

Herre S J Van Der Zant

List of Publications by Year in descending order

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312
papers

32,688
citations

4641

85
h-index

4203

174
g-index

313
all docs

313
docs citations

313
times ranked

29948
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. <i>Nanoscale</i> , 2015, 7, 4598-4810. | 2.8 | 2,452 |
| 2 | Fast and Broadband Photoresponse of Few-Layer Black Phosphorus Field-Effect Transistors. <i>Nano Letters</i> , 2014, 14, 3347-3352. | 4.5 | 1,510 |
| 3 | Isolation and characterization of few-layer black phosphorus. <i>2D Materials</i> , 2014, 1, 025001. | 2.0 | 1,411 |
| 4 | Deterministic transfer of two-dimensional materials by all-dry viscoelastic stamping. <i>2D Materials</i> , 2014, 1, 011002. | 2.0 | 1,375 |
| 5 | Local Strain Engineering in Atomically Thin MoS ₂ . <i>Nano Letters</i> , 2013, 13, 5361-5366. | 4.5 | 1,041 |
| 6 | Elastic Properties of Freely Suspended MoS ₂ Nanosheets. <i>Advanced Materials</i> , 2012, 24, 772-775. | 11.1 | 905 |
| 7 | Environmental instability of few-layer black phosphorus. <i>2D Materials</i> , 2015, 2, 011002. | 2.0 | 818 |
| 8 | Photocurrent generation with two-dimensional van der Waals semiconductors. <i>Chemical Society Reviews</i> , 2015, 44, 3691-3718. | 18.7 | 802 |
| 9 | Photovoltaic effect in few-layer black phosphorus PN junctions defined by local electrostatic gating. <i>Nature Communications</i> , 2014, 5, 4651. | 5.8 | 643 |
| 10 | Laser-Thinning of MoS ₂ : On Demand Generation of a Single-Layer Semiconductor. <i>Nano Letters</i> , 2012, 12, 3187-3192. | 4.5 | 567 |
| 11 | Large and Tunable Photothermoelectric Effect in Single-Layer MoS ₂ . <i>Nano Letters</i> , 2013, 13, 358-363. | 4.5 | 566 |
| 12 | The effect of the substrate on the Raman and photoluminescence emission of single-layer MoS ₂ . <i>Nano Research</i> , 2014, 7, 561-571. | 5.8 | 497 |
| 13 | Electron Transport through Single-Mn ¹² Molecular Magnets. <i>Physical Review Letters</i> , 2006, 96, 206801. | 2.9 | 444 |
| 14 | Quantum phase transitions and vortex dynamics in superconducting networks. <i>Physics Reports</i> , 2001, 355, 235-334. | 10.3 | 421 |
| 15 | Mechanical systems in the quantum regime. <i>Physics Reports</i> , 2012, 511, 273-335. | 10.3 | 398 |
| 16 | Single-photon emission from localized excitons in an atomically thin semiconductor. <i>Optica</i> , 2015, 2, 347. | 4.8 | 378 |
| 17 | Strong Coupling Between Single-Electron Tunneling and Nanomechanical Motion. <i>Science</i> , 2009, 325, 1103-1107. | 6.0 | 348 |
| 18 | Gate Controlled Photocurrent Generation Mechanisms in High-Gain In ₂ Se ₃ Phototransistors. <i>Nano Letters</i> , 2015, 15, 7853-7858. | 4.5 | 347 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Long-range orientation and atomic attachment of nanocrystals in 2D honeycomb superlattices. <i>Science</i> , 2014, 344, 1377-1380. | 6.0 | 343 |
| 20 | Orbital Kondo effect in carbon nanotubes. <i>Nature</i> , 2005, 434, 484-488. | 13.7 | 341 |
| 21 | Room-Temperature Electrical Addressing of a Bistable Spin-Crossover Molecular System. <i>Advanced Materials</i> , 2011, 23, 1545-1549. | 11.1 | 328 |
| 22 | Carbon Nanotubes as Ultrahigh Quality Factor Mechanical Resonators. <i>Nano Letters</i> , 2009, 9, 2547-2552. | 4.5 | 322 |
| 23 | Nanomechanical properties of few-layer graphene membranes. <i>Applied Physics Letters</i> , 2008, 92, . | 1.5 | 321 |
| 24 | Room-Temperature Gating of Molecular Junctions Using Few-Layer Graphene Nanogap Electrodes. <i>Nano Letters</i> , 2011, 11, 4607-4611. | 4.5 | 310 |
| 25 | Enhanced superconductivity in atomically thin TaS ₂ . <i>Nature Communications</i> , 2016, 7, 11043. | 5.8 | 285 |
| 26 | Fullerene-Based Anchoring Groups for Molecular Electronics. <i>Journal of the American Chemical Society</i> , 2008, 130, 13198-13199. | 6.6 | 282 |
| 27 | Single-molecule transistors. <i>Chemical Society Reviews</i> , 2015, 44, 902-919. | 18.7 | 282 |
| 28 | Large tunable image-charge effects in single-molecule junctions. <i>Nature Nanotechnology</i> , 2013, 8, 282-287. | 15.6 | 258 |
| 29 | Photovoltaic and Photothermoelectric Effect in a Double-Gated WSe ₂ Device. <i>Nano Letters</i> , 2014, 14, 5846-5852. | 4.5 | 232 |
| 30 | Atomically thin p-n junctions based on two-dimensional materials. <i>Chemical Society Reviews</i> , 2018, 47, 3339-3358. | 18.7 | 231 |
| 31 | Tunneling in Suspended Carbon Nanotubes Assisted by Longitudinal Phonons. <i>Physical Review Letters</i> , 2006, 96, 026801. | 2.9 | 229 |
| 32 | Electron-hole symmetry in a semiconducting carbon nanotube quantum dot. <i>Nature</i> , 2004, 429, 389-392. | 13.7 | 213 |
| 33 | Single-molecule quantum-transport phenomena in break junctions. <i>Nature Reviews Physics</i> , 2019, 1, 381-396. | 11.9 | 209 |
| 34 | Carbon nanotubes as nanoelectromechanical systems. <i>Physical Review B</i> , 2003, 67, . | 1.1 | 204 |
| 35 | Signatures of Quantum Interference Effects on Charge Transport Through a Single Benzene Ring. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 3152-3155. | 7.2 | 204 |
| 36 | Single-Layer MoS ₂ Mechanical Resonators. <i>Advanced Materials</i> , 2013, 25, 6719-6723. | 11.1 | 201 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | TiS ₃ Transistors with Tailored Morphology and Electrical Properties. <i>Advanced Materials</i> , 2015, 27, 2595-2601. | 11.1 | 193 |
| 38 | Direct Observation of Single-Molecule Magnets Organized on Gold Surfaces. <i>Angewandte Chemie - International Edition</i> , 2003, 42, 1645-1648. | 7.2 | 190 |
| 39 | Mechanically controlled quantum interference in individual π -stacked dimers. <i>Nature Chemistry</i> , 2016, 8, 1099-1104. | 6.6 | 190 |
| 40 | Ultrahigh Photoresponse of Few-Layer TiS ₃ Nanoribbon Transistors. <i>Advanced Optical Materials</i> , 2014, 2, 641-645. | 3.6 | 189 |
| 41 | Bending-Mode Vibration of a Suspended Nanotube Resonator. <i>Nano Letters</i> , 2006, 6, 2904-2908. | 4.5 | 185 |
| 42 | Nonlinear Modal Interactions in Clamped-Clamped Mechanical Resonators. <i>Physical Review Letters</i> , 2010, 105, 117205. | 2.9 | 178 |
| 43 | Electric Field Controlled Magnetic Anisotropy in a Single Molecule. <i>Nano Letters</i> , 2010, 10, 3307-3311. | 4.5 | 177 |
| 44 | Field-induced superconductor-to-insulator transitions in Josephson-junction arrays. <i>Physical Review Letters</i> , 1992, 69, 2971-2974. | 2.9 | 171 |
| 45 | Large negative differential conductance in single-molecule break junctions. <i>Nature Nanotechnology</i> , 2014, 9, 830-834. | 15.6 | 170 |
| 46 | Electrical control over the Fe(II) spin crossover in a single molecule: Theory and experiment. <i>Physical Review B</i> , 2011, 83, . | 1.1 | 169 |
| 47 | Motion detection of a micromechanical resonator embedded in a d.c. SQUID. <i>Nature Physics</i> , 2008, 4, 785-788. | 6.5 | 166 |
| 48 | Unity quantum yield of photogenerated charges and band-like transport in quantum-dot solids. <i>Nature Nanotechnology</i> , 2011, 6, 733-739. | 15.6 | 164 |
| 49 | Precise and reversible band gap tuning in single-layer MoSe ₂ by uniaxial strain. <i>Nanoscale</i> , 2016, 8, 2589-2593. | 2.8 | 159 |
| 50 | Electrical Manipulation of Spin States in a Single Electrostatically Gated Transition-Metal Complex. <i>Nano Letters</i> , 2010, 10, 105-110. | 4.5 | 157 |
| 51 | Thickness-Dependent Refractive Index of 1L, 2L, and 3L MoS ₂ , MoSe ₂ , WS ₂ , and WSe ₂ . <i>Advanced Optical Materials</i> , 2019, 7, 1900239. | 3.6 | 155 |
| 52 | Control of biaxial strain in single-layer molybdenite using local thermal expansion of the substrate. <i>2D Materials</i> , 2015, 2, 015006. | 2.0 | 149 |
| 53 | Electronics and optoelectronics of quasi-1D layered transition metal trichalcogenides. <i>2D Materials</i> , 2017, 4, 022003. | 2.0 | 146 |
| 54 | Mechanics of freely-suspended ultrathin layered materials. <i>Annalen Der Physik</i> , 2015, 527, 27-44. | 0.9 | 145 |

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|----|---|-----|-----------|
| 55 | Graphene Squeeze-Film Pressure Sensors. <i>Nano Letters</i> , 2016, 16, 568-571. | 4.5 | 143 |
| 56 | Quantum phase transitions in two dimensions: Experiments in Josephson-junction arrays. <i>Physical Review B</i> , 1996, 54, 10081-10093. | 1.1 | 139 |
| 57 | Single-Molecule Spin Switch Based on Voltage-Triggered Distortion of the Coordination Sphere. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 13425-13430. | 7.2 | 138 |
| 58 | Mechanical properties of freely suspended semiconducting graphene-like layers based on MoS ₂ . <i>Nanoscale Research Letters</i> , 2012, 7, 233. | 3.1 | 134 |
| 59 | Size-dependent effective Young's modulus of silicon nitride cantilevers. <i>Applied Physics Letters</i> , 2009, 94, . | 1.5 | 126 |
| 60 | High charge mobility in two-dimensional percolative networks of PbSe quantum dots connected by atomic bonds. <i>Nature Communications</i> , 2015, 6, 8195. | 5.8 | 125 |
| 61 | One-Dimensional Conduction in Charge-Density-Wave Nanowires. <i>Physical Review Letters</i> , 2004, 93, 176602. | 2.9 | 124 |
| 62 | Lithographic mechanical break junctions for single-molecule measurements in vacuum: possibilities and limitations. <i>New Journal of Physics</i> , 2008, 10, 065008. | 1.2 | 123 |
| 63 | Influence of induced magnetic fields on the static properties of Josephson-junction arrays. <i>Physical Review B</i> , 1993, 47, 5219-5229. | 1.1 | 119 |
| 64 | Electronic Excitations of a Single Molecule Contacted in a Three-Terminal Configuration. <i>Nano Letters</i> , 2007, 7, 3336-3342. | 4.5 | 118 |
| 65 | Kondo Effect in the Presence of Magnetic Impurities. <i>Physical Review Letters</i> , 2006, 96, 017205. | 2.9 | 117 |
| 66 | Kondo Effect in a Neutral and Stable All Organic Radical Single Molecule Break Junction. <i>Nano Letters</i> , 2015, 15, 3109-3114. | 4.5 | 117 |
| 67 | Dynamics of circular arrays of Josephson junctions and the discrete sine-Gordon equation. <i>Physica D: Nonlinear Phenomena</i> , 1996, 97, 429-470. | 1.3 | 116 |
| 68 | Temperature Dependence of Three-Terminal Molecular Junctions with Sulfur End-Functionalized Tercyclohexylidenes. <i>Nano Letters</i> , 2006, 6, 1031-1035. | 4.5 | 113 |
| 69 | Titanium trisulfide (TiS ₃): a 2D semiconductor with quasi-1D optical and electronic properties. <i>Scientific Reports</i> , 2016, 6, 22214. | 1.6 | 107 |
| 70 | Kink Propagation in a Highly Discrete System: Observation of Phase Locking to Linear Waves. <i>Physical Review Letters</i> , 1995, 74, 174-177. | 2.9 | 104 |
| 71 | Franckeite as a naturally occurring van der Waals heterostructure. <i>Nature Communications</i> , 2017, 8, 14409. | 5.8 | 103 |
| 72 | Franck-Condon Blockade in a Single-Molecule Transistor. <i>Nano Letters</i> , 2014, 14, 3191-3196. | 4.5 | 102 |

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|----|---|------|-----------|
| 73 | Spin Switching in Electronic Devices Based on 2D Assemblies of Spin-Crossover Nanoparticles. <i>Advanced Materials</i> , 2015, 27, 1288-1293. | 11.1 | 102 |
| 74 | Nanometer-spaced electrodes with calibrated separation. <i>Applied Physics Letters</i> , 2002, 80, 321-323. | 1.5 | 100 |
| 75 | Centimeter-Scale Synthesis of Ultrathin Layered MoO ₃ by van der Waals Epitaxy. <i>Chemistry of Materials</i> , 2016, 28, 4042-4051. | 3.2 | 100 |
| 76 | Stretching-Induced Conductance Increase in a Spin-Crossover Molecule. <i>Nano Letters</i> , 2016, 16, 4733-4737. | 4.5 | 96 |
| 77 | Nonlinear dynamic characterization of two-dimensional materials. <i>Nature Communications</i> , 2017, 8, 1253. | 5.8 | 96 |
| 78 | Isorecticular two-dimensional magnetic coordination polymers prepared through pre-synthetic ligand functionalization. <i>Nature Chemistry</i> , 2018, 10, 1001-1007. | 6.6 | 94 |
| 79 | Nanoelectromechanical Sensors Based on Suspended 2D Materials. <i>Research</i> , 2020, 2020, 8748602. | 2.8 | 93 |
| 80 | Self-breaking in planar few-atom Au constrictions for nanometer-spaced electrodes. <i>Applied Physics Letters</i> , 2007, 90, 133109. | 1.5 | 91 |
| 81 | A highly conductive fibre network enables centimetre-scale electron transport in multicellular cable bacteria. <i>Nature Communications</i> , 2019, 10, 4120. | 5.8 | 91 |
| 82 | Electronic Transport Spectroscopy of Carbon Nanotubes in a Magnetic Field. <i>Physical Review Letters</i> , 2005, 94, 156802. | 2.9 | 90 |
| 83 | Molecular three-terminal devices: fabrication and measurements. <i>Faraday Discussions</i> , 2006, 131, 347-356. | 1.6 | 90 |
| 84 | Phase Transitions in Spin-Crossover Thin Films Probed by Graphene Transport Measurements. <i>Nano Letters</i> , 2017, 17, 186-193. | 4.5 | 90 |
| 85 | Temperature-Dependent Raman Spectroscopy of Titanium Trisulfide (TiS ₃) Nanoribbons and Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 24185-24190. | 4.0 | 89 |
| 86 | Phase transitions of Josephson-tunnel-junction arrays at zero and full frustration. <i>Physical Review B</i> , 1987, 35, 7291-7294. | 1.1 | 88 |
| 87 | Electronic excitation spectrum of metallic carbon nanotubes. <i>Physical Review B</i> , 2005, 71, . | 1.1 | 88 |
| 88 | Mechanical properties of freely suspended atomically thin dielectric layers of mica. <i>Nano Research</i> , 2012, 5, 550-557. | 5.8 | 87 |
| 89 | <i>In situ</i> imaging of electromigration-induced nanogap formation by transmission electron microscopy. <i>Applied Physics Letters</i> , 2007, 91, . | 1.5 | 85 |
| 90 | Gate-tunable diode and photovoltaic effect in an organic-2D layered material p-n junction. <i>Nanoscale</i> , 2015, 7, 15442-15449. | 2.8 | 84 |

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|-----|--|------|-----------|
| 91 | Charge transport and single-electron effects in nanoscale systems. <i>Physica Status Solidi (B): Basic Research</i> , 2008, 245, 1455-1470. | 0.7 | 80 |
| 92 | Direct Observation of Magnetic Anisotropy in an Individual Fe ₄ Single-Molecule Magnet. <i>Physical Review Letters</i> , 2012, 109, 147203. | 2.9 | 78 |
| 93 | Single-molecule transport in three-terminal devices. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 374121. | 0.7 | 77 |
| 94 | Dynamics of vortices in underdamped Josephson-junction arrays. <i>Physical Review Letters</i> , 1991, 66, 2531-2534. | 2.9 | 76 |
| 95 | A gate-tunable single-molecule diode. <i>Nanoscale</i> , 2016, 8, 8919-8923. | 2.8 | 76 |
| 96 | The superconducting transition of 2-D Josephson-junction arrays in a small perpendicular magnetic field. <i>Journal of Low Temperature Physics</i> , 1990, 79, 289-310. | 0.6 | 74 |
| 97 | Visualizing the Motion of Graphene Nanodrums. <i>Nano Letters</i> , 2016, 16, 2768-2773. | 4.5 | 74 |
| 98 | Mechanically controlled quantum interference in graphene break junctions. <i>Nature Nanotechnology</i> , 2018, 13, 1126-1131. | 15.6 | 73 |
| 99 | Quantum Dots at Room Temperature Carved out from Few-Layer Graphene. <i>Nano Letters</i> , 2012, 12, 6096-6100. | 4.5 | 72 |
| 100 | Pumping of Vibrational Excitations in the Coulomb-Blockade Regime in a Suspended Carbon Nanotube. <i>Physical Review Letters</i> , 2009, 102, 225501. | 2.9 | 71 |
| 101 | Folded MoS ₂ layers with reduced interlayer coupling. <i>Nano Research</i> , 2014, 7, 572-578. | 5.8 | 71 |
| 102 | Buckling beam micromechanical memory with on-chip readout. <i>Applied Physics Letters</i> , 2009, 94, . | 1.5 | 70 |
| 103 | Ballistic Vortices in Josephson-Junction Arrays. <i>Europhysics Letters</i> , 1992, 18, 343-348. | 0.7 | 69 |
| 104 | Electrical properties and mechanical stability of anchoring groups for single-molecule electronics. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 1558-1567. | 1.5 | 69 |
| 105 | Large Conductance Variations in a Mechanosensitive Single-Molecule Junction. <i>Nano Letters</i> , 2018, 18, 5981-5988. | 4.5 | 69 |
| 106 | Magnetic and electronic phase transitions probed by nanomechanical resonators. <i>Nature Communications</i> , 2020, 11, 2698. | 5.8 | 69 |
| 107 | A Nanoelectromechanical Single-Atom Switch. <i>Nano Letters</i> , 2009, 9, 2940-2945. | 4.5 | 67 |
| 108 | Whirling Modes and Parametric Instabilities in the Discrete Sine-Gordon Equation: Experimental Tests in Josephson Rings. <i>Physical Review Letters</i> , 1995, 74, 379-382. | 2.9 | 62 |

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|-----|--|-----|-----------|
| 109 | Fast and reliable identification of atomically thin layers of TaSe ₂ crystals. <i>Nano Research</i> , 2013, 6, 191-199. | 5.8 | 62 |
| 110 | Vibrational Excitations in Weakly Coupled Single-Molecule Junctions: A Computational Analysis. <i>ACS Nano</i> , 2008, 2, 1445-1451. | 7.3 | 61 |
| 111 | An All-Electric Single-Molecule Motor. <i>ACS Nano</i> , 2010, 4, 6681-6686. | 7.3 | 61 |
| 112 | Exchange Coupling Inversion in a High-Spin Organic Triradical Molecule. <i>Nano Letters</i> , 2016, 16, 2066-2071. | 4.5 | 60 |
| 113 | Highly Anisotropic Mechanical and Optical Properties of 2D Layered As ₂ S ₃ Membranes. <i>ACS Nano</i> , 2019, 13, 10845-10851. | 7.3 | 60 |
| 114 | Mechanical stiffening, bistability, and bit operations in a microcantilever. <i>Applied Physics Letters</i> , 2010, 97, 193107. | 1.5 | 59 |
| 115 | Q-factor control of a microcantilever by mechanical sideband excitation. <i>Applied Physics Letters</i> , 2011, 99, . | 1.5 | 59 |
| 116 | Strong and tunable mode coupling in carbon nanotube resonators. <i>Physical Review B</i> , 2012, 86, . | 1.1 | 59 |
| 117 | Electric-Field Control of Interfering Transport Pathways in a Single-Molecule Anthraquinone Transistor. <i>Nano Letters</i> , 2015, 15, 5569-5573. | 4.5 | 59 |
| 118 | Massively parallel fabrication of crack-defined gold break junctions featuring sub-3 nm gaps for molecular devices. <i>Nature Communications</i> , 2018, 9, 3433. | 5.8 | 59 |
| 119 | Controlling the anisotropy of a van der Waals antiferromagnet with light. <i>Science Advances</i> , 2021, 7, . | 4.7 | 59 |
| 120 | A reference-free clustering method for the analysis of molecular break-junction measurements. <i>Applied Physics Letters</i> , 2019, 114, . | 1.5 | 57 |
| 121 | Influence of the Chemical Structure on the Stability and Conductance of Porphyrin Single-Molecule Junctions. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 11223-11226. | 7.2 | 56 |
| 122 | Statistical analysis of single-molecule breaking traces. <i>Physica Status Solidi (B): Basic Research</i> , 2013, 250, 2431-2436. | 0.7 | 56 |
| 123 | Superconductor-to-Insulator Transitions in Non and Fully Frustrated Josephson-Junction Arrays. <i>Europhysics Letters</i> , 1992, 19, 541-546. | 0.7 | 55 |
| 124 | A Comprehensive Study of Extended Tetrathiafulvalene Cruciform Molecules for Molecular Electronics: Synthesis and Electrical Transport Measurements. <i>Journal of the American Chemical Society</i> , 2014, 136, 16497-16507. | 6.6 | 55 |
| 125 | Room-temperature stability of Pt nanogaps formed by self-breaking. <i>Applied Physics Letters</i> , 2009, 94, . | 1.5 | 52 |
| 126 | Sandwich-type gated mechanical break junctions. <i>Nanotechnology</i> , 2010, 21, 265201. | 1.3 | 52 |

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|-----|---|------|-----------|
| 127 | Coupling carbon nanotube mechanics to a superconducting circuit. <i>Scientific Reports</i> , 2012, 2, 599. | 1.6 | 52 |
| 128 | Conductance Switching and Vibrational Fine Structure of a $[2\text{Co}^{\text{II}}]_{\text{C}_{44}}$ Gridlike Single Molecule Measured in a Three-Terminal Device. <i>Small</i> , 2010, 6, 174-178. | 5.2 | 51 |
| 129 | Fast and Efficient Photodetection in Nanoscale Quantum-Dot Junctions. <i>Nano Letters</i> , 2012, 12, 5740-5743. | 4.5 | 51 |
| 130 | Phase transition of frustrated two-dimensional Josephson junction arrays. <i>Journal of Low Temperature Physics</i> , 1991, 82, 67-92. | 0.6 | 50 |
| 131 | Phenomenological model of vortex dynamics in arrays of Josephson junctions. <i>Physical Review B</i> , 1991, 43, 10218-10228. | 1.1 | 50 |
| 132 | Redox-Induced Gating of the Exchange Interactions in a Single Organic Diradical. <i>ACS Nano</i> , 2017, 11, 5879-5883. | 7.3 | 50 |
| 133 | Robust graphene-based molecular devices. <i>Nature Nanotechnology</i> , 2019, 14, 957-961. | 15.6 | 50 |
| 134 | Probing the charge of a quantum dot with a nanomechanical resonator. <i>Physical Review B</i> , 2012, 86, . | 1.1 | 49 |
| 135 | Tuning nonlinear damping in graphene nanoresonators by parametric direct internal resonance. <i>Nature Communications</i> , 2021, 12, 1099. | 5.8 | 49 |
| 136 | Quantum interference effects at room temperature in OPV-based single-molecule junctions. <i>Nanoscale Research Letters</i> , 2013, 8, 234. | 3.1 | 48 |
| 137 | Vortex dynamics in two-dimensional underdamped, classical Josephson-junction arrays. <i>Physical Review B</i> , 1993, 47, 295-304. | 1.1 | 47 |
| 138 | Sequential Electron Transport and Vibrational Excitations in an Organic Molecule Coupled to Few-Layer Graphene Electrodes. <i>ACS Nano</i> , 2016, 10, 2521-2527. | 7.3 | 47 |
| 139 | Static Capacitive Pressure Sensing Using a Single Graphene Drum. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 43205-43210. | 4.0 | 47 |
| 140 | Single-Molecule Resonant Tunneling Diode. <i>Journal of Physical Chemistry C</i> , 2015, 119, 5697-5702. | 1.5 | 46 |
| 141 | Spin-state dependent conductance switching in single molecule-graphene junctions. <i>Nanoscale</i> , 2018, 10, 7905-7911. | 2.8 | 46 |
| 142 | Effect of Metal Complexation on the Conductance of Single-Molecular Wires Measured at Room Temperature. <i>Journal of the American Chemical Society</i> , 2014, 136, 8314-8322. | 6.6 | 45 |
| 143 | A versatile low-temperature setup for the electrical characterization of single-molecule junctions. <i>Review of Scientific Instruments</i> , 2011, 82, 053907. | 0.6 | 44 |
| 144 | Proximity-Induced Shiba States in a Molecular Junction. <i>Physical Review Letters</i> , 2017, 118, 117001. | 2.9 | 44 |

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|-----|---|------|-----------|
| 145 | Sensitive capacitive pressure sensors based on graphene membrane arrays. <i>Microsystems and Nanoengineering</i> , 2020, 6, 102. | 3.4 | 44 |
| 146 | Complete mapping of the thermoelectric properties of a single molecule. <i>Nature Nanotechnology</i> , 2021, 16, 426-430. | 15.6 | 44 |
| 147 | Stochastic switching of cantilever motion. <i>Nature Communications</i> , 2013, 4, 2624. | 5.8 | 42 |
| 148 | Opto-thermally excited multimode parametric resonance in graphene membranes. <i>Scientific Reports</i> , 2018, 8, 9366. | 1.6 | 42 |
| 149 | Quantum dots in carbon nanotubes. <i>Semiconductor Science and Technology</i> , 2006, 21, S52-S63. | 1.0 | 41 |
| 150 | Effect of undercut on the resonant behaviour of silicon nitride cantilevers. <i>Journal of Micromechanics and Microengineering</i> , 2009, 19, 035003. | 1.5 | 41 |
| 151 | Sealing Graphene Nanodrums. <i>Nano Letters</i> , 2019, 19, 5313-5318. | 4.5 | 41 |
| 152 | Dynamics of 2D material membranes. <i>2D Materials</i> , 2021, 8, 042001. | 2.0 | 41 |
| 153 | Quantum Transport through a Single Conjugated Rigid Molecule, a Mechanical Break Junction Study. <i>Accounts of Chemical Research</i> , 2018, 51, 1359-1367. | 7.6 | 40 |
| 154 | Large birefringence and linear dichroism in TiS_3 nanosheets. <i>Nanoscale</i> , 2018, 10, 12424-12429. | 2.8 | 40 |
| 155 | Coherent phase slip in arrays of underdamped Josephson tunnel junctions. <i>Physical Review B</i> , 1988, 38, 5154-5157. | 1.1 | 39 |
| 156 | High-Frequency Stochastic Switching of Graphene Resonators Near Room Temperature. <i>Nano Letters</i> , 2019, 19, 1282-1288. | 4.5 | 39 |
| 157 | Optomechanics for thermal characterization of suspended graphene. <i>Physical Review B</i> , 2017, 96, . | 1.1 | 38 |
| 158 | Time-domain response of atomically thin MoS_2 nanomechanical resonators. <i>Applied Physics Letters</i> , 2014, 105, . | 1.5 | 37 |
| 159 | Tracking molecular resonance forms of donor-acceptor push-pull molecules by single-molecule conductance experiments. <i>Nature Communications</i> , 2015, 6, 10233. | 5.8 | 36 |
| 160 | Transition from Strong to Weak Electronic Coupling in a Single-Molecule Junction. <i>Physical Review Letters</i> , 2016, 117, 126804. | 2.9 | 36 |
| 161 | Vortices in two-dimensional superconducting weakly coupled wire networks. <i>Physical Review B</i> , 1994, 50, 340-350. | 1.1 | 35 |
| 162 | MoS_2 -on-paper optoelectronics: drawing photodetectors with van der Waals semiconductors beyond graphite. <i>Nanoscale</i> , 2020, 12, 19068-19074. | 2.8 | 34 |

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