Jeffrey A Hubbell

List of Publications by Year
in descending order

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422	55,200	699 121	1456 220
papers	citations	h-index	g-index

442	442	442	39773
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synthetic biomaterials as instructive extracellular microenvironments for morphogenesis in tissue engineering. Nature Biotechnology, 2005, 23, 47-55.	9.4	4,068
2	Synthetic matrix metalloproteinase-sensitive hydrogels for the conduction of tissue regeneration: Engineering cell-invasion characteristics. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 5413-5418.	3.3	1,331
3	Exploiting lymphatic transport and complement activation in nanoparticle vaccines. Nature Biotechnology, 2007, 25, 1159-1164.	9.4	1,142
4	Bioerodible hydrogels based on photopolymerized poly(ethylene glycol)-co-poly(.alpha.-hydroxy acid) diacrylate macromers. Macromolecules, 1993, 26, 581-587.	2.2	938
5	An RGD spacing of 440 nm is sufficient for integrin alpha V beta 3-mediated fibroblast spreading and 140 nm for focal contact and stress fiber formation.. Journal of Cell Biology, 1991, 114, 1089-1100.	2.3	845
6	Oxidation-responsive polymeric vesicles. Nature Materials, 2004, 3, 183-189.	13.3	798
7	Repair of bone defects using synthetic mimetics of collagenous extracellular matrices. Nature Biotechnology, 2003, 21, 513-518.	9.4	797
8	Incorporation of adhesion peptides into nonadhesive hydrogels useful for tissue resurfacing. , 1998, 39, 266-276.		792
9	Biomaterials in Tissue Engineering. Nature Biotechnology, 1995, 13, 565-576.	9.4	773
10	Synthesis and Physicochemical Characterization of End-Linked Poly(ethylene glycol)-co-peptide Hydrogels Formed by Michael-Type Addition. Biomacromolecules, 2003, 4, 713-722.	2.6	639
11	Poly(l-lysine)-g-Poly(ethylene glycol) Layers on Metal Oxide Surfaces:Â Attachment Mechanism and Effects of Polymer Architecture on Resistance to Protein Adsorptionâ€. Journal of Physical Chemistry B, 2000, 104, 3298-3309.	1.2	620
12	In vivo targeting of dendritic cells in lymph nodes with poly(propylene sulfide) nanoparticles. Journal of Controlled Release, 2006, 112, 26-34.	4.8	605
13	Polymeric Biomaterials with Degradation Sites for Proteases Involved in Cell Migration. Macromolecules, 1999, 32, 241-244.	2.2	574
14	Characterization of permeability and network structure of interfacially photopolymerized poly(ethylene glycol) diacrylate hydrogels. Biomaterials, 1998, 19, 1287-1294.	5.7	553
15	Development of fibrin derivatives for controlled release of heparin-binding growth factors. Journal of Controlled Release, 2000, 65, 389-402.	4.8	537
16	Molecularly Engineered PEG Hydrogels: A Novel Model System for Proteolytically Mediated Cell Migration. Biophysical Journal, 2005, 89, 1374-1388.	0.2	509
17	Cellâ€demanded release of VEGF from synthetic, biointeractive cellâ€ingrowth matrices for vascularized tissue growth. FASEB Journal, 2003, 17, 2260-2262.	0.2	501
18	Materials engineering for immunomodulation. Nature, 2009, 462, 449-460.	13.7	493

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19	Poly(l-lysine)-g-poly(ethylene glycol) Layers on Metal Oxide Surfaces:Â Surface-Analytical Characterization and Resistance to Serum and Fibrinogen Adsorption. Langmuir, 2001, 17, 489-498.	1.6	490
20	Cell-Responsive Synthetic Hydrogels. Advanced Materials, 2003, 15, 888-892.	11.1	486
21	Surface Treatments of Polymers for Biocompatibility. Annual Review of Materials Research, 1996, 26, 365-394.	5.5	479
22	Bioactive biomaterials. Current Opinion in Biotechnology, 1999, 10, 123-129.	3.3	470
23	Nanomaterials for Drug Delivery. Science, 2012, 337, 303-305.	6.0	465
24	Enhanced proteolytic degradation of molecularly engineered PEG hydrogels in response to MMP-1 and MMP-2. Biomaterials, 2010, 31, 7836-7845.	5.7	463
25	Thin Polymer Layers Formed by Polyelectrolyte Multilayer Techniques on Biological Surfaces. Langmuir, 1999, 15, 5355-5362.	1.6	427
26	PEG-SS-PPS:Â Reduction-Sensitive Disulfide Block Copolymer Vesicles for Intracellular Drug Delivery. Biomacromolecules, 2007, 8, 1966-1972.	2.6	418
27	Growth Factors Engineered for Super-Affinity to the Extracellular Matrix Enhance Tissue Healing. Science, 2014, 343, 885-888.	6.0	406
28	Controlled release of nerve growth factor from a heparin-containing fibrin-based cell ingrowth matrix. Journal of Controlled Release, 2000, 69, 149-158.	4.8	402
29	Heparin-binding domain of fibrin(ogen) binds growth factors and promotes tissue repair when incorporated within a synthetic matrix. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4563-4568.	3.3	401
30	Engineering the Growth Factor Microenvironment with Fibronectin Domains to Promote Wound and Bone Tissue Healing. Science Translational Medicine, 2011, 3, 100ra89.	5.8	391
31	Targeting dendritic cells with biomaterials: developing the next generation of vaccines. Trends in Immunology, 2006, 27, 573-579.	2.9	390
32	Convalent surface immobilization of Arg-Gly-Asp- and Tyr-Ile-Gly-Ser-Arg-containing peptides to obtain well-defined cell-adhesive substrates. Analytical Biochemistry, 1990, 187, 292-301.	1.1	389
33	Conjugate Addition Reactions Combined with Free-Radical Cross-Linking for the Design of Materials for Tissue Engineering. Biomacromolecules, 2001, 2, 430-441.	2.6	389
34	Fibrin gel as a three dimensional matrix in cardiovascular tissue engineering. European Journal of Cardio-thoracic Surgery, 2000, 17, 587-591.	0.6	379
35	Photopolymerized hyaluronic acid-based hydrogels and interpenetrating networks. Biomaterials, 2003, 24, 893-900.	5.7	373
36	Cell-Demanded Liberation of VEGF121From Fibrin Implants Induces Local and Controlled Blood Vessel Growth. Circulation Research, 2004, 94, 1124-1132.	2.0	355

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37	Materials as morphogenetic guides in tissue engineering. Current Opinion in Biotechnology, 2003, 14, 551-558.	3.3	352
38	Covalently conjugated VEGFâ€“fibrin matrices for endothelialization. Journal of Controlled Release, 2001, 72, 101-113.	4.8	351
39	Systematic Modulation of Michael-Type Reactivity of Thiols through the Use of Charged Amino Acids. Bioconjugate Chemistry, 2001, 12, 1051-1056.	1.8	334
40	Engineering the Regenerative Microenvironment with Biomaterials. Advanced Healthcare Materials, 2013, 2, 57-71.	3.9	329
41	Protein delivery from materials formed by self-selective conjugate addition reactions. Journal of Controlled Release, 2001, 76, 11-25.	4.8	328
42	Biopolymeric delivery matrices for angiogenic growth factors. Cardiovascular Pathology, 2003, 12, 295-310.	0.7	321
43	Enzymatic incorporation of bioactive peptides into fibrin matrices enhances neurite extension. Nature Biotechnology, 2000, 18, 415-419.	9.4	316
44	Biologically Engineered Protein-graft-Poly(ethylene glycol) Hydrogels:Â A Cell Adhesive and Plasmin-Degradable Biosynthetic Material for Tissue Repair. Biomacromolecules, 2002, 3, 710-723.	2.6	302
45	RGD-grafted poly-l-lysine-graft-(polyethylene glycol) copolymers block non-specific protein adsorption while promoting cell adhesion. Biotechnology and Bioengineering, 2003, 82, 784-790.	1.7	301
46	Network Formation and Degradation Behavior of Hydrogels Formed by Michael-Type Addition Reactions. Biomacromolecules, 2005, 6, 290-301.	2.6	301
47	Controlling integrin specificity and stem cell differentiation in 2D and 3D environments through regulation of fibronectin domain stability. Biomaterials, 2009, 30, 1089-1097.	5.7	300
48	Three-dimensional extracellular matrix-directed cardioprogenitor differentiation: Systematic modulation of a synthetic cell-responsive PEG-hydrogel. Biomaterials, 2008, 29, 2757-2766.	5.7	294
49	Biofunctional polymer nanoparticles for intra-articular targeting and retention inÂcartilage. Nature Materials, 2008, 7, 248-254.	13.3	292
50	Cross-Linking Exogenous Bifunctional Peptides into Fibrin Gels with Factor XIIIa. Bioconjugate Chemistry, 1999, 10, 75-81.	1.8	287
51	Human endothelial cell interactions with surface-coupled adhesion peptides on a nonadhesive glass substrate and two polymeric biomaterials. Journal of Biomedical Materials Research Part B, 1991, 25, 223-242.	3.0	283
52	In situ cell manipulation through enzymatic hydrogel photopatterning. Nature Materials, 2013, 12, 1072-1078.	13.3	282
53	Engineering growth factors for regenerative medicine applications. Acta Biomaterialia, 2016, 30, 1-12.	4.1	273
54	MMP-2 sensitive, VEGF-bearing bioactive hydrogels for promotion of vascular healing. Journal of Biomedical Materials Research Part B, 2004, 68A, 704-716.	3.0	271

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55	The effect of matrix characteristics on fibroblast proliferation in 3D gels. Biomaterials, 2010, 31, 8454-8464.	5.7	271
56	Endothelial Cell-Selective Materials for Tissue Engineering in the Vascular Graft Via a New Receptor. Nature Biotechnology, 1991, 9, 568-572.	9.4	265
57	Biomolecular Hydrogels Formed and Degraded via Site-Specific Enzymatic Reactions. Biomacromolecules, 2007, 8, 3000-3007.	2.6	264
58	The 12thâ€“14th type III repeats of fibronectin function as a highly promiscuous growth factor-binding domain. FASEB Journal, 2010, 24, 4711-4721.	0.2	259
59	Solution technique to incorporate polyethylene oxide and other water-soluble polymers into surfaces of polymeric biomaterials. Biomaterials, 1991, 12, 144-153.	5.7	258
60	Targeting the tumor-draining lymph node with adjuvanted nanoparticles reshapes the anti-tumor immune response. Biomaterials, 2014, 35, 814-824.	5.7	256
61	In Vitro and in Vivo Performance of Porcine Islets Encapsulated in Interfacially Photopolymerized Poly(Ethylene Glycol) Diacrylate Membranes. Cell Transplantation, 1999, 8, 293-306.	1.2	255
62	Biomimetic materials in tissue engineering. Materials Today, 2010, 13, 14-22.	8.3	251
63	Biological responses to polyethylene oxide modified polyethylene terephthalate surfaces. Journal of Biomedical Materials Research Part B, 1991, 25, 829-843.	3.0	242
64	Glucose-oxidase Based Self-Destructing Polymeric Vesicles. Langmuir, 2004, 20, 3487-3491.	1.6	228
65	Nanoparticle conjugation of CpG enhances adjuvancy for cellular immunity and memory recall at low dose. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19902-19907.	3.3	223
66	Hollow Mesoporous Plasmonic Nanoshells for Enhanced Solar Vapor Generation. Nano Letters, 2016, 16, 2159-2167.	4.5	223
67	A sensitivity study of the key parameters in the interfacial photopolymerization of poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock		219
68	Chemisorbed poly(propylene sulphide)-based copolymers resist biomolecular interactions. Nature Materials, 2003, 2, 259-264.	13.3	214
69	Extracellular matrix-inspired growth factor delivery systems for bone regeneration. Advanced Drug Delivery Reviews, 2015, 94, 41-52.	6.6	214
70	Photopolymerized hydrogel materials for drug delivery applications. Reactive & Functional Polymers, 1995, 25, 139-147.	0.8	213
71	Synthetic extracellular matrices for in situ tissue engineering. Biotechnology and Bioengineering, 2004, 86, 27-36.	1.7	213
72	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.	3.3	207

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73	Dendritic cell activation and T cell priming with adjuvant- and antigen-loaded oxidation-sensitive polymersomes. Biomaterials, 2012, 33, 6211-6219.	5.7	206
74	Enzymatic formation of modular cell-instructive fibrin analogs for tissue engineering. Biomaterials, 2007, 28, 3856-3866.	5.7	203
75	Antigen delivery to dendritic cells by poly(propylene sulfide) nanoparticles with disulfide conjugated peptides: Cross-presentation and T cell activation. Vaccine, 2010, 28, 7897-7906.	1.7	199
76	Engineering Approaches to Immunotherapy. Science Translational Medicine, 2012, 4, 148rv9.	5.8	194
77	Bovine Primary Chondrocyte Culture in Synthetic Matrix Metalloproteinase-Sensitive Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock	4.9	192
78	Carbon Monoxide-Releasing Micelles for Immunotherapy. Journal of the American Chemical Society, 2010, 132, 18273-18280.	6.6	191
79	The selective modulation of endothelial cell mobility on RGD peptide containing surfaces by YIGSR peptides. Biomaterials, 2005, 26, 167-174.	5.7	190
80	Peptide functionalized poly(l-lysine)-g-poly(ethylene glycol) on titanium: resistance to protein adsorption in full heparinized human blood plasma. Biomaterials, 2003, 24, 4949-4958.	5.7	189
81	Surface-immobilized polyethylene oxide for bacterial repellence. Biomaterials, 1992, 13, 417-420.	5.7	188
82	Extracellular Matrix-Inspired Growth Factor Delivery Systems for Skin Wound Healing. Advances in Wound Care, 2015, 4, 479-489.	2.6	187
83	Incorporation of heparinâ€binding peptides into fibrin gels enhances neurite extension: an example of designer matrices in tissue engineering. FASEB Journal, 1999, 13, 2214-2224.	0.2	186
84	Recombinant Protein-co-PEG Networks as Cell-Adhesive and Proteolytically Degradable Hydrogel Matrixes. Part I:Â Development and Physicochemical Characteristics. Biomacromolecules, 2005, 6, 1226-1238.	2.6	185
85	MATERIALS SCIENCE: Enhancing Drug Function. Science, 2003, 300, 595-596.	6.0	181
86	Poly(ethylene glycol) hydrogels formed by conjugate addition with controllable swelling, degradation, and release of pharmaceutically active proteins. Journal of Controlled Release, 2005, 102, 619-627.	4.8	181
87	Doxorubicin encapsulation and diffusional release from stable, polymeric, hydrogel nanoparticles. European Journal of Pharmaceutical Sciences, 2006, 29, 120-129.	1.9	179
88	Polymer Networks with Grafted Cell Adhesion Peptides for Highly Biospecific Cell Adhesive Substrates. Analytical Biochemistry, 1994, 222, 380-388.	1.1	178
89	Optimization of photopolymerized bioerodible hydrogel properties for adhesion prevention. Journal of Biomedical Materials Research Part B, 1994, 28, 831-838.	3.0	176
90	Recombinant Protein-co-PEG Networks as Cell-Adhesive and Proteolytically Degradable Hydrogel Matrixes. Part II:Â Biofunctional Characteristics. Biomacromolecules, 2006, 7, 3019-3029.	2.6	176

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91	Rapid photopolymerization of immunoprotective gels in contact with cells and tissue. Journal of the American Chemical Society, 1992, 114, 8311-8312.	6.6	172
92	Antigens reversibly conjugated to a polymeric glyco-adjuvant induce protective humoral and cellular immunity. Nature Materials, 2019, 18, 175-185.	13.3	172
93	Development of growth factor fusion proteins for cellâ€triggered drug delivery. FASEB Journal, 2001, 15, 1300-1302.	0.2	171
94	Engineering antigens for in situ erythrocyte binding induces T-cell deletion. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E60-8.	3.3	167
95	Device design and materials optimization of conformal coating for islets of Langerhans. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10514-10519.	3.3	167
96	Enhancing Efficacy of Anticancer Vaccines by Targeted Delivery to Tumor-Draining Lymph Nodes. Cancer Immunology Research, 2014, 2, 436-447.	1.6	165
97	Endothelial cell proliferation and progenitor maturation by fibrin-bound VEGF variants with differential susceptibilities to local cellular activity. Journal of Controlled Release, 2005, 101, 93-109.	4.8	163
98	Photo-crosslinked copolymers of 2-hydroxyethyl methacrylate, poly(ethylene glycol) tetra-acrylate and ethylene dimethacrylate for improving biocompatibility of biosensors. Biomaterials, 1995, 16, 389-396.	5.7	162
99	The effect of the linker on the hydrolysis rate of drug-linked ester bonds. Journal of Controlled Release, 2004, 95, 291-300.	4.8	162
100	Synthesis of Polymer Network Scaffolds from l-Lactide and Poly(ethylene glycol) and Their Interaction with Cells. Macromolecules, 1997, 30, 6077-6083.	2.2	161
101	Nanoparticle conjugation of antigen enhances cytotoxic T-cell responses in pulmonary vaccination. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E989-97.	3.3	160
102	Bone repair with a form of BMP-2 engineered for incorporation into fibrin cell ingrowth matrices. Biotechnology and Bioengineering, 2005, 89, 253-262.	1.7	159
103	Extracellular Matrix and Growth Factor Engineering for Controlled Angiogenesis in Regenerative Medicine. Frontiers in Bioengineering and Biotechnology, 2015, 3, 45.	2.0	159
104	Covalently Attached GRGD on Polymer Surfaces Promotes Biospecific Adhesion of Mammalian Cells. Annals of the New York Academy of Sciences, 1990, 589, 261-270.	1.8	158
105	Silk Hydrogels as Soft Substrates for Neural Tissue Engineering. Advanced Functional Materials, 2013, 23, 5140-5149.	7.8	157
106	Poly(ethylene oxide)-graft-poly(L-lysine) copolymers to enhance the biocompatibility of poly(L-lysine)-alginate microcapsule membranes. Biomaterials, 1992, 13, 863-870.	5.7	153
107	Primary Human and Rat Î²-Cells Release the Intracellular Autoantigens GAD65, IA-2, and Proinsulin in Exosomes Together With Cytokine-Induced Enhancers of Immunity. Diabetes, 2017, 66, 460-473.	0.3	152
108	Selective Molecular Assembly Patterning:Â A New Approach to Micro- and Nanochemical Patterning of Surfaces for Biological Applications. Langmuir, 2002, 18, 3281-3287.	1.6	151

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109	Laminin heparin-binding peptides bind to several growth factors and enhance diabetic wound healing. Nature Communications, 2018, 9, 2163.	5.8	150
110	Oxidation-Sensitive Polymeric Nanoparticles. Langmuir, 2005, 21, 411-417.	1.6	147
111	Interfacial photopolymerization of poly(ethylene glycol)-based hydrogels upon alginate-poly(l-lysine) microcapsules for enhanced biocompatibility. Biomaterials, 1993, 14, 1008-1016.	5.7	144
112	Three-dimensional Migration of Neurites Is Mediated by Adhesion Site Density and Affinity. Journal of Biological Chemistry, 2000, 275, 6813-6818.	1.6	144
113	Collagen-binding IL-12 enhances tumour inflammation and drives the complete remission of established immunologically cold mouse tumours. Nature Biomedical Engineering, 2020, 4, 531-543.	11.6	141
114	Human embryonic stem cell-derived microvascular grafts for cardiac tissue preservation after myocardial infarction. Biomaterials, 2011, 32, 1102-1109.	5.7	139
115	New Synthetic Methodologies for Amphiphilic Multiblock Copolymers of Ethylene Glycol and Propylene Sulfide. Macromolecules, 2001, 34, 8913-8917.	2.2	137
116	Long-lasting fibrin matrices ensure stable and functional angiogenesis by highly tunable, sustained delivery of recombinant VEGF ₁₆₄. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6952-6957.	3.3	136
117	Targeted antibody and cytokine cancer immunotherapies through collagen affinity. Science Translational Medicine, 2019, 11, .	5.8	134
118	Surface physical interpenetrating networks of poly(ethylene terephthalate) and poly(ethylene oxide) with biomedical applications. Macromolecules, 1992, 25, 226-232.	2.2	131
119	Matrix-binding checkpoint immunotherapies enhance antitumor efficacy and reduce adverse events. Science Translational Medicine, 2017, 9, .	5.8	131
120	The role of actively released fibrin-conjugated VEGF for VEGF receptor 2 gene activation and the enhancement of angiogenesis. Biomaterials, 2008, 29, 1720-1729.	5.7	130
121	Peptide-matrix-mediated gene transfer of an oxygen-insensitive hypoxia-inducible factor-1Â variant for local induction of angiogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 2506-2511.	3.3	129
122	The effect of enzymatically degradable poly(ethylene glycol) hydrogels on smooth muscle cell phenotype. Biomaterials, 2008, 29, 314-326.	5.7	129
123	Toll-like receptor 8 agonist nanoparticles mimic immunomodulating effects of the live BCG vaccine and enhance neonatal innate and adaptive immune responses. Journal of Allergy and Clinical Immunology, 2017, 140, 1339-1350.	1.5	128
124	Engineering integrin signaling for promoting embryonic stem cell self-renewal in a precisely defined niche. Biomaterials, 2010, 31, 1219-1226.	5.7	127
125	Lymphatic drainage function and its immunological implications: From dendritic cell homing to vaccine design. Seminars in Immunology, 2008, 20, 147-156.	2.7	126
126	Size- and charge-dependent non-specific uptake of PEGylated nanoparticles by macrophages. International Journal of Nanomedicine, 2012, 7, 799.	3.3	126

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127	Fibronectin modulates macrophage adhesion and FBGC formation: The role of RGD, PHSRN, and PRRARV domains. Journal of Biomedical Materials Research Part B, 2001, 55, 79-88.	3.0	125
128	Cell-responsive hydrogel for encapsulation of vascular cells. Biomaterials, 2009, 30, 4318-4324.	5.7	125
129	Design principles for therapeutic angiogenic materials. Nature Reviews Materials, 2016, 1, .	23.3	125
130	Self-assembly and steric stabilization at heterogeneous, biological surfaces using adsorbing block copolymers. Chemistry and Biology, 1998, 5, 177-183.	6.2	124
131	Hydrogel systems for barriers and local drug delivery in the control of wound healing. Journal of Controlled Release, 1996, 39, 305-313.	4.8	122
132	Engineering complement activation on polypropylene sulfide vaccine nanoparticles. Biomaterials, 2011, 32, 2194-2203.	5.7	120
133	Force Measurements between Bacteria and Poly(ethylene glycol)-Coated Surfaces. Langmuir, 2000, 16, 9155-9158.	1.6	119
134	Densely crosslinked polymer networks of poly(ethylene glycol) in trimethylolpropane triacrylate for cell-adhesion-resistant surfaces. Journal of Biomedical Materials Research Part B, 1995, 29, 207-215.	3.0	118
135	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.	3.3	118
136	Overcoming immunological barriers in regenerative medicine. Nature Biotechnology, 2014, 32, 786-794.	9.4	118
137	Tunable T cell immunity towards a protein antigen using polymersomes vs. solid-core nanoparticles. Biomaterials, 2013, 34, 4339-4346.	5.7	116
138	Peripherally Administered Nanoparticles Target Monocytic Myeloid Cells, Secondary Lymphoid Organs and Tumors in Mice. PLoS ONE, 2013, 8, e61646.	1.1	116
139	Towards a fully-synthetic substitute of alginate: development of a new process using thermal gelation and chemical cross-linking. Biomaterials, 2004, 25, 5115-5124.	5.7	113
140	Amphiphilic Hydrogel Nanoparticles. Preparation, Characterization, and Preliminary Assessment as New Colloidal Drug Carriers. Langmuir, 2005, 21, 2605-2613.	1.6	111
141	Tenascin C Promiscuously Binds Growth Factors via Its Fifth Fibronectin Type III-Like Domain. PLoS ONE, 2013, 8, e62076.	1.1	108
142	RGD-containing peptide GCRGYGRGDSPG reduces enhancement of osteoblast differentiation by poly(L-lysine)-graft-poly(ethylene glycol)-coated titanium surfaces. Journal of Biomedical Materials Research Part B, 2004, 68A, 458-472.	3.0	107
143	Nanoparticle conjugation and pulmonary delivery enhance the protective efficacy of Ag85B and CpG against tuberculosis. Vaccine, 2011, 29, 6959-6966.	1.7	107
144	Bone healing in the rat and dog with nonglycosylated BMP-2 demonstrating low solubility in fibrin matrices. Journal of Orthopaedic Research, 2004, 22, 376-381.	1.2	106

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145	Design, Characterization, and One-Point in vivo Calibration of a Subcutaneously Implanted Glucose Electrode. Analytical Chemistry, 1994, 66, 3131-3138.	3.2	103
146	TLR-3 stimulation improves anti-tumor immunity elicited by dendritic cell exosome-based vaccines in a murine model of melanoma. Scientific Reports, 2015, 5, 17622.	1.6	103
147	Improving the osteogenic potential of BMP-2 with hyaluronic acid hydrogel modified with integrin-specific fibronectin fragment. Biomaterials, 2013, 34, 704-712.	5.7	102
148	Precision Intracellular Delivery Based on Optofluidic Polymersome Rupture. ACS Nano, 2012, 6, 7850-7857.	7.3	101
149	Visualization and analysis of mural thrombogenesis on collagen, polyurethane and nylon. Biomaterials, 1986, 7, 354-363.	5.7	98
150	Lactide-Based Poly(ethylene glycol) Polymer Networks for Scaffolds in Tissue Engineering. Macromolecules, 1996, 29, 5233-5235.	2.2	98
151	Rapidly degraded terpolymers of DL-lactide, glycolide, and ?-caprolactone with increased hydrophilicity by copolymerization with polyethers. Journal of Biomedical Materials Research Part B, 1990, 24, 1397-1411.	3.0	97
152	Local Release of Fibrinolytic Agents for Adhesion Prevention. Journal of Surgical Research, 1995, 59, 759-763.	0.8	96
153	Synthetic biodegradable polymers for tissue engineering and drug delivery. Current Opinion in Solid State and Materials Science, 1998, 3, 246-251.	5.6	96
154	Blocking Adhesion to Cell and Tissue Surfaces by the Chemisorption of a Poly-l-lysine-graft-(poly(ethylene glycol); phenylboronic acid) Copolymerâ€–. Biomacromolecules, 2000, 1, 523-533.	2.6	96
155	Translating materials design to the clinic. Nature Materials, 2013, 12, 963-966.	13.3	96
156	Mechanisms of 3-D migration and matrix remodeling of fibroblasts within artificial ECMs. Acta Biomaterialia, 2007, 3, 615-629.	4.1	94
157	Multifunctional poly(ethylene glycol) semi-interpenetrating polymer networks as highly selective adhesive substrates for bioadhesive peptide grafting. Biotechnology and Bioengineering, 1994, 43, 772-780.	1.7	93
158	Non-viral gene delivery for local and controlled DNA release. Journal of Controlled Release, 2005, 102, 263-275.	4.8	93
159	Bone healing induced by local delivery of an engineered parathyroid hormone prodrug. Biomaterials, 2009, 30, 1763-1771.	5.7	93
160	A Novel Method for the Encapsulation of Biomolecules into Polymersomes via Direct Hydration. Langmuir, 2009, 25, 9025-9029.	1.6	93
161	A collagen-poly(lactic acid-co-É›-caprolactone) hybrid scaffold for bladder tissue regeneration. Biomaterials, 2011, 32, 3969-3976.	5.7	92
162	Local induction of lymphangiogenesis with engineered fibrin-binding VEGF-C promotes wound healing by increasing immune cell trafficking and matrix remodeling. Biomaterials, 2017, 131, 160-175.	5.7	92

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163	Effects of fibrinolysis on neurite growth from dorsal root ganglia cultured in two- and three-dimensional fibrin gels. , 1996, 365, 380-391.		91
164	Water-borne,in situcrosslinked biomaterials from phase-segregated precursors. Journal of Biomedical Materials Research - Part A, 2003, 64A, 447-456.	2.1	90
165	Neurite extension andin vitro myelination within three-dimensional modified fibrin matrices. Journal of Neurobiology, 2005, 63, 1-14.	3.7	90
166	Synthesis of Pyridyl Disulfide-Functionalized Nanoparticles for Conjugating Thiol-Containing Small Molecules, Peptides, and Proteins. Bioconjugate Chemistry, 2010, 21, 653-662.	1.8	90
167	Nano-sized drug-loaded micelles deliver payload to lymph node immune cells and prolong allograft survival. Journal of Controlled Release, 2011, 156, 154-160.	4.8	90
168	Pattern stability under cell culture conditionsâ€"A comparative study of patterning methods based on PLL-g-PEG background passivation. Biomaterials, 2006, 27, 2534-2541.	5.7	89
169	Intraarterial protein delivery via intimally-adherent bilayer hydrogels. Journal of Controlled Release, 2000, 64, 205-215.	4.8	87
170	PEG-b-PPS Diblock Copolymer Aggregates for Hydrophobic Drug Solubilization and Release: Cyclosporin A as an Example. Molecular Pharmaceutics, 2008, 5, 632-642.	2.3	87
171	Recruitment of CD103 ⁺ dendritic cells via tumor-targeted chemokine delivery enhances efficacy of checkpoint inhibitor immunotherapy. Science Advances, 2019, 5, eaay1357.	4.7	87
172	Mechanical properties, proteolytic degradability and biological modifications affect angiogenic process extension into native and modified fibrin matrices in vitro. Biomaterials, 2005, 26, 1369-1379.	5.7	85
173	Micelles for Delivery of Nitric Oxide. Journal of the American Chemical Society, 2009, 131, 14413-14418.	6.6	85
174	SPARC-derived protease substrates to enhance the plasmin sensitivity of molecularly engineered PEG hydrogels. Biomaterials, 2011, 32, 1301-1310.	5.7	84
175	Molecular Properties of Fibrin-Based Matrices for Promotion of Angiogenesis in Vitro. Microvascular Research, 2001, 62, 315-326.	1.1	83
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