Ian F Smith

List of Publications by Year
in descending order

21 papers	2,512 citations	430874 18 h-index	713466 21 g-index
23 all docs	23 docs citations	23 times ranked	5729 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	Gene expression and functional deficits underlie TREM2-knockout microglia responses in human models of Alzheimerâ€™s disease. Nature Communications, 2020, 11, 5370.	12.8	160
3	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
4	Comparison of Ca2+ puffs evoked by extracellular agonists and photoreleased IP3. Cell Calcium, 2017, 63, 43-47.	2.4	23
5	Lattice light sheet imaging of membrane nanotubes between human breast cancer cells in culture and in brain metastases. Scientific Reports, 2017, 7, 11029.	3.3	16
6	Tunneling Nanotubes and Gap Junctionsâ€"Their Role in Long-Range Intercellular Communication during Development, Health, and Disease Conditions. Frontiers in Molecular Neuroscience, 2017, 10, 333.	2.9	181
7	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
8	Imaging Local Ca²⁺ Signals in Cultured Mammalian Cells. Journal of Visualized Experiments, 2015, , .	0.3	14
9	A comparison of fluorescent Ca2+ indicators for imaging local Ca2+ signals in cultured cells. Cell Calcium, 2015, 58, 638-648.	2.4	159
10	Single-Molecule Tracking of Inositol Trisphosphate Receptors Reveals Different Motilities and Distributions. Biophysical Journal, 2014, 107, 834-845.	0.5	24
11	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
12	Active Generation and Propagation of Ca2+ Signals within Tunneling Membrane Nanotubes. Biophysical Journal, 2011, 100, L37-L39.	0.5	73
13	Timescales of IP3-Evoked Ca2+ Spikes Emerge from Ca2+ Puffs Only at the Cellular Level. Biophysical Journal, 2011, 101, 2638-2644.	0.5	47
14	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
15	A Novel Postsynaptic Mechanism for Heterosynaptic Sharing of Short-Term Plasticity. Journal of Neuroscience, 2010, 30, 8797-8806.	3.6	10
16	Superresolution Localization of Single Functional IP3R Channels Utilizing Ca2+ÂFlux as a Readout. Biophysical Journal, 2010, 99, 437-446.	0.5	41
17	Essential Regulation of Cell Bioenergetics by Constitutive InsP3 Receptor Ca2+ Transfer to Mitochondria. Cell, 2010, 142, 270-283.	28.9	888
18	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

#	Article	IF	Citations
19	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
20	Ca ²⁺ Puffs Originate from Preestablished Stable Clusters of Inositol Trisphosphate Receptors. Science Signaling, 2009, 2, ra77.	3.6	75
21	Enhanced Ryanodine Receptor Recruitment Contributes to Ca2+ Disruptions in Young, Adult, and Aged Alzheimer's Disease Mice. Journal of Neuroscience, 2006, 26, 5180-5189.	3.6	305