

# Functional and Biomimetic Materials for Engineering of Microenvironment

Chemical Reviews

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Introduction: Bioinspired and Biomimetic Materials. Chemical Reviews, 2017, 117, 12581-12583.	47.7	77
2	Engineering ellipsoidal cap-like hydrogel particles as building blocks or sacrificial templates for three-dimensional cell culture. Biomaterials Science, 2018, 6, 885-892.	5.4	9
3	Rational Fabrication of Anti-freezing, Non-drying Tough Organohydrogels by One-pot Solvent Displacement. Angewandte Chemie, 2018, 130, 6678-6681.	2.0	96
4	Rational Fabrication of Anti-freezing, Non-drying Tough Organohydrogels by One-pot Solvent Displacement. Angewandte Chemie - International Edition, 2018, 57, 6568-6571.	13.8	341
5	Recent advances in microfluidic models for cancer metastasis research. TrAC - Trends in Analytical Chemistry, 2018, 105, 1-6.	11.4	17
6	Hydrodynamics in Cell Studies. Chemical Reviews, 2018, 118, 2042-2079.	47.7	75
7	Self-crosslinking and injectable chondroitin sulfate/pullulan hydrogel for cartilage tissue engineering. Applied Materials Today, 2018, 10, 173-183.	4.3	89
8	Photosensitive peptide hydrogels as smart materials for applications. Chinese Chemical Letters, 2018, 29, 1098-1104.	9.0	27
9	Development of biocompatible fluorescent gelatin nanocarriers for cell imaging and anticancer drug targeting. Journal of Materials Science, 2018, 53, 10679-10691.	3.7	55
10	Rheological behavior of pH responsive composite hydrogels of chitosan and alginate: Characterization and its use in encapsulation of citral. Colloids and Surfaces B: Biointerfaces, 2018, 169, 99-106.	5.0	66
11	Engineering the Cell Microenvironment Using Novel Photoresponsive Hydrogels. ACS Applied Materials & Interfaces, 2018, 10, 12374-12389.	8.0	48
12	Photoresponsive fiber scaffolds with a core-sheath nanostructure for regulating cell behaviors. Journal of Materials Chemistry B, 2018, 6, 2052-2056.	5.8	9
13	High Modulus Conductive Hydrogels Enhance In Vitro Maturation and Contractile Function of Primary Cardiomyocytes for Uses in Drug Screening. Advanced Healthcare Materials, 2018, 7, e1800990.	7.6	28
14	Nanostructure Evolution of Biomimetic Hydrogel from Silk Fibroin and Poly( <i>N</i> -Vinylcaprolactam): A Small Angle Neutron Scattering Study. ACS Symposium Series, 2018, , 71-89.	0.5	0
15	Manipulating cell fate: dynamic control of cell behaviors on functional platforms. Chemical Society Reviews, 2018, 47, 8639-8684.	38.1	115
16	Adhesion Control of Branched Catecholic Polymers by Acid Stimulation. ACS Omega, 2018, 3, 16626-16632.	3.5	13
17	Near-infrared AIEgen-functionalized and diselenide-linked oligo-ethylenimine with self-sufficing ROS to exert spatiotemporal responsibility for promoted gene delivery. Journal of Materials Chemistry B, 2018, 6, 6660-6666.	5.8	14
18	Acyldiazide functionalized benzimidazole-based metallogel for the efficient detection and separation of Cr <sup>3+</sup> . Soft Matter, 2018, 14, 8390-8394.	2.7	22

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19	3D Culture of Mesenchymal Stem Cells in Alginate Hydrogels. <i>Methods in Molecular Biology</i> , 2018, 2002, 165-180.	0.9	15
20	Porous and responsive hydrogels for cell therapy. <i>Current Opinion in Colloid and Interface Science</i> , 2018, 38, 135-157.	7.4	35
21	The protective effects of acupoint gel embedding on rats with myocardial ischemia-reperfusion injury. <i>Life Sciences</i> , 2018, 211, 51-62.	4.3	14
22	Nanoscaled and microscaled parallel topography promotes tenogenic differentiation of ASC and neotendon formation in vitro. <i>International Journal of Nanomedicine</i> , 2018, Volume 13, 3867-3881.	6.7	29
23	Biodegradable and elastomeric vascular grafts enable vascular remodeling. <i>Biomaterials</i> , 2018, 183, 306-318.	11.4	84
24	The relationship between thiol-acrylate photopolymerization kinetics and hydrogel mechanics: An improved model incorporating photobleaching and thiol-Michael addition. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 88, 160-169.	3.1	16
25	Energy dissipation in quasi-linear viscoelastic tissues, cells, and extracellular matrix. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 84, 198-207.	3.1	15
26	Programmed Shape-Morphing Scaffolds Enabling Facile 3D Endothelialization. <i>Advanced Functional Materials</i> , 2018, 28, 1801027.	14.9	125
27	Tunable stiffness of graphene oxide/polyacrylamide composite scaffolds regulates cytoskeleton assembly. <i>Chemical Science</i> , 2018, 9, 6516-6522.	7.4	22
28	Electrospun three-dimensional aligned nanofibrous scaffolds for tissue engineering. <i>Materials Science and Engineering C</i> , 2018, 92, 995-1005.	7.3	91
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30	Carbon nanofiber amalgamated 3D poly- $\epsilon$ -caprolactone scaffold functionalized porous-nanoarchitectures for human meniscal tissue engineering: In vitro and in vivo biocompatibility studies. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2018, 14, 2247-2258.	3.3	18
31	Tough Magnetic Chitosan Hydrogel Nanocomposites for Remotely Stimulated Drug Release. <i>Biomacromolecules</i> , 2018, 19, 3351-3360.	5.4	87
32	Microfluidic fabrication of microparticles for biomedical applications. <i>Chemical Society Reviews</i> , 2018, 47, 5646-5683.	38.1	410
33	Softening and Shape Morphing of Stiff Tough Hydrogels by Localized Unlocking of the Trivalent Ionically Cross-Linked Centers. <i>Macromolecular Rapid Communications</i> , 2018, 39, e1800143.	3.9	38
34	Injectable Hydrogels for Cardiac Tissue Engineering. <i>Macromolecular Bioscience</i> , 2018, 18, e1800079.	4.1	172
35	Multiple Cross-Linking of a Small Peptide to Form a Size Tunable Biopolymer with Efficient Cell Adhesion and Proliferation Property. <i>Biomacromolecules</i> , 2018, 19, 3994-4002.	5.4	16
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37	Tumor Oxygenation and Hypoxia Inducible Factor-1 Functional Inhibition <i>via</i> a Reactive Oxygen Species Responsive Nanoplatfom for Enhancing Radiation Therapy and Abscopal Effects. ACS Nano, 2018, 12, 8308-8322.	14.6	213
38	Hierarchical Micro- and Nanopatterning of Metallic Glass to Engineer Cellular Responses. ACS Applied Bio Materials, 2018, 1, 51-58.	4.6	12
39	Bioceramics to regulate stem cells and their microenvironment for tissue regeneration. Materials Today, 2019, 24, 41-56.	14.2	144
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41	Engineered materials for organoid systems. Nature Reviews Materials, 2019, 4, 606-622.	48.7	251
42	Regulation of Cell Behavior by Hydrostatic Pressure. Applied Mechanics Reviews, 2019, 71, 0408031-4080313.	10.1	34
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46	Differential Effects of Directional Cyclic Stretching on the Functionalities of Engineered Cardiac Tissues. ACS Applied Bio Materials, 2019, 2, 3508-3519.	4.6	17
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50	Fabrication and characterization of a novel konjac glucomannan-based air filtration aerogels strengthened by wheat straw and okara. Carbohydrate Polymers, 2019, 224, 115129.	10.2	43
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52	Directional topography gradients drive optimum alignment and differentiation of human myoblasts. Journal of Tissue Engineering and Regenerative Medicine, 2019, 13, 2234-2245.	2.7	28
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54	Functional Nanomaterials on 2D Surfaces and in 3D Nanocomposite Hydrogels for Biomedical Applications. Advanced Functional Materials, 2019, 29, 1904344.	14.9	58

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55	Stimuli-responsive hydrogels for manipulation of cell microenvironment: From chemistry to biofabrication technology. Progress in Polymer Science, 2019, 98, 101147.	24.7	120
56	Enhancement and control of neuron adhesion on polydimethylsiloxane for cell microengineering using a functionalized triblock polymer. Lab on A Chip, 2019, 19, 3162-3167.	6.0	12
57	Entanglement-Driven Adhesion, Self-Healing, and High Stretchability of Double-Network PEG-Based Hydrogels. ACS Applied Materials & Interfaces, 2019, 11, 36458-36468.	8.0	67
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60	Strengthened cellulosic gels by the chemical gelation of cellulose via crosslinking with TEOS. Cellulose, 2019, 26, 9819-9829.	4.9	12
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65	Characterization of microcircular wounds pressurized by a hybrid chip-on-dish method for live cell adhesion and mobility testing. Analytical Methods, 2019, 11, 1159-1167.	2.7	2
66	pH-Controlled Self-Assembled Fibrillar Network Hydrogels: Evidence of Kinetic Control of the Mechanical Properties. Chemistry of Materials, 2019, 31, 4817-4830.	6.7	35
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69	Optimization of the cell microenvironment in a dual magnetic-pH-sensitive hydrogel-based scaffold by multiphysics modeling. Bioelectrochemistry, 2019, 129, 90-99.	4.6	10
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71	Tissue Engineering for Clean Meat Production. Frontiers in Sustainable Food Systems, 2019, 3, .	3.9	142
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75	Stem cells from human exfoliated deciduous teeth as an alternative cell source in bio-root regeneration. <i>Theranostics</i> , 2019, 9, 2694-2711.	10.0	73
76	Photosensitive Hydrogel Creates Favorable Biologic Niches to Promote Spinal Cord Injury Repair. <i>Advanced Healthcare Materials</i> , 2019, 8, e1900013.	7.6	52
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78	Imaging oxygen microenvironment in hydrogel microwell array. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2019, 35, 321-328.	3.4	5
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80	Stimuli-Responsive Self-Assembly Based on Macrocyclic Hosts and Biomedical Applications. , 2019, , 1-44.		0
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82	Functionalized DNA Hydrogels Produced by Polymerase-Catalyzed Incorporation of Non-Natural Nucleotides as a Surface Coating for Cell Culture Applications. <i>Advanced Healthcare Materials</i> , 2019, 8, e1900080.	7.6	24
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86	Mouse <i>in vitro</i> spermatogenesis on alginate-based 3D bioprinted scaffolds. <i>Biofabrication</i> , 2019, 11, 035011.	7.1	48
87	Fabrication of three-dimensional islet models by the geometry-controlled hanging-drop method. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2019, 35, 329-337.	3.4	20
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90	A preliminary study of the local biomechanical environment of liver tumors in vivo. <i>Medical Physics</i> , 2019, 46, 1728-1739.	3.0	4
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99	Engineering hiPSC cardiomyocyte in vitro model systems for functional and structural assessment. Progress in Biophysics and Molecular Biology, 2019, 144, 3-15.	2.9	19
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127	Biomimetic Networks with Enhanced Photodynamic Antimicrobial Activity from Conjugated Polythiophene/Polyisocyanide Hybrid Hydrogels. Angewandte Chemie, 2020, 132, 2742-2746.	2.0	4
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135	Supramolecular Nanofibers for Encapsulation and In Situ Differentiation of Neural Stem Cells. <i>Advanced Healthcare Materials</i> , 2020, 9, e1901295.	7.6	12
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