W Mark Saltzman

List of Publications by Year in descending order

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240 papers 20,348 citations

9756 73 h-index 12233 133 g-index

249 all docs 249 docs citations

times ranked

249

24206 citing authors

#	Article	IF	CITATIONS
1	Synthetic DNA delivery systems. Nature Biotechnology, 2000, 18, 33-37.	9.4	1,494
2	MicroRNA silencing for cancer therapy targeted to the tumour microenvironment. Nature, 2015, 518, 107-110.	13.7	709
3	Enhancement of transfection by physical concentration of DNA at the cell surface. Nature Biotechnology, 2000, 18, 893-895.	9.4	532
4	Tissue-engineered vascular grafts transform into mature blood vessels via an inflammation-mediated process of vascular remodeling. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4669-4674.	3.3	495
5	Nanoparticle-based therapy in an in vivo microRNA-155 (miR-155)-dependent mouse model of lymphoma. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1695-704.	3.3	439
6	Polymeric nanoparticles for drug delivery to the central nervous system. Advanced Drug Delivery Reviews, 2012, 64, 701-705.	6.6	427
7	Intravaginal gene silencing using biodegradable polymer nanoparticles densely loaded with small-interfering RNA. Nature Materials, 2009, 8, 526-533.	13.3	415
8	Poly(ethylene glycol)-Conjugated PAMAM Dendrimer for Biocompatible, High-Efficiency DNA Delivery. Macromolecules, 2002, 35, 3456-3462.	2.2	388
9	Enhanced and prolonged cross-presentation following endosomal escape of exogenous antigens encapsulated in biodegradable nanoparticles. Immunology, 2006, 117, 78-88.	2.0	373
10	A holistic approach to targeting disease with polymeric nanoparticles. Nature Reviews Drug Discovery, 2015, 14, 239-247.	21.5	373
11	The uptake and intracellular fate of PLGA nanoparticles in epithelial cells. Biomaterials, 2009, 30, 2790-2798.	5.7	363
12	Biodegradable poly(amine-co-ester) terpolymers for targeted gene delivery. Nature Materials, 2012, 11, 82-90.	13.3	360
13	PEGylated PLGA nanoparticles for the improved delivery of doxorubicin. Nanomedicine: Nanotechnology, Biology, and Medicine, 2009, 5, 410-418.	1.7	303
14	Building drug delivery into tissue engineering design. Nature Reviews Drug Discovery, 2002, 1, 177-186.	21.5	290
15	Pharmacokinetics of the Carmustine Implant. Clinical Pharmacokinetics, 2002, 41, 403-419.	1.6	236
16	Controlled Surface Modification with Poly(ethylene)glycol Enhances Diffusion of PLGA Nanoparticles in Human Cervical Mucus. Molecular Pharmaceutics, 2009, 6, 173-181.	2.3	231
17	Highly penetrative, drug-loaded nanocarriers improve treatment of glioblastoma. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11751-11756.	3.3	222
18	Materials for protein delivery in tissue engineering. Advanced Drug Delivery Reviews, 1998, 33, 71-86.	6.6	216

#	Article	IF	Citations
19	The influence of microchannels on neurite growth and architecture. Biomaterials, 2005, 26, 771-778.	5.7	211
20	Fibronectin terminated multilayer films: Protein adsorption and cell attachment studies. Biomaterials, 2007, 28, 851-860.	5.7	203
21	Biomaterials with hierarchically defined micro- and nanoscale structure. Biomaterials, 2004, 25, 3593-3601.	5.7	200
22	Therapeutic siRNA: principles, challenges, and strategies. Yale Journal of Biology and Medicine, 2012, 85, 187-200.	0.2	199
23	Distribution of nerve growth factor following direct delivery to brain interstitium. Brain Research, 1995, 680, 196-206.	1.1	194
24	Chemotherapeutic drugs released from polymers: distribution of 1,3-bis(2-chloroethyl)-1-nitrosourea in the rat brain. Pharmaceutical Research, 1996, 13, 671-682.	1.7	190
25	Surface-mediated gene transfer from nanocomposites of controlled texture. Nature Materials, 2004, 3, 569-574.	13.3	188
26	Improving the expansion and neuronal differentiation of mesenchymal stem cells through culture surface modification. Biomaterials, 2004, 25, 1331-1337.	5.7	179
27	Surface modification of biodegradable polyesters with fatty acid conjugates for improved drug targeting. Biomaterials, 2005, 26, 5727-5736.	5.7	174
28	Controlled delivery of VEGF via modulation of alginate microparticle ionic crosslinking. Journal of Controlled Release, 2009, 134, 26-34.	4.8	167
29	A sunblock based on bioadhesive nanoparticles. Nature Materials, 2015, 14, 1278-1285.	13.3	167
30	A self-assembled, modular DNA delivery system mediated by silica nanoparticles. Journal of Controlled Release, 2004, 95, 333-341.	4.8	166
31	Controlled release for local delivery of drugs: barriers and models. Journal of Controlled Release, 2014, 190, 664-673.	4.8	163
32	Octa-functional PLGA nanoparticles for targeted and efficient siRNA delivery to tumors. Biomaterials, 2012, 33, 583-591.	5.7	160
33	Three Dimensional Bioprinting of a Vascularized and Perfusable Skin Graft Using Human Keratinocytes, Fibroblasts, Pericytes, and Endothelial Cells. Tissue Engineering - Part A, 2020, 26, 227-238.	1.6	160
34	Nanotherapy for Cancer: Targeting and Multifunctionality in the Future of Cancer Therapies. ACS Biomaterials Science and Engineering, 2015, 1, 64-78.	2.6	151
35	Controlled DNA delivery systems. Pharmaceutical Research, 1999, 16, 1300-1308.	1.7	144
36	In vivo correction of anaemia in \hat{l}^2 -thalassemic mice by \hat{l}^3 PNA-mediated gene editing with nanoparticle delivery. Nature Communications, 2016, 7, 13304.	5.8	143

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37	Tissueâ€engineered vascular grafts form neovessels that arise from regeneration of the adjacent blood vessel. FASEB Journal, 2011, 25, 2731-2739.	0.2	136
38	Organosilicate-polymer drug delivery systems: controlled release and enhanced mechanical properties. Journal of Controlled Release, 2003, 90, 163-169.	4.8	133
39	Transplantation of brain cells assembled around a programmable synthetic microenvironment. Nature Biotechnology, 2001, 19, 934-939.	9.4	131
40	miR-34a Silences c-SRC to Attenuate Tumor Growth in Triple-Negative Breast Cancer. Cancer Research, 2016, 76, 927-939.	0.4	128
41	In utero nanoparticle delivery for site-specific genome editing. Nature Communications, 2018, 9, 2481.	5.8	124
42	Partial Correction of Cystic Fibrosis Defects with PLGA Nanoparticles Encapsulating Curcumin. Molecular Pharmaceutics, 2010, 7, 86-93.	2.3	123
43	The effect of hyperbranched polyglycerol coatings on drug delivery using degradable polymer nanoparticles. Biomaterials, 2014, 35, 6595-6602.	5.7	121
44	Improved cell adhesion and proliferation on synthetic phosphonic acid-containing hydrogels. Biomaterials, 2005, 26, 3663-3671.	5.7	119
45	Nanotechnology for Delivery of Drugs to the Brain for Epilepsy. Neurotherapeutics, 2009, 6, 323-336.	2.1	117
46	In vivo distribution of surface-modified PLGA nanoparticles following intravaginal delivery. Journal of Controlled Release, 2011, 156, 258-264.	4.8	117
47	Nanoparticles that deliver triplex-forming peptide nucleic acid molecules correct F508del CFTR in airway epithelium. Nature Communications, 2015, 6, 6952.	5.8	114
48	Novel Delivery Strategies for Glioblastoma. Cancer Journal (Sudbury, Mass), 2012, 18, 89-99.	1.0	109
49	Enhanced siRNA delivery into cells by exploiting the synergy between targeting ligands and cell-penetrating peptides. Biomaterials, 2011, 32, 6194-6203.	5.7	106
50	Polymeric vehicles for nucleic acid delivery. Advanced Drug Delivery Reviews, 2020, 156, 119-132.	6.6	106
51	Mathematical modeling of molecular diffusion through mucus. Advanced Drug Delivery Reviews, 2009, 61, 101-114.	6.6	104
52	Nanoparticle targeting to the endothelium during normothermic machine perfusion of human kidneys. Science Translational Medicine, 2017, 9, .	5.8	104
53	High loading efficiency and tunable release of plasmid DNA encapsulated in submicron particles fabricated from PLGA conjugated with poly-L-lysine. Journal of Controlled Release, 2008, 129, 66-72.	4.8	101
54	Poly(ï‰-pentadecalactone-co-butylene-co-succinate) nanoparticles as biodegradable carriers for camptothecin delivery. Biomaterials, 2009, 30, 5707-5719.	5.7	100

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55	Controlled release of dopamine from a polymeric brain implant: In vivo characterization. Annals of Neurology, 1989, 25, 351-356.	2.8	99
56	Cellular Fate of a Modular DNA Delivery System Mediated by Silica Nanoparticles. Biotechnology Progress, 2008, 21, 532-537.	1.3	99
57	Polymer nanoparticles encapsulating siRNA for treatment of HSV-2 genital infection. Journal of Controlled Release, 2012, 162, 102-110.	4.8	99
58	Controlled release of nerve growth factor from a polymeric implant. Brain Research, 1990, 515, 309-311.	1.1	98
59	Convection-enhanced delivery of camptothecin-loaded polymer nanoparticles for treatment of intracranial tumors. Drug Delivery and Translational Research, 2011, 1, 34-42.	3.0	98
60	Nanoparticle-mediated convection-enhanced delivery of a DNA intercalator to gliomas circumvents temozolomide resistance. Nature Biomedical Engineering, 2021, 5, 1048-1058.	11.6	96
61	Intracranial delivery of recombinant nerve growth factor: release kinetics and protein distribution for three delivery systems. Pharmaceutical Research, 1999, 16, 232-240.	1.7	94
62	New methods for direct delivery of chemotherapy for treating brain tumors. Yale Journal of Biology and Medicine, 2006, 79, 141-52.	0.2	94
63	Transport and elimination of recombinant human NGF during long-term delivery to the brain. Brain Research, 1996, 727, 169-181.	1.1	90
64	A PEDF N-terminal peptide protects the retina from ischemic injury when delivered in PLGA nanospheres. Experimental Eye Research, 2006, 83, 824-833.	1.2	90
65	Dilation and degradation of the brain extracellular matrix enhances penetration of infused polymer nanoparticles. Brain Research, 2007, 1180, 121-132.	1.1	90
66	Nanosystems for simultaneous imaging and drug delivery to T cells. AAPS Journal, 2007, 9, E171-E180.	2.2	89
67	An electrospun scaffold integrating nucleic acid delivery for treatment of full-thickness wounds. Biomaterials, 2013, 34, 3891-3901.	5 . 7	89
68	Nanoparticles Deliver Triplex-forming PNAs for Site-specific Genomic Recombination in CD34+ Human Hematopoietic Progenitors. Molecular Therapy, 2011, 19, 172-180.	3.7	86
69	Polymer nanoparticles containing tumor lysates as antigen delivery vehicles for dendritic cell–based antitumor immunotherapy. Nanomedicine: Nanotechnology, Biology, and Medicine, 2011, 7, 1-10.	1.7	86
70	Dual delivery of VEGF and MCP-1 to support endothelial cell transplantation for therapeutic vascularization. Biomaterials, 2010, 31, 3054-3062.	5. 7	85
71	Polymer Nanoparticle-Mediated Delivery of MicroRNA Inhibition and Alternative Splicing. Molecular Pharmaceutics, 2012, 9, 1481-1488.	2.3	84
72	The NIH Somatic Cell Genome Editing program. Nature, 2021, 592, 195-204.	13.7	84

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73	Cell penetrating peptide-modified poly(lactic-co-glycolic acid) nanoparticles with enhanced cell internalization. Acta Biomaterialia, 2016, 30, 49-61.	4.1	81
74	Centrifugal Seeding Increases Seeding Efficiency and Cellular Distribution of Bone Marrow Stromal Cells in Porous Biodegradable Scaffolds. Tissue Engineering, 2007, 13, 2743-2749.	4.9	79
75	Surface chemistry governs cellular tropism of nanoparticles in the brain. Nature Communications, 2017, 8, 15322.	5.8	77
76	Focus on Fundamentals: Achieving Effective Nanoparticle Targeting. Trends in Molecular Medicine, 2018, 24, 598-606.	3.5	77
77	Nanoparticle-mediated intratumoral inhibition of miR-21 for improved survival in glioblastoma. Biomaterials, 2019, 201, 87-98.	5 . 7	77
78	Ex vivo pretreatment of human vessels with siRNA nanoparticles provides protein silencing in endothelial cells. Nature Communications, 2017, 8, 191.	5.8	76
79	Surface modified poly(\hat{l}^2 amino ester)-containing nanoparticles for plasmid DNA delivery. Journal of Controlled Release, 2012, 164, 41-48.	4.8	75
80	Systemic delivery of blood–brain barrier-targeted polymeric nanoparticles enhances delivery to brain tissue. Journal of Drug Targeting, 2015, 23, 736-749.	2.1	73
81	Stealth particles give mucus the slip. Nature Materials, 2009, 8, 11-13.	13.3	72
82	Enhancement of surface ligand display on PLGA nanoparticles with amphiphilic ligand conjugates. Journal of Controlled Release, 2011, 156, 109-115.	4.8	72
83	Sustained delivery of proangiogenic microRNAâ€132 by nanoparticle transfection improves endothelial cell transplantation. FASEB Journal, 2014, 28, 908-922.	0.2	72
84	Oral immunization with an anti–idiotypic antibody to the exoglycolipid antigen protects against experimental Chlamydia trachomatis infection. Nature Medicine, 1996, 2, 1116-1121.	15.2	71
85	Systemic delivery of triplex-forming PNA and donor DNA by nanoparticles mediates site-specific genome editing of human hematopoietic cells in vivo. Gene Therapy, 2013, 20, 658-669.	2.3	71
86	Diffusion of Nerve Growth Factor in Rat Striatum as Determined by Multiphoton Microscopy. Biophysical Journal, 2003, 85, 581-588.	0.2	68
87	Biodegradable Microspheres with Enhanced Capacity for Covalently Bound Surface Ligands. Macromolecules, 2004, 37, 9779-9784.	2.2	68
88	Distribution of polymer nanoparticles by convection-enhanced delivery to brain tumors. Journal of Controlled Release, 2016, 232, 103-112.	4.8	65
89	Therapeutic Peptide Nucleic Acids: Principles, Limitations, and Opportunities. Yale Journal of Biology and Medicine, 2017, 90, 583-598.	0.2	65
90	The nanomaterial-dependent modulation of dendritic cells and its potential influence on therapeutic immunosuppression in lupus. Biomaterials, 2014, 35, 1089-1095.	5.7	64

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91	Efficient Gene Disruption in Cultured Primary Human Endothelial Cells by CRISPR/Cas9. Circulation Research, 2015, 117, 121-128.	2.0	64
92	Surface-Modified Nanoparticles Enhance Transurothelial Penetration and Delivery of Survivin siRNA in Treating Bladder Cancer. Molecular Cancer Therapeutics, 2014, 13, 71-81.	1.9	63
93	In Vitro Cytotoxicity and in Vivo Distribution after Direct Delivery of PEGâ^'Camptothecin Conjugates to the Rat Brain. Bioconjugate Chemistry, 2004, 15, 1364-1375.	1.8	62
94	Improved i.p. drug delivery with bioadhesive nanoparticles. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11453-11458.	3.3	62
95	Cell aggregation and neurite growth in gels of extracellular matrix molecules. Biotechnology and Bioengineering, 1994, 43, 555-562.	1.7	61
96	Anti-tumor Activity of miniPEG- \hat{l}^3 -Modified PNAs to Inhibit MicroRNA-210 for Cancer Therapy. Molecular Therapy - Nucleic Acids, 2017, 9, 111-119.	2.3	61
97	Engineering of multifunctional gels integrating highly efficient growth factor delivery with endothelial cell transplantation. FASEB Journal, 2008, 22, 2949-2956.	0.2	60
98	Degradable bioadhesive nanoparticles for prolonged intravaginal delivery and retention of elvitegravir. Biomaterials, 2017, 144, 144-154.	5.7	59
99	Quantitating Endosomal Escape of a Library of Polymers for mRNA Delivery. Nano Letters, 2020, 20, 1117-1123.	4.5	59
100	PC12 CELL AGGREGATION AND NEURITE GROWTH IN GELS OF COLLAGEN, LAMININ AND FIBRONECTIN. International Journal of Developmental Neuroscience, 1996, 14, 351-364.	0.7	58
101	Blocking MHC class II on human endothelium mitigates acute rejection. JCI Insight, 2016, 1, .	2.3	58
102	Peptide Nucleic Acids as a Tool for Site-Specific Gene Editing. Molecules, 2018, 23, 632.	1.7	57
103	Controlled Release of Proteins to Tissue Transplants for the Treatment of Neurodegenerative Disorders. Journal of Pharmaceutical Sciences, 1996, 85, 1276-1281.	1.6	56
104	Stabilization of nerve growth factor in controlled release polymers and in tissue. Journal of Biomaterials Science, Polymer Edition, 1997, 8, 103-117.	1.9	56
105	Pericytes modulate endothelial sprouting. Cardiovascular Research, 2013, 100, 492-500.	1.8	55
106	Multi-layered nanoparticles for combination gene and drug delivery to tumors. Biomaterials, 2014, 35, 9343-9354.	5.7	55
107	PEGylated squalenoyl-gemcitabine nanoparticles for the treatment ofÂglioblastoma. Biomaterials, 2016, 105, 136-144.	5.7	55
108	Nanotechnology for delivery of peptide nucleic acids (PNAs). Journal of Controlled Release, 2016, 240, 302-311.	4.8	55

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109	Escaping the endosome: assessing cellular trafficking mechanisms of non-viral vehicles. Journal of Controlled Release, 2021, 335, 465-480.	4.8	55
110	Distribution of drugs following controlled delivery to the brain interstitium. Journal of Neuro-Oncology, 1995, 26, 91-102.	1.4	54
111	Controlled Vaginal Delivery of Antibodies in the Mouse1. Biology of Reproduction, 1992, 47, 133-140.	1.2	53
112	Growth versus function in the three-dimensional culture of single and aggregated hepatocytes within collagen gels. Biotechnology Progress, 1993, 9, 600-607.	1.3	53
113	Micron-Scale Positioning of Features Influences the Rate of Polymorphonuclear Leukocyte Migration. Biophysical Journal, 2001, 81, 2569-2579.	0.2	51
114	Bioengineering Approaches to Controlled Protein Delivery. Pediatric Research, 2008, 63, 513-519.	1.1	51
115	Nanoparticles for urothelium penetration and delivery of the histone deacetylase inhibitor belinostat for treatment of bladder cancer. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 1124-1134.	1.7	51
116	Biodegradation, biocompatibility, and drug delivery in poly(ω-pentadecalactone-co-p-dioxanone) copolyesters. Biomaterials, 2011, 32, 6646-6654.	5.7	49
117	A "top-down―approach to actuate poly(amine-co-ester) terpolymers for potent and safe mRNA delivery. Biomaterials, 2018, 176, 122-130.	5.7	49
118	Cell-binding Peptides Conjugated to Poly(ethylene glycol) Promote Neural Cell Aggregation. Nature Biotechnology, 1994, 12, 797-801.	9.4	48
119	Gene expression and mucosal immune responses after vaginal DNA immunization in mice using a controlled delivery matrix. Journal of Controlled Release, 2003, 86, 339-348.	4.8	48
120	Human Aortic Smooth Muscle Cells Promote Arteriole Formation by Coengrafted Endothelial Cells. Tissue Engineering - Part A, 2009, 15, 165-173.	1.6	48
121	The effect of inflammatory cell-derived MCP-1 loss on neuronal survival during chronic neuroinflammation. Biomaterials, 2014, 35, 6698-6706.	5.7	48
122	Canonical and Non-Canonical Barriers Facing AntimiR Cancer Therapeutics. Current Medicinal Chemistry, 2013, 20, 3582-3593.	1.2	48
123	Oligosaccharyltransferase Inhibition Overcomes Therapeutic Resistance to EGFR Tyrosine Kinase Inhibitors. Cancer Research, 2018, 78, 5094-5106.	0.4	47
124	Localized delivery of proteins in the brain: can transport be customized?., 1998, 15, 377-385.		46
125	Radiolabeling of Poly(lactic- <i>co</i> -glycolic acid) (PLGA) Nanoparticles with Biotinylated F-18 Prosthetic Groups and Imaging of Their Delivery to the Brain with Positron Emission Tomography. Bioconjugate Chemistry, 2014, 25, 2157-2165.	1.8	45
126	Imaging the delivery of brain-penetrating PLGA nanoparticles in the brain using magnetic resonance. Journal of Neuro-Oncology, 2015, 121, 441-449.	1.4	44

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127	Peptide Nucleic Acids and Gene Editing: Perspectives on Structure and Repair. Molecules, 2020, 25, 735.	1.7	44
128	The behavioral and biochemical effects of BDNF containing polymers implanted in the hippocampus of rats. Brain Research, 2010, 1321, 40-50.	1.1	43
129	Tunability of Biodegradable Poly(amine- <i>co</i> -ester) Polymers for Customized Nucleic Acid Delivery and Other Biomedical Applications. Biomacromolecules, 2018, 19, 3861-3873.	2.6	43
130	Biodegradable PEG-poly(I‰-pentadecalactone-co-p-dioxanone) nanoparticles for enhanced and sustained drug delivery to treat brain tumors. Biomaterials, 2018, 178, 193-203.	5.7	43
131	Optimizing biodegradable nanoparticle size for tissue-specific delivery. Journal of Controlled Release, 2019, 314, 92-101.	4.8	43
132	Fibroblast and hepatocyte behavior on synthetic polymer surfaces. Journal of Biomedical Materials Research Part B, 1991, 25, 741-759.	3.0	42
133	Enzymeâ€synthesized poly(amineâ€ <i>co</i> â€esters) as nonviral vectors for gene delivery. Journal of Biomedical Materials Research - Part A, 2011, 96A, 456-465.	2.1	41
134	PEGylation of poly(amine-co-ester) polyplexes for tunable gene delivery. Biomaterials, 2021, 272, 120780.	5.7	39
135	Delivering tissue regeneration. Nature Biotechnology, 1999, 17, 534-535.	9.4	38
136	In vitro evaluation of biodegradable microspheres with surface-bound ligands. Journal of Controlled Release, 2006, 110, 574-580.	4.8	38
137	Modified Poly(lacticâ€∢i>coàâ€glycolic Acid) Nanoparticles for Enhanced Cellular Uptake and Gene Editing in the Lung. Advanced Healthcare Materials, 2015, 4, 361-366.	3.9	37
138	Lysis of cold-storage-induced microvascular obstructions for ex vivo revitalization of marginal human kidneys. American Journal of Transplantation, 2021, 21, 161-173.	2.6	37
139	Poly(lactide-co-glycolide) nanoparticle assembly for highly efficient delivery of potent therapeutic agents from medical devices. Biomaterials, 2010, 31, 3631-3642.	5.7	36
140	Controlled antibody release from a matrix of poly(ethylene-co-vinyl acetate) fractionated with a supercritical fluid. Journal of Applied Polymer Science, 1993, 48, 1493-1500.	1.3	35
141	Influence of synthetic polymers on neutrophil migration in three-dimensional collagen gels. Journal of Biomedical Materials Research Part B, 1999, 46, 465-474.	3.0	35
142	Macrophage-derived PDGF-B induces muscularization in murine and human pulmonary hypertension. JCI Insight, 2021, 6, .	2.3	35
143	Regeneration of mammalian cochlear and vestibular hair cells through Hes1/Hes5 modulation with siRNA. Hearing Research, 2013, 304, 91-110.	0.9	34
144	Dual-Targeting Nanoparticles for <i>In Vivo</i> Delivery of Suicide Genes to Chemotherapy-Resistant Ovarian Cancer Cells. Molecular Cancer Therapeutics, 2017, 16, 323-333.	1.9	34

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145	Oligosaccharyltransferase Inhibition Reduces Receptor Tyrosine Kinase Activation and Enhances Glioma Radiosensitivity. Clinical Cancer Research, 2019, 25, 784-795.	3.2	32
146	Synthesis and characterization of polymer-(multi)-peptide conjugates for control of specific cell aggregation. Journal of Biomaterials Science, Polymer Edition, 1998, 9, 207-226.	1.9	31
147	Biomimetic design in microparticulate vaccines. Biomaterials, 2003, 24, 4435-4443.	5 . 7	31
148	Synergistic tumor suppression by combined inhibition of telomerase and CDKN1A. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3062-71.	3.3	31
149	Residence half-life of IgG administered topically to the mouse vagina. Biology of Reproduction, 1996, 54, 264-269.	1.2	30
150	Multiphoton microscopy guides neurotrophin modification with poly(ethylene glycol) to enhance interstitial diffusion. Nature Materials, 2004, 3, 489-494.	13.3	30
151	Impact of Cell Type and Density on Nerve Growth Factor Distribution and Bioactivity in 3-Dimensional Collagen Gel Cultures. Tissue Engineering, 2006, 12, 1915-1927.	4.9	30
152	Parameter estimation methodology in a model of hydrophobic drug release from a polymer coating. Journal of Controlled Release, 2010, 142, 474-482.	4.8	30
153	From in silico hit to long-acting late-stage preclinical candidate to combat HIV-1 infection. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E802-E811.	3.3	30
154	Growth-Factor Delivery in Tissue Engineering. MRS Bulletin, 1996, 21, 62-65.	1.7	29
155	Quantitative image analysis for developing microstructural descriptions of heterogeneous materials. Chemical Engineering Science, 1987, 42, 1989-2004.	1.9	28
156	Controlling human polymorphonuclear leukocytes motility using microfabrication technology. Journal of Biomedical Materials Research Part B, 2000, 51, 694-702.	3.0	28
157	Pigment epitheliumâ€derived factor restoration increases bone mass and improves bone plasticity in a model of osteogenesis imperfecta type VI <i>via</i> Wnt3a blockade. FASEB Journal, 2016, 30, 2837-2848.	0.2	28
158	<i>Clostridium perfringens</i> enterotoxin <scp>C</scp> â€terminal domain labeled to fluorescent dyes for <i>in vivo</i> visualization of micrometastatic chemotherapyâ€resistant ovarian cancer. International Journal of Cancer, 2015, 137, 2618-2629.	2.3	27
159	Nanomedicine gets personal. Science Translational Medicine, 2015, 7, 314fs47.	5.8	27
160	Long-term vaginal antibody delivery: Delivery systems and biodistribution., 2000, 67, 253-264.		26
161	Biodegradable Meshes Printed with Extracellular Matrix Proteins Support Micropatterned Hepatocyte Cultures. Tissue Engineering - Part A, 2009, 15, 1169-1179.	1.6	26
162	Shining light on a new class of hydrogels. Nature Biotechnology, 2009, 27, 543-544.	9.4	26

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163	Local DNA Repair Inhibition for Sustained Radiosensitization of High-Grade Gliomas. Molecular Cancer Therapeutics, 2017, 16, 1456-1469.	1.9	26
164	Polymeric controlled delivery for immunization. Trends in Biotechnology, 1997, 15, 364-369.	4.9	25
165	Topical antibody delivery systems produce sustained levels in mucosal tissue and blood. Nature Biotechnology, 1998, 16, 163-167.	9.4	25
166	A nanoscopic multivalent antigen-presenting carrier for sensitive detection and drug delivery to T Cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2007, 3, 75-85.	1.7	25
167	Effect of Extracellular Matrix Elements on the Transport of Paclitaxel through an Arterial Wall Tissue Mimic. Biomacromolecules, 2008, 9, 2792-2798.	2.6	25
168	Nanoparticle delivery of miR-223 to attenuate macrophage fusion. Biomaterials, 2016, 89, 127-135.	5.7	25
169	Nanomaterials for convection-enhanced delivery of agents to treat brain tumors. Current Opinion in Biomedical Engineering, 2017, 4, 1-12.	1.8	25
170	Biodegradable bioadhesive nanoparticle incorporation of broadâ€spectrum organic sunscreen agents. Bioengineering and Translational Medicine, 2019, 4, 129-140.	3.9	25
171	Dextran retention in the rat brain following release from a polymer implant. Biotechnology Progress, 1992, 8, 527-532.	1.3	24
172	Synthesis and Biological Activity of Polyethylene Glycolâ [^] Mouse Nerve Growth Factor Conjugate. Bioconjugate Chemistry, 1999, 10, 932-937.	1.8	24
173	Paracrine exchanges of molecular signals between alginate-encapsulated pericytes and freely suspended endothelial cells within a 3D protein gel. Biomaterials, 2013, 34, 8899-8908.	5.7	24
174	Ligand-modified gene carriers increased uptake in target cells but reduced DNA release and transfection efficiency. Nanomedicine: Nanotechnology, Biology, and Medicine, 2010, 6, 334-343.	1.7	23
175	Cell Interactions with Polymers. , 2014, , 385-406.		23
176	Poly(amine-co-ester) nanoparticles for effective Nogo-B knockdown in the liver. Journal of Controlled Release, 2019, 304, 259-267.	4.8	23
177	Fibroblast aggregation by suspension with conjugates of poly(ethylene glycol) and RGD., 1996, 50, 349.		23
178	Development of a model system for preliminary evaluation of tissue-engineered vascular conduits. Journal of Pediatric Surgery, 2006, 41, 787-791.	0.8	21
179	Vaccine Delivery by Polymeric Vehicles in the Mouse Reproductive Tract Induces Sustained Local and Systemic Immunity. Molecular Pharmaceutics, 2010, 7, 1585-1595.	2.3	21
180	Prevention of K-Ras- and Pten-mediated intravaginal tumors by treatment with camptothecin-loaded PLGA nanoparticles. Drug Delivery and Translational Research, 2011, 1, 383-394.	3.0	21

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181	Nonsurgical treatment of skin cancer with local delivery of bioadhesive nanoparticles. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	21
182	Fibroblast aggregation by suspension with conjugates of poly(ethylene glycol) and RGD., 2000, 50, 349-356.		20
183	Simultaneous release of multiple molecules from poly(lactide-co-glycolide) nanoparticles assembled onto medical devices. Biomaterials, 2009, 30, 4889-4897.	5.7	20
184	Downsizing tumour therapeutics. Nature Nanotechnology, 2012, 7, 346-347.	15.6	20
185	Targeted Genome Modification via Triple Helix Formation. Methods in Molecular Biology, 2014, 1176, 89-106.	0.4	20
186	Controlled release of macromolecules from a degradable polyanhydride matrix. Journal of Biomaterials Science, Polymer Edition, 1995, 6, 297-311.	1.9	19
187	Aggregation Enhances Catecholamine Secretion in Cultured Cells. Tissue Engineering, 2001, 7, 179-190.	4.9	18
188	Alginate microparticles loaded with basic fibroblast growth factor induce tissue coverage in a rat model of myelomeningocele. Journal of Pediatric Surgery, 2019, 54, 80-85.	0.8	18
189	Controlled Antibody Delivery Systems. Nature Biotechnology, 1992, 10, 1446-1449.	9.4	17
190	Antibodies to CD18 influence neutrophil migration through extracellular matrix. Journal of Leukocyte Biology, 1999, 65, 356-363.	1.5	17
191	Replacement of Bone Marrow by Bone in Rat Femurs: The Bone Bioreactor. Tissue Engineering - Part A, 2008, 14, 237-246.	1.6	17
192	Multifunctional Poly(amine- <i>co</i> -ester- <i>co</i> -orthoester) for Efficient and Safe Gene Delivery. ACS Biomaterials Science and Engineering, 2016, 2, 2080-2089.	2.6	17
193	Progenitor-derived human endothelial cells evade alloimmunity by CRISPR/Cas9-mediated complete ablation of MHC expression. JCI Insight, 2019, 4, .	2.3	17
194	Tuning protein half-life in mouse using sequence-defined biopolymers functionalized with lipids. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	17
195	Surface Topography of Polyethylene Glycol Shell Nanoparticles Formed from Bottlebrush Block Copolymers Controls Interactions with Proteins and Cells. ACS Nano, 2021, 15, 16118-16129.	7.3	16
196	Cultures of cells from fetal rat brain: Methods to control composition, morphology, and biochemical activity., 1999, 62, 461-467.		15
197	Polymer delivery systems for site-specific genome editing. Journal of Controlled Release, 2011, 155, 312-316.	4.8	15
198	Structural and pharmacological evaluation of a novel non-nucleoside reverse transcriptase inhibitor as a promising long acting nanoformulation for treating HIV. Antiviral Research, 2019, 167, 110-116.	1.9	15

#	Article	lF	Citations
199	Nanoparticles for delivery of agents to fetal lungs. Acta Biomaterialia, 2021, 123, 346-353.	4.1	15
200	Direct targeting of amplified gene loci for proapoptotic anticancer therapy. Nature Biotechnology, 2022, 40, 325-334.	9.4	15
201	Nerve Growth Factor Delivery and Cell Aggregation Enhance Choline Acetyltransferase Activity after Neural Transplantation. Tissue Engineering, 1996, 2, 183-196.	4.9	14
202	Fas ligand and nitric oxide combination to control smooth muscle growth while sparing endothelium. Biomaterials, 2019, 212, 28-38.	5.7	14
203	Polyglycerol and Poly(ethylene glycol) exhibit different effects on pharmacokinetics and antibody generation when grafted to nanoparticle surfaces. Biomaterials, 2022, 287, 121676.	5.7	14
204	Influence of structural parameters on the ring-opening polymerization of new alkyl malolactonate monomers and on the biocompatibility of polymers therefrom. Macromolecular Chemistry and Physics, 2002, 203, 1684-1693.	1.1	12
205	Conjugation to Increase Treatment Volume during Local Therapy: A Case Study with PEGylated Camptothecin. Bioconjugate Chemistry, 2007, 18, 2115-2121.	1.8	12
206	Debugging the genetic code: Non-viral inÂvivo delivery of therapeutic genome editing technologies. Current Opinion in Biomedical Engineering, 2018, 7, 24-32.	1.8	12
207	Topical formulation based on disease-specific nanoparticles for single-dose cure of psoriasis. Journal of Controlled Release, 2022, 349, 354-366.	4.8	12
208	Enhancing potency of siRNA targeting fusion genes by optimization outside of target sequence. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6597-605.	3.3	11
209	The Yale Center for Biomedical Innovation and Technology (CBIT). Academic Medicine, 2019, 94, 528-534.	0.8	11
210	High-throughput quantitative microscopy-based half-life measurements of intravenously injected agents. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3502-3508.	3.3	11
211	The effect of synthetic polymers on the migration of monocytes through human cervical mucus. Biomaterials, 2004, 25, 4563-4571.	5.7	10
212	Efficacy of camptothecin and polymer-conjugated camptothecin in tumor spheroids and solid tumors. Journal of Biomaterials Science, Polymer Edition, 2007, 18, 1283-1299.	1.9	10
213	Poly(Lactic-co-Glycolic Acid) Nanoparticle Delivery of Peptide Nucleic Acids In Vivo. Methods in Molecular Biology, 2020, 2105, 261-281.	0.4	10
214	Glycoprotein-130 Expression Is Associated with Aggressive Bladder Cancer and Is a Potential Therapeutic Target. Molecular Cancer Therapeutics, 2019, 18, 413-420.	1.9	9
215	<scp>3D</scp> bioprinting of an implantable xenoâ€free vascularized human skin graft. Bioengineering and Translational Medicine, 2023, 8, .	3.9	9
216	ZNF117 regulates glioblastoma stem cell differentiation towards oligodendroglial lineage. Nature Communications, 2022, 13, 2196.	5.8	9

#	Article	IF	Citations
217	Intrathecal delivery and its applications in leptomeningeal disease. Advanced Drug Delivery Reviews, 2022, 186, 114338.	6.6	9
218	Surface patterning and biological evaluation of semi-interpenetrated poly(HEMA)/poly(alkyll²-malolactonate)s. Macromolecular Symposia, 2003, 197, 369-380.	0.4	8
219	Development of a parathyroid hormone-controlled release system as a potential surgical treatment for hypoparathyroidism. Journal of Pediatric Surgery, 2005, 40, 81-85.	0.8	8
220	Controlled protein delivery in the generation of microvascular networks. Drug Delivery and Translational Research, 2015, 5, 75-88.	3.0	8
221	Extracellular vesicles mediated exocytosis of antisense peptide nucleic acids. Molecular Therapy - Nucleic Acids, 2021, 25, 302-315.	2.3	8
222	Ex vivo isolated human vessel perfusion system for the design and assessment of nanomedicines targeted to the endothelium. Bioengineering and Translational Medicine, 2020, 5, e10154.	3.9	7
223	Quantitative microscopy-based measurements of circulating nanoparticle concentration using microliter blood volumes. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 1863-1867.	1.7	6
224	Enhanced growth and hepatic differentiation of fetal liver epithelial cells through combinational and temporal adjustment of soluble factors. Biotechnology Journal, 2012, 7, 440-448.	1.8	5
225	Improved threshold selection for the determination of volume of distribution of nanoparticles administered by convection-enhanced delivery. Computerized Medical Imaging and Graphics, 2017, 62, 34-40.	3.5	5
226	Longâ€acting and extendedâ€release implant and nanoformulations with a synergistic antiretroviral twoâ€drug combination controls HIV â€1 infection in a humanized mouse model. Bioengineering and Translational Medicine, 2022, 7, e10237.	3.9	5
227	Malolactonate polymers and copolymers for biomedical applications. Macromolecular Symposia, 2003, 197, 303-314.	0.4	4
228	Development of PTH Eluting Microspheres for the Treatment of Hypoparathyroidism. Journal of Surgical Research, 2007, 143, 195-199.	0.8	4
229	Are We Studying What Matters? Health Priorities and NIH-Funded Biomedical Engineering Research. Annals of Biomedical Engineering, 2010, 38, 2237-2251.	1.3	4
230	Engineering alginate microparticles for optimized accumulation in fetal rat myelomeningocele. Journal of Pediatric Surgery, 2022, 57, 544-550.	0.8	4
231	Surface conjugation of antibodies improves nanoparticle uptake in bronchial epithelial cells. PLoS ONE, 2022, 17, e0266218.	1.1	4
232	Cell interactions with polymers. , 2020, , 275-293.		3
233	Diffusion measurements for drug design. Nature Materials, 2005, 4, 714-714.	13.3	1
234	Tissue-Engineered Microvasculature to Reperfuse Isolated Renal Glomeruli. Tissue Engineering - Part A, 2015, 21, 2673-2679.	1.6	1

#	Article	IF	CITATIONS
235	A digital pathology tool for quantification of color features in histologic specimens. Bioengineering and Translational Medicine, 2022, 7, e10242.	3.9	1
236	Intra-amniotic Injection of Poly(lactic-co-glycolic Acid) Microparticles Loaded with Growth Factor: Effect on Tissue Coverage and Cellular Apoptosis in the Rat Model of Myelomeningocele. Journal of the American College of Surgeons, 2022, 234, 1010-1019.	0.2	1
237	Biomolecular Engineering I: Biotechnology. , 0, , 472-506.		0
238	Engineered molecular delivery for control and enhancement of transplanted endothelial cell fate in tissue engineering., 2009,,.		0
239	Reply to Pandey et al.: Understanding the efficacy of a potential antiretroviral drug candidate in humanized mouse model of HIV infection. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8114-E8115.	3.3	0
240	A novel polymer-coated nanoparticle (NP) for urothelium penetration and drug delivery Journal of Clinical Oncology, 2013, 31, e15543-e15543.	0.8	0