

Ali Khademhosseini

List of Publications by Year in descending order

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780
papers

97,598
citations

143

157
h-index

401

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875
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875
docs citations

875
times ranked

68720
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrogels in Biology and Medicine: From Molecular Principles to Bionanotechnology. <i>Advanced Materials</i> , 2006, 18, 1345-1360.	11.1	3,481
2	Hydrogels in Regenerative Medicine. <i>Advanced Materials</i> , 2009, 21, 3307-3329.	11.1	2,326
3	Synthesis, properties, and biomedical applications of gelatin methacryloyl (GelMA) hydrogels. <i>Biomaterials</i> , 2015, 73, 254-271.	5.7	1,871
4	Cell-laden microengineered gelatin methacrylate hydrogels. <i>Biomaterials</i> , 2010, 31, 5536-5544.	5.7	1,864
5	Advances in engineering hydrogels. <i>Science</i> , 2017, 356, .	6.0	1,836
6	Microscale technologies for tissue engineering and biology. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 2480-2487.	3.3	1,443
7	25th Anniversary Article: Rational Design and Applications of Hydrogels in Regenerative Medicine. <i>Advanced Materials</i> , 2014, 26, 85-124.	11.1	1,103
8	Diverse Applications of Nanomedicine. <i>ACS Nano</i> , 2017, 11, 2313-2381.	7.3	976
9	Controlling the Porosity and Microarchitecture of Hydrogels for Tissue Engineering. <i>Tissue Engineering - Part B: Reviews</i> , 2010, 16, 371-383.	2.5	925
10	Nanocomposite hydrogels for biomedical applications. <i>Biotechnology and Bioengineering</i> , 2014, 111, 441-453.	1.7	916
11	Nanoparticle-Aptamer Bioconjugates. <i>Cancer Research</i> , 2004, 64, 7668-7672.	0.4	873
12	Biinks for 3D bioprinting: an overview. <i>Biomaterials Science</i> , 2018, 6, 915-946.	2.6	828
13	Carbon-Nanotube-Embedded Hydrogel Sheets for Engineering Cardiac Constructs and Bioactuators. <i>ACS Nano</i> , 2013, 7, 2369-2380.	7.3	789
14	Hydrogel bioprinted microchannel networks for vascularization of tissue engineering constructs. <i>Lab on A Chip</i> , 2014, 14, 2202-2211.	3.1	759
15	Microengineered hydrogels for tissue engineering. <i>Biomaterials</i> , 2007, 28, 5087-5092.	5.7	742
16	Direct 3D bioprinting of perfusable vascular constructs using a blend bioink. <i>Biomaterials</i> , 2016, 106, 58-68.	5.7	727
17	Bioprinting 3D microfibrinous scaffolds for engineering endothelialized myocardium and heart-on-a-chip. <i>Biomaterials</i> , 2016, 110, 45-59.	5.7	699
18	Carbon-Based Nanomaterials: Multifunctional Materials for Biomedical Engineering. <i>ACS Nano</i> , 2013, 7, 2891-2897.	7.3	693

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19	Microfluidic Bioprinting of Heterogeneous 3D Tissue Constructs Using Low-Viscosity Bioink. <i>Advanced Materials</i> , 2016, 28, 677-684.	11.1	677
20	Functional Human Vascular Network Generated in Photocrosslinkable Gelatin Methacrylate Hydrogels. <i>Advanced Functional Materials</i> , 2012, 22, 2027-2039.	7.8	618
21	Electrospun scaffolds for tissue engineering of vascular grafts. <i>Acta Biomaterialia</i> , 2014, 10, 11-25.	4.1	611
22	Biocompatibility of engineered nanoparticles for drug delivery. <i>Journal of Controlled Release</i> , 2013, 166, 182-194.	4.8	597
23	Photocrosslinkable Gelatin Hydrogel for Epidermal Tissue Engineering. <i>Advanced Healthcare Materials</i> , 2016, 5, 108-118.	3.9	595
24	Functionalization, preparation and use of cell-laden gelatin methacryloyl-based hydrogels as modular tissue culture platforms. <i>Nature Protocols</i> , 2016, 11, 727-746.	5.5	581
25	A decade of progress in tissue engineering. <i>Nature Protocols</i> , 2016, 11, 1775-1781.	5.5	570
26	Multisensor-integrated organs-on-chips platform for automated and continual in situ monitoring of organoid behaviors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E2293-E2302.	3.3	570
27	Engineering microscale topographies to control the cell-substrate interface. <i>Biomaterials</i> , 2012, 33, 5230-5246.	5.7	568
28	Microfabrication of complex porous tissue engineering scaffolds using 3D projection stereolithography. <i>Biomaterials</i> , 2012, 33, 3824-3834.	5.7	560
29	Directed assembly of cell-laden microgels for fabrication of 3D tissue constructs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 9522-9527.	3.3	548
30	Graphene-based materials for tissue engineering. <i>Advanced Drug Delivery Reviews</i> , 2016, 105, 255-274.	6.6	537
31	Nanotechnology in Textiles. <i>ACS Nano</i> , 2016, 10, 3042-3068.	7.3	530
32	Direct-write bioprinting of cell-laden methacrylated gelatin hydrogels. <i>Biofabrication</i> , 2014, 6, 024105.	3.7	528
33	3D Biofabrication Strategies for Tissue Engineering and Regenerative Medicine. <i>Annual Review of Biomedical Engineering</i> , 2014, 16, 247-276.	5.7	522
34	Drug delivery systems and materials for wound healing applications. <i>Advanced Drug Delivery Reviews</i> , 2018, 127, 138-166.	6.6	512
35	Ionic liquids and their solid-state analogues as materials for energy generation and storage. <i>Nature Reviews Materials</i> , 2016, 1, .	23.3	511
36	3D Bioprinting for Tissue and Organ Fabrication. <i>Annals of Biomedical Engineering</i> , 2017, 45, 148-163.	1.3	507

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37	Modular tissue engineering: engineering biological tissues from the bottom up. <i>Soft Matter</i> , 2009, 5, 1312.	1.2	504
38	Vascularization and Angiogenesis in Tissue Engineering: Beyond Creating Static Networks. <i>Trends in Biotechnology</i> , 2016, 34, 733-745.	4.9	490
39	Cell-laden hydrogels for osteochondral and cartilage tissue engineering. <i>Acta Biomaterialia</i> , 2017, 57, 1-25.	4.1	490
40	A liver-on-a-chip platform with bioprinted hepatic spheroids. <i>Biofabrication</i> , 2016, 8, 014101.	3.7	466
41	Directed 3D cell alignment and elongation in microengineered hydrogels. <i>Biomaterials</i> , 2010, 31, 6941-6951.	5.7	463
42	Injectable Graphene Oxide/Hydrogel-Based Angiogenic Gene Delivery System for Vasculogenesis and Cardiac Repair. <i>ACS Nano</i> , 2014, 8, 8050-8062.	7.3	449
43	Bioactive Silicate Nanoplatelets for Osteogenic Differentiation of Human Mesenchymal Stem Cells. <i>Advanced Materials</i> , 2013, 25, 3329-3336.	11.1	448
44	Engineered biomaterials for in situ tissue regeneration. <i>Nature Reviews Materials</i> , 2020, 5, 686-705.	23.3	420
45	Multi-tissue interactions in an integrated three-tissue organ-on-a-chip platform. <i>Scientific Reports</i> , 2017, 7, 8837.	1.6	407
46	Carbon Nanotube Reinforced Hybrid Microgels as Scaffold Materials for Cell Encapsulation. <i>ACS Nano</i> , 2012, 6, 362-372.	7.3	400
47	Digitally tunable physicochemical coding of material composition and topography in continuous microfibrils. <i>Nature Materials</i> , 2011, 10, 877-883.	13.3	397
48	Engineering Immunomodulatory Biomaterials To Tune the Inflammatory Response. <i>Trends in Biotechnology</i> , 2016, 34, 470-482.	4.9	387
49	Fiber-based tissue engineering: Progress, challenges, and opportunities. <i>Biotechnology Advances</i> , 2013, 31, 669-687.	6.0	386
50	Reduced Graphene Oxide-GelMA Hybrid Hydrogels as Scaffolds for Cardiac Tissue Engineering. <i>Small</i> , 2016, 12, 3677-3689.	5.2	385
51	Microfluidic fabrication of microengineered hydrogels and their application in tissue engineering. <i>Lab on A Chip</i> , 2012, 12, 45-59.	3.1	375
52	Mesenchymal stem cells in regenerative medicine: Focus on articular cartilage and intervertebral disc regeneration. <i>Methods</i> , 2016, 99, 69-80.	1.9	366
53	Wearables in Medicine. <i>Advanced Materials</i> , 2018, 30, e1706910.	11.1	358
54	Progress in Tissue Engineering. <i>Scientific American</i> , 2009, 300, 64-71.	1.0	355

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55	A cell-laden microfluidic hydrogel. <i>Lab on A Chip</i> , 2007, 7, 756.	3.1	352
56	Extrusion Bioprinting of Shear-Thinning Gelatin Methacryloyl Bioinks. <i>Advanced Healthcare Materials</i> , 2017, 6, 1601451.	3.9	352
57	Microfabricated Biomaterials for Engineering 3D Tissues. <i>Advanced Materials</i> , 2012, 24, 1782-1804.	11.1	351
58	Microwell-mediated control of embryoid body size regulates embryonic stem cell fate via differential expression of WNT5a and WNT11. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 16978-16983.	3.3	349
59	Controlling size, shape and homogeneity of embryoid bodies using poly(ethylene glycol) microwells. <i>Lab on A Chip</i> , 2007, 7, 786.	3.1	344
60	Modified Gellan Gum hydrogels with tunable physical and mechanical properties. <i>Biomaterials</i> , 2010, 31, 7494-7502.	5.7	342
61	The mechanical properties and cytotoxicity of cell-laden double-network hydrogels based on photocrosslinkable gelatin and gellan gum biomacromolecules. <i>Biomaterials</i> , 2012, 33, 3143-3152.	5.7	342
62	Fabrication of Gradient Hydrogels Using a Microfluidics/Photopolymerization Process. <i>Langmuir</i> , 2004, 20, 5153-5156.	1.6	338
63	Gradient biomaterials for soft-to-hard interface tissue engineering. <i>Acta Biomaterialia</i> , 2011, 7, 1441-1451.	4.1	338
64	Overview of Silk Fibroin Use in Wound Dressings. <i>Trends in Biotechnology</i> , 2018, 36, 907-922.	4.9	330
65	Highly Stretchable, Strain Sensing Hydrogel Optical Fibers. <i>Advanced Materials</i> , 2016, 28, 10244-10249.	11.1	327
66	Micromolding of shape-controlled, harvestable cell-laden hydrogels. <i>Biomaterials</i> , 2006, 27, 5391-5398.	5.7	318
67	Shear-Thinning Nanocomposite Hydrogels for the Treatment of Hemorrhage. <i>ACS Nano</i> , 2014, 8, 9833-9842.	7.3	318
68	Biomimetic tissues on a chip for drug discovery. <i>Drug Discovery Today</i> , 2012, 17, 173-181.	3.2	317
69	Bioprinted Osteogenic and Vasculogenic Patterns for Engineering 3D Bone Tissue. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700015.	3.9	310
70	Micromolding of photocrosslinkable chitosan hydrogel for spheroid microarray and co-cultures. <i>Biomaterials</i> , 2006, 27, 5259-5267.	5.7	309
71	Organ-on-a-chip platforms for studying drug delivery systems. <i>Journal of Controlled Release</i> , 2014, 190, 82-93.	4.8	308
72	Nano/Microfluidics for diagnosis of infectious diseases in developing countries. <i>Advanced Drug Delivery Reviews</i> , 2010, 62, 449-457.	6.6	305

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73	Layer-by-layer deposition of hyaluronic acid and poly-L-lysine for patterned cell co-cultures. <i>Biomaterials</i> , 2004, 25, 3583-3592.	5.7	297
74	The bioprinting roadmap. <i>Biofabrication</i> , 2020, 12, 022002.	3.7	291
75	Microfluidics for drug discovery and development: From target selection to product lifecycle management. <i>Drug Discovery Today</i> , 2008, 13, 1-13.	3.2	290
76	Bioinspired Materials for Controlling Stem Cell Fate. <i>Accounts of Chemical Research</i> , 2010, 43, 419-428.	7.6	284
77	Cell and Protein Compatibility of Parylene-C Surfaces. <i>Langmuir</i> , 2007, 23, 11718-11725.	1.6	279
78	Gold Nanocomposite Bioink for Printing 3D Cardiac Constructs. <i>Advanced Functional Materials</i> , 2017, 27, 1605352.	7.8	278
79	A microwell array system for stem cell culture. <i>Biomaterials</i> , 2008, 29, 752-763.	5.7	277
80	Microfluidics-Enabled Multimaterial Maskless Stereolithographic Bioprinting. <i>Advanced Materials</i> , 2018, 30, e1800242.	11.1	277
81	Rapid Continuous Multimaterial Extrusion Bioprinting. <i>Advanced Materials</i> , 2017, 29, 1604630.	11.1	275
82	PGS: Gelatin nanofibrous scaffolds with tunable mechanical and structural properties for engineering cardiac tissues. <i>Biomaterials</i> , 2013, 34, 6355-6366.	5.7	273
83	A simple soft lithographic route to fabrication of poly(ethylene glycol) microstructures for protein and cell patterning. <i>Biomaterials</i> , 2004, 25, 557-563.	5.7	271
84	4D bioprinting: the next-generation technology for biofabrication enabled by stimuli-responsive materials. <i>Biofabrication</i> , 2017, 9, 012001.	3.7	271
85	Synthesis and Characterization of Hybrid Hyaluronic Acid-Gelatin Hydrogels. <i>Biomacromolecules</i> , 2013, 14, 1085-1092.	2.6	269
86	Stop-flow lithography to generate cell-laden microgel particles. <i>Lab on A Chip</i> , 2008, 8, 1056.	3.1	268
87	Synthesis and Characterization of Tunable Poly(Ethylene Glycol): Gelatin Methacrylate Composite Hydrogels. <i>Tissue Engineering - Part A</i> , 2011, 17, 1713-1723.	1.6	268
88	Layer by Layer Three-dimensional Tissue Epitaxy by Cell-Laden Hydrogel Droplets. <i>Tissue Engineering - Part C: Methods</i> , 2010, 16, 157-166.	1.1	267
89	Cell-laden Microengineered and Mechanically Tunable Hybrid Hydrogels of Gelatin and Graphene Oxide. <i>Advanced Materials</i> , 2013, 25, 6385-6391.	11.1	266
90	Engineering a highly elastic human protein-based sealant for surgical applications. <i>Science Translational Medicine</i> , 2017, 9, .	5.8	261

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91	Vascularized Bone Tissue Engineering: Approaches for Potential Improvement. <i>Tissue Engineering - Part B: Reviews</i> , 2012, 18, 363-382.	2.5	259
92	3D-printed microfluidic devices. <i>Biofabrication</i> , 2016, 8, 022001.	3.7	259
93	Smart Bandage for Monitoring and Treatment of Chronic Wounds. <i>Small</i> , 2018, 14, e1703509.	5.2	257
94	Microfluidic techniques for development of 3D vascularized tissue. <i>Biomaterials</i> , 2014, 35, 7308-7325.	5.7	254
95	Synthesis and characterization of photocrosslinkable gelatin and silk fibroin interpenetrating polymer network hydrogels. <i>Acta Biomaterialia</i> , 2011, 7, 2384-2393.	4.1	251
96	Tough and flexible CNT-polymeric hybrid scaffolds for engineering cardiac constructs. <i>Biomaterials</i> , 2014, 35, 7346-7354.	5.7	249
97	Gelatin-polysaccharide composite scaffolds for 3D cell culture and tissue engineering: Towards natural therapeutics. <i>Bioengineering and Translational Medicine</i> , 2019, 4, 96-115.	3.9	249
98	Cell infiltrative hydrogel fibrous scaffolds for accelerated wound healing. <i>Acta Biomaterialia</i> , 2017, 49, 66-77.	4.1	244
99	Controlling the porosity of fibrous scaffolds by modulating the fiber diameter and packing density. <i>Journal of Biomedical Materials Research - Part A</i> , 2011, 96A, 566-574.	2.1	238
100	DNA-directed self-assembly of shape-controlled hydrogels. <i>Nature Communications</i> , 2013, 4, 2275.	5.8	238
101	Dielectrophoretically Aligned Carbon Nanotubes to Control Electrical and Mechanical Properties of Hydrogels to Fabricate Contractile Muscle Myofibers. <i>Advanced Materials</i> , 2013, 25, 4028-4034.	11.1	236
102	Interplay between materials and microfluidics. <i>Nature Reviews Materials</i> , 2017, 2, .	23.3	236
103	The Synergy of Scaffold-Based and Scaffold-Free Tissue Engineering Strategies. <i>Trends in Biotechnology</i> , 2018, 36, 348-357.	4.9	231
104	Sutureless repair of corneal injuries using naturally derived bioadhesive hydrogels. <i>Science Advances</i> , 2019, 5, eaav1281.	4.7	229
105	Highly Elastic and Conductive Human-Based Protein Hybrid Hydrogels. <i>Advanced Materials</i> , 2016, 28, 40-49.	11.1	226
106	Cell docking inside microwells within reversibly sealed microfluidic channels for fabricating multiphenotype cell arrays. <i>Lab on A Chip</i> , 2005, 5, 1380.	3.1	224
107	Controlled-size embryoid body formation in concave microwell arrays. <i>Biomaterials</i> , 2010, 31, 4296-4303.	5.7	223
108	Directed endothelial cell morphogenesis in micropatterned gelatin methacrylate hydrogels. <i>Biomaterials</i> , 2012, 33, 9009-9018.	5.7	221

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109	Micropatterned cell co-cultures using layer-by-layer deposition of extracellular matrix components. <i>Biomaterials</i> , 2006, 27, 1479-1486.	5.7	220
110	Coaxial extrusion bioprinting of 3D microfibrinous constructs with cell-favorable gelatin methacryloyl microenvironments. <i>Biofabrication</i> , 2018, 10, 024102.	3.7	219
111	Biomimetic gradient hydrogels for tissue engineering. <i>Canadian Journal of Chemical Engineering</i> , 2010, 88, 899-911.	0.9	218
112	Skeletal Muscle Tissue Engineering: Methods to Form Skeletal Myotubes and Their Applications. <i>Tissue Engineering - Part B: Reviews</i> , 2014, 20, 403-436.	2.5	218
113	In vitro and in vivo analysis of visible light crosslinkable gelatin methacryloyl (GelMA) hydrogels. <i>Biomaterials Science</i> , 2017, 5, 2093-2105.	2.6	218
114	Fabrication of three-dimensional porous cell-laden hydrogel for tissue engineering. <i>Biofabrication</i> , 2010, 2, 035003.	3.7	217
115	Biomechanical properties of native and tissue engineered heart valve constructs. <i>Journal of Biomechanics</i> , 2014, 47, 1949-1963.	0.9	216
116	Hybrid hydrogels containing vertically aligned carbon nanotubes with anisotropic electrical conductivity for muscle myofiber fabrication. <i>Scientific Reports</i> , 2014, 4, 4271.	1.6	213
117	The Future of Layer-by-Layer Assembly: A Tribute to <i>ACS Nano</i> Associate Editor Helmuth MÄ¶hwald. <i>ACS Nano</i> , 2019, 13, 6151-6169.	7.3	211
118	Engineered Contractile Skeletal Muscle Tissue on a Microgrooved Methacrylated Gelatin Substrate. <i>Tissue Engineering - Part A</i> , 2012, 18, 2453-2465.	1.6	206
119	Glucose-sensitive Hydrogel Optical Fibers Functionalized with Phenylboronic Acid. <i>Advanced Materials</i> , 2017, 29, 1606380.	11.1	206
120	Micromolding of photocrosslinkable hyaluronic acid for cell encapsulation and entrapment. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 79A, 522-532.	2.1	203
121	Building Vascular Networks. <i>Science Translational Medicine</i> , 2012, 4, 160ps23.	5.8	202
122	Microfluidic Chip-Based Fabrication of PLGA Microfiber Scaffolds for Tissue Engineering. <i>Langmuir</i> , 2008, 24, 6845-6851.	1.6	201
123	Highly Elastic Micropatterned Hydrogel for Engineering Functional Cardiac Tissue. <i>Advanced Functional Materials</i> , 2013, 23, 4950-4959.	7.8	201
124	A Highly Elastic and Rapidly Crosslinkable Elastin-like Polypeptide-based Hydrogel for Biomedical Applications. <i>Advanced Functional Materials</i> , 2015, 25, 4814-4826.	7.8	201
125	A Bioactive Carbon Nanotube-based Ink for Printing 2D and 3D Flexible Electronics. <i>Advanced Materials</i> , 2016, 28, 3280-3289.	11.1	199
126	Digitally Tunable Microfluidic Bioprinting of Multilayered Cannular Tissues. <i>Advanced Materials</i> , 2018, 30, e1706913.	11.1	199

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127	Co-culture of human embryonic stem cells with murine embryonic fibroblasts on microwell-patterned substrates. <i>Biomaterials</i> , 2006, 27, 5968-5977.	5.7	198
128	Evolution and clinical translation of drug delivery nanomaterials. <i>Nano Today</i> , 2017, 15, 91-106.	6.2	196
129	Bioprinting the Cancer Microenvironment. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1710-1721.	2.6	194
130	Mussel-Inspired Multifunctional Hydrogel Coating for Prevention of Infections and Enhanced Osteogenesis. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 11428-11439.	4.0	193
131	3D Bioprinting in Skeletal Muscle Tissue Engineering. <i>Small</i> , 2019, 15, e1805530.	5.2	192
132	Multiscale bioprinting of vascularized models. <i>Biomaterials</i> , 2019, 198, 204-216.	5.7	191
133	Molded polyethylene glycol microstructures for capturing cells within microfluidic channels. <i>Lab on A Chip</i> , 2004, 4, 425.	3.1	190
134	Regulating Cellular Behavior on Few-Layer Reduced Graphene Oxide Films with Well-Controlled Reduction States. <i>Advanced Functional Materials</i> , 2012, 22, 751-759.	7.8	189
135	Mesenchymal stem cells: Identification, phenotypic characterization, biological properties and potential for regenerative medicine through biomaterial micro-engineering of their niche. <i>Methods</i> , 2016, 99, 62-68.	1.9	189
136	A highly adhesive and naturally derived sealant. <i>Biomaterials</i> , 2017, 140, 115-127.	5.7	188
137	Enhanced angiogenesis through controlled release of basic fibroblast growth factor from peptide amphiphile for tissue regeneration. <i>Biomaterials</i> , 2006, 27, 5836-5844.	5.7	187
138	A Textile Dressing for Temporal and Dosage Controlled Drug Delivery. <i>Advanced Functional Materials</i> , 2017, 27, 1702399.	7.8	187
139	Controlling Mechanical Properties of Cell-Laden Hydrogels by Covalent Incorporation of Graphene Oxide. <i>Small</i> , 2014, 10, 514-523.	5.2	183
140	Bioprinted thrombosis-on-a-chip. <i>Lab on A Chip</i> , 2016, 16, 4097-4105.	3.1	183
141	Fabrication of porous chitosan scaffolds for soft tissue engineering using dense gas CO ₂ . <i>Acta Biomaterialia</i> , 2011, 7, 1653-1664.	4.1	182
142	Microfluidics for advanced drug delivery systems. <i>Current Opinion in Chemical Engineering</i> , 2015, 7, 101-112.	3.8	182
143	Elastic sealants for surgical applications. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2015, 95, 27-39.	2.0	182
144	Aptamer-Based Microfluidic Electrochemical Biosensor for Monitoring Cell-Secreted Trace Cardiac Biomarkers. <i>Analytical Chemistry</i> , 2016, 88, 10019-10027.	3.2	181

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145	Microfluidic patterning for fabrication of contractile cardiac organoids. <i>Biomedical Microdevices</i> , 2007, 9, 149-157.	1.4	179
146	Photocrosslinkable κ -Carrageenan Hydrogels for Tissue Engineering Applications. <i>Advanced Healthcare Materials</i> , 2013, 2, 895-907.	3.9	178
147	Engineering vascularized and innervated bone biomaterials for improved skeletal tissue regeneration. <i>Materials Today</i> , 2018, 21, 362-376.	8.3	178
148	Biodegradable Gelatin Methacryloyl Microneedles for Transdermal Drug Delivery. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801054.	3.9	177
149	Sequential assembly of cell-laden hydrogel constructs to engineer vascular-like microchannels. <i>Biotechnology and Bioengineering</i> , 2011, 108, 1693-1703.	1.7	175
150	Organs-on-a-chip: a new tool for drug discovery. <i>Expert Opinion on Drug Discovery</i> , 2014, 9, 335-352.	2.5	175
151	Flexible pH-Sensing Hydrogel Fibers for Epidermal Applications. <i>Advanced Healthcare Materials</i> , 2016, 5, 711-719.	3.9	172
152	Transdermal regulation of vascular network bioengineering using a photopolymerizable methacrylated gelatin hydrogel. <i>Biomaterials</i> , 2013, 34, 6785-6796.	5.7	170
153	Integrin-Mediated Interactions Control Macrophage Polarization in 3D Hydrogels. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700289.	3.9	169
154	Advances and Future Perspectives in 4D Bioprinting. <i>Biotechnology Journal</i> , 2018, 13, e1800148.	1.8	168
155	Mechanically Robust and Bioadhesive Collagen and Photocrosslinkable Hyaluronic Acid Semi-Interpenetrating Networks. <i>Tissue Engineering - Part A</i> , 2009, 15, 1645-1653.	1.6	167
156	Delivery strategies to control inflammatory response: Modulating M1-M2 polarization in tissue engineering applications. <i>Journal of Controlled Release</i> , 2016, 240, 349-363.	4.8	164
157	Advancing Frontiers in Bone Bioprinting. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801048.	3.9	164
158	Cultivation of Human Embryonic Stem Cells Without the Embryoid Body Step Enhances Osteogenesis In Vitro. <i>Stem Cells</i> , 2006, 24, 835-843.	1.4	163
159	Integrating microfluidics and lensless imaging for point-of-care testing. <i>Biosensors and Bioelectronics</i> , 2009, 24, 3208-3214.	5.3	162
160	A toolkit of thread-based microfluidics, sensors, and electronics for 3D tissue embedding for medical diagnostics. <i>Microsystems and Nanoengineering</i> , 2016, 2, 16039.	3.4	162
161	Textile Technologies and Tissue Engineering: A Path Toward Organ Weaving. <i>Advanced Healthcare Materials</i> , 2016, 5, 751-766.	3.9	161
162	Quantitative analysis of cell adhesion on aligned micro- and nanofibers. <i>Journal of Biomedical Materials Research - Part A</i> , 2008, 84A, 291-299.	2.1	160

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163	Microfluidic System for Studying the Interaction of Nanoparticles and Microparticles with Cells. <i>Analytical Chemistry</i> , 2005, 77, 5453-5459.	3.2	159
164	In-Depth Interfacial Chemistry and Reactivity Focused Investigation of Lithium-Imide- and Lithium-Imidazole-Based Electrolytes. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 16087-16100.	4.0	159
165	Surgical materials: Current challenges and nano-enabled solutions. <i>Nano Today</i> , 2014, 9, 574-589.	6.2	158
166	Room-Temperature-Formed PEDOT:PSS Hydrogels Enable Injectable, Soft, and Healable Organic Bioelectronics. <i>Advanced Materials</i> , 2020, 32, e1904752.	11.1	158
167	Photonic hydrogel sensors. <i>Biotechnology Advances</i> , 2016, 34, 250-271.	6.0	157
168	Crosslinking Strategies for 3D Bioprinting of Polymeric Hydrogels. <i>Small</i> , 2020, 16, e2002931.	5.2	157
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