Gavin M King

List of Publications by Year
in descending order

43 papers	985 citations	430442 18 h-index	433756 31 g-index
45 all docs	45 docs citations	45 times ranked	1163 citing authors

#	Article	IF	Citations
1	Direct visualization of conformations and conformational dynamics of the proton-driven translocation factor SecDF in supported lipid bilayers. Biophysical Journal, 2022, 121, 468a.	0.2	0
2	Controllable membrane remodeling by a modified fragment of the apoptotic protein Bax. Faraday Discussions, 2021, 232, 114-130.	1.6	2
3	Towards a Quantitative Understanding of Proteinâ€“Lipid Bilayer Interactions at the Single Molecule Level: Opportunities and Challenges. Journal of Membrane Biology, 2021, 254, 17-28.	1.0	4
4	Atomic Force Microscopy Reveals Membrane Protein Activity at the Single Molecule Level. Methods in Molecular Biology, 2021, 2302, 81-99.	0.4	2
5	Atomic force microscopy for quantitative understanding of peptide-induced lipid bilayer remodeling. Methods, 2020, 197, 20-20.	1.9	7
6	Characterizing the Locus of a Peripheral Membrane Proteinâ€“Lipid Bilayer Interaction Underlying Protein Export Activity inE. coli. Langmuir, 2020, 36, 2143-2152.	1.6	5
7	The effects of anthracycline drugs on the conformational distribution of mouse P-glycoprotein explains their transport rate differences. Biochemical Pharmacology, 2020, 174, 113813.	2.0	13
8	Protein Translocation Activity in Surface-Supported Lipid Bilayers. Langmuir, 2019, 35, 12246-12256.	1.6	10
9	Multiple stochastic pathways in forced peptide-lipid membrane detachment. Scientific Reports, 2019, 9, 451.	1.6	9
10	Direct visualization of the E. coli Sec translocase engaging precursor proteins in lipid bilayers. Science Advances, 2019, 5, eaav9404.	4.7	19
11	Mechanism of Action of Peptides That Cause the pH-Triggered Macromolecular Poration of Lipid Bilayers. Journal of the American Chemical Society, 2019, 141, 6706-6718.	6.6	30
12	Potent Macromolecule-Sized Poration of Lipid Bilayers by the Macrolittins, A Synthetically Evolved Family of Pore-Forming Peptides. Journal of the American Chemical Society, 2018, 140, 6441-6447.	6.6	41
13	The Hessian Blob Algorithm: Precise Particle Detection in Atomic Force Microscopy Imagery. Scientific Reports, 2018, 8, 978.	1.6	45
14	Single-molecule observation of nucleotide induced conformational changes in basal SecA-ATP hydrolysis. Science Advances, 2018, 4, eaat8797.	4.7	23
15	Conformations and Dynamic Transitions of a Melittin Derivative That Forms Macromolecule-Sized Pores in Lipid Bilayers. Langmuir, 2018, 34, 8393-8399.	1.6	15
16	High-Resolution AFM-Based Force Spectroscopy. Methods in Molecular Biology, 2018, 1814, 49-62.	0.4	6
17	The conformation and dynamics of P-glycoprotein in a lipid bilayer investigated by atomic force microscopy. Biochemical Pharmacology, 2018, 156, 302-311.	2.0	22
18	Single-Molecule Peptideâ€“Lipid Affinity Assay Reveals Interplay between Solution Structure and Partitioning. Langmuir, 2017, 33, 4057-4065.	1.6	14

#	Article	IF	Citations
19	Glass is a Viable Substrate for Precision Force Microscopy of Membrane Proteins. Scientific Reports, 2015, 5, 12550.	1.6	48
20	Probing Protein-Lipid Interactions at the Single Molecule Level. Biophysical Journal, 2015, 108, 559a.	0.2	0
21	Transient Collagen Triple Helix Binding to a Key Metalloproteinase in Invasion and Development. Structure, 2015, 23, 257-269.	1.6	30
22	Heparinoids Activate a Protease, Secreted by Mucosa and Tumors, via Tethering Supplemented by Allostery. ACS Chemical Biology, 2014, 9, 957-966.	1.6	12
23	Glass is a Viable Substrate for Atomic Force Microscopy of Membrane Proteins. Biophysical Journal, 2014, 106, 458a.	0.2	0
24	Three-Dimensional Atomic Force Microscopy: Interaction Force Vector by Direct Observation of Tip Trajectory. Nano Letters, 2013, 13, 5106-5111.	4.5	11
25	Stoichiometry of SecYEG in the active translocase of Escherichia coli varies with precursor species. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 11815-11820.	3.3	38
26	Dynamic Structure of the Translocon SecYEG in Membrane. Journal of Biological Chemistry, 2013, 288, 16848-16854.	1.6	33
27	A Precision Force Microscope for Biophysics. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 31-36.	0.3	0
28	Routine and Timely Sub-picoNewton Force Stability and Precision for Biological Applications of Atomic Force Microscopy. Nano Letters, 2012, 12, 3557-3561.	4.5	68
29	Optical trapping meets atomic force microscopy: a precision force microscope for biophysics. Proceedings of SPIE, 2010, , .	0.8	0
30	Label-free optical imaging of membrane patches for atomic force microscopy. Optics Express, 2010, 18, 23924.	1.7	7
31	Ultrastable Atomic Force Microscopy using Laser-Based, Active Noise Cancelation. , 2010, , .		0
32	Ultrastable Atomic Force Microscopy: Atomic-Scale Stability and Registration in Ambient Conditions. Nano Letters, 2009, 9, 1451-1456.	4.5	82
33	Independent measurements of force and position in atomic force microscopy. Proceedings of SPIE, 2009, , .	0.8	1
34	Improved performance of an ultrastable measurement platform using a field-programmable gate array for real-time deterministic control. Proceedings of SPIE, 2008, , .	0.8	4
35	Back-scattered detection provides atomic-scale localization precision, stability, and registration in 3D. Optics Express, 2007, 15, 13434.	1.7	48
36	Stabilization of an optical microscope to 01 nm in three dimensions. Applied Optics, 2007, 46, 421.	2.1	126

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37	Probing Nanotube-Nanopore Interactions. Physical Review Letters, 2005, 95, 216103.	2.9	42
38	Nanometer Patterning with Ice. Nano Letters, 2005, 5, 1157-1160.	4.5	46
39	3D Stabilization of an Optical Microscope to 0.1 nm at 1 Hz using an Array of Nano-Posts. , 2005, , .		0
40	Patterned growth of single-walled carbon nanotube arrays from a vapor-deposited Fe catalyst. Applied Physics Letters, 2003, 83, 4238-4240.	1.5	79
41	Spectroscopic study of food and food toxins. , 2003, , .		4
42	Attractive-mode force microscope for investigations of biomolecules under ambient conditions. Review of Scientific Instruments, 2001, 72, 4261-4265.	0.6	8
43	Quartz tuning forks as sensors for attractive-mode force microscopy under ambient conditions. Applied Physics Letters, 2001, 79, 1712-1714.	1.5	30