Ali Khademhosseini

List of Publications by Citations

748 papers	74,401 citations	140 h-index	245 g-index
875 ext. papers	85,913 ext. citations	10.5 avg, IF	8.36 L-index

#	Paper	IF	Citations
748	Hydrogels in Biology and Medicine: From Molecular Principles to Bionanotechnology. *Advanced Materials*, **2006**, 18, 1345-1360	24	3009
747	Hydrogels in regenerative medicine. *Advanced Materials*, **2009**, 21, 3307-29	24	1971
746	Cell-laden microengineered gelatin methacrylate hydrogels. *Biomaterials*, **2010**, 31, 5536-44	15.6	1458
745	Microscale technologies for tissue engineering and biology. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 2480-7	11.5	1304
744	Synthesis, properties, and biomedical applications of gelatin methacryloyl (GelMA) hydrogels. *Biomaterials*, **2015**, 73, 254-71	15.6	1167
743	Advances in engineering hydrogels. *Science*, **2017**, 356,	33.3	1161
742	25th anniversary article: Rational design and applications of hydrogels in regenerative medicine. *Advanced Materials*, **2014**, 26, 85-123	24	895
741	Nanoparticle-aptamer bioconjugates: a new approach for targeting prostate cancer cells. *Cancer Research*, **2004**, 64, 7668-72	10.1	788
740	Controlling the porosity and microarchitecture of hydrogels for tissue engineering. *Tissue Engineering - Part B: Reviews*, **2010**, 16, 371-83	7.9	737
739	Nanocomposite hydrogels for biomedical applications. *Biotechnology and Bioengineering*, **2014**, 111, 441-53	4.9	723
738	Diverse Applications of Nanomedicine. *ACS Nano*, **2017**, 11, 2313-2381	16.7	714
737	Carbon-nanotube-embedded hydrogel sheets for engineering cardiac constructs and bioactuators. *ACS Nano*, **2013**, 7, 2369-80	16.7	659
736	Microengineered hydrogels for tissue engineering. *Biomaterials*, **2007**, 28, 5087-92	15.6	655
735	Hydrogel bioprinted microchannel networks for vascularization of tissue engineering constructs. *Lab on A Chip*, **2014**, 14, 2202-11	7.2	632
734	Carbon-based nanomaterials: multifunctional materials for biomedical engineering. *ACS Nano*, **2013**, 7, 2891-7	16.7	573
733	Direct 3D bioprinting of perfusable vascular constructs using a blend bioink. *Biomaterials*, **2016**, 106, 58-68	15.6	544
732	Microfluidic Bioprinting of Heterogeneous 3D Tissue Constructs Using Low-Viscosity Bioink. *Advanced Materials*, **2016**, 28, 677-84	24	530

731	Electrospun scaffolds for tissue engineering of vascular grafts. *Acta Biomaterialia*, **2014**, 10, 11-25	10.8	512
730	Engineering microscale topographies to control the cell-substrate interface. *Biomaterials*, **2012**, 33, 5230-46	15.6	499
729	Bioprinting 3D microfibrous scaffolds for engineering endothelialized myocardium and heart-on-a-chip. *Biomaterials*, **2016**, 110, 45-59	15.6	495
728	Bioinks for 3D bioprinting: an overview. *Biomaterials Science*, **2018**, 6, 915-946	7.4	488
727	Directed assembly of cell-laden microgels for fabrication of 3D tissue constructs. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 9522-7	11.5	488
726	Functional Human Vascular Network Generated in Photocrosslinkable Gelatin Methacrylate Hydrogels. *Advanced Functional Materials*, **2012**, 22, 2027-2039	15.6	484
725	Microfabrication of complex porous tissue engineering scaffolds using 3D projection stereolithography. *Biomaterials*, **2012**, 33, 3824-34	15.6	474
724	Biocompatibility of engineered nanoparticles for drug delivery. *Journal of Controlled Release*, **2013**, 166, 182-94	11.7	467
723	Modular Tissue Engineering: Engineering Biological Tissues from the Bottom Up. *Soft Matter*, **2009**, 5, 1312-1319	3.6	444
722	Direct-write bioprinting of cell-laden methacrylated gelatin hydrogels. *Biofabrication*, **2014**, 6, 024105	10.5	432
721	3D biofabrication strategies for tissue engineering and regenerative medicine. *Annual Review of Biomedical Engineering*, **2014**, 16, 247-76	12	429
720	Multisensor-integrated organs-on-chips platform for automated and continual in situ monitoring of organoid behaviors. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E2293-E2302	11.5	416
719	Directed 3D cell alignment and elongation in microengineered hydrogels. *Biomaterials*, **2010**, 31, 6941-6951	15.6	410
718	Photocrosslinkable Gelatin Hydrogel for Epidermal Tissue Engineering. *Advanced Healthcare Materials*, **2016**, 5, 108-18	10.1	407
717	Graphene-based materials for tissue engineering. *Advanced Drug Delivery Reviews*, **2016**, 105, 255-274	18.5	404
716	Ionic liquids and their solid-state analogues as materials for energy generation and storage. *Nature Reviews Materials*, **2016**, 1,	73.3	391
715	Functionalization, preparation and use of cell-laden gelatin methacryloyl-based hydrogels as modular tissue culture platforms. *Nature Protocols*, **2016**, 11, 727-46	18.8	391
714	Nanotechnology in Textiles. *ACS Nano*, **2016**, 10, 3042-68	16.7	390

713	A decade of progress in tissue engineering. *Nature Protocols*, **2016**, 11, 1775-81	18.8	387
712	3D Bioprinting for Tissue and Organ Fabrication. *Annals of Biomedical Engineering*, **2017**, 45, 148-163	4.7	368
711	Bioactive silicate nanoplatelets for osteogenic differentiation of human mesenchymal stem cells. *Advanced Materials*, **2013**, 25, 3329-36	24	365
710	Vascularization and Angiogenesis in Tissue Engineering: Beyond Creating Static Networks. *Trends in Biotechnology*, **2016**, 34, 733-745	15.1	364
709	Injectable graphene oxide/hydrogel-based angiogenic gene delivery system for vasculogenesis and cardiac repair. *ACS Nano*, **2014**, 8, 8050-62	16.7	359
708	Digitally tunable physicochemical coding of material composition and topography in continuous microfibres. *Nature Materials*, **2011**, 10, 877-83	27	355
707	A liver-on-a-chip platform with bioprinted hepatic spheroids. *Biofabrication*, **2016**, 8, 014101	10.5	353
706	Carbon nanotube reinforced hybrid microgels as scaffold materials for cell encapsulation. *ACS Nano* , **2012**, 6, 362-72	16.7	347
705	Fiber-based tissue engineering: Progress, challenges, and opportunities. *Biotechnology Advances*, **2013**, 31, 669-87	17.8	330
704	Microwell-mediated control of embryoid body size regulates embryonic stem cell fate via differential expression of WNT5a and WNT11. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 16978-83	11.5	326
703	Controlling size, shape and homogeneity of embryoid bodies using poly(ethylene glycol) microwells. *Lab on A Chip*, **2007**, 7, 786-94	7.2	323
702	Microfluidic fabrication of microengineered hydrogels and their application in tissue engineering. *Lab on A Chip*, **2012**, 12, 45-59	7.2	322
701	Fabrication of gradient hydrogels using a microfluidics/photopolymerization process. *Langmuir*, **2004**, 20, 5153-6	4	320
700	Cell-laden hydrogels for osteochondral and cartilage tissue engineering. *Acta Biomaterialia*, **2017**, 57, 1-25	10.8	317
699	Microfabricated biomaterials for engineering 3D tissues. *Advanced Materials*, **2012**, 24, 1782-804	24	310
698	A cell-laden microfluidic hydrogel. *Lab on A Chip*, **2007**, 7, 756-62	7.2	310
697	Progress in tissue engineering. *Scientific American*, **2009**, 300, 64-71	0.5	301
696	Multi-tissue interactions in an integrated three-tissue organ-on-a-chip platform. *Scientific Reports*, **2017**, 7, 8837	4.9	297

695	Gradient biomaterials for soft-to-hard interface tissue engineering. *Acta Biomaterialia*, **2011**, 7, 1441-51	10.8	295
694	Drug delivery systems and materials for wound healing applications. *Advanced Drug Delivery Reviews*, **2018**, 127, 138-166	18.5	294
693	The mechanical properties and cytotoxicity of cell-laden double-network hydrogels based on photocrosslinkable gelatin and gellan gum biomacromolecules. *Biomaterials*, **2012**, 33, 3143-52	15.6	289
692	Reduced Graphene Oxide-GelMA Hybrid Hydrogels as Scaffolds for Cardiac Tissue Engineering. *Small*, **2016**, 12, 3677-89	11	283
691	Biomimetic tissues on a chip for drug discovery. *Drug Discovery Today*, **2012**, 17, 173-81	8.8	282
690	Micromolding of shape-controlled, harvestable cell-laden hydrogels. *Biomaterials*, **2006**, 27, 5391-8	15.6	279
689	Micromolding of photocrosslinkable chitosan hydrogel for spheroid microarray and co-cultures. *Biomaterials*, **2006**, 27, 5259-67	15.6	277
688	Layer-by-layer deposition of hyaluronic acid and poly-L-lysine for patterned cell co-cultures. *Biomaterials*, **2004**, 25, 3583-92	15.6	277
687	Modified Gellan Gum hydrogels with tunable physical and mechanical properties. *Biomaterials*, **2010**, 31, 7494-502	15.6	271
686	Engineering Immunomodulatory Biomaterials To Tune the Inflammatory Response. *Trends in Biotechnology*, **2016**, 34, 470-482	15.1	268
685	Nano/Microfluidics for diagnosis of infectious diseases in developing countries. *Advanced Drug Delivery Reviews*, **2010**, 62, 449-57	18.5	266
684	Mesenchymal stem cells in regenerative medicine: Focus on articular cartilage and intervertebral disc regeneration. *Methods*, **2016**, 99, 69-80	4.6	263
683	Bioinspired materials for controlling stem cell fate. *Accounts of Chemical Research*, **2010**, 43, 419-28	24.3	259
682	Microfluidics for drug discovery and development: from target selection to product lifecycle management. *Drug Discovery Today*, **2008**, 13, 1-13	8.8	258
681	A microwell array system for stem cell culture. *Biomaterials*, **2008**, 29, 752-63	15.6	257
680	Cell and protein compatibility of parylene-C surfaces. *Langmuir*, **2007**, 23, 11718-25	4	254
679	Organ-on-a-chip platforms for studying drug delivery systems. *Journal of Controlled Release*, **2014**, 190, 82-93	11.7	252
678	A simple soft lithographic route to fabrication of poly(ethylene glycol) microstructures for protein and cell patterning. *Biomaterials*, **2004**, 25, 557-63	15.6	252

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676	Shear-thinning nanocomposite hydrogels for the treatment of hemorrhage. *ACS Nano*, **2014**, 8, 9833-42	16.7	236
675	PGS:Gelatin nanofibrous scaffolds with tunable mechanical and structural properties for engineering cardiac tissues. *Biomaterials*, **2013**, 34, 6355-66	15.6	236
674	Highly Stretchable, Strain Sensing Hydrogel Optical Fibers. *Advanced Materials*, **2016**, 28, 10244-10249	24	236
673	Stop-flow lithography to generate cell-laden microgel particles. *Lab on A Chip*, **2008**, 8, 1056-61	7.2	235
672	Extrusion Bioprinting of Shear-Thinning Gelatin Methacryloyl Bioinks. *Advanced Healthcare Materials*, **2017**, 6, 1601451	10.1	233
671	Cell-laden microengineered and mechanically tunable hybrid hydrogels of gelatin and graphene oxide. *Advanced Materials*, **2013**, 25, 6385-91	24	225
670	Synthesis and characterization of tunable poly(ethylene glycol): gelatin methacrylate composite hydrogels. *Tissue Engineering - Part A*, **2011**, 17, 1713-23	3.9	225
669	Wearables in Medicine. *Advanced Materials*, **2018**, 30, e1706910	24	223
668	Bioprinted Osteogenic and Vasculogenic Patterns for Engineering 3D Bone Tissue. *Advanced Healthcare Materials*, **2017**, 6, 1700015	10.1	222
667	Vascularized bone tissue engineering: approaches for potential improvement. *Tissue Engineering - Part B: Reviews*, **2012**, 18, 363-82	7.9	216
666	Microfluidic techniques for development of 3D vascularized tissue. *Biomaterials*, **2014**, 35, 7308-25	15.6	215
665	Tough and flexible CNT-polymeric hybrid scaffolds for engineering cardiac constructs. *Biomaterials*, **2014**, 35, 7346-54	15.6	209
664	DNA-directed self-assembly of shape-controlled hydrogels. *Nature Communications*, **2013**, 4, 2275	17.4	205
663	Rapid Continuous Multimaterial Extrusion Bioprinting. *Advanced Materials*, **2017**, 29, 1604630	24	205
662	Synthesis and characterization of photocrosslinkable gelatin and silk fibroin interpenetrating polymer network hydrogels. *Acta Biomaterialia*, **2011**, 7, 2384-93	10.8	205
661	Controlled-size embryoid body formation in concave microwell arrays. *Biomaterials*, **2010**, 31, 4296-303	15.6	202
660	Micropatterned cell co-cultures using layer-by-layer deposition of extracellular matrix components. *Biomaterials*, **2006**, 27, 1479-86	15.6	202

659	Dielectrophoretically aligned carbon nanotubes to control electrical and mechanical properties of hydrogels to fabricate contractile muscle myofibers. *Advanced Materials*, **2013**, 25, 4028-34	24	200
658	Cell docking inside microwells within reversibly sealed microfluidic channels for fabricating multiphenotype cell arrays. *Lab on A Chip*, **2005**, 5, 1380-6	7.2	200
657	Overview of Silk Fibroin Use in Wound Dressings. *Trends in Biotechnology*, **2018**, 36, 907-922	15.1	198
656	Synthesis and characterization of hybrid hyaluronic acid-gelatin hydrogels. *Biomacromolecules*, **2013**, 14, 1085-92	6.9	193
655	3D-printed microfluidic devices. *Biofabrication*, **2016**, 8, 022001	10.5	192
654	Directed endothelial cell morphogenesis in micropatterned gelatin methacrylate hydrogels. *Biomaterials*, **2012**, 33, 9009-18	15.6	191
653	Controlling the porosity of fibrous scaffolds by modulating the fiber diameter and packing density. *Journal of Biomedical Materials Research - Part A*, **2011**, 96, 566-74	5.4	191
652	4D bioprinting: the next-generation technology for biofabrication enabled by stimuli-responsive materials. *Biofabrication*, **2016**, 9, 012001	10.5	190
651	Microfluidics-Enabled Multimaterial Maskless Stereolithographic Bioprinting. *Advanced Materials*, **2018**, 30, e1800242	24	190
650	BIOMIMETIC GRADIENT HYDROGELS FOR TISSUE ENGINEERING. *Canadian Journal of Chemical Engineering*, **2010**, 88, 899-911	2.3	190
649	Highly Elastic and Conductive Human-Based Protein Hybrid Hydrogels. *Advanced Materials*, **2016**, 28, 40-9	24	187
648	Microfluidic chip-based fabrication of PLGA microfiber scaffolds for tissue engineering. *Langmuir*, **2008**, 24, 6845-51	4	186
647	Co-culture of human embryonic stem cells with murine embryonic fibroblasts on microwell-patterned substrates. *Biomaterials*, **2006**, 27, 5968-77	15.6	184
646	Cell infiltrative hydrogel fibrous scaffolds for accelerated wound healing. *Acta Biomaterialia*, **2017**, 49, 66-77	10.8	183
645	Micromolding of photocrosslinkable hyaluronic acid for cell encapsulation and entrapment. *Journal of Biomedical Materials Research - Part A*, **2006**, 79, 522-32	5.4	182
644	Molded polyethylene glycol microstructures for capturing cells within microfluidic channels. *Lab on A Chip*, **2004**, 4, 425-30	7.2	180
643	Interplay between materials and microfluidics. *Nature Reviews Materials*, **2017**, 2,	73.3	179
642	Fabrication of three-dimensional porous cell-laden hydrogel for tissue engineering. *Biofabrication*, **2010**, 2, 035003	10.5	176

641	Building vascular networks. *Science Translational Medicine*, **2012**, 4, 160ps23	17.5	175
640	Gold Nanocomposite Bioink for Printing 3D Cardiac Constructs. *Advanced Functional Materials*, **2017**, 27, 1605352	15.6	173
639	Biomechanical properties of native and tissue engineered heart valve constructs. *Journal of Biomechanics*, **2014**, 47, 1949-63	2.9	173
638	Highly Elastic Micropatterned Hydrogel for Engineering Functional Cardiac Tissue. *Advanced Functional Materials*, **2013**, 23, 4950	15.6	173
637	Enhanced angiogenesis through controlled release of basic fibroblast growth factor from peptide amphiphile for tissue regeneration. *Biomaterials*, **2006**, 27, 5836-44	15.6	171
636	Engineering a highly elastic human protein-based sealant for surgical applications. *Science Translational Medicine*, **2017**, 9,	17.5	170
635	Engineered contractile skeletal muscle tissue on a microgrooved methacrylated gelatin substrate. *Tissue Engineering - Part A*, **2012**, 18, 2453-65	3.9	169
634	Regulating Cellular Behavior on Few-Layer Reduced Graphene Oxide Films with Well-Controlled Reduction States. *Advanced Functional Materials*, **2012**, 22, 751-759	15.6	167
633	Hybrid hydrogels containing vertically aligned carbon nanotubes with anisotropic electrical conductivity for muscle myofiber fabrication. *Scientific Reports*, **2014**, 4, 4271	4.9	165
632	Skeletal muscle tissue engineering: methods to form skeletal myotubes and their applications. *Tissue Engineering - Part B: Reviews*, **2014**, 20, 403-36	7.9	164
631	Controlling mechanical properties of cell-laden hydrogels by covalent incorporation of graphene oxide. *Small*, **2014**, 10, 514-23	11	159
630	Microfluidic patterning for fabrication of contractile cardiac organoids. *Biomedical Microdevices*, **2007**, 9, 149-57	3.7	159
629	The Synergy of Scaffold-Based and Scaffold-Free Tissue Engineering Strategies. *Trends in Biotechnology*, **2018**, 36, 348-357	15.1	158
628	Organs-on-a-chip: a new tool for drug discovery. *Expert Opinion on Drug Discovery*, **2014**, 9, 335-52	6.2	158
627	Engineered biomaterials for in situ tissue regeneration. *Nature Reviews Materials*, **2020**, 5, 686-705	73.3	157
626	Fabrication of porous chitosan scaffolds for soft tissue engineering using dense gas CO2. *Acta Biomaterialia*, **2011**, 7, 1653-64	10.8	156
625	A Bioactive Carbon Nanotube-Based Ink for Printing 2D and 3D Flexible Electronics. *Advanced Materials*, **2016**, 28, 3280-9	24	156
624	In vitro and in vivo analysis of visible light crosslinkable gelatin methacryloyl (GelMA) hydrogels. *Biomaterials Science*, **2017**, 5, 2093-2105	7.4	152

623	Cultivation of human embryonic stem cells without the embryoid body step enhances osteogenesis in vitro. *Stem Cells*, **2006**, 24, 835-43	5.8	151
622	Mesenchymal stem cells: Identification, phenotypic characterization, biological properties and potential for regenerative medicine through biomaterial micro-engineering of their niche. *Methods*, **2016**, 99, 62-8	4.6	149
621	Bioprinting the Cancer Microenvironment. *ACS Biomaterials Science and Engineering*, **2016**, 2, 1710-1721	5.5	148
620	A Highly Elastic and Rapidly Crosslinkable Elastin-Like Polypeptide-Based Hydrogel for Biomedical Applications. *Advanced Functional Materials*, **2015**, 25, 4814-4826	15.6	148
619	Mechanically robust and bioadhesive collagen and photocrosslinkable hyaluronic acid semi-interpenetrating networks. *Tissue Engineering - Part A*, **2009**, 15, 1645-53	3.9	148
618	Bone regeneration through controlled release of bone morphogenetic protein-2 from 3-D tissue engineered nano-scaffold. *Journal of Controlled Release*, **2007**, 117, 380-6	11.7	147
617	Coaxial extrusion bioprinting of 3D microfibrous constructs with cell-favorable gelatin methacryloyl microenvironments. *Biofabrication*, **2018**, 10, 024102	10.5	147
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612	Smart Bandage for Monitoring and Treatment of Chronic Wounds. *Small*, **2018**, 14, e1703509	11	142
611	Photocrosslinkable kappa-carrageenan hydrogels for tissue engineering applications. *Advanced Healthcare Materials*, **2013**, 2, 895-907	10.1	140
610	Microfluidics for Advanced Drug Delivery Systems. *Current Opinion in Chemical Engineering*, **2015**, 7, 101-112	5.4	140
609	Sequential assembly of cell-laden hydrogel constructs to engineer vascular-like microchannels. *Biotechnology and Bioengineering*, **2011**, 108, 1693-703	4.9	140
608	Integrating microfluidics and lensless imaging for point-of-care testing. *Biosensors and Bioelectronics*, **2009**, 24, 3208-14	11.8	139
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606	Aptamer-Based Microfluidic Electrochemical Biosensor for Monitoring Cell-Secreted Trace Cardiac Biomarkers. *Analytical Chemistry*, **2016**, 88, 10019-10027	7.8	137

605	Gelatin methacrylate as a promising hydrogel for 3D microscale organization and proliferation of dielectrophoretically patterned cells. *Lab on A Chip*, **2012**, 12, 2959-69	7.2	135
604	Digitally Tunable Microfluidic Bioprinting of Multilayered Cannular Tissues. *Advanced Materials*, **2018**, 30, e1706913	24	134
603	Engineering systems for the generation of patterned co-cultures for controlling cell-cell interactions. *Biochimica Et Biophysica Acta - General Subjects*, **2011**, 1810, 239-50	4	133
602	Quantitative analysis of cell adhesion on aligned micro- and nanofibers. *Journal of Biomedical Materials Research - Part A*, **2008**, 84, 291-9	5.4	133
601	A soft lithographic approach to fabricate patterned microfluidic channels. *Analytical Chemistry*, **2004**, 76, 3675-81	7.8	133
600	Mussel-Inspired Multifunctional Hydrogel Coating for Prevention of Infections and Enhanced Osteogenesis. *ACS Applied Materials & Interfaces*, **2017**, 9, 11428-11439	9.5	132
599	Elastic sealants for surgical applications. *European Journal of Pharmaceutics and Biopharmaceutics*, **2015**, 95, 27-39	5.7	132
598	Layer-by-layer assembly of 3D tissue constructs with functionalized graphene. *Advanced Functional Materials*, **2014**, 24, 6136-6144	15.6	131
597	A Textile Dressing for Temporal and Dosage Controlled Drug Delivery. *Advanced Functional Materials*, **2017**, 27, 1702399	15.6	130
596	Surgical Materials: Current Challenges and Nano-enabled Solutions. *Nano Today*, **2014**, 9, 574-589	17.9	128
595	Transdermal regulation of vascular network bioengineering using a photopolymerizable methacrylated gelatin hydrogel. *Biomaterials*, **2013**, 34, 6785-96	15.6	128
594	The Future of Layer-by-Layer Assembly: A Tribute to ACS Nano Associate Editor Helmuth Möwald. *ACS Nano*, **2019**, 13, 6151-6169	16.7	127
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590	A highly adhesive and naturally derived sealant. *Biomaterials*, **2017**, 140, 115-127	15.6	122
589	Sutureless repair of corneal injuries using naturally derived bioadhesive hydrogels. *Science Advances*, **2019**, 5, eaav1281	14.3	122
588	Hierarchical Fabrication of Engineered Vascularized Bone Biphasic Constructs via Dual 3D Bioprinting: Integrating Regional Bioactive Factors into Architectural Design. *Advanced Healthcare Materials*, **2016**, 5, 2174-81	10.1	122

587	Flexible pH-Sensing Hydrogel Fibers for Epidermal Applications. *Advanced Healthcare Materials*, **2016**, 5, 711-9	10.1	122
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585	Gelatin-polysaccharide composite scaffolds for 3D cell culture and tissue engineering: Towards natural therapeutics. *Bioengineering and Translational Medicine*, **2019**, 4, 96-115	14.8	121
584	Photonic hydrogel sensors. *Biotechnology Advances*, **2016**, 34, 250-71	17.8	120
583	Delivery strategies to control inflammatory response: Modulating M1-M2 polarization in tissue engineering applications. *Journal of Controlled Release*, **2016**, 240, 349-363	11.7	120
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580	Multiscale bioprinting of vascularized models. *Biomaterials*, **2019**, 198, 204-216	15.6	118
579	Composite Living Fibers for Creating Tissue Constructs Using Textile Techniques. *Advanced Functional Materials*, **2014**, 24, 4060-4067	15.6	118
578	Integration column: microwell arrays for mammalian cell culture. *Integrative Biology (United Kingdom)*, **2009**, 1, 625-34	3.7	118
577	Layer-by-Layer Surface Modification and Patterned Electrostatic Deposition of Quantum Dots. *Nano Letters*, **2004**, 4, 1421-1425	11.5	118
576	Aligned carbon nanotube-based flexible gel substrates for engineering bio-hybrid tissue actuators. *Advanced Functional Materials*, **2015**, 25, 4486-4495	15.6	116
575	Spatially and Temporally Controlled Hydrogels for Tissue Engineering. *Materials Science and Engineering Reports*, **2017**, 119, 1-35	30.9	115
574	Generation of static and dynamic patterned co-cultures using microfabricated parylene-C stencils. *Lab on A Chip*, **2007**, 7, 1272-9	7.2	115
573	Tri-layered elastomeric scaffolds for engineering heart valve leaflets. *Biomaterials*, **2014**, 35, 7774-85	15.6	114
572	Osteogenic and angiogenic potentials of monocultured and co-cultured human-bone-marrow-derived mesenchymal stem cells and human-umbilical-vein endothelial cells on three-dimensional porous beta-tricalcium phosphate scaffold. *Acta Biomaterialia*, **2013**, 9, 4906-15	10.8	114
571	3D Bioprinting in Skeletal Muscle Tissue Engineering. *Small*, **2019**, 15, e1805530	11	113
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566	Nanoclay-enriched poly(e-caprolactone) electrospun scaffolds for osteogenic differentiation of human mesenchymal stem cells. *Tissue Engineering - Part A*, **2014**, 20, 2088-101	3.9	111
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10	Vascular Tissue Engineering: The Role of 3D Bioprinting **2020**, 1-18	
9	Microfabrication techniques in materiomics51-66	
8	Micro- and Nanoscale Technologies in High-Throughput Biomedical Experimentation **2009**, 314-346	
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