Ian Parker

List of Publications by Year
in descending order

53 papers	3,143 citations	172457 29 h-index	175258 52 g-index
58 all docs	58 docs citations	58 times ranked	2637 citing authors

#	Article	IF	Citations
1	TREM2 regulates purinergic receptor-mediated calcium signaling and motility in human iPSC-derived microglia. ELife, 2022, 11, .	6.0	31
2	Piezo1 channels restrain regulatory T cells but are dispensable for effector CD4 ⁺ T cell responses. Science Advances, 2021, 7, .	10.3	45
3	Termination of Ca2+ puffs during IP3-evoked global Ca2+ signals. Cell Calcium, 2021, 100, 102494.	2.4	4
4	Noise analysis of cytosolic calcium image data. Cell Calcium, 2020, 86, 102152.	2.4	6
5	Regulatory T cells suppress Th17 cell Ca ²⁺ signaling in the spinal cord during murine autoimmune neuroinflammation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20088-20099.	7.1	34
6	ER-luminal [Ca2+] regulation of InsP3 receptor gating mediated by an ER-luminal peripheral Ca2+-binding protein. ELife, 2020, 9, .	6.0	19
7	IP3 mediated global Ca2+ signals arise through two temporally and spatially distinct modes of Ca2+ release. ELife, 2020, 9, .	6.0	34
8	Myosin-II mediated traction forces evoke localized Piezo1-dependent Ca2+ flickers. Communications Biology, 2019, 2, 298.	4.4	141
9	Spatial-temporal patterning of Ca2+ signals by the subcellular distribution of IP3 and IP3 receptors. Seminars in Cell and Developmental Biology, 2019, 94, 3-10.	5.0	23
10	Applications of FLIKA, a Python-based image processing and analysis platform, for studying local events of cellular calcium signaling. Biochimica Et Biophysica Acta - Molecular Cell Research, 2019, 1866, 1171-1179.	4.1	15
11	Dynamic Ca2+ imaging with a simplified lattice light-sheet microscope: A sideways view of subcellular Ca2+ puffs. Cell Calcium, 2018, 71, 34-44.	2.4	23
12	CellSpecks: A Software for Automated Detection and Analysis of Calcium Channels in Live Cells. Biophysical Journal, 2018, 115, 2141-2151.	0.5	4
13	All three IP ₃ receptor isoforms generate Ca ²⁺ puffs that display similar characteristics. Science Signaling, 2018, 11, .	3.6	53
14	TraceSpecks: A Software for Automated Idealization of Noisy Patch-Clamp and Imaging Data. Biophysical Journal, 2018, 115, 9-21.	0.5	12
15	Subcellular Ca²⁺ Puffs Mediated By Different Inositol Trisphosphate Receptor Isoforms. FASEB Journal, 2018, 32, 750.33.	0.5	1
16	Comparison of Ca2+ puffs evoked by extracellular agonists and photoreleased IP3. Cell Calcium, 2017, 63, 43-47.	2.4	23
17	High-throughput screen detects calcium signaling dysfunction in typical sporadic autism spectrum disorder. Scientific Reports, 2017, 7, 40740.	3.3	33
18	T-cell calcium dynamics visualized in a ratiometric tdTomato-GCaMP6f transgenic reporter mouse. ELife, 2017, 6, .	6.0	51

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19	Intermittent Ca2+ signals mediated by Orai1 regulate basal T cell motility. ELife, 2017, 6, .	6.0	31
20	Communication of Ca2+ signals via tunneling membrane nanotubes is mediated by transmission of inositol trisphosphate through gap junctions. Cell Calcium, 2016, 60, 266-272.	2.4	48
21	Imaging Local Ca²⁺ Signals in Cultured Mammalian Cells. Journal of Visualized Experiments, 2015, , .	0.3	14
22	Spinning-Spot Shadowless TIRF Microscopy. PLoS ONE, 2015, 10, e0136055.	2.5	36
23	Picomolar sensitivity to inositol trisphosphate in Xenopus oocytes. Cell Calcium, 2015, 58, 511-517.	2.4	6
24	Imaging regulatory T cell dynamics and CTLA4-mediated suppression of T cell priming. Nature Communications, 2015, 6, 6219.	12.8	107
25	Molecular Biophysics of Orai Store-Operated Ca2+ Channels. Biophysical Journal, 2015, 108, 237-246.	0.5	64
26	Modulation of Elementary Calcium Release Mediates a Transition from Puffs to Waves in an IP3R Cluster Model. PLoS Computational Biology, 2015, 11, e1003965.	3.2	25
27	A comparison of fluorescent Ca2+ indicators for imaging local Ca2+ signals in cultured cells. Cell Calcium, 2015, 58, 638-648.	2.4	159
28	Single-Molecule Tracking of Inositol Trisphosphate Receptors Reveals Different Motilities and Distributions. Biophysical Journal, 2014, 107, 834-845.	0.5	24
29	Termination of calcium puffs and coupled closings of inositol trisphosphate receptor channels. Cell Calcium, 2014, 56, 157-168.	2.4	28
30	An algorithm for automated detection, localization and measurement of local calcium signals from camera-based imaging. Cell Calcium, 2014, 56, 147-156.	2.4	70
31	Factors Determining the Recruitment of Inositol Trisphosphate Receptor Channels During Calcium Puffs. Biophysical Journal, 2013, 105, 2474-2484.	0.5	20
32	Cytotoxicity of Intracellular AÎ²₄₂Amyloid Oligomers Involves Ca²⁺Release from the Endoplasmic Reticulum by Stimulated Production of Inositol Trisphosphate. Journal of Neuroscience, 2013, 33, 3824-3833.	3.6	115
33	Orai1 Function Is Essential for T Cell Homing to Lymph Nodes. Journal of Immunology, 2013, 190, 3197-3206.	0.8	24
34	The Probability of Triggering Calcium Puffs Is Linearly Related to the Number of Inositol Trisphosphate Receptors in a Cluster. Biophysical Journal, 2012, 102, 1826-1836.	0.5	44
35	Recording single-channel activity of inositol trisphosphate receptors in intact cells with a microscope, not a patch clamp. Journal of General Physiology, 2010, 136, 119-127.	1.9	47
36	Superresolution Localization of Single Functional IP3R Channels Utilizing Ca2+ÂFlux as a Readout. Biophysical Journal, 2010, 99, 437-446.	0.5	41

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37	Tunneling membrane nanotubes generate local calcium signals and may actively propagate calcium signals between cells. FASEB Journal, 2010, 24, lb582.	0.5	0
38	Imaging the quantal substructure of single IP ₃ R channel activity during Ca ²⁺ puffs in intact mammalian cells. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6404-6409.	7.1	172
39	Localization of puff sites adjacent to the plasma membrane: Functional and spatial characterization of Ca2+ signaling in SH-SY5Y cells utilizing membrane-permeant caged IP3. Cell Calcium, 2009, 45, 65-76.	2.4	104
40	Ca ²⁺ Puffs Originate from Preestablished Stable Clusters of Inositol Trisphosphate Receptors. Science Signaling, 2009, 2, ra77.	3.6	75
41	Multi-dimensional resolution of elementary Ca2+ signals by simultaneous multi-focal imaging. Cell Calcium, 2008, 43, 367-374.	2.4	27
42	Mode Switching Is the Major Mechanism of Ligand Regulation of InsP3 Receptor Calcium Release Channels. Journal of General Physiology, 2007, 130, 631-645.	1.9	59
43	A Kinetic Model of Single and Clustered IP3 Receptors in the Absence of Ca2+ Feedback. Biophysical Journal, 2007, 93, 1151-1162.	0.5	86
44	Optical single-channel recording by imaging Ca2+ flux through individual ion channels: theoretical considerations and limits to resolution. Cell Calcium, 2005, 37, 283-299.	2.4	88
45	â€œOptical Patch-clampingâ€• Journal of General Physiology, 2005, 126, 179-192.	1.9	104
46	Spatiotemporal patterning of IP3-mediated Ca2+signals inXenopusoocytes by Ca2+-binding proteins. Journal of Physiology, 2004, 556, 447-461.	2.9	81
47	Imaging the Activity and Localization of Single Voltage-Gated Ca2+ Channels by Total Internal Reflection Fluorescence Microscopy. Biophysical Journal, 2004, 86, 3250-3259.	0.5	88
48	Buffer Kinetics Shape the Spatiotemporal Patterns of IP 3 â€Evoked Ca 2+ Signals. Journal of Physiology, 2003, 553, 775-788.	2.9	131
49	Radial Localization of Inositol 1,4,5-Trisphosphateâ€“sensitive Ca2+ Release Sites in Xenopus Oocytes Resolved by Axial Confocal Linescan Imaging. Journal of General Physiology, 1999, 113, 199-213.	1.9	42
50	A continuum of InsP3-mediated elementary Ca2+signalling events inXenopusoocytes. Journal of Physiology, 1998, 509, 67-80.	2.9	227
51	Activation and co-ordination of InsP3-mediated elementary Ca2+events during global Ca2+signals inXenopusoocytes. Journal of Physiology, 1998, 509, 81-91.	2.9	154
52	Hemispheric asymmetry of macroscopic and elementary calcium signals mediated by InsP3inXenopusoocytes. Journal of Physiology, 1998, 511, 395-405.	2.9	28
53	Elementary events of InsP3-induced Ca2+ liberation in Xenopus oocytes: hot spots, puffs and blips. Cell Calcium, 1996, 20, 105-121.	2.4	221