

# W Mark Saltzman

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3431355/publications.pdf>

Version: 2024-02-01

240  
papers

20,348  
citations

9775

73  
h-index

12258

133  
g-index

249  
all docs

249  
docs citations

249  
times ranked

24206  
citing authors

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

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

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

#	ARTICLE	IF	CITATIONS
55	Controlled release of dopamine from a polymeric brain implant: In vivo characterization. <i>Annals of Neurology</i> , 1989, 25, 351-356.	2.8	99
56	Cellular Fate of a Modular DNA Delivery System Mediated by Silica Nanoparticles. <i>Biotechnology Progress</i> , 2008, 21, 532-537.	1.3	99
57	Polymer nanoparticles encapsulating siRNA for treatment of HSV-2 genital infection. <i>Journal of Controlled Release</i> , 2012, 162, 102-110.	4.8	99
58	Controlled release of nerve growth factor from a polymeric implant. <i>Brain Research</i> , 1990, 515, 309-311.	1.1	98
59	Convection-enhanced delivery of camptothecin-loaded polymer nanoparticles for treatment of intracranial tumors. <i>Drug Delivery and Translational Research</i> , 2011, 1, 34-42.	3.0	98
60	Nanoparticle-mediated convection-enhanced delivery of a DNA intercalator to gliomas circumvents temozolomide resistance. <i>Nature Biomedical Engineering</i> , 2021, 5, 1048-1058.	11.6	96
61	Intracranial delivery of recombinant nerve growth factor: release kinetics and protein distribution for three delivery systems. <i>Pharmaceutical Research</i> , 1999, 16, 232-240.	1.7	94
62	New methods for direct delivery of chemotherapy for treating brain tumors. <i>Yale Journal of Biology and Medicine</i> , 2006, 79, 141-52.	0.2	94
63	Transport and elimination of recombinant human NGF during long-term delivery to the brain. <i>Brain Research</i> , 1996, 727, 169-181.	1.1	90
64	A PEDF N-terminal peptide protects the retina from ischemic injury when delivered in PLGA nanospheres. <i>Experimental Eye Research</i> , 2006, 83, 824-833.	1.2	90
65	Dilation and degradation of the brain extracellular matrix enhances penetration of infused polymer nanoparticles. <i>Brain Research</i> , 2007, 1180, 121-132.	1.1	90
66	Nanosystems for simultaneous imaging and drug delivery to T cells. <i>AAPS Journal</i> , 2007, 9, E171-E180.	2.2	89
67	An electrospun scaffold integrating nucleic acid delivery for treatment of full-thickness wounds. <i>Biomaterials</i> , 2013, 34, 3891-3901.	5.7	89
68	Nanoparticles Deliver Triplex-forming PNAs for Site-specific Genomic Recombination in CD34+ Human Hematopoietic Progenitors. <i>Molecular Therapy</i> , 2011, 19, 172-180.	3.7	86
69	Polymer nanoparticles containing tumor lysates as antigen delivery vehicles for dendritic cell-based antitumor immunotherapy. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2011, 7, 1-10.	1.7	86
70	Dual delivery of VEGF and MCP-1 to support endothelial cell transplantation for therapeutic vascularization. <i>Biomaterials</i> , 2010, 31, 3054-3062.	5.7	85
71	Polymer Nanoparticle-Mediated Delivery of MicroRNA Inhibition and Alternative Splicing. <i>Molecular Pharmaceutics</i> , 2012, 9, 1481-1488.	2.3	84
72	The NIH Somatic Cell Genome Editing program. <i>Nature</i> , 2021, 592, 195-204.	13.7	84

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

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

#	ARTICLE	IF	CITATIONS
109	Escaping the endosome: assessing cellular trafficking mechanisms of non-viral vehicles. <i>Journal of Controlled Release</i> , 2021, 335, 465-480.	4.8	55
110	Distribution of drugs following controlled delivery to the brain interstitium. <i>Journal of Neuro-Oncology</i> , 1995, 26, 91-102.	1.4	54
111	Controlled Vaginal Delivery of Antibodies in the Mouse <sup>1</sup> . <i>Biology of Reproduction</i> , 1992, 47, 133-140.	1.2	53
112	Growth versus function in the three-dimensional culture of single and aggregated hepatocytes within collagen gels. <i>Biotechnology Progress</i> , 1993, 9, 600-607.	1.3	53
113	Micron-Scale Positioning of Features Influences the Rate of Polymorphonuclear Leukocyte Migration. <i>Biophysical Journal</i> , 2001, 81, 2569-2579.	0.2	51
114	Bioengineering Approaches to Controlled Protein Delivery. <i>Pediatric Research</i> , 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. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2013, 9, 1124-1134.	1.7	51
116	Biodegradation, biocompatibility, and drug delivery in poly( $\epsilon$ -pentadecalactone-co-p-dioxanone) copolyesters. <i>Biomaterials</i> , 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. <i>Biomaterials</i> , 2018, 176, 122-130.	5.7	49
118	Cell-binding Peptides Conjugated to Poly(ethylene glycol) Promote Neural Cell Aggregation. <i>Nature Biotechnology</i> , 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. <i>Journal of Controlled Release</i> , 2003, 86, 339-348.	4.8	48
120	Human Aortic Smooth Muscle Cells Promote Arteriole Formation by Coengrafted Endothelial Cells. <i>Tissue Engineering - Part A</i> , 2009, 15, 165-173.	1.6	48
121	The effect of inflammatory cell-derived MCP-1 loss on neuronal survival during chronic neuroinflammation. <i>Biomaterials</i> , 2014, 35, 6698-6706.	5.7	48
122	Canonical and Non-Canonical Barriers Facing AntimiR Cancer Therapeutics. <i>Current Medicinal Chemistry</i> , 2013, 20, 3582-3593.	1.2	48
123	Oligosaccharyltransferase Inhibition Overcomes Therapeutic Resistance to EGFR Tyrosine Kinase Inhibitors. <i>Cancer Research</i> , 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-co-glycolic acid) (PLGA) Nanoparticles with Biotinylated F-18 Prosthetic Groups and Imaging of Their Delivery to the Brain with Positron Emission Tomography. <i>Bioconjugate Chemistry</i> , 2014, 25, 2157-2165.	1.8	45
126	Imaging the delivery of brain-penetrating PLGA nanoparticles in the brain using magnetic resonance. <i>Journal of Neuro-Oncology</i> , 2015, 121, 441-449.	1.4	44



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

#	ARTICLE	IF	CITATIONS
145	Oligosaccharyltransferase Inhibition Reduces Receptor Tyrosine Kinase Activation and Enhances Glioma Radiosensitivity. <i>Clinical Cancer Research</i> , 2019, 25, 784-795.	3.2	32
146	Synthesis and characterization of polymer-(multi)-peptide conjugates for control of specific cell aggregation. <i>Journal of Biomaterials Science, Polymer Edition</i> , 1998, 9, 207-226.	1.9	31
147	Biomimetic design in microparticulate vaccines. <i>Biomaterials</i> , 2003, 24, 4435-4443.	5.7	31
148	Synergistic tumor suppression by combined inhibition of telomerase and CDKN1A. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E3062-71.	3.3	31
149	Residence half-life of IgG administered topically to the mouse vagina. <i>Biology of Reproduction</i> , 1996, 54, 264-269.	1.2	30
150	Multiphoton microscopy guides neurotrophin modification with poly(ethylene glycol) to enhance interstitial diffusion. <i>Nature Materials</i> , 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. <i>Tissue Engineering</i> , 2006, 12, 1915-1927.	4.9	30
152	Parameter estimation methodology in a model of hydrophobic drug release from a polymer coating. <i>Journal of Controlled Release</i> , 2010, 142, 474-482.	4.8	30
153	From in silico hit to long-acting late-stage preclinical candidate to combat HIV-1 infection. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E802-E811.	3.3	30
154	Growth-Factor Delivery in Tissue Engineering. <i>MRS Bulletin</i> , 1996, 21, 62-65.	1.7	29
155	Quantitative image analysis for developing microstructural descriptions of heterogeneous materials. <i>Chemical Engineering Science</i> , 1987, 42, 1989-2004.	1.9	28
156	Controlling human polymorphonuclear leukocytes motility using microfabrication technology. <i>Journal of Biomedical Materials Research Part B</i> , 2000, 51, 694-702.	3.0	28
157	Pigment epithelium-derived factor restoration increases bone mass and improves bone plasticity in a model of osteogenesis imperfecta type VI <i>via</i> Wnt3a blockade. <i>FASEB Journal</i> , 2016, 30, 2837-2848.	0.2	28
158	<i>Clostridium perfringens</i> enterotoxin C-terminal domain labeled to fluorescent dyes for <i>in vivo</i> visualization of micrometastatic chemotherapy-resistant ovarian cancer. <i>International Journal of Cancer</i> , 2015, 137, 2618-2629.	2.3	27
159	Nanomedicine gets personal. <i>Science Translational Medicine</i> , 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. <i>Tissue Engineering - Part A</i> , 2009, 15, 1169-1179.	1.6	26
162	Shining light on a new class of hydrogels. <i>Nature Biotechnology</i> , 2009, 27, 543-544.	9.4	26

#	ARTICLE	IF	CITATIONS
163	Local DNA Repair Inhibition for Sustained Radiosensitization of High-Grade Gliomas. <i>Molecular Cancer Therapeutics</i> , 2017, 16, 1456-1469.	1.9	26
164	Polymeric controlled delivery for immunization. <i>Trends in Biotechnology</i> , 1997, 15, 364-369.	4.9	25
165	Topical antibody delivery systems produce sustained levels in mucosal tissue and blood. <i>Nature Biotechnology</i> , 1998, 16, 163-167.	9.4	25
166	A nanoscopic multivalent antigen-presenting carrier for sensitive detection and drug delivery to T Cells. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2007, 3, 75-85.	1.7	25
167	Effect of Extracellular Matrix Elements on the Transport of Paclitaxel through an Arterial Wall Tissue Mimic. <i>Biomacromolecules</i> , 2008, 9, 2792-2798.	2.6	25
168	Nanoparticle delivery of miR-223 to attenuate macrophage fusion. <i>Biomaterials</i> , 2016, 89, 127-135.	5.7	25
169	Nanomaterials for convection-enhanced delivery of agents to treat brain tumors. <i>Current Opinion in Biomedical Engineering</i> , 2017, 4, 1-12.	1.8	25
170	Biodegradable bioadhesive nanoparticle incorporation of broad-spectrum organic sunscreen agents. <i>Bioengineering and Translational Medicine</i> , 2019, 4, 129-140.	3.9	25
171	Dextran retention in the rat brain following release from a polymer implant. <i>Biotechnology Progress</i> , 1992, 8, 527-532.	1.3	24
172	Synthesis and Biological Activity of Polyethylene Glycol~Mouse Nerve Growth Factor Conjugate. <i>Bioconjugate Chemistry</i> , 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. <i>Biomaterials</i> , 2013, 34, 8899-8908.	5.7	24
174	Ligand-modified gene carriers increased uptake in target cells but reduced DNA release and transfection efficiency. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 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. <i>Journal of Controlled Release</i> , 2019, 304, 259-267.	4.8	23
177	Fibroblast aggregation by suspension with conjugates of poly(ethylene glycol) and RGD. <i>Biotechnology and Bioengineering</i> , 1996, 50, 349-356.	1.7	23
178	Development of a model system for preliminary evaluation of tissue-engineered vascular conduits. <i>Journal of Pediatric Surgery</i> , 2006, 41, 787-791.	0.8	21
179	Vaccine Delivery by Polymeric Vehicles in the Mouse Reproductive Tract Induces Sustained Local and Systemic Immunity. <i>Molecular Pharmaceutics</i> , 2010, 7, 1585-1595.	2.3	21
180	Prevention of K-Ras- and Pten-mediated intravaginal tumors by treatment with camptothecin-loaded PLGA nanoparticles. <i>Drug Delivery and Translational Research</i> , 2011, 1, 383-394.	3.0	21

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

#	ARTICLE	IF	CITATIONS
217	Intrathecal delivery and its applications in leptomeningeal disease. <i>Advanced Drug Delivery Reviews</i> , 2022, 186, 114338.	6.6	9
218	Surface patterning and biological evaluation of semi-interpenetrated poly(HEMA)/poly(alkyl $\beta$ -malolactonate)s. <i>Macromolecular Symposia</i> , 2003, 197, 369-380.	0.4	8
219	Development of a parathyroid hormone-controlled release system as a potential surgical treatment for hypoparathyroidism. <i>Journal of Pediatric Surgery</i> , 2005, 40, 81-85.	0.8	8
220	Controlled protein delivery in the generation of microvascular networks. <i>Drug Delivery and Translational Research</i> , 2015, 5, 75-88.	3.0	8
221	Extracellular vesicles mediated exocytosis of antisense peptide nucleic acids. <i>Molecular Therapy - Nucleic Acids</i> , 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. <i>Bioengineering and Translational Medicine</i> , 2020, 5, e10154.	3.9	7
223	Quantitative microscopy-based measurements of circulating nanoparticle concentration using microliter blood volumes. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 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. <i>Biotechnology Journal</i> , 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. <i>Computerized Medical Imaging and Graphics</i> , 2017, 62, 34-40.	3.5	5
226	Long-acting and extended-release implant and nanoformulations with a synergistic antiretroviral two-drug combination controls HIV-1 infection in a humanized mouse model. <i>Bioengineering and Translational Medicine</i> , 2022, 7, e10237.	3.9	5
227	Malolactonate polymers and copolymers for biomedical applications. <i>Macromolecular Symposia</i> , 2003, 197, 303-314.	0.4	4
228	Development of PTH Eluting Microspheres for the Treatment of Hypoparathyroidism. <i>Journal of Surgical Research</i> , 2007, 143, 195-199.	0.8	4
229	Are We Studying What Matters? Health Priorities and NIH-Funded Biomedical Engineering Research. <i>Annals of Biomedical Engineering</i> , 2010, 38, 2237-2251.	1.3	4
230	Engineering alginate microparticles for optimized accumulation in fetal rat myelomeningocele. <i>Journal of Pediatric Surgery</i> , 2022, 57, 544-550.	0.8	4
231	Surface conjugation of antibodies improves nanoparticle uptake in bronchial epithelial cells. <i>PLoS ONE</i> , 2022, 17, e0266218.	1.1	4
232	Cell interactions with polymers. , 2020, , 275-293.		3
233	Diffusion measurements for drug design. <i>Nature Materials</i> , 2005, 4, 714-714.	13.3	1
234	Tissue-Engineered Microvasculature to Reperfuse Isolated Renal Glomeruli. <i>Tissue Engineering - Part A</i> , 2015, 21, 2673-2679.	1.6	1

#	ARTICLE	IF	CITATIONS
235	A digital pathology tool for quantification of color features in histologic specimens. <i>Bioengineering and Translational Medicine</i> , 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. <i>Journal of the American College of Surgeons</i> , 2022, 234, 1010-1019.	0.2	1
237	<i>Biomolecular Engineering I: Biotechnology.</i> , 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. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E8114-E8115.	3.3	0
240	A novel polymer-coated nanoparticle (NP) for urothelium penetration and drug delivery.. <i>Journal of Clinical Oncology</i> , 2013, 31, e15543-e15543.	0.8	0