Matthew R Zanotelli

List of Publications by Year
in descending order

20	1,215	623734 14	752698 20
papers	citations	h-index	g-index

21	21	21	1864
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Matrix stiffening promotes a tumor vasculature phenotype. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 492-497.	7.1	295
2	Mechanoresponsive metabolism in cancer cell migration and metastasis. Cell Metabolism, 2021, 33, 1307-1321.	16.2	127
3	Regulation of ATP utilization during metastatic cell migration by collagen architecture. Molecular Biology of the Cell, 2018, 29, 1-9.	2.1	118
4	Mechanical Forces in Tumor Angiogenesis. Advances in Experimental Medicine and Biology, 2018, 1092, 91-112.	1.6	93
5	Energetic costs regulated by cell mechanics and confinement are predictive of migration path during decision-making. Nature Communications, 2019, 10, 4185.	12.8	92
6	Fiber alignment drives changes in architectural and mechanical features in collagen matrices. PLoS ONE, 2019, 14, e0216537.	2.5	90
7	Stable engineered vascular networks from human induced pluripotent stem cell-derived endothelial cells cultured in synthetic hydrogels. Acta Biomaterialia, 2016, 35, 32-41.	8.3	86
8	Differential effects of cell adhesion, modulus and VEGFR-2 inhibition on capillary network formation in synthetic hydrogel arrays. Biomaterials, 2014, 35, 2149-2161.	11.4	62
9	Matrix stiffness enhances VEGFR-2 internalization, signaling, and proliferation in endothelial cells. Convergent Science Physical Oncology, 2017, 3, 044001.	2.6	55
10	Simvastatin Ameliorates Matrix Stiffness-Mediated Endothelial Monolayer Disruption. PLoS ONE, 2016, 11, e0147033.	2.5	39
11	Clinical doses of radiation reduce collagen matrix stiffness. APL Bioengineering, 2018, 2, 031901.	6.2	36
12	Extent of Cell Confinement in Microtracks Affects Speed and Results in Differential Matrix Strains. Biophysical Journal, 2019, 117, 1692-1701.	0.5	27
13	Matrix-driven changes in metabolism support cytoskeletal activity to promote cell migration. Biophysical Journal, 2021, 120, 1705-1717.	0.5	23
14	Binding of Anticell Adhesive Oximeâ€Crosslinked PEG Hydrogels to Cardiac Tissues. Advanced Healthcare Materials, 2015, 4, 1327-1331.	7.6	16
15	Highly motile cells are metabolically responsive to collagen density. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2114672119.	7.1	15
16	Microstructured hydrogel scaffolds containing differential density interfaces promote rapid cellular invasion and vascularization. Acta Biomaterialia, 2019, 91, 144-158.	8.3	14
17	Subcellular regulation of cancer cell mechanics. Current Opinion in Biomedical Engineering, 2017, 1, 8-14.	3.4	12
18	An ovarian bioreactor for in vitro culture of the whole bovine ovary: a preliminary report. Journal of Ovarian Research, 2016, 9, 47.	3.0	6

#	Article	IF	Citations
19	The Physical Microenvironment of Tumors: Characterization and Clinical Impact. Biophysical Reviews and Letters, 2020, 15, 51-82.	0.8	3
20	The Physical Microenvironment of Tumors: Characterization and Clinical Impact. , 2020, , 165-195.		2