

Jennifer L West

List of Publications by Year in descending order

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235
papers

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4146

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238
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238
docs citations

238
times ranked

33704
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoshell-mediated near-infrared thermal therapy of tumors under magnetic resonance guidance. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 13549-13554.	7.1	3,629
2	Photo-thermal tumor ablation in mice using near infrared-absorbing nanoparticles. Cancer Letters, 2004, 209, 171-176.	7.2	1,728
3	Immunotargeted Nanoshells for Integrated Cancer Imaging and Therapy. Nano Letters, 2005, 5, 709-711.	9.1	1,721
4	Photopolymerizable hydrogels for tissue engineering applications. Biomaterials, 2002, 23, 4307-4314.	11.4	1,463
5	Near-Infrared Resonant Nanoshells for Combined Optical Imaging and Photothermal Cancer Therapy. Nano Letters, 2007, 7, 1929-1934.	9.1	1,272
6	Nanoshell-Enabled Photonics-Based Imaging and Therapy of Cancer. Technology in Cancer Research and Treatment, 2004, 3, 33-40.	1.9	1,036
7	The Differential Cytotoxicity of Water-Soluble Fullerenes. Nano Letters, 2004, 4, 1881-1887.	9.1	985
8	Engineered Nanomaterials for Biophotonics Applications: Improving Sensing, Imaging, and Therapeutics. Annual Review of Biomedical Engineering, 2003, 5, 285-292.	12.3	838
9	Functionalization density dependence of single-walled carbon nanotubes cytotoxicity in vitro. Toxicology Letters, 2006, 161, 135-142.	0.8	810
10	A New Era for Cancer Treatment: Goldâ€Nanoparticleâ€Mediated Thermal Therapies. Small, 2011, 7, 169-183.	10.0	773
11	Correlating Nanoscale Titania Structure with Toxicity: A Cytotoxicity and Inflammatory Response Study with Human Dermal Fibroblasts and Human Lung Epithelial Cells. Toxicological Sciences, 2006, 92, 174-185.	3.1	757
12	A Whole Blood Immunoassay Using Gold Nanoshells. Analytical Chemistry, 2003, 75, 2377-2381.	6.5	664
13	Smooth muscle cell growth in photopolymerized hydrogels with cell adhesive and proteolytically degradable domains: synthetic ECM analogs for tissue engineering. Biomaterials, 2001, 22, 3045-3051.	11.4	663
14	Nano-C60 cytotoxicity is due to lipid peroxidation. Biomaterials, 2005, 26, 7587-7595.	11.4	651
15	Temperature-sensitive polymer-nanoshell composites for photothermally modulated drug delivery. Journal of Biomedical Materials Research Part B, 2000, 51, 293-298.	3.1	643
16	Gold nanoshell-localized photothermal ablation of prostate tumors in a clinical pilot device study. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18590-18596.	7.1	588
17	Polymeric Biomaterials with Degradation Sites for Proteases Involved in Cell Migration. Macromolecules, 1999, 32, 241-244.	4.8	574
18	3D Biofabrication Strategies for Tissue Engineering and Regenerative Medicine. Annual Review of Biomedical Engineering, 2014, 16, 247-276.	12.3	522

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19	Photocrosslinkable polyvinyl alcohol hydrogels that can be modified with cell adhesion peptides for use in tissue engineering. <i>Biomaterials</i> , 2002, 23, 4325-4332.	11.4	502
20	Metal Nanoshells. <i>Annals of Biomedical Engineering</i> , 2006, 34, 15-22.	2.5	487
21	Covalently immobilized gradients of bFGF on hydrogel scaffolds for directed cell migration. <i>Biomaterials</i> , 2005, 26, 3227-3234.	11.4	434
22	Three-Dimensional Biochemical and Biomechanical Patterning of Hydrogels for Guiding Cell Behavior. <i>Advanced Materials</i> , 2006, 18, 2679-2684.	21.0	424
23	Fabrication of 3D hepatic tissues by additive photopatterning of cellular hydrogels. <i>FASEB Journal</i> , 2007, 21, 790-801.	0.5	422
24	Tethered-TGF- β 2 increases extracellular matrix production of vascular smooth muscle cells. <i>Biomaterials</i> , 2001, 22, 439-444.	11.4	415
25	Controlling the surface enhanced Raman effect via the nanoshell geometry. <i>Applied Physics Letters</i> , 2003, 82, 257-259.	3.3	407
26	Photolithographic patterning of polyethylene glycol hydrogels. <i>Biomaterials</i> , 2006, 27, 2519-2524.	11.4	372
27	Three-dimensional micropatterning of bioactive hydrogels via two-photon laser scanning photolithography for guided 3D cell migration. <i>Biomaterials</i> , 2008, 29, 2962-2968.	11.4	369
28	Applications of nanotechnology to biotechnology. <i>Current Opinion in Biotechnology</i> , 2000, 11, 215-217.	6.6	328
29	Biomimetic hydrogels with pro-angiogenic properties. <i>Biomaterials</i> , 2010, 31, 3840-3847.	11.4	324
30	Gold nanoshell bioconjugates for molecular imaging in living cells. <i>Optics Letters</i> , 2005, 30, 1012.	3.3	308
31	Independent Optical Control of Microfluidic Valves Formed from Optomechanically Responsive Nanocomposite Hydrogels. <i>Advanced Materials</i> , 2005, 17, 1366-1368.	21.0	297
32	Cell adhesion peptides alter smooth muscle cell adhesion, proliferation, migration, and matrix protein synthesis on modified surfaces and in polymer scaffolds. <i>Journal of Biomedical Materials Research Part B</i> , 2002, 60, 86-93.	3.1	287
33	Synthetic Materials in the Study of Cell Response to Substrate Rigidity. <i>Annals of Biomedical Engineering</i> , 2010, 38, 2-20.	2.5	268
34	Immunonanoshells for targeted photothermal ablation of tumor cells. <i>International Journal of Nanomedicine</i> , 2006, 1, 149-154.	6.7	246
35	PEGDA hydrogels with patterned elasticity: Novel tools for the study of cell response to substrate rigidity. <i>Biotechnology and Bioengineering</i> , 2010, 105, 636-644.	3.3	243
36	Cell migration through defined, synthetic extracellular matrix analogues. <i>FASEB Journal</i> , 2002, 16, 751-753.	0.5	232

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37	Nanoparticles for Thermal Cancer Therapy. Journal of Biomechanical Engineering, 2009, 131, 074001.	1.3	229
38	Modification of surfaces with cell adhesion peptides alters extracellular matrix deposition. Biomaterials, 1999, 20, 2281-2286.	11.4	216
39	Temperature-sensitive hydrogels with SiO ₂ @Au nanoshells for controlled drug delivery. Journal of Controlled Release, 2007, 123, 219-227.	9.9	216
40	Photopolymerized hydrogel materials for drug delivery applications. Reactive & Functional Polymers, 1995, 25, 139-147.	0.8	213
41	Vascularization of Engineered Tissues: Approaches to Promote Angiogenesis in Biomaterials. Current Topics in Medicinal Chemistry, 2008, 8, 300-310.	2.1	213
42	Protease-activated quantum dot probes. Biochemical and Biophysical Research Communications, 2005, 334, 1317-1321.	2.1	209
43	Inhibition of thrombosis and intimal thickening by in situ photopolymerization of thin hydrogel barriers.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 5967-5971.	7.1	207
44	Multilayer microfluidic PEGDA hydrogels. Biomaterials, 2010, 31, 5491-5497.	11.4	204
45	Visible light photoinitiation of mesenchymal stem cell-laden bioresponsive hydrogels. , 2011, 22, 43-55.		182
46	Effects of nitric oxide releasing poly(vinyl alcohol) hydrogel dressings on dermal wound healing in diabetic mice. Wound Repair and Regeneration, 2002, 10, 286-294.	3.0	175
47	Three-dimensional Biomimetic Patterning in Hydrogels to Guide Cellular Organization. Advanced Materials, 2012, 24, 2344-2348.	21.0	169
48	Immunonanoshells for targeted photothermal ablation in medulloblastoma and glioma: an in vitro evaluation using human cell lines. Journal of Neuro-Oncology, 2008, 86, 165-172.	2.9	167
49	Micropatterning of Poly(Ethylene Glycol) Diacrylate Hydrogels with Biomolecules to Regulate and Guide Endothelial Morphogenesis. Tissue Engineering - Part A, 2009, 15, 579-585.	3.1	163
50	Nitric oxide-generating polymers reduce platelet adhesion and smooth muscle cell proliferation. Biomaterials, 2000, 21, 2273-2278.	11.4	162
51	Application of INAA to the build-up and clearance of gold nanoshells in clinical studies in mice. Journal of Radioanalytical and Nuclear Chemistry, 2007, 271, 455-459.	1.5	162
52	Near infrared laser-tissue welding using nanoshells as an exogenous absorber. Lasers in Surgery and Medicine, 2005, 37, 123-129.	2.1	159
53	Physiologic Pulsatile Flow Bioreactor Conditioning of Poly(ethylene glycol)-based Tissue Engineered Vascular Grafts. Annals of Biomedical Engineering, 2007, 35, 190-200.	2.5	159
54	Covalently immobilized platelet-derived growth factor-BB promotes angiogenesis in biomimetic poly(ethylene glycol) hydrogels. Acta Biomaterialia, 2011, 7, 133-143.	8.3	159

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55	Covalent immobilization of RGDS on hydrogel surfaces to direct cell alignment and migration. Journal of Controlled Release, 2005, 109, 139-148.	9.9	158
56	A Synthetic Matrix with Independently Tunable Biochemistry and Mechanical Properties to Study Epithelial Morphogenesis and EMT in a Lung Adenocarcinoma Model. Cancer Research, 2012, 72, 6013-6023.	0.9	155
57	The promotion of microvasculature formation in poly(ethylene glycol) diacrylate hydrogels by an immobilized VEGF-mimetic peptide. Biomaterials, 2011, 32, 5782-5789.	11.4	151
58	Covalently-Immobilized Vascular Endothelial Growth Factor Promotes Endothelial Cell Tubulogenesis in Poly(ethylene glycol) Diacrylate Hydrogels. Journal of Biomaterials Science, Polymer Edition, 2009, 20, 1763-1779.	3.5	150
59	Cancer-Associated Fibroblasts Induce a Collagen Cross-link Switch in Tumor Stroma. Molecular Cancer Research, 2016, 14, 287-295.	3.4	150
60	Poly(ethylene glycol) Hydrogel System Supports Preadipocyte Viability, Adhesion, and Proliferation. Tissue Engineering, 2005, 11, 1498-1505.	4.6	145
61	Thermo-responsive systems for controlled drug delivery. Expert Opinion on Drug Delivery, 2008, 5, 1077-1091.	5.0	143
62	Enhancing mechanical properties of tissue-engineered constructs via lysyl oxidase crosslinking activity. Journal of Biomedical Materials Research Part B, 2003, 66A, 513-521.	3.1	140
63	Design and Characterization of Poly(Ethylene Glycol) Photopolymerizable Semi-Interpenetrating Networks for Chondrogenesis of Human Mesenchymal Stem Cells. Tissue Engineering, 2007, 13, 2549-2560.	4.6	136
64	Flexural characterization of cell encapsulated PEGDA hydrogels with applications for tissue engineered heart valves. Acta Biomaterialia, 2011, 7, 2467-2476.	8.3	131
65	Near-Infrared-Resonant Gold/Gold Sulfide Nanoparticles as a Photothermal Cancer Therapeutic Agent. Small, 2010, 6, 745-752.	10.0	130
66	Nanoshell-mediated photothermal therapy improves survival in a murine glioma model. Journal of Neuro-Oncology, 2011, 104, 55-63.	2.9	127
67	Antibody-conjugated gold-gold sulfide nanoparticles as multifunctional agents for imaging and therapy of breast cancer. International Journal of Nanomedicine, 2010, 5, 445.	6.7	122
68	In vivo small animal micro-CT using nanoparticle contrast agents. Frontiers in Pharmacology, 2015, 6, 256.	3.5	122
69	Separation of the arterial wall from blood contact using hydrogel barriers reduces intimal thickening after balloon injury in the rat: The roles of medial and luminal factors in arterial healing. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 13188-13193.	7.1	118
70	Nitric oxide-releasing polyurethane-PEG copolymer containing the YIGSR peptide promotes endothelialization with decreased platelet adhesion. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 84B, 108-116.	3.4	117
71	Optically tunable nanoparticle contrast agents for early cancer detection: model-based analysis of gold nanoshells. Journal of Biomedical Optics, 2005, 10, 064035.	2.6	112
72	Independent optically addressable nanoparticle-polymer optomechanical composites. Applied Physics Letters, 2002, 80, 4609-4611.	3.3	111

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73	A bioresponsive hydrogel tuned to chondrogenesis of human mesenchymal stem cells. FASEB Journal, 2011, 25, 1486-1496.	0.5	110
74	Nitric Oxide-Producing Polyurethanes. Biomacromolecules, 2005, 6, 838-844.	5.4	108
75	Immobilization of Cell-Adhesive Laminin Peptides in Degradable PEGDA Hydrogels Influences Endothelial Cell Tubulogenesis. BioResearch Open Access, 2013, 2, 241-249.	2.6	105
76	Fabrication of 3D Biomimetic Microfluidic Networks in Hydrogels. Advanced Healthcare Materials, 2016, 5, 2153-2160.	7.6	101
77	Tissue engineered small-diameter vascular grafts. Clinics in Plastic Surgery, 2003, 30, 507-517.	1.5	99
78	Poly(ethylene glycol) hydrogels conjugated with a collagenase-sensitive fluorogenic substrate to visualize collagenase activity during three-dimensional cell migration. Biomaterials, 2007, 28, 3163-3170.	11.4	98
79	Local Release of Fibrinolytic Agents for Adhesion Prevention. Journal of Surgical Research, 1995, 59, 759-763.	1.6	96
80	Integrating valve-inspired design features into poly(ethylene glycol) hydrogel scaffolds for heart valve tissue engineering. Acta Biomaterialia, 2015, 14, 11-21.	8.3	95
81	Synthetic Biomimetic Hydrogels Incorporated with Ephrin-A1 for Therapeutic Angiogenesis. Biomacromolecules, 2007, 8, 42-49.	5.4	94
82	Three-dimensional photolithographic patterning of multiple bioactive ligands in poly(ethylene glycol) hydrogels. Soft Matter, 2010, 6, 5056.	2.7	94
83	Val-ala-pro-gly, an elastin-derived non-integrin ligand: Smooth muscle cell adhesion and specificity. Journal of Biomedical Materials Research Part B, 2003, 67A, 255-259.	3.1	93
84	The stabilization and targeting of surfactant-synthesized gold nanorods. Nanotechnology, 2009, 20, 434005.	2.6	92
85	Development and optimization of a dual-photoinitiator, emulsion-based technique for rapid generation of cell-laden hydrogel microspheres. Acta Biomaterialia, 2011, 7, 3267-3276.	8.3	92
86	Micron-Scale Spatially Patterned, Covalently Immobilized Vascular Endothelial Growth Factor on Hydrogels Accelerates Endothelial Tubulogenesis and Increases Cellular Angiogenic Responses. Tissue Engineering - Part A, 2011, 17, 221-229.	3.1	91
87	An opto-mechanical nanoshell-polymer composite. Applied Physics B: Lasers and Optics, 2001, 73, 379-381.	2.2	90
88	Effects of Epidermal Growth Factor on Fibroblast Migration through Biomimetic Hydrogels. Biotechnology Progress, 2003, 19, 1781-1785.	2.6	90
89	Modification of polyurethaneurea with PEG and YIGSR peptide to enhance endothelialization without platelet adhesion. Journal of Biomedical Materials Research Part B, 2005, 72B, 131-139.	3.1	90
90	Gadolinium-€Conjugated Gold Nanoshells for Multimodal Diagnostic Imaging and Photothermal Cancer Therapy. Small, 2014, 10, 556-565.	10.0	90

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91	Anisotropic Poly(Ethylene Glycol)/Polycaprolactone Hydrogelâ€Fiber Composites for Heart Valve Tissue Engineering. Tissue Engineering - Part A, 2014, 20, 2634-2645.	3.1	89
92	Laser Scanning Lithography for Surface Micropatterning on Hydrogels. Advanced Materials, 2005, 17, 2939-2942.	21.0	85
93	Dual-Energy Micro-CT Functional Imaging of Primary Lung Cancer in Mice Using Gold and Iodine Nanoparticle Contrast Agents: A Validation Study. PLoS ONE, 2014, 9, e88129.	2.5	84
94	Integration of Selfâ€Assembled Microvascular Networks with Microfabricated PEGâ€Based Hydrogels. Advanced Functional Materials, 2012, 22, 4511-4518.	14.9	83
95	Hydrogel-nanoparticle composites for optically modulated cancer therapeutic delivery. Journal of Controlled Release, 2014, 178, 63-68.	9.9	81
96	Thermally responsive polymerâ€nanoparticle composites for biomedical applications. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2011, 3, 307-317.	6.1	79
97	Dual-Energy CT Imaging of Tumor Liposome Delivery After Gold Nanoparticle-Augmented Radiation Therapy. Theranostics, 2018, 8, 1782-1797.	10.0	79
98	Tissue engineering in the cardiovascular system: Progress toward a tissue engineered heart. The Anatomical Record, 2001, 263, 367-371.	1.8	76
99	Modeling the tumor extracellular matrix: Tissue engineering tools repurposed towards new frontiers in cancer biology. Journal of Biomechanics, 2014, 47, 1969-1978.	2.1	76
100	Platelet adhesion on a bioresorbable poly(propylene fumarate-co-ethylene glycol) copolymer. Biomaterials, 1999, 20, 683-690.	11.4	72
101	Studying the influence of angiogenesis in in vitro cancer model systems. Advanced Drug Delivery Reviews, 2016, 97, 250-259.	13.7	72
102	Biomimetic Hydrogels with Immobilized EphrinA1 for Therapeutic Angiogenesis. Biomacromolecules, 2011, 12, 2715-2722.	5.4	67
103	Electrospun Polyurethane and Hydrogel Composite Scaffolds as Biomechanical Mimics for Aortic Valve Tissue Engineering. ACS Biomaterials Science and Engineering, 2016, 2, 1546-1558.	5.2	67
104	Poly(Ethylene Glycol) Hydrogel Scaffolds Containing Cell-Adhesive and Protease-Sensitive Peptides Support Microvessel Formation by Endothelial Progenitor Cells. Cellular and Molecular Bioengineering, 2016, 9, 38-54.	2.1	67
105	Proteolytically Degradable Hydrogels with a Fluorogenic Substrate for Studies of Cellular Proteolytic Activity and Migration. Biotechnology Progress, 2005, 21, 1736-1741.	2.6	66
106	Vascular-targeted photothermal therapy of an orthotopic murine glioma model. Nanomedicine, 2012, 7, 1133-1148.	3.3	66
107	Nanoshells for Photothermal Cancer Therapy. Methods in Molecular Biology, 2010, 624, 101-117.	0.9	66
108	A 3D Poly(ethylene glycol)-based Tumor Angiogenesis Model to Study the Influence of Vascular Cells on Lung Tumor Cell Behavior. Scientific Reports, 2016, 6, 32726.	3.3	65

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109	Synthetic ECM: Bioactive Synthetic Hydrogels for 3D Tissue Engineering. <i>Bioconjugate Chemistry</i> , 2020, 31, 2253-2271.	3.6	65
110	Comparison of covalently and physically cross-linked polyethylene glycol-based hydrogels for the prevention of postoperative adhesions in a rat model. <i>Biomaterials</i> , 1995, 16, 1153-1156.	11.4	62
111	Hydrogel Microsphere Encapsulation of a Cell-Based Gene Therapy System Increases Cell Survival of Injected Cells, Transgene Expression, and Bone Volume in a Model of Heterotopic Ossification. <i>Tissue Engineering - Part A</i> , 2010, 16, 3727-3736.	3.1	62
112	EphrinA I-targeted nanoshells for photothermal ablation of prostate cancer cells. <i>International Journal of Nanomedicine</i> , 2008, 3, 351-8.	6.7	62
113	Development of a YIGSR-peptide-modified polyurethaneurea to enhance endothelialization. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2004, 15, 73-94.	3.5	58
114	Encoding Hydrogel Mechanics via Network Cross-Linking Structure. <i>ACS Biomaterials Science and Engineering</i> , 2015, 1, 335-344.	5.2	57
115	YC-1-Mediated Vascular Protection through Inhibition of Smooth Muscle Cell Proliferation and Platelet Function. <i>Biochemical and Biophysical Research Communications</i> , 2002, 291, 1014-1021.	2.1	55
116	Integrin Interactions with Immobilized Peptides in Polyethylene Glycol Diacrylate Hydrogels. <i>Tissue Engineering</i> , 2004, 10, 1775-1786.	4.6	55
117	Hydrogel-Coated Near Infrared Absorbing Nanoshells as Light-Responsive Drug Delivery Vehicles. <i>ACS Biomaterials Science and Engineering</i> , 2015, 1, 685-692.	5.2	55
118	Rapid healing of femoral defects in rats with low dose sustained BMP2 expression from PEGDA hydrogel microspheres. <i>Journal of Orthopaedic Research</i> , 2013, 31, 1597-1604.	2.3	54
119	Laser-scanning lithography (LSL) for the soft lithographic patterning of cell-adhesive self-assembled monolayers. <i>Biotechnology and Bioengineering</i> , 2006, 93, 1060-1068.	3.3	51
120	Localized delivery of nitric oxide from hydrogels inhibits neointima formation in a rat carotid balloon injury model. <i>Acta Biomaterialia</i> , 2005, 1, 597-606.	8.3	50
121	Angiogenesis-like Activity of Endothelial Cells Co-cultured with VEGF-producing Smooth Muscle Cells. <i>Tissue Engineering</i> , 2006, 12, 381-390.	4.6	50
122	A comparative analysis of EGFR-targeting antibodies for gold nanoparticle CT imaging of lung cancer. <i>PLoS ONE</i> , 2018, 13, e0206950.	2.5	50
123	Nitric oxide-generating hydrogels inhibit neointima formation. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2005, 16, 659-672.	3.5	49
124	Fabrication and Mechanical Evaluation of Anatomically-Inspired Quasilaminar Hydrogel Structures with Layer-Specific Formulations. <i>Annals of Biomedical Engineering</i> , 2013, 41, 398-407.	2.5	48
125	Covalent immobilization of stem cell factor and stromal derived factor 1 α for in vitro culture of hematopoietic progenitor cells. <i>Acta Biomaterialia</i> , 2013, 9, 9258-9269.	8.3	43
126	3-Dimensional spatially organized PEG-based hydrogels for an aortic valve co-culture model. <i>Biomaterials</i> , 2015, 67, 354-364.	11.4	43

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127	Improved Angiogenesis in Response to Localized Delivery of Macrophage-Recruiting Molecules. PLoS ONE, 2015, 10, e0131643.	2.5	43
128	Fibulin-2 Is a Driver of Malignant Progression in Lung Adenocarcinoma. PLoS ONE, 2013, 8, e67054.	2.5	42
129	Molecular weight changes in polymer erosion. Pharmaceutical Research, 1992, 09, 1279-1283.	3.5	39
130	Heparanase and Platelet Factor-4 Induce Smooth Muscle Cell Proliferation and Migration via bFGF Release from the ECM. Journal of Biochemistry, 2002, 131, 913-922.	1.7	39
131	Endochondral Bone Formation from Hydrogel Carriers Loaded with BMP2-transduced Cells. Annals of Biomedical Engineering, 2007, 35, 796-807.	2.5	39
132	Cathepsin K-sensitive poly(ethylene glycol) hydrogels for degradation in response to bone resorption. Journal of Biomedical Materials Research - Part A, 2011, 98A, 53-62.	4.0	39
133	Whole-Blood Immunoassay Facilitated by Gold Nanoshell-Conjugate Antibodies. , 2005, 303, 101-112.		38
134	Customized cell microenvironments. Nature Materials, 2011, 10, 727-729.	27.5	38
135	Fabrication of Multifaceted Micropatterned Surfaces with Laser Scanning Lithography. Advanced Functional Materials, 2011, 21, 2876-2888.	14.9	37
136	Hyaluronan Hydrogels for a Biomimetic Spongiosa Layer of Tissue Engineered Heart Valve Scaffolds. Biomacromolecules, 2016, 17, 1766-1775.	5.4	37
137	Overexpression of Lysyl Oxidase to Increase Matrix Crosslinking and Improve Tissue Strength in Dermal Wound Healing. Annals of Biomedical Engineering, 2006, 34, 1239-1246.	2.5	36
138	The <i>Flk1^{Cre}myr::mCherry</i> mouse as a useful reporter to characterize multiple aspects of ocular blood vessel development and disease. Developmental Dynamics, 2009, 238, 2318-2326.	1.8	36
139	Mitral valvular interstitial cell responses to substrate stiffness depend on age and anatomic region. Acta Biomaterialia, 2011, 7, 75-82.	8.3	36
140	Bioactive poly(ethylene glycol) hydrogels to recapitulate the HSC niche and facilitate HSC expansion in culture. Biotechnology and Bioengineering, 2016, 113, 870-881.	3.3	36
141	Bioactive Poly(ethylene Glycol) Acrylate Hydrogels for Regenerative Engineering. Regenerative Engineering and Translational Medicine, 2019, 5, 167-179.	2.9	36
142	An investigation of the effects of ultrasound on degradable polyanhydride matrices. Macromolecules, 1992, 25, 511-515.	4.8	35
143	Three-dimensional photolithographic micropatterning: a novel tool to probe the complexities of cell migration. Integrative Biology (United Kingdom), 2013, 5, 817.	1.3	35
144	Stiffness of Protease Sensitive and Cell Adhesive PEG Hydrogels Promotes Neovascularization In Vivo. Annals of Biomedical Engineering, 2017, 45, 1387-1398.	2.5	35

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145	Biomimetic Surface Patterning Promotes Mesenchymal Stem Cell Differentiation. ACS Applied Materials & Interfaces, 2016, 8, 21883-21892.	8.0	34
146	Application of Hydrogels in Heart Valve Tissue Engineering. Journal of Long-Term Effects of Medical Implants, 2015, 25, 105-134.	0.7	32
147	Transendothelial migration enhances integrin-dependent human neutrophil chemokinesis. Journal of Leukocyte Biology, 2007, 81, 686-695.	3.3	31
148	Ascorbic acid promotes extracellular matrix deposition while preserving valve interstitial cell quiescence within 3D hydrogel scaffolds. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 1963-1973.	2.7	31
149	Hyaluronic acid based low viscosity hydrogel as a novel carrier for Convection Enhanced Delivery of CAR T cells. Journal of Clinical Neuroscience, 2018, 56, 163-168.	1.5	31
150	Harnessing Macrophages for Vascularization in Tissue Engineering. Annals of Biomedical Engineering, 2019, 47, 354-365.	2.5	30
151	3D printing of high strength, porous, elastomeric structures to promote tissue integration of implants. Journal of Biomedical Materials Research - Part A, 2021, 109, 54-63.	4.0	30
152	Pulsed polymers. Nature Materials, 2003, 2, 709-710.	27.5	29
153	Macrophages Influence Vessel Formation in 3D Bioactive Hydrogels. Advanced Biology, 2017, 1, 1600021.	3.0	29
154	An injectable method for noninvasive spine fusion. Spine Journal, 2011, 11, 545-556.	1.3	26
155	Rapid Heterotrophic Ossification with Cryopreserved Poly(ethylene glycol-) Microencapsulated BMP2-Expressing MSCs. International Journal of Biomaterials, 2012, 2012, 1-11.	2.4	26
156	M0 and M2 Macrophages Enhance Vascularization of Tissue Engineering Scaffolds. Regenerative Engineering and Translational Medicine, 2018, 4, 51-61.	2.9	25
157	Using Tools from Optogenetics to Create Light-Responsive Biomaterials: LOVTRAP-PEG Hydrogels for Dynamic Peptide Immobilization. Annals of Biomedical Engineering, 2020, 48, 1885-1894.	2.5	24
158	Novel Heparanase-Inhibiting Antibody Reduces Neointima Formation. Journal of Biochemistry, 2006, 139, 339-345.	1.7	23
159	Poly(ethylene glycol)-lysine dendrimers for targeted delivery of nitric oxide. Journal of Biomaterials Science, Polymer Edition, 2006, 17, 1159-1172.	3.5	23
160	Bioactive Hydrogel Substrates: Probing Leukocyte Receptor-Ligand Interactions in Parallel Plate Flow Chamber Studies. Annals of Biomedical Engineering, 2006, 34, 1705-1711.	2.5	22
161	EphrinA1-targeted nanoshells for photothermal ablation of prostate cancer cells. International Journal of Nanomedicine, 2008, , 351.	6.7	21
162	Efficacy of adhesion barriers. Resorbable hydrogel, oxidized regenerated cellulose and hyaluronic acid. Journal of reproductive medicine, The, 1996, 41, 149-54.	0.2	21

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163	Cell-based gene therapy for repair of critical size defects in the rat fibula. Journal of Cellular Biochemistry, 2011, 112, 1563-1571.	2.6	20
164	Recapitulation and Modulation of the Cellular Architecture of a User-Chosen Cell of Interest Using Cell-Derived, Biomimetic Patterning. ACS Nano, 2015, 9, 6128-6138.	14.6	20
165	Optical coherence tomography guided microinjections in live mouse embryos: high-resolution targeted manipulation for mouse embryonic research. Journal of Biomedical Optics, 2015, 20, 1.	2.6	20
166	3D Culture Facilitates VEGF-Stimulated Endothelial Differentiation of Adipose-Derived Stem Cells. Annals of Biomedical Engineering, 2020, 48, 1034-1044.	2.5	19
167	Modulating Functionalized Poly(ethylene glycol) Diacrylate Hydrogel Mechanical Properties through Competitive Crosslinking Mechanics for Soft Tissue Applications. Polymers, 2020, 12, 3000.	4.5	19
168	Micropatterning of Poly(ethylene glycol) Diacrylate Hydrogels. Methods in Cell Biology, 2014, 121, 105-119.	1.1	18
169	Dynamic Ligand Presentation in Biomaterials. Bioconjugate Chemistry, 2018, 29, 2140-2149.	3.6	18
170	Blood vessel matrix: a new alternative for abdominal wall reconstruction. Hernia: the Journal of Hernias and Abdominal Wall Surgery, 2008, 12, 351-358.	2.0	16
171	Umbilical Cord Blood-Derived Mononuclear Cells Exhibit Pericyte-Like Phenotype and Support Network Formation of Endothelial Progenitor Cells In Vitro. Annals of Biomedical Engineering, 2015, 43, 2552-2568.	2.5	16
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