Ulrich F Keyser

List of Publications by Year
in descending order

213 papers	12,344 citations	23500 58 h-index	30848 102 g-index
236 all docs	236 docs citations	236 times ranked	10954 citing authors

#	Article	IF	Citations
1	A Surfactant Enables Efficient Membrane Spanning by Non-Aggregating DNA-Based Ion Channels. Molecules, 2022, 27, 578.	1.7	8
2	Nanofluidic Traps by Two-Photon Fabrication for Extended Detection of Single Macromolecules and Colloids in Solution. ACS Applied Nano Materials, 2022, 5, 1995-2005.	2.4	3
3	Sequential assembly and separation of synthetic cell models using microfluidics. Biophysical Journal, 2022, 121, 406a.	0.2	0
4	An ultrasensitive microfluidic approach reveals correlations between the physico-chemical and biological activity of experimental peptide antibiotics. Scientific Reports, 2022, 12, 4005.	1.6	9
5	Lifetime of glass nanopores in a PDMS chip for single-molecule sensing. IScience, 2022, 25, 104191.	1.9	7
6	Deoxyribonucleic Acid Encoded and Size-Defined Ï€-Stacking of Perylene Diimides. Journal of the American Chemical Society, 2022, 144, 368-376.	6.6	15
7	3D flow field measurements outside nanopores. Review of Scientific Instruments, 2022, 93, 054106.	0.6	0
8	Quantifying proton-induced membrane polarization in single biomimetic giant vesicles. Biophysical Journal, 2022, 121, 2223-2232.	0.2	2
9	Split G-Quadruplexes Enhance Nanopore Signals for Simultaneous Identification of Multiple Nucleic Acids. Nano Letters, 2022, 22, 4993-4998.	4.5	12
10	Observing capture with a colloidal model membrane channel. Journal of Physics Condensed Matter, 2022, 34, 344001.	0.7	0
11	Measuring Thousands of Single-Vesicle Leakage Events Reveals the Mode of Action of Antimicrobial Peptides. Analytical Chemistry, 2022, 94, 9530-9539.	3.2	7
12	Dynamics of deterministically positioned singleâ€bond surfaceâ€enhanced Raman scattering from DNA origami assembled in plasmonic nanogaps. Journal of Raman Spectroscopy, 2021, 52, 348-354.	1.2	8
13	Channel-length dependence of particle diffusivity in confinement. Soft Matter, 2021, 17, 5131-5136.	1.2	3
14	Electrical DNA Sequence Mapping Using Oligodeoxynucleotide Labels and Nanopores. ACS Nano, 2021, 15, 2679-2685.	7.3	22
15	Kinetics of Toehold-Mediated DNA Strand Displacement Depend on Fe^{II}₄L₄ Tetrahedron Concentration. Nano Letters, 2021, 21, 1368-1374.	4.5	16
16	DNA Structural Barcode Copying and Random Access. Small Structures, 2021, 2, 2000144.	6.9	16
17	Ionic and molecular transport in aqueous solution through 2D and layered nanoporous membranes. Journal Physics D: Applied Physics, 2021, 54, 183002.	1.3	4
18	Switching Cytolytic Nanopores into Antimicrobial Fractal Ruptures by a Single Side Chain Mutation. ACS Nano, 2021, 15, 9679-9689.	7.3	17

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19	Cations Regulate Membrane Attachment and Functionality of DNA Nanostructures. Journal of the American Chemical Society, 2021, 143, 7358-7367.	6.6	44
20	Image Encoding Using Multiâ€Level DNA Barcodes with Nanopore Readout. Small, 2021, 17, e2100711.	5.2	32
21	Dynamics of driven polymer transport through a nanopore. Nature Physics, 2021, 17, 1043-1049.	6.5	40
22	Experimental Measurement of Relative Path Probabilities and Stochastic Actions. Physical Review X, 2021, 11, .	2.8	5
23	Standardizing characterization of membrane active peptides with microfluidics. Biomicrofluidics, 2021, 15, 041301.	1.2	7
24	Current Fluctuations in Nanopores Reveal the Polymer-Wall Adsorption Potential. Physical Review Letters, 2021, 127, 137801.	2.9	10
25	FeII4L4 tetrahedron binds and aggregates DNA G-quadruplexes. Chemical Science, 2021, 12, 14564-14569.	3.7	7
26	DNA Origami Voltage Sensors for Transmembrane Potentials with Single-Molecule Sensitivity. Nano Letters, 2021, 21, 8634-8641.	4.5	22
27	Design and Assembly of Membrane-Spanning DNA Nanopores. Methods in Molecular Biology, 2021, 2186, 33-48.	0.4	1
28	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
29	A Microfluidic Platform for Sequential Assembly and Separation of Synthetic Cell Models. ACS Synthetic Biology, 2021, 10, 3105-3116.	1.9	13
30	Toward single-molecule proteomics. Science, 2021, 374, 1443-1444.	6.0	7
31	Conformational Control in Main Group Phosphazane Anion Receptors and Transporters. Journal of the American Chemical Society, 2020, 142, 1029-1037.	6.6	19
32	Tunable Anion-Selective Transport through Monolayer Graphene and Hexagonal Boron Nitride. ACS Nano, 2020, 14, 2729-2738.	7.3	36
33	Optimizing Brownian escape rates by potential shaping. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1383-1388.	3.3	36
34	Noise properties of rectifying and non-rectifying nanopores. Nanotechnology, 2020, 31, 10LT01.	1.3	6
35	Direct detection of molecular intermediates from first-passage times. Science Advances, 2020, 6, eaaz4642.	4.7	26
36	Characterization of lipid composition and diffusivity in OLA generated vesicles. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183359.	1.4	22

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37	Tailoring Interleaflet Lipid Transfer with a DNA-based Synthetic Enzyme. Nano Letters, 2020, 20, 4306-4311.	4.5	13
38	Nanopore-Based DNA Hard Drives for Rewritable and Secure Data Storage. Nano Letters, 2020, 20, 3754-3760.	4.5	88
39	Single-cell microfluidics facilitates the rapid quantification of antibiotic accumulation in Gram-negative bacteria. Lab on A Chip, 2020, 20, 2765-2775.	3.1	57
40	Aerosol-jet printing facilitates the rapid prototyping of microfluidic devices with versatile geometries and precise channel functionalization. Applied Materials Today, 2020, 19, 100618.	2.3	22
41	Digital Sensing and Molecular Computation by an Enzyme-Free DNA Circuit. ACS Nano, 2020, 14, 5763-5771.	7.3	48
42	Current Enhancement in Solid-State Nanopores Depends on Three-Dimensional DNA Structure. Nano Letters, 2019, 19, 5661-5666.	4.5	33
43	Fe^{II}₄L₄ Tetrahedron Binds to Nonpaired DNA Bases. Journal of the American Chemical Society, 2019, 141, 11358-11362.	6.6	36
44	Multiplexed DNA Identification Using Site Specific dCas9 Barcodes and Nanopore Sensing. ACS Sensors, 2019, 4, 2065-2072.	4.0	50
45	Nonlinear Electrophoresis of Highly Charged Nonpolarizable Particles. Physical Review Letters, 2019, 123, 014502.	2.9	38
46	Controlling aggregation of cholesterol-modified DNA nanostructures. Nucleic Acids Research, 2019, 47, 11441-11451.	6.5	60
47	All-Optical Detection of Neuronal Membrane Depolarization in Live Cells Using Colloidal Quantum Dots. Nano Letters, 2019, 19, 8539-8549.	4.5	27
48	Scalable integration of nano-, and microfluidics with hybrid two-photon lithography. Microsystems and Nanoengineering, 2019, 5, 40.	3.4	45
49	Cation dependent electroosmotic flow in glass nanopores. Applied Physics Letters, 2019, 115, 113702.	1.5	11
50	Monitoring G-Quadruplex Formation with DNA Carriers and Solid-State Nanopores. Nano Letters, 2019, 19, 7996-8001.	4.5	20
51	A microfluidic platform for the characterisation of membrane active antimicrobials. Lab on A Chip, 2019, 19, 837-844.	3.1	46
52	Density-Dependent Speed-up of Particle Transport in Channels. Physical Review Letters, 2019, 122, 214501.	2.9	15
53	Tailoring the Binding Properties of Phosphazane Anion Receptors and Transporters. Journal of the American Chemical Society, 2019, 141, 8807-8815.	6.6	24
54	An Integrated Microfluidic Platform for Quantifying Drug Permeation across Biomimetic Vesicle Membranes. Molecular Pharmaceutics, 2019, 16, 2494-2501.	2.3	36

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55	Quantum electrodynamics at room temperature coupling a single vibrating molecule with a plasmonic nanocavity. Nature Communications, 2019, 10, 1049.	5.8	114
56	Indole Pulse Signalling Regulates the Cytoplasmic pH of E. coli in a Memory-Like Manner. Scientific Reports, 2019, 9, 3868.	1.6	33
57	Pushing the resolution of dCas9 barcodes for multiplexed DNA identification with nanopore sensors. , 2019, , .		1
58	Digital Data Storage Using DNA Nanostructures and Solid-State Nanopores. Nano Letters, 2019, 19, 1210-1215.	4.5	123
59	Experimental evidence of symmetry breaking of transition-path times. Nature Communications, 2019, 10, 55.	5.8	37
60	Specific Biosensing Using DNA Aptamers and Nanopores. Advanced Functional Materials, 2019, 29, 1807555.	7.8	40
61	DNA Nanotechnology for Building Sensors, Nanopores and Ion-Channels. Advances in Experimental Medicine and Biology, 2019, 1174, 331-370.	0.8	6
62	Thermoâ€Responsive Actuation of a DNA Origami Flexor. Advanced Functional Materials, 2018, 28, 1706410.	7.8	71
63	The Crucial Role of Charge in Thermoresponsiveâ€Polymerâ€Assisted Reversible Dis/Assembly of Gold Nanoparticles. Advanced Optical Materials, 2018, 6, 1701270.	3.6	26
64	Optical Voltage Sensing Using DNA Origami. Nano Letters, 2018, 18, 1962-1971.	4.5	43
65	Suppressed Quenching and Strong-Coupling of Purcell-Enhanced Single-Molecule Emission in Plasmonic Nanocavities. ACS Photonics, 2018, 5, 186-191.	3.2	137
66	Mapping Nanoscale Hotspots with Single-Molecule Emitters Assembled into Plasmonic Nanocavities Using DNA Origami. Nano Letters, 2018, 18, 405-411.	4.5	126
67	QuipuNet: Convolutional Neural Network for Single-Molecule Nanopore Sensing. Nano Letters, 2018, 18, 4040-4045.	4.5	55
68	Combining Affinity Selection and Specific Ion Mobility for Microchip Protein Sensing. Analytical Chemistry, 2018, 90, 10302-10310.	3.2	16
69	Promoting single-file DNA translocations through nanopores using electro-osmotic flow. Journal of Chemical Physics, 2018, 149, 163311.	1.2	32
70	A synthetic enzyme built from DNA flips 107 lipids per second in biological membranes. Nature Communications, 2018, 9, 2426.	5.8	101
71	A microfluidic device for characterizing nuclear deformations. Lab on A Chip, 2017, 17, 805-813.	3.1	33
72	Direction- and Salt-Dependent Ionic Current Signatures for DNA Sensing with Asymmetric Nanopores. Biophysical Journal, 2017, 112, 674-682.	0.2	39

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73	Extrinsic Cation Selectivity of 2D Membranes. ACS Nano, 2017, 11, 1340-1346.	7.3	105
74	Single molecule based SNP detection using designed DNA carriers and solid-state nanopores. Chemical Communications, 2017, 53, 436-439.	2.2	65
75	Particle transport across a channel via an oscillating potential. Physical Review E, 2017, 96, 052401.	0.8	4
76	Blockable Zn₁₀L₁₅ Ion Channels through Subcomponent Selfâ€Assembly. Angewandte Chemie - International Edition, 2017, 56, 15388-15392.	7.2	73
77	Ionic Current-Based Mapping of Short Sequence Motifs in Single DNA Molecules Using Solid-State Nanopores. Nano Letters, 2017, 17, 5199-5205.	4.5	56
78	Asymmetric dynamics of DNA entering and exiting a strongly confining nanopore. Nature Communications, 2017, 8, 380.	5.8	59
79	Blockable Zn₁₀L₁₅ Ion Channels through Subcomponent Selfâ€Assembly. Angewandte Chemie, 2017, 129, 15590-15594.	1.6	17
80	Controlling the Reversible Assembly of Liposomes through a Multistimuli Responsive Anchored DNA. Nano Letters, 2016, 16, 4462-4466.	4.5	39
81	Gap-Dependent Coupling of Agâ€“Au Nanoparticle Heterodimers Using DNA Origami-Based Self-Assembly. ACS Photonics, 2016, 3, 1589-1595.	3.2	75
82	From Ion-Channels to Porins: Engineering DNA-Based Synthetic Counterparts. Biophysical Journal, 2016, 110, 351a.	0.2	0
83	DNA Nanostructures for Single Molecule Protein Sensing with Nanopores. Biophysical Journal, 2016, 110, 654a.	0.2	0
84	Quantifying Protein Concentration using Designed DNA Carriers and Solid-State Nanopores. Biophysical Journal, 2016, 110, 334a.	0.2	1
85	Digitally encoded DNA nanostructures for multiplexed, single-molecule protein sensing with nanopores. Nature Nanotechnology, 2016, 11, 645-651.	15.6	263
86	Quantifying Nanomolar Protein Concentrations Using Designed DNA Carriers and Solid-State Nanopores. Nano Letters, 2016, 16, 3557-3562.	4.5	97
87	Selective Trapping of DNA Using Glass Microcapillaries. Langmuir, 2016, 32, 8525-8532.	1.6	12
88	Nondeterministic self-assembly with asymmetric interactions. Physical Review E, 2016, 94, 022404.	0.8	4
89	Large-Conductance Transmembrane Porin Made from DNA Origami. ACS Nano, 2016, 10, 8207-8214.	7.3	171
90	Translocation frequency of double-stranded DNA through a solid-state nanopore. Physical Review E, 2016, 93, 022401.	0.8	75

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91	Direct Optofluidic Measurement of the Lipid Permeability of Fluoroquinolones. Scientific Reports, 2016, 6, 32824.	1.6	34
92	Ion Channels Made from a Single Membrane-Spanning DNA Duplex. Nano Letters, 2016, 16, 4665-4669.	4.5	124
93	DNA Origami for Nanopores: Design, Developments and Challenges. Biophysical Journal, 2016, 110, 32a-33a.	0.2	0
94	Enhancing nanopore sensing with DNA nanotechnology. Nature Nanotechnology, 2016, 11, 106-108.	15.6	66
95	Programming Light-Harvesting Efficiency Using DNA Origami. Nano Letters, 2016, 16, 2369-2374.	4.5	100
96	Dependence of norfloxacin diffusion across bilayers on lipid composition. Soft Matter, 2016, 12, 2135-2144.	1.2	25
97	Nondecaying Hydrodynamic Interactions along Narrow Channels. Physical Review Letters, 2015, 115, 038301.	2.9	47
98	Measuring the proton selectivity of graphene membranes. Applied Physics Letters, 2015, 107, .	1.5	56
99	Nanopore analysis of amyloid fibrils formed by lysozyme aggregation. Analyst, The, 2015, 140, 4882-4886.	1.7	27
100	Protein reconstitution into freestanding planar lipid membranes for electrophysiological characterization. Nature Protocols, 2015, 10, 188-198.	5.5	134
101	Electroosmotic Flow Reversal Outside Glass Nanopores. Nano Letters, 2015, 15, 695-702.	4.5	49
102	Ionic Conductivity, Structural Deformation, and Programmable Anisotropy of DNA Origami in Electric Field. ACS Nano, 2015, 9, 1420-1433.	7.3	86
103	Free-standing graphene membranes on glass nanopores for ionic current measurements. Applied Physics Letters, 2015, 106, .	1.5	45
104	Real-time deformability cytometry: on-the-fly cell mechanical phenotyping. Nature Methods, 2015, 12, 199-202.	9.0	580
105	Specific Protein Detection Using Designed DNA Carriers and Nanopores. Journal of the American Chemical Society, 2015, 137, 2035-2041.	6.6	167
106	Camera-based three-dimensional real-time particle tracking at kHz rates and Ã…ngstrÃ¶m accuracy. Nature Communications, 2015, 6, 5885.	5.8	109
107	Electroosmotic flow rectification in conical nanopores. Nanotechnology, 2015, 26, 275202.	1.3	54
108	DNA-Tile Structures Induce Ionic Currents through Lipid Membranes. Nano Letters, 2015, 15, 3134-3138.	4.5	125

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109	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
110	DNA origami based assembly of gold nanoparticle dimers for SERS detection. Proceedings of SPIE, 2015, , .	0.8	1
111	Bilayer-Spanning DNA Nanopores with Voltage-Switching between Open and Closed State. ACS Nano, 2015, 9, 1117-1126.	7.3	118
112	The Indole Pulse: A New Perspective on Indole Signalling in Escherichia coli. PLoS ONE, 2014, 9, e93168.	1.1	66
113	Bacterial Metabolite Indole Modulates Incretin Secretion from Intestinal Enteroendocrine L Cells. Cell Reports, 2014, 9, 1202-1208.	2.9	368
114	Local characterization of hindered Brownian motion by using digital video microscopy and 3D particle tracking. Review of Scientific Instruments, 2014, 85, 023708.	0.6	30
115	Diffusion coefficients and particle transport in synthetic membrane channels. European Physical Journal: Special Topics, 2014, 223, 3145-3163.	1.2	13
116	Voltage-Dependent Properties of DNA Origami Nanopores. Nano Letters, 2014, 14, 1270-1274.	4.5	58
117	Auxetic nuclei in embryonic stem cells exiting pluripotency. Nature Materials, 2014, 13, 638-644.	13.3	145
118	DNA origami based assembly of gold nanoparticle dimers for surface-enhanced Raman scattering. Nature Communications, 2014, 5, 3448.	5.8	377
119	Influence of internal viscoelastic modes on the Brownian motion of a Î»-DNA coated colloid. Soft Matter, 2014, 10, 1738.	1.2	1
120	Measurement of the Position-Dependent Electrophoretic Force on DNA in a Glass Nanocapillary. Nano Letters, 2014, 14, 6606-6613.	4.5	25
121	Bacterial nucleoid structure probed by active drag and resistive pulse sensing. Integrative Biology (United Kingdom), 2014, 6, 184-191.	0.6	9
122	DNA origami nanopores: developments, challenges and perspectives. Nanoscale, 2014, 6, 14121-14132.	2.8	63
123	A label-free microfluidic assay to quantitatively study antibiotic diffusion through lipid membranes. Lab on A Chip, 2014, 14, 2303-2308.	3.1	36
124	Anisotropic diffusion of spherical particles in closely confining microchannels. Physical Review E, 2014, 89, 062305.	0.8	52
125	Giant Unilamellar Vesicles and Suspended Nanobilayers as Model Systems for Biophysical Research. Behavior Research Methods, 2014, , 67-89.	2.3	0
126	Channel-Facilitated Diffusion Boosted by Particle Binding at the Channel Entrance. Physical Review Letters, 2014, 113, 048102.	2.9	38

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127	Membrane-Spanning DNA Nanopores. Biomimetic Chemical Structures for Single-Molecule Research and Nanotechnology. Biophysical Journal, 2014, 106, 632a.	0.2	0
128	Selective transport control on molecular velcro made from intrinsically disordered proteins. Nature Nanotechnology, 2014, 9, 525-530.	15.6	42
129	Nanopores formed by DNA origami: A review. FEBS Letters, 2014, 588, 3564-3570.	1.3	72
130	DNA Interactions in Crowded Nanopores. Nano Letters, 2013, 13, 2798-2802.	4.5	36
131	Bacterial Signal Indole Modifies the Physicochemical Properties of Lipid Membranes. Biophysical Journal, 2013, 104, 251a.	0.2	0
132	Electrophoretic Forces on Multiple DNA Molecules in a Nanopore. Biophysical Journal, 2013, 104, 517a.	0.2	0
133	Lipidâ€Bilayerâ€Spanning DNA Nanopores with a Bifunctional Porphyrin Anchor. Angewandte Chemie - International Edition, 2013, 52, 12069-12072.	7.2	190
134	DNA origami nanopores: an emerging tool in biomedicine. Nanomedicine, 2013, 8, 1551-1554.	1.7	16
135	Nanotubes Complexed with DNA and Proteins for Resistive-Pulse Sensing. ACS Nano, 2013, 7, 8857-8869.	7.3	30
136	A Landauâ€"Squire Nanojet. Nano Letters, 2013, 13, 5141-5146.	4.5	40
137	DNA Translocation. , 2013, , 31-58.		3
138	Lipid-coated nanocapillaries for DNA sensing. Analyst, The, 2013, 138, 104-106.	1.7	31
139	The Effect of Bacterial Signal Indole on the Electrical Properties of Lipid Membranes. ChemPhysChem, 2013, 14, 417-423.	1.0	34
140	DNA Origami Nanopores. Biophysical Journal, 2013, 104, 517a.	0.2	0
141	Single Protein Molecule Detection by Glass Nanopores. ACS Nano, 2013, 7, 4129-4134.	7.3	228
142	Multiplexed ionic current sensing with glass nanopores. Lab on A Chip, 2013, 13, 1859.	3.1	63
143	DNA Origami Nanopores for Controlling DNA Translocation. ACS Nano, 2013, 7, 6024-6030.	7.3	118
144	Lipid Nanobilayers to Host Biological Nanopores for DNA Translocations. Langmuir, 2013, 29, 355-364.	1.6	24

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145	Lipidâ€Bilayerâ€Spanning DNA Nanopores with a Bifunctional Porphyrin Anchor. Angewandte Chemie, 2013, 125, 12291-12294.	1.6	28
146	Investigating Membrane Transport with Optical Tweezers. , 2013, , .		0
147	Dynamic single-molecule force spectroscopy using optical tweezers and nanopores. Proceedings of SPIE, 2013, , .	0.8	0
148	Rapid internal contraction boosts DNA friction. Nature Communications, 2013, 4, 1780.	5.8	22
149	Optimizing Diffusive Transport Through a Synthetic Membrane Channel. Advanced Materials, 2013, 25, 844-849.	11.1	40
150	Studying DNA translocation in nanocapillaries using single molecule fluorescence. Applied Physics Letters, 2012, 101, 223704.	1.5	41
151	Perpendicular coupling to in-plane photonics using arc waveguides fabricated via two-photon polymerization. Applied Physics Letters, 2012, 100, .	1.5	18
152	Viscoelastic Properties of Differentiating Blood Cells Are Fate- and Function-Dependent. PLoS ONE, 2012, 7, e45237.	1.1	162
153	Colloid Flow Control in Microchannels and Detection by Laser Scattering. , 2012, , 45-49.		1
154	Voltageâ€driven transport of ions and <scp>DNA</scp> through nanocapillaries. Electrophoresis, 2012, 33, 3480-3487.	1.3	54
155	Nanopores â€" mission accomplished and what next?. Physics of Life Reviews, 2012, 9, 164-166.	1.5	3
156	Microfluidics Reveals a Flow-Induced Large-Scale Polymorphism of Protein Aggregates. Journal of Physical Chemistry Letters, 2012, 3, 2803-2807.	2.1	40
157	Indole prevents Escherichia coli cell division by modulating membrane potential. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1590-1594.	1.4	142
158	Optical Tweezers for Mechanical Control Over DNA in a Nanopore. Methods in Molecular Biology, 2012, 870, 115-134.	0.4	6
159	Analyzing Single DNA Molecules by Nanopore Translocation. Methods in Molecular Biology, 2012, 870, 135-145.	0.4	5
160	Escherichia Coli Regulates Cell Division by Modulating Membrane Potential. Biophysical Journal, 2012, 102, 714a-715a.	0.2	0
161	DNA Origami Nanopores. Nano Letters, 2012, 12, 512-517.	4.5	267
162	Parallel sub-micrometre channels with different dimensions for laser scattering detection. Lab on A Chip, 2011, 11, 3365.	3.1	29

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163	Micro-rheology on (polymer-grafted) colloids using optical tweezers. Journal of Physics Condensed Matter, 2011, 23, 184114.	0.7	17
164	Nanocapillaries and optical tweezers for studies on DNA in confinement. Proceedings of SPIE, 2011, , .	0.8	0
165	Note: Direct force and ionic-current measurements on DNA in a nanocapillary. Review of Scientific Instruments, 2011, 82, 086102.	0.6	17
166	Simple Reconstitution of Protein Pores in Nano Lipid Bilayers. Nano Letters, 2011, 11, 3334-3340.	4.5	39
167	Self-aware particles. Nature, 2011, 478, 45-46.	13.7	5
168	Single Molecule Studies of Nuclear Transport. Biophysical Journal, 2011, 100, 249a.	0.2	0
169	DNA condensation by TmHU studied by optical tweezers, AFM and molecular dynamics simulations. Journal of Biological Physics, 2011, 37, 117-131.	0.7	7
170	Indole Transport across Escherichia coli Membranes. Journal of Bacteriology, 2011, 193, 1793-1798.	1.0	84
171	Controlling molecular transport through nanopores. Journal of the Royal Society Interface, 2011, 8, 1369-1378.	1.5	157
172	High-speed video-based tracking of optically trapped colloids. Journal of Optics (United Kingdom), 2011, 13, 044011.	1.0	24
173	Probing DNA with micro- and nanocapillaries and optical tweezers. Journal of Physics Condensed Matter, 2010, 22, 454113.	0.7	31
174	DNA tug of war: tether forces on DNA in a nanopore. Proceedings of SPIE, 2010, , .	0.8	0
175	Detecting DNA Folding with Nanocapillaries. Nano Letters, 2010, 10, 2493-2497.	4.5	184
176	Real-time particle tracking at 10,000 fps using optical fiber illumination. Optics Express, 2010, 18, 22722.	1.7	78
177	Tether forces in DNAelectrophoresis. Chemical Society Reviews, 2010, 39, 939-947.	18.7	67
178	Modeling of colloidal transport in capillaries. Journal of Applied Physics, 2009, 105, .	1.1	30
179	Origin of the electrophoretic force on DNA in solid-state nanopores. Nature Physics, 2009, 5, 347-351.	6.5	327
180	Single colloid electrophoresis. Journal of Colloid and Interface Science, 2009, 337, 260-264.	5.0	32

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181	Sensing DNA-coatings of microparticles using micropipettes. Biosensors and Bioelectronics, 2009, 24, 2423-2427.	5.3	47
182	Phase-State Dependent Current Fluctuations in Pure Lipid Membranes. Biophysical Journal, 2009, 96, 4592-4597.	0.2	72
183	Inserting and Manipulating DNA in a Nanopore with Optical Tweezers. Methods in Molecular Biology, 2009, 544, 95-112.	0.4	10
184	Optical tweezers to study single Protein A/Immunoglobulin G interactions at varying conditions. European Biophysics Journal, 2008, 37, 927-934.	1.2	19
185	Noise in solid-state nanopores. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 417-421.	3.3	315
186	Optical tweezers with 2.5â€‚kHz bandwidth video detection for single-colloid electrophoresis. Review of Scientific Instruments, 2008, 79, 023710.	0.6	64
187	Forces between single pairs of charged colloids in aqueous salt solutions. Physical Review E, 2007, 76, 031403.	0.8	89
188	Kinetics of TmHU binding to DNA as observed by optical tweezers. Microscopy Research and Technique, 2007, 70, 938-943.	1.2	7
189	Nanobubbles in Solid-State Nanopores. Physical Review Letters, 2006, 97, 088101.	2.9	121
190	Salt Dependence of Ion Transport and DNA Translocation through Solid-State Nanopores. Nano Letters, 2006, 6, 89-95.	4.5	735
191	Direct force measurements on DNA in a solid-state nanopore. Nature Physics, 2006, 2, 473-477.	6.5	587
192	Optical tweezers for force measurements on DNA in nanopores. Review of Scientific Instruments, 2006, 77, 105105.	0.6	128
193	Nanopore Tomography of a Laser Focus. Nano Letters, 2005, 5, 2253-2256.	4.5	78
194	Spin blockade in capacitively coupled quantum dots. Applied Physics Letters, 2004, 85, 606-608.	1.5	18
195	Fabrication of double quantum dots by combining afm and e-beam lithography. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 483-486.	1.3	4
196	Photoluminescence of self-assembled InAs/AlAs quantum dots as a function of density. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 117-119.	1.3	5
197	Aharonovâ€"Bohm effect of a quantum ring in the Kondo regime. Physica Status Solidi (B): Basic Research, 2003, 238, 331-334.	0.7	1
198	Fano resonances in semiconductor quantum dots. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 1305-1308.	0.8	3

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199	Kinetically limited quantum dot formation on AlAs(100) surfaces. Journal of Crystal Growth, 2003, 249, 477-482.	0.7	23
200	Combined atomic force microscope and electron-beam lithography used for the fabrication of variable-coupling quantum dots. Applied Physics Letters, 2003, 83, 1163-1165.	1.5	15
201	Tuning the onset voltage of resonant tunneling through InAs quantum dots by growth parameters. Applied Physics Letters, 2003, 82, 1209-1211.	1.5	14
202	Kondo Effect in a Few-Electron Quantum Ring. Physical Review Letters, 2003, 90, 196601.	2.9	130
203	Fabrication of quantum point contacts by engraving GaAs/AlGaAs heterostructures with a diamond tip. Applied Physics Letters, 2002, 81, 2023-2025.	1.5	24
204	Flux-quantum-modulated Kondo conductance in a multielectron quantum dot. Physical Review B, 2002, 66, .	1.1	22
205	AharonovÂBohm oscillations of a tuneable quantum ring. Semiconductor Science and Technology, 2002, 17, L22-L24.	1.0	82
206	Diamond cantilever with integrated tip for nanomachining. Diamond and Related Materials, 2002, 11, 667-671.	1.8	20
207	Influence of the size of self-assembled InAs/AlAs quantum dots on photoluminescence and resonant tunneling. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 761-764.	1.3	12
208	Direct fabrication of parallel quantum dots with an atomic force microscope. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 1155-1158.	1.3	7
209	Fabrication of Quantum Dots with Scanning Probe Nanolithography. Physica Status Solidi (B): Basic Research, 2001, 224, 681-684.	0.7	6
210	Controlled mechanical AFM machining of two-dimensional electron systems: fabrication of a single-electron transistor. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 6, 860-863.	1.3	35
211	Fabrication of a single-electron transistor by current-controlled local oxidation of a two-dimensional electron system. Applied Physics Letters, 2000, 76, 457-459.	1.5	80
212	Nanomachining of mesoscopic electronic devices using an atomic force microscope. Applied Physics Letters, 1999, 75, 1107-1109.	1.5	62
213	Fractional Aharonov-Bohm Oscillations in a Kondo Correlated Few-Electron Quantum Ring. Advances in Solid State Physics, 0, , 113-124.	0.8	2