Emad Moeendarbary

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5755078/publications.pdf

Version: 2024-02-01

45 papers	4,037 citations	201575 27 h-index	265120 42 g-index
49 all docs	49 docs citations	49 times ranked	6899 citing authors

#	Article	IF	Citations
1	3D In Vitro Models for Investigating the Role of Stiffness in Cancer Invasion. ACS Biomaterials Science and Engineering, 2023, 9, 3729-3741.	2.6	41
2	Acoustics interaction in a complex piping network with multiple pulsatile sources. Journal of Sound and Vibration, 2022, 528, 116863.	2.1	3
3	KIT is dispensable for physiological organ vascularisation in the embryo. Angiogenesis, 2022, 25, 343-353.	3.7	8
4	Acoustics and vibrations in a complex piping network with pump startupâ€“shutdown transients. International Journal of Mechanical Sciences, 2022, 227, 107357.	3.6	4
5	Mechanobiology of the brain in ageing and Alzheimer's disease. European Journal of Neuroscience, 2021, 53, 3851-3878.	1.2	61
6	Spatiotemporal immunolocalisation of REST in the brain of healthy ageing and Alzheimerâ€™s disease rats. FEBS Open Bio, 2021, 11, 146-163.	1.0	3
7	Astigmatic traction force microscopy (aTFM). Nature Communications, 2021, 12, 2168.	5.8	34
8	Tumor cell nuclei soften during transendothelial migration. Journal of Biomechanics, 2021, 121, 110400.	0.9	42
9	Biofabrication of vasculature in microphysiological models of bone. Biofabrication, 2021, 13, 032004.	3.7	19
10	High-Strouhal-number pulsatile flow in a curved pipe. Journal of Fluid Mechanics, 2021, 923, .	1.4	7
11	Removal and dispersal of biofluid films by powered medical devices: Modeling infectious agent spreading in dentistry. IScience, 2021, 24, 103344.	1.9	4
12	Quantifying cell-generated forces: Poissonâ€™s ratio matters. Communications Physics, 2021, 4, 237.	2.0	22
13	Poroelastic osmoregulation of living cell volume. IScience, 2021, 24, 103482.	1.9	3
14	Mechanical Response of Neural Cells to Physiologically Relevant Stiffness Gradients. Advanced Healthcare Materials, 2020, 9, e1901036.	3.9	41
15	A new framework for characterization of poroelastic materials using indentation. Acta Biomaterialia, 2020, 102, 138-148.	4.1	32
16	The multiscale hierarchical structure of Heloderma suspectum osteoderms and their mechanical properties. Acta Biomaterialia, 2020, 107, 194-203.	4.1	16
17	Poroelasticity of Living Tissues. , 2019, , 238-245.		17
18	Spatiotemporally Super-Resolved Volumetric Traction Force Microscopy. Nano Letters, 2019, 19, 4427-4434.	4.5	43

#	Article	IF	Citations
19	Balance of mechanical forces drives endothelial gap formation and may facilitate cancer and immune-cell extravasation. PLoS Computational Biology, 2019, 15, e1006395.	1.5	53
20	Cytoskeletal Control of Antigen-Dependent T Cell Activation. Cell Reports, 2019, 26, 3369-3379.e5.	2.9	68
21	Mechanobiological Control of the Immune Response. Biophysical Journal, 2019, 116, 550a.	0.2	0
22	Dickkopf-3 links HSF1 and YAP/TAZ signalling to control aggressive behaviours in cancer-associated fibroblasts. Nature Communications, 2019, 10, 130.	5.8	116
23	Complex mechanics of the heterogeneous extracellular matrix in cancer. Extreme Mechanics Letters, 2018, 21, 25-34.	2.0	158
24	In Vitro Modeling of Mechanics in Cancer Metastasis. ACS Biomaterials Science and Engineering, 2018, 4, 294-301.	2.6	64
25	Infection Augments Expression of Mechanosensing Piezo1 Channels in Amyloid Plaque-Reactive Astrocytes. Frontiers in Aging Neuroscience, 2018, 10, 332.	1.7	57
26	Engineered Models of Metastasis with Application to Study Cancer Biomechanics. Advances in Experimental Medicine and Biology, 2018, 1092, 189-207.	0.8	5
27	The soft mechanical signature of glial scars in the central nervous system. Nature Communications, 2017, 8, 14787.	5.8	292
28	Laminin Levels Regulate Tissue Migration and Anterior-Posterior Polarity during Egg Morphogenesis in Drosophila. Cell Reports, 2017, 20, 211-223.	2.9	42
29	Abstract A53: Probing forces and modulation of cancer cell mechanical properties during transendothelial migration. , 2017, , .		1
30	Actin kinetics shapes cortical network structure and mechanics. Science Advances, 2016, 2, e1501337.	4.7	130
31	A Chemomechanical Model for Nuclear Morphology and Stresses during Cell Transendothelial Migration. Biophysical Journal, 2016, 111, 1541-1552.	0.2	112
32	Super-Resolved Traction Force Microscopy (STFM). Nano Letters, 2016, 16, 2633-2638.	4.5	86
33	Hypoxia and loss of <scp>PHD</scp> 2 inactivate stromal fibroblasts to decrease tumour stiffness andÂmetastasis. EMBO Reports, 2015, 16, 1394-1408.	2.0	120
34	Cdc42EP3/BORG2 and Septin Network Enables Mechano-transduction and the Emergence of Cancer-Associated Fibroblasts. Cell Reports, 2015, 13, 2699-2714.	2.9	106
35	Hydraulic cracking. Nature Materials, 2015, 14, 268-269.	13.3	6
36	Atomic force microscopy-based force measurements on animal cells and tissues. Methods in Cell Biology, 2015, 125, 211-235.	0.5	58

#	Article	IF	Citations
37	CNS Cell Distribution and Axon Orientation Determine Local Spinal Cord Mechanical Properties. Biophysical Journal, 2015, 108, 2137-2147.	0.2	136
38	Theta-Burst Stimulation of Hippocampal Slices Induces Network-Level Calcium Oscillations and Activates Analogous Gene Transcription to Spatial Learning. PLoS ONE, 2014, 9, e100546.	1.1	14
39	Cell mechanics: principles, practices, and prospects. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2014, 6, 371-388.	6.6	232
40	The cytoplasm of living cells behaves as a poroelastic material. Nature Materials, 2013, 12, 253-261.	13.3	527
41	Mechanotransduction and YAP-dependent matrix remodelling is required for the generation and maintenance of cancer-associated fibroblasts. Nature Cell Biology, 2013, 15, 637-646.	4.6	1,088
42	Excess F-actin mechanically impedes mitosis leading to cytokinesis failure in X-linked neutropenia by exceeding Aurora B kinase error correction capacity. Blood, 2012, 120, 3803-3811.	0.6	42
43	PP1-Mediated Moesin Dephosphorylation Couples Polar Relaxation to Mitotic Exit. Current Biology, 2012, 22, 231-236.	1.8	86
44	Migration of DNA molecules through entropic trap arrays: a dissipative particle dynamics study. Microfluidics and Nanofluidics, 2010, 8, 243-254.	1.0	21
45	Dissipative particle dynamics simulation of entropic trapping for DNA separation. Sensors and Actuators A: Physical, 2010, 157, 328-335.	2.0	12