-Adhesion Properties of Poly(acrylic acid)/Polyacrylamide Hydrogen-Bonded Multilayers. Macromolecules, 2012, 45, 6120-6126.	4.8	15
259	High-throughput stem-cell niches. Nature Methods, 2011, 8, 915-916.	19.0	14
260	Restoring lost nigrostriatal fibers in Parkinsonâ€™s disease based on clinically-inspired design criteria. Brain Research Bulletin, 2021, 175, 168-185.	3.0	14
261	Metabolic labeling of secreted matrix to investigate cellâ€"material interactions in tissue engineering and mechanobiology. Nature Protocols, 2022, 17, 618-648.	12.0	14
262	Computational sensitivity investigation of hydrogel injection characteristics for myocardial support. Journal of Biomechanics, 2017, 64, 231-235.	2.1	13
263	Identification of osteoconductive and biodegradable polymers from a combinatorial polymer library. Journal of Biomedical Materials Research - Part A, 2010, 93A, 807-816.	4.0	12
264	Controlled release of GDNF reduces nerve rootâ€mediated behavioral hypersensitivity. Journal of Orthopaedic Research, 2009, 27, 120-127.	2.3	11
265	Cellular control in two clicks. Nature, 2009, 460, 469-470.	27.8	11
266	Cathelicidin Related Antimicrobial Peptide (CRAMP) Enhances Bone Marrow Cell Retention and Attenuates Cardiac Dysfunction in a Mouse Model of Myocardial Infarction. Stem Cell Reviews and Reports, 2018, 14, 702-714.	5.6	11
267	Injectable Microsphere Gel Progressively ImprovesÂGlobal Ventricular Function, Regional Contractile Strain, and Mitral Regurgitation AfterÂMyocardial Infarction. Annals of Thoracic Surgery, 2015, 99, 597-603.	1.3	10
268	Computational Investigation of Transmural Differences in Left Ventricular Contractility. Journal of Biomechanical Engineering, 2016, 138, .	1.3	10
269	Localized targeting of biomaterials following myocardial infarction: A foundation to build on. Trends in Cardiovascular Medicine, 2013, 23, 301-311.	4.9	9
270	Emerging technologies provide insights on cancer extracellular matrix biology and therapeutics. IScience, 2021, 24, 102475.	4.1	9

#	Article	IF	Citations
271	A Bioengineered Neuregulin-Hydrogel Therapy Reduces Scar Size and Enhances Post-Infarct Ventricular Contractility in an Ovine Large Animal Model. Journal of Cardiovascular Development and Disease, 2020, 7, 53.	1.6	8
272	Tuning hydrogel properties for applications in tissue engineering. , 2009, 2009, 2094-6.		7
273	Engineering Cartilage Tissue. , 2011, , 493-520.		7
274	Resorbable Pins to Enhance Scaffold Retention in a Porcine Chondral Defect Model. Cartilage, 2021, 13, 1676S-1687S.	2.7	6
275	Therapeutic Efficacy of Cryopreserved, Allogeneic Extracellular Vesicles for Treatment of Acute Myocardial Infarction. International Heart Journal, 2021, 62, 381-389.	1.0	6
276	Ischemia induces P-selectin-mediated selective progenitor cell engraftment in the isolated-perfused heart. Journal of Molecular and Cellular Cardiology, 2012, 52, 105-112.	1.9	5
277	Plant-Derived Recombinant Human Collagen: A Strategic Approach for Generating Safe Human ECM-Based Scaffold. Tissue Engineering - Part A, 2013, 19, 1489-1490.	3.1	5
278	Anisotropic Rodâ€Shaped Particles Influence Injectable Granular Hydrogel Properties and Cell Invasion (Adv. Mater. 12/2022). Advanced Materials, 2022, 34, .	21.0	5
279	Radicals promote magnetic gel assembly. Nature, 2014, 514, 574-575.	27.8	4
280	Drug Delivery: Harnessing Interfacial Phenomena to Program the Release Properties of Hollow Microcapsules (Adv. Funct. Mater. 1/2012). Advanced Functional Materials, 2012, 22, 130-130.	14.9	3
281	Emerging Issues in Translating Laboratory Experiments to Applications for Society. Tissue Engineering - Part A, 2014, 20, 2547-2548.	3.1	3
282	Regulation Policy on Tissue Engineering and Regenerative Medicine in Asianâ€“Pacific Region. Tissue Engineering - Part A, 2015, 21, 2779-2780.	3.1	3
283	Editorial: Special Issue on Advanced Biomedical Hydrogels. ACS Biomaterials Science and Engineering, 2021, 7, 3993-3996.	5.2	3
284	Matrix Metalloproteinase-Targeted SPECT/CT Imaging for Evaluation of Therapeutic Hydrogels for the Early Modulation of Post-Infarct Myocardial Remodeling. Journal of Cardiovascular Translational Research, 2023, 16, 155-165.	2.4	3
285	Stem cellâ€“materials interactions. Biomaterials Science, 2014, 2, 1545-1547.	5.4	2
286	Tissue Engineering: Stabilization of Damaged Articular Cartilage with Hydrogelâ€Mediated Reinforcement and Sealing (Adv. Healthcare Mater. 10/2021). Advanced Healthcare Materials, 2021, 10, 2170049.	7.6	2
287	Surface and bulk modifications to photocrosslinked polyanhydrides to control degradation behavior. Journal of Biomedical Materials Research Part B, 2000, 51, 352-359.	3.1	2
288	Differential Behavior of Auricular and Articular Chondrocytes in Hyaluronic Acid Hydrogels. Tissue Engineering - Part A, 2008, .	3.1	2

#	Article	IF	Citations
289	Hydrogels with dynamically tunable properties. , 2015, , 90-109.		1
290	Injectable Shear-Thinning Hydrogels Prevent Ischemic Mitral Regurgitation and Normalize Ventricular Flow Dynamics. Seminars in Thoracic and Cardiovascular Surgery, 2020, 32, 445-453.	0.6	1
291	Three-dimensional Culture of Human Embryonic Stem Cells. Human Cell Culture, 2007, , 149-172.	0.1	1
292	Hydrogel Patterning: (Swelling-Induced Surface Patterns in Hydrogels with Gradient Crosslinking) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	14.9	0
293	Dynamic Mechanical Properties Control Adult Stem Cell Fate. , 2012, , .		0
294	Tissue Engineering: Stem Cell Response to Spatially and Temporally Displayed and Reversible Surface Topography (Adv. Healthcare Mater. 1/2013). Advanced Healthcare Materials, 2013, 2, 232-232.	7.6	0
295	Themed issue on nanoscale biomaterials. Journal of Materials Chemistry B, 2014, 2, 8039-8042.	5.8	0
296	Welcome to <i>ACS Biomaterials Science & Engineering</i>. ACS Biomaterials Science and Engineering, 2015, 1, 1-1.	5.2	0
297	Hydrogels in Cardiac Tissue Engineering. , 2016, , 323-361.		0
298	ACS Biomaterials Science and Engineering, Editorialâ€"First Anniversary. ACS Biomaterials Science and Engineering, 2016, 2, 141-141.	5.2	0
299	EXTH-23. ANTISECRETORY FACTOR-MEDIATED LOWERING OF INTERSTITIAL FLUID PRESSURE PRODUCES ANTI-TUMOR ACTIVITY IN GLIOBLASTOMA. Neuro-Oncology, 2017, 19, vi77-vi77.	1.2	0
300	Frontispiece: Rutheniumâ€Crosslinked Hydrogels with Rapid, Visibleâ€Light Degradation. Chemistry - A European Journal, 2018, 24, .	3.3	0
301	Biomaterial-Based Delivery of a Small Molecule Matrix Metalloproteinase Inhibitor Limits Adverse Biomechanical Changes Throughout the Left Ventricle Following Myocardial Infarction. Journal of Cardiac Failure, 2018, 24, S40.	1.7	0
302	Hydrogels: Mechanochemical Adhesion and Plasticity in Multifiber Hydrogel Networks (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	21.0	0
303	Controllable and robust morphogenesis of functional vascular network assembly within synthetic environments. FASEB Journal, 2011, 25, 300.7.	0.5	0
304	Local Drug Delivery in the Treatment of Glioblastoma. , 2016, , 207-211.		0
305	Author response: new therapies for reducing post-myocardial left ventricular remodeling. Annals of Translational Medicine, 2015, 3, 146.	1.7	0