

Simon BernÅ“che

List of Publications by Year in descending order

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35
papers

4,408
citations

218677

26
h-index

361022

35
g-index

39
all docs

39
docs citations

39
times ranked

3386
citing authors

#	ARTICLE	IF	CITATIONS
1	Energetics of ion conduction through the K ⁺ channel. <i>Nature</i> , 2001, 414, 73-77.	27.8	745
2	Control of ion selectivity in potassium channels by electrostatic and dynamic properties of carbonyl ligands. <i>Nature</i> , 2004, 431, 830-834.	27.8	528
3	Theoretical and computational models of biological ion channels. <i>Quarterly Reviews of Biophysics</i> , 2004, 37, 15-103.	5.7	362
4	Molecular Dynamics of the KcsA K ⁺ Channel in a Bilayer Membrane. <i>Biophysical Journal</i> , 2000, 78, 2900-2917.	0.5	314
5	The mechanism of ammonia transport based on the crystal structure of AmtB of <i>Escherichia coli</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 17090-17095.	7.1	304
6	Generalized solvent boundary potential for computer simulations. <i>Journal of Chemical Physics</i> , 2001, 114, 2924-2937.	3.0	223
7	A microscopic view of ion conduction through the K ⁺ channel. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 8644-8648.	7.1	222
8	Molecular Dynamics Simulation of Melittin in a Dimyristoylphosphatidylcholine Bilayer Membrane. <i>Biophysical Journal</i> , 1998, 75, 1603-1618.	0.5	209
9	A Gate in the Selectivity Filter of Potassium Channels. <i>Structure</i> , 2005, 13, 591-600.	3.3	190
10	Ion Channels, Permeation, and Electrostatics: Insight into the Function of KcsA. <i>Biochemistry</i> , 2000, 39, 13295-13306.	2.5	167
11	Ion selectivity in channels and transporters. <i>Journal of General Physiology</i> , 2011, 137, 415-426.	1.9	142
12	The Ionization State and the Conformation of Glu-71 in the KcsA K ⁺ Channel. <i>Biophysical Journal</i> , 2002, 82, 772-780.	0.5	85
13	Self-Learning Adaptive Umbrella Sampling Method for the Determination of Free Energy Landscapes in Multiple Dimensions. <i>Journal of Chemical Theory and Computation</i> , 2013, 9, 1885-1895.	5.3	80
14	On the Potential Functions used in Molecular Dynamics Simulations of Ion Channels. <i>Biophysical Journal</i> , 2002, 82, 1681-1684.	0.5	76
15	Conformational dynamics and role of the acidic pocket in ASIC pH-dependent gating. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 3768-3773.	7.1	73
16	Extracellular Blockade of K ⁺ Channels by Tea. <i>Journal of General Physiology</i> , 2001, 118, 207-218.	1.9	71
17	Synergistic substrate binding determines the stoichiometry of transport of a prokaryotic H ⁺ /Cl ⁻ exchanger. <i>Nature Structural and Molecular Biology</i> , 2012, 19, 525-531.	8.2	71
18	A Combined Computational and Functional Approach Identifies New Residues Involved in pH-dependent Gating of ASIC1a. <i>Journal of Biological Chemistry</i> , 2010, 285, 16315-16329.	3.4	66

#	ARTICLE	IF	CITATIONS
19	Ammonium Transporters Achieve Charge Transfer by Fragmenting Their Substrate. <i>Journal of the American Chemical Society</i> , 2012, 134, 10419-10427.	13.7	60
20	Anchoring of a monotopic membrane protein: the binding of prostaglandin H2 synthase-1 to the surface of a phospholipid bilayer. <i>European Biophysics Journal</i> , 2000, 29, 439-454.	2.2	49
21	Collaborative EM image processing with the IPLT image processing library and toolbox. <i>Journal of Structural Biology</i> , 2007, 157, 28-37.	2.8	49
22	Molecular determinants of desensitization in an ENaC/degenerin channel. <i>FASEB Journal</i> , 2013, 27, 5034-5045.	0.5	44
23	Mechanism of activation at the selectivity filter of the KcsA K ⁺ channel. <i>ELife</i> , 2017, 6, .	6.0	43
24	NanC Crystal Structure, a Model for Outer-Membrane Channels of the Acidic Sugar-Specific KdgM Porin Family. <i>Journal of Molecular Biology</i> , 2009, 394, 718-731.	4.2	40
25	A Stable Water Chain in the Hydrophobic Pore of the AmtB Ammonium Transporter. <i>Biophysical Journal</i> , 2007, 92, L82-L84.	0.5	37
26	Transport mechanisms in the ammonium transporter family. <i>Transfusion Clinique Et Biologique</i> , 2010, 17, 168-175.	0.4	30
27	A Limited 4 Å... Radial Displacement of the S4-S5 Linker Is Sufficient for Internal Gate Closing in Kv Channels. <i>Journal of Biological Chemistry</i> , 2012, 287, 40091-40098.	3.4	28
28	Initial steps of inactivation at the K ⁺ channel selectivity filter. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E1713-22.	7.1	22
29	Unidirectional Transport Mechanism in an ATP Dependent Exporter. <i>ACS Central Science</i> , 2017, 3, 250-258.	11.3	19
30	Absence of Ion-Binding Affinity in the Putatively Inactivated Low-[K ⁺] Structure of the KcsA Potassium Channel. <i>Structure</i> , 2011, 19, 70-79.	3.3	17
31	Divergent Cl ⁻ and H ⁺ pathways underlie transport coupling and gating in CLC exchangers and channels. <i>ELife</i> , 2020, 9, .	6.0	17
32	An antiparallel actin dimer is associated with the endocytic pathway in mammalian cells. <i>Journal of Structural Biology</i> , 2012, 177, 70-80.	2.8	12
33	The Voltage-Dependent Deactivation of the KvAP Channel Involves the Breakage of Its S4 Helix. <i>Frontiers in Molecular Biosciences</i> , 2020, 7, 162.	3.5	5
34	Gating energetics of a voltage-dependent K ⁺ channel pore domain. <i>Journal of Computational Chemistry</i> , 2017, 38, 1472-1478.	3.3	4
35	A bas les barrières d'énergie dans les canaux potassiques!. <i>Medecine/Sciences</i> , 2002, 18, 605-609.	0.2	1