Amy C Rowat

List of Publications by Year in Descending Order

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	Perspectives on scaling production of adipose tissue for food applications.. *Biomaterials*, **2021**, 280, 121273	15.6	5
38	Cancer Cell Mechanobiology: A New Frontier for Cancer Research. *Journal of the National Cancer Center*, **2021**,		1
37	Promoting an interdisciplinary food literacy framework to cultivate critical citizenship. *Journal of American College Health*, **2021**, 69, 459-462	2.2	4
36	Cancer Cells Resist Mechanical Destruction in Circulation via RhoA/Actomyosin-Dependent Mechano-Adaptation. *Cell Reports*, **2020**, 30, 3864-3874.e6	10.6	28
35	Type V Collagen in Scar Tissue Regulates the Size of Scar after Heart Injury. *Cell*, **2020**, 182, 545-562.e23	56.2	35
34	Differential Contributions of Actin and Myosin to the Physical Phenotypes and Invasion of Pancreatic Cancer Cells. *Cellular and Molecular Bioengineering*, **2020**, 13, 27-44	3.9	9
33	Unraveling the mechanobiology of immune cells. *Current Opinion in Biotechnology*, **2020**, 66, 236-245	11.4	20
32	Single Cell Mechanotype and Associated Molecular Changes in Urothelial Cell Transformation and Progression. *Frontiers in Cell and Developmental Biology*, **2020**, 8, 601376	5.7	3
31	Bridging the gap between the science of cultured meat and public perceptions. *Trends in Food Science and Technology*, **2020**, 104, 144-152	15.3	25
30	Microfluidic Mechanotyping of a Single Cell with Two Consecutive Constrictions of Different Sizes and an Electrical Detection System. *Analytical Chemistry*, **2019**, 91, 12890-12899	7.8	7
29	A scalable filtration method for high throughput screening based on cell deformability. *Lab on A Chip*, **2019**, 19, 343-357	7.2	14
28	Activating p53 family member TAp63: A novel therapeutic strategy for targeting p53-altered tumors. *Cancer*, **2019**, 125, 2409-2422	6.4	11
27	DYT1 Dystonia Patient-Derived Fibroblasts Have Increased Deformability and Susceptibility to Damage by Mechanical Forces. *Frontiers in Cell and Developmental Biology*, **2019**, 7, 103	5.7	9
26	A Study of High-Grade Serous Ovarian Cancer Origins Implicates the SOX18 Transcription Factor in Tumor Development. *Cell Reports*, **2019**, 29, 3726-3735.e4	10.6	19
25	Stress hormone signaling through □adrenergic receptors regulates macrophage mechanotype and function. *FASEB Journal*, **2019**, 33, 3997-4006	0.9	16
24	Predicting cancer cell invasion by single-cell physical phenotyping. *Integrative Biology (United Kingdom)*, **2018**, 10, 218-231	3.7	22
23	Emerin Deregulation Links Nuclear Shape Instability to Metastatic Potential. *Cancer Research*, **2018**, 78, 6086-6097	10.1	29

22	Wrinkling of milk skin is mediated by evaporation. *Soft Matter*, **2017**, 13, 1056-1062	3.6	7
21	Quantitative Deformability Cytometry: Rapid, Calibrated Measurements of Cell Mechanical Properties. *Biophysical Journal*, **2017**, 113, 1574-1584	2.9	68
20	Cancer cells become less deformable and more invasive with activation of β-adrenergic signaling. *Journal of Cell Science*, **2016**, 129, 4563-4575	5.3	45
19	The physical origins of transit time measurements for rapid, single cell mechanotyping. *Lab on A Chip*, **2016**, 16, 3330-9	7.2	44
18	Stiffness of pancreatic cancer cells is associated with increased invasive potential. *Integrative Biology (United Kingdom)*, **2016**, 8, 1232-1245	3.7	59
17	Neural regulation of cancer: from mechanobiology to inflammation. *Clinical and Translational Immunology*, **2016**, 5, e78	6.8	16
16	miR-509-3p is clinically significant and strongly attenuates cellular migration and multi-cellular spheroids in ovarian cancer. *Oncotarget*, **2016**, 7, 25930-48	3.3	39
15	Tumour-suppressor microRNAs regulate ovarian cancer cell physical properties and invasive behaviour. *Open Biology*, **2016**, 6,	7	24
14	Migration in Confined 3D Environments Is Determined by a Combination of Adhesiveness, Nuclear Volume, Contractility, and Cell Stiffness. *Biophysical Journal*, **2015**, 109, 900-13	2.9	119
13	Understanding diffusion theory and Fick's law through food and cooking. *American Journal of Physiology - Advances in Physiology Education*, **2015**, 39, 192-7	1.9	8
12	Screening cell mechanotype by parallel microfiltration. *Scientific Reports*, **2015**, 5, 17595	4.9	36
11	The kitchen as a physics classroom. *Physics Education*, **2014**, 49, 512-522	0.8	15
10	A microfluidic technique to probe cell deformability. *Journal of Visualized Experiments*, **2014**, e51474	1.6	13
9	Shape transitions in soft spheres regulated by elasticity. *Physical Review E*, **2013**, 88, 052404	2.4	7
8	Nuclear envelope composition determines the ability of neutrophil-type cells to passage through micron-scale constrictions. *Journal of Biological Chemistry*, **2013**, 288, 8610-8618	5.4	216
7	The Science of Chocolate: Interactive Activities on Phase Transitions, Emulsification, and Nucleation. *Journal of Chemical Education*, **2011**, 88, 29-33	2.4	7
6	Tracking lineages of single cells in lines using a microfluidic device. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 18149-54	11.5	101
5	Physical properties of the nucleus studied by micropipette aspiration. *Methods in Molecular Biology*, **2009**, 464, 3-12	1.4	10

4	Towards an integrated understanding of the structure and mechanics of the cell nucleus. *BioEssays*, **2008**, 30, 226-36	4.1	95
3	The cell as a material. *Current Opinion in Cell Biology*, **2007**, 19, 101-7	9	353
2	A protocol for screening cells based on deformability using parallel microfiltration. *Protocol Exchange*,		4
1	adrenergic signaling modulates cancer cell mechanotype through a RhoA-ROCK-myosin II axis		2