

Amy C Rowat

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

39
papers

1,546
citations

19
h-index

39
g-index

44
ext. papers

1,920
ext. citations

7
avg. IF

4.34
L-index

#	Paper	IF	Citations
39	The cell as a material. <i>Current Opinion in Cell Biology</i> , 2007 , 19, 101-7	9	353
38	Nuclear envelope composition determines the ability of neutrophil-type cells to passage through micron-scale constrictions. <i>Journal of Biological Chemistry</i> , 2013 , 288, 8610-8618	5.4	216
37	Migration in Confined 3D Environments Is Determined by a Combination of Adhesiveness, Nuclear Volume, Contractility, and Cell Stiffness. <i>Biophysical Journal</i> , 2015 , 109, 900-13	2.9	119
36	Tracking lineages of single cells in lines using a microfluidic device. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 18149-54	11.5	101
35	Towards an integrated understanding of the structure and mechanics of the cell nucleus. <i>BioEssays</i> , 2008 , 30, 226-36	4.1	95
34	Quantitative Deformability Cytometry: Rapid, Calibrated Measurements of Cell Mechanical Properties. <i>Biophysical Journal</i> , 2017 , 113, 1574-1584	2.9	68
33	Stiffness of pancreatic cancer cells is associated with increased invasive potential. <i>Integrative Biology (United Kingdom)</i> , 2016 , 8, 1232-1245	3.7	59
32	Cancer cells become less deformable and more invasive with activation of β adrenergic signaling. <i>Journal of Cell Science</i> , 2016 , 129, 4563-4575	5.3	45
31	The physical origins of transit time measurements for rapid, single cell mechanotyping. <i>Lab on A Chip</i> , 2016 , 16, 3330-9	7.2	44
30	miR-509-3p is clinically significant and strongly attenuates cellular migration and multi-cellular spheroids in ovarian cancer. <i>Oncotarget</i> , 2016 , 7, 25930-48	3.3	39
29	Screening cell mechanotype by parallel microfiltration. <i>Scientific Reports</i> , 2015 , 5, 17595	4.9	36
28	Type V Collagen in Scar Tissue Regulates the Size of Scar after Heart Injury. <i>Cell</i> , 2020 , 182, 545-562.e23	56.2	35
27	Emerin Deregulation Links Nuclear Shape Instability to Metastatic Potential. <i>Cancer Research</i> , 2018 , 78, 6086-6097	10.1	29
26	Cancer Cells Resist Mechanical Destruction in Circulation via RhoA/Actomyosin-Dependent Mechano-Adaptation. <i>Cell Reports</i> , 2020 , 30, 3864-3874.e6	10.6	28
25	Bridging the gap between the science of cultured meat and public perceptions. <i>Trends in Food Science and Technology</i> , 2020 , 104, 144-152	15.3	25
24	Tumour-suppressor microRNAs regulate ovarian cancer cell physical properties and invasive behaviour. <i>Open Biology</i> , 2016 , 6,	7	24
23	Predicting cancer cell invasion by single-cell physical phenotyping. <i>Integrative Biology (United Kingdom)</i> , 2018 , 10, 218-231	3.7	22

22	Unraveling the mechanobiology of immune cells. <i>Current Opinion in Biotechnology</i> , 2020 , 66, 236-245	11.4	20
21	A Study of High-Grade Serous Ovarian Cancer Origins Implicates the SOX18 Transcription Factor in Tumor Development. <i>Cell Reports</i> , 2019 , 29, 3726-3735.e4	10.6	19
20	Neural regulation of cancer: from mechanobiology to inflammation. <i>Clinical and Translational Immunology</i> , 2016 , 5, e78	6.8	16
19	Stress hormone signaling through β adrenergic receptors regulates macrophage mechanotype and function. <i>FASEB Journal</i> , 2019 , 33, 3997-4006	0.9	16
18	The kitchen as a physics classroom. <i>Physics Education</i> , 2014 , 49, 512-522	0.8	15
17	A scalable filtration method for high throughput screening based on cell deformability. <i>Lab on A Chip</i> , 2019 , 19, 343-357	7.2	14
16	A microfluidic technique to probe cell deformability. <i>Journal of Visualized Experiments</i> , 2014 , e51474	1.6	13
15	Activating p53 family member TAp63: A novel therapeutic strategy for targeting p53-altered tumors. <i>Cancer</i> , 2019 , 125, 2409-2422	6.4	11
14	Physical properties of the nucleus studied by micropipette aspiration. <i>Methods in Molecular Biology</i> , 2009 , 464, 3-12	1.4	10
13	DYT1 Dystonia Patient-Derived Fibroblasts Have Increased Deformability and Susceptibility to Damage by Mechanical Forces. <i>Frontiers in Cell and Developmental Biology</i> , 2019 , 7, 103	5.7	9
12	Differential Contributions of Actin and Myosin to the Physical Phenotypes and Invasion of Pancreatic Cancer Cells. <i>Cellular and Molecular Bioengineering</i> , 2020 , 13, 27-44	3.9	9
11	Understanding diffusion theory and Fick's law through food and cooking. <i>American Journal of Physiology - Advances in Physiology Education</i> , 2015 , 39, 192-7	1.9	8
10	Wrinkling of milk skin is mediated by evaporation. <i>Soft Matter</i> , 2017 , 13, 1056-1062	3.6	7
9	Microfluidic Mechanotyping of a Single Cell with Two Consecutive Constrictions of Different Sizes and an Electrical Detection System. <i>Analytical Chemistry</i> , 2019 , 91, 12890-12899	7.8	7
8	Shape transitions in soft spheres regulated by elasticity. <i>Physical Review E</i> , 2013 , 88, 052404	2.4	7
7	The Science of Chocolate: Interactive Activities on Phase Transitions, Emulsification, and Nucleation. <i>Journal of Chemical Education</i> , 2011 , 88, 29-33	2.4	7
6	Perspectives on scaling production of adipose tissue for food applications.. <i>Biomaterials</i> , 2021 , 280, 1212736	3.6	5
5	A protocol for screening cells based on deformability using parallel microfiltration. <i>Protocol Exchange</i> ,		4

4	Promoting an interdisciplinary food literacy framework to cultivate critical citizenship. <i>Journal of American College Health</i> , 2021 , 69, 459-462	2.2	4
3	Single Cell Mechanotype and Associated Molecular Changes in Urothelial Cell Transformation and Progression. <i>Frontiers in Cell and Developmental Biology</i> , 2020 , 8, 601376	5-7	3
2	Adrenergic signaling modulates cancer cell mechanotype through a RhoA-ROCK-myosin II axis		2
1	Cancer Cell Mechanobiology: A New Frontier for Cancer Research. <i>Journal of the National Cancer Center</i> , 2021 ,		1