Matthew R Zanotelli

List of Publications by Year
in descending order

20	1,215	706676 14	843174 20
papers	citations	h-index	g-index

21	21	21	2074
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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.	3.3	15
2	Matrix-driven changes in metabolism support cytoskeletal activity to promote cell migration. Biophysical Journal, 2021, 120, 1705-1717.	0.2	23
3	Mechanoresponsive metabolism in cancer cell migration and metastasis. Cell Metabolism, 2021, 33, 1307-1321.	7.2	127
4	The Physical Microenvironment of Tumors: Characterization and Clinical Impact. Biophysical Reviews and Letters, 2020, 15, 51-82.	0.9	3
5	The Physical Microenvironment of Tumors: Characterization and Clinical Impact. , 2020, , 165-195.		2
6	Extent of Cell Confinement in Microtracks Affects Speed and Results in Differential Matrix Strains. Biophysical Journal, 2019, 117, 1692-1701.	0.2	27
7	Energetic costs regulated by cell mechanics and confinement are predictive of migration path during decision-making. Nature Communications, 2019, 10, 4185.	5.8	92
8	Fiber alignment drives changes in architectural and mechanical features in collagen matrices. PLoS ONE, 2019, 14, e0216537.	1.1	90
9	Microstructured hydrogel scaffolds containing differential density interfaces promote rapid cellular invasion and vascularization. Acta Biomaterialia, 2019, 91, 144-158.	4.1	14
10	Clinical doses of radiation reduce collagen matrix stiffness. APL Bioengineering, 2018, 2, 031901.	3.3	36
11	Regulation of ATP utilization during metastatic cell migration by collagen architecture. Molecular Biology of the Cell, 2018, 29, 1-9.	0.9	118
12	Mechanical Forces in Tumor Angiogenesis. Advances in Experimental Medicine and Biology, 2018, 1092, 91-112.	0.8	93
13	Subcellular regulation of cancer cell mechanics. Current Opinion in Biomedical Engineering, 2017, 1, 8-14.	1.8	12
14	Matrix stiffening promotes a tumor vasculature phenotype. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 492-497.	3.3	295
15	Matrix stiffness enhances VEGFR-2 internalization, signaling, and proliferation in endothelial cells. Convergent Science Physical Oncology, 2017, 3, 044001.	2.6	55
16	Simvastatin Ameliorates Matrix Stiffness-Mediated Endothelial Monolayer Disruption. PLoS ONE, 2016, 11, e0147033.	1.1	39
17	An ovarian bioreactor for in vitro culture of the whole bovine ovary: a preliminary report. Journal of Ovarian Research, 2016, 9, 47.	1.3	6
18	Stable engineered vascular networks from human induced pluripotent stem cell-derived endothelial cells cultured in synthetic hydrogels. Acta Biomaterialia, 2016, 35, 32-41.	4.1	86

#	Article	IF	Citations
19	Binding of Anticell Adhesive Oximeâ€Crosslinked PEG Hydrogels to Cardiac Tissues. Advanced Healthcare Materials, 2015, 4, 1327-1331.	3.9	16
20	Differential effects of cell adhesion, modulus and VEGFR-2 inhibition on capillary network formation in synthetic hydrogel arrays. Biomaterials, 2014, 35, 2149-2161.	5.7	62