

Herre S J Van Der Zant

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296 papers	26,328 citations	78 h-index	157 g-index
313 ext. papers	29,702 ext. citations	9 avg, IF	7.17 L-index

#	Paper	IF	Citations
296	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. <i>Nanoscale</i> , 2015 , 7, 4598-810	7.7	2015
295	Fast and broadband photoresponse of few-layer black phosphorus field-effect transistors. <i>Nano Letters</i> , 2014 , 14, 3347-52	11.5	1305
294	Isolation and characterization of few-layer black phosphorus. <i>2D Materials</i> , 2014 , 1, 025001	5.9	1163
293	Deterministic transfer of two-dimensional materials by all-dry viscoelastic stamping. <i>2D Materials</i> , 2014 , 1, 011002	5.9	986
292	Local strain engineering in atomically thin MoS ₂ . <i>Nano Letters</i> , 2013 , 13, 5361-6	11.5	802
291	Elastic properties of freely suspended MoS ₂ nanosheets. <i>Advanced Materials</i> , 2012 , 24, 772-5	24	725
290	Environmental instability of few-layer black phosphorus. <i>2D Materials</i> , 2015 , 2, 011002	5.9	683
289	Photocurrent generation with two-dimensional van der Waals semiconductors. <i>Chemical Society Reviews</i> , 2015 , 44, 3691-718	58.5	608
288	Photovoltaic effect in few-layer black phosphorus PN junctions defined by local electrostatic gating. <i>Nature Communications</i> , 2014 , 5, 4651	17.4	555
287	Large and tunable photothermoelectric effect in single-layer MoS ₂ . <i>Nano Letters</i> , 2013 , 13, 358-63	11.5	480
286	Laser-thinning of MoS ₂ on demand generation of a single-layer semiconductor. <i>Nano Letters</i> , 2012 , 12, 3187-92	11.5	471
285	Electron transport through single Mn ₁₂ molecular magnets. <i>Physical Review Letters</i> , 2006 , 96, 206801	7.4	418
284	The effect of the substrate on the Raman and photoluminescence emission of single-layer MoS ₂ . <i>Nano Research</i> , 2014 , 7, 561-571	10	392
283	Quantum phase transitions and vortex dynamics in superconducting networks. <i>Physics Reports</i> , 2001 , 355, 235-334	27.7	371
282	Mechanical systems in the quantum regime. <i>Physics Reports</i> , 2012 , 511, 273-335	27.7	331
281	Orbital Kondo effect in carbon nanotubes. <i>Nature</i> , 2005 , 434, 484-8	50.4	315
280	Strong coupling between single-electron tunneling and nanomechanical motion. <i>Science</i> , 2009 , 325, 1103-373	33.3	308

279	Long-range orientation and atomic attachment of nanocrystals in 2D honeycomb superlattices. <i>Science</i> , 2014 , 344, 1377-80	33.3	303
278	Nanomechanical properties of few-layer graphene membranes. <i>Applied Physics Letters</i> , 2008 , 92, 063111	3.4	302
277	Single-photon emission from localized excitons in an atomically thin semiconductor. <i>Optica</i> , 2015 , 2, 347	8.6	290
276	Room-temperature electrical addressing of a bistable spin-crossover molecular system. <i>Advanced Materials</i> , 2011 , 23, 1545-9	24	286
275	Carbon nanotubes as ultrahigh quality factor mechanical resonators. <i>Nano Letters</i> , 2009 , 9, 2547-52	11.5	280
274	Room-temperature gating of molecular junctions using few-layer graphene nanogap electrodes. <i>Nano Letters</i> , 2011 , 11, 4607-11	11.5	263
273	Fullerene-based anchoring groups for molecular electronics. <i>Journal of the American Chemical Society</i> , 2008 , 130, 13198-9	16.4	249
272	Gate Controlled Photocurrent Generation Mechanisms in High-Gain InBe Phototransistors. <i>Nano Letters</i> , 2015 , 15, 7853-8	11.5	248
271	Large tunable image-charge effects in single-molecule junctions. <i>Nature Nanotechnology</i> , 2013 , 8, 282-7	28.7	228
270	Single-molecule transistors. <i>Chemical Society Reviews</i> , 2015 , 44, 902-19	58.5	214
269	Tunneling in suspended carbon nanotubes assisted by longitudinal phonons. <i>Physical Review Letters</i> , 2006 , 96, 026801	7.4	212
268	Enhanced superconductivity in atomically thin TaS ₂ . <i>Nature Communications</i> , 2016 , 7, 11043	17.4	200
267	Electron-hole symmetry in a semiconducting carbon nanotube quantum dot. <i>Nature</i> , 2004 , 429, 389-92	50.4	199
266	Photovoltaic and photothermoelectric effect in a double-gated WSe ₂ device. <i>Nano Letters</i> , 2014 , 14, 5846-52	11.5	186
265	Carbon nanotubes as nanoelectromechanical systems. <i>Physical Review B</i> , 2003 , 67,	3.3	178
264	Direct observation of single-molecule magnets organized on gold surfaces. <i>Angewandte Chemie - International Edition</i> , 2003 , 42, 1645-8	16.4	173
263	Signatures of quantum interference effects on charge transport through a single benzene ring. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 3152-5	16.4	170
262	Electric field controlled magnetic anisotropy in a single molecule. <i>Nano Letters</i> , 2010 , 10, 3307-11	11.5	163

261	Single-layer MoS(2) mechanical resonators. <i>Advanced Materials</i> , 2013 , 25, 6719-23	24	162
260	Ultrahigh Photoresponse of Few-Layer TiS ₃ Nanoribbon Transistors. <i>Advanced Optical Materials</i> , 2014 , 2, 641-645	8.1	159
259	Atomically thin p-n junctions based on two-dimensional materials. <i>Chemical Society Reviews</i> , 2018 , 47, 3339-3358	58.5	158
258	Nonlinear modal interactions in clamped-clamped mechanical resonators. <i>Physical Review Letters</i> , 2010 , 105, 117205	7.4	157
257	Bending-mode vibration of a suspended nanotube resonator. <i>Nano Letters</i> , 2006 , 6, 2904-8	11.5	157
256	Field-induced superconductor-to-insulator transitions in Josephson-junction arrays. <i>Physical Review Letters</i> , 1992 , 69, 2971-2974	7.4	155
255	Electrical control over the Fe(II) spin crossover in a single molecule: Theory and experiment. <i>Physical Review B</i> , 2011 , 83,	3.3	152
254	Motion detection of a micromechanical resonator embedded in a d.c. SQUID. <i>Nature Physics</i> , 2008 , 4, 785-788	16.2	146
253	Unity quantum yield of photogenerated charges and band-like transport in quantum-dot solids. <i>Nature Nanotechnology</i> , 2011 , 6, 733-9	28.7	145
252	Electrical manipulation of spin states in a single electrostatically gated transition-metal complex. <i>Nano Letters</i> , 2010 , 10, 105-10	11.5	145
251	TiS ₃ transistors with tailored morphology and electrical properties. <i>Advanced Materials</i> , 2015 , 27, 2595-601	20.1	144
250	Large negative differential conductance in single-molecule break junctions. <i>Nature Nanotechnology</i> , 2014 , 9, 830-4	28.7	143
249	Mechanically controlled quantum interference in individual stacked dimers. <i>Nature Chemistry</i> , 2016 , 8, 1099-1104	17.6	124
248	Mechanical properties of freely suspended semiconducting graphene-like layers based on MoS ₂ . <i>Nanoscale Research Letters</i> , 2012 , 7, 233	5	121
247	Quantum phase transitions in two dimensions: Experiments in Josephson-junction arrays. <i>Physical Review B</i> , 1996 , 54, 10081-10093	3.3	119
246	One-dimensional conduction in charge-density-wave nanowires. <i>Physical Review Letters</i> , 2004 , 93, 17660	7.4	116
245	Electronic excitations of a single molecule contacted in a three-terminal configuration. <i>Nano Letters</i> , 2007 , 7, 3336-42	11.5	115
244	Influence of induced magnetic fields on the static properties of Josephson-junction arrays. <i>Physical Review B</i> , 1993 , 47, 5219-5229	3.3	115

243	Size-dependent effective Young's modulus of silicon nitride cantilevers. <i>Applied Physics Letters</i> , 2009 , 94, 233108	3.4	114
242	Mechanics of freely-suspended ultrathin layered materials. <i>Annalen Der Physik</i> , 2015 , 527, 27-44	2.6	112
241	Kondo effect in the presence of magnetic impurities. <i>Physical Review Letters</i> , 2006 , 96, 017205	7.4	112
240	Dynamics of circular arrays of Josephson junctions and the discrete sine-Gordon equation. <i>Physica D: Nonlinear Phenomena</i> , 1996 , 97, 429-470	3.3	112
239	Lithographic mechanical break junctions for single-molecule measurements in vacuum: possibilities and limitations. <i>New Journal of Physics</i> , 2008 , 10, 065008	2.9	111
238	Single-Molecule Spin Switch Based on Voltage-Triggered Distortion of the Coordination Sphere. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 13425-30	16.4	106
237	Temperature Dependence of Three-Terminal Molecular Junctions with Sulfur End-Functionalized Tercyclohexylidenes. <i>Nano Letters</i> , 2006 , 6, 1031-1035	11.5	105
236	Control of biaxial strain in single-layer molybdenite using local thermal expansion of the substrate. <i>2D Materials</i> , 2015 , 2, 015006	5.9	104
235	Precise and reversible band gap tuning in single-layer MoSe ₂ by uniaxial strain. <i>Nanoscale</i> , 2016 , 8, 2589-93	7.7	102
234	Single-molecule quantum-transport phenomena in break junctions. <i>Nature Reviews Physics</i> , 2019 , 1, 381-396	3.6	99
233	High charge mobility in two-dimensional percolative networks of PbSe quantum dots connected by atomic bonds. <i>Nature Communications</i> , 2015 , 6, 8195	17.4	99
232	Graphene Squeeze-Film Pressure Sensors. <i>Nano Letters</i> , 2016 , 16, 568-71	11.5	96
231	Kink propagation in a highly discrete system: Observation of phase locking to linear waves. <i>Physical Review Letters</i> , 1995 , 74, 174-177	7.4	96
230	Kondo effect in a neutral and stable all organic radical single molecule break junction. <i>Nano Letters</i> , 2015 , 15, 3109-14	11.5	93
229	Electronics and optoelectronics of quasi-1D layered transition metal trichalcogenides. <i>2D Materials</i> , 2017 , 4, 022003	5.9	92
228	Nanometer-spaced electrodes with calibrated separation. <i>Applied Physics Letters</i> , 2002 , 80, 321-323	3.4	90
227	Molecular three-terminal devices: fabrication and measurements. <i>Faraday Discussions</i> , 2006 , 131, 347-56; discussion 393-402	3.6	88
226	Spin switching in electronic devices based on 2D assemblies of spin-crossover nanoparticles. <i>Advanced Materials</i> , 2015 , 27, 1288-93	24	85

225	Electronic excitation spectrum of metallic carbon nanotubes. <i>Physical Review B</i> , 2005 , 71,	3.3	85
224	Self-breaking in planar few-atom Au constrictions for nanometer-spaced electrodes. <i>Applied Physics Letters</i> , 2007 , 90, 133109	3.4	83
223	Phase transitions of Josephson-tunnel-junction arrays at zero and full frustration. <i>Physical Review B</i> , 1987 , 35, 7291-7294	3.3	83
222	Franck-Condon blockade in a single-molecule transistor. <i>Nano Letters</i> , 2014 , 14, 3191-6	11.5	82
221	Electronic transport spectroscopy of carbon nanotubes in a magnetic field. <i>Physical Review Letters</i> , 2005 , 94, 156802	7.4	81
220	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	8.1	80
219	Titanium trisulfide (TiS ₃): a 2D semiconductor with quasi-1D optical and electronic properties. <i>Scientific Reports</i> , 2016 , 6, 22214	4.9	80
218	In situ imaging of electromigration-induced nanogap formation by transmission electron microscopy. <i>Applied Physics Letters</i> , 2007 , 91, 072107	3.4	74
217	Temperature-Dependent Raman Spectroscopy of Titanium Trisulfide (TiS ₃) Nanoribbons and Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 24185-90	9.5	72
216	Gate-tunable diode and photovoltaic effect in an organic-2D layered material p-n junction. <i>Nanoscale</i> , 2015 , 7, 15442-9	7.7	72
215	Direct observation of magnetic anisotropy in an individual Fe ₄ single-molecule magnet. <i>Physical Review Letters</i> , 2012 , 109, 147203	7.4	72
214	Dynamics of vortices in underdamped Josephson-junction arrays. <i>Physical Review Letters</i> , 1991 , 66, 2531-2534	25.34	71
213	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	1.3	71
212	Nonlinear dynamic characterization of two-dimensional materials. <i>Nature Communications</i> , 2017 , 8, 12531-7	17.4	70
211	Isorecticular two-dimensional magnetic coordination polymers prepared through pre-synthetic ligand functionalization. <i>Nature Chemistry</i> , 2018 , 10, 1001-1007	17.6	70
210	Mechanical properties of freely suspended atomically thin dielectric layers of mica. <i>Nano Research</i> , 2012 , 5, 550-557	10	70
209	Phase Transitions in Spin-Crossover Thin Films Probed by Graphene Transport Measurements. <i>Nano Letters</i> , 2017 , 17, 186-193	11.5	69
208	Franckeite as a naturally occurring van der Waals heterostructure. <i>Nature Communications</i> , 2017 , 8, 14409-7	17.4	68

207	Quantum dots at room temperature carved out from few-layer graphene. <i>Nano Letters</i> , 2012 , 12, 6096-1105	10.5	67
206	Charge transport and single-electron effects in nanoscale systems. <i>Physica Status Solidi (B): Basic Research</i> , 2008 , 245, 1455-1470	1.3	67
205	Single-molecule transport in three-terminal devices. <i>Journal of Physics Condensed Matter</i> , 2008 , 20, 3741-28	12.8	66
204	Stretching-Induced Conductance Increase in a Spin-Crossover Molecule. <i>Nano Letters</i> , 2016 , 16, 4733-7	11.5	66
203	Centimeter-Scale Synthesis of Ultrathin Layered MoO ₃ by van der Waals Epitaxy. <i>Chemistry of Materials</i> , 2016 , 28, 4042-4051	9.6	64
202	A gate-tunable single-molecule diode. <i>Nanoscale</i> , 2016 , 8, 8919-23	7.7	64
201	Pumping of vibrational excitations in the coulomb-blockade regime in a suspended carbon nanotube. <i>Physical Review Letters</i> , 2009 , 102, 225501	7.4	63
200	Ballistic Vortices in Josephson-Junction Arrays. <i>Europhysics Letters</i> , 1992 , 18, 343-348	1.6	60
199	Buckling beam micromechanical memory with on-chip readout. <i>Applied Physics Letters</i> , 2009 , 94, 183501	3.4	59
198	A nanoelectromechanical single-atom switch. <i>Nano Letters</i> , 2009 , 9, 2940-5	11.5	56
197	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	7.4	56
196	Folded MoS ₂ layers with reduced interlayer coupling. <i>Nano Research</i> , 2014 , 7, 572-578	10	55
195	Fast and reliable identification of atomically thin layers of TaSe ₂ crystals. <i>Nano Research</i> , 2013 , 6, 191-198	10	53
194	Mechanical stiffening, bistability, and bit operations in a microcantilever. <i>Applied Physics Letters</i> , 2010 , 97, 193107	3.4	53
193	Statistical analysis of single-molecule breaking traces. <i>Physica Status Solidi (B): Basic Research</i> , 2013 , 250, 2431-2436	1.3	52
192	Influence of the chemical structure on the stability and conductance of porphyrin single-molecule junctions. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 11223-6	16.4	52
191	An all-electric single-molecule motor. <i>ACS Nano</i> , 2010 , 4, 6681-6	16.7	52
190	Vibrational excitations in weakly coupled single-molecule junctions: a computational analysis. <i>ACS Nano</i> , 2008 , 2, 1445-51	16.7	52

189	Visualizing the Motion of Graphene Nanodrums. <i>Nano Letters</i> , 2016 , 16, 2768-73	11.5	51
188	Strong and tunable mode coupling in carbon nanotube resonators. <i>Physical Review B</i> , 2012 , 86,	3.3	51
187	A highly conductive fibre network enables centimetre-scale electron transport in multicellular cable bacteria. <i>Nature Communications</i> , 2019 , 10, 4120	17.4	50
186	Electric-Field Control of Interfering Transport Pathways in a Single-Molecule Anthraquinone Transistor. <i>Nano Letters</i> , 2015 , 15, 5569-73	11.5	50
185	Electrical properties and mechanical stability of anchoring groups for single-molecule electronics. <i>Beilstein Journal of Nanotechnology</i> , 2015 , 6, 1558-67	3	49
184	Sandwich-type gated mechanical break junctions. <i>Nanotechnology</i> , 2010 , 21, 265201	3.4	48
183	Phase transition of frustrated two-dimensional Josephson junction arrays. <i>Journal of Low Temperature Physics</i> , 1991 , 82, 67-92	1.3	48
182	Superconductor-to-Insulator Transitions in Non and Fully Frustrated Josephson-Junction Arrays. <i>Europhysics Letters</i> , 1992 , 19, 541-546	1.6	48
181	Fast and efficient photodetection in nanoscale quantum-dot junctions. <i>Nano Letters</i> , 2012 , 12, 5740-3	11.5	47
180	Phenomenological model of vortex dynamics in arrays of Josephson junctions. <i>Physical Review B</i> , 1991 , 43, 10218-10228	3.3	47
179	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, 16497-507	16.4	46
178	Room-temperature stability of Pt nanogaps formed by self-breaking. <i>Applied Physics Letters</i> , 2009 , 94, 123108	3.4	46
177	Conductance switching and vibrational fine structure of a [2 x 2] Co(II)(4) gridlike single molecule measured in a three-terminal device. <i>Small</i> , 2010 , 6, 174-8	11	46
176	Quantum interference effects at room temperature in OPV-based single-molecule junctions. <i>Nanoscale Research Letters</i> , 2013 , 8, 234	5	44
175	Q-factor control of a microcantilever by mechanical sideband excitation. <i>Applied Physics Letters</i> , 2011 , 99, 151904	3.4	44
174	Probing the charge of a quantum dot with a nanomechanical resonator. <i>Physical Review B</i> , 2012 , 86,	3.3	43
173	Vortex dynamics in two-dimensional underdamped, classical Josephson-junction arrays. <i>Physical Review B</i> , 1993 , 47, 295-304	3.3	43
172	Mechanically controlled quantum interference in graphene break junctions. <i>Nature Nanotechnology</i> , 2018 , 13, 1126-1131	28.7	43

171	Exchange Coupling Inversion in a High-Spin Organic Triradical Molecule. <i>Nano Letters</i> , 2016 , 16, 2066-71	11.5	40
170	Coupling carbon nanotube mechanics to a superconducting circuit. <i>Scientific Reports</i> , 2012 , 2, 599	4.9	39
169	Nanoelectromechanical Sensors Based on Suspended 2D Materials. <i>Research</i> , 2020 , 2020, 8748602	7.8	39
168	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, 8314-22	16.4	38
167	Quantum dots in carbon nanotubes. <i>Semiconductor Science and Technology</i> , 2006 , 21, S52-S63	1.8	38
166	Massively parallel fabrication of crack-defined gold break junctions featuring sub-3 nm gaps for molecular devices. <i>Nature Communications</i> , 2018 , 9, 3433	17.4	37
165	A versatile low-temperature setup for the electrical characterization of single-molecule junctions. <i>Review of Scientific Instruments</i> , 2011 , 82, 053907	1.7	37
164	Coherent phase slip in arrays of underdamped Josephson tunnel junctions. <i>Physical Review B</i> , 1988 , 38, 5154-5157	3.3	37
163	Sequential Electron Transport and Vibrational Excitations in an Organic Molecule Coupled to Few-Layer Graphene Electrodes. <i>ACS Nano</i> , 2016 , 10, 2521-7	16.7	36
162	A reference-free clustering method for the analysis of molecular break-junction measurements. <i>Applied Physics Letters</i> , 2019 , 114, 143102	3.4	35
161	Single-Molecule Resonant Tunneling Diode. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 5697-5702	3.8	35
160	Redox-Induced Gating of the Exchange Interactions in a Single Organic Diradical. <i>ACS Nano</i> , 2017 , 11, 5879-5883	16.7	34
159	Highly Anisotropic Mechanical and Optical Properties of 2D Layered AsS Membranes. <i>ACS Nano</i> , 2019 , 13, 10845-10851	16.7	34
158	Effect of undercut on the resonant behaviour of silicon nitride cantilevers. <i>Journal of Micromechanics and Microengineering</i> , 2009 , 19, 035003	2	34
157	Magnetic and electronic phase transitions probed by nanomechanical resonators. <i>Nature Communications</i> , 2020 , 11, 2698	17.4	33
156	Stochastic switching of cantilever motion. <i>Nature Communications</i> , 2013 , 4, 2624	17.4	33
155	Spin-state dependent conductance switching in single molecule-graphene junctions. <i>Nanoscale</i> , 2018 , 10, 7905-7911	7.7	32
154	Large Conductance Variations in a Mechanosensitive Single-Molecule Junction. <i>Nano Letters</i> , 2018 , 18, 5981-5988	11.5	32

- 153 Vortices in two-dimensional superconducting weakly coupled wire networks. *Physical Review B*, **1994**, 50, 340-350 3.3 32
- 152 Thin-film growth of the charge-density-wave oxide Rb_{0.30}MoO₃. *Applied Physics Letters*, **1996**, 68, 3823-3825 3.4 31
- 151 Transition from Strong to Weak Electronic Coupling in a Single-Molecule Junction. *Physical Review Letters*, **2016**, 117, 126804 7.4 30
- 150 Quantum Transport through a Single Conjugated Rigid Molecule, a Mechanical Break Junction Study. *Accounts of Chemical Research*, **2018**, 51, 1359-1367 24.3 30
- 149 Time-domain response of atomically thin MoS₂ nanomechanical resonators. *Applied Physics Letters*, **2014**, 105, 041911 3.4 30
- 148 Tracking molecular resonance forms of donor-acceptor push-pull molecules by single-molecule conductance experiments. *Nature Communications*, **2015**, 6, 10233 17.4 30
- 147 Tunable charge-density wave transport in a current-effect transistor. *Physical Review Letters*, **2000**, 84, 534-7 7.4 30
- 146 Fiske modes in one-dimensional parallel Josephson-junction arrays. *Physical Review B*, **1994**, 49, 12945-12952 3.5 30
- 145 Proximity-Induced Shiba States in a Molecular Junction. *Physical Review Letters*, **2017**, 118, 117001 7.4 29
- 144 A statistical approach to inelastic electron tunneling spectroscopy on fullerene-terminated molecules. *Physical Chemistry Chemical Physics*, **2011**, 13, 14325-32 3.6 29
- 143 Robust graphene-based molecular devices. *Nature Nanotechnology*, **2019**, 14, 957-961 28.7 28
- 142 Static Capacitive Pressure Sensing Using a Single Graphene Drum. *ACS Applied Materials & Interfaces*, **2017**, 9, 43205-43210 9.5 28
- 141 Strongly coupled modes in a weakly driven micromechanical resonator. *Applied Physics Letters*, **2012**, 101, 243111 3.4 28
- 140 Coupling between electronic transport and longitudinal phonons in suspended nanotubes. *New Journal of Physics*, **2005**, 7, 243-243 2.9 28
- 139 Charge transport in a zinc-porphyrin single-molecule junction. *Beilstein Journal of Nanotechnology*, **2011**, 2, 714-9 3 27
- 138 Tunable backaction of a DC SQUID on an integrated micromechanical resonator. *Physical Review Letters*, **2010**, 105, 207203 7.4 27
- 137 Large birefringence and linear dichroism in TiS nanosheets. *Nanoscale*, **2018**, 10, 12424-12429 7.7 26
- 136 Planar nanocontacts with atomically controlled separation. *Applied Physics Letters*, **2003**, 83, 3782-3784 3.4 26

135	Nanoelectromechanics of suspended carbon nanotubes. <i>New Journal of Physics</i> , 2008 , 10, 095003	2.9	25
134	Electromigrated molecular junctions. <i>Physica Status Solidi (B): Basic Research</i> , 2006 , 243, 3408-3412	1.3	25
133	Negative resistance and local charge-density-wave dynamics. <i>Physical Review Letters</i> , 2001 , 87, 126401	7.4	25
132	Charge-density-wave current conversion in submicron NbSe ₃ wires. <i>Physical Review Letters</i> , 2000 , 84, 538-41	7.4	25
131	High-Frequency Stochastic Switching of Graphene Resonators Near Room Temperature. <i>Nano Letters</i> , 2019 , 19, 1282-1288	11.5	24
130	High-quality-factor tantalum oxide nanomechanical resonators by laser oxidation of TaSe ₂ . <i>Nano Research</i> , 2015 , 8, 2842-2849	10	24
129	Interactions between directly- and parametrically-driven vibration modes in a micromechanical resonator. <i>Physical Review B</i> , 2011 , 84,	3.3	24
128	Characterization of Nanometer-Spaced Few-Layer Graphene Electrodes. <i>Graphene</i> , 2012 , 01, 26-29	1.5	24
127	Opto-thermally excited multimode parametric resonance in graphene membranes. <i>Scientific Reports</i> , 2018 , 8, 9366	4.9	23
126	Electroluminescence spectra in weakly coupled single-molecule junctions. <i>Physical Review B</i> , 2010 , 81,	3.3	23
125	A new class of extended tetrathiafulvalene cruciform molecules for molecular electronics with dithiafulvene-4,5-dithiolate anchoring groups. <i>Advanced Materials</i> , 2013 , 25, 405-9	24	22
124	Looking Ahead: Challenges and Opportunities in Organometallic Chemistry <i>Organometallics</i> , 2011 , 30, 7-12	3.8	22
123	One-dimensional parallel Josephson-junction arrays as a tool for diagnostics. <i>Applied Physics Letters</i> , 1994 , 65, 2102-2104	3.4	22
122	Probing transverse magnetic anisotropy by electronic transport through a single-molecule magnet. <i>Physical Review B</i> , 2015 , 91,	3.3	21
121	Optomechanics for thermal characterization of suspended graphene. <i>Physical Review B</i> , 2017 , 96,	3.3	20
120	Ground-State Spin Blockade in a Single-Molecule Junction. <i>Physical Review Letters</i> , 2019 , 122, 197701	7.4	20
119	Unravelling the conductance path through single-porphyrin junctions. <i>Chemical Science</i> , 2019 , 10, 8299-8305	9.4	20
118	Graphene gas osmometers. <i>2D Materials</i> , 2017 , 4, 011002	5.9	20

117	Observing magnetic anisotropy in electronic transport through individual single-molecule magnets. <i>Journal of Physics Condensed Matter</i> , 2015 , 27, 113202	1.8	19
116	Bonding and electronic transport properties of fullerene and fullerene derivatives in break-junction geometries. <i>Small</i> , 2013 , 9, 209-14	11	19
115	Manipulation of organic polyradicals in a single-molecule transistor. <i>Physical Review B</i> , 2012 , 86,	3.3	19
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