

Katarzyna Pogoda

List of Publications by Year in descending order

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Version: 2024-02-01

46
papers

2,381
citations

331259

21
h-index

223531

46
g-index

53
all docs

53
docs citations

53
times ranked

3354
citing authors

#	ARTICLE	IF	CITATIONS
1	Control of cell morphology and differentiation by substrates with independently tunable elasticity and viscous dissipation. <i>Nature Communications</i> , 2018, 9, 449.	5.8	301
2	Cancer cell detection in tissue sections using AFM. <i>Archives of Biochemistry and Biophysics</i> , 2012, 518, 151-156.	1.4	298
3	Cancer cell recognition – Mechanical phenotype. <i>Micron</i> , 2012, 43, 1259-1266.	1.1	243
4	Vimentin protects cells against nuclear rupture and DNA damage during migration. <i>Journal of Cell Biology</i> , 2019, 218, 4079-4092.	2.3	155
5	Compression stiffening of brain and its effect on mechanosensing by glioma cells. <i>New Journal of Physics</i> , 2014, 16, 075002.	1.2	148
6	Tumor stiffening reversion through collagen crosslinking inhibition improves T cell migration and anti-PD-1 treatment. <i>ELife</i> , 2021, 10, .	2.8	127
7	Depth-sensing analysis of cytoskeleton organization based on AFM data. <i>European Biophysics Journal</i> , 2012, 41, 79-87.	1.2	118
8	Emergence of tissue-like mechanics from fibrous networks confined by close-packed cells. <i>Nature</i> , 2019, 573, 96-101.	13.7	118
9	Augmentation of integrin-mediated mechanotransduction by hyaluronic acid. <i>Biomaterials</i> , 2014, 35, 71-82.	5.7	97
10	Soft Substrates Containing Hyaluronan Mimic the Effects of Increased Stiffness on Morphology, Motility, and Proliferation of Glioma Cells. <i>Biomacromolecules</i> , 2017, 18, 3040-3051.	2.6	70
11	Loss of Vimentin Enhances Cell Motility through Small Confining Spaces. <i>Small</i> , 2019, 15, e1903180.	5.2	59
12	Candidacidal Activity of Selected Ceragenins and Human Cathelicidin LL-37 in Experimental Settings Mimicking Infection Sites. <i>PLoS ONE</i> , 2016, 11, e0157242.	1.1	59
13	Glial Tissue Mechanics and Mechanosensing by Glial Cells. <i>Frontiers in Cellular Neuroscience</i> , 2018, 12, 25.	1.8	48
14	Tissue Rheology as a Possible Complementary Procedure to Advance Histological Diagnosis of Colon Cancer. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 5620-5631.	2.6	43
15	Myosin IIA suppresses glioblastoma development in a mechanically sensitive manner. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15550-15559.	3.3	39
16	Indenting soft samples (hydrogels and cells) with cantilevers possessing various shapes of probing tip. <i>European Biophysics Journal</i> , 2020, 49, 485-495.	1.2	36
17	A novel method to make viscoelastic polyacrylamide gels for cell culture and traction force microscopy. <i>APL Bioengineering</i> , 2020, 4, 036104.	3.3	36
18	Age-Related Changes in the Mechanical Properties of Human Fibroblasts and Its Prospective Reversal After Anti-Wrinkle Tripeptide Treatment. <i>International Journal of Peptide Research and Therapeutics</i> , 2014, 20, 77-85.	0.9	32

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19	Sporicidal activity of ceragenin CSA-13 against <i>Bacillus subtilis</i> . <i>Scientific Reports</i> , 2017, 7, 44452.	1.6	27
20	Role of a Kinesin Motor in Cancer Cell Mechanics. <i>Nano Letters</i> , 2019, 19, 7691-7702.	4.5	26
21	Inhibition of inflammatory response in human keratinocytes by magnetic nanoparticles functionalized with PBP10 peptide derived from the PIP2-binding site of human plasma gelsolin. <i>Journal of Nanobiotechnology</i> , 2019, 17, 22.	4.2	25
22	Lateral distribution of phosphatidylinositol 4,5-bisphosphate in membranes regulates formin- and ARP2/3-mediated actin nucleation. <i>Journal of Biological Chemistry</i> , 2019, 294, 4704-4722.	1.6	22
23	Mid-infrared spectroscopy and microscopy of subcellular structures in eukaryotic cells with atomic force microscopy “infrared spectroscopy. <i>RSC Advances</i> , 2018, 8, 2786-2794.	1.7	21
24	Unique Role of Vimentin Networks in Compression Stiffening of Cells and Protection of Nuclei from Compressive Stress. <i>Nano Letters</i> , 2022, 22, 4725-4732.	4.5	21
25	The Atr-Chek1 pathway inhibits axon regeneration in response to Piezo-dependent mechanosensation. <i>Nature Communications</i> , 2021, 12, 3845.	5.8	19
26	Enhancement of Pulmozyme activity in purulent sputum by combination with poly-aspartic acid or gelsolin. <i>Journal of Cystic Fibrosis</i> , 2015, 14, 587-593.	0.3	18
27	Dynamic Tuning of Viscoelastic Hydrogels with Carbonyl Iron Microparticles Reveals the Rapid Response of Cells to Three-Dimensional Substrate Mechanics. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 20947-20959.	4.0	15
28	<p>Nanomechanics and Histopathology as Diagnostic Tools to Characterize Freshly Removed Human Brain Tumors</p>. <i>International Journal of Nanomedicine</i> , 2020, Volume 15, 7509-7521.	3.3	14
29	Loops <i>versus</i> lines and the compression stiffening of cells. <i>Soft Matter</i> , 2020, 16, 4389-4406.	1.2	14
30	Elasticity-dependent response of malignant cells to viscous dissipation. <i>Biomechanics and Modeling in Mechanobiology</i> , 2021, 20, 145-154.	1.4	14
31	Compression stiffening in biological tissues: On the possibility of classic elasticity origins. <i>Physical Review E</i> , 2019, 99, 052413.	0.8	13
32	Contact Microscopy using a Compact Laser Produced Plasma Soft X-Ray Source. <i>Acta Physica Polonica A</i> , 2016, 129, 237-240.	0.2	13
33	Assessment of aliphatic poly(ester-carbonate-urea-urethane)s potential as materials for biomedical application. <i>Journal of Polymer Research</i> , 2017, 24, 1.	1.2	12
34	Assessment of cellular response to drug/nanoparticles conjugates treatment through FTIR imaging and PLS regression study. <i>Sensors and Actuators B: Chemical</i> , 2020, 313, 128039.	4.0	12
35	Stiffening of bacteria cells as a first manifestation of bactericidal attack. <i>Micron</i> , 2017, 101, 95-102.	1.1	11
36	In search of the correlation between nanomechanical and biomolecular properties of prostate cancer cells with different metastatic potential. <i>Archives of Biochemistry and Biophysics</i> , 2021, 697, 108718.	1.4	8

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37	Inhomogeneity of stiffness and density of the extracellular matrix within the leukoplakia of human oral mucosa as potential physicochemical factors leading to carcinogenesis. <i>Translational Oncology</i> , 2021, 14, 101105.	1.7	7
38	Compressive tumours cause neuronal damage. <i>Nature Biomedical Engineering</i> , 2019, 3, 171-172.	11.6	6
39	A Novel Method to Make Polyacrylamide Gels with Mechanical Properties Resembling those of Biological Tissues. <i>Bio-protocol</i> , 2021, 11, e4131.	0.2	5
40	The Impact of Preprocessing Methods for a Successful Prostate Cell Lines Discrimination Using Partial Least Squares Regression and Discriminant Analysis Based on Fourier Transform Infrared Imaging. <i>Cells</i> , 2021, 10, 953.	1.8	5
41	Human Vimentin Layers on Solid Substrates: Adsorption Kinetics and Corona Formation Investigations. <i>Biomacromolecules</i> , 2022, 23, 3308-3317.	2.6	4
42	Magnetic field tuning of mechanical properties of ultrasoft PDMS-based magnetorheological elastomers for biological applications. <i>Multifunctional Materials</i> , 2021, 4, 035001.	2.4	3
43	Physics Comes to the Aid of Medicine – Clinically-Relevant Microorganisms through the Eyes of Atomic Force Microscope. <i>Pathogens</i> , 2020, 9, 969.	1.2	2
44	The search for new sporicidal agents for medical use: where are we?. <i>Future Microbiology</i> , 2017, 12, 735-737.	1.0	1
45	Modification of Polymer Substrates with Extreme Ultraviolet - Potential Application in Cancer Cell Identification. <i>Acta Physica Polonica A</i> , 2018, 133, 283-285.	0.2	1
46	X-ray microbeam stand-alone facility for cultured cells irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2017, 394, 50-60.	0.6	0