Michael J Mitchell

List of Publications by Year
in descending order

416	88,211	529	344
papers	citations	127 h-index	285 g-index

437	437	437	79125
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nanocarriers as an emerging platform for cancer therapy. Nature Nanotechnology, 2007, 2, 751-760.	31.5	7,469
2	Engineering precision nanoparticles for drug delivery. Nature Reviews Drug Discovery, 2021, 20, 101-124.	46.4	3,154
3	Designing materials for biology and medicine. Nature, 2004, 428, 487-492.	27.8	2,876
4	Impact of Nanotechnology on Drug Delivery. ACS Nano, 2009, 3, 16-20.	14.6	2,760
5	Knocking down barriers: advances in siRNA delivery. Nature Reviews Drug Discovery, 2009, 8, 129-138.	46.4	2,639
6	Physical and mechanical properties of PLA, and their functions in widespread applications â€" A comprehensive review. Advanced Drug Delivery Reviews, 2016, 107, 367-392.	13.7	1,957
7	CRISPR-Cas9 Knockin Mice for Genome Editing and Cancer Modeling. Cell, 2014, 159, 440-455.	28.9	1,566
8	Delivery technologies for cancer immunotherapy. Nature Reviews Drug Discovery, 2019, 18, 175-196.	46.4	1,562
9	Nanoparticle Delivery of Cancer Drugs. Annual Review of Medicine, 2012, 63, 185-198.	12.2	1,347
10	Overcoming the challenges in administering biopharmaceuticals: formulation and delivery strategies. Nature Reviews Drug Discovery, 2014, 13, 655-672.	46.4	1,261
11	Lipid nanoparticles for mRNA delivery. Nature Reviews Materials, 2021, 6, 1078-1094.	48.7	1,256
12	Bioresponsive materials. Nature Reviews Materials, 2017, 2, .	48.7	1,117
13	Engineering Substrate Topography at the Microâ€•and Nanoscale to Control Cell Function. Angewandte Chemie - International Edition, 2009, 48, 5406-5415.	13.8	1,109
14	A combinatorial library of lipid-like materials for delivery of RNAi therapeutics. Nature Biotechnology, 2008, 26, 561-569.	17.5	1,076
15	Advances in oligonucleotide drug delivery. Nature Reviews Drug Discovery, 2020, 19, 673-694.	46.4	1,036
16	Treating metastatic cancer with nanotechnology. Nature Reviews Cancer, 2012, 12, 39-50.	28.4	1,023
17	Preclinical Development and Clinical Translation of a PSMA-Targeted Docetaxel Nanoparticle with a Differentiated Pharmacological Profile. Science Translational Medicine, 2012, 4, 128ra39.	12.4	978
18	Biodegradable Polymer Scaffolds for Tissue Engineering. Nature Biotechnology, 1994, 12, 689-693.	17.5	921

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19	Targeted delivery of cisplatin to prostate cancer cells by aptamer functionalized Pt(IV) prodrug-PLGAâ€“PEG nanoparticles. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17356-17361.	7.1	904
20	Nanostructured materials for applications in drug delivery and tissue engineering. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 241-268.	3.5	897
21	Nanoparticle-Aptamer Bioconjugates. Cancer Research, 2004, 64, 7668-7672.	0.9	873
22	A controlled-release microchip. Nature, 1999, 397, 335-338.	27.8	839
23	Degradable Poly(Î²-amino esters):Â Synthesis, Characterization, and Self-Assembly with Plasmid DNA. Journal of the American Chemical Society, 2000, 122, 10761-10768.	13.7	827
24	Lipid-like materials for low-dose, in vivo gene silencing. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1864-1869.	7.1	776
25	Emerging Frontiers in Drug Delivery. Journal of the American Chemical Society, 2016, 138, 704-717.	13.7	776
26	Controlled delivery systems for proteins based on poly(lactic/glycolic acid) microspheres. Pharmaceutical Research, 1991, 08, 713-720.	3.5	774
27	Antisense c-myb oligonucleotides inhibit intimal arterial smooth muscle cell accumulation in vivo. Nature, 1992, 359, 67-70.	27.8	773
28	Therapeutic genome editing by combined viral and non-viral delivery of CRISPR system components in vivo. Nature Biotechnology, 2016, 34, 328-333.	17.5	732
29	Size- and shape-dependent foreign body immune response to materials implanted in rodents and non-human primates. Nature Materials, 2015, 14, 643-651.	27.5	700
30	Therapeutic siRNA silencing in inflammatory monocytes in mice. Nature Biotechnology, 2011, 29, 1005-1010.	17.5	697
31	In vitro and ex vivo strategies for intracellular delivery. Nature, 2016, 538, 183-192.	27.8	662
32	Efficiency of siRNA delivery by lipid nanoparticles is limited by endocytic recycling. Nature Biotechnology, 2013, 31, 653-658.	17.5	660
33	Visual evidence of acidic environment within degrading poly(lactic-co-glycolic acid) (PLGA) microspheres. Pharmaceutical Research, 2000, 17, 100-106.	3.5	659
34	Engineering Stem Cell Organoids. Cell Stem Cell, 2016, 18, 25-38.	11.1	654
35	Precise engineering of targeted nanoparticles by using self-assembled biointegrated block copolymers. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2586-2591.	7.1	649
36	Microfluidic technologies for accelerating the clinical translation of nanoparticles. Nature Nanotechnology, 2012, 7, 623-629.	31.5	571

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37	A decade of progress in tissue engineering. Nature Protocols, 2016, 11, 1775-1781.	12.0	570
38	Advances in Biomaterials for Drug Delivery. Advanced Materials, 2018, 30, e1705328.	21.0	565
39	Drug delivery by supramolecular design. Chemical Society Reviews, 2017, 46, 6600-6620.	38.1	551
40	Bioplastics for a circular economy. Nature Reviews Materials, 2022, 7, 117-137.	48.7	550
41	Preparation of poly(glycolic acid) bonded fiber structures for cell attachment and transplantation. Journal of Biomedical Materials Research Part B, 1993, 27, 183-189.	3.1	546
42	A Combinatorial Polymer Library Approach Yields Insight into Nonviral Gene Delivery. Accounts of Chemical Research, 2008, 41, 749-759.	15.6	530
43	Mechanistic understanding of in vivo protein corona formation on polymeric nanoparticles and impact on pharmacokinetics. Nature Communications, 2017, 8, 777.	12.8	507
44	Lipid Nanoparticle Assisted mRNA Delivery for Potent Cancer Immunotherapy. Nano Letters, 2017, 17, 1326-1335.	9.1	506
45	Dynamic Cell Seeding of Polymer Scaffolds for Cartilage Tissue Engineering. Biotechnology Progress, 1998, 14, 193-202.	2.6	490
46	Intracellular Delivery by Membrane Disruption: Mechanisms, Strategies, and Concepts. Chemical Reviews, 2018, 118, 7409-7531.	47.7	490
47	Cardiac tissue engineering: Cell seeding, cultivation parameters, and tissue construct characterization. Biotechnology and Bioengineering, 1999, 64, 580-589.	3.3	473
48	In vivo endothelial siRNA delivery using polymeric nanoparticles with low molecular weight. Nature Nanotechnology, 2014, 9, 648-655.	31.5	466
49	Niche-independent high-purity cultures of Lgr5+ intestinal stem cells and their progeny. Nature Methods, 2014, 11, 106-112.	19.0	466
50	Managing diabetes with nanomedicine: challenges and opportunities. Nature Reviews Drug Discovery, 2015, 14, 45-57.	46.4	459
51	Switching from differentiation to growth in hepatocytes: Control by extracellular matrix. Journal of Cellular Physiology, 1992, 151, 497-505.	4.1	449
52	Semi-Automated Synthesis and Screening of a Large Library of Degradable Cationic Polymers for Gene Delivery. Angewandte Chemie - International Edition, 2003, 42, 3153-3158.	13.8	445
53	Degradable lipid nanoparticles with predictable in vivo siRNA delivery activity. Nature Communications, 2014, 5, 4277.	12.8	431
54	Self-assembled hydrogels utilizing polymerâ€“nanoparticle interactions. Nature Communications, 2015, 6, 6295.	12.8	425

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55	mRNA vaccine delivery using lipid nanoparticles. Therapeutic Delivery, 2016, 7, 319-334.	2.2	414
56	Delivery of mRNA vaccines with heterocyclic lipids increases anti-tumor efficacy by STING-mediated immune cell activation. Nature Biotechnology, 2019, 37, 1174-1185.	17.5	398
57	A vector-free microfluidic platform for intracellular delivery. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2082-2087.	7.1	386
58	The promise of organ and tissue preservation to transform medicine. Nature Biotechnology, 2017, 35, 530-542.	17.5	371
59	Lipopeptide nanoparticles for potent and selective siRNA delivery in rodents and nonhuman primates. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3955-3960.	7.1	366
60	Polymeric synthetic nanoparticles for the induction of antigen-specific immunological tolerance. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E156-65.	7.1	364
61	Enzymatic Degradation of Glycosaminoglycans. Critical Reviews in Biochemistry and Molecular Biology, 1995, 30, 387-444.	5.2	360
62	Parallel Synthesis and Biophysical Characterization of a Degradable Polymer Library for Gene Delivery. Journal of the American Chemical Society, 2003, 125, 5316-5323.	13.7	353
63	Glucose-responsive insulin patch for the regulation of blood glucose in mice and minipigs. Nature Biomedical Engineering, 2020, 4, 499-506.	22.5	353
64	Prevascularization of porous biodegradable polymers. Biotechnology and Bioengineering, 1993, 42, 716-723.	3.3	331
65	Combinatorial discovery of polymers resistant to bacterial attachment. Nature Biotechnology, 2012, 30, 868-875.	17.5	328
66	Dendrimer-RNA nanoparticles generate protective immunity against lethal Ebola, H1N1 influenza, and Toxoplasma gondii challenges with a single dose. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4133-42.	7.1	320
67	Surface hydrolysis of poly(glycolic acid) meshes increases the seeding density of vascular smooth muscle cells. , 1998, 42, 417-424.		307
68	Transdermal drug delivery using low-frequency sonophoresis. Pharmaceutical Research, 1996, 13, 411-420.	3.5	305
69	Ionizable Lipid Nanoparticle-Mediated mRNA Delivery for Human CAR T Cell Engineering. Nano Letters, 2020, 20, 1578-1589.	9.1	299
70	An inflammation-targeting hydrogel for local drug delivery in inflammatory bowel disease. Science Translational Medicine, 2015, 7, 300ra128.	12.4	288
71	An ingestible self-orienting system for oral delivery of macromolecules. Science, 2019, 363, 611-615.	12.6	287
72	Nanomedicine in the management of microbial infection â€“ Overview and perspectives. Nano Today, 2014, 9, 478-498.	11.9	286

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73	Sustained antigen availability during germinal center initiation enhances antibody responses to vaccination. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E6639-E6648.	7.1	286
74	Formulation and physical characterization of large porous particles for inhalation. Pharmaceutical Research, 1999, 16, 1735-1742.	3.5	285
75	Characterization and development of RGD-peptide-modified poly(lactic acid-co-lysine) as an interactive, resorbable biomaterial. , 1997, 35, 513-523.		271
76	Design of imidazole-containing endosomolytic biopolymers for gene delivery. Biotechnology and Bioengineering, 2000, 67, 217-223.	3.3	270
77	Controlled-release of IGF-I and TGF-Î²1 in a photopolymerizing hydrogel for cartilage tissue engineering. Journal of Orthopaedic Research, 2001, 19, 1098-1104.	2.3	268
78	A pH-responsive supramolecular polymer gel as an enteric elastomer for use in gastric devices. Nature Materials, 2015, 14, 1065-1071.	27.5	268
79	Moisture-induced aggregation of lyophilized proteins in the solid state. Biotechnology and Bioengineering, 1991, 37, 177-184.	3.3	247
80	Spatially controlled cell engineering on biodegradable polymer surfaces. FASEB Journal, 1998, 12, 1447-1454.	0.5	238
81	Transdermal monitoring of glucose and other analytes using ultrasound. Nature Medicine, 2000, 6, 347-350.	30.7	237
82	Evolution of macromolecular complexity in drug delivery systems. Nature Reviews Chemistry, 2017, 1, .	30.2	233
83	Long-term engraftment of hepatocytes transplanted on biodegradable polymer sponges. , 1997, 37, 413-420.		217
84	Restoration of tumour-growth suppression in vivo via systemic nanoparticle-mediated delivery of PTEN mRNA. Nature Biomedical Engineering, 2018, 2, 850-864.	22.5	214
85	Inhaled Nanoformulated mRNA Polyplexes for Protein Production in Lung Epithelium. Advanced Materials, 2019, 31, e1805116.	21.0	212
86	Lipidoid-Coated Iron Oxide Nanoparticles for Efficient DNA and siRNA delivery. Nano Letters, 2013, 13, 1059-1064.	9.1	210
87	Small RNA combination therapy for lung cancer. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3553-61.	7.1	210
88	Determinants of release rate of tetanus vaccine from polyester microspheres. Pharmaceutical Research, 1993, 10, 945-953.	3.5	207
89	Enzyme thermoinactivation in anhydrous organic solvents. Biotechnology and Bioengineering, 1991, 37, 843-853.	3.3	206
90	Shape-memory polymer networks from oligo(?-caprolactone)dimethacrylates. Journal of Polymer Science Part A, 2005, 43, 1369-1381.	2.3	206

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91	Engineering and physical sciences in oncology: challenges and opportunities. Nature Reviews Cancer, 2017, 17, 659-675.	28.4	204
92	In Vivo Compatibility of Graphene Oxide with Differing Oxidation States. ACS Nano, 2015, 9, 3866-3874.	14.6	197
93	An elastic second skin. Nature Materials, 2016, 15, 911-918.	27.5	195
94	Bioprinting the Cancer Microenvironment. ACS Biomaterials Science and Engineering, 2016, 2, 1710-1721.	5.2	194
95	Proton-driven transformable nanovaccine for cancer immunotherapy. Nature Nanotechnology, 2020, 15, 1053-1064.	31.5	194
96	Nanotechnology for biomaterials engineering: structural characterization of amphiphilic polymeric nanoparticles by 1H NMR spectroscopy. Biomaterials, 1997, 18, 27-30.	11.4	192
97	Nanomaterials for T-cell cancer immunotherapy. Nature Nanotechnology, 2021, 16, 25-36.	31.5	191
98	Non-genetic engineering of cells for drug delivery and cell-based therapy. Advanced Drug Delivery Reviews, 2015, 91, 125-140.	13.7	190
99	Glucose-responsive insulin activity by covalent modification with aliphatic phenylboronic acid conjugates. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2401-2406.	7.1	190
100	Mechanism of insulin aggregation and stabilization in agitated aqueous solutions. Biotechnology and Bioengineering, 1992, 40, 895-903.	3.3	187
101	Photopolymerizable degradable polyanhydrides with osteocompatibility. Nature Biotechnology, 1999, 17, 156-159.	17.5	186
102	Barcoded nanoparticles for high throughput in vivo discovery of targeted therapeutics. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2060-2065.	7.1	185
103	TRAIL-coated leukocytes that kill cancer cells in the circulation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 930-935.	7.1	182
104	An ionizable lipid toolbox for RNA delivery. Nature Communications, 2021, 12, 7233.	12.8	182
105	Oral, ultraâ€“long-lasting drug delivery: Application toward malaria elimination goals. Science Translational Medicine, 2016, 8, 365ra157.	12.4	181
106	Development of an oral once-weekly drug delivery system for HIV antiretroviral therapy. Nature Communications, 2018, 9, 2.	12.8	180
107	Combinatorial synthesis of chemically diverse core-shell nanoparticles for intracellular delivery. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12996-13001.	7.1	178
108	Lectin-bearing polymerized liposomes as potential oral vaccine carriers. Pharmaceutical Research, 1996, 13, 1378-1383.	3.5	174

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109	Synthesis and Biological Evaluation of Ionizable Lipid Materials for the In Vivo Delivery of Messenger RNA to B Lymphocytes. Advanced Materials, 2017, 29, 1606944.	21.0	174
110	Synthesis and Characterization of in Situ Cross-Linkable Hyaluronic Acid-Based Hydrogels with Potential Application for Vocal Fold Regeneration. Macromolecules, 2004, 37, 3239-3248.	4.8	173
111	Bioinspired Alkenyl Amino Alcohol Ionizable Lipid Materials for Highly Potent In Vivo mRNA Delivery. Advanced Materials, 2016, 28, 2939-2943.	21.0	172
112	Clonal Expansion of Lgr5-Positive Cells from Mammalian Cochlea and High-Purity Generation of Sensory Hair Cells. Cell Reports, 2017, 18, 1917-1929.	6.4	167
113	A luminal unfolding microneedle injector for oral delivery of macromolecules. Nature Medicine, 2019, 25, 1512-1518.	30.7	167
114	Transdermal Photopolymerization of Poly (Ethylene Oxide)-Based Injectable Hydrogels for Tissue-Engineered Cartilage. Plastic and Reconstructive Surgery, 1999, 104, 1014-1022.	1.4	164
115	Computational and Experimental Models of Cancer Cell Response to Fluid Shear Stress. Frontiers in Oncology, 2013, 3, 44.	2.8	158
116	Moisture-induced aggregation of lyophilized insulin. Pharmaceutical Research, 1994, 11, 21-29.	3.5	153
117	An implantable microdevice to perform high-throughput in vivo drug sensitivity testing in tumors. Science Translational Medicine, 2015, 7, 284ra57.	12.4	150
118	Magnetically enhanced insulin release in diabetic rats. Journal of Biomedical Materials Research Part B, 1987, 21, 1367-1373.	3.1	148
119	Controlled delivery systems for proteins using polyanhydride microspheres. Pharmaceutical Research, 1993, 10, 487-496.	3.5	148
120	Prolonged energy harvesting for ingestible devices. Nature Biomedical Engineering, 2017, 1, .	22.5	148
121	Biomaterials for vaccine-based cancer immunotherapy. Journal of Controlled Release, 2018, 292, 256-276.	9.9	146
122	Materials for stem cell factories of the future. Nature Materials, 2014, 13, 570-579.	27.5	145
123	Fluid shear stress sensitizes cancer cells to receptor-mediated apoptosis via trimeric death receptors. New Journal of Physics, 2013, 15, 015008.	2.9	143
124	Microfluidic formulation of nanoparticles for biomedical applications. Biomaterials, 2021, 274, 120826.	11.4	143
125	Perspectives and Challenges in Tissue Engineering and Regenerative Medicine. Advanced Materials, 2009, 21, 3235-3236.	21.0	140
126	Selective differentiation of mammalian bone marrow stromal cells cultured on three-dimensional polymer foams. Journal of Biomedical Materials Research Part B, 2001, 55, 229-235.	3.1	139

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127	Metabolic control of primed human pluripotent stem cell fate and function by the miR-200câ€“SIRT2 axis. Nature Cell Biology, 2017, 19, 445-456.	10.3	138
128	Transdermal Photopolymerization of Poly (Ethylene Oxide)-Based Injectable Hydrogels for Tissue-Engineered Cartilage. Plastic and Reconstructive Surgery, 1999, 104, 1014-1022.	1.4	136
129	Nanoparticulate drug delivery systems targeting inflammation for treatment of inflammatory bowel disease. Nano Today, 2017, 16, 82-96.	11.9	136
130	Parallel microfluidic synthesis of size-tunable polymeric nanoparticles using 3D flow focusing towards in vivo study. Nanomedicine: Nanotechnology, Biology, and Medicine, 2014, 10, 401-409.	3.3	134
131	Applications of ethylene vinyl acetate copolymers (EVA) in drug delivery systems. Journal of Controlled Release, 2017, 262, 284-295.	9.9	134
132	Comprehensive proteomic characterization of stem cell-derived extracellular matrices. Biomaterials, 2017, 128, 147-159.	11.4	132
133	Design and Synthesis of Waterborne Polyurethanes. Advanced Materials, 2018, 30, e1706237.	21.0	131
134	Hepatocyte culture on biodegradable polymeric substrates. Biotechnology and Bioengineering, 1991, 38, 145-158.	3.3	129
135	Ly6Clo monocytes drive immunosuppression and confer resistance to anti-VEGFR2 cancer therapy. Journal of Clinical Investigation, 2017, 127, 3039-3051.	8.2	124
136	Nucleic acid delivery for therapeutic applications. Advanced Drug Delivery Reviews, 2021, 178, 113834.	13.7	122
137	Genetic and hypoxic alterations of the micro ‹scp›RNA‹/scp› â€210â€•‹scp›ISCU‹/scp› 1/2 axis promote ironâ€“sulfur deficiency and pulmonary hypertension. EMBO Molecular Medicine, 2015, 7, 695-713.	6.9	120
138	Scalable mRNA and siRNA Lipid Nanoparticle Production Using a Parallelized Microfluidic Device. Nano Letters, 2021, 21, 5671-5680.	9.1	120
139	Rapid Optimization of Gene Delivery by Parallel End-modification of Poly(Î²-amino ester)s. Molecular Therapy, 2007, 15, 1306-1312.	8.2	118
140	Cooperative Effects of Matrix Stiffness and Fluid Shear Stress on Endothelial Cell Behavior. Biophysical Journal, 2015, 108, 471-478.	0.5	118
141	Chiral Supraparticles for Controllable Nanomedicine. Advanced Materials, 2020, 32, e1903878.	21.0	118
142	The PDGF-BB-SOX7 axis-modulated IL-33 in pericytes and stromal cells promotes metastasis through tumour-associated macrophages. Nature Communications, 2016, 7, 11385.	12.8	117
143	Biocompatibility of polymeric delivery systems for macromolecules. Journal of Biomedical Materials Research Part B, 1981, 15, 267-277.	3.1	115
144	Controlled release using a new bioerodible polyphosphazene matrix system. Journal of Biomedical Materials Research Part B, 1987, 21, 1231-1246.	3.1	115

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145	Creating biomimetic micro-environments with synthetic polymer-peptide hybrid molecules. Journal of Biomaterials Science, Polymer Edition, 1998, 9, 507-518.	3.5	114
146	Dendrimer-Inspired Nanomaterials for the in Vivo Delivery of siRNA to Lung Vasculature. Nano Letters, 2015, 15, 3008-3016.	9.1	113
147	Glucose-Responsive Nanoparticles for Rapid and Extended Self-Regulated Insulin Delivery. ACS Nano, 2020, 14, 488-497.	14.6	113
148	Systemic RNAi-mediated Gene Silencing in Nonhuman Primate and Rodent Myeloid Cells. Molecular Therapy - Nucleic Acids, 2012, 1, e4.	5.1	112
149	Ionizable lipid nanoparticles encapsulating barcoded mRNA for accelerated in vivo delivery screening. Journal of Controlled Release, 2019, 316, 404-417.	9.9	111
150	Ionizable lipid nanoparticles for in utero mRNA delivery. Science Advances, 2021, 7, .	10.3	110
151	Tissue engineering: a new field and its challenges. , 1997, 14, 840-841.		108
152	A metalloproteinase inhibitor as an inhibitor of neovascularization. Journal of Cellular Biochemistry, 1991, 47, 230-235.	2.6	107
153	Nanoparticles for Immune Cytokine TRAIL-Based Cancer Therapy. ACS Nano, 2018, 12, 912-931.	14.6	107
154	Triggerable tough hydrogels for gastric resident dosage forms. Nature Communications, 2017, 8, 124.	12.8	106
155	A novel biotinylated degradable polymer for cell-interactive applications. , 1998, 58, 529-535.		104
156	Surface-Initiated Polymerization of l-Lactide:â€‰ Coating of Solid Substrates with a Biodegradable Polymer. Macromolecules, 2001, 34, 5361-5363.	4.8	103
157	Transdermal Delivery of Heparin by Skin Electroporation. Nature Biotechnology, 1995, 13, 1205-1209.	17.5	102
158	Multiplexed RNAi therapy against brain tumor-initiating cells via lipopolymeric nanoparticle infusion delays glioblastoma progression. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6147-E6156.	7.1	102
159	The influence of microstructure and monomer properties on the erosion mechanism of a class of polyanhydrides. Journal of Polymer Science Part A, 1993, 31, 2445-2458.	2.3	98
160	Poly(glycoamidoamine) Brushes Formulated Nanomaterials for Systemic siRNA and mRNA Delivery in Vivo. Nano Letters, 2016, 16, 842-848.	9.1	98
161	Repeatable and adjustable on-demand sciatic nerve block with phototriggerable liposomes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15719-15724.	7.1	97
162	Large porous particles for sustained protection from carbachol-induced bronchoconstriction in guinea pigs. Pharmaceutical Research, 1999, 16, 555-561.	3.5	96

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163	Exploiting Electrostatic Interactions in Polymerâ€“Nanoparticle Hydrogels. ACS Macro Letters, 2015, 4, 848-852.	4.8	95
164	Nanoparticles with photoinduced precipitation for the extraction of pollutants from water and soil. Nature Communications, 2015, 6, 7765.	12.8	95
165	Ultrasound-mediated gastrointestinal drug delivery. Science Translational Medicine, 2015, 7, 310ra168.	12.4	95
166	Live-cell protein labelling with nanometre precision by cell squeezing. Nature Communications, 2016, 7, 10372.	12.8	94
167	Aggregation of a Lyophilized Pharmaceutical Protein, Recombinant Human Albumin: Effect of Moisture and Stabilization by Excipients. Nature Biotechnology, 1995, 13, 493-496.	17.5	92
168	Neutrophil Responses to Sterile Implant Materials. PLoS ONE, 2015, 10, e0137550.	2.5	92
169	Microfluidic squeezing for intracellular antigen loading in polyclonal B-cells as cellular vaccines. Scientific Reports, 2015, 5, 10276.	3.3	88
170	Localized delivery of epidermal growth factor improves the survival of transplanted hepatocytes. , 1996, 50, 422-429.		87
171	In vivo versusin vitro degradation of controlled release polymers for intracranial surgical therapy. Journal of Biomedical Materials Research Part B, 1994, 28, 387-395.	3.1	86
172	On the pH memory of lyophilized compounds containing protein functional groups. , 1997, 53, 345-348.		85
173	Lamin A/C deficiency reduces circulating tumor cell resistance to fluid shear stress. American Journal of Physiology - Cell Physiology, 2015, 309, C736-C746.	4.6	84
174	Helper lipid structure influences protein adsorption and delivery of lipid nanoparticles to spleen and liver. Biomaterials Science, 2021, 9, 1449-1463.	5.4	84
175	From Advanced Biomedical Coatings to Multiâ€Functionalized Biomaterials. Journal of Macromolecular Science - Reviews in Macromolecular Chemistry and Physics, 2006, 46, 347-375.	2.2	82
176	Nanoparticles for nucleic acid delivery: Applications in cancer immunotherapy. Cancer Letters, 2019, 458, 102-112.	7.2	82
177	Ectopic induction of cartilage and bone by water-soluble proteins from bovine bone using a polyanhydride delivery vehicle. Journal of Biomedical Materials Research Part B, 1990, 24, 901-911.	3.1	81
178	Endothelial siRNA delivery in nonhuman primates using ionizable lowâ€“molecular weight polymeric nanoparticles. Science Advances, 2018, 4, eaar8409.	10.3	81
179	Ionizable Amphiphilic Dendrimerâ€Based Nanomaterials with Alkylâ€Chainâ€Substituted Amines for Tunable siRNA Delivery to the Liver Endothelium Inâ€…Vivo. Angewandte Chemie - International Edition, 2014, 53, 14397-14401.	13.8	80
180	Nanoparticle-encapsulated siRNAs for gene silencing in the haematopoietic stem-cell niche. Nature Biomedical Engineering, 2020, 4, 1076-1089.	22.5	80

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181	Inhibitors of Angiogenesis. Nature Biotechnology, 1991, 9, 630-634.	17.5	79
182	Synergistic effect of electric field and ultrasound on transdermal transport. Pharmaceutical Research, 1996, 13, 633-638.	3.5	79
183	Synthesis and Characterization of Photo-Cross-Linked Polymers Based on Poly(l-lactic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 66	4.8	79
184	Characterization of partially saturated poly(propylene fumarate) for orthopaedic application. Journal of Biomaterials Science, Polymer Edition, 1997, 8, 893-904.	3.5	79
185	Morphology and mechanical function of long-termin vitro engineered cartilage. , 1999, 44, 217-221.		76
186	Advanced multimodal nanoparticles delay tumor progression with clinical radiation therapy. Journal of Controlled Release, 2016, 238, 103-113.	9.9	76
187	Discovery of a Novel Polymer for Human Pluripotent Stem Cell Expansion and Multilineage Differentiation. Advanced Materials, 2015, 27, 4006-4012.	21.0	75
188	Biodegradable scaffolds promote tissue remodeling and functional improvement in non-human primates with acute spinal cord injury. Biomaterials, 2017, 123, 63-76.	11.4	75
189	Polyanhydrides. IV. Unsaturated and crosslinked polyanhydrides. Journal of Polymer Science Part A, 1991, 29, 571-579.	2.3	73
190	Preliminaryin vivo report on the osteocompatibility of poly(anhydride-co-imides) evaluated in a tibial model. Journal of Biomedical Materials Research Part B, 1998, 43, 374-379.	3.1	73
191	E-selectin liposomal and nanotube-targeted delivery of doxorubicin to circulating tumor cells. Journal of Controlled Release, 2012, 160, 609-617.	9.9	72
192	Nanostructured Fibrous Membranes with Rose Spike-Like Architecture. Nano Letters, 2017, 17, 6235-6240.	9.1	72
193	Physical Biology in Cancer. 3. The role of cell glycocalyx in vascular transport of circulating tumor cells. American Journal of Physiology - Cell Physiology, 2014, 306, C89-C97.	4.6	70
194	A microneedle platform for buccal macromolecule delivery. Science Advances, 2021, 7, .	10.3	70
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