# John P Fisher

List of Publications by Year
in descending order



| 204 | 11,771 | 19657 61 | 32842 100 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 211 | 211 | 211 | 13383 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Self-Folding Thermo-Magnetically Responsive Soft Microgrippers. ACS Applied Materials & Interfaces, 2015, 7, 3398-3405. | 8.0 | 499 |
| 2 | Use of stereolithography to manufacture critical-sized 3D biodegradable scaffolds for bone ingrowth. Journal of Biomedical Materials Research Part B, 2003, 64B, 65-69. | 3.1 | 451 |
| 3 | 3D Bioprinting for Organ Regeneration. Advanced Healthcare Materials, 2017, 6, 1601118. | 7.6 | 385 |
| 4 | 4D printing smart biomedical scaffolds with novel soybean oil epoxidized acrylate. Scientific Reports, 2016, 6, 27226. | 3.3 | 296 |
| 5 | 4D printing of polymeric materials for tissue and organ regeneration. Materials Today, 2017, 20, 577-591. | 14.2 | 292 |
| 6 | Bone tissue engineering bioreactors: Dynamic culture and the influence of shear stress. Bone, 2011, 48, 171-181. | 2.9 | 249 |
| 7 | Evaluating 3Dâ€Printed Biomaterials as Scaffolds for Vascularized Bone Tissue Engineering. Advanced Materials, 2015, 27, 138-144. | 21.0 | 241 |
| 8 | Soft and hard tissue response to photocrosslinked poly(propylene fumarate) scaffolds in a rabbit model. Journal of Biomedical Materials Research Part B, 2002, 59, 547-556. | 3.1 | 230 |
| 9 | Assessment methodologies for extrusion-based bioink printability. Biofabrication, 2020, 12, 022003. | 7.1 | 214 |
| 10 | Stereolithographic Bone Scaffold Design Parameters: Osteogenic Differentiation and Signal Expression. Tissue Engineering - Part B: Reviews, 2010, 16, 523-539. | 4.8 | 209 |
| 11 | Stimuliâ€Responsive Theragrippers for Chemomechanical Controlled Release. Angewandte Chemie - International Edition, 2014, 53, 8045-8049. | 13.8 | 198 |
| 12 | Photocrosslinking characteristics and mechanical properties of diethyl fumarate/poly(propylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 | 11.4 | 188 |
| 13 | 3D printing for the design and fabrication of polymer-based gradient scaffolds. Acta Biomaterialia, 2017, 56, 3-13. | 8.3 | 181 |
| 14 | Synthesis of poly(propylene fumarate). Nature Protocols, 2009, 4, 518-525. | 12.0 | 174 |
| 15 | Fabrication and mechanical characterization of 3D printed vertical uniform and gradient scaffolds for bone and osteochondral tissue engineering. Acta Biomaterialia, 2019, 90, 37-48. | 8.3 | 172 |
| 16 | The Evolution of Polystyrene as a Cell Culture Material. Tissue Engineering - Part B: Reviews, 2018, 24, 359-372. | 4.8 | 168 |
| 17 | Synthesis and Characterization of Oligo(poly(ethylene glycol) fumarate) Macromer. Macromolecules, 2001, 34, 2839-2844. | 4.8 | 156 |
| 18 | Photoinitiated Polymerization of Biomaterials. Annual Review of Materials Research, 2001, 31, 171-181. | 9.3 | 147 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Strategic Directions in Tissue Engineering. Tissue Engineering, 2007, 13, 2827-2837. | 4.6 | 142 |
| 20 | The influence of stereolithographic scaffold architecture and composition on osteogenic signal expression with rat bone marrow stromal cells. Biomaterials, 2011, 32, 3750-3763. | 11.4 | 133 |
| 21 | Evaluation of the In Vitro Cytotoxicity of Cross-Linked Biomaterials. Biomacromolecules, 2013, 14, 1321-1329. | 5.4 | 132 |
| 22 | Current and Future Perspectives on Skin Tissue Engineering: Key Features of Biomedical Research, Translational Assessment, and Clinical Application. Advanced Healthcare Materials, 2019, 8, e1801471. | 7.6 | 131 |
| 23 | Effect of Initial Cell Seeding Density on Early Osteogenic Signal Expression of Rat Bone Marrow Stromal Cells Cultured on Cross-Linked Poly(propylene fumarate) Disks. Biomacromolecules, 2009, 10, 1810-1817. | 5.4 | 129 |
| 24 | 3Dâ€Printed Biodegradable Polymeric Vascular Grafts. Advanced Healthcare Materials, 2016, 5, 319-325. | 7.6 | 128 |
| 25 | Prussian blue nanoparticle-based photothermal therapy combined with checkpoint inhibition for photothermal immunotherapy of neuroblastoma. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 771-781. | 3.3 | 122 |
| 26 | 4D physiologically adaptable cardiac patch: A 4-month in vivo study for the treatment of myocardial infarction. Science Advances, 2020, 6, eabb5067. | 10.3 | 118 |
| 27 | Early osteogenic signal expression of rat bone marrow stromal cells is influenced by both hydroxyapatite nanoparticle content and initial cell seeding density in biodegradable nanocomposite scaffolds. Acta Biomaterialia, 2011, 7, 1249-1264. | 8.3 | 115 |
| 28 | 3D bioprinting for cardiovascular regeneration and pharmacology. Advanced Drug Delivery Reviews, 2018, 132, 252-269. | 13.7 | 115 |
| 29 | Bioreactors to influence stem cell fate: Augmentation of mesenchymal stem cell signaling pathways via dynamic culture systems. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 2470-2480. | 2.4 | 113 |
| 30 | Synthesis of poly(L-lactide) and polyglycolide by ring-opening polymerization. Nature Protocols, 2007, 2, 2767-2771. | 12.0 | 112 |
| 31 | Thermoreversible hydrogel scaffolds for articular cartilage engineering. Journal of Biomedical Materials Research Part B, 2004, 71A, 268-274. | 3.1 | 109 |
| 32 | Nanoparticle technology in bone tissue engineering. Journal of Drug Targeting, 2007, 15, 241-252. | 4.4 | 109 |
| 33 | Continuous digital light processing (cDLP): Highly accurate additive manufacturing of tissue engineered bone scaffolds. Virtual and Physical Prototyping, 2012, 7, 13-24. | 10.4 | 108 |
| 34 | Bone formation in transforming growth factor ?-1-coated porous poly(propylene fumarate) scaffolds. Journal of Biomedical Materials Research Part B, 2002, 60, 241-251. | 3.1 | 106 |
| 35 | Extrusion-based 3D printing of poly(propylene fumarate) scaffolds with hydroxyapatite gradients. Journal of Biomaterials Science, Polymer Edition, 2017, 28, 532-554. | 3.5 | 101 |
| 36 | Factors Determining Hydrogel Permeability. Annals of the New York Academy of Sciences, 1997, 831, 179-184. | 3.8 | 99 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Recent advances in 3D printing: vascular network for tissue and organ regeneration. Translational Research, 2019, 211, 46-63. | 5.0 | 92 |
| 38 | Neural differentiation of pluripotent cells in 3D alginate-based cultures. Biomaterials, 2014, 35, 4636-4645. | 11.4 | 91 |
| 39 | Enhanced extracellular vesicle production and ethanol-mediated vascularization bioactivity via a 3D-printed scaffold-perfusion bioreactor system. Acta Biomaterialia, 2019, 95, 236-244. | 8.3 | 91 |
| 40 | 3D printing PLGA: a quantitative examination of the effects of polymer composition and printing parameters on print resolution. Biofabrication, 2017, 9, 024101. | 7.1 | 89 |
| 41 | Towards rationally designed biomanufacturing of therapeutic extracellular vesicles: impact of the bioproduction microenvironment. Biotechnology Advances, 2018, 36, 2051-2059. | 11.7 | 88 |
| 42 | Influence of 3D printed porous architecture on mesenchymal stem cell enrichment and differentiation. Acta Biomaterialia, 2016, 32, 161-169. | 8.3 | 87 |
| 43 | Extrusion-Based 3D Printing of Poly(propylene fumarate) in a Full-Factorial Design. ACS Biomaterials Science and Engineering, 2016, 2, 1771-1780. | 5.2 | 85 |
| 44 | Development and Characterization of a 3D Printed, Keratin-Based Hydrogel. Annals of Biomedical Engineering, 2017, 45, 237-248. | 2.5 | 82 |
| 45 | Biomaterial Scaffolds in Pediatric Tissue Engineering. Pediatric Research, 2008, 63, 497-501. | 2.3 | 81 |
| 46 | Tissue Engineering Solutions for Cleft Palates. Journal of Oral and Maxillofacial Surgery, 2007, 65, 2503-2511. | 1.2 | 79 |
| 47 | Photoinitiated Cross-Linking of the Biodegradable Polyester Poly(propylene fumarate). Part II. In Vitro Degradation. Biomacromolecules, 2003, 4, 1335-1342. | 5.4 | 77 |
| 48 | Vascularization in tissue engineering: fundamentals and state-of-art. Progress in Biomedical Engineering, 2020, 2, 012002. | 4.9 | 77 |
| 49 | Effect of Dynamic Culture and Periodic Compression on Human Mesenchymal Stem Cell Proliferation and Chondrogenesis. Annals of Biomedical Engineering, 2016, 44, 2103-2113. | 2.5 | 76 |
| 50 | Effect of prevascularization on inÂvivo vascularization of poly(propylene fumarate)/fibrin scaffolds. Biomaterials, 2016, 77, 255-266. | 11.4 | 75 |
| 51 | <scp>C</scp>ollagen hydrogel scaffold promotes mesenchymal stem cell and endothelial cell coculture for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2017, 105, 1123-1131. | 4.0 | 74 |
| 52 | 3D printed biofunctionalized scaffolds for microfracture repair of cartilage defects. Biomaterials, 2018, 185, 219-231. | 11.4 | 74 |
| 53 | Photoinitiated Cross-Linking of the Biodegradable Polyester Poly(propylene fumarate). Part I. Determination of Network Structure. Biomacromolecules, 2003, 4, 1327-1334. | 5.4 | 72 |
| 54 | Tubular Perfusion System for the Long-Term Dynamic Culture of Human Mesenchymal Stem Cells. Tissue Engineering - Part C: Methods, 2011, 17, 337-348. | 2.1 | 72 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Macroporous Hydrogels Upregulate Osteogenic Signal Expression and Promote Bone Regeneration. Biomacromolecules, 2010, 11, 1160-1168. | 5.4 | 71 |
| 56 | 3D printed HUVECs/MSCs cocultures impact cellular interactions and angiogenesis depending on cell-cell distance. Biomaterials, 2019, 222, 119423. | 11.4 | 71 |
| 57 | Fabrication and evaluation of 3D printed BCP scaffolds reinforced with ZrO<sub>2</sub> for bone tissue applications. Biotechnology and Bioengineering, 2018, 115, 989-999. | 3.3 | 70 |
| 58 | Bioprinted osteon-like scaffolds enhance in vivo neovascularization. Biofabrication, 2019, 11, 025013. | 7.1 | 70 |
| 59 | Recent Developments in Cyclic Acetal Biomaterials for Tissue Engineering Applications. Pharmaceutical Research, 2008, 25, 2348-2356. | 3.5 | 69 |
| 60 | 3D printing of resorbable poly(propylene fumarate) tissue engineering scaffolds. MRS Bulletin, 2015, 40, 119-126. | 3.5 | 69 |
| 61 | In Vitro Endothelialization of Biodegradable Vascular Grafts Via Endothelial Progenitor Cell Seeding and Maturation in a Tubular Perfusion System Bioreactor. Tissue Engineering - Part C: Methods, 2016, 22, 663-670. | 2.1 | 67 |
| 62 | The potential impact of bone tissue engineering in the clinic. Regenerative Medicine, 2016, 11, 571-587. | 1.7 | 65 |
| 63 | Synthesis and characterization of cyclic acetal based degradable hydrogels. European Journal of Pharmaceutics and Biopharmaceutics, 2008, 68, 67-73. | 4.3 | 60 |
| 64 | Development of a 3D Printed, Bioengineered Placenta Model to Evaluate the Role of Trophoblast Migration in Preeclampsia. ACS Biomaterials Science and Engineering, 2016, 2, 1817-1826. | 5.2 | 59 |
| 65 | Multimodal imaging of sustained drug release from 3-D poly(propylene fumarate) (PPF) scaffolds. Journal of Controlled Release, 2011, 156, 239-245. | 9.9 | 58 |
| 66 | Macroporous Hydrogel Scaffolds and Their Characterization By Optical Coherence Tomography. Tissue Engineering - Part C: Methods, 2011, 17, 101-112. | 2.1 | 55 |
| 67 | Mesenchymal Stem Cells: Roles and Relationships in Vascularization. Tissue Engineering - Part B: Reviews, 2014, 20, 218-228. | 4.8 | 55 |
| 68 | Three-Dimensional Printing Articular Cartilage: Recapitulating the Complexity of Native Tissue<sup />. Tissue Engineering - Part B: Reviews, 2017, 23, 225-236. | 4.8 | 55 |
| 69 | Validating continuous digital light processing (cDLP) additive manufacturing accuracy and tissue engineering utility of a dye-initiator package. Biofabrication, 2014, 6, 015003. | 7.1 | 53 |
| 70 | Effect of biomaterial properties on bone healing in a rabbit tooth extraction socket model. Journal of Biomedical Materials Research Part B, 2004, 68A, 428-438. | 3.1 | 52 |
| 71 | Synthesis and Properties of Poly[poly(ethylene glycol)-co-cyclic acetal] Based Hydrogels. Macromolecules, 2007, 40, 7625-7632. | 4.8 | 52 |
| 72 | Cyclic acetal hydrogel system for bone marrow stromal cell encapsulation and osteodifferentiation. Journal of Biomedical Materials Research - Part A, 2008, 86A, 662-670. | 4.0 | 51 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Hybrid 3D Printing of Synthetic and Cellâ€Laden Bioinks for Shape Retaining Soft Tissue Grafts. Advanced Functional Materials, 2020, 30, 1907145. | 14.9 | 50 |
| 74 | Evaluating Changes in Structure and Cytotoxicity DuringIn VitroDegradation of Three-Dimensional Printed Scaffolds. Tissue Engineering - Part A, 2015, 21, 1642-1653. | 3.1 | 49 |
| 75 | Overcoming Ovarian Cancer Drug Resistance with a Cold Responsive Nanomaterial. ACS Central Science, 2018, 4, 567-581. | 11.3 | 49 |
| 76 | ZEB2, a master regulator of the epithelialâ€“mesenchymal transition, mediates trophoblast differentiation. Molecular Human Reproduction, 2019, 25, 61-75. | 2.8 | 49 |
| 77 | Repair of Tympanic Membrane Perforations with Customized Bioprinted Ear Grafts Using Chinchilla Models. Tissue Engineering - Part A, 2018, 24, 527-535. | 3.1 | 47 |
| 78 | 4D Selfâ€Morphing Culture Substrate for Modulating Cell Differentiation. Advanced Science, 2020, 7, 1902403. | 11.2 | 46 |
| 79 | Human mesenchymal stem cell position within scaffolds influences cell fate during dynamic culture. Biotechnology and Bioengineering, 2012, 109, 2381-2391. | 3.3 | 45 |
| 80 | Photocrosslinked alginate with hyaluronic acid hydrogels as vehicles for mesenchymal stem cell encapsulation and chondrogenesis. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1962-1970. | 4.0 | 45 |
| 81 | Catheter Ablation for Control of Ventricular Tachycardia: A Report of the Percutaneous Cardiac Mapping and Ablation Registry.. PACE - Pacing and Clinical Electrophysiology, 1986, 9, 1391-1395. | 1.2 | 44 |
| 82 | Chondrocyte Signaling and Artificial Matrices for Articular Cartilage Engineering. , 2006, 585, 67-86. | | 44 |
| 83 | Synergistic effect of sustained release of growth factors and dynamic culture on osteoblastic differentiation of mesenchymal stem cells. Journal of Biomedical Materials Research - Part A, 2015, 103, 2161-2171. | 4.0 | 44 |
| 84 | Poly(propylene fumarate) and Poly(DL-lactic-co-glycolic acid) as Scaffold Materials for Solid and Foam-Coated Composite Tissue-Engineered Constructs for Cranial Reconstruction. Tissue Engineering, 2003, 9, 495-504. | 4.6 | 42 |
| 85 | Tubular perfusion system culture of human mesenchymal stem cells on polyâ€<scp>Lâ€</scp>lactic acid scaffolds produced using a supercritical carbon dioxideâ€assisted process. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2563-2572. | 4.0 | 42 |
| 86 | Dynamic Bioreactor Culture of High Volume Engineered Bone Tissue. Tissue Engineering - Part A, 2016, 22, 263-271. | 3.1 | 42 |
| 87 | Digital micromirror device (DMD)-based 3D printing of poly(propylene fumarate) scaffolds. Materials Science and Engineering C, 2016, 61, 301-311. | 7.3 | 42 |
| 88 | Mesoscopic Fluorescence Molecular Tomography for Evaluating Engineered Tissues. Annals of Biomedical Engineering, 2016, 44, 667-679. | 2.5 | 42 |
| 89 | Placental basement membrane proteins are required for effective cytotrophoblast invasion in a threeâ€dimensional bioprinted placenta model. Journal of Biomedical Materials Research - Part A, 2018, 106, 1476-1487. | 4.0 | 42 |
| 90 | A liposome/gelatin methacrylate nanocomposite hydrogel system for delivery of stromal cell-derived factor-1Î± and stimulation of cell migration. Acta Biomaterialia, 2020, 108, 67-76. | 8.3 | 41 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Chemoâ€Enzymatic Synthesis of Degradable PTMCâ€bâ€PECAâ€bâ€PTMC Triblock Copolymers and their Micelle Formation for pHâ€Dependent Controlled Release. Macromolecular Bioscience, 2009, 9, 613-621. | 4.1 | 39 |
| 92 | Phenotypic Variations in Chondrocyte Subpopulations and Their Response to In Vitro Culture and External Stimuli. Annals of Biomedical Engineering, 2010, 38, 3371-3388. | 2.5 | 39 |
| 93 | 3D Printed Pericardium Hydrogels To Promote Wound Healing in Vascular Applications. Biomacromolecules, 2017, 18, 3802-3811. | 5.4 | 39 |
| 94 | 3D printing in cell culture systems and medical applications. Applied Physics Reviews, 2018, 5, 041109. | 11.3 | 38 |
| 95 | Extracellular Matrixâ€Based Biohybrid Materials for Engineering Compliant, Matrixâ€Dense Tissues. Advanced Healthcare Materials, 2015, 4, 2475-2487. | 7.6 | 37 |
| 96 | Microphysiological systems of the placental barrier. Advanced Drug Delivery Reviews, 2020, 161-162, 161-175. | 13.7 | 37 |
| 97 | Multiple initiators and dyes for continuous Digital Light Processing (cDLP) additive manufacture of resorbable bone tissue engineering scaffolds. Virtual and Physical Prototyping, 2014, 9, 3-9. | 10.4 | 36 |
| 98 | The Influence of Printing Parameters and Cell Density on Bioink Printing Outcomes. Tissue Engineering - Part A, 2020, 26, 1349-1358. | 3.1 | 36 |
| 99 | In Vivo Bone Regeneration Using Tubular Perfusion System Bioreactor Cultured Nanofibrous Scaffolds. Tissue Engineering - Part A, 2014, 20, 139-146. | 3.1 | 34 |
| 100 | 3D Printed Vascular Networks Enhance Viability in High-Volume Perfusion Bioreactor. Annals of Biomedical Engineering, 2016, 44, 3435-3445. | 2.5 | 34 |
| 101 | Effect of construct properties on encapsulated chondrocyte expression of insulin-like growth factor-1. Biomaterials, 2007, 28, 299-306. | 11.4 | 32 |
| 102 | Addition of Hyaluronic Acid to Alginate Embedded Chondrocytes Interferes with Insulin-like Growth Factor-1 SignalingIn VitroandIn Vivo. Tissue Engineering - Part A, 2009, 15, 3449-3459. | 3.1 | 32 |
| 103 | Effect of Transforming Growth Factor Î²2 on Marrow-Infused Foam Poly(Propylene Fumarate) Tissue-Engineered Constructs for the Repair of Critical-Size Cranial Defects in Rabbits. Tissue Engineering, 2005, 11, 923-939. | 4.6 | 31 |
| 104 | A Fluidic Culture Platform for Spatially Patterned Cell Growth, Differentiation, and Cocultures. Tissue Engineering - Part A, 2018, 24, 1715-1732. | 3.1 | 31 |
| 105 | Effects of Exogenous IGF-1 Delivery on the Early Expression of IGF-1 Signaling Molecules by Alginate Embedded Chondrocytes. Tissue Engineering - Part A, 2008, 14, 1263-1273. | 3.1 | 30 |
| 106 | Tissue response and orbital floor regeneration using cyclic acetal hydrogels. Journal of Biomedical Materials Research - Part A, 2009, 90A, 819-829. | 4.0 | 30 |
| 107 | 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. | 5.2 | 30 |
| 108 | Trophoblastâ€“endothelium signaling involves angiogenesis and apoptosis in a dynamic bioprinted placenta model. Biotechnology and Bioengineering, 2019, 116, 181-192. | 3.3 | 30 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | 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. | 8.3 | 28 |
| 110 | Biomimetic Placenta-Fetus Model Demonstrating Maternalâ€“Fetal Transmission and Fetal Neural Toxicity of Zika Virus. Annals of Biomedical Engineering, 2018, 46, 1963-1974. | 2.5 | 28 |
| 111 | In Vitro Models for Studying Transport Across Epithelial Tissue Barriers. Annals of Biomedical Engineering, 2019, 47, 1-21. | 2.5 | 28 |
| 112 | Development of keratin-based membranes for potential use in skin repair. Acta Biomaterialia, 2019, 83, 177-188. | 8.3 | 28 |
| 113 | Addressing present pitfalls in 3D printing for tissue engineering to enhance future potential. APL Bioengineering, 2020, 4, 010901. | 6.2 | 28 |
| 114 | In vitro degradation and fracture toughness of multilayered porous poly(propylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (fumar 159-164. | 3.1 | 27 |
| 115 | Osteogenic Differentiation of Bone Marrow Stromal Cells Induced by Coculture with Chondrocytes Encapsulated in Three-Dimensional Matrices. Tissue Engineering - Part A, 2009, 15, 1181-1190. | 3.1 | 27 |
| 116 | Formation of an Aggregated Alginate Construct in a Tubular Perfusion System. Tissue Engineering - Part C: Methods, 2011, 17, 1171-1178. | 2.1 | 27 |
| 117 | Bioengineering Strategies to Treat Female Infertility. Tissue Engineering - Part B: Reviews, 2017, 23, 294-306. | 4.8 | 27 |
| 118 | Three dimensional extrusion printing induces polymer molecule alignment and cell organization within engineered cartilage. Journal of Biomedical Materials Research - Part A, 2018, 106, 2190-2199. | 4.0 | 27 |
| 119 | Matrix molecule influence on chondrocyte phenotype and proteoglycan 4 expression by alginateâ€embedded zonal chondrocytes and mesenchymal stem cells. Journal of Orthopaedic Research, 2012, 30, 1886-1897. | 2.3 | 26 |
| 120 | Sustained released of bioactive mesenchymal stromal cellâ€derived extracellular vesicles from 3Dâ€printed gelatin methacrylate hydrogels. Journal of Biomedical Materials Research - Part A, 2022, 110, 1190-1198. | 4.0 | 26 |
| 121 | Synthesis and properties of cyclic acetal biomaterials. Journal of Biomedical Materials Research - Part A, 2007, 81A, 594-602. | 4.0 | 25 |
| 122 | Gene expression of alginate-embedded chondrocyte subpopulations and their response to exogenous IGF-1 delivery. Journal of Tissue Engineering and Regenerative Medicine, 2012, 6, 179-192. | 2.7 | 25 |
| 123 | In Vivo Evaluation of Three-Dimensional Printed, Keratin-Based Hydrogels in a Porcine Thermal Burn Model. Tissue Engineering - Part A, 2020, 26, 265-278. | 3.1 | 25 |
| 124 | Assessment of decellularized pericardial extracellular matrix and poly(propylene fumarate) biohybrid for small-diameter vascular graft applications. Acta Biomaterialia, 2020, 110, 68-81. | 8.3 | 25 |
| 125 | 3D printed cellulose based product applications. Materials Chemistry Frontiers, 2022, 6, 254-279. | 5.9 | 25 |
| 126 | Reinforced Pericardium as a Hybrid Material for Cardiovascular Applications. Tissue Engineering - Part A, 2014, 20, 2807-2816. | 3.1 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Cell-Laden 3D Printed Scaffolds for Bone Tissue Engineering. Clinical Reviews in Bone and Mineral Metabolism, 2015, 13, 245-255. | 0.8 | 24 |
| 128 | Development and assessment of a biodegradable solvent cast polyester fabric smallâ€diameter vascular graft. Journal of Biomedical Materials Research - Part A, 2014, 102, 1972-1981. | 4.0 | 23 |
| 129 | 3D printing bioactive PLGA scaffolds using DMSO as a removable solvent. Bioprinting, 2018, 10, e00038. | 5.8 | 23 |
| 130 | Multimaterial Dual Gradient Three-Dimensional Printing for Osteogenic Differentiation and Spatial Segregation. Tissue Engineering - Part A, 2020, 26, 239-252. | 3.1 | 23 |
| 131 | EH Networks as a Scaffold for Skeletal Muscle Regeneration in Abdominal Wall Hernia Repair. Journal of Surgical Research, 2008, 149, 76-83. | 1.6 | 22 |
| 132 | Coculture Strategies in Bone Tissue Engineering: The Impact of Culture Conditions on Pluripotent Stem Cell Populations. Tissue Engineering - Part B: Reviews, 2012, 18, 312-321. | 4.8 | 22 |
| 133 | Human Mesenchymal Stem Cellâ€Derived Miniature Joint System for Disease Modeling and Drug Testing. Advanced Science, 2022, 9, e2105909. | 11.2 | 22 |
| 134 | Characterization of cyclic acetal hydroxyapatite nanocomposites for craniofacial tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 94A, 408-418. | 4.0 | 21 |
| 135 | Tunable osteogenic differentiation of hMPCs in tubular perfusion system bioreactor. Biotechnology and Bioengineering, 2016, 113, 1805-1813. | 3.3 | 20 |
| 136 | Characterizing placental stiffness using ultrasound shear-wave elastography in healthy and preeclamptic pregnancies. Archives of Gynecology and Obstetrics, 2020, 302, 1103-1112. | 1.7 | 20 |
| 137 | Xâ€ray phase contrast imaging of calcified tissue and biomaterial structure in bioreactor engineered tissues. Biotechnology and Bioengineering, 2015, 112, 612-620. | 3.3 | 16 |
| 138 | Cyclic Acetal Hydroxyapatite Nanocomposites for Orbital Bone Regeneration. Tissue Engineering - Part A, 2010, 16, 55-65. | 3.1 | 15 |
| 139 | Hydroxyapatiteâ€doped alginate beads as scaffolds for the osteoblastic differentiation of mesenchymal stem cells. Journal of Biomedical Materials Research - Part A, 2016, 104, 2325-2333. | 4.0 | 15 |
| 140 | Effect of Dexamethasone on Room Temperature Three-Dimensional Printing, Rheology, and Degradation of a Low Modulus Polyester for Soft Tissue Engineering. ACS Biomaterials Science and Engineering, 2019, 5, 846-858. | 5.2 | 15 |
| 141 | Challenges Associated with Regeneration of Orbital Floor Bone. Tissue Engineering - Part B: Reviews, 2010, 16, 541-550. | 4.8 | 14 |
| 142 | Development of a Dynamic Stem Cell Culture Platform for Mesenchymal Stem Cell Adhesion and Evaluation. Molecular Pharmaceutics, 2014, 11, 2172-2181. | 4.6 | 14 |
| 143 | Bioinspired One Cell Culture Isolates Highly Tumorigenic and Metastatic Cancer Stem Cells Capable of Multilineage Differentiation. Advanced Science, 2020, 7, 2000259. | 11.2 | 14 |
| 144 | Liposomal SDF-1 Alpha Delivery in Nanocomposite Hydrogels Promotes Macrophage Phenotype Changes and Skin Tissue Regeneration. ACS Biomaterials Science and Engineering, 2021, 7, 5230-5241. | 5.2 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Skeletal muscle tissue engineering approaches to abdominal wall hernia repair. Birth Defects Research Part C: Embryo Today Reviews, 2008, 84, 315-321. | 3.6 | 13 |
| 146 | Porous EH and EH-PEG Scaffolds as Gene Delivery Vehicles to Skeletal Muscle. Pharmaceutical Research, 2011, 28, 1306-1316. | 3.5 | 13 |
| 147 | Engineering Superficial Zone Chondrocytes from Mesenchymal Stem Cells. Tissue Engineering - Part C: Methods, 2014, 20, 630-640. | 2.1 | 13 |
| 148 | Sustained delivery of vascular endothelial growth factor from mesoporous calciumâ€deficient hydroxyapatite microparticles promotes in vitro angiogenesis and osteogenesis. Journal of Biomedical Materials Research - Part A, 2021, 109, 1080-1087. | 4.0 | 13 |
| 149 | Long-Term Sustained Drug Delivery via 3D Printed Masks for the Development of a Heparin-Loaded Interlayer in Vascular Tissue Engineering Applications. ACS Applied Materials & Interfaces, 2021, 13, 50812-50822. | 8.0 | 13 |
| 150 | Microâ€•and Macrobioprinting: Current Trends in Tissue Modeling and Organ Fabrication. Small Methods, 2018, 2, 1700318. | 8.6 | 12 |
| 151 | Model Placental Barrier Phenotypic Response to Fluoxetine and Sertraline: A Comparative Study. Advanced Healthcare Materials, 2019, 8, 1900476. | 7.6 | 12 |
| 152 | Natural and Synthetic Polymeric Scaffolds. , 2009, , 415-442. | | 12 |
| 153 | Computational investigation of interface printing patterns within 3D printed multilayered scaffolds for osteochondral tissue engineering. Biofabrication, 2022, 14, 025015. | 7.1 | 12 |
| 154 | Cyclic acetal hydroxyapatite composites and endogenous osteogenic gene expression of rat marrow stromal cells. Journal of Tissue Engineering and Regenerative Medicine, 2009, 4, n/a-n/a. | 2.7 | 11 |
| 155 | Extracellular Matrix for Small-Diameter Vascular Grafts. Tissue Engineering - Part A, 2020, 26, 1388-1401. | 3.1 | 11 |
| 156 | Fabrication of centimeter-sized 3D constructs with patterned endothelial cells through assembly of cell-laden microbeads as a potential bone graft. Acta Biomaterialia, 2021, 121, 204-213. | 8.3 | 11 |
| 157 | Mechanisms of angiogenic incompetence in Hutchinsonâ€“Gilford progeria via downregulation of endothelial NOS. Aging Cell, 2021, 20, e13388. | 6.7 | 11 |
| 158 | Cellular responses to degradable cyclic acetal modified PEG hydrogels. Journal of Biomedical Materials Research - Part A, 2009, 90A, 863-873. | 4.0 | 10 |
| 159 | In vitro effects of cisplatin-functionalized silica nanoparticles on chondrocytes. Journal of Nanoparticle Research, 2010, 12, 2757-2770. | 1.9 | 10 |
| 160 | Photodynamic Therapy for Biomodulation and Disinfection in Implant Dentistry: Is It Feasible and Effective?. Photochemistry and Photobiology, 2021, 97, 916-929. | 2.5 | 10 |
| 161 | Tubular perfusion system for chondrocyte culture and superficial zone protein expression. Journal of Biomedical Materials Research - Part A, 2015, 103, 1864-1874. | 4.0 | 9 |
| 162 | Imaging stem cell distribution, growth, migration, and differentiation in 3â€Ð scaffolds for bone tissue engineering using mesoscopic fluorescence tomography. Biotechnology and Bioengineering, 2018, 115, 257-265. | 3.3 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Synthetic polymer coatings diminish chronic inflammation risk in large ECMâ€based materials. Journal of Biomedical Materials Research - Part A, 2019, 107, 494-504. | 4.0 | 9 |
| 164 | Translation and Validation of Spiritual Well-Being Questionnaire SHALOM in Lithuanian Language, Culture and Health Care Practice. Religions, 2018, 9, 156. | 0.6 | 8 |
| 165 | Perfusion Bioreactor Culture of Bone Marrow Stromal Cells Enhances Cranial Defect Regeneration. Plastic and Reconstructive Surgery, 2019, 143, 993e-1002e. | 1.4 | 8 |
| 166 | Dual Extrusion Patterning Drives Tissue Development Aesthetics and Shape Retention in 3D Printed Nippleâ€Areola Constructs. Advanced Healthcare Materials, 2021, 10, e2101249. | 7.6 | 8 |
| 167 | Centrifugation Assay for Measuring Adhesion of Serially Passaged Bovine Chondrocytes to Polystyrene Surfaces. Tissue Engineering - Part C: Methods, 2012, 18, 537-544. | 2.1 | 7 |
| 168 | Enhanced Viability of Endothelial Colony Forming Cells in Fibrin Microbeads for Sensor Vascularization. Sensors, 2015, 15, 23886-23902. | 3.8 | 7 |
| 169 | Assessing SSRIsâ€™ effects on fetal cardiomyocytes utilizing placenta-fetus model. Acta Biomaterialia, 2019, 99, 258-268. | 8.3 | 7 |
| 170 | Concurrent multi-lineage differentiation of mesenchymal stem cells through spatial presentation of growth factors. Biomedical Materials (Bristol), 2020, 15, 055035. | 3.3 | 7 |
| 171 | Incorporating a structural extracellular matrix gradient into a porcine urinary bladder matrix<scp>â€based</scp> hydrogel dermal scaffold. Journal of Biomedical Materials Research - Part A, 2021, 109, 1893-1904. | 4.0 | 7 |
| 172 | Assessment of the Effects of Energy Density in Crosslinking of Keratin-Based Photo-Sensitive Resin. , 2018, , . | | 6 |
| 173 | Dualâ€chambered membrane bioreactor for coculture of stratified cell populations. Biotechnology and Bioengineering, 2019, 116, 3253-3268. | 3.3 | 6 |
| 174 | Aminated 3D Printed Polystyrene Maintains Stem Cell Proliferation and Osteogenic Differentiation. Tissue Engineering - Part C: Methods, 2020, 26, 118-131. | 2.1 | 6 |
| 175 | Bioinks for Three-Dimensional Printing in Regenerative Medicine. , 2019, , 805-830. | | 5 |
| 176 | Biomechanical Aspects of Osteochondral Regeneration: Implications and Strategies for 3D Bioprinting. Tissue Engineering - Part B: Reviews, 2021, , . | 4.8 | 5 |
| 177 | Polymeric Scaffolds for Tissue Engineering Applications. , 2007, , 8-1-8-18. | | 5 |
| 178 | Controlled Delivery of Tissue Inductive Factors in a Cardiovascular Hybrid Biomaterial Scaffold. ACS Biomaterials Science and Engineering, 2017, 3, 1350-1358. | 5.2 | 4 |
| 179 | Development of surface functionalization strategies for 3Dâ€printed polystyrene constructs. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2019, 107, 2566-2578. | 3.4 | 4 |
| 180 | Overview of Tissue Engineering Concepts and Applications. , 2020, , 1289-1316. | | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Noncovalent reversible binding-enabled facile fabrication of leak-free PDMS microfluidic devices without plasma treatment for convenient cell loading and retrieval. Bioactive Materials, 2022, 16, 346-358. | 15.6 | 4 |
| 182 | Direct-Write Construction of Tissue-Engineered Scaffolds. Materials Research Society Symposia Proceedings, 2001, 698, 551. | 0.1 | 3 |
| 183 | Engineering Niches for Cartilage Tissue Regeneration âˆ—. , 2017, , 531-546. | | 3 |
| 184 | Engineering Polymeric Scaffolds for Bone Grafts. , 2007, , 81-94. | | 3 |
| 185 | Tomorrow's Tissue Engineering Triumphs Require Understanding of Today's Achievements. Tissue Engineering - Part B: Reviews, 2008, 14, 1-1. | 4.8 | 2 |
| 186 | Quantitative assessment of macroporous cell scaffold structures using optical coherence tomography (OCT). , 2009, , . | | 2 |
| 187 | Investigation of pore structure and cell distribution in EH-PEG hydrogel scaffold using optical coherence tomography and fluorescence microscopy. , 2010, , . | | 2 |
| 188 | Fabrication and characterization of porous EH scaffolds and EHâ€PEG bilayers. Journal of Biomedical Materials Research - Part A, 2011, 97A, 264-271. | 4.0 | 2 |
| 189 | Separation of Mesenchymal Stem Cells Through a Strategic Centrifugation Protocol. Tissue Engineering - Part C: Methods, 2016, 22, 348-359. | 2.1 | 2 |
| 190 | Programmable Culture Substrates: 4D Selfâ€Morphing Culture Substrate for Modulating Cell Differentiation (Adv. Sci. 5/2020). Advanced Science, 2020, 7, 2070034. | 11.2 | 2 |
| 191 | 3D printing technologies forin vitrovaccine testing platforms and vaccine delivery systems against infectious diseases. Essays in Biochemistry, 2021, 65, 519-531. | 4.7 | 2 |
| 192 | Natural and Synthetic Polymeric Scaffolds. , 2021, , 257-283. | | 2 |
| 193 | Bioreactors and Scale-Up in Bone Tissue Engineering. , 2022, , 225-247. | | 2 |
| 194 | A Continued Commitment to Quality Research in Tissue Engineering. Tissue Engineering - Part A, 2008, 14, 1457-1458. | 3.1 | 1 |
| 195 | Cartilage Engineering: Current Status and Future Trends. , 2011, , 279-306. | | 1 |
| 196 | Three-dimensional imaging of stem cell distribution within tissue engineering scaffolds using angled fluorescent laminar optical tomography (aFLOT). , 2011, , . | | 1 |
| 197 | The Maturation of Tissue Engineering. Tissue Engineering - Part A, 2015, 21, 2473-2475. | 3.1 | 1 |
| 198 | Rock inhibitor may compromise human induced pluripotent stem cells for cardiac differentiation in 3D. Bioactive Materials, 2021, 9, 508-522. | 15.6 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Use of stereolithography to manufacture critical-sized 3D biodegradable scaffolds for bone ingrowth. , 2003, 64B, 65. | | 1 |
| 200 | Recent Advances in Senotherapeutics Delivery. Tissue Engineering - Part B: Reviews, 2022, 28, 1223-1234. | 4.8 | 1 |
| 201 | Biological Implications of Polymeric Scaffolds for Bone Tissue Engineering Developed via Solid Freeform Fabrication. , 2012, , 483-507. | | 0 |
| 202 | Fabrication and Printing of Multi-material Hydrogels. , 2018, , 397-430. | | 0 |
| 203 | Engineered Liver Tissue Culture in an In Vitro Tubular Perfusion System. Tissue Engineering - Part A, 2020, 26, 1369-1377. | 3.1 | 0 |
| 204 | A Special Dedication to Editor-in-Chief, Dr. Tony Mikos. Tissue Engineering - Part A, 2020, 26, 1223-1223. | 3.1 | 0 |