Mathias Winterhalter

List of Publications by Year
in descending order

233 papers	11,696 citations	28736 57 h-index	42259 96 g-index
243 all docs	243 docs citations	243 times ranked	12514 citing authors

#	Article	IF	Citations
1	Silicon Nitride-Based Micro-Apertures Coated with Parylene for the Investigation of Pore Proteins Fused in Free-Standing Lipid Bilayers. Membranes, 2022, 12, 309.	1.4	3
2	Changes in Salt Concentration Modify the Translocation of Neutral Molecules through a Î”CymA Nanopore in a Non-monotonic Manner. ACS Nano, 2022, 16, 7701-7712.	7.3	6
3	The cryo-EM structure of the S-layer deinoxanthin-binding complex of Deinococcus radiodurans informs properties of its environmental interactions. Journal of Biological Chemistry, 2022, 298, 102031.	1.6	16
4	Antibiotic uptake through porins located in the outer membrane of Gram-negative bacteria. Expert Opinion on Drug Delivery, 2021, 18, 449-457.	2.4	6
5	Towards understanding single-channel characteristics of OccK8 purified from Pseudomonas aeruginosa. European Biophysics Journal, 2021, 50, 87-98.	1.2	5
6	Rapid fabrication of teflon apertures by controlled high voltage pulses for formation of free standing planar lipid bilayer membrane. Biomedical Microdevices, 2021, 23, 12.	1.4	2
7	Permeation eines 5.1â€kDaâ€Peptides durch einen Proteinkanal: Molekulare Basis der Translokation von Protamin durch CymA aus Klebsiella Oxytoca **. Angewandte Chemie, 2021, 133, 8170-8175.	1.6	2
8	How to Enter a Bacterium: Bacterial Porins and the Permeation of Antibiotics. Chemical Reviews, 2021, 121, 5158-5192.	23.0	103
9	Largeâ€Peptide Permeation Through a Membrane Channel: Understanding Protamine Translocation Through CymA from <i>Klebsiella Oxytoca</i>**. Angewandte Chemie - International Edition, 2021, 60, 8089-8094.	7.2	15
10	Detection and quantification of small concentrations of moxifloxacin using surfaceâ€enhanced Raman spectroscopy in a Kretschmann configuration. Journal of Raman Spectroscopy, 2021, 52, 1617-1629.	1.2	5
11	Structural analysis of the architecture and in situ localization of the main S-layer complex in Deinococcus radiodurans. Structure, 2021, 29, 1279-1285.e3.	1.6	18
12	Towards the sustainable discovery and development of new antibiotics. Nature Reviews Chemistry, 2021, 5, 726-749.	13.8	439
13	A general approach to protein folding using thermostable exoshells. Nature Communications, 2021, 12, 5720.	5.8	7
14	The C2 entity of chitosugars is crucial in molecular selectivity of the Vibrio campbellii chitoporin. Journal of Biological Chemistry, 2021, 297, 101350.	1.6	1
15	Total synthesis and mechanism of action of the antibiotic armeniaspirol A. Chemical Science, 2021, 12, 16023-16034.	3.7	5
16	Porins and small-molecule translocation across the outer membrane of Gram-negative bacteria. Nature Reviews Microbiology, 2020, 18, 164-176.	13.6	225
17	The Beauty of Asymmetric Membranes: Reconstitution of the Outer Membrane of Gram-Negative Bacteria. Frontiers in Cell and Developmental Biology, 2020, 8, 586.	1.8	21
18	Dynamic interaction of fluoroquinolones with magnesium ions monitored using bacterial outer membrane nanopores. Chemical Science, 2020, 11, 10344-10353.	3.7	23

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19	Kanamycin Uptake into <i>Escherichia coli</i> Is Facilitated by OmpF and OmpC Porin Channels Located in the Outer Membrane. ACS Infectious Diseases, 2020, 6, 1855-1865.	1.8	38
20	Computational Modeling of Ion Transport in Bulk and through a Nanopore Using the Drude Polarizable Force Field. Journal of Chemical Information and Modeling, 2020, 60, 3188-3203.	2.5	16
21	Electroosmosis Dominates Electrophoresis of Antibiotic Transport Across the Outer Membrane Porin F. Biophysical Journal, 2020, 118, 2844-2852.	0.2	11
22	Serial femtosecond crystallography on in vivo-grown crystals drives elucidation of mosquitocidal Cyt1Aa bioactivation cascade. Nature Communications, 2020, 11, 1153.	5.8	31
23	Rapid lipid bilayer membrane formation on Parylene coated apertures to perform ion channel analyses. Biomedical Microdevices, 2020, 22, 32.	1.4	6
24	Structural insights into the main S-layer unit of Deinococcus radiodurans reveal a massive protein complex with porin-like features. Journal of Biological Chemistry, 2020, 295, 4224-4236.	1.6	21
25	Elektrophysiologische Charakterisierung des Transports von Antibiotika durch ÃuÃŸere MembrankanÃle in Gramâ€negativen Bakterien in Gegenwart von Lipopolysacchariden. Angewandte Chemie, 2020, 132, 8595-8599.	1.6	4
26	Electrophysiological Characterization of Transport Across Outerâ€Membrane Channels from Gramâ€Negative Bacteria in Presence of Lipopolysaccharides. Angewandte Chemie - International Edition, 2020, 59, 8517-8521.	7.2	34
27	The challenge of intracellular antibiotic accumulation, a function of fluoroquinolone influx versus bacterial efflux. Communications Biology, 2020, 3, 198.	2.0	34
28	Manipulation of charge distribution in the arginine and glutamate clusters of the OmpG pore alters sugar specificity and ion selectivity. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 183021.	1.4	6
29	Fosfomycin Permeation through the Outer Membrane Porin OmpF. Biophysical Journal, 2019, 116, 258-269.	0.2	24
30	Smallâ€Molecule Permeation across Membrane Channels: Chemical Modification to Quantify Transport across OmpF. Angewandte Chemie - International Edition, 2019, 58, 4737-4741.	7.2	33
31	Outer Membrane Porins. Sub-Cellular Biochemistry, 2019, 92, 79-123.	1.0	42
32	Identification and Characterization of Approved Drugs and Drug-Like Compounds as Covalent Escherichia coli ClpP Inhibitors. International Journal of Molecular Sciences, 2019, 20, 2686.	1.8	5
33	Permeation von kleinen MolekÃ¼len durch MembrankanÃle: Chemische Modifikation zur Quantifizierung des Transports Ã¼ber OmpF. Angewandte Chemie, 2019, 131, 4788-4792.	1.6	9
34	Breaching the Barrier: Quantifying Antibiotic Permeability across Gram-negative Bacterial Membranes. Journal of Molecular Biology, 2019, 431, 3531-3546.	2.0	60
35	Parylene-C coated micro-apertures with painted synthetic lipid bilayer membranes for the investigation of outer-membrane-vesicle fusion. , 2019, , .		1
36	Effects of H-bonds on sugar binding to chitoporin from Vibrio harveyi. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 610-618.	1.4	1

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37	A Multidisciplinary Approach toward Identification of Antibiotic Scaffolds for Acinetobacter baumannii. Structure, 2019, 27, 268-280.e6.	1.6	41
38	Î±-Amino Diphenyl Phosphonates as Novel Inhibitors of <i>Escherichia coli</i> ClpP Protease. Journal of Medicinal Chemistry, 2019, 62, 774-797.	2.9	23
39	Mechanistic aspects of maltotriose-conjugate translocation to the Gram-negative bacteria cytoplasm. Life Science Alliance, 2019, 2, e201800242.	1.3	11
40	Porin self-association enables cell-to-cell contact in <i>Providencia stuartii</i> floating communities. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2220-E2228.	3.3	11
41	Unusual Constriction Zones in the Major Porins OmpU and OmpT from Vibrio cholerae. Structure, 2018, 26, 708-721.e4.	1.6	22
42	Enrofloxacin Permeation Pathways across the Porin OmpC. Journal of Physical Chemistry B, 2018, 122, 1417-1426.	1.2	24
43	Ampicillin permeation across OmpF, the major outer-membrane channel in Escherichia coli. Journal of Biological Chemistry, 2018, 293, 7030-7037.	1.6	35
44	Probing transport of fosfomycin through substrate specific OprO and OprP from Pseudomonas aeruginosa. Biochemical and Biophysical Research Communications, 2018, 495, 1454-1460.	1.0	11
45	Fast Formation of Lipid Bilayer Membranes for Simultaneous Analysis of Molecular Transport Using Parylene Coated Chips. Proceedings (mdpi), 2018, 2, .	0.2	5
46	Quantifying Permeation of Small Charged Molecules across Channels: Electrophysiology in Small Volumes. ACS Omega, 2018, 3, 17481-17486.	1.6	5
47	Translocation of small molecules through engineered outer-membrane channels from Gram-negative bacteria. European Physical Journal E, 2018, 41, 111.	0.7	3
48	The 2018 correlative microscopy techniques roadmap. Journal Physics D: Applied Physics, 2018, 51, 443001.	1.3	99
49	Getting Drugs into Gram-Negative Bacteria: Rational Rules for Permeation through General Porins. ACS Infectious Diseases, 2018, 4, 1487-1498.	1.8	117
50	Getting Drugs through Small Pores: Exploiting the Porins Pathway in <i>Pseudomonas aeruginosa</i>. ACS Infectious Diseases, 2018, 4, 1519-1528.	1.8	25
51	Mechanisms of intrinsic resistance and acquired susceptibility of Pseudomonas aeruginosa isolated from cystic fibrosis patients to temocillin, a revived antibiotic. Scientific Reports, 2017, 7, 40208.	1.6	34
52	Probing transport of charged Î²-lactamase inhibitors through OmpC, a membrane channel from E.Âcoli. Biochemical and Biophysical Research Communications, 2017, 484, 51-55.	1.0	26
53	Structural basis for nutrient acquisition by dominant members of the human gut microbiota. Nature, 2017, 541, 407-411.	13.7	188
54	Single Residue Acts as Gate in OccK Channels. Journal of Physical Chemistry B, 2017, 121, 2614-2621.	1.2	15

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55	General Method to Determine the Flux of Charged Molecules through Nanopores Applied to Î²-Lactamase Inhibitors and OmpF. Journal of Physical Chemistry Letters, 2017, 8, 1295-1301.	2.1	53
56	Bacterial Outer Membrane Porins as Electrostatic Nanosieves: Exploring Transport Rules of Small Polar Molecules. ACS Nano, 2017, 11, 5465-5473.	7.3	74
57	Understanding Carbapenem Translocation through OccD3 (OpdP) of <i>Pseudomonas aeruginosa</i>. ACS Chemical Biology, 2017, 12, 1656-1664.	1.6	16
58	Protein A Functionalized Polyelectrolyte Microcapsules as a Universal Platform for Enhanced Targeting of Cell Surface Receptors. ACS Applied Materials & Interfaces, 2017, 9, 11506-11517.	4.0	32
59	Engineering Enhanced Pore Sizes Using FhuA Î”1-160 from <i>E. coli</i> Outer Membrane as Template. ACS Sensors, 2017, 2, 1619-1626.	4.0	29
60	Characterization of Ciprofloxacin Permeation Pathways across the Porin OmpC Using Metadynamics and a String Method. Journal of Chemical Theory and Computation, 2017, 13, 4553-4566.	2.3	41
61	Sensing Single Molecule Penetration into Nanopores: Pushing the Time Resolution to the Diffusion Limit. ACS Sensors, 2017, 2, 1184-1190.	4.0	19
62	Peptide translocation across MOMP, the major outer membrane channel from Campylobacter jejuni. Biochemistry and Biophysics Reports, 2017, 11, 79-83.	0.7	4
63	Polydopamine Coating To Stabilize a Free-Standing Lipid Bilayer for Channel Sensing. Langmuir, 2017, 33, 7256-7262.	1.6	4
64	Porin flexibility in Providencia stuartii: cell-surface-exposed loops L5 and L7 are markers of Providencia porin OmpPst1. Research in Microbiology, 2017, 168, 685-699.	1.0	7
65	â€œTo Catch or Not to Catchâ€: Microcapsuleâ€Based Sandwich Assay for Detection of Proteins and Nucleic Acids. Advanced Functional Materials, 2016, 26, 6015-6024.	7.8	20
66	Electro-Osmotic Driven Kinetics of Cyclodextrin through the CymA Channel. Biophysical Journal, 2016, 110, 115a.	0.2	3
67	MOMP from Campylobacter jejuni Is a Trimer of 18-Stranded Î²-Barrel Monomers with a Ca 2+ Ion Bound at the Constriction Zone. Journal of Molecular Biology, 2016, 428, 4528-4543.	2.0	36
68	Correlated trapping of sugar molecules by the trimeric protein channelÂ chitoporin. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 3032-3040.	1.4	11
69	Large-Conductance Transmembrane Porin Made from DNA Origami. ACS Nano, 2016, 10, 8207-8214.	7.3	171
70	Ion Channels Made from a Single Membrane-Spanning DNA Duplex. Nano Letters, 2016, 16, 4665-4669.	4.5	124
71	Draft Genome Sequence of Dietzia maris DSM 43672, a Gram-Positive Bacterium of the Mycolata Group. Genome Announcements, 2016, 4, .	0.8	5
72	Structural Insights into Outer Membrane Permeability of Acinetobacter baumannii. Structure, 2016, 24, 221-231.	1.6	49

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73	Molecular Basis of Filtering Carbapenems by Porins from Î^{2}-Lactam-resistant Clinical Strains of Escherichia coli. Journal of Biological Chemistry, 2016, 291, 2837-2847.	1.6	65
74	Role of Electroosmosis in the Permeation of Neutral Molecules: CymA and Cyclodextrin as an Example. Biophysical Journal, 2016, 110, 600-611.	0.2	55
75	Crystal structure of a COG4313 outer membrane channel. Scientific Reports, 2015, 5, 11927.	1.6	19
76	Robotic voltammetry with carbon nanotube-based sensors: a superb blend for convenient high-quality antimicrobial trace analysis. International Journal of Nanomedicine, 2015, 10, 859.	3.3	8
77	Toxins Secreted by Bacillus Isolated from Lung Adenocarcinomas Favor the Penetration of Toxic Substances. Frontiers in Microbiology, 2015, 6, 1301.	1.5	3
78	Pore forming activity of the potent RTX-toxin produced by pediatric pathogen Kingella kingae: Characterization and comparison to other RTX-family members. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 1536-1544.	1.4	24
79	Hot start reverse transcriptase: an approach for improved real-time RT-PCR performance. Journal of Analytical Science and Technology, 2015, 6, 20.	1.0	5
80	Protein reconstitution into freestanding planar lipid membranes for electrophysiological characterization. Nature Protocols, 2015, 10, 188-198.	5.5	134
81	Halogenated Dodecaborate Clusters as Agents to Trigger Release of Liposomal Contents. ChemPlusChem, 2015, 80, 656-664.	1.3	24
82	Analysis of fast channel blockage: revealing substrate binding in the microsecond range. Analyst, The, 2015, 140, 4820-4827.	1.7	22
83	Physical methods to quantify small antibiotic molecules uptake into Gram-negative bacteria. European Journal of Pharmaceutics and Biopharmaceutics, 2015, 95, 63-67.	2.0	41
84	The location of coenzyme Q10 in phospholipid membranes made of POPE: a small-angle synchrotron X-ray diffraction study. European Biophysics Journal, 2015, 44, 373-381.	1.2	9
85	Outer-membrane translocation of bulky small molecules by passive diffusion. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2991-9.	3.3	70
86	Understanding Voltage Gating of Providencia stuartii Porins at Atomic Level. PLoS Computational Biology, 2015, 11, e1004255.	1.5	10
87	Antibiotic translocation through porins studied in planar lipid bilayers using parallel platforms. Analyst, The, 2015, 140, 4874-4881.	1.7	13
88	Understanding the Translocation of Fluoroquinolones through OmpC using the Metadynamics. Biophysical Journal, 2015, 108, 443a.	0.2	0
89	Quantification of Fluoroquinolone Uptake through the Outer Membrane Channel OmpF of <i>Escherichia coli</i>. Journal of the American Chemical Society, 2015, 137, 13836-13843.	6.6	70
90	Chitoporin from the Marine Bacterium Vibrio harveyi. Journal of Biological Chemistry, 2015, 290, 19184-19196.	1.6	17

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91	Transport across the outer membrane porin of mycolic acid containing actinomycetales: Nocardia farcinica. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 654-661.	1.4	5
92	Polymer Capsules and Electroporation. IFMBE Proceedings, 2015, , 789-792.	0.2	0
93	Porin Involvement in Cephalosporin and Carbapenem Resistance of Burkholderia pseudomallei. PLoS ONE, 2014, 9, e95918.	1.1	22
94	Chemosensing Ensembles for Monitoring Biomembrane Transport in Real Time. Angewandte Chemie - International Edition, 2014, 53, 2762-2765.	7.2	97
95	Untersuchung des Energiebedarfs derbatch-Rektifikation durch einen neuen Trainingssimulator. Chemie-Ingenieur-Technik, 2014, 86, 714-724.	0.4	2
96	Pharmacological aspects of release from microcapsules â€” from polymeric multilayers to lipid membranes. Current Opinion in Pharmacology, 2014, 18, 129-140.	1.7	21
97	TRANSLOCATION Project: How to Get Good Drugs into Bad Bugs. Science Translational Medicine, 2014, 6, 228ed7.	5.8	76
98	Synthetic ion transporters: Pore formation in bilayers via coupled activity of non-spanning cobalt-cage amphiphiles. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 1247-1254.	1.4	6
99	Interaction of protamine with gramâ€negative bacteria membranes: possible alternative mechanisms of internalization in <i>Escherichia coli</i>, <i>Salmonella typhimurium</i> and <i>Pseudomonas aeruginosa</i>. Journal of Peptide Science, 2014, 20, 240-250.	0.8	15
100	Polydopamine Films from the Forgotten Air/Water Interface. Journal of Physical Chemistry Letters, 2014, 5, 3436-3440.	2.1	67
101	Nanoplasmonically-Induced Defects in Lipid Membrane Monitored by Ion Current: Transient Nanopores versus Membrane Rupture. Nano Letters, 2014, 14, 4273-4279.	4.5	35
102	Lipid membranes in external electric fields: Kinetics of large pore formation causing rupture. Advances in Colloid and Interface Science, 2014, 208, 121-128.	7.0	15
103	Antibiotic Transport through Porins. Biophysical Journal, 2014, 106, 557a.	0.2	0
104	Polyelectrolyte Microcapsule Based Assay for Monitoring Biotechnological Processes In Vitro and In Vivo. Biophysical Journal, 2014, 106, 621a.	0.2	0
105	Peptide translocation through the mesoscopic channel: binding kinetics at the single molecule level. European Biophysics Journal, 2013, 42, 363-369.	1.2	33
106	Polypeptide Translocation Through the Mitochondrial TOM Channel: Temperature-Dependent Rates at the Single-Molecule Level. Journal of Physical Chemistry Letters, 2013, 4, 78-82.	2.1	16
107	Differential Detergent Extraction of Mycobacterium marinum Cell Envelope Proteins Identifies an Extensively Modified Threonine-Rich Outer Membrane Protein with Channel Activity. Journal of Bacteriology, 2013, 195, 2050-2059.	1.0	25
108	Chitoporin from Vibrio harveyi, a Channel with Exceptional Sugar Specificity. Journal of Biological Chemistry, 2013, 288, 11038-11046.	1.6	40

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109	Molecular Uptake of Chitooligosaccharides through Chitoporin from the Marine Bacterium Vibrio harveyi. PLoS ONE, 2013, 8, e55126.	1.1	42
110	Modulation of enrofloxacin binding in OmpF by Mg2+ as revealed by the analysis of fast flickering single-porin current. Journal of General Physiology, 2012, 140, 69-82.	0.9	23
111	Pulling Peptides across Nanochannels: Resolving Peptide Binding and Translocation through the Hetero-oligomeric Channel from <i>Nocardia farcinica</i>. ACS Nano, 2012, 6, 10699-10707.	7.3	57
112	Nanoaggregates of micropurified lipopolysaccharide identified using dynamic light scattering, zeta potential measurement, and TLR4 signaling activity. Analytical Biochemistry, 2012, 430, 203-213.	1.1	4
113	Antibiotic Uptake through Membrane Channels: Role of <i>Providencia stuartii</i> OmpPst1 Porin in Carbapenem Resistance. Biochemistry, 2012, 51, 10244-10249.	1.2	30
114	Antibiotic Permeation across the OmpF Channel: Modulation of the Affinity Site in the Presence of Magnesium. Journal of Physical Chemistry B, 2012, 116, 4433-4438.	1.2	60
115	Protein Translocation through Tom40: Kinetics of Peptide Release. Biophysical Journal, 2012, 102, 39-47.	0.2	35
116	Protein Translocation through Mitochondria Channel: Peptide Interactions with TOM40 Channel. Biophysical Journal, 2012, 102, 656a.	0.2	0
117	Computational modeling of ion transport through nanopores. Nanoscale, 2012, 4, 6166.	2.8	60
118	Thermodynamic study of Cu2+ binding to the DAHK and GHK peptides by isothermal titration calorimetry (ITC) with the weaker competitor glycine. Journal of Biological Inorganic Chemistry, 2012, 17, 37-47.	1.1	97
119	Interaction of cephalosporins with outer membrane channels of Escherichia coli. Revealing binding by fluorescence quenching and ion conductance fluctuations. Physical Chemistry Chemical Physics, 2011, 13, 1521-1530.	1.3	23
120	Simple Reconstitution of Protein Pores in Nano Lipid Bilayers. Nano Letters, 2011, 11, 3334-3340.	4.5	39
121	Retrieval of a Metabolite from Cells with Polyelectrolyte Microcapsules. Biophysical Journal, 2011, 100, 624a.	0.2	0
122	Molecular analysis of antimicrobial agent translocation through the membrane porin BpsOmp38 from an ultraresistant Burkholderia pseudomallei strain. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 1552-1559.	1.4	8
123	Probing the Transport of Ionic Liquids in Aqueous Solution through Nanopores. Journal of Physical Chemistry Letters, 2011, 2, 2331-2336.	2.1	29
124	Raman imaging and photodegradation study of phthalocyanine containing microcapsules and coated particles. Journal of Raman Spectroscopy, 2011, 42, 1901-1907.	1.2	19
125	Generation of artificial channels by multimerization of Î²-strands from natural porin. Biological Chemistry, 2011, 392, 617-24.	1.2	6
126	Unimolecular study of the interaction between the outer membrane protein OmpF from E. coli and an analogue of the HP(2â€"20) antimicrobial peptide. Journal of Bioenergetics and Biomembranes, 2010, 42, 173-180.	1.0	29

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127	Interaction of N,N,N-trialkylammonioundecahydro-closo-dodecaborates with dipalmitoyl phosphatidylcholine liposomes. Chemistry and Physics of Lipids, 2010, 163, 64-73.	1.5	26
128	Retrieval of a Metabolite from Cells with Polyelectrolyte Microcapsules. Small, 2010, 6, 2412-2419.	5.2	10
129	Implication of Porins in Î²-Lactam Resistance of Providencia stuartii. Journal of Biological Chemistry, 2010, 285, 32273-32281.	1.6	49
130	New developments in nanopore researchâ€"from fundamentals to applications. Journal of Physics Condensed Matter, 2010, 22, 450301.	0.7	12
131	Permeation through nanochannels: revealing fast kinetics. Journal of Physics Condensed Matter, 2010, 22, 454131.	0.7	9
132	Molecular Basis of Enrofloxacin Translocation through OmpF, an Outer Membrane Channel of Escherichia coli - When Binding Does Not Imply Translocation. Journal of Physical Chemistry B, 2010, 114, 5170-5179.	1.2	88
133	Toward Screening for Antibiotics with Enhanced Permeation Properties through Bacterial Porins. Biochemistry, 2010, 49, 6928-6935.	1.2	47
134	Bridging Timescales and Length Scales: From Macroscopic Flux to the Molecular Mechanism of Antibiotic Diffusion through Porins. Biophysical Journal, 2010, 98, 569-575.	0.2	40
135	Comparing the Temperature-Dependent Conductance of the Two Structurally Similar E. coli Porins OmpC and OmpF. Biophysical Journal, 2010, 98, 1830-1839.	0.2	54
136	Interactions of Mitochondrial Presequence Peptides with the Mitochondrial Outer Membrane Preprotein Translocase TOM. Biophysical Journal, 2010, 99, 774-781.	0.2	17
137	Permeation of Antibiotics through Escherichia coli OmpF and OmpC Porins: Screening for Influx on a Single-Molecule Level. Journal of Biomolecular Screening, 2010, 15, 302-307.	2.6	85
138	Fluorescence Quenching as a Tool to Investigate Quinolone Antibiotic Interactions with Bacterial Protein OmpF. Journal of Membrane Biology, 2009, 227, 133-140.	1.0	7
139	Antibiotic translocation through membrane channels: temperature-dependent ion current fluctuation for catching the fast events. European Biophysics Journal, 2009, 38, 1141-1145.	1.2	50
140	Dodecaborate cluster lipids with variable headgroups for boron neutron capture therapy: Synthesis, physicalâ€"chemical properties and toxicity. Journal of Organometallic Chemistry, 2009, 694, 1708-1712.	0.8	24
141	Interaction of Na2B12H11SH with dimyristoyl phosphatidylcholine liposomes. Chemistry and Physics of Lipids, 2009, 157, 78-85.	1.5	29
142	Polyelectrolyte-Coated Unilamellar Nanometer-Sized Magnetic Liposomes. Langmuir, 2009, 25, 6793-6799.	1.6	41
143	Pyridinium Lipids with the Dodecaborate Cluster as Polar Headgroup: Synthesis, Characterization of the Physicalâ^'Chemical Behavior, and Toxicity in Cell Culture. Bioconjugate Chemistry, 2009, 20, 2190-2198.	1.8	16
144	Single-strand DNA translation initiation step analyzed by Isothermal Titration Calorimetry. Biochemical and Biophysical Research Communications, 2009, 385, 296-301.	1.0	2

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145	The Porin passport control - Conductance measurements and biological relevance. Biophysical Journal, 2009, 96, 148a-149a.	0.2	0
146	The Temperature Dependence of Lipid Membrane Permeability, its Quantized Nature, and the Influence of Anesthetics. Biophysical Journal, 2009, 96, 4581-4591.	0.2	187
147	Understanding Ion Conductance on a Molecular Level: An All-Atom Modeling of the Bacterial Porin OmpF. Biophysical Journal, 2009, 97, 1898-1906.	0.2	88
148	Ion Transport through OmpF in Molecular Dynamics Simulations and Experiments. Biophysical Journal, 2009, 96, 661a.	0.2	0
149	How Î²-Lactam Antibiotics Enter Bacteria: A Dialogue with the Porins. PLoS ONE, 2009, 4, e5453.	1.1	83
150	Miniaturized planar lipid bilayer: increased stability, low electric noise and fast fluid perfusion. Analytical and Bioanalytical Chemistry, 2008, 390, 841-846.	1.9	28
151	Transport at the nanoscale: temperature dependence of ion conductance. European Biophysics Journal, 2008, 38, 121-125.	1.2	60
152	The porin and the permeating antibiotic: a selective diffusion barrier in Gram-negative bacteria. Nature Reviews Microbiology, 2008, 6, 893-903.	13.6	742
153	Chapter 2 Functionalized Liposomes. Behavior Research Methods, 2008, 7, 39-58.	2.3	2
154	Facilitated Permeation of Antibiotics across Membrane Channels â˜' Interaction of the Quinolone Moxifloxacin with the OmpF Channel. Journal of the American Chemical Society, 2008, 130, 13301-13309.	6.6	57
155	Biophysical Characterization of In- and Efflux in Gram-Negative Bacteria. Current Drug Targets, 2008, 9, 789-796.	1.0	16
156	Mechanical Properties of Lipid Bilayers Containing Grafted Lipids. Perspectives in Supramolecular Chemistry, 2007, , 207-219.	0.1	2
157	The Anionic Boron Cluster (B12H11SH)2â˜' as a Means To Trigger Release of Liposome Contents. ChemMedChem, 2007, 2, 51-53.	1.6	32
158	Multifunctionalized Polymer Microcapsules: Novel Tools for Biological and Pharmacological Applications. Small, 2007, 3, 944-955.	5.2	223
159	Microstructured Liposome Array. Bioconjugate Chemistry, 2006, 17, 245-247.	1.8	38
160	Stable Polymethacrylate Nanocapsules from Ultraviolet Light-Induced Template Radical Polymerization of Unilamellar Liposomes. Langmuir, 2006, 22, 7755-7759.	1.6	48
161	A nanocompartment system (Synthosome) designed for biotechnological applications. Journal of Biotechnology, 2006, 123, 50-59.	1.9	104
162	Interaction of Zwitterionic Penicillins with the OmpF Channel Facilitates Their Translocation. Biophysical Journal, 2006, 90, 1617-1627.	0.2	146

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163	Functional Subconformations in Protein Folding: Evidence from Single-Channel Experiments. Physical Review Letters, 2006, 96, 038101.	2.9	27
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