Mark I Wallace

List of Publications by Year
in descending order

62	3,331	136740	155451
papers	citations	32 h-index	55 g-index

71	71	71	3862
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fast slow folding of an outer membrane porin. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2121487119.	3.3	2
2	Spatiotemporal stop-and-go dynamics of the mitochondrial TOM core complex correlates with channel activity. Communications Biology, 2022, 5, 471.	2.0	4
3	Constructing ion channels from water-soluble Î±-helical barrels. Nature Chemistry, 2021, 13, 643-650.	6.6	59
4	Single-molecule imaging of pore-forming toxin dynamics in droplet interface bilayers. Methods in Enzymology, 2021, 649, 431-459.	0.4	3
5	Combined Single-Molecule FRET and Single-Channel Recording to Link Ion Channel Conformation and Function. Biophysical Journal, 2020, 118, 466a-467a.	0.2	0
6	Modifying Membrane Morphology and Interactions with DNA Origami Clathrin-Mimic Networks. ACS Nano, 2019, 13, 9973-9979.	7.3	42
7	Artificial Signal Transduction across Membranes. ChemBioChem, 2019, 20, 2569-2580.	1.3	16
8	Controlling Anomalous Diffusion in Lipid Membranes. Biophysical Journal, 2019, 116, 1085-1094.	0.2	20
9	Dynamic tuneable G protein-coupled receptor monomer-dimer populations. Nature Communications, 2018, 9, 1710.	5.8	92
10	iSCAT Microscopy of Phase Separated Lipid Membranes. Biophysical Journal, 2018, 114, 449a.	0.2	0
11	Urea-mediated anomalous diffusion in supported lipid bilayers. Interface Focus, 2018, 8, 20180028.	1.5	2
12	On demand modulation of lipid composition in an individual bilayer. Soft Matter, 2017, 13, 1788-1793.	1.2	9
13	Measuring the potential energy barrier to lipid bilayer electroporation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160227.	1.8	23
14	Lipid Diffusion in Membrane Junctions Measured by Single-Molecule Tracking. Biophysical Journal, 2017, 112, 75a.	0.2	0
15	Assembling the Tat protein translocase. ELife, 2016, 5, .	2.8	62
16	Imaging the dynamics of individual electropores. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5281-5286.	3.3	92
17	Membrane Crowding and Anomalous Diffusion in Artificial Lipid Bilayers. Biophysical Journal, 2016, 110, 568a.	0.2	1
18	Single-Molecule Fluorescence Imaging to Determine the Stoichiometry of the Twin-Arginine Translocase. Biophysical Journal, 2016, 110, 570a.	0.2	0

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19	Chemical amplification of magnetic field effects relevant to avian magnetoreception. Nature Chemistry, 2016, 8, 384-391.	6.6	79
20	Length-Dependent Formation of Transmembrane Pores by 3₁₀-Helical Î±-Aminoisobutyric Acid Foldamers. Journal of the American Chemical Society, 2016, 138, 688-695.	6.6	71
21	Imaging potassium-flux through individual electropores in droplet interface bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 613-617.	1.4	21
22	The TatC component of the twinâ€arginine protein translocase functions as an obligate oligomer. Molecular Microbiology, 2015, 98, 111-129.	1.2	27
23	Combining Single-Molecule Imaging and Single-Channel Electrophysiology. Journal of Molecular Biology, 2015, 427, 146-157.	2.0	24
24	Real-Time Imaging of Nanoscopic Lipid Domains using iSCAT. Biophysical Journal, 2015, 108, 17a-18a.	0.2	0
25	Imaging the Assembly of Perfringolysin O. Biophysical Journal, 2015, 108, 81a.	0.2	0
26	Dynamic label-free imaging of lipid nanodomains. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12299-12303.	3.3	100
27	High-throughput optical sensing of nucleic acids in a nanopore array. Nature Nanotechnology, 2015, 10, 986-991.	15.6	132
28	Membrane pore formation at proteinâ€“lipid interfaces. Trends in Biochemical Sciences, 2014, 39, 510-516.	3.7	140
29	High-Speed Single-Particle Tracking of GM1 in Model Membranes Reveals Anomalous Diffusion due to Interleaflet Coupling and Molecular Pinning. Nano Letters, 2014, 14, 5390-5397.	4.5	104
30	Photobleaching Reveals Heterogeneous Stoichiometry for Equinatoxin II Oligomers. ChemBioChem, 2014, 15, 2139-2145.	1.3	35
31	Mass Spectrometry Defines the C-Terminal Dimerization Domain and Enables Modeling of the Structure of Full-Length OmpA. Structure, 2014, 22, 781-790.	1.6	58
32	Fluorescence Imaging of MACPF/CDC Proteins: New Techniques and Their Application. Sub-Cellular Biochemistry, 2014, 80, 293-319.	1.0	1
33	A radical sense of direction: signalling and mechanism in cryptochrome magnetoreception. Trends in Biochemical Sciences, 2013, 38, 435-446.	3.7	108
34	Constructing droplet interface bilayers from the contact of aqueous droplets in oil. Nature Protocols, 2013, 8, 1048-1057.	5.5	115
35	Live cell imaging shows reversible assembly of the TatA component of the twin-arginine protein transport system. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3650-9.	3.3	69
36	One-step synthesis of fluorescein modified nano-carbon for Pd(ii) detection via fluorescence quenching. Analyst, The, 2012, 137, 2054.	1.7	61

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37	Rapid Assembly of a Multimeric Membrane Protein Pore Observed by Single Molecule Fluorescence. Biophysical Journal, 2012, 102, 262a.	0.2	0
38	Quantification of Membrane Protein Inhibition by Optical Ion Flux in a Droplet Interface Bilayer Array. Angewandte Chemie - International Edition, 2012, 51, 3134-3138.	7.2	44
39	Dynamic and Reversible Control of 2D Membrane Protein Concentration in a Droplet Interface Bilayer. Nano Letters, 2011, 11, 3324-3328.	4.5	30
40	In Vitro Reconstitution of Eukaryotic Ion Channels Using Droplet Interface Bilayers. Journal of the American Chemical Society, 2011, 133, 9370-9375.	6.6	58
41	Rapid Assembly of a Multimeric Membrane Protein Pore. Biophysical Journal, 2011, 101, 2679-2683.	0.2	75
42	Determining Membrane Capacitance by Dynamic Control of Droplet Interface Bilayer Area. Langmuir, 2011, 27, 14335-14342.	1.6	105
43	Imaging Multiple Conductance States in an Alamethicin Pore. Journal of the American Chemical Society, 2011, 133, 14507-14509.	6.6	31
44	Visualizing helicases unwinding DNA at the single molecule level. Nucleic Acids Research, 2010, 38, 4448-4457.	6.5	58
45	Single Molecule Fluorescence in Membrane Biology. , 2009, , 253-288.		0
46	Simultaneous Measurement of Ionic Current and Fluorescence from Single Protein Pores. Journal of the American Chemical Society, 2009, 131, 1652-1653.	6.6	118
47	Lucky Imaging: Improved Localization Accuracy for Single Molecule Imaging. Biophysical Journal, 2009, 96, 2912-2917.	0.2	12
48	Protein modification for single molecule fluorescence microscopy. Organic and Biomolecular Chemistry, 2008, 6, 3031.	1.5	16
49	Droplet interface bilayers. Molecular BioSystems, 2008, 4, 1191.	2.9	411
50	Enhanced Stability and Fluidity in Droplet on Hydrogel Bilayers for Measuring Membrane Protein Diffusion. Nano Letters, 2007, 7, 3875-3878.	4.5	74
51	Direct Detection of Membrane Channels from Gels Using Water-in-Oil Droplet Bilayers. Journal of the American Chemical Society, 2007, 129, 16042-16047.	6.6	89
52	Membrane Protein Stoichiometry Determined from the Step-Wise Photobleaching of Dye-Labelled Subunits. ChemBioChem, 2007, 8, 994-999.	1.3	111
53	Prepore for a breakthrough. Nature Structural and Molecular Biology, 2005, 12, 385-386.	3.6	27
54	A model of stereocilia adaptation based on single molecule mechanical studies of myosin I. Philosophical Transactions of the Royal Society B: Biological Sciences, 2004, 359, 1895-1905.	1.8	32

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55	Photon Counting Histogram for One-Photon Excitation. ChemPhysChem, 2003, 4, 1121-1123.	1.0	51
56	Photon Counting Histogram for One-Photon Excitation. ChemPhysChem, 2003, 4, 1280-1280.	1.0	2
57	Coupled Electrorotation of Polymer Microspheres for Microfluidic Sensing and Mixing. Analytical Chemistry, 2002, 74, 5099-5104.	3.2	17
58	Diamond deposition in a DC-arc Jet CVD system: investigations of the effects of nitrogen addition. Diamond and Related Materials, 2001, 10, 370-375.	1.8	24
59	Two-state model of conformational fluctuation in a DNA hairpin-loop. Chemical Physics Letters, 2001, 334, 145-150.	1.2	40
60	Non-Arrhenius kinetics for the loop closure of a DNA hairpin. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 5584-5589.	3.3	179
61	FRET Fluctuation Spectroscopy:Â Exploring the Conformational Dynamics of a DNA Hairpin Loop. Journal of Physical Chemistry B, 2000, 104, 11551-11555.	1.2	93
62	Ratiometric Analysis of Single-Molecule Fluorescence Resonance Energy Transfer Using Logical Combinations of Threshold Criteria:Â A Study of 12-mer DNA. Journal of Physical Chemistry B, 2000, 104, 5171-5178.	1.2	56