

# Hyunjoon Kong

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

137 papers	3,482 citations	33 h-index	53 g-index
148 ext. papers	4,181 ext. citations	9.3 avg, IF	5.48 L-index

#	Paper	IF	Citations
137	Transcriptomic and physiological analysis of endocrine disrupting chemicals Impacts on 3D Zebrafish liver cell culture system.. <i>Aquatic Toxicology</i> , <b>2022</b> , 245, 106105	5.1	1
136	Self-locomotive, antimicrobial microrobot (SLAM) swarm for enhanced biofilm elimination. <i>Biomaterials</i> , <b>2022</b> , 121610	15.6	0
135	Effects of mechanical properties of gelatin methacryloyl hydrogels on encapsulated stem cell spheroids for 3D tissue engineering. <i>International Journal of Biological Macromolecules</i> , <b>2021</b> , 194, 903-909	7.9	0
134	Shear-Resistant, Biological Tethering of Nanostimulators for Enhanced Therapeutic Cell Paracrine Factor Secretion. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 17276-17288	9.5	0
133	Hyperelastic model for polyacrylamide-gelatin double network shape-memory hydrogels. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2021</b> , 37, 748-756	2	1
132	Fabrication of cell penetrating peptide-conjugated bacterial cellulose nanofibrils with remarkable skin adhesion and water retention performance. <i>International Journal of Pharmaceutics</i> , <b>2021</b> , 600, 120476	6.5	4
131	The Cholesterol Metabolite 27HC Increases Secretion of Extracellular Vesicles Which Promote Breast Cancer Progression. <i>Endocrinology</i> , <b>2021</b> , 162,	4.8	5
130	Histatin-1 is an endogenous ligand of the sigma-2 receptor. <i>FEBS Journal</i> , <b>2021</b> , 288, 6815-6827	5.7	1
129	3D Printing of Biocompatible Shape-Memory Double Network Hydrogels. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 12726-12734	9.5	8
128	Surface tethering of stromal cell-derived factor-1 carriers to stem cells enhances cell homing to ischemic muscle. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2020</b> , 28, 102215	6	2
127	Comparative effects of N-cadherin protein and peptide fragments on mesenchymal stem cell mechanotransduction and paracrine function. <i>Biomaterials</i> , <b>2020</b> , 239, 119846	15.6	10
126	Transparent and Flexible Electronics Assembled with Metallic Nanowire-Layered Nondrying Glycerogel. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 13040-13050	9.5	10
125	The biofilm removal effect of MnO <sub>2</sub> -diatom microbubbler from the dental prosthetic surfaces: In vitro study. <i>The Journal of Korean Academy of Prosthodontics</i> , <b>2020</b> , 58, 14	0.2	0
124	Surface Tethering of Inflammation-Modulatory Nanostimulators to Stem Cells for Ischemic Muscle Repair. <i>ACS Nano</i> , <b>2020</b> , 14, 5298-5313	16.7	8
123	Matrix Softness-Mediated 3D Zebrafish Hepatocyte Modulates Response to Endocrine Disrupting Chemicals. <i>Environmental Science &amp; Technology</i> , <b>2020</b> , 54, 13797-13806	10.3	3
122	Catalytic microgelators for decoupled control of gelation rate and rigidity of the biological gels. <i>Journal of Controlled Release</i> , <b>2020</b> , 317, 166-180	11.7	2
121	Enhanced Condensation on Liquid-Infused Nanoporous Surfaces by Vibration-Assisted Droplet Sweeping. <i>ACS Nano</i> , <b>2020</b> , 14, 13367-13379	16.7	15

120	Electrothermal soft manipulator enabling safe transport and handling of thin cell/tissue sheets and bioelectronic devices. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	11
119	A Photoresponsive Hydrogel with Enhanced Photoefficiency and the Decoupled Process of Light Activation and Shape Changing for Precise Geometric Control. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 38647-38654	9.5	8
118	Preoperative vascular surgery model using a single polymer tough hydrogel with controllable elastic moduli. <i>Soft Matter</i> , <b>2020</b> , 16, 8057-8068	3.6	2
117	Phase imaging with computational specificity (PICS) for measuring dry mass changes in sub-cellular compartments. <i>Nature Communications</i> , <b>2020</b> , 11, 6256	17.4	33
116	Strain shifts under stress-controlled oscillatory shearing in theoretical, experimental, and structural perspectives: Application to probing zero-shear viscosity. <i>Journal of Rheology</i> , <b>2019</b> , 63, 863-881	4.1	10
115	Vibration at structural resonance frequency of hydrophilic substrates enhances biofilm removal. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 299, 126950	8.5	3
114	Reactive oxygen species-responsive drug delivery systems for the treatment of neurodegenerative diseases. <i>Biomaterials</i> , <b>2019</b> , 217, 119292	15.6	50
113	Antioxidants: Stimulus-Responsive Anti-Oxidizing Drug Crystals and their Ecological Implication (Small 21/2019). <i>Small</i> , <b>2019</b> , 15, 1970112	11	
112	Neuron-Muscle Interfaces: Matrix Topography Regulates Synaptic Transmission at the Neuromuscular Junction (Adv. Sci. 6/2019). <i>Advanced Science</i> , <b>2019</b> , 6, 1970032	13.6	78
111	Pericyte transplantation improves skeletal muscle recovery following hindlimb immobilization. <i>FASEB Journal</i> , <b>2019</b> , 33, 7694-7706	0.9	12
110	Matrix Topography Regulates Synaptic Transmission at the Neuromuscular Junction. <i>Advanced Science</i> , <b>2019</b> , 6, 1801521	13.6	15
109	Graphene oxide substrates with N-cadherin stimulates neuronal growth and intracellular transport. <i>Acta Biomaterialia</i> , <b>2019</b> , 90, 412-423	10.8	7
108	Stimulus-Responsive Anti-Oxidizing Drug Crystals and their Ecological Implication. <i>Small</i> , <b>2019</b> , 15, e19001765	11.65	6
107	Epi-illumination gradient light interference microscopy for imaging opaque structures. <i>Nature Communications</i> , <b>2019</b> , 10, 4691	17.4	30
106	Surface tethering of stem cells with HO-responsive anti-oxidizing colloidal particles for protection against oxidation-induced death. <i>Biomaterials</i> , <b>2019</b> , 201, 1-15	15.6	16
105	Biohybrid valveless pump-bot powered by engineered skeletal muscle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 1543-1548	11.5	38
104	Simulation and Fabrication of Stronger, Larger, and Faster Walking Biohybrid Machines. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1801145	15.6	36
103	Stretchable, anti-bacterial hydrogel activated by large mechanical deformation. <i>Journal of Controlled Release</i> , <b>2018</b> , 275, 1-11	11.7	12

102	Engineering the Surface of Therapeutic "Living" Cells. <i>Chemical Reviews</i> , <b>2018</b> , 118, 1664-1690	68.1	56
101	Engineering Polymersomes for Diagnostics and Therapy. <i>Advanced Healthcare Materials</i> , <b>2018</b> , 7, e1701276	17.6	67
100	A new design of dielectric elastomer membrane resonator with tunable resonant frequencies and mode shapes. <i>Smart Materials and Structures</i> , <b>2018</b> , 27, 065029	3.4	12
99	Potential lymphangiogenesis therapies: Learning from current antiangiogenesis therapies-A review. <i>Medicinal Research Reviews</i> , <b>2018</b> , 38, 1769-1798	14.4	31
98	Disease-directed design of biodegradable polymers: Reactive oxygen species and pH-responsive micellar nanoparticles for anticancer drug delivery. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2018</b> , 14, 2666-2677	6	21
97	Diatom Microbubbler for Active Biofilm Removal in Confined Spaces. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 35685-35692	9.5	9
96	Biomimetics: Simulation and Fabrication of Stronger, Larger, and Faster Walking Biohybrid Machines (Adv. Funct. Mater. 23/2018). <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1870159	15.6	1
95	Decellularized Matrix Produced by Mesenchymal Stem Cells Modulates Growth and Metabolic Activity of Hepatic Cell Cluster. <i>ACS Biomaterials Science and Engineering</i> , <b>2018</b> , 4, 456-462	5.5	3
94	Spatial Organization of Superparamagnetic Iron Oxide Nanoparticles in/on Nano/Microsized Carriers Modulates the Magnetic Resonance Signal. <i>Langmuir</i> , <b>2018</b> , 34, 15276-15282	4	5
93	Pore Diameter of Mesoporous Silica Modulates Oxidation of HO-Sensing Chromophore in a Porous Matrix. <i>Langmuir</i> , <b>2018</b> , 34, 11242-11252	4	3
92	3D Printed Stem-Cell-Laden, Microchanneled Hydrogel Patch for the Enhanced Release of Cell-Secreting Factors and Treatment of Myocardial Infarctions. <i>ACS Biomaterials Science and Engineering</i> , <b>2017</b> , 3, 1980-1987	5.5	29
91	Self-Assembled, Biodegradable Magnetic Resonance Imaging Agents: Organic Radical-Functionalized Diblock Copolymers. <i>ACS Macro Letters</i> , <b>2017</b> , 6, 176-180	6.6	29
90	Chemical and mechanical modulation of polymeric micelle assembly. <i>Nanoscale</i> , <b>2017</b> , 9, 5194-5204	7.7	9
89	Balanced Effects of Surface Reactivity and Self-Association of Bifunctional Polyaspartamide on Stem Cell Adhesion. <i>ACS Omega</i> , <b>2017</b> , 2, 1333-1339	3.9	0
88	Damage, Healing, and Remodeling in Optogenetic Skeletal Muscle Bioactuators. <i>Advanced Healthcare Materials</i> , <b>2017</b> , 6, 1700030	10.1	38
87	In Vivo Assessment of Engineered Skin Cell Delivery with Multimodal Optical Microscopy. <i>Tissue Engineering - Part C: Methods</i> , <b>2017</b> , 23, 434-442	2.9	2
86	A 3D-printed platform for modular neuromuscular motor units. <i>Microsystems and Nanoengineering</i> , <b>2017</b> , 3, 17015	7.7	43
85	Investigating the Life Expectancy and Proteolytic Degradation of Engineered Skeletal Muscle Biological Machines. <i>Scientific Reports</i> , <b>2017</b> , 7, 3775	4.9	17

84	Worm-Like Superparamagnetic Nanoparticle Clusters for Enhanced Adhesion and Magnetic Resonance Relaxivity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 1219-1225	9.5	13
83	Active Antioxidizing Particles for On-Demand Pressure-Driven Molecular Release. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 35642-35650	9.5	12
82	Proangiogenic alginate-g-pyrrole hydrogel with decoupled control of mechanical rigidity and electrically conductivity. <i>Biomaterials Research</i> , <b>2017</b> , 21, 24	16.8	7
81	Effects of fluoride-modified titanium surfaces with the similar roughness on RUNX2 gene expression of osteoblast-like MG63 cells. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2017</b> , 105, 3102-3109	5.4	3
80	Enzyme-Induced Matrix Softening Regulates Hepatocarcinoma Cancer Cell Phenotypes. <i>Macromolecular Bioscience</i> , <b>2017</b> , 17, 1700117	5.5	7
79	Poly(ethylene glycol)-Mediated Collagen Gel Mechanics Regulates Cellular Phenotypes in a Microchanneled Matrix. <i>Biomacromolecules</i> , <b>2017</b> , 18, 2315-2323	6.9	2
78	3D printing enables separation of orthogonal functions within a hydrogel particle. <i>Biomedical Microdevices</i> , <b>2016</b> , 18, 49	3.7	12
77	Alginate Sulfates Mitigate Binding Kinetics of Proangiogenic Growth Factors with Receptors toward Revascularization. <i>Molecular Pharmaceutics</i> , <b>2016</b> , 13, 2148-54	5.6	4
76	Rupture force of cell adhesion ligand tethers modulates biological activities of a cell-laden hydrogel. <i>Chemical Communications</i> , <b>2016</b> , 52, 4757-60	5.8	5
75	Top-down synthesis of polyaspartamide morphogens to derive platinum nanoclusters. <i>Materials Letters</i> , <b>2016</b> , 168, 184-187	3.3	1
74	High-Resolution Projection Microstereolithography for Patterning of Neovasculature. <i>Advanced Healthcare Materials</i> , <b>2016</b> , 5, 610-9	10.1	87
73	Three Dimensional Conjugation of Recombinant N-Cadherin to a Hydrogel for Anisotropic Neural Growth. <i>Journal of Materials Chemistry B</i> , <b>2016</b> , 4, 6803-6811	7.3	26
72	Modulation of Matrix Softness and Interstitial Flow for 3D Cell Culture Using a Cell-Microenvironment-on-a-Chip System. <i>ACS Biomaterials Science and Engineering</i> , <b>2016</b> , 2, 1968-1975	5.5	11
71	Bioprinting: High-Resolution Projection Microstereolithography for Patterning of Neovasculature (Adv. Healthcare Mater. 5/2016). <i>Advanced Healthcare Materials</i> , <b>2016</b> , 5, 622-622	10.1	1
70	Bacteria-mimicking nanoparticle surface functionalization with targeting motifs. <i>Nanoscale</i> , <b>2015</b> , 7, 6737-44	7.7	11
69	Hydrophilic packaging of iron oxide nanoclusters for highly sensitive imaging. <i>Biomaterials</i> , <b>2015</b> , 69, 184-90	15.6	24
68	Functionalized ultrathin palladium nanosheets as patches for HepG2 cancer cells. <i>Chemical Communications</i> , <b>2015</b> , 51, 14171-14174	5.8	17
67	Matrix stiffness-modulated proliferation and secretory function of the airway smooth muscle cells. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , <b>2015</b> , 308, L1125-35	5.8	49

66	Poly(ethylene glycol)-poly(lactic-co-glycolic acid) core-shell microspheres with enhanced controllability of drug encapsulation and release rate. <i>Journal of Biomaterials Science, Polymer Edition</i> , <b>2015</b> , 26, 828-40	3.5	5
65	In situ assembly of antifouling/bacterial silver nanoparticle-hydrogel composites with controlled particle release and matrix softening. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 15359-67	9.5	38
64	Water-Hydrogel Binding Affinity Modulates Freeze-Drying-Induced Micropore Architecture and Skeletal Myotube Formation. <i>Biomacromolecules</i> , <b>2015</b> , 16, 2255-64	6.9	16
63	A bio-inspired, microchanneled hydrogel with controlled spacing of cell adhesion ligands regulates 3D spatial organization of cells and tissue. <i>Biomaterials</i> , <b>2015</b> , 58, 26-34	15.6	47
62	van der Waals force-induced loading of proangiogenic nanoparticles on microbubbles for enhanced neovascularization. <i>Nanoscale</i> , <b>2015</b> , 7, 17139-47	7.7	6
61	Glacier moraine formation-mimicking colloidal particle assembly in microchanneled, bioactive hydrogel for guided vascular network construction. <i>Advanced Healthcare Materials</i> , <b>2015</b> , 4, 195-201	10.1	13
60	Non-Spherical Particles for Targeted Drug Delivery. <i>Chemical Engineering Science</i> , <b>2015</b> , 125, 20-24	4.4	62
59	In situ assembly of the collagen-polyacrylamide interpenetrating network hydrogel: Enabling decoupled control of stiffness and degree of swelling. <i>European Polymer Journal</i> , <b>2015</b> , 72, 413-422	5.2	13
58	Bioinspired tuning of hydrogel permeability-rigidity dependency for 3D cell culture. <i>Scientific Reports</i> , <b>2015</b> , 5, 8948	4.9	27
57	Material-mediated proangiogenic factor release pattern modulates quality of regenerated blood vessels. <i>Journal of Controlled Release</i> , <b>2014</b> , 196, 363-9	11.7	11
56	Cross-linkable liposomes stabilize a magnetic resonance contrast-enhancing polymeric fastener. <i>Langmuir</i> , <b>2014</b> , 30, 3697-704	4	11
55	Recapitulating cell-cell adhesion using N-cadherin biologically tethered to substrates. <i>Biomacromolecules</i> , <b>2014</b> , 15, 2172-9	6.9	14
54	Effects of polymer architecture and charge density on the pH-responsive Ca(II) release from brushite. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2014</b> , 459, 74-81	5.1	7
53	Tailoring polymersome bilayer permeability improves enhanced permeability and retention effect for bioimaging. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 10821-9	9.5	32
52	Materials for biological modulation, sensing, and imaging. <i>MRS Bulletin</i> , <b>2014</b> , 39, 12-14	3.2	
51	Matrix rigidity-modulated cardiovascular organoid formation from embryoid bodies. <i>PLoS ONE</i> , <b>2014</b> , 9, e94764	3.7	40
50	The role of Ix-1 in the pathogenesis of venous neointimal hyperplasia associated with hemodialysis arteriovenous fistula. <i>PLoS ONE</i> , <b>2014</b> , 9, e102542	3.7	20
49	Flow-mediated stem cell labeling with superparamagnetic iron oxide nanoparticle clusters. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 10266-73	9.5	7

48	Hydrogels: In Situ Self-Folding Assembly of a Multi-Walled Hydrogel Tube for Uniaxial Sustained Molecular Release (Adv. Mater. 39/2013). <i>Advanced Materials</i> , <b>2013</b> , 25, 5522-5522	24	
47	Enzymatically cross-linked injectable alginate-g-pyrrole hydrogels for neovascularization. <i>Journal of Controlled Release</i> , <b>2013</b> , 172, 30-37	11.7	31
46	A polymeric fastener can easily functionalize liposome surfaces with gadolinium for enhanced magnetic resonance imaging. <i>ACS Nano</i> , <b>2013</b> , 7, 9599-610	16.7	40
45	The spatiotemporal control of erosion and molecular release from micropatterned poly(ethylene glycol)-based hydrogel. <i>Biomaterials</i> , <b>2013</b> , 34, 8416-23	15.6	22
44	Biomaterials for Cell-Based Therapeutic Angiogenesis. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , <b>2013</b> , 247-259	0.5	
43	Tailoring hydrogel adhesion to polydimethylsiloxane substrates using polysaccharide glue. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 6949-52	16.4	49
42	A liposome-based ion release impedance sensor for biological detection. <i>Biomedical Microdevices</i> , <b>2013</b> , 15, 895-905	3.7	22
41	Tailoring the dependency between rigidity and water uptake of a microfabricated hydrogel with the conformational rigidity of a polymer cross-linker. <i>Biomacromolecules</i> , <b>2013</b> , 14, 1361-9	6.9	13
40	Leukocyte-mimicking stem cell delivery via in situ coating of cells with a bioactive hyperbranched polyglycerol. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 8770-3	16.4	61
39	Generation of Cell-Instructive Collagen Gels through Thermodynamic Control. <i>ACS Macro Letters</i> , <b>2013</b> , 2, 1077-1081	6.6	7
38	Stiffness-modulated water retention and neovascularization of dermal fibroblast-encapsulating collagen gel. <i>Tissue Engineering - Part A</i> , <b>2013</b> , 19, 1275-84	3.9	12
37	In situ self-folding assembly of a multi-walled hydrogel tube for uniaxial sustained molecular release. <i>Advanced Materials</i> , <b>2013</b> , 25, 5568-73	24	46
36	Simvastatin reduces venous stenosis formation in a murine hemodialysis vascular access model. <i>Kidney International</i> , <b>2013</b> , 84, 338-52	9.9	51
35	Tailoring Hydrogel Adhesion to Polydimethylsiloxane Substrates Using Polysaccharide Glue. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 7087-7090	3.6	5
34	"Living" microvascular stamp for patterning of functional neovessels; orchestrated control of matrix property and geometry. <i>Advanced Materials</i> , <b>2012</b> , 24, 58-63, 1	24	57
33	Tuning structural durability of yeast-encapsulating alginate gel beads with interpenetrating networks for sustained bioethanol production. <i>Biotechnology and Bioengineering</i> , <b>2012</b> , 109, 63-73	4.9	19
32	Development of miniaturized walking biological machines. <i>Scientific Reports</i> , <b>2012</b> , 2, 857	4.9	147
31	Multi-material bio-fabrication of hydrogel cantilevers and actuators with stereolithography. <i>Lab on A Chip</i> , <b>2012</b> , 12, 88-98	7.2	125



30	Polyaspartamide Vesicle induced by Metallic Nanoparticles. <i>Soft Matter</i> , <b>2012</b> , 2012, 2237-2242	3.6	9
29	Fabrication of microgel-in-liposome particles with improved water retention. <i>Langmuir</i> , <b>2012</b> , 28, 4095-101	10.1	9
28	Interplay of cell adhesion matrix stiffness and cell type for non-viral gene delivery. <i>Acta Biomaterialia</i> , <b>2012</b> , 8, 2612-9	10.8	17
27	Hydrogel Microstructures: Characterization of Mass and Swelling of Hydrogel Microstructures using MEMS Resonant Mass Sensor Arrays (Small 16/2012). <i>Small</i> , <b>2012</b> , 8, 2450-2450	11	1
26	Microfabrication of proangiogenic cell-laden alginate-g-pyrrole hydrogels. <i>Biomaterials</i> , <b>2012</b> , 33, 7718-25	15.6	12
25	Protein adhesion regulated by the nanoscale surface conformation. <i>Soft Matter</i> , <b>2012</b> , 8, 11801	3.6	10
24	Hydrogels for in vivo-like three-dimensional cellular studies. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , <b>2012</b> , 4, 351-65	6.6	72
23	Characterization of mass and swelling of hydrogel microstructures using MEMS resonant mass sensor arrays. <i>Small</i> , <b>2012</b> , 8, 2555-62	11	17
22	Ellipsoidal Polyaspartamide Polymersomes with Enhanced Cell-Targeting Ability. <i>Advanced Functional Materials</i> , <b>2012</b> , 22, 3239-3246	15.6	30
21	Directed cell growth and alignment on protein-patterned 3D hydrogels with stereolithography. <i>Virtual and Physical Prototyping</i> , <b>2012</b> , 7, 219-228	10.1	26
20	3-D biofabrication using stereolithography for biology and medicine. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , <b>2012</b> , 2012, 6805-8	0.9	9
19	Modulating the rigidity and mineralization of collagen gels using poly(lactic-co-glycolic acid) microparticles. <i>Tissue Engineering - Part A</i> , <b>2012</b> , 18, 1642-51	3.9	21
18	The interplay between cell adhesion cues and curvature of cell adherent alginate microgels in multipotent stem cell culture. <i>Tissue Engineering - Part A</i> , <b>2011</b> , 17, 2687-94	3.9	21
17	A cell-instructive hydrogel to regulate malignancy of 3D tumor spheroids with matrix rigidity. <i>Biomaterials</i> , <b>2011</b> , 32, 9308-15	15.6	117
16	Tuning the dependency between stiffness and permeability of a cell encapsulating hydrogel with hydrophilic pendant chains. <i>Acta Biomaterialia</i> , <b>2011</b> , 7, 3719-28	10.8	44
15	Integrative design of a poly(ethylene glycol)-poly(propylene glycol)-alginate hydrogel to control three dimensional biomineralization. <i>Biomaterials</i> , <b>2011</b> , 32, 2695-703	15.6	47
14	Stereolithography-Based Hydrogel Microenvironments to Examine Cellular Interactions. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 3642-3651	15.6	95
13	Directed blood vessel growth using an angiogenic microfiber/microparticle composite patch. <i>Advanced Materials</i> , <b>2011</b> , 23, 3139-43	24	33



12	Clickable polyglycerol hyperbranched polymers and their application to gold nanoparticles and acid-labile nanocarriers. <i>Chemical Communications</i> , <b>2011</b> , 47, 1279-81	5.8	46
11	Top-down synthesis of versatile polyaspartamide linkers for single-step protein conjugation to materials. <i>Bioconjugate Chemistry</i> , <b>2011</b> , 22, 2377-82	6.3	14
10	Tuning the non-equilibrium state of a drug-encapsulated poly(ethylene glycol) hydrogel for stem and progenitor cell mobilization. <i>Biomaterials</i> , <b>2011</b> , 32, 2004-12	15.6	21
9	Biomaterials for Studies in Cellular Mechanotransduction <b>2011</b> , 267-277		1
8	Tuning hydrogel properties and function using substituent effects. <i>Soft Matter</i> , <b>2010</b> , 6, 2150-2152	3.6	11
7	Three-dimensional photopatterning of hydrogels using stereolithography for long-term cell encapsulation. <i>Lab on A Chip</i> , <b>2010</b> , 10, 2062-70	7.2	347
6	Tuning responsiveness and structural integrity of a pH responsive hydrogel using a poly(ethylene glycol) cross-linker. <i>Soft Matter</i> , <b>2010</b> , 6, 3930	3.6	30
5	Polycation structure mediates expression of lyophilized polycation/pDNA complexes. <i>Macromolecular Bioscience</i> , <b>2010</b> , 10, 1210-5	5.5	6
4	Decoupled control of stiffness and permeability with a cell-encapsulating poly(ethylene glycol) dimethacrylate hydrogel. <i>Biomaterials</i> , <b>2010</b> , 31, 4864-71	15.6	76
3	Biodegradable Polymer Crosslinker: Independent Control of Stiffness, Toughness, and Hydrogel Degradation Rate. <i>Advanced Functional Materials</i> , <b>2009</b> , 19, 3056-3062	15.6	71
2	Sequential delivery of dexamethasone and VEGF to control local tissue response for carbon nanotube fluorescence based micro-capillary implantable sensors. <i>Biomaterials</i> , <b>2009</b> , 30, 622-31	15.6	40
1	Quantitative analysis of the cross-linked structure of microgels using fluorescent probes. <i>Polymer</i> , <b>2009</b> , 50, 5288-5292	3.9	10