Antonios G Mikos

List of Publications by Citations

234 papers	18,792 citations	71 h-index	134 g-index
245 ext. papers	21,011 ext. citations	9.2 avg, IF	7.09 L-index

#	Paper	IF	Citations
234	Biomimetic materials for tissue engineering. *Biomaterials*, **2003**, 24, 4353-64	15.6	1253
233	Thermoresponsive hydrogels in biomedical applications. *European Journal of Pharmaceutics and Biopharmaceutics*, **2008**, 68, 34-45	5.7	931
232	Gelatin as a delivery vehicle for the controlled release of bioactive molecules. *Journal of Controlled Release*, **2005**, 109, 256-74	11.7	820
231	Electrospun poly(epsilon-caprolactone) microfiber and multilayer nanofiber/microfiber scaffolds: characterization of scaffolds and measurement of cellular infiltration. *Biomacromolecules*, **2006**, 7, 2796-805	6.9	763
230	Size matters: molecular weight affects the efficiency of poly(ethylenimine) as a gene delivery vehicle. *Journal of Biomedical Materials Research Part B*, **1999**, 45, 268-75		672
229	Bone formation by three-dimensional stromal osteoblast culture in biodegradable polymer scaffolds. *Journal of Biomedical Materials Research Part B*, **1997**, 36, 17-28		584
228	Strategies for controlled delivery of growth factors and cells for bone regeneration. *Advanced Drug Delivery Reviews*, **2012**, 64, 1292-309	18.5	470
227	Engineering complex tissues. *Tissue Engineering*, **2006**, 12, 3307-39		459
226	Fabrication of biodegradable polymer scaffolds to engineer trabecular bone. *Journal of Biomaterials Science, Polymer Edition*, **1995**, 7, 23-38	3.5	377
225	Engineering complex tissues. *Science Translational Medicine*, **2012**, 4, 160rv12	17.5	364
224	Growth factor delivery for tissue engineering. *Pharmaceutical Research*, **2000**, 17, 497-504	4.5	362
223	Materials design for bone-tissue engineering. *Nature Reviews Materials*, **2020**, 5, 584-603	73.3	293
222	Poly(ethylenimine)-mediated transfection: a new paradigm for gene delivery. *Journal of Biomedical Materials Research Part B*, **2000**, 51, 321-8		256
221	Poly(lactic acid) nanofibrous scaffolds for tissue engineering. *Advanced Drug Delivery Reviews*, **2016**, 107, 206-212	18.5	238
220	Injectable biomaterials for regenerating complex craniofacial tissues. *Advanced Materials*, **2009**, 21, 3368-93	24	233
219	Review: Hydrogels for cell immobilization. *Biotechnology and Bioengineering*, **1996**, 50, 357-64	4.9	228
218	Gelatin carriers for drug and cell delivery in tissue engineering. *Journal of Controlled Release*, **2014**, 190, 210-8	11.7	221

217	In vivo biocompatibility of ultra-short single-walled carbon nanotube/biodegradable polymer nanocomposites for bone tissue engineering. *Bone*, **2008**, 43, 362-370	4.7	218
216	Ectopic bone formation by marrow stromal osteoblast transplantation using poly(DL-lactic-co-glycolic acid) foams implanted into the rat mesentery. *Journal of Biomedical Materials Research Part B*, **1997**, 36, 1-8		215
215	Dose effect of dual delivery of vascular endothelial growth factor and bone morphogenetic protein-2 on bone regeneration in a rat critical-size defect model. *Tissue Engineering - Part A*, **2009**, 15, 2347-62	3.9	209
214	Materials from Mussel-Inspired Chemistry for Cell and Tissue Engineering Applications. *Biomacromolecules*, **2015**, 16, 2541-55	6.9	206
213	Soft and hard tissue response to photocrosslinked poly(propylene fumarate) scaffolds in a rabbit model. *Journal of Biomedical Materials Research Part B*, **2002**, 59, 547-56		206
212	Osteoblast function on synthetic biodegradable polymers. *Journal of Biomedical Materials Research Part B*, **1994**, 28, 1445-53		206
211	Bone tissue engineering. *Nature Medicine*, **1995**, 1, 1322-4	50.5	204
210	Review: Hydrogels for cell immobilization **1996**, 50, 357		188
209	In vivo degradation of a poly(propylene fumarate)/beta-tricalcium phosphate injectable composite scaffold. *Journal of Biomedical Materials Research Part B*, **1998**, 41, 1-7		181
208	Modeling Ewing sarcoma tumors in vitro with 3D scaffolds. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 6500-5	11.5	180
207	Selective laser sintering scaffold with hierarchical architecture and gradient composition for osteochondral repair in rabbits. *Biomaterials*, **2017**, 137, 37-48	15.6	179
206	Influence of the porosity of starch-based fiber mesh scaffolds on the proliferation and osteogenic differentiation of bone marrow stromal cells cultured in a flow perfusion bioreactor. *Tissue Engineering*, **2006**, 12, 801-9		176
205	Photocrosslinking characteristics and mechanical properties of diethyl fumarate/poly(propylene fumarate) biomaterials. *Biomaterials*, **2002**, 23, 4333-43	15.6	172
204	Crosslinking characteristics of an injectable poly(propylene fumarate)/beta-tricalcium phosphate paste and mechanical properties of the crosslinked composite for use as a biodegradable bone cement. *Journal of Biomedical Materials Research Part B*, **1999**, 44, 314-21		172
203	In vivo bone and soft tissue response to injectable, biodegradable oligo(poly(ethylene glycol) fumarate) hydrogels. *Biomaterials*, **2003**, 24, 3201-11	15.6	171
202	Osteogenic differentiation of mesenchymal stem cells on pregenerated extracellular matrix scaffolds in the absence of osteogenic cell culture supplements. *Tissue Engineering - Part A*, **2010**, 16, 431-40	3.9	158
201	Synthesis of poly(propylene fumarate). *Nature Protocols*, **2009**, 4, 518-25	18.8	156
200	Enhanced chondrogenesis in co-cultures with articular chondrocytes and mesenchymal stem cells. *Biomaterials*, **2012**, 33, 6362-9	15.6	150

199	Synthesis and properties of photocross-linked poly(propylene fumarate) scaffolds. *Journal of Biomaterials Science, Polymer Edition*, **2001**, 12, 673-87	3.5	150
198	Modulation of marrow stromal osteoblast adhesion on biomimetic oligo[poly(ethylene glycol) fumarate] hydrogels modified with Arg-Gly-Asp peptides and a poly(ethyleneglycol) spacer. *Journal of Biomedical Materials Research Part B*, **2002**, 61, 169-79		143
197	Synthesis and Characterization of Oligo(poly(ethylene glycol) fumarate) Macromer. *Macromolecules* , **2001**, 34, 2839-2844	5.5	141
196	Engineering tumors: a tissue engineering perspective in cancer biology. *Tissue Engineering - Part B: Reviews*, **2010**, 16, 351-9	7.9	138
195	Photoinitiated Polymerization of Biomaterials. *Annual Review of Materials Research*, **2001**, 31, 171-181	12.8	133
194	Fibrin glue as a drug delivery system. *Journal of Controlled Release*, **2010**, 148, 49-55	11.7	130
193	3D printing for the design and fabrication of polymer-based gradient scaffolds. *Acta Biomaterialia*, **2017**, 56, 3-13	10.8	129
192	The influence of stereolithographic scaffold architecture and composition on osteogenic signal expression with rat bone marrow stromal cells. *Biomaterials*, **2011**, 32, 3750-63	15.6	120
191	Osteoblastic phenotype of rat marrow stromal cells cultured in the presence of dexamethasone, beta-glycerolphosphate, and L-ascorbic acid. *Journal of Cellular Biochemistry*, **1998**, 71, 55-62	4.7	117
190	Dual growth factor delivery from bilayered, biodegradable hydrogel composites for spatially-guided osteochondral tissue repair. *Biomaterials*, **2014**, 35, 8829-8839	15.6	112
189	Hierarchically designed bone scaffolds: From internal cues to external stimuli. *Biomaterials*, **2019**, 218, 119334	15.6	109
188	Articular chondrocytes and mesenchymal stem cells seeded on biodegradable scaffolds for the repair of cartilage in a rat osteochondral defect model. *Biomaterials*, **2014**, 35, 7460-9	15.6	108
187	Applications of decellularized extracellular matrix in bone and cartilage tissue engineering. *Bioengineering and Translational Medicine*, **2019**, 4, 83-95	14.8	106
186	Thermoreversible hydrogel scaffolds for articular cartilage engineering. *Journal of Biomedical Materials Research Part B*, **2004**, 71, 268-74		103
185	Fabrication and mechanical characterization of 3D printed vertical uniform and gradient scaffolds for bone and osteochondral tissue engineering. *Acta Biomaterialia*, **2019**, 90, 37-48	10.8	101
184	In vitro cytotoxicity and in vivo biocompatibility of poly(propylene fumarate-co-ethylene glycol) hydrogels. *Journal of Biomedical Materials Research Part B*, **1999**, 46, 22-32		100
183	In vivo degradation of porous poly(propylene fumarate)/poly(DL-lactic-co-glycolic acid) composite scaffolds. *Biomaterials*, **2005**, 26, 4616-23	15.6	99
182	In vitro cytotoxicity of injectable and biodegradable poly(propylene fumarate)-based networks: unreacted macromers, cross-linked networks, and degradation products. *Biomacromolecules*, **2003**, 4, 1026-33	6.9	98

181	Assessment methodologies for extrusion-based bioink printability. *Biofabrication*, **2020**, 12, 022003	10.5	94
180	Three-dimensional Printing of Multilayered Tissue Engineering Scaffolds. *Materials Today*, **2018**, 21, 861-874	21.8	93
179	Synthesis and characterization of injectable, thermally and chemically gelable, amphiphilic poly(N-isopropylacrylamide)-based macromers. *Biomacromolecules*, **2008**, 9, 1558-70	6.9	87
178	In Vitro Degradation of a Poly(Propylene Fumarate)/ Tricalcium Phosphate Composite Orthopaedic Scaffold. *Tissue Engineering*, **1997**, 3, 207-215		85
177	Extrusion-based 3D printing of poly(propylene fumarate) scaffolds with hydroxyapatite gradients. *Journal of Biomaterials Science, Polymer Edition*, **2017**, 28, 532-554	3.5	83
176	Strategies for controlled delivery of biologics for cartilage repair. *Advanced Drug Delivery Reviews*, **2015**, 84, 123-34	18.5	82
175	In vitro and in vivo degradation of poly(propylene fumarate-co-ethylene glycol) hydrogels. *Journal of Biomedical Materials Research Part B*, **1998**, 42, 312-20		77
174	Bone formation by three-dimensional stromal osteoblast culture in biodegradable polymer scaffolds **1997**, 36, 17		77
173	Injectable calcium phosphate cement with PLGA, gelatin and PTMC microspheres in a rabbit femoral defect. *Acta Biomaterialia*, **2011**, 7, 1752-9	10.8	76
172	Ubiquilins regulate autophagic flux through mTOR signalling and lysosomal acidification. *Nature Cell Biology*, **2019**, 21, 384-396	23.4	76
171	Flow perfusion effects on three-dimensional culture and drug sensitivity of Ewing sarcoma. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 10304-9	11.5	75
170	A 3D in vitro model of patient-derived prostate cancer xenograft for controlled interrogation of in vivo tumor-stromal interactions. *Biomaterials*, **2016**, 77, 164-72	15.6	74
169	Retinal pigment epithelium cells cultured on synthetic biodegradable polymers. *Journal of Biomedical Materials Research Part B*, **1997**, 34, 87-93		74
168	Modification of oligo(poly(ethylene glycol) fumarate) macromer with a GRGD peptide for the preparation of functionalized polymer networks. *Biomacromolecules*, **2001**, 2, 255-61	6.9	74
167	Evolving strategies for preventing biofilm on implantable materials. *Materials Today*, **2013**, 16, 177-182	21.8	71
166	Characterization of partially saturated poly(propylene fumarate) for orthopaedic application. *Journal of Biomaterials Science, Polymer Edition*, **1997**, 8, 893-904	3.5	71
165	Inhibition of smooth muscle cell growth in vitro by an antisense oligodeoxynucleotide released from poly(DL-lactic-co-glycolic acid) microparticles. *Journal of Biomedical Materials Research Part B*, **1997**, 35, 525-30		71
164	In vitro cytotoxicity of single-walled carbon nanotube/biodegradable polymer nanocomposites. *Journal of Biomedical Materials Research - Part A*, **2008**, 86, 813-23	5.4	71

163	Responsive and in situ-forming chitosan scaffolds for bone tissue engineering applications: an overview of the last decade. *Journal of Materials Chemistry*, **2010**, 20, 1638-1645		70
162	Polymeric Systems for Bioprinting. *Chemical Reviews*, **2020**, 120, 10744-10792	68.1	68
161	Synthesis of oligo(poly(ethylene glycol) fumarate). *Nature Protocols*, **2012**, 7, 1219-27	18.8	68
160	Scaffold/Extracellular matrix hybrid constructs for bone-tissue engineering. *Advanced Healthcare Materials*, **2013**, 2, 13-24	10.1	68
159	Evaluation of the biocompatibility of calcium phosphate cement/PLGA microparticle composites. *Journal of Biomedical Materials Research - Part A*, **2008**, 87, 760-9	5.4	68
158	Extrusion-Based 3D Printing of Poly(propylene fumarate) in a Full-Factorial Design. *ACS Biomaterials Science and Engineering*, **2016**, 2, 1771-1780	5.5	67
157	Synthesis of poly(propylene fumarate) by acylation of propylene glycol in the presence of a proton scavenger. *Journal of Biomaterials Science, Polymer Edition*, **1999**, 10, 363-73	3.5	67
156	Preparation and characterization of poly(propylene fumarate-co-ethylene glycol) hydrogels. *Journal of Biomaterials Science, Polymer Edition*, **1998**, 9, 653-66	3.5	66
155	Evaluation of cell-laden polyelectrolyte hydrogels incorporating poly(L-Lysine) for applications in cartilage tissue engineering. *Biomaterials*, **2016**, 83, 332-46	15.6	64
154	Antibiotic-releasing porous polymethylmethacrylate/gelatin/antibiotic constructs for craniofacial tissue engineering. *Journal of Controlled Release*, **2011**, 152, 196-205	11.7	64
153	Application of Materials as Medical Devices with Localized Drug Delivery Capabilities for Enhanced Wound Repair. *Progress in Materials Science*, **2017**, 89, 392-410	42.2	62
152	Synthesis and characterization of thermally and chemically gelling injectable hydrogels for tissue engineering. *Biomacromolecules*, **2012**, 13, 1908-15	6.9	62
151	Building bridges: leveraging interdisciplinary collaborations in the development of biomaterials to meet clinical needs. *Advanced Materials*, **2012**, 24, 4995-5013	24	62
150	Direct and indirect co-culture of chondrocytes and mesenchymal stem cells for the generation of polymer/extracellular matrix hybrid constructs. *Acta Biomaterialia*, **2014**, 10, 1824-35	10.8	60
149	Mini-review: Islet transplantation to create a bioartificial pancreas. *Biotechnology and Bioengineering*, **1994**, 43, 673-7	4.9	57
148	Increased recruitment of endogenous stem cells and chondrogenic differentiation by a composite scaffold containing bone marrow homing peptide for cartilage regeneration. *Theranostics*, **2018**, 8, 5039-5058	12.1	57
147	Novel applications of statins for bone regeneration. *National Science Review*, **2015**, 2, 85-99	10.8	56
146	Injectable OPF/graphene oxide hydrogels provide mechanical support and enhance cell electrical signaling after implantation into myocardial infarct. *Theranostics*, **2018**, 8, 3317-3330	12.1	54

145	An optimized method for the chemiluminescent detection of alkaline phosphatase levels during osteodifferentiation by bone morphogenetic protein 2. *Journal of Cellular Biochemistry*, **2001**, 80, 532-7	4.7	53
144	Synthesis and Characterization of a Block Copolymer Consisting of Poly(propylene fumarate) and Poly(ethylene glycol). *Macromolecules*, **1997**, 30, 4318-4323	5.5	52
143	Modulation of marrow stromal cell function using poly(D,L-lactic acid)-block-poly(ethylene glycol)-monomethyl ether surfaces. *Journal of Biomedical Materials Research Part B*, **1999**, 46, 390-8		50
142	In vitro and in vivo evaluation of self-mineralization and biocompatibility of injectable, dual-gelling hydrogels for bone tissue engineering. *Journal of Controlled Release*, **2015**, 205, 25-34	11.7	49
141	Retinal pigment epithelium cell culture on thin biodegradable poly(DL-lactic-co-glycolic acid) films. *Journal of Biomaterials Science, Polymer Edition*, **1998**, 9, 1187-205	3.5	48
140	Generation of osteochondral tissue constructs with chondrogenically and osteogenically predifferentiated mesenchymal stem cells encapsulated in bilayered hydrogels. *Acta Biomaterialia*, **2014**, 10, 1112-23	10.8	47
139	Synthesis, physicochemical characterization, and cytocompatibility of bioresorbable, dual-gelling injectable hydrogels. *Biomacromolecules*, **2014**, 15, 132-42	6.9	46
138	Functionalization of oligo(poly(ethylene glycol)fumarate) hydrogels with finely dispersed calcium phosphate nanocrystals for bone-substituting purposes. *Journal of Biomaterials Science, Polymer Edition*, **2007**, 18, 1547-1564	3.5	46
137	Tissue Engineering in Orthopaedics. *Journal of Bone and Joint Surgery - Series A*, **2016**, 98, 1132-9	5.6	46
136	Characterization of the Cross-Linked Structure of Fumarate-Based Degradable Polymer Networks. *Macromolecules*, **2002**, 35, 4373-4379	5.5	45
135	Osteochondral tissue regeneration through polymeric delivery of DNA encoding for the SOX trio and RUNX2. *Acta Biomaterialia*, **2014**, 10, 4103-12	10.8	43
134	Structure-property evaluation of thermally and chemically gelling injectable hydrogels for tissue engineering. *Biomacromolecules*, **2012**, 13, 2821-30	6.9	42
133	Biodegradable, phosphate-containing, dual-gelling macromers for cellular delivery in bone tissue engineering. *Biomaterials*, **2015**, 67, 286-96	15.6	41
132	Synthesis and characterization of injectable, biodegradable, phosphate-containing, chemically cross-linkable, thermoresponsive macromers for bone tissue engineering. *Biomacromolecules*, **2014** , 15, 1788-96	6.9	41
131	Changes in In Vitro Susceptibility Patterns of Aspergillus to Triazoles and Correlation With Aspergillosis Outcome in a Tertiary Care Cancer Center, 1999-2015. *Clinical Infectious Diseases*, **2017**, 65, 216-225	11.6	39
130	Osteoblast migration on poly(alpha-hydroxy esters). *Biotechnology and Bioengineering*, **1996**, 50, 443-51	4.9	38
129	Biodegradable thermoresponsive polymers: Applications in drug delivery and tissue engineering. *Polymer*, **2020**, 211, 123063	3.9	38
128	Progress in three-dimensional printing with growth factors. *Journal of Controlled Release*, **2019**, 295, 50-59	11.7	38

127	Spatiotemporal Control of Growth Factors in Three-Dimensional Printed Scaffolds. *Bioprinting*, **2018**, 12, e00032-e00032	7	37
126	3D tissue-engineered model of Ewing's sarcoma. *Advanced Drug Delivery Reviews*, **2014**, 79-80, 155-71	18.5	36
125	Protein and mineral composition of osteogenic extracellular matrix constructs generated with a flow perfusion bioreactor. *Biomacromolecules*, **2011**, 12, 4204-12	6.9	36
124	Open-source three-dimensional printing of biodegradable polymer scaffolds for tissue engineering. *Journal of Biomedical Materials Research - Part A*, **2014**, 102, 4326-35	5.4	35
123	Improved in situ seeding of 3D printed scaffolds using cell-releasing hydrogels. *Biomaterials*, **2018**, 185, 194-204	15.6	35
122	Immunomodulatory properties of stem cells and bioactive molecules for tissue engineering. *Journal of Controlled Release*, **2015**, 219, 107-118	11.7	34
121	Incorporation of fast dissolving glucose porogens into an injectable calcium phosphate cement for bone tissue engineering. *Acta Biomaterialia*, **2017**, 50, 68-77	10.8	33
120	An Overview of the Tissue Engineering Market in the United States from 2011 to 2018. *Tissue Engineering - Part A*, **2019**, 25, 1-8	3.9	33
119	A neurotrophic peptide-functionalized self-assembling peptide nanofiber hydrogel enhances rat sciatic nerve regeneration. *Nano Research*, **2018**, 11, 4599-4613	10	30
118	Synergistic effects of dual-presenting VEGF- and BDNF-mimetic peptide epitopes from self-assembling peptide hydrogels on peripheral nerve regeneration. *Nanoscale*, **2019**, 11, 19943-19958	7.7	30
117	Fabrication and Characterization of Electrospun Decellularized Muscle-Derived Scaffolds. *Tissue Engineering - Part C: Methods*, **2019**, 25, 276-287	2.9	27
116	Biomaterials-aided mandibular reconstruction using in vivo bioreactors. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 6954-6963	11.5	26
115	Synthetic Polymers **2019**, 559-590		26
114	A factorial analysis of the combined effects of hydrogel fabrication parameters on the in vitro swelling and degradation of oligo(poly(ethylene glycol) fumarate) hydrogels. *Journal of Biomedical Materials Research - Part A*, **2014**, 102, 3477-87	5.4	25
113	Reconstruction of large mandibular defects using autologous tissues generated from in vivo bioreactors. *Acta Biomaterialia*, **2016**, 45, 72-84	10.8	25
112	A composite critical-size rabbit mandibular defect for evaluation of craniofacial tissue regeneration. *Nature Protocols*, **2016**, 11, 1989-2009	18.8	25
111	Bone Tissue Engineering with Multilayered Scaffolds-Part I: An Approach for Vascularizing Engineered Constructs In Vivo. *Tissue Engineering - Part A*, **2015**, 21, 2480-94	3.9	24
110	Mineralized Collagen-Based Composite Bone Materials for Cranial Bone Regeneration in Developing Sheep. *ACS Biomaterials Science and Engineering*, **2017**, 3, 1092-1099	5.5	23

109	Design of a high-throughput flow perfusion bioreactor system for tissue engineering. *Tissue Engineering - Part C: Methods*, **2012**, 18, 817-20	2.9	23
108	Effects of Local Antibiotic Delivery from Porous Space Maintainers on Infection Clearance and Induction of an Osteogenic Membrane in an Infected Bone Defect. *Tissue Engineering - Part A*, **2017**, 23, 91-100	3.9	22
107	Biomacromolecules for Tissue Engineering: Emerging Biomimetic Strategies. *Biomacromolecules*, **2019**, 20, 2904-2912	6.9	22
106	Tuning pore features of mineralized collagen/PCL scaffolds for cranial bone regeneration in a rat model. *Materials Science and Engineering C*, **2020**, 106, 110186	8.3	22
105	Effects of Shear Stress Gradients on Ewing Sarcoma Cells Using 3D Printed Scaffolds and Flow Perfusion. *ACS Biomaterials Science and Engineering*, **2018**, 4, 347-356	5.5	21
104	Evaluation of antibiotic-impregnated microspheres for the prevention of implant-associated orthopaedic infections. *Journal of Bone and Joint Surgery - Series A*, **2014**, 96, 128-34	5.6	21
103	Multimaterial Segmented Fiber Printing for Gradient Tissue Engineering. *Tissue Engineering - Part C: Methods*, **2019**, 25, 12-24	2.9	21
102	Bone Tissue Engineering Challenges in Oral & Maxillofacial Surgery. *Advances in Experimental Medicine and Biology*, **2015**, 881, 57-78	3.6	20
101	A high-strength mineralized collagen bone scaffold for large-sized cranial bone defect repair in sheep. *International Journal of Energy Production and Management*, **2018**, 5, 283-292	5.3	20
100	Three-Dimensional Printing of Tissue Engineering Scaffolds with Horizontal Pore and Composition Gradients. *Tissue Engineering - Part C: Methods*, **2019**, 25, 411-420	2.9	18
99	Development of a biodegradable bone cement for craniofacial applications. *Journal of Biomedical Materials Research - Part A*, **2012**, 100, 2252-9	5.4	18
98	Advances in biomaterials for skeletal muscle engineering and obstacles still to overcome. *Materials Today Bio*, **2020**, 7, 100069	9.9	18
97	Modeling Stroma-Induced Drug Resistance in a Tissue-Engineered Tumor Model of Ewing Sarcoma. *Tissue Engineering - Part A*, **2017**, 23, 80-89	3.9	17
96	Material Processing and Design of Biodegradable Metal Matrix Composites for Biomedical Applications. *Annals of Biomedical Engineering*, **2018**, 46, 1229-1240	4.7	17
95	Hypoxia and flow perfusion modulate proliferation and gene expression of articular chondrocytes on porous scaffolds. *AICHE Journal*, **2013**, 59, 3158-3166	3.6	17
94	Integrin alpha(v)beta(3) is involved in stimulated migration of vascular adventitial fibroblasts by basic fibroblast growth factor but not platelet-derived growth factor. *Journal of Cellular Biochemistry*, **2001**, 83, 129-35	4.7	17
93	Inherently Antimicrobial Biodegradable Polymers in Tissue Engineering. *ACS Biomaterials Science and Engineering*, **2017**, 3, 1207-1220	5.5	16
92	Multimodal pore formation in calcium phosphate cements. *Journal of Biomedical Materials Research - Part A*, **2018**, 106, 500-509	5.4	16

91	Incorporation of fast dissolving glucose porogens and poly(lactic-co-glycolic acid) microparticles within calcium phosphate cements for bone tissue regeneration. *Acta Biomaterialia*, **2018**, 78, 341-350	10.8	16
90	Machine Learning-Guided Three-Dimensional Printing of Tissue Engineering Scaffolds. *Tissue Engineering - Part A*, **2020**, 26, 1359-1368	3.9	16
89	Drug delivery and tissue engineering to promote wound healing in the immunocompromised host: Current challenges and future directions. *Advanced Drug Delivery Reviews*, **2018**, 129, 319-329	18.5	16
88	Effect of poly(ethylene glycol) molecular weight on tensile and swelling properties of oligo(poly(ethylene glycol) fumarate) hydrogels for cartilage tissue engineering **2002**, 59, 429		16
87	Perspectives on the prevention and treatment of infection for orthopedic tissue engineering applications. *Science Bulletin*, **2013**, 58, 4342-4348		15
86	Nanomaterial Additives for Fabrication of Stimuli-Responsive Skeletal Muscle Tissue Engineering Constructs. *Advanced Healthcare Materials*, **2020**, 9, e2000730	10.1	15
85	The Influence of Printing Parameters and Cell Density on Bioink Printing Outcomes. *Tissue Engineering - Part A*, **2020**, 26, 1349-1358	3.9	15
84	Polymer-Based Local Antibiotic Delivery for Prevention of Polymicrobial Infection in Contaminated Mandibular Implants. *ACS Biomaterials Science and Engineering*, **2016**, 2, 558-566	5.5	15
83	Synthesis and Characterization of Diol-Based Unsaturated Polyesters: Poly(diol fumarate) and Poly(diol fumarate-co-succinate). *Biomacromolecules*, **2017**, 18, 1724-1735	6.9	14
82	Mechanically tunable coaxial electrospun models of YAP/TAZ mechanoresponse and IGF-1R activation in osteosarcoma. *Acta Biomaterialia*, **2019**, 100, 38-51	10.8	14
81	Use of porous space maintainers in staged mandibular reconstruction. *Oral and Maxillofacial Surgery Clinics of North America*, **2014**, 26, 143-9	3.4	14
80	Multimaterial Dual Gradient Three-Dimensional Printing for Osteogenic Differentiation and Spatial Segregation. *Tissue Engineering - Part A*, **2020**, 26, 239-252	3.9	14
79	Evaluation of Gelatin Microparticles as Adherent-Substrates for Mesenchymal Stem Cells in a Hydrogel Composite. *Annals of Biomedical Engineering*, **2016**, 44, 1894-907	4.7	13
78	Synthetic biodegradable hydrogel delivery of demineralized bone matrix for bone augmentation in a rat model. *Acta Biomaterialia*, **2014**, 10, 4574-4582	10.8	13
77	Multimodal porogen platforms for calcium phosphate cement degradation. *Journal of Biomedical Materials Research - Part A*, **2019**, 107, 1713-1722	5.4	12
76	Technical Report: Correlation Between the Repair of Cartilage and Subchondral Bone in an Osteochondral Defect Using Bilayered, Biodegradable Hydrogel Composites. *Tissue Engineering - Part C: Methods*, **2015**, 21, 1216-25	2.9	12
75	Bone Tissue Engineering with Multilayered Scaffolds-Part II: Combining Vascularization with Bone Formation in Critical-Sized Bone Defect. *Tissue Engineering - Part A*, **2015**, 21, 2495-503	3.9	12
74	Large Animal Models of an In Vivo Bioreactor for Engineering Vascularized Bone. *Tissue Engineering - Part B: Reviews*, **2018**, 24, 317-325	7.9	12

73	Biomechanical forces in tissue engineered tumor models. *Current Opinion in Biomedical Engineering*, **2018**, 6, 42-50	4.4	12
72	Surface-modified poly(lactide-co-glycolide) nanospheres for targeted bone imaging with enhanced labeling and delivery of radioisotope. *Journal of Biomedical Materials Research - Part A*, **2003**, 67, 751-60	5.4	12
71	Fiber engraving for bioink bioprinting within 3D printed tissue engineering scaffolds. *Bioprinting*, **2020**, 18,	7	12
70	Click functionalized, tissue-specific hydrogels for osteochondral tissue engineering. *Journal of Biomedical Materials Research - Part A*, **2020**, 108, 684-693	5.4	12
69	Infected animal models for tissue engineering. *Methods*, **2015**, 84, 17-24	4.6	11
68	Microfluidic devices for disease modeling in muscle tissue. *Biomaterials*, **2019**, 198, 250-258	15.6	11
67	Biodegradable, in Situ-Forming Cell-Laden Hydrogel Composites of Hydroxyapatite Nanoparticles for Bone Regeneration. *Industrial & Engineering Chemistry Research*, **2015**, 54, 10206-10211	3.9	9
66	Modeling the Tumor Microenvironment and Pathogenic Signaling in Bone Sarcoma. *Tissue Engineering - Part B: Reviews*, **2020**, 26, 249-271	7.9	9
65	3D Tissue-Engineered Tumor Model for Ewing's Sarcoma That Incorporates Bone-like ECM and Mineralization. *ACS Biomaterials Science and Engineering*, **2020**, 6, 539-552	5.5	8
64	Synthesis of Injectable, Thermally Responsive, Chondroitin Sulfate-Cross-Linked Poly(-isopropylacrylamide) Hydrogels. *ACS Biomaterials Science and Engineering*, **2019**, 5, 6405-6413	5.5	7
63	Acellular mineral deposition within injectable, dual-gelling hydrogels for bone tissue engineering. *Journal of Biomedical Materials Research - Part A*, **2017**, 105, 110-117	5.4	7
62	Emerging strategies in reprogramming and enhancing the fate of mesenchymal stem cells for bone and cartilage tissue engineering. *Journal of Controlled Release*, **2021**, 330, 565-574	11.7	7
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