# Ulrich F Keyser

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 189 papers | 9,326 citations | 51 h-index | 91 g-index |
| 236 ext. papers | 11,082 ext. citations | 8.5 avg, IF | 6.5 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 189 | An ultrasensitive microfluidic approach reveals correlations between the physico-chemical and biological activity of experimental peptide antibiotics.. *Scientific Reports*, **2022**, 12, 4005 | 4.9 | 1 |
| 188 | Lifetime of glass nanopores in a PDMS chip for single-molecule sensing.. *IScience*, **2022**, 25, 104191 | 6.1 | 0 |
| 187 | 3D flow field measurements outside nanopores. *Review of Scientific Instruments*, **2022**, 93, 054106 | 1.7 | |
| 186 | Toward single-molecule proteomics.. *Science*, **2021**, 374, 1443-1444 | 33.3 | 0 |
| 185 | Membrane Activity of a DNA-Based Ion Channel Depends on the Stability of Its Double-Stranded Structure. *Nano Letters*, **2021**, 21, 9789-9796 | 11.5 | 0 |
| 184 | A Microfluidic Platform for Sequential Assembly and Separation of Synthetic Cell Models. *ACS Synthetic Biology*, **2021**, 10, 3105-3116 | 5.7 | 2 |
| 183 | Fe L tetrahedron binds and aggregates DNA G-quadruplexes. *Chemical Science*, **2021**, 12, 14564-14569 | 9.4 | 0 |
| 182 | DNA Origami Voltage Sensors for Transmembrane Potentials with Single-Molecule Sensitivity. *Nano Letters*, **2021**, 21, 8634-8641 | 11.5 | 5 |
| 181 | Design and Assembly of Membrane-Spanning DNA Nanopores. *Methods in Molecular Biology*, **2021**, 2186, 33-48 | 1.4 | |
| 180 | Switching Cytolytic Nanopores into Antimicrobial Fractal Ruptures by a Single Side Chain Mutation. *ACS Nano*, **2021**, 15, 9679-9689 | 16.7 | 9 |
| 179 | Cations Regulate Membrane Attachment and Functionality of DNA Nanostructures. *Journal of the American Chemical Society*, **2021**, 143, 7358-7367 | 16.4 | 10 |
| 178 | Image Encoding Using Multi-Level DNA Barcodes with Nanopore Readout. *Small*, **2021**, 17, e2100711 | 11 | 5 |
| 177 | Dynamics of driven polymer transport through a nanopore. *Nature Physics*, **2021**, 17, 1043-1049 | 16.2 | 5 |
| 176 | Experimental Measurement of Relative Path Probabilities and Stochastic Actions. *Physical Review X*, **2021**, 11, | 9.1 | 1 |
| 175 | Dynamics of deterministically positioned single-bond surface-enhanced Raman scattering from DNA origami assembled in plasmonic nanogaps. *Journal of Raman Spectroscopy*, **2021**, 52, 348-354 | 2.3 | 3 |
| 174 | Channel-length dependence of particle diffusivity in confinement. *Soft Matter*, **2021**, 17, 5131-5136 | 3.6 | 1 |
| 173 | Electrical DNA Sequence Mapping Using Oligodeoxynucleotide Labels and Nanopores. *ACS Nano*, **2021**, 15, 2679-2685 | 16.7 | 6 |

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| 172 | Kinetics of Toehold-Mediated DNA Strand Displacement Depend on FeL Tetrahedron Concentration. *Nano Letters*, **2021**, 21, 1368-1374 | 11.5 | 9 |
| 171 | DNA Structural Barcode Copying and Random Access. *Small Structures*, **2021**, 2, 2000144 | 8.7 | 4 |
| 170 | Ionic and molecular transport in aqueous solution through 2D and layered nanoporous membranes. *Journal Physics D: Applied Physics*, **2021**, 54, 183002 | 3 | 1 |
| 169 | Standardizing characterization of membrane active peptides with microfluidics. *Biomicrofluidics*, **2021**, 15, 041301 | 3.2 | 2 |
| 168 | Current Fluctuations in Nanopores Reveal the Polymer-Wall Adsorption Potential. *Physical Review Letters*, **2021**, 127, 137801 | 7.4 | 1 |
| 167 | Direct detection of molecular intermediates from first-passage times. *Science Advances*, **2020**, 6, eaaz4642 | 14.3 | 12 |
| 166 | Characterization of lipid composition and diffusivity in OLA generated vesicles. *Biochimica Et Biophysica Acta - Biomembranes*, **2020**, 1862, 183359 | 3.8 | 13 |
| 165 | Tailoring Interleaflet Lipid Transfer with a DNA-based Synthetic Enzyme. *Nano Letters*, **2020**, 20, 4306-4311 | 11.5 | 7 |
| 164 | Nanopore-Based DNA Hard Drives for Rewritable and Secure Data Storage. *Nano Letters*, **2020**, 20, 3754-3760 | 11.5 | 35 |
| 163 | Single-cell microfluidics facilitates the rapid quantification of antibiotic accumulation in Gram-negative bacteria. *Lab on A Chip*, **2020**, 20, 2765-2775 | 7.2 | 24 |
| 162 | Aerosol-jet printing facilitates the rapid prototyping of microfluidic devices with versatile geometries and precise channel functionalization. *Applied Materials Today*, **2020**, 19, 100618 | 6.6 | 10 |
| 161 | Conformational Control in Main Group Phosphazane Anion Receptors and Transporters. *Journal of the American Chemical Society*, **2020**, 142, 1029-1037 | 16.4 | 8 |
| 160 | Tunable Anion-Selective Transport through Monolayer Graphene and Hexagonal Boron Nitride. *ACS Nano*, **2020**, 14, 2729-2738 | 16.7 | 17 |
| 159 | Optimizing Brownian escape rates by potential shaping. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 1383-1388 | 11.5 | 20 |
| 158 | Digital Sensing and Molecular Computation by an Enzyme-Free DNA Circuit. *ACS Nano*, **2020**, 14, 5763-5771 | 16.7 | 22 |
| 157 | Scalable integration of nano-, and microfluidics with hybrid two-photon lithography. *Microsystems and Nanoengineering*, **2019**, 5, 40 | 7.7 | 28 |
| 156 | Cation dependent electroosmotic flow in glass nanopores. *Applied Physics Letters*, **2019**, 115, 113702 | 3.4 | 8 |
| 155 | Monitoring G-Quadruplex Formation with DNA Carriers and Solid-State Nanopores. *Nano Letters*, **2019**, 19, 7996-8001 | 11.5 | 10 |

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| 154 | A microfluidic platform for the characterisation of membrane active antimicrobials. *Lab on A Chip*, **2019**, 19, 837-844 | 7.2 | 31 |
| 153 | Density-Dependent Speed-up of Particle Transport in Channels. *Physical Review Letters*, **2019**, 122, 214501 | 7.4 | 7 |
| 152 | Tailoring the Binding Properties of Phosphazane Anion Receptors and Transporters. *Journal of the American Chemical Society*, **2019**, 141, 8807-8815 | 16.4 | 14 |
| 151 | An Integrated Microfluidic Platform for Quantifying Drug Permeation across Biomimetic Vesicle Membranes. *Molecular Pharmaceutics*, **2019**, 16, 2494-2501 | 5.6 | 22 |
| 150 | Quantum electrodynamics at room temperature coupling a single vibrating molecule with a plasmonic nanocavity. *Nature Communications*, **2019**, 10, 1049 | 17.4 | 80 |
| 149 | Indole Pulse Signalling Regulates the Cytoplasmic pH of E. coli in a Memory-Like Manner. *Scientific Reports*, **2019**, 9, 3868 | 4.9 | 17 |
| 148 | Current Enhancement in Solid-State Nanopores Depends on Three-Dimensional DNA Structure. *Nano Letters*, **2019**, 19, 5661-5666 | 11.5 | 19 |
| 147 | FeL Tetrahedron Binds to Nonpaired DNA Bases. *Journal of the American Chemical Society*, **2019**, 141, 11358-11362 | 16.4 | 21 |
| 146 | Multiplexed DNA Identification Using Site Specific dCas9 Barcodes and Nanopore Sensing. *ACS Sensors*, **2019**, 4, 2065-2072 | 9.2 | 32 |
| 145 | Nonlinear Electrophoresis of Highly Charged Nonpolarizable Particles. *Physical Review Letters*, **2019**, 123, 014502 | 7.4 | 14 |
| 144 | Controlling aggregation of cholesterol-modified DNA nanostructures. *Nucleic Acids Research*, **2019**, 47, 11441-11451 | 20.1 | 23 |
| 143 | All-Optical Detection of Neuronal Membrane Depolarization in Live Cells Using Colloidal Quantum Dots. *Nano Letters*, **2019**, 19, 8539-8549 | 11.5 | 19 |
| 142 | DNA Nanotechnology for Building Sensors, Nanopores and Ion-Channels. *Advances in Experimental Medicine and Biology*, **2019**, 1174, 331-370 | 3.6 | 2 |
| 141 | Noise properties of rectifying and non-rectifying nanopores. *Nanotechnology*, **2019**, 31, 10LT01 | 3.4 | 5 |
| 140 | Digital Data Storage Using DNA Nanostructures and Solid-State Nanopores. *Nano Letters*, **2019**, 19, 1210-1215 | 11.5 | 58 |
| 139 | Experimental evidence of symmetry breaking of transition-path times. *Nature Communications*, **2019**, 10, 55 | 17.4 | 26 |
| 138 | Specific Biosensing Using DNA Aptamers and Nanopores. *Advanced Functional Materials*, **2019**, 29, 1807556 | 15.6 | 18 |
| 137 | Thermo-Responsive Actuation of a DNA Origami Flexor. *Advanced Functional Materials*, **2018**, 28, 1706410 | 15.6 | 52 |

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|---|---|---|---|
| 136 | The Crucial Role of Charge in Thermoresponsive-Polymer-Assisted Reversible Dis/Assembly of Gold Nanoparticles. *Advanced Optical Materials*, **2018**, 6, 1701270 | 8.1 | 19 |
| 135 | Optical Voltage Sensing Using DNA Origami. *Nano Letters*, **2018**, 18, 1962-1971 | 11.5 | 31 |
| 134 | Suppressed Quenching and Strong-Coupling of Purcell-Enhanced Single-Molecule Emission in Plasmonic Nanocavities. *ACS Photonics*, **2018**, 5, 186-191 | 6.3 | 99 |
| 133 | Combining Affinity Selection and Specific Ion Mobility for Microchip Protein Sensing. *Analytical Chemistry*, **2018**, 90, 10302-10310 | 7.8 | 14 |
| 132 | Promoting single-file DNA translocations through nanopores using electro-osmotic flow. *Journal of Chemical Physics*, **2018**, 149, 163311 | 3.9 | 18 |
| 131 | A synthetic enzyme built from DNA flips 10 lipids per second in biological membranes. *Nature Communications*, **2018**, 9, 2426 | 17.4 | 68 |
| 130 | Mapping Nanoscale Hotspots with Single-Molecule Emitters Assembled into Plasmonic Nanocavities Using DNA Origami. *Nano Letters*, **2018**, 18, 405-411 | 11.5 | 97 |
| 129 | QuipuNet: Convolutional Neural Network for Single-Molecule Nanopore Sensing. *Nano Letters*, **2018**, 18, 4040-4045 | 11.5 | 35 |
| 128 | A microfluidic device for characterizing nuclear deformations. *Lab on A Chip*, **2017**, 17, 805-813 | 7.2 | 18 |
| 127 | Direction- and Salt-Dependent Ionic Current Signatures for DNA Sensing with Asymmetric Nanopores. *Biophysical Journal*, **2017**, 112, 674-682 | 2.9 | 23 |
| 126 | Extrinsic Cation Selectivity of 2D Membranes. *ACS Nano*, **2017**, 11, 1340-1346 | 16.7 | 71 |
| 125 | Particle transport across a channel via an oscillating potential. *Physical Review E*, **2017**, 96, 052401 | 2.4 | 4 |
| 124 | Blockable Zn L Ion Channels through Subcomponent Self-Assembly. *Angewandte Chemie - International Edition*, **2017**, 56, 15388-15392 | 16.4 | 43 |
| 123 | Ionic Current-Based Mapping of Short Sequence Motifs in Single DNA Molecules Using Solid-State Nanopores. *Nano Letters*, **2017**, 17, 5199-5205 | 11.5 | 39 |
| 122 | Asymmetric dynamics of DNA entering and exiting a strongly confining nanopore. *Nature Communications*, **2017**, 8, 380 | 17.4 | 43 |
| 121 | Blockable Zn10L15 Ion Channels through Subcomponent Self-Assembly. *Angewandte Chemie*, **2017**, 129, 15590-15594 | 3.6 | 12 |
| 120 | Single molecule based SNP detection using designed DNA carriers and solid-state nanopores. *Chemical Communications*, **2016**, 53, 436-439 | 5.8 | 49 |
| 119 | Translocation frequency of double-stranded DNA through a solid-state nanopore. *Physical Review E* , **2016**, 93, 022401 | 2.4 | 47 |

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| 118 | Direct Optofluidic Measurement of the Lipid Permeability of Fluoroquinolones. *Scientific Reports*, **2016**, 6, 32824 | 4.9 | 23 |
| 117 | Ion Channels Made from a Single Membrane-Spanning DNA Duplex. *Nano Letters*, **2016**, 16, 4665-9 | 11.5 | 87 |
| 116 | Enhancing nanopore sensing with DNA nanotechnology. *Nature Nanotechnology*, **2016**, 11, 106-8 | 28.7 | 51 |
| 115 | Programming Light-Harvesting Efficiency Using DNA Origami. *Nano Letters*, **2016**, 16, 2369-74 | 11.5 | 80 |
| 114 | Dependence of norfloxacin diffusion across bilayers on lipid composition. *Soft Matter*, **2016**, 12, 2135-44 | 3.6 | 17 |
| 113 | Controlling the Reversible Assembly of Liposomes through a Multistimuli Responsive Anchored DNA. *Nano Letters*, **2016**, 16, 4462-6 | 11.5 | 29 |
| 112 | Gap-Dependent Coupling of Ag□Au Nanoparticle Heterodimers Using DNA Origami-Based Self-Assembly. *ACS Photonics*, **2016**, 3, 1589-1595 | 6.3 | 66 |
| 111 | Digitally encoded DNA nanostructures for multiplexed, single-molecule protein sensing with nanopores. *Nature Nanotechnology*, **2016**, 11, 645-51 | 28.7 | 180 |
| 110 | Quantifying Nanomolar Protein Concentrations Using Designed DNA Carriers and Solid-State Nanopores. *Nano Letters*, **2016**, 16, 3557-62 | 11.5 | 76 |
| 109 | Selective Trapping of DNA Using Glass Microcapillaries. *Langmuir*, **2016**, 32, 8525-32 | 4 | 11 |
| 108 | Nondeterministic self-assembly with asymmetric interactions. *Physical Review E*, **2016**, 94, 022404 | 2.4 | 3 |
| 107 | Large-Conductance Transmembrane Porin Made from DNA Origami. *ACS Nano*, **2016**, 10, 8207-14 | 16.7 | 124 |
| 106 | Camera-based three-dimensional real-time particle tracking at kHz rates and Ångström accuracy. *Nature Communications*, **2015**, 6, 5885 | 17.4 | 79 |
| 105 | Electroosmotic flow rectification in conical nanopores. *Nanotechnology*, **2015**, 26, 275202 | 3.4 | 47 |
| 104 | DNA-Tile Structures Induce Ionic Currents through Lipid Membranes. *Nano Letters*, **2015**, 15, 3134-8 | 11.5 | 93 |
| 103 | Quantification of Fluoroquinolone Uptake through the Outer Membrane Channel OmpF of Escherichia coli. *Journal of the American Chemical Society*, **2015**, 137, 13836-43 | 16.4 | 45 |
| 102 | Bilayer-spanning DNA nanopores with voltage-switching between open and closed state. *ACS Nano*, **2015**, 9, 1117-26 | 16.7 | 90 |
| 101 | Nondecaying Hydrodynamic Interactions along Narrow Channels. *Physical Review Letters*, **2015**, 115, 038301 | 7.4 | 30 |

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|---|---|---|---|
| 100 | Measuring the proton selectivity of graphene membranes. *Applied Physics Letters*, **2015**, 107, 213104 | 3.4 | 42 |
| 99 | Nanopore analysis of amyloid fibrils formed by lysozyme aggregation. *Analyst, The*, **2015**, 140, 4882-6 | 5 | 24 |
| 98 | Protein reconstitution into freestanding planar lipid membranes for electrophysiological characterization. *Nature Protocols*, **2015**, 10, 188-98 | 18.8 | 96 |
| 97 | Electroosmotic flow reversal outside glass nanopores. *Nano Letters*, **2015**, 15, 695-702 | 11.5 | 40 |
| 96 | Ionic conductivity, structural deformation, and programmable anisotropy of DNA origami in electric field. *ACS Nano*, **2015**, 9, 1420-33 | 16.7 | 69 |
| 95 | Free-standing graphene membranes on glass nanopores for ionic current measurements. *Applied Physics Letters*, **2015**, 106, 023119 | 3.4 | 40 |
| 94 | Real-time deformability cytometry: on-the-fly cell mechanical phenotyping. *Nature Methods*, **2015**, 12, 199-202, 4 p following 202 | 21.6 | 382 |
| 93 | Specific protein detection using designed DNA carriers and nanopores. *Journal of the American Chemical Society*, **2015**, 137, 2035-41 | 16.4 | 130 |
| 92 | Voltage-dependent properties of DNA origami nanopores. *Nano Letters*, **2014**, 14, 1270-4 | 11.5 | 49 |
| 91 | Auxetic nuclei in embryonic stem cells exiting pluripotency. *Nature Materials*, **2014**, 13, 638-644 | 27 | 113 |
| 90 | DNA origami based assembly of gold nanoparticle dimers for surface-enhanced Raman scattering. *Nature Communications*, **2014**, 5, 3448 | 17.4 | 316 |
| 89 | Influence of internal viscoelastic modes on the Brownian motion of a □DNA coated colloid. *Soft Matter*, **2014**, 10, 1738-45 | 3.6 | 1 |
| 88 | Measurement of the position-dependent electrophoretic force on DNA in a glass nanocapillary. *Nano Letters*, **2014**, 14, 6606-13 | 11.5 | 20 |
| 87 | Bacterial nucleoid structure probed by active drag and resistive pulse sensing. *Integrative Biology (United Kingdom)*, **2014**, 6, 184-91 | 3.7 | 8 |
| 86 | DNA origami nanopores: developments, challenges and perspectives. *Nanoscale*, **2014**, 6, 14121-32 | 7.7 | 61 |
| 85 | A label-free microfluidic assay to quantitatively study antibiotic diffusion through lipid membranes. *Lab on A Chip*, **2014**, 14, 2303-8 | 7.2 | 22 |
| 84 | Anisotropic diffusion of spherical particles in closely confining microchannels. *Physical Review E*, **2014**, 89, 062305 | 2.4 | 46 |
| 83 | Giant Unilamellar Vesicles and Suspended Nanobilayers as Model Systems for Biophysical Research. *Behavior Research Methods*, **2014**, 67-89 | 6.1 | |

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| 82 | Channel-facilitated diffusion boosted by particle binding at the channel entrance. *Physical Review Letters*, **2014**, 113, 048102 | 7.4 | 31 |
| 81 | Selective transport control on molecular velcro made from intrinsically disordered proteins. *Nature Nanotechnology*, **2014**, 9, 525-30 | 28.7 | 30 |
| 80 | Nanopores formed by DNA origami: a review. *FEBS Letters*, **2014**, 588, 3564-70 | 3.8 | 59 |
| 79 | The indole pulse: a new perspective on indole signalling in Escherichia coli. *PLoS ONE*, **2014**, 9, e93168 | 3.7 | 41 |
| 78 | Bacterial metabolite indole modulates incretin secretion from intestinal enteroendocrine L cells. *Cell Reports*, **2014**, 9, 1202-8 | 10.6 | 257 |
| 77 | Local characterization of hindered Brownian motion by using digital video microscopy and 3D particle tracking. *Review of Scientific Instruments*, **2014**, 85, 023708 | 1.7 | 23 |
| 76 | Diffusion coefficients and particle transport in synthetic membrane channels. *European Physical Journal: Special Topics*, **2014**, 223, 3145-3163 | 2.3 | 9 |
| 75 | DNA interactions in crowded nanopores. *Nano Letters*, **2013**, 13, 2798-802 | 11.5 | 34 |
| 74 | Lipid-bilayer-spanning DNA nanopores with a bifunctional porphyrin anchor. *Angewandte Chemie - International Edition*, **2013**, 52, 12069-72 | 16.4 | 151 |
| 73 | Nanotubes complexed with DNA and proteins for resistive-pulse sensing. *ACS Nano*, **2013**, 7, 8857-69 | 16.7 | 25 |
| 72 | A Landau-Squire nanojet. *Nano Letters*, **2013**, 13, 5141-6 | 11.5 | 37 |
| 71 | DNA Translocation **2013**, 31-58 | | 1 |
| 70 | Lipid-coated nanocapillaries for DNA sensing. *Analyst, The*, **2013**, 138, 104-6 | 5 | 27 |
| 69 | The effect of bacterial signal indole on the electrical properties of lipid membranes. *ChemPhysChem*, **2013**, 14, 417-23 | 3.2 | 24 |
| 68 | Single protein molecule detection by glass nanopores. *ACS Nano*, **2013**, 7, 4129-34 | 16.7 | 200 |
| 67 | Multiplexed ionic current sensing with glass nanopores. *Lab on A Chip*, **2013**, 13, 1859-62 | 7.2 | 55 |
| 66 | DNA origami nanopores for controlling DNA translocation. *ACS Nano*, **2013**, 7, 6024-30 | 16.7 | 99 |
| 65 | Lipid nanobilayers to host biological nanopores for DNA translocations. *Langmuir*, **2013**, 29, 355-64 | 4 | 20 |

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| 64 | Lipid-Bilayer-Spanning DNA Nanopores with a Bifunctional Porphyrin Anchor. *Angewandte Chemie*, **2013**, 125, 12291-12294 | 3.6 | 25 |
| 63 | Rapid internal contraction boosts DNA friction. *Nature Communications*, **2013**, 4, 1780 | 17.4 | 21 |
| 62 | Optimizing diffusive transport through a synthetic membrane channel. *Advanced Materials*, **2013**, 25, 844-9 | 24 | 34 |
| 61 | Colloid Flow Control in Microchannels and Detection by Laser Scattering **2012**, 45-49 | | 1 |
| 60 | Voltage-driven transport of ions and DNA through nanocapillaries. *Electrophoresis*, **2012**, 33, 3480-7 | 3.6 | 49 |
| 59 | Nanopores - mission accomplished and what next?: Comment on "Nanopores: A journey towards DNA sequencing" by M. Wanunu. *Physics of Life Reviews*, **2012**, 9, 164-6; discussion 174-6 | 2.1 | 2 |
| 58 | Microfluidics Reveals a Flow-Induced Large-Scale Polymorphism of Protein Aggregates. *Journal of Physical Chemistry Letters*, **2012**, 3, 2803-2807 | 6.4 | 33 |
| 57 | Indole prevents Escherichia coli cell division by modulating membrane potential. *Biochimica Et Biophysica Acta - Biomembranes*, **2012**, 1818, 1590-4 | 3.8 | 97 |
| 56 | Optical tweezers for mechanical control over DNA in a nanopore. *Methods in Molecular Biology*, **2012**, 870, 115-34 | 1.4 | 5 |
| 55 | Analyzing single DNA molecules by nanopore translocation. *Methods in Molecular Biology*, **2012**, 870, 135-45 | 1.4 | 5 |
| 54 | DNA origami nanopores. *Nano Letters*, **2012**, 12, 512-7 | 11.5 | 235 |
| 53 | Studying DNA translocation in nanocapillaries using single molecule fluorescence. *Applied Physics Letters*, **2012**, 101, 223704 | 3.4 | 38 |
| 52 | Perpendicular coupling to in-plane photonics using arc waveguides fabricated via two-photon polymerization. *Applied Physics Letters*, **2012**, 100, 171102 | 3.4 | 15 |
| 51 | Viscoelastic properties of differentiating blood cells are fate- and function-dependent. *PLoS ONE*, **2012**, 7, e45237 | 3.7 | 133 |
| 50 | Micro-rheology on (polymer-grafted) colloids using optical tweezers. *Journal of Physics Condensed Matter*, **2011**, 23, 184114 | 1.8 | 12 |
| 49 | Note: Direct force and ionic-current measurements on DNA in a nanocapillary. *Review of Scientific Instruments*, **2011**, 82, 086102 | 1.7 | 15 |
| 48 | Simple reconstitution of protein pores in nano lipid bilayers. *Nano Letters*, **2011**, 11, 3334-40 | 11.5 | 35 |
| 47 | DNA condensation by TmHU studied by optical tweezers, AFM and molecular dynamics simulations. *Journal of Biological Physics*, **2011**, 37, 117-31 | 1.6 | 5 |

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| 46 | Parallel sub-micrometre channels with different dimensions for laser scattering detection. *Lab on A Chip*, **2011**, 11, 3365-8 | 7.2 | 25 |
| 45 | Indole transport across Escherichia coli membranes. *Journal of Bacteriology*, **2011**, 193, 1793-8 | 3.5 | 63 |
| 44 | Controlling molecular transport through nanopores. *Journal of the Royal Society Interface*, **2011**, 8, 1369-78 | 4.8 | 132 |
| 43 | High-speed video-based tracking of optically trapped colloids. *Journal of Optics (United Kingdom)*, **2011**, 13, 044011 | 1.7 | 22 |
| 42 | Probing DNA with micro- and nanocapillaries and optical tweezers. *Journal of Physics Condensed Matter*, **2010**, 22, 454113 | 1.8 | 27 |
| 41 | Detecting DNA folding with nanocapillaries. *Nano Letters*, **2010**, 10, 2493-7 | 11.5 | 155 |
| 40 | Real-time particle tracking at 10,000 fps using optical fiber illumination. *Optics Express*, **2010**, 18, 22722-33 | 3.5 | 58 |
| 39 | Tether forces in DNA electrophoresis. *Chemical Society Reviews*, **2010**, 39, 939-47 | 58.5 | 56 |
| 38 | Modeling of colloidal transport in capillaries. *Journal of Applied Physics*, **2009**, 105, 084702 | 2.5 | 26 |
| 37 | Origin of the electrophoretic force on DNA in solid-state nanopores. *Nature Physics*, **2009**, 5, 347-351 | 16.2 | 287 |
| 36 | Single colloid electrophoresis. *Journal of Colloid and Interface Science*, **2009**, 337, 260-4 | 9.3 | 28 |
| 35 | Sensing DNA-coatings of microparticles using micropipettes. *Biosensors and Bioelectronics*, **2009**, 24, 2423-7 | 11.8 | 45 |
| 34 | Phase-state dependent current fluctuations in pure lipid membranes. *Biophysical Journal*, **2009**, 96, 4592-7 | 2.9 | 62 |
| 33 | Inserting and manipulating DNA in a nanopore with optical tweezers. *Methods in Molecular Biology*, **2009**, 544, 95-112 | 1.4 | 7 |
| 32 | Noise in solid-state nanopores. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 417-21 | 11.5 | 265 |
| 31 | Optical tweezers with 2.5 kHz bandwidth video detection for single-colloid electrophoresis. *Review of Scientific Instruments*, **2008**, 79, 023710 | 1.7 | 47 |
| 30 | Optical tweezers to study single protein A/immunoglobulin G interactions at varying conditions. *European Biophysics Journal*, **2008**, 37, 927-34 | 1.9 | 14 |
| 29 | Kinetics of TmHU binding to DNA as observed by optical tweezers. *Microscopy Research and Technique*, **2007**, 70, 938-43 | 2.8 | 7 |

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| 28 | Forces between single pairs of charged colloids in aqueous salt solutions. *Physical Review E*, **2007**, 76, 031403 | 2.4 | 84 |
| 27 | Optical tweezers for force measurements on DNA in nanopores. *Review of Scientific Instruments*, **2006**, 77, 105105 | 1.7 | 110 |
| 26 | Nanobubbles in solid-state nanopores. *Physical Review Letters*, **2006**, 97, 088101 | 7.4 | 106 |
| 25 | Salt dependence of ion transport and DNA translocation through solid-state nanopores. *Nano Letters*, **2006**, 6, 89-95 | 11.5 | 625 |
| 24 | Direct force measurements on DNA in a solid-state nanopore. *Nature Physics*, **2006**, 2, 473-477 | 16.2 | 511 |
| 23 | Nanopore tomography of a laser focus. *Nano Letters*, **2005**, 5, 2253-6 | 11.5 | 66 |
| 22 | Spin blockade in capacitively coupled quantum dots. *Applied Physics Letters*, **2004**, 85, 606-608 | 3.4 | 18 |
| 21 | Fabrication of double quantum dots by combining afm and e-beam lithography. *Physica E: Low-Dimensional Systems and Nanostructures*, **2004**, 21, 483-486 | 3 | 4 |
| 20 | Fractional Aharonov-Bohm Oscillations in a Kondo Correlated Few-Electron Quantum Ring. *Advances in Solid State Physics*, **2003**, 113-124 | | 2 |
| 19 | Photoluminescence of self-assembled InAs/AlAs quantum dots as a function of density. *Physica E: Low-Dimensional Systems and Nanostructures*, **2003**, 17, 117-119 | 3 | 5 |
| 18 | Aharonov-Bohm effect of a quantum ring in the Kondo regime. *Physica Status Solidi (B): Basic Research*, **2003**, 238, 331-334 | 1.3 | 1 |
| 17 | Fano resonances in semiconductor quantum dots. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2003**, 1305-1308 | | 3 |
| 16 | Kinetically limited quantum dot formation on AlAs(100) surfaces. *Journal of Crystal Growth*, **2003**, 249, 477-482 | 1.6 | 20 |
| 15 | Combined atomic force microscope and electron-beam lithography used for the fabrication of variable-coupling quantum dots. *Applied Physics Letters*, **2003**, 83, 1163-1165 | 3.4 | 15 |
| 14 | Tuning the onset voltage of resonant tunneling through InAs quantum dots by growth parameters. *Applied Physics Letters*, **2003**, 82, 1209-1211 | 3.4 | 12 |
| 13 | Kondo effect in a few-electron quantum ring. *Physical Review Letters*, **2003**, 90, 196601 | 7.4 | 118 |
| 12 | 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 | 3 | 10 |
| 11 | Direct fabrication of parallel quantum dots with an atomic force microscope. *Physica E: Low-Dimensional Systems and Nanostructures*, **2002**, 13, 1155-1158 | 3 | 7 |

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| 10 | Fabrication of quantum point contacts by engraving GaAs/AlGaAs heterostructures with a diamond tip. *Applied Physics Letters*, **2002**, 81, 2023-2025 | 3.4 | 20 |
| 9 | Flux-quantum-modulated Kondo conductance in a multielectron quantum dot. *Physical Review B*, **2002**, 66, | 3.3 | 22 |
| 8 | Aharonov□Bohm oscillations of a tuneable quantum ring. *Semiconductor Science and Technology*, **2002**, 17, L22-L24 | 1.8 | 71 |
| 7 | Diamond cantilever with integrated tip for nanomachining. *Diamond and Related Materials*, **2002**, 11, 667-671 | 3.5 | 18 |
| 6 | Fabrication of Quantum Dots with Scanning Probe Nanolithography. *Physica Status Solidi (B): Basic Research*, **2001**, 224, 681-684 | 1.3 | 6 |
| 5 | 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 | 3 | 32 |
| 4 | Fabrication of a single-electron transistor by current-controlled local oxidation of a two-dimensional electron system. *Applied Physics Letters*, **2000**, 76, 457-459 | 3.4 | 76 |
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| 2 | Secure data storage on DNA hard drives | | 1 |
| 1 | Measuring thousands of single vesicle leakage events reveals the mode of action of antimicrobial peptides | | 1 |