Tejal A Desai

List of Publications by Year in Descending Order

216 papers	12,748 citations	64 h-index	106 g-index
228 ext. papers	13,974 ext. citations	9.9 avg, IF	6.63 L-index

#	Paper	IF	Citations
216	Synthesis and Preliminary Biological Assessment of Carborane-Loaded Theranostic Nanoparticles to Target Prostate-Specific Membrane Antigen. *ACS Applied Materials & Interfaces*, **2021**, 13, 54739-54752	9.5	1
215	Bioinspired Polymeric High Aspect Ratio Particles with Asymmetric Janus Functionalities. *Advanced NanoBiomed Research*, **2021**, 1, 2000057	0	1
214	Impact of Microdevice Geometry on Transit and Retention in the Murine Gastrointestinal Tract. *ACS Biomaterials Science and Engineering*, **2021**,	5.5	1
213	Micro- and nanoscale biophysical cues for cardiovascular disease therapy. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2021**, 34, 102365	6	1
212	Perspectives on disparities in scientific visibility. *Nature Reviews Materials*, **2021**, 6, 556-559	73.3	3
211	DNA scaffolds enable efficient and tunable functionalization of biomaterials for immune cell modulation. *Nature Nanotechnology*, **2021**, 16, 214-223	28.7	18
210	Multi-Immune Agonist Nanoparticle Therapy Stimulates Type I Interferons to Activate Antigen-Presenting Cells and Induce Antigen-Specific Antitumor Immunity. *Molecular Pharmaceutics*, **2021**, 18, 1014-1025	5.6	4
209	Fund Black scientists. *Cell*, **2021**, 184, 561-565	56.2	42
208	Transthyretin amyloid fibrils alter primary fibroblast structure, function, and inflammatory gene expression. *American Journal of Physiology - Heart and Circulatory Physiology*, **2021**, 321, H149-H160	5.2	2
207	Modulating the foreign body response of implants for diabetes treatment. *Advanced Drug Delivery Reviews*, **2021**, 174, 87-113	18.5	13
206	Drug delivery to the anterior segment of the eye: A review of current and future treatment strategies. *International Journal of Pharmaceutics*, **2021**, 607, 120924	6.5	9
205	Engineering the drug carrier biointerface to overcome biological barriers to drug delivery. *Advanced Drug Delivery Reviews*, **2020**, 167, 89-108	18.5	31
204	TiO-Based Nanotopographical Cues Attenuate the Restenotic Phenotype in Primary Human Vascular Endothelial and Smooth Muscle Cells. *ACS Biomaterials Science and Engineering*, **2020**, 6, 923-932	5.5	6
203	Near-Infrared Optical Nanosensors for Continuous Detection of Glucose. *Journal of Diabetes Science and Technology*, **2020**, 14, 204-211	4.1	7
202	An Injectable Cytokine Trap for Local Treatment of Autoimmune Disease. *Biomaterials*, **2020**, 230, 119626	15.6	10
201	Micro and nanoscale technologies in oral drug delivery. *Advanced Drug Delivery Reviews*, **2020**, 157, 37-62	18.5	45
200	Nanotopography Enhances Dynamic Remodeling of Tight Junction Proteins through Cytosolic Liquid Complexes. *ACS Nano*, **2020**, 14, 13192-13202	16.7	4

199	Networks of High Aspect Ratio Particles to Direct Colloidal Assembly Dynamics and Cellular Interactions. *Advanced Functional Materials*, **2020**, 30, 2005938	15.6	3
198	Co-Delivery of Timolol and Brimonidine with a Polymer Thin-Film Intraocular Device. *Journal of Ocular Pharmacology and Therapeutics*, **2019**, 35, 124-131	2.6	5
197	Recent advances in intraocular sustained-release drug delivery devices. *Drug Discovery Today*, **2019**, 24, 1694-1700	8.8	27
196	Bottom-Up Fabrication of Multilayer Enteric Devices for the Oral Delivery of Peptides. *Pharmaceutical Research*, **2019**, 36, 89	4.5	18
195	Hang on tight: reprogramming the cell with microstructural cues. *Biomedical Microdevices*, **2019**, 21, 43	3.7	6
194	Device design methodology and formulation of a protein therapeutic for sustained release intraocular delivery. *Bioengineering and Translational Medicine*, **2019**, 4, 152-163	14.8	6
193	Supporting Survival of Transplanted Stem-Cell-Derived Insulin-Producing Cells in an Encapsulation Device Augmented with Controlled Release of Amino Acids. *Advanced Biology*, **2019**, 3, 1900086	3.5	4
192	Human intestinal spheroids cultured using Sacrificial Micromolding as a model system for studying drug transport. *Scientific Reports*, **2019**, 9, 9936	4.9	10
191	Reversible inhibition of efflux transporters by hydrogel microdevices. *European Journal of Pharmaceutics and Biopharmaceutics*, **2019**, 145, 76-84	5.7	12
190	Engineering a Clinically Translatable Bioartificial Pancreas to Treat Type I Diabetes. *Trends in Biotechnology*, **2018**, 36, 445-456	15.1	45
189	Influence of the Surfactant Structure on Photoluminescent Conjugated Polymer Nanoparticles: Interfacial Properties and Protein Binding. *Langmuir*, **2018**, 34, 6125-6137	4	13
188	Injectable hyaluronic acid based microrods provide local micromechanical and biochemical cues to attenuate cardiac fibrosis after myocardial infarction. *Biomaterials*, **2018**, 169, 11-21	15.6	37
187	Lipid signaling affects primary fibroblast collective migration and anchorage in response to stiffness and microtopography. *Journal of Cellular Physiology*, **2018**, 233, 3672-3683	7	5
186	Perivascular delivery of resolvin D1 inhibits neointimal hyperplasia in a rabbit vein graft model. *Journal of Vascular Surgery*, **2018**, 68, 188S-200S.e4	3.5	17
185	The Psychiatric Cell Map Initiative: A Convergent Systems Biological Approach to Illuminating Key Molecular Pathways in Neuropsychiatric Disorders. *Cell*, **2018**, 174, 505-520	56.2	69
184	Pro-resolving lipid mediators in vascular disease. *Journal of Clinical Investigation*, **2018**, 128, 3727-3735	15.9	33
183	Porous Silicon in Immunoisolation and Bio-filtration **2018**, 1471-1478		
182	Long-term intraocular pressure reduction with intracameral polycaprolactone glaucoma devices that deliver a novel anti-glaucoma agent. *Journal of Controlled Release*, **2018**, 269, 45-51	11.7	16

181	Prevascularization of the Subcutaneous Space Improves Survival of Transplanted Mouse Islets. *Transplantation*, **2018**, 102, S372	1.8	2
180	Islet encapsulation therapy - racing towards the finish line?. *Nature Reviews Endocrinology*, **2018**, 14, 630-632	15.2	11
179	Stem Cell Therapies for Treating Diabetes: Progress and Remaining Challenges. *Cell Stem Cell*, **2018**, 22, 810-823	18	125
178	TiO2 Nanotube Arrays as Smart Platforms for Biomedical Applications **2018**, 143-157		6
177	Picoliter-volume inkjet printing into planar microdevice reservoirs for low-waste, high-capacity drug loading. *Bioengineering and Translational Medicine*, **2017**, 2, 9-16	14.8	20
176	Glucose-Stimulated Insulin Response of Silicon Nanopore-Immunoprotected Islets under Convective Transport. *ACS Biomaterials Science and Engineering*, **2017**, 3, 1051-1061	5.5	2
175	Long acting systemic HIV pre-exposure prophylaxis: an examination of the field. *Drug Delivery and Translational Research*, **2017**, 7, 805-816	6.2	24
174	Calibrated flux measurements reveal a nanostructure-stimulated transcytotic pathway. *Experimental Cell Research*, **2017**, 355, 153-161	4.2	8
173	Nanoengineered Stent Surface to Reduce In-Stent Restenosis in Vivo. *ACS Applied Materials & Interfaces*, **2017**, 9, 19677-19686	9.5	27
172	Advances in islet encapsulation technologies. *Nature Reviews Drug Discovery*, **2017**, 16, 338-350	64.1	214
171	Nanoporous Immunoprotective Device for Stem-Cell-Derived □Cell Replacement Therapy. *ACS Nano*, **2017**, 11, 7747-7757	16.7	53
170	Injectable Polymeric Cytokine-Binding Nanowires Are Effective Tissue-Specific Immunomodulators. *ACS Nano*, **2017**, 11, 11433-11440	16.7	11
169	Nanotemplated Materials for Advanced Drug Delivery Systems **2017**, 289-308		
168	Design and Biological Applications of Nanostructured Poly(Ethylene Glycol) Films **2017**, 531-560		
167	Silicon nanopore membrane (SNM) for islet encapsulation and immunoisolation under convective transport. *Scientific Reports*, **2016**, 6, 23679	4.9	33
166	The 2016 Young Innovators of Cellular and Molecular Bioengineering. *Cellular and Molecular Bioengineering*, **2016**, 9, 303-304	3.9	
165	A Tunable, Biodegradable, Thin-Film Polymer Device as a Long-Acting Implant Delivering Tenofovir Alafenamide Fumarate for HIV Pre-exposure Prophylaxis. *Pharmaceutical Research*, **2016**, 33, 1649-56	4.5	68
164	Fabrication of Sealed Nanostraw Microdevices for Oral Drug Delivery. *ACS Nano*, **2016**, 10, 5873-81	16.7	47

163	Nitinol-Based Nanotubular Arrays with Controlled Diameters Upregulate Human Vascular Cell ECM Production. *ACS Biomaterials Science and Engineering*, **2016**, 2, 409-414	5.5	19
162	Tunable Microfibers Suppress Fibrotic Encapsulation via Inhibition of TGF Signaling. *Tissue Engineering - Part A*, **2016**, 22, 142-50	3.9	4
161	Titanium dioxide nanotube arrays coated with laminin enhance C2C12 skeletal myoblast adhesion and differentiation. *RSC Advances*, **2016**, 6, 18502-18514	3.7	5
160	Approaching a cure for type 1 diabetes. *Nature Medicine*, **2016**, 22, 236-7	50.5	3
159	Biocompatibility and Pharmacokinetic Analysis of an Intracameral Polycaprolactone Drug Delivery Implant for Glaucoma **2016**, 57, 4341-6		40
158	Miniaturized iPS-Cell-Derived Cardiac Muscles for Physiologically Relevant Drug Response Analyses. *Scientific Reports*, **2016**, 6, 24726	4.9	142
157	Probing the luminal microenvironment of reconstituted epithelial microtissues. *Scientific Reports*, **2016**, 6, 33148	4.9	6
156	In vivo and in vitro sustained release of ranibizumab from a nanoporous thin-film device. *Drug Delivery and Translational Research*, **2016**, 6, 771-780	6.2	17
155	Micro/nanofabricated platforms for oral drug delivery. *Journal of Controlled Release*, **2015**, 219, 431-444	11.7	67
154	Polycaprolactone Thin-Film Micro- and Nanoporous Cell-Encapsulation Devices. *ACS Nano*, **2015**, 9, 5675-82	12.7	58
153	Nanotopography facilitates in vivo transdermal delivery of high molecular weight therapeutics through an integrin-dependent mechanism. *Nano Letters*, **2015**, 15, 2434-41	11.5	28
152	Programmed synthesis of three-dimensional tissues. *Nature Methods*, **2015**, 12, 975-81	21.6	152
151	Polycaprolactone thin-film drug delivery systems: Empirical and predictive models for device design. *Materials Science and Engineering C*, **2015**, 57, 232-9	8.3	37
150	Interventional magnetic resonance imaging-guided cell transplantation into the brain with radially branched deployment. *Molecular Therapy*, **2015**, 23, 119-29	11.7	15
149	Formation of spatially and geometrically controlled three-dimensional tissues in soft gels by sacrificial micromolding. *Tissue Engineering - Part C: Methods*, **2015**, 21, 541-7	2.9	19
148	Micromechanical Cues Converging on Fibroblasts, Cardiac Myocytes, and Stem Cells: Micromechanical Cues Converging on Fibroblasts, Cardiac Myocytes, and Stem Cells **2015**, 1-34		
147	In Vitro and In Vivo Sustained Zero-Order Delivery of Rapamycin (Sirolimus) From a Biodegradable Intraocular Device **2015**, 56, 7331-7		20
146	Intestinal absorption of fluorescently labeled nanoparticles. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2015**, 11, 1169-78	6	14

145	Nanostructured materials for ocular delivery: nanodesign for enhanced bioadhesion, transepithelial permeability and sustained delivery. *Therapeutic Delivery*, **2015**, 6, 1365-76	3.8	12
144	Fabrication of micropatterned polymeric nanowire arrays for high-resolution reagent localization and topographical cellular control. *Nano Letters*, **2015**, 15, 1540-6	11.5	18
143	A strategy for tissue self-organization that is robust to cellular heterogeneity and plasticity. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 2287-92	11.5	71
142	Localized delivery of mechano-growth factor E-domain peptide via polymeric microstructures improves cardiac function following myocardial infarction. *Biomaterials*, **2015**, 46, 26-34	15.6	14
141	Facile Synthesis of Robust Free-Standing TiO Nanotubular Membranes for Biofiltration Applications. *Journal of Applied Electrochemistry*, **2014**, 44, 411-418	2.6	14
140	In vitro analysis of nanoparticulate hydroxyapatite/chitosan composites as potential drug delivery platforms for the sustained release of antibiotics in the treatment of osteomyelitis. *Journal of Pharmaceutical Sciences*, **2014**, 103, 567-79	3.9	50
139	Compliant 3D microenvironment improves □cell cluster insulin expression through mechanosensing and □catenin signaling. *Tissue Engineering - Part A*, **2014**, 20, 1888-95	3.9	32
138	Simultaneous bactericidal and osteogenic effect of nanoparticulate calcium phosphate powders loaded with clindamycin on osteoblasts infected with Staphylococcus aureus. *Materials Science and Engineering C*, **2014**, 37, 210-22	8.3	38
137	Porous Silicon in Immunoisolation and Bio-filtration **2014**, 1-8		
136	Novel functionalization of discrete polymeric biomaterial microstructures for applications in imaging and three-dimensional manipulation. *ACS Applied Materials & Interfaces*, **2014**, 6, 14477-85	9.5	10
135	Discrete microstructural cues for the attenuation of fibrosis following myocardial infarction. *Biomaterials*, **2014**, 35, 8820-8828	15.6	12
134	Nanoparticulate drug delivery platforms for advancing bone infection therapies. *Expert Opinion on Drug Delivery*, **2014**, 11, 1899-912	8	23
133	Nitinol-based nanotubular coatings for the modulation of human vascular cell function. *Nano Letters*, **2014**, 14, 5021-8	11.5	36
132	Planar microdevices enhance transport of large molecular weight molecules across retinal pigment epithelial cells. *Biomedical Microdevices*, **2014**, 16, 629-38	3.7	7
131	Sustained delivery of MGF peptide from microrods attracts stem cells and reduces apoptosis of myocytes. *Biomedical Microdevices*, **2014**, 16, 705-15	3.7	16
130	Effect of collagen nanotopography on keloid fibroblast proliferation and matrix synthesis: implications for dermal wound healing. *Tissue Engineering - Part A*, **2014**, 20, 2728-36	3.9	18
129	Advances in calcium phosphate coatings--anodic spark deposition: a review. *Frontiers in Bioscience - Landmark*, **2014**, 19, 475-89	2.8	3
128	Membranes to achieve immunoprotection of transplanted islets. *Frontiers in Bioscience - Landmark*, **2014**, 19, 49-76	2.8	56

127	Planar microdevices for enhanced in vivo retention and oral bioavailability of poorly permeable drugs. *Advanced Healthcare Materials*, **2014**, 3, 1648-54	10.1	49
126	The effect of nanotopography on modulating protein adsorption and the fibrotic response. *Tissue Engineering - Part A*, **2014**, 20, 130-8	3.9	36
125	Planar bioadhesive microdevices: a new technology for oral drug delivery. *Current Pharmaceutical Biotechnology*, **2014**, 15, 673-83	2.6	16
124	Porous Silicon in Immunoisolation and Bio-filtration **2014**, 937-944		
123	Phase composition control of calcium phosphate nanoparticles for tunable drug delivery kinetics and treatment of osteomyelitis. I. Preparation and drug release. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 1416-26	5.4	64
122	In the spotlight: Tissue engineering. *IEEE Reviews in Biomedical Engineering*, **2013**, 6, 27-8	6.4	1
121	Nanostructure-mediated transport of biologics across epithelial tissue: enhancing permeability via nanotopography. *Nano Letters*, **2013**, 13, 164-71	11.5	39
120	Microdomain heterogeneity in 3D affects the mechanics of neonatal cardiac myocyte contraction. *Biomechanics and Modeling in Mechanobiology*, **2013**, 12, 95-109	3.8	10
119	Nano- and microfabrication for overcoming drug delivery challenges. *Journal of Materials Chemistry B*, **2013**, 1, 1878-1884	7.3	15
118	Effect of calcium phosphate particle shape and size on their antibacterial and osteogenic activity in the delivery of antibiotics in vitro. *ACS Applied Materials & Interfaces*, **2013**, 5, 2422-31	9.5	62
117	Ocular biocompatibility and structural integrity of micro- and nanostructured poly(caprolactone) films. *Journal of Ocular Pharmacology and Therapeutics*, **2013**, 29, 249-57	2.6	37
116	PEGylated silicon nanowire coated silica microparticles for drug delivery across intestinal epithelium. *Biomaterials*, **2012**, 33, 1663-72	15.6	50
115	Collagen fibril diameter and alignment promote the quiescent keratocyte phenotype. *Journal of Biomedical Materials Research - Part A*, **2012**, 100, 613-21	5.4	37
114	Single-injection HPLC method for rapid analysis of a combination drug delivery system. *AAPS PharmSciTech*, **2012**, 13, 605-10	3.9	4
113	Size-controlled insulin-secreting cell clusters. *Acta Biomaterialia*, **2012**, 8, 4278-84	10.8	12
112	Shape effect in the design of nanowire-coated microparticles as transepithelial drug delivery devices. *ACS Nano*, **2012**, 6, 7832-41	16.7	45
111	Multi-reservoir bioadhesive microdevices for independent rate-controlled delivery of multiple drugs. *Small*, **2012**, 8, 3839-46	11	45
110	Emerging microtechnologies for the development of oral drug delivery devices. *Advanced Drug Delivery Reviews*, **2012**, 64, 1569-78	18.5	39

109	Nanostructured thin film polymer devices for constant-rate protein delivery. *Nano Letters*, **2012**, 12, 5355-61	13.5	39
108	Microtechnologies for Drug Delivery **2012**, 359-381		3
107	Differentiation of human embryonic stem cells into pancreatic endoderm in patterned size-controlled clusters. *Stem Cell Research*, **2011**, 6, 276-85	1.6	41
106	Hemocompatibility of silicon-based substrates for biomedical implant applications. *Annals of Biomedical Engineering*, **2011**, 39, 1296-305	4.7	51
105	Hierarchical nanoengineered surfaces for enhanced cytoadhesion and drug delivery. *Biomaterials*, **2011**, 32, 3499-506	15.6	31
104	Integrin β1 blockade enhances microtopographical down-regulation of α-smooth muscle actin: role of microtopography in ECM regulation. *Integrative Biology (United Kingdom)*, **2011**, 3, 733-41	3.7	8
103	Microtopographical assembly of cardiomyocytes. *Integrative Biology (United Kingdom)*, **2011**, 3, 1011-9	3.7	10
102	In the spotlight: tissue engineering--translation for tissue engineering and regenerative medicine. *IEEE Reviews in Biomedical Engineering*, **2011**, 4, 24-5	6.4	
101	Nanoengineered surfaces enhance drug loading and adhesion. *Nano Letters*, **2011**, 11, 1076-81	11.5	28
100	In the spotlight: tissue engineering. *IEEE Reviews in Biomedical Engineering*, **2010**, 3, 23-4	6.4	
99	Patterning of mono- and multilayered pancreatic beta-cell clusters. *Langmuir*, **2010**, 26, 9943-9	4	21
98	Whole genome expression analysis reveals differential effects of TiO2 nanotubes on vascular cells. *Nano Letters*, **2010**, 10, 143-8	11.5	64
97	Microtopographical cues in 3D attenuate fibrotic phenotype and extracellular matrix deposition: implications for tissue regeneration. *Tissue Engineering - Part A*, **2010**, 16, 2519-27	3.9	42
96	Nanoscale porosity in polymer films: fabrication and therapeutic applications. *Soft Matter*, **2010**, 6, 1621-1631	3.6	50
95	Biophysical mechanisms of single-cell interactions with microtopographical cues. *Biomedical Microdevices*, **2010**, 12, 287-96	3.7	24
94	Enhanced differentiation of retinal progenitor cells using microfabricated topographical cues. *Biomedical Microdevices*, **2010**, 12, 363-9	3.7	61
93	Hypertrophy, gene expression, and beating of neonatal cardiac myocytes are affected by microdomain heterogeneity in 3D. *Biomedical Microdevices*, **2010**, 12, 1073-85	3.7	12
92	Nanotemplating of biodegradable polymer membranes for constant-rate drug delivery. *Advanced Materials*, **2010**, 22, 2358-62	24	34

91	Three-dimensional culture with stiff microstructures increases proliferation and slows osteogenic differentiation of human mesenchymal stem cells. *Small*, **2010**, 6, 355-60	11	25
90	Inorganic nanoporous membranes for immunoisolated cell-based drug delivery. *Advances in Experimental Medicine and Biology*, **2010**, 670, 104-25	3.6	14
89	Proliferation of mouse embryonic stem cell progeny and the spontaneous contractile activity of cardiomyocytes are affected by microtopography. *Developmental Dynamics*, **2009**, 238, 1964-73	2.9	29
88	In vitro inflammatory response of nanostructured titania, silicon oxide, and polycaprolactone. *Journal of Biomedical Materials Research - Part A*, **2009**, 91, 647-55	5.4	79
87	Microfabricated devices for enhanced bioadhesive drug delivery: attachment to and small-molecule release through a cell monolayer under flow. *Small*, **2009**, 5, 2857-63	11	55
86	The effect of TiO2 nanotubes on endothelial function and smooth muscle proliferation. *Biomaterials*, **2009**, 30, 1268-72	15.6	209
85	In the spotlight: tissue engineering--quantitative analysis of complex 3-D tissues. *IEEE Reviews in Biomedical Engineering*, **2009**, 2, 21-2	6.4	
84	Long-term small molecule and protein elution from TiO2 nanotubes. *Nano Letters*, **2009**, 9, 1932-6	11.5	178
83	Biomimetic nanowire coatings for next generation adhesive drug delivery systems. *Nano Letters*, **2009**, 9, 716-20	11.5	151
82	Inflammatory Response to Implanted Nanostructured Materials **2009**, 355-371		7
81	Surfactant-free, drug-quantum-dot coloaded poly(lactide-co-glycolide) nanoparticles: towards multifunctional nanoparticles. *ACS Nano*, **2008**, 2, 538-44	16.7	75
80	Microfabrication of an asymmetric, multi-layered microdevice for controlled release of orally delivered therapeutics. *Lab on A Chip*, **2008**, 8, 1042-7	7.2	46
79	Microfabricated implants for applications in therapeutic delivery, tissue engineering, and biosensing. *Lab on A Chip*, **2008**, 8, 1864-78	7.2	93
78	In the Spotlight: Tissue and Molecular Engineering. *IEEE Reviews in Biomedical Engineering*, **2008**, 1, 21-2	6.4	
77	Surface modification of SU-8 for enhanced biofunctionality and nonfouling properties. *Langmuir*, **2008**, 24, 2631-6	4	62
76	In vitro immunogenicity of silicon-based micro- and nanostructured surfaces. *ACS Nano*, **2008**, 2, 1076-84	16.7	49
75	Microstructures in 3D biological gels affect cell proliferation. *Tissue Engineering - Part A*, **2008**, 14, 379-90	3.9	29
74	Fabrication of mechanically robust, large area, polycrystalline nanotubular/porous TiO2 membranes. *Journal of Membrane Science*, **2008**, 319, 199-205	9.6	88

73	Retinal tissue engineering using mouse retinal progenitor cells and a novel biodegradable, thin-film poly(e-caprolactone) nanowire scaffold. *Journal of Ocular Biology, Diseases, and Informatics*, **2008**, 1, 19-29		100
72	Contractility-dependent modulation of cell proliferation and adhesion by microscale topographical cues. *Small*, **2008**, 4, 1416-24	11	44
71	Combined effects of microtopography and cyclic strain on vascular smooth muscle cell orientation. *Journal of Biomechanics*, **2008**, 41, 762-9	2.9	45
70	A microfabricated scaffold for retinal progenitor cell grafting. *Biomaterials*, **2008**, 29, 418-26	15.6	121
69	Purified and surfactant-free coenzyme Q10-loaded biodegradable nanoparticles. *International Journal of Pharmaceutics*, **2008**, 348, 107-14	6.5	54
68	Survival, migration and differentiation of retinal progenitor cells transplanted on micro-machined poly(methyl methacrylate) scaffolds to the subretinal space. *Lab on A Chip*, **2007**, 7, 695-701	7.2	114
67	TiO2 Nanotube Arrays of 1000 μm Length by Anodization of Titanium Foil: Phenol Red Diffusion. *Journal of Physical Chemistry C*, **2007**, 111, 14992-14997	3.8	430
66	Osteogenic differentiation of marrow stromal cells cultured on nanoporous alumina surfaces. *Journal of Biomedical Materials Research - Part A*, **2007**, 80, 955-64	5.4	114
65	Influence of engineered titania nanotubular surfaces on bone cells. *Biomaterials*, **2007**, 28, 3188-97	15.6	509
64	Decreased Staphylococcus epidermis adhesion and increased osteoblast functionality on antibiotic-loaded titania nanotubes. *Biomaterials*, **2007**, 28, 4880-8	15.6	476
63	Biocompatibility of nanoporous alumina membranes for immunoisolation. *Biomaterials*, **2007**, 28, 2638-45	15.6	147
62	Titania nanotubes: a novel platform for drug-eluting coatings for medical implants?. *Small*, **2007**, 3, 1878-81	11	284
61	Aligned arrays of biodegradable poly(epsilon-caprolactone) nanowires and nanofibers by template synthesis. *Nano Letters*, **2007**, 7, 1463-8	11.5	121
60	The effects of cell density and device arrangement on the behavior of macroencapsulated beta-cells. *Cell Transplantation*, **2007**, 16, 765-74	4	9
59	Nanostructured surfaces for bone biotemplating applications. *Journal of Orthopaedic Research*, **2006**, 24, 619-27	3.8	52
58	Optical coherence tomography of cell dynamics in three-dimensional tissue models. *Optics Express*, **2006**, 14, 7159-71	3.3	70
57	Functional MR microimaging of pancreatic beta-cell activation. *Cell Transplantation*, **2006**, 15, 195-203	4	55
56	Off-wafer fabrication and surface modification of asymmetric 3D SU-8 microparticles. *Nature Protocols*, **2006**, 1, 3153-8	18.8	58

55	Evaluation of silicon nanoporous membranes and ECM-based microenvironments on neurosecretory cells. *Biomaterials*, **2006**, 27, 3075-83	15.6	50
54	Development and characterization of a porous micro-patterned scaffold for vascular tissue engineering applications. *Biomaterials*, **2006**, 27, 4775-82	15.6	152
53	Methods for fabrication of nanoscale topography for tissue engineering scaffolds. *Annals of Biomedical Engineering*, **2006**, 34, 89-101	4.7	277
52	Drug delivery in the BME curricula. *Annals of Biomedical Engineering*, **2006**, 34, 270-5	4.7	7
51	Control of cellular organization in three dimensions using a microfabricated polydimethylsiloxane-collagen composite tissue scaffold. *Tissue Engineering*, **2005**, 11, 378-86		59
50	Improving the integrity of three-dimensional vascular patterns by poly(ethylene glycol) conjugation. *Bioconjugate Chemistry*, **2005**, 16, 18-22	6.3	8
49	Peptide-conjugated quantum dots activate neuronal receptors and initiate downstream signaling of neurite growth. *Nano Letters*, **2005**, 5, 603-7	11.5	120
48	Vascular tissue engineering: microtextured scaffold templates to control organization of vascular smooth muscle cells and extracellular matrix. *Acta Biomaterialia*, **2005**, 1, 93-100	10.8	107
47	Influence of nanoporous alumina membranes on long-term osteoblast response. *Biomaterials*, **2005**, 26, 4516-22	15.6	132
46	Gastrointestinal patch systems for oral drug delivery. *Drug Discovery Today*, **2005**, 10, 909-15	8.8	59
45	Micromachined devices: the impact of controlled geometry from cell-targeting to bioavailability. *Journal of Controlled Release*, **2005**, 109, 127-38	11.7	62
44	Microscale multilayer cocultures for biomimetic blood vessels. *Journal of Biomedical Materials Research - Part A*, **2005**, 72, 146-60	5.4	78
43	Fabrication and evaluation of nanoporous alumina membranes for osteoblast culture. *Journal of Biomedical Materials Research - Part A*, **2005**, 72, 288-95	5.4	100
42	Peptide-immobilized nanoporous alumina membranes for enhanced osteoblast adhesion. *Biomaterials*, **2005**, 26, 1969-76	15.6	110
41	Nanoporous alumina capsules for cellular macroencapsulation: transport and biocompatibility. *Diabetes Technology and Therapeutics*, **2005**, 7, 684-94	8.1	55
40	Micromachined biocapsules for cell-based sensing and delivery. *Advanced Drug Delivery Reviews*, **2004**, 56, 211-29	18.5	87
39	Nanoporous microsystems for islet cell replacement. *Advanced Drug Delivery Reviews*, **2004**, 56, 1661-73	18.5	94
38	Poly(ethylene glycol) interfaces: an approach for enhanced performance of microfluidic systems. *Biosensors and Bioelectronics*, **2004**, 19, 1037-44	11.8	67

37	Layer-by-layer microfluidics for biomimetic three-dimensional structures. *Biomaterials*, **2004**, 25, 1355-64	15.6	164
36	XPS and AFM analysis of antifouling PEG interfaces for microfabricated silicon biosensors. *Biosensors and Bioelectronics*, **2004**, 20, 227-39	11.8	169
35	Evaluation of the stability of nonfouling ultrathin poly(ethylene glycol) films for silicon-based microdevices. *Langmuir*, **2004**, 20, 348-56	4	162
34	Surface modification of nanoporous alumina surfaces with poly(ethylene glycol). *Langmuir*, **2004**, 20, 8035-41	4	143
33	A wireless, remote query glucose biosensor based on a pH-sensitive polymer. *Analytical Chemistry*, **2004**, 76, 4038-43	7.8	109
32	Quantitative XPS Analysis of PEG-Modified Silicon Surfaces. *Journal of Physical Chemistry B*, **2004**, 108, 5185-5188	3.4	52
31	Inhibition of fibroblast proliferation in cardiac myocyte cultures by surface microtopography. *American Journal of Physiology - Cell Physiology*, **2003**, 285, C171-82	5.4	88
30	Microfluidic Patterning of Cellular Biopolymer Matrices. *Journal of the Association for Laboratory Automation*, **2003**, 8, 40-43		
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1 Nanotopography enhances dynamic remodeling of tight junction proteins through cytosolic complexes 1