## Ulrich F Keyser

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8707345/publications.pdf

Version: 2024-02-01

213 papers 12,344 citations

23567 58 h-index 30922 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<br>Letters, 2006, 6, 89-95.   | 9.1                        | 735               |
| 2              | Direct force measurements on DNA in a solid-state nanopore. Nature Physics, 2006, 2, 473-477.  | 16.7                       | 587               |
| 3              | Real-time deformability cytometry: on-the-fly cell mechanical phenotyping. Nature Methods, 2015, 12, 199-202.  | 19.0                       | 580               |
| 4              | DNA origami based assembly of gold nanoparticle dimers for surface-enhanced Raman scattering. Nature Communications, 2014, 5, 3448.  | 12.8                       | 377               |
| 5              | Bacterial Metabolite Indole Modulates Incretin Secretion from Intestinal Enteroendocrine L Cells.<br>Cell Reports, 2014, 9, 1202-1208.   | 6.4                        | 368               |
| 6              | Origin of the electrophoretic force on DNA in solid-state nanopores. Nature Physics, 2009, 5, 347-351.   | 16.7                       | 327               |
| 7              | Noise in solid-state nanopores. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 417-421.   | 7.1                        | 315               |
| 8              | DNA Origami Nanopores. Nano Letters, 2012, 12, 512-517.  | 9.1                        | 267               |
| 9              | Digitally encoded DNA nanostructures for multiplexed, single-molecule protein sensing with nanopores. Nature Nanotechnology, 2016, 11, 645-651.  | 31.5                       | 263               |
| 10             | Single Protein Molecule Detection by Glass Nanopores. ACS Nano, 2013, 7, 4129-4134.  | 14.6                       | 228               |
| 11             |  |                            |                   |
| 11             | Lipidâ€Bilayerâ€Spanning DNA Nanopores with a Bifunctional Porphyrin Anchor. Angewandte Chemie - International Edition, 2013, 52, 12069-12072.   | 13.8                       | 190               |
| 12             | Lipidâ€Bilayerâ€Spanning DNA Nanopores with a Bifunctional Porphyrin Anchor. Angewandte Chemie - International Edition, 2013, 52, 12069-12072.  Detecting DNA Folding with Nanocapillaries. Nano Letters, 2010, 10, 2493-2497.   | 13.8<br>9.1                | 190               |
|                | International Edition, 2013, 52, 12069-12072.  |                            |                   |
| 12             | International Edition, 2013, 52, 12069-12072.  Detecting DNA Folding with Nanocapillaries. Nano Letters, 2010, 10, 2493-2497.  | 9.1                        | 184               |
| 12             | Detecting DNA Folding with Nanocapillaries. Nano Letters, 2010, 10, 2493-2497.  Large-Conductance Transmembrane Porin Made from DNA Origami. ACS Nano, 2016, 10, 8207-8214.  Specific Protein Detection Using Designed DNA Carriers and Nanopores. Journal of the American   | 9.1                        | 184               |
| 12<br>13<br>14 | Detecting DNA Folding with Nanocapillaries. Nano Letters, 2010, 10, 2493-2497.  Large-Conductance Transmembrane Porin Made from DNA Origami. ACS Nano, 2016, 10, 8207-8214.  Specific Protein Detection Using Designed DNA Carriers and Nanopores. Journal of the American Chemical Society, 2015, 137, 2035-2041.  Viscoelastic Properties of Differentiating Blood Cells Are Fate- and Function-Dependent. PLoS ONE,   | 9.1<br>14.6<br>13.7        | 184<br>171<br>167 |
| 12<br>13<br>14 | Detecting DNA Folding with Nanocapillaries. Nano Letters, 2010, 10, 2493-2497.  Large-Conductance Transmembrane Porin Made from DNA Origami. ACS Nano, 2016, 10, 8207-8214.  Specific Protein Detection Using Designed DNA Carriers and Nanopores. Journal of the American Chemical Society, 2015, 137, 2035-2041.  Viscoelastic Properties of Differentiating Blood Cells Are Fate- and Function-Dependent. PLoS ONE, 2012, 7, e45237.  Controlling molecular transport through nanopores. Journal of the Royal Society Interface, 2011, 8, | 9.1<br>14.6<br>13.7<br>2.5 | 184<br>171<br>167 |

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|----|--|------|-----------|
| 19 | Suppressed Quenching and Strong-Coupling of Purcell-Enhanced Single-Molecule Emission in Plasmonic Nanocavities. ACS Photonics, 2018, 5, 186-191.    | 6.6  | 137       |
| 20 | Protein reconstitution into freestanding planar lipid membranes for electrophysiological characterization. Nature Protocols, 2015, 10, 188-198.      | 12.0 | 134       |
| 21 | Kondo Effect in a Few-Electron Quantum Ring. Physical Review Letters, 2003, 90, 196601.  | 7.8  | 130       |
| 22 | Optical tweezers for force measurements on DNA in nanopores. Review of Scientific Instruments, 2006, 77, 105105.                                     | 1.3  | 128       |
| 23 | Mapping Nanoscale Hotspots with Single-Molecule Emitters Assembled into Plasmonic Nanocavities Using DNA Origami. Nano Letters, 2018, 18, 405-411.   | 9.1  | 126       |
| 24 | DNA-Tile Structures Induce Ionic Currents through Lipid Membranes. Nano Letters, 2015, 15, 3134-3138.  | 9.1  | 125       |
| 25 | Ion Channels Made from a Single Membrane-Spanning DNA Duplex. Nano Letters, 2016, 16, 4665-4669.   | 9.1  | 124       |
| 26 | Digital Data Storage Using DNA Nanostructures and Solid-State Nanopores. Nano Letters, 2019, 19, 1210-1215.  | 9.1  | 123       |
| 27 | Nanobubbles in Solid-State Nanopores. Physical Review Letters, 2006, 97, 088101.   | 7.8  | 121       |
| 28 | DNA Origami Nanopores for Controlling DNA Translocation. ACS Nano, 2013, 7, 6024-6030.   | 14.6 | 118       |
| 29 | Bilayer-Spanning DNA Nanopores with Voltage-Switching between Open and Closed State. ACS Nano, 2015, 9, 1117-1126.                                   | 14.6 | 118       |
| 30 | Quantum electrodynamics at room temperature coupling a single vibrating molecule with a plasmonic nanocavity. Nature Communications, 2019, 10, 1049. | 12.8 | 114       |
| 31 | Camera-based three-dimensional real-time particle tracking at kHz rates and Ångström accuracy.<br>Nature Communications, 2015, 6, 5885.              | 12.8 | 109       |
| 32 | Extrinsic Cation Selectivity of 2D Membranes. ACS Nano, 2017, 11, 1340-1346.   | 14.6 | 105       |
| 33 | A synthetic enzyme built from DNA flips 107 lipids per second in biological membranes. Nature Communications, 2018, 9, 2426.                         | 12.8 | 101       |
| 34 | Programming Light-Harvesting Efficiency Using DNA Origami. Nano Letters, 2016, 16, 2369-2374.  | 9.1  | 100       |
| 35 | Quantifying Nanomolar Protein Concentrations Using Designed DNA Carriers and Solid-State Nanopores. Nano Letters, 2016, 16, 3557-3562.               | 9.1  | 97        |
| 36 | Forces between single pairs of charged colloids in aqueous salt solutions. Physical Review E, 2007, 76, 031403.                                      | 2.1  | 89        |

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|----|---|------|-----------|
| 37 | Nanopore-Based DNA Hard Drives for Rewritable and Secure Data Storage. Nano Letters, 2020, 20, 3754-3760.   | 9.1  | 88        |
| 38 | lonic Conductivity, Structural Deformation, and Programmable Anisotropy of DNA Origami in Electric Field. ACS Nano, 2015, 9, 1420-1433.   | 14.6 | 86        |
| 39 | Indole Transport across Escherichia coli Membranes. Journal of Bacteriology, 2011, 193, 1793-1798.  | 2.2  | 84        |
| 40 | AharonovÂBohm oscillations of a tuneable quantum ring. Semiconductor Science and Technology, 2002, 17, L22-L24.   | 2.0  | 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.             | 3.3  | 80        |
| 42 | Nanopore Tomography of a Laser Focus. Nano Letters, 2005, 5, 2253-2256.   | 9.1  | 78        |
| 43 | Real-time particle tracking at 10,000 fps using optical fiber illumination. Optics Express, 2010, 18, 22722.  | 3.4  | 78        |
| 44 | Gap-Dependent Coupling of Ag–Au Nanoparticle Heterodimers Using DNA Origami-Based Self-Assembly. ACS Photonics, 2016, 3, 1589-1595.   | 6.6  | 75        |
| 45 | Translocation frequency of double-stranded DNA through a solid-state nanopore. Physical Review E, 2016, 93, 022401.   | 2.1  | 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.                  | 13.8 | 73        |
| 47 | Phase-State Dependent Current Fluctuations in Pure Lipid Membranes. Biophysical Journal, 2009, 96, 4592-4597.   | 0.5  | 72        |
| 48 | Nanopores formed by DNA origami: A review. FEBS Letters, 2014, 588, 3564-3570.  | 2.8  | 72        |
| 49 | Thermoâ€Responsive Actuation of a DNA Origami Flexor. Advanced Functional Materials, 2018, 28, 1706410.   | 14.9 | 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. | 13.7 | 70        |
| 51 | Tether forces in DNAelectrophoresis. Chemical Society Reviews, 2010, 39, 939-947.   | 38.1 | 67        |
| 52 | The Indole Pulse: A New Perspective on Indole Signalling in Escherichia coli. PLoS ONE, 2014, 9, e93168.  | 2.5  | 66        |
| 53 | Enhancing nanopore sensing with DNA nanotechnology. Nature Nanotechnology, 2016, 11, 106-108.   | 31.5 | 66        |
| 54 | Single molecule based SNP detection using designed DNA carriers and solid-state nanopores. Chemical Communications, 2017, 53, 436-439.  | 4.1  | 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.        | 1.3  | 64        |
| 56 | Multiplexed ionic current sensing with glass nanopores. Lab on A Chip, 2013, 13, 1859.   | 6.0  | 63        |
| 57 | DNA origami nanopores: developments, challenges and perspectives. Nanoscale, 2014, 6, 14121-14132.   | 5.6  | 63        |
| 58 | Nanomachining of mesoscopic electronic devices using an atomic force microscope. Applied Physics Letters, 1999, 75, 1107-1109.                           | 3.3  | 62        |
| 59 | Controlling aggregation of cholesterol-modified DNA nanostructures. Nucleic Acids Research, 2019, 47, 11441-11451.                                       | 14.5 | 60        |
| 60 | Asymmetric dynamics of DNA entering and exiting a strongly confining nanopore. Nature Communications, 2017, 8, 380.                                      | 12.8 | 59        |
| 61 | Voltage-Dependent Properties of DNA Origami Nanopores. Nano Letters, 2014, 14, 1270-1274.  | 9.1  | 58        |
| 62 | Single-cell microfluidics facilitates the rapid quantification of antibiotic accumulation in Gram-negative bacteria. Lab on A Chip, 2020, 20, 2765-2775. | 6.0  | 57        |
| 63 | Measuring the proton selectivity of graphene membranes. Applied Physics Letters, 2015, 107, .  | 3.3  | 56        |
| 64 | Ionic Current-Based Mapping of Short Sequence Motifs in Single DNA Molecules Using Solid-State Nanopores. Nano Letters, 2017, 17, 5199-5205.             | 9.1  | 56        |
| 65 | QuipuNet: Convolutional Neural Network for Single-Molecule Nanopore Sensing. Nano Letters, 2018, 18, 4040-4045.  | 9.1  | 55        |
| 66 | Voltageâ€driven transport of ions and <scp>DNA</scp> through nanocapillaries. Electrophoresis, 2012, 33, 3480-3487.                                      | 2.4  | 54        |
| 67 | Electroosmotic flow rectification in conical nanopores. Nanotechnology, 2015, 26, 275202.  | 2.6  | 54        |
| 68 | Anisotropic diffusion of spherical particles in closely confining microchannels. Physical Review E, 2014, 89, 062305.                                    | 2.1  | 52        |
| 69 | Multiplexed DNA Identification Using Site Specific dCas9 Barcodes and Nanopore Sensing. ACS Sensors, 2019, 4, 2065-2072.                                 | 7.8  | 50        |
| 70 | Electroosmotic Flow Reversal Outside Glass Nanopores. Nano Letters, 2015, 15, 695-702.   | 9.1  | 49        |
| 71 | Digital Sensing and Molecular Computation by an Enzyme-Free DNA Circuit. ACS Nano, 2020, 14, 5763-5771.  | 14.6 | 48        |
| 72 | Sensing DNA-coatings of microparticles using micropipettes. Biosensors and Bioelectronics, 2009, 24, 2423-2427.  | 10.1 | 47        |

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| 73             | Nondecaying Hydrodynamic Interactions along Narrow Channels. Physical Review Letters, 2015, 115, 038301.  | 7.8                         | 47                   |
| 74             | A microfluidic platform for the characterisation of membrane active antimicrobials. Lab on A Chip, 2019, 19, 837-844.   | 6.0                         | 46                   |
| 75             | Free-standing graphene membranes on glass nanopores for ionic current measurements. Applied Physics Letters, 2015, 106, .   | 3.3                         | 45                   |
| 76             | Scalable integration of nano-, and microfluidics with hybrid two-photon lithography. Microsystems and Nanoengineering, 2019, 5, 40.   | 7.0                         | 45                   |
| 77             | Cations Regulate Membrane Attachment and Functionality of DNA Nanostructures. Journal of the American Chemical Society, 2021, 143, 7358-7367.   | 13.7                        | 44                   |
| 78             | Optical Voltage Sensing Using DNA Origami. Nano Letters, 2018, 18, 1962-1971.   | 9.1                         | 43                   |
| 79             | Selective transport control on molecular velcro made from intrinsically disordered proteins. Nature Nanotechnology, 2014, 9, 525-530.   | 31.5                        | 42                   |
| 80             | Studying DNA translocation in nanocapillaries using single molecule fluorescence. Applied Physics Letters, 2012, 101, 223704.   | 3.3                         | 41                   |
| 81             | Microfluidics Reveals a Flow-Induced Large-Scale Polymorphism of Protein Aggregates. Journal of Physical Chemistry Letters, 2012, 3, 2803-2807.   | 4.6                         | 40                   |
| 82             | A Landau–Squire Nanojet. Nano Letters, 2013, 13, 5141-5146.   | 9.1                         | 40                   |
|                |   | 9.1                         |                      |
| 83             | Optimizing Diffusive Transport Through a Synthetic Membrane Channel. Advanced Materials, 2013, 25, 844-849.   | 21.0                        | 40                   |
| 83             | Optimizing Diffusive Transport Through a Synthetic Membrane Channel. Advanced Materials, 2013, 25, 844-849.  Specific Biosensing Using DNA Aptamers and Nanopores. Advanced Functional Materials, 2019, 29, 1807555.  |                             |                      |
|                | Specific Biosensing Using DNA Aptamers and Nanopores. Advanced Functional Materials, 2019, 29,  | 21.0                        | 40                   |
| 84             | Specific Biosensing Using DNA Aptamers and Nanopores. Advanced Functional Materials, 2019, 29, 1807555.   | 21.0                        | 40                   |
| 84             | Specific Biosensing Using DNA Aptamers and Nanopores. Advanced Functional Materials, 2019, 29, 1807555.  Dynamics of driven polymer transport through a nanopore. Nature Physics, 2021, 17, 1043-1049.  | 21.0<br>14.9<br>16.7        | 40 40                |
| 84<br>85<br>86 | Specific Biosensing Using DNA Aptamers and Nanopores. Advanced Functional Materials, 2019, 29, 1807555.  Dynamics of driven polymer transport through a nanopore. Nature Physics, 2021, 17, 1043-1049.  Simple Reconstitution of Protein Pores in Nano Lipid Bilayers. Nano Letters, 2011, 11, 3334-3340.  Controlling the Reversible Assembly of Liposomes through a Multistimuli Responsive Anchored DNA.   | 21.0<br>14.9<br>16.7<br>9.1 | 40<br>40<br>40<br>39 |
| 84<br>85<br>86 | Specific Biosensing Using DNA Aptamers and Nanopores. Advanced Functional Materials, 2019, 29, 1807555.  Dynamics of driven polymer transport through a nanopore. Nature Physics, 2021, 17, 1043-1049.  Simple Reconstitution of Protein Pores in Nano Lipid Bilayers. Nano Letters, 2011, 11, 3334-3340.  Controlling the Reversible Assembly of Liposomes through a Multistimuli Responsive Anchored DNA. Nano Letters, 2016, 16, 4462-4466.  Direction- and Salt-Dependent Ionic Current Signatures for DNA Sensing with Asymmetric Nanopores. | 21.0<br>14.9<br>16.7<br>9.1 | 40<br>40<br>40<br>39 |

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| 91  | Experimental evidence of symmetry breaking of transition-path times. Nature Communications, 2019, 10, 55.  | 12.8 | 37        |
| 92  | DNA Interactions in Crowded Nanopores. Nano Letters, 2013, 13, 2798-2802.  | 9.1  | 36        |
| 93  | A label-free microfluidic assay to quantitatively study antibiotic diffusion through lipid membranes.<br>Lab on A Chip, 2014, 14, 2303-2308.   | 6.0  | 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.                                       | 13.7 | 36        |
| 95  | An Integrated Microfluidic Platform for Quantifying Drug Permeation across Biomimetic Vesicle Membranes. Molecular Pharmaceutics, 2019, 16, 2494-2501.   | 4.6  | 36        |
| 96  | Tunable Anion-Selective Transport through Monolayer Graphene and Hexagonal Boron Nitride. ACS Nano, 2020, 14, 2729-2738.   | 14.6 | 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.                                  | 7.1  | 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. | 2.7  | 35        |
| 99  | The Effect of Bacterial Signal Indole on the Electrical Properties of Lipid Membranes. ChemPhysChem, 2013, 14, 417-423.  | 2.1  | 34        |
| 100 | Direct Optofluidic Measurement of the Lipid Permeability of Fluoroquinolones. Scientific Reports, 2016, 6, 32824.  | 3.3  | 34        |
| 101 | A microfluidic device for characterizing nuclear deformations. Lab on A Chip, 2017, 17, 805-813.   | 6.0  | 33        |
| 102 | Current Enhancement in Solid-State Nanopores Depends on Three-Dimensional DNA Structure. Nano Letters, 2019, 19, 5661-5666.  | 9.1  | 33        |
| 103 | Indole Pulse Signalling Regulates the Cytoplasmic pH of E. coli in a Memory-Like Manner. Scientific Reports, 2019, 9, 3868.  | 3.3  | 33        |
| 104 | Single colloid electrophoresis. Journal of Colloid and Interface Science, 2009, 337, 260-264.  | 9.4  | 32        |
| 105 | Promoting single-file DNA translocations through nanopores using electro-osmotic flow. Journal of Chemical Physics, 2018, 149, 163311.   | 3.0  | 32        |
| 106 | Image Encoding Using Multiâ€Level DNA Barcodes with Nanopore Readout. Small, 2021, 17, e2100711.   | 10.0 | 32        |
| 107 | Probing DNA with micro- and nanocapillaries and optical tweezers. Journal of Physics Condensed Matter, 2010, 22, 454113.   | 1.8  | 31        |
| 108 | Lipid-coated nanocapillaries for DNA sensing. Analyst, The, 2013, 138, 104-106.  | 3.5  | 31        |

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| 109 | Modeling of colloidal transport in capillaries. Journal of Applied Physics, 2009, 105, .   | 2.5  | 30        |
| 110 | Nanotubes Complexed with DNA and Proteins for Resistive-Pulse Sensing. ACS Nano, 2013, 7, 8857-8869.   | 14.6 | 30        |
| 111 | Local characterization of hindered Brownian motion by using digital video microscopy and 3D particle tracking. Review of Scientific Instruments, 2014, 85, 023708. | 1.3  | 30        |
| 112 | Parallel sub-micrometre channels with different dimensions for laser scattering detection. Lab on A Chip, 2011, 11, 3365.  | 6.0  | 29        |
| 113 | Lipidâ€Bilayerâ€Spanning DNA Nanopores with a Bifunctional Porphyrin Anchor. Angewandte Chemie, 2013, 125, 12291-12294.  | 2.0  | 28        |
| 114 | Nanopore analysis of amyloid fibrils formed by lysozyme aggregation. Analyst, The, 2015, 140, 4882-4886.   | 3.5  | 27        |
| 115 | All-Optical Detection of Neuronal Membrane Depolarization in Live Cells Using Colloidal Quantum<br>Dots. Nano Letters, 2019, 19, 8539-8549.                        | 9.1  | 27        |
| 116 | The Crucial Role of Charge in Thermoresponsiveâ€Polymerâ€Assisted Reversible Dis/Assembly of Gold Nanoparticles. Advanced Optical Materials, 2018, 6, 1701270.     | 7.3  | 26        |
| 117 | Direct detection of molecular intermediates from first-passage times. Science Advances, 2020, 6, eaaz4642.   | 10.3 | 26        |
| 118 | Measurement of the Position-Dependent Electrophoretic Force on DNA in a Glass Nanocapillary. Nano Letters, 2014, 14, 6606-6613.                                    | 9.1  | 25        |
| 119 | Dependence of norfloxacin diffusion across bilayers on lipid composition. Soft Matter, 2016, 12, 2135-2144.  | 2.7  | 25        |
| 120 | Fabrication of quantum point contacts by engraving GaAs/AlGaAs heterostructures with a diamond tip. Applied Physics Letters, 2002, 81, 2023-2025.                  | 3.3  | 24        |
| 121 | High-speed video-based tracking of optically trapped colloids. Journal of Optics (United Kingdom), 2011, 13, 044011.   | 2.2  | 24        |
| 122 | Lipid Nanobilayers to Host Biological Nanopores for DNA Translocations. Langmuir, 2013, 29, 355-364.   | 3.5  | 24        |
| 123 | Tailoring the Binding Properties of Phosphazane Anion Receptors and Transporters. Journal of the American Chemical Society, 2019, 141, 8807-8815.                  | 13.7 | 24        |
| 124 | Kinetically limited quantum dot formation on AlAs(100) surfaces. Journal of Crystal Growth, 2003, 249, 477-482.  | 1.5  | 23        |
| 125 | Flux-quantum-modulated Kondo conductance in a multielectron quantum dot. Physical Review B, 2002, 66, .  | 3.2  | 22        |
| 126 | Rapid internal contraction boosts DNA friction. Nature Communications, 2013, 4, 1780.  | 12.8 | 22        |

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| 127 | Characterization of lipid composition and diffusivity in OLA generated vesicles. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183359.   | 2.6  | 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.   | 4.3  | 22        |
| 129 | Electrical DNA Sequence Mapping Using Oligodeoxynucleotide Labels and Nanopores. ACS Nano, 2021, 15, 2679-2685.  | 14.6 | 22        |
| 130 | DNA Origami Voltage Sensors for Transmembrane Potentials with Single-Molecule Sensitivity. Nano Letters, 2021, 21, 8634-8641.  | 9.1  | 22        |
| 131 | Diamond cantilever with integrated tip for nanomachining. Diamond and Related Materials, 2002, 11, 667-671.  | 3.9  | 20        |
| 132 | Monitoring G-Quadruplex Formation with DNA Carriers and Solid-State Nanopores. Nano Letters, 2019, 19, 7996-8001.  | 9.1  | 20        |
| 133 | Optical tweezers to study single Protein A/Immunoglobulin G interactions at varying conditions. European Biophysics Journal, 2008, 37, 927-934.  | 2.2  | 19        |
| 134 | Conformational Control in Main Group Phosphazane Anion Receptors and Transporters. Journal of the American Chemical Society, 2020, 142, 1029-1037.   | 13.7 | 19        |
| 135 | Spin blockade in capacitively coupled quantum dots. Applied Physics Letters, 2004, 85, 606-608.  | 3.3  | 18        |
| 136 | Perpendicular coupling to in-plane photonics using arc waveguides fabricated via two-photon polymerization. Applied Physics Letters, 2012, 100, .  | 3.3  | 18        |
| 137 | Micro-rheology on (polymer-grafted) colloids using optical tweezers. Journal of Physics Condensed Matter, 2011, 23, 184114.  | 1.8  | 17        |
| 138 | Note: Direct force and ionic-current measurements on DNA in a nanocapillary. Review of Scientific Instruments, 2011, 82, 086102.   | 1.3  | 17        |
| 139 | Blockable Zn <sub>10</sub> L <sub>15</sub> Ion Channels through Subcomponent Selfâ€Assembly.<br>Angewandte Chemie, 2017, 129, 15590-15594.   | 2.0  | 17        |
| 140 | Switching Cytolytic Nanopores into Antimicrobial Fractal Ruptures by a Single Side Chain Mutation. ACS Nano, 2021, 15, 9679-9689.  | 14.6 | 17        |
| 141 | DNA origami nanopores: an emerging tool in biomedicine. Nanomedicine, 2013, 8, 1551-1554.  | 3.3  | 16        |
| 142 | Combining Affinity Selection and Specific Ion Mobility for Microchip Protein Sensing. Analytical Chemistry, 2018, 90, 10302-10310.   | 6.5  | 16        |
| 143 | Kinetics of Toehold-Mediated DNA Strand Displacement Depend on Fe <sup>   sup&gt;<sub>4</sub><br/> sub&gt;4<br/> sub&gt; Tetrahedron Concentration. Nano Letters, 2021, 21, 1368-1374.</sup> | 9.1  | 16        |
| 144 | DNA Structural Barcode Copying and Random Access. Small Structures, 2021, 2, 2000144.  | 12.0 | 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.                     | 3.3  | 15        |
| 146 | Density-Dependent Speed-up of Particle Transport in Channels. Physical Review Letters, 2019, 122, 214501.  | 7.8  | 15        |
| 147 | Deoxyribonucleic Acid Encoded and Size-Defined π-Stacking of Perylene Diimides. Journal of the American Chemical Society, 2022, 144, 368-376.  | 13.7 | 15        |
| 148 | Tuning the onset voltage of resonant tunneling through InAs quantum dots by growth parameters. Applied Physics Letters, 2003, 82, 1209-1211.   | 3.3  | 14        |
| 149 | Diffusion coefficients and particle transport in synthetic membrane channels. European Physical Journal: Special Topics, 2014, 223, 3145-3163.   | 2.6  | 13        |
| 150 | Tailoring Interleaflet Lipid Transfer with a DNA-based Synthetic Enzyme. Nano Letters, 2020, 20, 4306-4311.  | 9.1  | 13        |
| 151 | A Microfluidic Platform for Sequential Assembly and Separation of Synthetic Cell Models. ACS Synthetic Biology, 2021, 10, 3105-3116.   | 3.8  | 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.        | 2.7  | 12        |
| 153 | Selective Trapping of DNA Using Glass Microcapillaries. Langmuir, 2016, 32, 8525-8532.   | 3.5  | 12        |
| 154 | Split G-Quadruplexes Enhance Nanopore Signals for Simultaneous Identification of Multiple Nucleic Acids. Nano Letters, 2022, 22, 4993-4998.  | 9.1  | 12        |
| 155 | Cation dependent electroosmotic flow in glass nanopores. Applied Physics Letters, 2019, 115, 113702.   | 3.3  | 11        |
| 156 | Current Fluctuations in Nanopores Reveal the Polymer-Wall Adsorption Potential. Physical Review Letters, 2021, 127, 137801.  | 7.8  | 10        |
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