

Alexandre J Kabla

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

4,698
citations

126907

33
h-index

189892

50
g-index

62
all docs

62
docs citations

62
times ranked

4791
citing authors

#	ARTICLE	IF	CITATIONS
1	autohaem: 3D printed devices for automated preparation of blood smears. Review of Scientific Instruments, 2022, 93, 014104.	1.3	2
2	Fracture in living tissues. Trends in Cell Biology, 2022, 32, 537-551.	7.9	18
3	Use of microfluidic experiments to optimize MICP treatment protocols for effective strength enhancement of MICP-treated sandy soils. Acta Geotechnica, 2022, 17, 3817-3838.	5.7	24
4	Effects of Bacterial Density on Growth Rate and Characteristics of Microbial-Induced CaCO ₃ Precipitates: Particle-Scale Experimental Study. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2021, 147, .	3.0	44
5	Strain maps characterize the symmetry of convergence and extension patterns during zebrafish gastrulation. Scientific Reports, 2021, 11, 19357.	3.3	6
6	Actomyosin controls planarity and folding of epithelia in response to compression. Nature Materials, 2020, 19, 109-117.	27.5	60
7	Spatial heterogeneity of cell-matrix adhesive forces predicts human glioblastoma migration. Neuro-Oncology Advances, 2020, 2, vdaa081.	0.7	6
8	The role of single-cell mechanical behaviour and polarity in driving collective cell migration. Nature Physics, 2020, 16, 802-809.	16.7	109
9	A unified rheological model for cells and cellularised materials. Royal Society Open Science, 2020, 7, 190920.	2.4	38
10	Fractional viscoelastic models for power-law materials. Soft Matter, 2020, 16, 6002-6020.	2.7	178
11	Tug-of-war between stretching and bending in living cell sheets. Physical Review E, 2020, 102, 012401.	2.1	5
12	Pressure sensing through Piezo channels controls whether cells migrate with blebs or pseudopods. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2506-2512.	7.1	57
13	Curling of epithelial monolayers reveals coupling between active bending and tissue tension. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9377-9383.	7.1	49
14	Microscale Visualization of Microbial-Induced Calcium Carbonate Precipitation Processes. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2019, 145, .	3.0	85
15	Stress relaxation in epithelial monolayers is controlled by the actomyosin cortex. Nature Physics, 2019, 15, 839-847.	16.7	126
16	A microfluidic chip and its use in characterising the particle-scale behaviour of microbial-induced calcium carbonate precipitation (MICP). Geotechnique, 2019, 69, 1086-1094.	4.0	90
17	RHEOS.jl – A Julia Package for Rheology Data Analysis. Journal of Open Source Software, 2019, 4, 1700.	4.6	10
18	Method to study cell migration under uniaxial compression. Molecular Biology of the Cell, 2017, 28, 809-816.	2.1	20

#	ARTICLE	IF	CITATIONS
19	Tumour heterogeneity promotes collective invasion and cancer metastatic dissemination. Royal Society Open Science, 2017, 4, 161007.	2.4	35
20	Myosin II Controls Junction Fluctuations to Guide Epithelial Tissue Ordering. Developmental Cell, 2017, 43, 480-492.e6.	7.0	109
21	Emergent patterns from probabilistic generalizations of lateral activation and inhibition. Journal of the Royal Society Interface, 2016, 13, 20151077.	3.4	2
22	The dynamic mechanical properties of cellularised aggregates. Current Opinion in Cell Biology, 2016, 42, 113-120.	5.4	38
23	A one-piece 3D printed flexure translation stage for open-source microscopy. Review of Scientific Instruments, 2016, 87, 025104.	1.3	108
24	Leader Cells Define Directionality of Trunk, but Not Cranial, Neural Crest Cell Migration. Cell Reports, 2016, 15, 2076-2088.	6.4	100
25	Emergence of homeostatic epithelial packing and stress dissipation through divisions oriented along the long cell axis. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5726-5731.	7.1	176
26	Gap geometry dictates epithelial closure efficiency. Nature Communications, 2015, 6, 7683.	12.8	118
27	Nonautonomous contact guidance signaling during collective cell migration. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1807-1812.	7.1	70
28	Auxetic nuclei in embryonic stem cells exiting pluripotency. Nature Materials, 2014, 13, 638-644.	27.5	145
29	A kinetic mechanism for cell sorting based on local variations in cell motility. Interface Focus, 2014, 4, 20140013.	3.0	22
30	In vivo collective cell migration requires an LPAR2-dependent increase in tissue fluidity. Journal of Cell Biology, 2014, 206, 113-127.	5.2	125
31	Guidance of collective cell migration by substrate geometry. Integrative Biology (United Kingdom), 2013, 5, 1026.	1.3	241
32	Generating suspended cell monolayers for mechanobiological studies. Nature Protocols, 2013, 8, 2516-2530.	12.0	50
33	Collective cell migration: leadership, invasion and segregation. Journal of the Royal Society Interface, 2012, 9, 3268-3278.	3.4	218
34	Characterizing the mechanics of cultured cell monolayers. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16449-16454.	7.1	295
35	In vivo dynamics of the internal fibrous structure in smooth adhesive pads of insects. Acta Biomaterialia, 2012, 8, 2730-2736.	8.3	35
36	Emerging modes of collective cell migration induced by geometrical constraints. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12974-12979.	7.1	389

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37	Mapping forces in a 3D elastic assembly of grains. Journal of the Mechanics and Physics of Solids, 2012, 60, 55-66.	4.8	65
38	Dilatancy in Slow Granular Flows. Physical Review Letters, 2009, 102, 228301.	7.8	49
39	Cell shape changes indicate a role for extrinsic tensile forces in Drosophila germ-band extension. Nature Cell Biology, 2009, 11, 859-864.	10.3	227
40	Tissue tectonics: morphogenetic strain rates, cell shape change and intercalation. Nature Methods, 2009, 6, 458-464.	19.0	241
41	Strain-Induced Alignment in Collagen Gels. PLoS ONE, 2009, 4, e5902.	2.5	323
42	Elasticity of Floppy and Stiff Random Networks. Physical Review Letters, 2008, 101, 215501.	7.8	182
43	REAL-TIME BLOCK FLOW TRACKING OF ATRIAL SEPTAL DEFECT MOTION IN 4D CARDIAC ULTRASOUND. , 2007, ,		3
44	Real-Time Tracking and Shape Analysis of Atrial Septal Defects in 3D Echocardiography. Academic Radiology, 2007, 14, 1298-1309.	2.5	10
45	Quasi-static rheology of foams. Part 1. Oscillating strain. Journal of Fluid Mechanics, 2007, 587, 23-44.	3.4	26
46	Quasi-static rheology of foams. Part 2. Continuous shear flow. Journal of Fluid Mechanics, 2007, 587, 45-72.	3.4	52
47	Nonlinear mechanics of soft fibrous networks. Journal of the Royal Society Interface, 2007, 4, 99-106.	3.4	87
48	X-ray observation of micro-failures in granular piles approaching an avalanche. Europhysics Letters, 2005, 71, 932-937.	2.0	29
49	Contact Dynamics in a Gently Vibrated Granular Pile. Physical Review Letters, 2004, 92, 035501.	7.8	37
50	Local Stress Relaxation and Shear Banding in a Dry Foam under Shear. Physical Review Letters, 2003, 90, 258303.	7.8	136