

# Kate Poole

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

2,341  
citations

236925

25  
h-index

315739

38  
g-index

42  
all docs

42  
docs citations

42  
times ranked

3309  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tuning Piezo ion channels to detect molecular-scale movements relevant for fine touch. <i>Nature Communications</i> , 2014, 5, 3520.	12.8	229
2	A new technical approach to quantify cell-cell adhesion forces by AFM. <i>Ultramicroscopy</i> , 2006, 106, 637-644.	1.9	225
3	Direct measurement of TRPV4 and PIEZO1 activity reveals multiple mechanotransduction pathways in chondrocytes. <i>ELife</i> , 2017, 6, .	6.0	190
4	The Molecular and Cellular Identity of Peripheral Osmoreceptors. <i>Neuron</i> , 2011, 69, 332-344.	8.1	141
5	TACAN Is an Ion Channel Involved in Sensing Mechanical Pain. <i>Cell</i> , 2020, 180, 956-967.e17.	28.9	120
6	Molecular-scale Topographic Cues Induce the Orientation and Directional Movement of Fibroblasts on Two-dimensional Collagen Surfaces. <i>Journal of Molecular Biology</i> , 2005, 349, 380-386.	4.2	118
7	Introducing Membrane Charge and Membrane Potential to T Cell Signaling. <i>Frontiers in Immunology</i> , 2017, 8, 1513.	4.8	106
8	Stomatin-domain proteins. <i>European Journal of Cell Biology</i> , 2012, 91, 240-245.	3.6	100
9	Probing cellular microenvironments and tissue remodeling by atomic force microscopy. <i>Pflugers Archiv European Journal of Physiology</i> , 2008, 456, 29-49.	2.8	80
10	Structural Decoding of the Netrin-1/UNC5 Interaction and its Therapeutical Implications in Cancers. <i>Cancer Cell</i> , 2016, 29, 173-185.	16.8	80
11	A 3D Magnetic Hyaluronic Acid Hydrogel for Magnetomechanical Neuromodulation of Primary Dorsal Root Ganglion Neurons. <i>Advanced Materials</i> , 2018, 30, e1800927.	21.0	78
12	The effect of raft lipid depletion on microvilli formation in MDCK cells, visualized by atomic force microscopy. <i>FEBS Letters</i> , 2004, 565, 53-58.	2.8	75
13	A stomatin dimer modulates the activity of acid-sensing ion channels. <i>EMBO Journal</i> , 2012, 31, 3635-3646.	7.8	72
14	Modeling the Impact of Microgravity at the Cellular Level: Implications for Human Disease. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 96.	3.7	69
15	Laminin-332 coordinates mechanotransduction and growth cone bifurcation in sensory neurons. <i>Nature Neuroscience</i> , 2011, 14, 993-1000.	14.8	66
16	Small-molecule inhibition of STOML3 oligomerization reverses pathological mechanical hypersensitivity. <i>Nature Neuroscience</i> , 2017, 20, 209-218.	14.8	59
17	Mechanically activated ion channels. <i>International Journal of Biochemistry and Cell Biology</i> , 2018, 97, 104-107.	2.8	48
18	PIEZO1-Mediated Currents Are Modulated by Substrate Mechanics. <i>ACS Nano</i> , 2019, 13, 13545-13559.	14.6	44

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19	Creating nanoscopic collagen matrices using atomic force microscopy. <i>Microscopy Research and Technique</i> , 2004, 64, 435-440.	2.2	43
20	TMEM87a/Elkin1, a component of a novel mechanoelectrical transduction pathway, modulates melanoma adhesion and migration. <i>ELife</i> , 2020, 9, .	6.0	43
21	Mechanoelectrical transduction in chondrocytes. <i>Clinical and Experimental Pharmacology and Physiology</i> , 2018, 45, 481-488.	1.9	41
22	Regulation of ASIC channels by a stomatin/STOML3 complex located in a mobile vesicle pool in sensory neurons. <i>Open Biology</i> , 2012, 2, 120096.	3.6	38
23	Rapid Method for Proline Determination in Grape Juice and Wine. <i>Journal of Agricultural and Food Chemistry</i> , 2012, 60, 4259-4264.	5.2	36
24	Sensory mechanotransduction at membrane-matrix interfaces. <i>Pflugers Archiv European Journal of Physiology</i> , 2015, 467, 121-132.	2.8	36
25	Flexible, actin-based ridges colocalise with the $\alpha 5 \beta 1$ integrin on the surface of melanoma cells. <i>British Journal of Cancer</i> , 2005, 92, 1499-1505.	6.4	28
26	Heterotypic tumor models through freeform printing into photostabilized granular microgels. <i>Biomaterials Science</i> , 2021, 9, 4496-4509.	5.4	23
27	Practical significance of relative assimilable nitrogen requirements of yeast: a preliminary study of fermentation performance and liberation of $H_2S$ . <i>Australian Journal of Grape and Wine Research</i> , 2002, 8, 175-179.	2.1	22
28	A 3D Bioprinted Vascularized Glioblastoma-on-a-Chip for Studying the Impact of Simulated Microgravity as a Novel Pre-Clinical Approach in Brain Tumor Therapy. <i>Advanced Therapeutics</i> , 2021, 4, 2100106.	3.2	20
29	The Diverse Physiological Functions of Mechanically Activated Ion Channels in Mammals. <i>Annual Review of Physiology</i> , 2022, 84, 307-329.	13.1	20
30	From stretch to deflection: the importance of context in the activation of mammalian, mechanically activated ion channels. <i>FEBS Journal</i> , 2022, 289, 4447-4469.	4.7	19
31	Modulating the Mechanical Activation of TRPV4 at the Cell-Substrate Interface. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 608951.	4.1	19
32	Proline transport and stress tolerance of ammonia-insensitive mutants of the PUT4-encoded proline-specific permease in yeast. <i>Journal of General and Applied Microbiology</i> , 2009, 55, 427-439.	0.7	16
33	Analysis of Mechanically Activated Ion Channels at the Cell-Substrate Interface: Combining Pillar Arrays and Whole-Cell Patch-Clamp. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 47.	4.1	15
34	Microgravity – Radiation: A Space Mechanobiology Approach Toward Cardiovascular Function and Disease. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 750775.	3.7	7
35	Mechanomics Approaches to Understand Cell Behavior in Context of Tissue Neogenesis, During Prenatal Development and Postnatal Healing. <i>Frontiers in Cell and Developmental Biology</i> , 2019, 7, 354.	3.7	6
36	Testing 3D printed biological platform for advancing simulated microgravity and space mechanobiology research. <i>Npj Microgravity</i> , 2022, 8, .	3.7	5

#	ARTICLE	IF	CITATIONS
37	Collagen Organization Within the Cartilage of Trpv4 $\Delta^{\Delta}$ Mice Studied with Two-Photon Microscopy and Polarized Second Harmonic Generation. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2020, 97, 504-514.	1.5	2
38	Mapping the Mechanome—A Protocol for Simultaneous Live Imaging and Quantitative Analysis of Cell Mechanoadaptation and Ingression. Bio-protocol, 2019, 9, e3439.	0.4	2
39	Confocal and Atomic Force Microscopy. Imaging & Microscopy, 2008, 10, 56-57.	0.1	0
40	Cellular Mechanotransduction via Ion Channels at the Cell-Substrate Interface. Biophysical Journal, 2018, 114, 19a.	0.5	0