Aleksei Aksimentiev

List of Publications by Year
in descending order

159 papers	12,946 citations	23879 60 h-index	32181 105 g-index
184 all docs	184 docs citations	184 times ranked	12080 citing authors

#	Article	IF	Citations
1	Multi-resolution simulation of DNA transport through large synthetic nanostructures. Physical Chemistry Chemical Physics, 2022, 24, 2706-2716.	1.3	10
2	Discrimination of RNA fiber structures using solid-state nanopores. Nanoscale, 2022, 14, 6866-6875.	2.8	8
3	Expanding the Molecular Alphabet of DNA-Based Data Storage Systems with Neural Network Nanopore Readout Processing. Nano Letters, 2022, 22, 1905-1914.	4.5	18
4	Single-molecule biophysics experiments in silico: Toward a physical model of a replisome. IScience, 2022, 25, 104264.	1.9	1
5	Fluorofoldamer-Based Salt- and Proton-Rejecting Artificial Water Channels for Ultrafast Water Transport. Nano Letters, 2022, 22, 4831-4838.	4.5	12
6	A tetrahedral DNA nanorobot with conformational change in response to molecular trigger. Nanoscale, 2021, 13, 15552-15559.	2.8	15
7	Chiral Systems Made from DNA. Advanced Science, 2021, 8, 2003113.	5.6	42
8	Translocation of DNA through Ultrathin Nanoslits. Advanced Materials, 2021, 33, e2007682.	11.1	22
9	Determining the In-Plane Orientation and Binding Mode of Single Fluorescent Dyes in DNA Origami Structures. ACS Nano, 2021, 15, 5109-5117.	7.3	18
10	Electrical unfolding of cytochrome <i>c</i> during translocation through a nanopore constriction. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	29
11	Hydrophobic Interactions between DNA Duplexes and Synthetic and Biological Membranes. Journal of the American Chemical Society, 2021, 143, 8305-8313.	6.6	26
12	Foldamer-based ultrapermeable and highly selective artificial water channels that exclude protons. Nature Nanotechnology, 2021, 16, 911-917.	15.6	54
13	Cations Regulate Membrane Attachment and Functionality of DNA Nanostructures. Journal of the American Chemical Society, 2021, 143, 7358-7367.	6.6	44
14	The Manipulation of the Internal Hydrophobicity of FraC Nanopores Augments Peptide Capture and Recognition. ACS Nano, 2021, 15, 9600-9613.	7.3	37
15	The emerging landscape of single-molecule protein sequencing technologies. Nature Methods, 2021, 18, 604-617.	9.0	198
16	Synthetic Macrocycle Nanopore for Potassium-Selective Transmembrane Transport. Journal of the American Chemical Society, 2021, 143, 15975-15983.	6.6	33
17	Netting proteins, one at a time. Nature Nanotechnology, 2021, 16, 1178-1179.	15.6	1
18	DNA sequence and methylation prescribe the inside-out conformational dynamics and bending energetics of DNA minicircles. Nucleic Acids Research, 2021, 49, 11459-11475.	6.5	11

#	Article	IF	Citations
19	DNA Origami Voltage Sensors for Transmembrane Potentials with Single-Molecule Sensitivity. Nano Letters, 2021, 21, 8634-8641.	4.5	22
20	Multiple rereads of single proteins at singleâ€“amino acid resolution using nanopores. Science, 2021, 374, 1509-1513.	6.0	222
21	Membrane Activity of a DNA-Based Ion Channel Depends on the Stability of Its Double-Stranded Structure. Nano Letters, 2021, 21, 9789-9796.	4.5	5
22	A nanoscale reciprocating rotary mechanism with coordinated mobility control. Nature Communications, 2021, 12, 7138.	5.8	14
23	Rosette Nanotube Porins as Ion Selective Transporters and Single-Molecule Sensors. Journal of the American Chemical Society, 2020, 142, 1680-1685.	6.6	19
24	Artificial water channels enable fast and selective water permeation through water-wire networks. Nature Nanotechnology, 2020, 15, 73-79.	15.6	111
25	Electrical recognition of the twenty proteinogenic amino acids using an aerolysin nanopore. Nature Biotechnology, 2020, 38, 176-181.	9.4	308
26	Molecular dynamics simulations of DNAâ€“DNA and DNAâ€“protein interactions. Current Opinion in Structural Biology, 2020, 64, 88-96.	2.6	49
27	High-Fidelity Capture, Threading, and Infinite-Depth Sequencing of Single DNA Molecules with a Double-Nanopore System. ACS Nano, 2020, 14, 15566-15576.	7.3	24
28	Scalable molecular dynamics on CPU and GPU architectures with NAMD. Journal of Chemical Physics, 2020, 153, 044130.	1.2	1,548
29	Single-Protein Collapse Determines Phase Equilibria of a Biological Condensate. Journal of Physical Chemistry Letters, 2020, 11, 4923-4929.	2.1	42
30	Tailoring Interleaflet Lipid Transfer with a DNA-based Synthetic Enzyme. Nano Letters, 2020, 20, 4306-4311.	4.5	13
31	Molecular Transport across the Ionic Liquidâ€“Aqueous Electrolyte Interface in a MoS₂ Nanopore. ACS Applied Materials & Interfaces, 2020, 12, 26624-26634.	4.0	16
32	Protein unfolding by SDS: the microscopic mechanisms and the properties of the SDS-protein assembly. Nanoscale, 2020, 12, 5422-5434.	2.8	34
33	Polyhydrazideâ€Based Organic Nanotubes as Efficient and Selective Artificial Iodide Channels. Angewandte Chemie - International Edition, 2020, 59, 4806-4813.	7.2	46
34	Polyhydrazideâ€Based Organic Nanotubes as Efficient and Selective Artificial Iodide Channels. Angewandte Chemie, 2020, 132, 4836-4843.	1.6	11
35	MrDNA: a multi-resolution model for predicting the structure and dynamics of DNA systems. Nucleic Acids Research, 2020, 48, 5135-5146.	6.5	67
36	Step-defect guided delivery of DNA to a graphene nanopore. Nature Nanotechnology, 2019, 14, 858-865.	15.6	45

#	Article	IF	Citations
37	Controlling aggregation of cholesterol-modified DNA nanostructures. Nucleic Acids Research, 2019, 47, 11441-11451.	6.5	60
38	Atoms to Phenotypes: Molecular Design Principles of Cellular Energy Metabolism. Cell, 2019, 179, 1098-1111.e23.	13.5	122
39	Electro-Mechanical Conductance Modulation of a Nanopore Using a Removable Gate. ACS Nano, 2019, 13, 2398-2409.	7.3	16
40	Characterization of the Lipid Structure and Fluidity of Lipid Membranes on Epitaxial Graphene and Their Correlation to Graphene Features. Langmuir, 2019, 35, 4726-4735.	1.6	5
41	Rapid and Accurate Determination of Nanopore Ionic Current Using a Steric Exclusion Model. ACS Sensors, 2019, 4, 634-644.	4.0	53
42	Effect of Temperature and Hydrophilic Ratio on the Structure of Poly(<i>N</i>-vinylcaprolactam)-<i>block</i>-poly(dimethylsiloxane)-<i>block</i>-poly(<i>N</i>-vinylcaprolactam) Polymersomes. ACS Applied Polymer Materials, 2019, 1, 722-736.	2.0	15
43	Molecular Mechanisms of DNA Replication and Repair Machinery: Insights from Microscopic Simulations. Advanced Theory and Simulations, 2019, 2, 1800191.	1.3	7
44	Single molecule analysis of structural fluctuations in DNA nanostructures. Nanoscale, 2019, 11, 18475-18482.	2.8	9
45	Molecular Mechanism of Spontaneous Nucleosome Unraveling. Journal of Molecular Biology, 2019, 431, 323-335.	2.0	63
46	New tricks for old dogs: improving the accuracy of biomolecular force fields by pair-specific corrections to non-bonded interactions. Physical Chemistry Chemical Physics, 2018, 20, 8432-8449.	1.3	180
47	Optical Voltage Sensing Using DNA Origami. Nano Letters, 2018, 18, 1962-1971.	4.5	43
48	Dynamic Interactions between Lipid-Tethered DNA and Phospholipid Membranes. Langmuir, 2018, 34, 15084-15092.	1.6	30
49	PoreDesigner for tuning solute selectivity in a robust and highly permeable outer membrane pore. Nature Communications, 2018, 9, 3661.	5.8	50
50	Water-Compression Gating of Nanopore Transport. Physical Review Letters, 2018, 120, 268101.	2.9	30
51	A Practical Guide to Molecular Dynamics Simulations of DNA Origami Systems. Methods in Molecular Biology, 2018, 1811, 209-229.	0.4	6
52	Dynamics of a Molecular Plug Docked onto a Solid-State Nanopore. Journal of Physical Chemistry Letters, 2018, 9, 4686-4694.	2.1	31
53	Sequence-dependent DNA condensation as a driving force of DNA phase separation. Nucleic Acids Research, 2018, 46, 9401-9413.	6.5	55
54	Inchworm movement of two rings switching onto a thread by biased Brownian diffusion represent a three-body problem. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9391-9396.	3.3	19

#	Article	IF	Citations
55	A synthetic enzyme built from DNA flips 107 lipids per second in biological membranes. Nature Communications, 2018, 9, 2426.	5.8	101
56	Modulation of Molecular Flux Using a Graphene Nanopore Capacitor. Journal of Physical Chemistry B, 2017, 121, 3724-3733.	1.2	14
57	Selective Permeability of Truncated Aquaporin 1 in Silico. ACS Biomaterials Science and Engineering, 2017, 3, 342-348.	2.6	9
58	Interference-Free Detection of Genetic Biomarkers Using Synthetic Dipole-Facilitated Nanopore Dielectrophoresis. ACS Nano, 2017, 11, 1204-1213.	7.3	42
59	Quantification of Membrane Protein-Detergent Complex Interactions. Journal of Physical Chemistry B, 2017, 121, 10228-10241.	1.2	20
60	Picomolar Fingerprinting of Nucleic Acid Nanoparticles Using Solid-State Nanopores. ACS Nano, 2017, 11, 9701-9710.	7.3	54
61	SDS-assisted protein transport through solid-state nanopores. Nanoscale, 2017, 9, 11685-11693.	2.8	67
62	Nanoscale Ion Pump Derived from a Biological Water Channel. Journal of Physical Chemistry B, 2017, 121, 7899-7906.	1.2	8
63	Porphyrin-Assisted Docking of a Thermophage Portal Protein into Lipid Bilayers: Nanopore Engineering and Characterization. ACS Nano, 2017, 11, 11931-11945.	7.3	23
64	Nanopore Sensing of Protein Folding. ACS Nano, 2017, 11, 7091-7100.	7.3	122
65	Molecular mechanism of DNA association with single-stranded DNA binding protein. Nucleic Acids Research, 2017, 45, 12125-12139.	6.5	39
66	Graphene Nanopores for Protein Sequencing. Advanced Functional Materials, 2016, 26, 4830-4838.	7.8	100
67	Improved model of hydrated calcium ion for molecular dynamics simulations using classical biomolecular force fields. Biopolymers, 2016, 105, 752-763.	1.2	40
68	Effects of cytosine modifications on DNA flexibility and nucleosome mechanical stability. Nature Communications, 2016, 7, 10813.	5.8	177
69	DNA sequence-dependent ionic currents in ultra-small solid-state nanopores. Nanoscale, 2016, 8, 9600-9613.	2.8	29
70	Water Mediates Recognition of DNA Sequence <i>via</i> Ionic Current Blockade in a Biological Nanopore. ACS Nano, 2016, 10, 4644-4651.	7.3	48
71	Large-Conductance Transmembrane Porin Made from DNA Origami. ACS Nano, 2016, 10, 8207-8214.	7.3	171
72	Mechanical Trapping of DNA in a Double-Nanopore System. Nano Letters, 2016, 16, 8021-8028.	4.5	68

#	Article	IF	Citations
73	Refined Parameterization of Nonbonded Interactions Improves Conformational Sampling and Kinetics of Protein Folding Simulations. Journal of Physical Chemistry Letters, 2016, 7, 3812-3818.	2.1	38
74	Nanopore Sequencing: Graphene Nanopores for Protein Sequencing (Adv. Funct. Mater. 27/2016). Advanced Functional Materials, 2016, 26, 4829-4829.	7.8	2
75	Direct evidence for sequence-dependent attraction between double-stranded DNA controlled by methylation. Nature Communications, 2016, 7, 11045.	5.8	64
76	Molecular mechanics of DNA bricks:<i>in situ</i>structure, mechanical properties and ionic conductivity. New Journal of Physics, 2016, 18, 055012.	1.2	21
77	The structure and intermolecular forces of DNA condensates. Nucleic Acids Research, 2016, 44, 2036-2046.	6.5	70
78	Ion Channels Made from a Single Membrane-Spanning DNA Duplex. Nano Letters, 2016, 16, 4665-4669.	4.5	124
79	Improved Parameterization of Amineâ€“Carboxylate and Amineâ€“Phosphate Interactions for Molecular Dynamics Simulations Using the CHARMM and AMBER Force Fields. Journal of Chemical Theory and Computation, 2016, 12, 430-443.	2.3	132
80	Molecular Dynamics Simulation of DNA Capture and Transport in Heated Nanopores. ACS Applied Materials & Interfaces, 2016, 8, 12599-12608.	4.0	44
81	Hydroxymethyluracil modifications enhance the flexibility and hydrophilicity of double-stranded DNA. Nucleic Acids Research, 2016, 44, 2085-2092.	6.5	22
82	<i>De novo</i>reconstruction of DNA origami structures through atomistic molecular dynamics simulation. Nucleic Acids Research, 2016, 44, 3013-3019.	6.5	67
83	The Hinge Region Strengthens the Nonspecific Interaction between Lac-Repressor and DNA: A Computer Simulation Study. PLoS ONE, 2016, 11, e0152002.	1.1	6
84	Molecular Dynamics of Membrane-Spanning DNA Channels: Conductance Mechanism, Electro-Osmotic Transport, and Mechanical Gating. Journal of Physical Chemistry Letters, 2015, 6, 4680-4687.	2.1	74
85	Slowing DNA Transport Using Grapheneâ€“DNA Interactions. Advanced Functional Materials, 2015, 25, 936-946.	7.8	102
86	Ionic Conductivity, Structural Deformation, and Programmable Anisotropy of DNA Origami in Electric Field. ACS Nano, 2015, 9, 1420-1433.	7.3	86
87	Highly permeable artificial water channels that can self-assemble into two-dimensional arrays. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9810-9815.	3.3	152
88	Plasmonic Nanopores for Trapping, Controlling Displacement, and Sequencing of DNA. ACS Nano, 2015, 9, 10598-10611.	7.3	148
89	Close encounters with DNA. Journal of Physics Condensed Matter, 2014, 26, 413101.	0.7	46
90	Smooth DNA Transport through a Narrowed Pore Geometry. Biophysical Journal, 2014, 107, 2381-2393.	0.2	88

#	Article	IF	Citations
91	Modeling thermophoretic effects in solid-state nanopores. Journal of Computational Electronics, 2014, 13, 826-838.	1.3	21
92	A Coarse-Grained Model of Unstructured Single-Stranded DNA Derived from Atomistic Simulation and Single-Molecule Experiment. Journal of Chemical Theory and Computation, 2014, 10, 2891-2896.	2.3	79
93	Conformational transitions and stop-and-go nanopore transport of single-stranded DNA on charged graphene. Nature Communications, 2014, 5, 5171.	5.8	97
94	Two Structural Scenarios for Protein Stabilization by PEG. Journal of Physical Chemistry B, 2014, 118, 8388-8395.	1.2	41
95	Rectification of Ion Current in Nanopores Depends on the Type of Monovalent Cations: Experiments and Modeling. Journal of Physical Chemistry C, 2014, 118, 9809-9819.	1.5	77
96	A Stabilized Finite Element Method for Modified Poisson-Nernst-Planck Equations to Determine Ion Flow Through a Nanopore. Communications in Computational Physics, 2014, 15, 93-125.	0.7	30
97	Stretching and Controlled Motion of Single-Stranded DNA in Locally Heated Solid-State Nanopores. ACS Nano, 2013, 7, 6816-6824.	7.3	48
98	In situ structure and dynamics of DNA origami determined through molecular dynamics simulations. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20099-20104.	3.3	144
99	End-to-end attraction of duplex DNA. Nucleic Acids Research, 2012, 40, 3812-3821.	6.5	81
100	Toward detection of DNAâ€bound proteins using solidâ€state nanopores: Insights from computer simulations. Electrophoresis, 2012, 33, 3466-3479.	1.3	14
101	Improved Parametrization of Li⁺, Na⁺, K⁺, and Mg²⁺ Ions for All-Atom Molecular Dynamics Simulations of Nucleic Acid Systems. Journal of Physical Chemistry Letters, 2012, 3, 45-50.	2.1	275
102	Assessing Graphene Nanopores for Sequencing DNA. Nano Letters, 2012, 12, 4117-4123.	4.5	237
103	Modeling and Simulation of Ion Channels. Chemical Reviews, 2012, 112, 6250-6284.	23.0	196
104	Competitive Binding of Cations to Duplex DNA Revealed through Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2012, 116, 12946-12954.	1.2	105
105	DNA Base-Calling from a Nanopore Using a Viterbi Algorithm. Biophysical Journal, 2012, 102, L37-L39.	0.2	75
106	Optimization of the Molecular Dynamics Method for Simulations of DNA and Ion Transport Through Biological Nanopores. Methods in Molecular Biology, 2012, 870, 165-186.	0.4	17
107	Slowing down DNA Translocation through a Nanopore in Lithium Chloride. Nano Letters, 2012, 12, 1038-1044.	4.5	343
108	Predicting the DNA Sequence Dependence of Nanopore Ion Current Using Atomic-Resolution Brownian Dynamics. Journal of Physical Chemistry C, 2012, 116, 3376-3393.	1.5	90

#	Article	IF	Citations
109	Molecular Dynamics Study of MspA Arginine Mutants Predicts Slow DNA Translocations and Ion Current Blockades Indicative of DNA Sequence. ACS Nano, 2012, 6, 6960-6968.	7.3	72
110	Rectification of the Current in Î±-Hemolysin Pore Depends on the Cation Type: The Alkali Series Probed by Molecular Dynamics Simulations and Experiments. Journal of Physical Chemistry C, 2011, 115, 4255-4264.	1.5	68
111	Surface functionalization of thin-film diamond for highly stable and selective biological interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 983-988.	3.3	87
112	Nanopore Analysis of Individual RNA/Antibiotic Complexes. ACS Nano, 2011, 5, 9345-9353.	7.3	69
113	Engineering Biological Nanopore MspA for Sequencing DNA. Biophysical Journal, 2011, 100, 168a.	0.2	2
114	Modeling Pressure-Driven Transport of Proteins Through a Nanochannel. IEEE Nanotechnology Magazine, 2011, 10, 75-82.	1.1	25
115	Microscopic Perspective on the Adsorption Isotherm of a Heterogeneous Surface. Journal of Physical Chemistry Letters, 2011, 2, 1804-1807.	2.1	32
116	Atoms-to-microns model for small solute transport through sticky nanochannels. Lab on A Chip, 2011, 11, 3766.	3.1	19
117	Lipid bilayer coated Al2O3 nanopore sensors: towards a hybrid biological solid-state nanopore. Biomedical Microdevices, 2011, 13, 671-682.	1.4	52
118	Control of Nanoscale Environment to Improve Stability of Immobilized Proteins on Diamond Surfaces. Advanced Functional Materials, 2011, 21, 1040-1050.	7.8	33
119	Nanopore Force Spectroscopy: Insights from Molecular Dynamics Simulations. , 2011, , 335-356.		1
120	Modeling Nanopores for Sequencing DNA. Methods in Molecular Biology, 2011, 749, 317-358.	0.4	24
121	Third Generation DNA Sequencing with a Nanopore. , 2011, , 287-311.		0
122	Modeling the Interface between Biological and SyntheticComponents in Hybrid Nanosystems. , 2011, , 43-60.		0
123	Single molecule force measurements: Insights from molecular simulations. Physics of Life Reviews, 2010, 7, 353-354.	1.5	1
124	The effect of calcium on the conformation of cobalamin transporter BtuB. Proteins: Structure, Function and Bioinformatics, 2010, 78, 1153-1162.	1.5	16
125	Control and reversal of the electrophoretic force on DNA in a charged nanopore. Journal of Physics Condensed Matter, 2010, 22, 454123.	0.7	46
126	Mechanical Properties of a Complete Microtubule Revealed through Molecular Dynamics Simulation. Biophysical Journal, 2010, 99, 629-637.	0.2	90

#	Article	IF	Citations
127	Nanopore Sequencing: Electrical Measurements of the Code of Life. IEEE Nanotechnology Magazine, 2010, 9, 281-294.	1.1	81
128	Slowing the translocation of double-stranded DNA using a nanopore smaller than the double helix. Nanotechnology, 2010, 21, 395501.	1.3	74
129	DNAâ€"DNA Interactions in Tight Supercoils Are Described by a Small Effective Charge Density. Physical Review Letters, 2010, 105, 158101.	2.9	88
130	Deciphering ionic current signatures of DNA transport through a nanopore. Nanoscale, 2010, 2, 468.	2.8	156
131	Electric and electrophoretic inversion of the DNA charge in multivalent electrolytes. Soft Matter, 2010, 6, 243-246.	1.2	78
132	Analyzing the forces binding a restriction endonuclease to DNA using a synthetic nanopore. Nucleic Acids Research, 2009, 37, 4170-4179.	6.5	39
133	Modeling transport through synthetic nanopores. IEEE Nanotechnology Magazine, 2009, 3, 20-28.	0.9	43
134	Microscopic Mechanics of Hairpin DNA Translocation through Synthetic Nanopores. Biophysical Journal, 2009, 96, 593-608.	0.2	84
135	Structure, Dynamics, and Ion Conductance of the Phospholamban Pentamer. Biophysical Journal, 2009, 96, 4853-4865.	0.2	20
136	Ionic Current Rectification through Silica Nanopores. Journal of Physical Chemistry C, 2009, 113, 1850-1862.	1.5	86
137	In meso crystal structure and docking simulations suggest an alternative proteoglycan binding site in the OpcA outer membrane adhesin. Proteins: Structure, Function and Bioinformatics, 2008, 71, 24-34.	1.5	40
138	Detection of DNA Sequences Using an Alternating Electric Field in a Nanopore Capacitor. Nano Letters, 2008, 8, 56-63.	4.5	162
139	Synthetic Ion Channels via Self-Assembly: A Route for Embedding Porous Polyoxometalate Nanocapsules in Lipid Bilayer Membranes. Nano Letters, 2008, 8, 3916-3921.	4.5	49
140	Electro-osmotic screening of the DNA charge in a nanopore. Physical Review E, 2008, 78, 021912.	0.8	142
141	DNA Attraction in Monovalent and Divalent Electrolytes. Journal of the American Chemical Society, 2008, 130, 15754-15755.	6.6	95
142	Computer Modeling in Biotechnology. Methods in Molecular Biology, 2008, 474, 181-234.	0.4	26
143	Stretching and unzipping nucleic acid hairpins using a synthetic nanopore. Nucleic Acids Research, 2008, 36, 1532-1541.	6.5	65
144	Strain Softening in Stretched DNA. Physical Review Letters, 2008, 101, 118101.	2.9	42

#	Article	IF	Citations
145	Exploring transmembrane transport through Î±-hemolysin with grid-steered molecular dynamics. Journal of Chemical Physics, 2007, 127, 125101.	1.2	126
146	Detecting SNPs Using a Synthetic Nanopore. Nano Letters, 2007, 7, 1680-1685.	4.5	133
147	Structure Refinement of the OpcA Adhesin Using Molecular Dynamics. Biophysical Journal, 2007, 93, 3058-3069.	0.2	15
148	Simulation of the electric response of DNA translocation through a semiconductor nanoporeâ€"capacitor. Nanotechnology, 2006, 17, 622-633.	1.3	157
149	The Electromechanics of DNA in a Synthetic Nanopore. Biophysical Journal, 2006, 90, 1098-1106.	0.2	181
150	Waterâ˜'Silica Force Field for Simulating Nanodevices. Journal of Physical Chemistry B, 2006, 110, 21497-21508.	1.2	283
151	Electrical signatures of single-stranded DNA with single base mutations in a nanopore capacitor. Nanotechnology, 2006, 17, 3160-3165.	1.3	65
152	The role of molecular modeling in bionanotechnology. Physical Biology, 2006, 3, S40-S53.	0.8	68
153	Beyond the gene chip. Bell Labs Technical Journal, 2005, 10, 5-22.	0.7	44
154	Orientation discrimination of single-stranded DNA inside the Â-hemolysin membrane channel. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12377-12382.	3.3	308
155	Stretching DNA Using the Electric Field in a Synthetic Nanopore. Nano Letters, 2005, 5, 1883-1888.	4.5	166
156	Imaging Î±-Hemolysin with Molecular Dynamics: Ionic Conductance, Osmotic Permeability, and the Electrostatic Potential Map. Biophysical Journal, 2005, 88, 3745-3761.	0.2	620
157	Microscopic Kinetics of DNA Translocation through Synthetic Nanopores. Biophysical Journal, 2004, 87, 2086-2097.	0.2	323
158	Large Scale Simulation of Protein Mechanics and Function. Advances in Protein Chemistry, 2003, 66, 195-247.	4.4	31
159	Scaling of the Euler Characteristic, Surface Area, and Curvatures in the Phase Separating or Ordering Systems. Physical Review Letters, 2001, 86, 240-243.	2.9	35