# Ulrich F Keyser

List of Publications by Year
in descending order



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|---|---|---|---|
| 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 | Salt Dependence of Ion Transport and DNA Translocation through Solid-State Nanopores. Nano Letters, 2006, 6, 89-95. | 4.5 | 735 |
| 2 | Direct force measurements on DNA in a solid-state nanopore. Nature Physics, 2006, 2, 473-477. | 6.5 | 587 |
| 3 | Real-time deformability cytometry: on-the-fly cell mechanical phenotyping. Nature Methods, 2015, 12, 199-202. | 9.0 | 580 |
| 4 | DNA origami based assembly of gold nanoparticle dimers for surface-enhanced Raman scattering. Nature Communications, 2014, 5, 3448. | 5.8 | 377 |
| 5 | Bacterial Metabolite Indole Modulates Incretin Secretion from Intestinal Enteroendocrine L Cells. Cell Reports, 2014, 9, 1202-1208. | 2.9 | 368 |
| 6 | Origin of the electrophoretic force on DNA in solid-state nanopores. Nature Physics, 2009, 5, 347-351. | 6.5 | 327 |
| 7 | 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 |
| 8 | DNA Origami Nanopores. Nano Letters, 2012, 12, 512-517. | 4.5 | 267 |
| 9 | Digitally encoded DNA nanostructures for multiplexed, single-molecule protein sensing with nanopores. Nature Nanotechnology, 2016, 11, 645-651. | 15.6 | 263 |
| 10 | Single Protein Molecule Detection by Glass Nanopores. ACS Nano, 2013, 7, 4129-4134. | 7.3 | 228 |
| 11 | Lipidâ€Bilayerâ€Spanning DNA Nanopores with a Bifunctional Porphyrin Anchor. Angewandte Chemie - International Edition, 2013, 52, 12069-12072. | 7.2 | 190 |
| 12 | Detecting DNA Folding with Nanocapillaries. Nano Letters, 2010, 10, 2493-2497. | 4.5 | 184 |
| 13 | Large-Conductance Transmembrane Porin Made from DNA Origami. ACS Nano, 2016, 10, 8207-8214. | 7.3 | 171 |
| 14 | Specific Protein Detection Using Designed DNA Carriers and Nanopores. Journal of the American Chemical Society, 2015, 137, 2035-2041. | 6.6 | 167 |
| 15 | Viscoelastic Properties of Differentiating Blood Cells Are Fate- and Function-Dependent. PLoS ONE, 2012, 7, e45237. | 1.1 | 162 |
| 16 | Controlling molecular transport through nanopores. Journal of the Royal Society Interface, 2011, 8, 1369-1378. | 1.5 | 157 |
| 17 | Auxetic nuclei in embryonic stem cells exiting pluripotency. Nature Materials, 2014, 13, 638-644. | 13.3 | 145 |
| 18 | Indole prevents Escherichia coli cell division by modulating membrane potential. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 1590-1594. | 1.4 | 142 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Suppressed Quenching and Strong-Coupling of Purcell-Enhanced Single-Molecule Emission in Plasmonic Nanocavities. ACS Photonics, 2018, 5, 186-191. | 3.2 | 137 |
| 20 | Protein reconstitution into freestanding planar lipid membranes for electrophysiological characterization. Nature Protocols, 2015, 10, 188-198. | 5.5 | 134 |
| 21 | Kondo Effect in a Few-Electron Quantum Ring. Physical Review Letters, 2003, 90, 196601. | 2.9 | 130 |
| 22 | Optical tweezers for force measurements on DNA in nanopores. Review of Scientific Instruments, 2006, 77, 105105. | 0.6 | 128 |
| 23 | Mapping Nanoscale Hotspots with Single-Molecule Emitters Assembled into Plasmonic Nanocavities Using DNA Origami. Nano Letters, 2018, 18, 405-411. | 4.5 | 126 |
| 24 | DNA-Tile Structures Induce Ionic Currents through Lipid Membranes. Nano Letters, 2015, 15, 3134-3138. | 4.5 | 125 |
| 25 | Ion Channels Made from a Single Membrane-Spanning DNA Duplex. Nano Letters, 2016, 16, 4665-4669. | 4.5 | 124 |
| 26 | Digital Data Storage Using DNA Nanostructures and Solid-State Nanopores. Nano Letters, 2019, 19, 1210-1215. | 4.5 | 123 |
| 27 | Nanobubbles in Solid-State Nanopores. Physical Review Letters, 2006, 97, 088101. | 2.9 | 121 |
| 28 | DNA Origami Nanopores for Controlling DNA Translocation. ACS Nano, 2013, 7, 6024-6030. | 7.3 | 118 |
| 29 | Bilayer-Spanning DNA Nanopores with Voltage-Switching between Open and Closed State. ACS Nano, 2015, 9, 1117-1126. | 7.3 | 118 |
| 30 | Quantum electrodynamics at room temperature coupling a single vibrating molecule with a plasmonic nanocavity. Nature Communications, 2019, 10, 1049. | 5.8 | 114 |
| 31 | Camera-based three-dimensional real-time particle tracking at kHz rates and Ã…ngstrÃ¶m accuracy. Nature Communications, 2015, 6, 5885. | 5.8 | 109 |
| 32 | Extrinsic Cation Selectivity of 2D Membranes. ACS Nano, 2017, 11, 1340-1346. | 7.3 | 105 |
| 33 | A synthetic enzyme built from DNA flips 107 lipids per second in biological membranes. Nature Communications, 2018, 9, 2426. | 5.8 | 101 |
| 34 | Programming Light-Harvesting Efficiency Using DNA Origami. Nano Letters, 2016, 16, 2369-2374. | 4.5 | 100 |
| 35 | Quantifying Nanomolar Protein Concentrations Using Designed DNA Carriers and Solid-State Nanopores. Nano Letters, 2016, 16, 3557-3562. | 4.5 | 97 |
| 36 | Forces between single pairs of charged colloids in aqueous salt solutions. Physical Review E, 2007, 76, 031403. | 0.8 | 89 |

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| 37 | Nanopore-Based DNA Hard Drives for Rewritable and Secure Data Storage. Nano Letters, 2020, 20, 3754-3760. | 4.5 | 88 |
| 38 | Ionic Conductivity, Structural Deformation, and Programmable Anisotropy of DNA Origami in Electric Field. ACS Nano, 2015, 9, 1420-1433. | 7.3 | 86 |
| 39 | Indole Transport across Escherichia coli Membranes. Journal of Bacteriology, 2011, 193, 1793-1798. | 1.0 | 84 |
| 40 | AharonovÂBohm oscillations of a tuneable quantum ring. Semiconductor Science and Technology, 2002, 17, L22-L24. | 1.0 | 82 |
| 41 | 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 |
| 42 | Nanopore Tomography of a Laser Focus. Nano Letters, 2005, 5, 2253-2256. | 4.5 | 78 |
| 43 | Real-time particle tracking at 10,000 fps using optical fiber illumination. Optics Express, 2010, 18, 22722. | 1.7 | 78 |
| 44 | Gap-Dependent Coupling of Agâ€“Au Nanoparticle Heterodimers Using DNA Origami-Based Self-Assembly. ACS Photonics, 2016, 3, 1589-1595. | 3.2 | 75 |
| 45 | Translocation frequency of double-stranded DNA through a solid-state nanopore. Physical Review E, 2016, 93, 022401. | 0.8 | 75 |
| 46 | Blockable Zn<sub>10</sub>L<sub>15</sub> Ion Channels through Subcomponent Selfâ€Assembly. Angewandte Chemie - International Edition, 2017, 56, 15388-15392. | 7.2 | 73 |
| 47 | Phase-State Dependent Current Fluctuations in Pure Lipid Membranes. Biophysical Journal, 2009, 96, 4592-4597. | 0.2 | 72 |
| 48 | Nanopores formed by DNA origami: A review. FEBS Letters, 2014, 588, 3564-3570. | 1.3 | 72 |
| 49 | Thermoâ€Responsive Actuation of a DNA Origami Flexor. Advanced Functional Materials, 2018, 28, 1706410. | 7.8 | 71 |
| 50 | 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 |
| 51 | Tether forces in DNAelectrophoresis. Chemical Society Reviews, 2010, 39, 939-947. | 18.7 | 67 |
| 52 | The Indole Pulse: A New Perspective on Indole Signalling in Escherichia coli. PLoS ONE, 2014, 9, e93168. | 1.1 | 66 |
| 53 | Enhancing nanopore sensing with DNA nanotechnology. Nature Nanotechnology, 2016, 11, 106-108. | 15.6 | 66 |
| 54 | Single molecule based SNP detection using designed DNA carriers and solid-state nanopores. Chemical Communications, 2017, 53, 436-439. | 2.2 | 65 |

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| 55 | Optical tweezers with 2.5â€‚kHz bandwidth video detection for single-colloid electrophoresis. Review of Scientific Instruments, 2008, 79, 023710. | 0.6 | 64 |
| 56 | Multiplexed ionic current sensing with glass nanopores. Lab on A Chip, 2013, 13, 1859. | 3.1 | 63 |
| 57 | DNA origami nanopores: developments, challenges and perspectives. Nanoscale, 2014, 6, 14121-14132. | 2.8 | 63 |
| 58 | Nanomachining of mesoscopic electronic devices using an atomic force microscope. Applied Physics Letters, 1999, 75, 1107-1109. | 1.5 | 62 |
| 59 | Controlling aggregation of cholesterol-modified DNA nanostructures. Nucleic Acids Research, 2019, 47, 11441-11451. | 6.5 | 60 |
| 60 | Asymmetric dynamics of DNA entering and exiting a strongly confining nanopore. Nature Communications, 2017, 8, 380. | 5.8 | 59 |
| 61 | Voltage-Dependent Properties of DNA Origami Nanopores. Nano Letters, 2014, 14, 1270-1274. | 4.5 | 58 |
| 62 | 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 |
| 63 | Measuring the proton selectivity of graphene membranes. Applied Physics Letters, 2015, 107, . | 1.5 | 56 |
| 64 | 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 |
| 65 | QuipuNet: Convolutional Neural Network for Single-Molecule Nanopore Sensing. Nano Letters, 2018, 18, 4040-4045. | 4.5 | 55 |
| 66 | Voltageâ€driven transport of ions and <scp>DNA</scp> through nanocapillaries. Electrophoresis, 2012, 33, 3480-3487. | 1.3 | 54 |
| 67 | Electroosmotic flow rectification in conical nanopores. Nanotechnology, 2015, 26, 275202. | 1.3 | 54 |
| 68 | Anisotropic diffusion of spherical particles in closely confining microchannels. Physical Review E, 2014, 89, 062305. | 0.8 | 52 |
| 69 | Multiplexed DNA Identification Using Site Specific dCas9 Barcodes and Nanopore Sensing. ACS Sensors, 2019, 4, 2065-2072. | 4.0 | 50 |
| 70 | Electroosmotic Flow Reversal Outside Glass Nanopores. Nano Letters, 2015, 15, 695-702. | 4.5 | 49 |
| 71 | Digital Sensing and Molecular Computation by an Enzyme-Free DNA Circuit. ACS Nano, 2020, 14, 5763-5771. | 7.3 | 48 |
| 72 | Sensing DNA-coatings of microparticles using micropipettes. Biosensors and Bioelectronics, 2009, 24, 2423-2427. | 5.3 | 47 |

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| 73 | Nondecaying Hydrodynamic Interactions along Narrow Channels. Physical Review Letters, 2015, 115, 038301. | 2.9 | 47 |
| 74 | A microfluidic platform for the characterisation of membrane active antimicrobials. Lab on A Chip, 2019, 19, 837-844. | 3.1 | 46 |
| 75 | Free-standing graphene membranes on glass nanopores for ionic current measurements. Applied Physics Letters, 2015, 106, . | 1.5 | 45 |
| 76 | Scalable integration of nano-, and microfluidics with hybrid two-photon lithography. Microsystems and Nanoengineering, 2019, 5, 40. | 3.4 | 45 |
| 77 | Cations Regulate Membrane Attachment and Functionality of DNA Nanostructures. Journal of the American Chemical Society, 2021, 143, 7358-7367. | 6.6 | 44 |
| 78 | Optical Voltage Sensing Using DNA Origami. Nano Letters, 2018, 18, 1962-1971. | 4.5 | 43 |
| 79 | Selective transport control on molecular velcro made from intrinsically disordered proteins. Nature Nanotechnology, 2014, 9, 525-530. | 15.6 | 42 |
| 80 | Studying DNA translocation in nanocapillaries using single molecule fluorescence. Applied Physics Letters, 2012, 101, 223704. | 1.5 | 41 |
| 81 | Microfluidics Reveals a Flow-Induced Large-Scale Polymorphism of Protein Aggregates. Journal of Physical Chemistry Letters, 2012, 3, 2803-2807. | 2.1 | 40 |
| 82 | A Landauâ€“Squire Nanojet. Nano Letters, 2013, 13, 5141-5146. | 4.5 | 40 |
| 83 | Optimizing Diffusive Transport Through a Synthetic Membrane Channel. Advanced Materials, 2013, 25, 844-849. | 11.1 | 40 |
| 84 | Specific Biosensing Using DNA Aptamers and Nanopores. Advanced Functional Materials, 2019, 29, 1807555. | 7.8 | 40 |
| 85 | Dynamics of driven polymer transport through a nanopore. Nature Physics, 2021, 17, 1043-1049. | 6.5 | 40 |
| 86 | Simple Reconstitution of Protein Pores in Nano Lipid Bilayers. Nano Letters, 2011, 11, 3334-3340. | 4.5 | 39 |
| 87 | Controlling the Reversible Assembly of Liposomes through a Multistimuli Responsive Anchored DNA. Nano Letters, 2016, 16, 4462-4466. | 4.5 | 39 |
| 88 | Direction- and Salt-Dependent Ionic Current Signatures for DNA Sensing with Asymmetric Nanopores. Biophysical Journal, 2017, 112, 674-682. | 0.2 | 39 |
| 89 | Channel-Facilitated Diffusion Boosted by Particle Binding at the Channel Entrance. Physical Review Letters, 2014, 113, 048102. | 2.9 | 38 |
| 90 | Nonlinear Electrophoresis of Highly Charged Nonpolarizable Particles. Physical Review Letters, 2019, 123, 014502. | 2.9 | 38 |

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| 91 | Experimental evidence of symmetry breaking of transition-path times. Nature Communications, 2019, 10, 55. | 5.8 | 37 |
| 92 | DNA Interactions in Crowded Nanopores. Nano Letters, 2013, 13, 2798-2802. | 4.5 | 36 |
| 93 | A label-free microfluidic assay to quantitatively study antibiotic diffusion through lipid membranes. Lab on A Chip, 2014, 14, 2303-2308. | 3.1 | 36 |
| 94 | Fe<sup>II</sup><sub>4</sub>L<sub>4</sub> Tetrahedron Binds to Nonpaired DNA Bases. Journal of the American Chemical Society, 2019, 141, 11358-11362. | 6.6 | 36 |
| 95 | An Integrated Microfluidic Platform for Quantifying Drug Permeation across Biomimetic Vesicle Membranes. Molecular Pharmaceutics, 2019, 16, 2494-2501. | 2.3 | 36 |
| 96 | Tunable Anion-Selective Transport through Monolayer Graphene and Hexagonal Boron Nitride. ACS Nano, 2020, 14, 2729-2738. | 7.3 | 36 |
| 97 | 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 |
| 98 | 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 |
| 99 | The Effect of Bacterial Signal Indole on the Electrical Properties of Lipid Membranes. ChemPhysChem, 2013, 14, 417-423. | 1.0 | 34 |
| 100 | Direct Optofluidic Measurement of the Lipid Permeability of Fluoroquinolones. Scientific Reports, 2016, 6, 32824. | 1.6 | 34 |
| 101 | A microfluidic device for characterizing nuclear deformations. Lab on A Chip, 2017, 17, 805-813. | 3.1 | 33 |
| 102 | Current Enhancement in Solid-State Nanopores Depends on Three-Dimensional DNA Structure. Nano Letters, 2019, 19, 5661-5666. | 4.5 | 33 |
| 103 | Indole Pulse Signalling Regulates the Cytoplasmic pH of E. coli in a Memory-Like Manner. Scientific Reports, 2019, 9, 3868. | 1.6 | 33 |
| 104 | Single colloid electrophoresis. Journal of Colloid and Interface Science, 2009, 337, 260-264. | 5.0 | 32 |
| 105 | Promoting single-file DNA translocations through nanopores using electro-osmotic flow. Journal of Chemical Physics, 2018, 149, 163311. | 1.2 | 32 |
| 106 | Image Encoding Using Multiâ€Level DNA Barcodes with Nanopore Readout. Small, 2021, 17, e2100711. | 5.2 | 32 |
| 107 | Probing DNA with micro- and nanocapillaries and optical tweezers. Journal of Physics Condensed Matter, 2010, 22, 454113. | 0.7 | 31 |
| 108 | Lipid-coated nanocapillaries for DNA sensing. Analyst, The, 2013, 138, 104-106. | 1.7 | 31 |

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| 109 | Modeling of colloidal transport in capillaries. Journal of Applied Physics, 2009, 105, . | 1.1 | 30 |
| 110 | Nanotubes Complexed with DNA and Proteins for Resistive-Pulse Sensing. ACS Nano, 2013, 7, 8857-8869. | 7.3 | 30 |
| 111 | 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 |
| 112 | Parallel sub-micrometre channels with different dimensions for laser scattering detection. Lab on A Chip, 2011, 11, 3365. | 3.1 | 29 |
| 113 | Lipidâ€Bilayerâ€Spanning DNA Nanopores with a Bifunctional Porphyrin Anchor. Angewandte Chemie, 2013, 125, 12291-12294. | 1.6 | 28 |
| 114 | Nanopore analysis of amyloid fibrils formed by lysozyme aggregation. Analyst, The, 2015, 140, 4882-4886. | 1.7 | 27 |
| 115 | All-Optical Detection of Neuronal Membrane Depolarization in Live Cells Using Colloidal Quantum Dots. Nano Letters, 2019, 19, 8539-8549. | 4.5 | 27 |
| 116 | The Crucial Role of Charge in Thermoresponsiveâ€Polymerâ€Assisted Reversible Dis/Assembly of Gold Nanoparticles. Advanced Optical Materials, 2018, 6, 1701270. | 3.6 | 26 |
| 117 | Direct detection of molecular intermediates from first-passage times. Science Advances, 2020, 6, eaaz4642. | 4.7 | 26 |
| 118 | Measurement of the Position-Dependent Electrophoretic Force on DNA in a Glass Nanocapillary. Nano Letters, 2014, 14, 6606-6613. | 4.5 | 25 |
| 119 | Dependence of norfloxacin diffusion across bilayers on lipid composition. Soft Matter, 2016, 12, 2135-2144. | 1.2 | 25 |
| 120 | Fabrication of quantum point contacts by engraving GaAs/AlGaAs heterostructures with a diamond tip. Applied Physics Letters, 2002, 81, 2023-2025. | 1.5 | 24 |
| 121 | High-speed video-based tracking of optically trapped colloids. Journal of Optics (United Kingdom), 2011, 13, 044011. | 1.0 | 24 |
| 122 | Lipid Nanobilayers to Host Biological Nanopores for DNA Translocations. Langmuir, 2013, 29, 355-364. | 1.6 | 24 |
| 123 | Tailoring the Binding Properties of Phosphazane Anion Receptors and Transporters. Journal of the American Chemical Society, 2019, 141, 8807-8815. | 6.6 | 24 |
| 124 | Kinetically limited quantum dot formation on AlAs(100) surfaces. Journal of Crystal Growth, 2003, 249, 477-482. | 0.7 | 23 |
| 125 | Flux-quantum-modulated Kondo conductance in a multielectron quantum dot. Physical Review B, 2002, 66, . | 1.1 | 22 |
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| 127 | Characterization of lipid composition and diffusivity in OLA generated vesicles. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183359. | 1.4 | 22 |
| 128 | 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 |
| 129 | Electrical DNA Sequence Mapping Using Oligodeoxynucleotide Labels and Nanopores. ACS Nano, 2021, 15, 2679-2685. | 7.3 | 22 |
| 130 | DNA Origami Voltage Sensors for Transmembrane Potentials with Single-Molecule Sensitivity. Nano Letters, 2021, 21, 8634-8641. | 4.5 | 22 |
| 131 | Diamond cantilever with integrated tip for nanomachining. Diamond and Related Materials, 2002, 11, 667-671. | 1.8 | 20 |
| 132 | Monitoring G-Quadruplex Formation with DNA Carriers and Solid-State Nanopores. Nano Letters, 2019, 19, 7996-8001. | 4.5 | 20 |
| 133 | Optical tweezers to study single Protein A/Immunoglobulin G interactions at varying conditions. European Biophysics Journal, 2008, 37, 927-934. | 1.2 | 19 |
| 134 | Conformational Control in Main Group Phosphazane Anion Receptors and Transporters. Journal of the American Chemical Society, 2020, 142, 1029-1037. | 6.6 | 19 |
| 135 | Spin blockade in capacitively coupled quantum dots. Applied Physics Letters, 2004, 85, 606-608. | 1.5 | 18 |
| 136 | Perpendicular coupling to in-plane photonics using arc waveguides fabricated via two-photon polymerization. Applied Physics Letters, 2012, 100, . | 1.5 | 18 |
| 137 | Micro-rheology on (polymer-grafted) colloids using optical tweezers. Journal of Physics Condensed Matter, 2011, 23, 184114. | 0.7 | 17 |
| 138 | Note: Direct force and ionic-current measurements on DNA in a nanocapillary. Review of Scientific Instruments, 2011, 82, 086102. | 0.6 | 17 |
| 139 | Blockable Zn<sub>10</sub>L<sub>15</sub> Ion Channels through Subcomponent Selfâ€Assembly. Angewandte Chemie, 2017, 129, 15590-15594. | 1.6 | 17 |
| 140 | Switching Cytolytic Nanopores into Antimicrobial Fractal Ruptures by a Single Side Chain Mutation. ACS Nano, 2021, 15, 9679-9689. | 7.3 | 17 |
| 141 | DNA origami nanopores: an emerging tool in biomedicine. Nanomedicine, 2013, 8, 1551-1554. | 1.7 | 16 |
| 142 | Combining Affinity Selection and Specific Ion Mobility for Microchip Protein Sensing. Analytical Chemistry, 2018, 90, 10302-10310. | 3.2 | 16 |
| 143 | Kinetics of Toehold-Mediated DNA Strand Displacement Depend on Fe<sup>II</sup><sub>4</sub>L<sub>4</sub> Tetrahedron Concentration. Nano Letters, 2021, 21, 1368-1374. | 4.5 | 16 |
| 144 | DNA Structural Barcode Copying and Random Access. Small Structures, 2021, 2, 2000144. | 6.9 | 16 |

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| 145 | 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 |
| 146 | Density-Dependent Speed-up of Particle Transport in Channels. Physical Review Letters, 2019, 122, 214501. | 2.9 | 15 |
| 147 | Deoxyribonucleic Acid Encoded and Size-Defined Ï€-Stacking of Perylene Diimides. Journal of the American Chemical Society, 2022, 144, 368-376. | 6.6 | 15 |
| 148 | Tuning the onset voltage of resonant tunneling through InAs quantum dots by growth parameters. Applied Physics Letters, 2003, 82, 1209-1211. | 1.5 | 14 |
| 149 | Diffusion coefficients and particle transport in synthetic membrane channels. European Physical Journal: Special Topics, 2014, 223, 3145-3163. | 1.2 | 13 |
| 150 | Tailoring Interleaflet Lipid Transfer with a DNA-based Synthetic Enzyme. Nano Letters, 2020, 20, 4306-4311. | 4.5 | 13 |
| 151 | A Microfluidic Platform for Sequential Assembly and Separation of Synthetic Cell Models. ACS Synthetic Biology, 2021, 10, 3105-3116. | 1.9 | 13 |
| 152 | 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 |
| 153 | Selective Trapping of DNA Using Glass Microcapillaries. Langmuir, 2016, 32, 8525-8532. | 1.6 | 12 |
| 154 | Split G-Quadruplexes Enhance Nanopore Signals for Simultaneous Identification of Multiple Nucleic Acids. Nano Letters, 2022, 22, 4993-4998. | 4.5 | 12 |
| 155 | Cation dependent electroosmotic flow in glass nanopores. Applied Physics Letters, 2019, 115, 113702. | 1.5 | 11 |
| 156 | Current Fluctuations in Nanopores Reveal the Polymer-Wall Adsorption Potential. Physical Review Letters, 2021, 127, 137801. | 2.9 | 10 |
| 157 | Inserting and Manipulating DNA in a Nanopore with Optical Tweezers. Methods in Molecular Biology, 2009, 544, 95-112. | 0.4 | 10 |
| 158 | Bacterial nucleoid structure probed by active drag and resistive pulse sensing. Integrative Biology (United Kingdom), 2014, 6, 184-191. | 0.6 | 9 |
| 159 | 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 |
| 160 | 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 |
| 161 | A Surfactant Enables Efficient Membrane Spanning by Non-Aggregating DNA-Based Ion Channels. Molecules, 2022, 27, 578. | 1.7 | 8 |
| 162 | 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 |

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| 163 | Kinetics of TmHU binding to DNA as observed by optical tweezers. Microscopy Research and Technique, 2007, 70, 938-943. | 1.2 | 7 |
| 164 | DNA condensation by TmHU studied by optical tweezers, AFM and molecular dynamics simulations. Journal of Biological Physics, 2011, 37, 117-131. | 0.7 | 7 |
| 165 | Standardizing characterization of membrane active peptides with microfluidics. Biomicrofluidics, 2021, 15, 041301. | 1.2 | 7 |
| 166 | FeII4L4 tetrahedron binds and aggregates DNA G-quadruplexes. Chemical Science, 2021, 12, 14564-14569. | 3.7 | 7 |
| 167 | Toward single-molecule proteomics. Science, 2021, 374, 1443-1444. | 6.0 | 7 |
| 168 | Lifetime of glass nanopores in a PDMS chip for single-molecule sensing. IScience, 2022, 25, 104191. | 1.9 | 7 |
| 169 | Measuring Thousands of Single-Vesicle Leakage Events Reveals the Mode of Action of Antimicrobial Peptides. Analytical Chemistry, 2022, 94, 9530-9539. | 3.2 | 7 |
| 170 | Fabrication of Quantum Dots with Scanning Probe Nanolithography. Physica Status Solidi (B): Basic Research, 2001, 224, 681-684. | 0.7 | 6 |
| 171 | Optical Tweezers for Mechanical Control Over DNA in a Nanopore. Methods in Molecular Biology, 2012, 870, 115-134. | 0.4 | 6 |
| 172 | Noise properties of rectifying and non-rectifying nanopores. Nanotechnology, 2020, 31, 10LT01. | 1.3 | 6 |
| 173 | DNA Nanotechnology for Building Sensors, Nanopores and Ion-Channels. Advances in Experimental Medicine and Biology, 2019, 1174, 331-370. | 0.8 | 6 |
| 174 | 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 |
| 175 | Self-aware particles. Nature, 2011, 478, 45-46. | 13.7 | 5 |
| 176 | Analyzing Single DNA Molecules by Nanopore Translocation. Methods in Molecular Biology, 2012, 870, 135-145. | 0.4 | 5 |
| 177 | Experimental Measurement of Relative Path Probabilities and Stochastic Actions. Physical Review X, 2021, 11, . | 2.8 | 5 |
| 178 | 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 |
| 179 | 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 |
| 180 | Nondeterministic self-assembly with asymmetric interactions. Physical Review E, 2016, 94, 022404. | 0.8 | 4 |

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| 181 | Particle transport across a channel via an oscillating potential. Physical Review E, 2017, 96, 052401. | 0.8 | 4 |
| 182 | Ionic and molecular transport in aqueous solution through 2D and layered nanoporous membranes. Journal Physics D: Applied Physics, 2021, 54, 183002. | 1.3 | 4 |
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