Jordan Miller

List of Publications by Citations

48 papers	5,244 citations	28 h-index	52 g-index
52 ext. papers	6,010 ext. citations	9.8 avg, IF	5.7 L-index

#	Paper	IF	Citations
48	Rapid casting of patterned vascular networks for perfusable engineered three-dimensional tissues. *Nature Materials*, **2012**, 11, 768-74	27	1402
47	Multivascular networks and functional intravascular topologies within biocompatible hydrogels. *Science*, **2019**, 364, 458-464	33.3	557
46	Measurement of mechanical tractions exerted by cells in three-dimensional matrices. *Nature Methods*, **2010**, 7, 969-71	21.6	444
45	Three-Dimensional Biochemical and Biomechanical Patterning of Hydrogels for Guiding Cell Behavior. *Advanced Materials*, **2006**, 18, 2679-2684	24	369
44	Bioresponsive mesoporous silica nanoparticles for triggered drug release. *Journal of the American Chemical Society*, **2011**, 133, 19582-5	16.4	303
43	Multidimensional traction force microscopy reveals out-of-plane rotational moments about focal adhesions. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 881-6	11.5	198
42	Geometric control of vascular networks to enhance engineered tissue integration and function. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 7586-91	11.5	197
41	Protease-activated quantum dot probes. *Biochemical and Biophysical Research Communications*, **2005**, 334, 1317-21	3.4	194
40	Bioactive hydrogels made from step-growth derived PEG-peptide macromers. *Biomaterials*, **2010**, 31, 3736-43	15.6	187
39	Multilayer microfluidic PEGDA hydrogels. *Biomaterials*, **2010**, 31, 5491-7	15.6	176
38	The billion cell construct: will three-dimensional printing get us there?. *PLoS Biology*, **2014**, 12, e1001882	9.7	99
37	3D bioprinting: improving in vitro models of metastasis with heterogeneous tumor microenvironments. *DMM Disease Models and Mechanisms*, **2017**, 10, 3-14	4.1	98
36	3D-printed fluidic networks as vasculature for engineered tissue. *Lab on A Chip*, **2016**, 16, 2025-43	7.2	93
35	Poly(ethylene glycol) hydrogels conjugated with a collagenase-sensitive fluorogenic substrate to visualize collagenase activity during three-dimensional cell migration. *Biomaterials*, **2007**, 28, 3163-70	15.6	89
34	Tissue vascularization through 3D printing: Will technology bring us flow?. *Developmental Dynamics*, **2015**, 244, 629-40	2.9	87
33	Laser Scanning Lithography for Surface Micropatterning on Hydrogels. *Advanced Materials*, **2005**, 17, 2939-2942	24	83
32	Proteolytically degradable hydrogels with a fluorogenic substrate for studies of cellular proteolytic activity and migration. *Biotechnology Progress*, **2005**, 21, 1736-41	2.8	58

31	Open-Source Selective Laser Sintering (OpenSLS) of Nylon and Biocompatible Polycaprolactone. *PLoS ONE*, **2016**, 11, e0147399	3.7	54
30	Degradable hydrogels derived from PEG-diacrylamide for hepatic tissue engineering. *Journal of Biomedical Materials Research - Part A*, **2015**, 103, 3331-8	5.4	49
29	In Vivo Anastomosis and Perfusion of a Three-Dimensionally-Printed Construct Containing Microchannel Networks. *Tissue Engineering - Part C: Methods*, **2016**, 22, 1-7	2.9	49
28	Laser-scanning lithography (LSL) for the soft lithographic patterning of cell-adhesive self-assembled monolayers. *Biotechnology and Bioengineering*, **2006**, 93, 1060-8	4.9	47
27	Generation of model tissues with dendritic vascular networks via sacrificial laser-sintered carbohydrate templates. *Nature Biomedical Engineering*, **2020**, 4, 916-932	19	42
26	Tissue-engineered, hydrogel-based endothelial progenitor cell therapy robustly revascularizes ischemic myocardium and preserves ventricular function. *Journal of Thoracic and Cardiovascular Surgery*, **2014**, 148, 1090-7; discussion 1097-8	1.5	36
25	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
24	Fabrication of Multifaceted Micropatterned Surfaces with Laser Scanning Lithography. *Advanced Functional Materials*, **2011**, 21, 2876-2888	15.6	33
23	Tubulogenesis of co-cultured human iPS-derived endothelial cells and human mesenchymal stem cells in fibrin and gelatin methacrylate gels. *Biomaterials Science*, **2017**, 5, 1652-1660	7.4	30
22	Decreased cell adhesion promotes angiogenesis in a Pyk2-dependent manner. *Experimental Cell Research*, **2011**, 317, 1860-71	4.2	30
21	Progress in three-dimensional bioprinting. *MRS Bulletin*, **2017**, 42, 557-562	3.2	28
20	Development, characterization, and applications of multi-material stereolithography bioprinting. *Scientific Reports*, **2021**, 11, 3171	4.9	27
19	Elucidating the role of graft compliance mismatch on intimal hyperplasia using an ex vivo organ culture model. *Acta Biomaterialia*, **2019**, 89, 84-94	10.8	22
18	Disturbed flow disrupts the blood-brain barrier in a 3D bifurcation model. *Biofabrication*, **2020**, 12, 025020	10.5	20
17	Three dimensional model for surgical planning in resection of thoracic tumors. *International Journal of Surgery Case Reports*, **2015**, 16, 127-9	0.8	19
16	Ultrahigh-throughput Generation and Characterization of Cellular Aggregates in Laser-ablated Microwells of Poly(dimethylsiloxane). *RSC Advances*, **2016**, 6, 8980-8991	3.7	18
15	A novel ex vivo tumor system identifies Src-mediated invasion and metastasis in mesenchymal tumor cells in non-small cell lung cancer. *Scientific Reports*, **2019**, 9, 4819	4.9	14
14	Engineering Escherichia coli for light-activated cytolysis of mammalian cells. *ACS Synthetic Biology*, **2014**, 3, 944-8	5.7	11

13	Thermofluidic heat exchangers for actuation of transcription in artificial tissues. *Science Advances*, **2020**, 6,	14.3	10
12	Perfusion and endothelialization of engineered tissues with patterned vascular networks. *Nature Protocols*, **2021**, 16, 3089-3113	18.8	7
11	Bioinks for Three-Dimensional Printing in Regenerative Medicine **2019**, 805-830		3
10	Contextual cues from cancer cells govern cancer-associated fibroblast heterogeneity. *Cell Reports*, **2021**, 35, 109009	10.6	3
9	Projection-based stereolithography for direct 3D printing of heterogeneous ultrasound phantoms. *PLoS ONE*, **2021**, 16, e0260737	3.7	2
8	Micropatterning: Fabrication of Multifaceted Micropatterned Surfaces with Laser Scanning Lithography (Adv. Funct. Mater. 15/2011). *Advanced Functional Materials*, **2011**, 21, 2798-2798	15.6	1
7	Blood Flow Within Bioengineered 3D Printed Vascular Constructs Using the Porcine Model. *Frontiers in Cardiovascular Medicine*, **2021**, 8, 629313	5.4	1
6	Vascular Networks Within 3D Printed and Engineered Tissues **2018**, 79-105		1
5	3D Printing and Patterning Vasculature in Engineered Tissues **2015**, 171-189		
4	Rapid Prototyping of Hydrogels to Guide Tissue Formation **2008**, 49-65		
3	Vascular Networks Within 3D Printed and Engineered Tissues **2017**, 1-27		
2	Rapid fabrication of hydrogel micropatterns by projection stereolithography for studying self-organized developmental patterning. *PLoS ONE*, **2021**, 16, e0245634	3.7	
1	3D Printing and Patterning Vasculature in Engineered Tissues **2015**, 267-285		