Herre S J Van Der Zant

List of Publications by Year
in descending order

312 papers	32,688 citations	4658 85 h-index	4228 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. Nanoscale, 2015, 7, 4598-4810.	5.6	2,452
2	Fast and Broadband Photoresponse of Few-Layer Black Phosphorus Field-Effect Transistors. Nano Letters, 2014, 14, 3347-3352.	9.1	1,510
3	Isolation and characterization of few-layer black phosphorus. 2D Materials, 2014, 1, 025001.	4.4	1,411
4	Deterministic transfer of two-dimensional materials by all-dry viscoelastic stamping. 2D Materials, 2014, 1, 011002.	4.4	1,375
5	Local Strain Engineering in Atomically Thin MoS₂. Nano Letters, 2013, 13, 5361-5366.	9.1	1,041
6	Elastic Properties of Freely Suspended MoS₂ Nanosheets. Advanced Materials, 2012, 24, 772-775.	21.0	905
7	Environmental instability of few-layer black phosphorus. 2D Materials, 2015, 2, 011002.	4.4	818
8	Photocurrent generation with two-dimensional van der Waals semiconductors. Chemical Society Reviews, 2015, 44, 3691-3718.	38.1	802
9	Photovoltaic effect in few-layer black phosphorus PN junctions defined by local electrostatic gating. Nature Communications, 2014, 5, 4651.	12.8	643
10	Laser-Thinning of MoS₂: On Demand Generation of a Single-Layer Semiconductor. Nano Letters, 2012, 12, 3187-3192.	9.1	567
11	Large and Tunable Photothermoelectric Effect in Single-Layer MoS₂. Nano Letters, 2013, 13, 358-363.	9.1	566
12	The effect of the substrate on the Raman and photoluminescence emission of single-layer MoS2. Nano Research, 2014, 7, 561-571.	10.4	497
13	Electron Transport through SingleMn12Molecular Magnets. Physical Review Letters, 2006, 96, 206801.	7.8	444
14	Quantum phase transitions and vortex dynamics in superconducting networks. Physics Reports, 2001, 355, 235-334.	25.6	421
15	Mechanical systems in the quantum regime. Physics Reports, 2012, 511, 273-335.	25.6	398
16	Single-photon emission from localized excitons in an atomically thin semiconductor. Optica, 2015, 2, 347.	9.3	378
17	Strong Coupling Between Single-Electron Tunneling and Nanomechanical Motion. Science, 2009, 325, 1103-1107.	12.6	348
18	Gate Controlled Photocurrent Generation Mechanisms in High-Gain In₂Se₃ Phototransistors. Nano Letters, 2015, 15, 7853-7858.	9.1	347

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19	Long-range orientation and atomic attachment of nanocrystals in 2D honeycomb superlattices. Science, 2014, 344, 1377-1380.	12.6	343
20	Orbital Kondo effect in carbon nanotubes. Nature, 2005, 434, 484-488.	27.8	341
21	Roomâ€Temperature Electrical Addressing of a Bistable Spinâ€Crossover Molecular System. Advanced Materials, 2011, 23, 1545-1549.	21.0	328
22	Carbon Nanotubes as Ultrahigh Quality Factor Mechanical Resonators. Nano Letters, 2009, 9, 2547-2552.	9.1	322
23	Nanomechanical properties of few-layer graphene membranes. Applied Physics Letters, 2008, 92, .	3.3	321
24	Room-Temperature Gating of Molecular Junctions Using Few-Layer Graphene Nanogap Electrodes. Nano Letters, 2011, 11, 4607-4611.	9.1	310
25	Enhanced superconductivity in atomically thin TaS2. Nature Communications, 2016, 7, 11043.	12.8	285
26	Fullerene-Based Anchoring Groups for Molecular Electronics. Journal of the American Chemical Society, 2008, 130, 13198-13199.	13.7	282
27	Single-molecule transistors. Chemical Society Reviews, 2015, 44, 902-919.	38.1	282
28	Large tunable image-charge effects in single-molecule junctions. Nature Nanotechnology, 2013, 8, 282-287.	31.5	258
29	Photovoltaic and Photothermoelectric Effect in a Double-Gated WSe₂ Device. Nano Letters, 2014, 14, 5846-5852.	9.1	232
30	Atomically thin pâ€“n junctions based on two-dimensional materials. Chemical Society Reviews, 2018, 47, 3339-3358.	38.1	231
31	Tunneling in Suspended Carbon Nanotubes Assisted by Longitudinal Phonons. Physical Review Letters, 2006, 96, 026801.	7.8	229
32	Electron-hole symmetry in a semiconducting carbon nanotube quantum dot. Nature, 2004, 429, 389-392.	27.8	213
33	Single-molecule quantum-transport phenomena in break junctions. Nature Reviews Physics, 2019, 1, 381-396.	26.6	209
34	Carbon nanotubes as nanoelectromechanical systems. Physical Review B, 2003, 67, .	3.2	204
35	Signatures of Quantum Interference Effects on Charge Transport Through a Single Benzene Ring. Angewandte Chemie - International Edition, 2013, 52, 3152-3155.	13.8	204
36	Singleâ€Layer MoS₂ Mechanical Resonators. Advanced Materials, 2013, 25, 6719-6723.	21.0	201

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37	TiS₃ Transistors with Tailored Morphology and Electrical Properties. Advanced Materials, 2015, 27, 2595-2601.	21.0	193
38	Direct Observation of Single-Molecule Magnets Organized on Gold Surfaces. Angewandte Chemie - International Edition, 2003, 42, 1645-1648.	13.8	190
39	Mechanically controlled quantum interference in individual Ï€-stacked dimers. Nature Chemistry, 2016, 8, 1099-1104.	13.6	190
40	Ultrahigh Photoresponse of Fewâ€Layer TiS₃ Nanoribbon Transistors. Advanced Optical Materials, 2014, 2, 641-645.	7.3	189
41	Bending-Mode Vibration of a Suspended Nanotube Resonator. Nano Letters, 2006, 6, 2904-2908.	9.1	185
42	Nonlinear Modal Interactions in Clamped-Clamped Mechanical Resonators. Physical Review Letters, 2010, 105, 117205.	7.8	178
43	Electric Field Controlled Magnetic Anisotropy in a Single Molecule. Nano Letters, 2010, 10, 3307-3311.	9.1	177
44	Field-induced superconductor-to-insulator transitions in Josephson-junction arrays. Physical Review Letters, 1992, 69, 2971-2974.	7.8	171
45	Large negative differential conductance in single-molecule break junctions. Nature Nanotechnology, 2014, 9, 830-834.	31.5	170
46	Electrical control over the Fe(II) spin crossover in a single molecule: Theory and experiment. Physical Review B, 2011, 83, .	3.2	169
47	Motion detection of a micromechanical resonator embedded in a d.c. SQUID. Nature Physics, 2008, 4, 785-788.	16.7	166
48	Unity quantum yield of photogenerated charges and band-like transport in quantum-dot solids. Nature Nanotechnology, 2011, 6, 733-739.	31.5	164
49	Precise and reversible band gap tuning in single-layer MoSe₂ by uniaxial strain. Nanoscale, 2016, 8, 2589-2593.	5.6	159
50	Electrical Manipulation of Spin States in a Single Electrostatically Gated Transition-Metal Complex. Nano Letters, 2010, 10, 105-110.	9.1	157
51	Thicknessâ€Dependent Refractive Index of 1L, 2L, and 3L MoS₂, MoSe₂, WS₂, and WSe₂. Advanced Optical Materials, 2019, 7, 1900239.	7.3	155
52	Control of biaxial strain in single-layer molybdenite using local thermal expansion of the substrate. 2D Materials, 2015, 2, 015006.	4.4	149
53	Electronics and optoelectronics of quasi-1D layered transition metal trichalcogenides. 2D Materials, 2017, 4, 022003.	4.4	146
54	Mechanics of freelyâ€suspended ultrathin layered materials. Annalen Der Physik, 2015, 527, 27-44.	2.4	145

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55	Graphene Squeeze-Film Pressure Sensors. Nano Letters, 2016, 16, 568-571.	9.1	143
56	Quantum phase transitions in two dimensions: Experiments in Josephson-junction arrays. Physical Review B, 1996, 54, 10081-10093.	3.2	139
57	Singleâ€Molecule Spin Switch Based on Voltageâ€Triggered Distortion of the Coordination Sphere. Angewandte Chemie - International Edition, 2015, 54, 13425-13430.	13.8	138
58	Mechanical properties of freely suspended semiconducting graphene-like layers based on MoS2. Nanoscale Research Letters, 2012, 7, 233.	5.7	134
59	Size-dependent effective Youngâ€™s modulus of silicon nitride cantilevers. Applied Physics Letters, 2009, 94, .	3.3	126
60	High charge mobility in two-dimensional percolative networks of PbSe quantum dots connected by atomic bonds. Nature Communications, 2015, 6, 8195.	12.8	125
61	One-Dimensional Conduction in Charge-Density-Wave Nanowires. Physical Review Letters, 2004, 93, 176602.	7.8	124
62	Lithographic mechanical break junctions for single-molecule measurements in vacuum: possibilities and limitations. New Journal of Physics, 2008, 10, 065008.	2.9	123
63	Influence of induced magnetic fields on the static properties of Josephson-junction arrays. Physical Review B, 1993, 47, 5219-5229.	3.2	119
64	Electronic Excitations of a Single Molecule Contacted in a Three-Terminal Configuration. Nano Letters, 2007, 7, 3336-3342.	9.1	118
65	Kondo Effect in the Presence of Magnetic Impurities. Physical Review Letters, 2006, 96, 017205.	7.8	117
66	Kondo Effect in a Neutral and Stable All Organic Radical Single Molecule Break Junction. Nano Letters, 2015, 15, 3109-3114.	9.1	117
67	Dynamics of circular arrays of Josephson junctions and the discrete sine-Gordon equation. Physica D: Nonlinear Phenomena, 1996, 97, 429-470.	2.8	116
68	Temperature Dependence of Three-Terminal Molecular Junctions with Sulfur End-Functionalized Tercyclohexylidenes. Nano Letters, 2006, 6, 1031-1035.	9.1	113
69	Titanium trisulfide (TiS3): a 2D semiconductor with quasi-1D optical and electronic properties. Scientific Reports, 2016, 6, 22214.	3.3	107
70	Kink Propagation in a Highly Discrete System: Observation of Phase Locking to Linear Waves. Physical Review Letters, 1995, 74, 174-177.	7.8	104
71	Franckeite as a naturally occurring van der Waals heterostructure. Nature Communications, 2017, 8, 14409.	12.8	103
72	Franckâ€“Condon Blockade in a Single-Molecule Transistor. Nano Letters, 2014, 14, 3191-3196.	9.1	102

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73	Spin Switching in Electronic Devices Based on 2D Assemblies of Spinâ€Crossover Nanoparticles. Advanced Materials, 2015, 27, 1288-1293.	21.0	102
74	Nanometer-spaced electrodes with calibrated separation. Applied Physics Letters, 2002, 80, 321-323.	3.3	100
75	Centimeter-Scale Synthesis of Ultrathin Layered MoO₃ by van der Waals Epitaxy. Chemistry of Materials, 2016, 28, 4042-4051.	6.7	100
76	Stretching-Induced Conductance Increase in a Spin-Crossover Molecule. Nano Letters, 2016, 16, 4733-4737.	9.1	96
77	Nonlinear dynamic characterization of two-dimensional materials. Nature Communications, 2017, 8, 1253.	12.8	96
78	Isoreticular two-dimensional magnetic coordination polymers prepared through pre-synthetic ligand functionalization. Nature Chemistry, 2018, 10, 1001-1007.	13.6	94
79	Nanoelectromechanical Sensors Based on Suspended 2D Materials. Research, 2020, 2020, 8748602.	5.7	93
80	Self-breaking in planar few-atom Au constrictions for nanometer-spaced electrodes. Applied Physics Letters, 2007, 90, 133109.	3.3	91
81	A highly conductive fibre network enables centimetre-scale electron transport in multicellular cable bacteria. Nature Communications, 2019, 10, 4120.	12.8	91
82	Electronic Transport Spectroscopy of Carbon Nanotubes in a Magnetic Field. Physical Review Letters, 2005, 94, 156802.	7.8	90
83	Molecular three-terminal devices: fabrication and measurements. Faraday Discussions, 2006, 131, 347-356.	3.2	90
84	Phase Transitions in Spin-Crossover Thin Films Probed by Graphene Transport Measurements. Nano Letters, 2017, 17, 186-193.	9.1	90
85	Temperature-Dependent Raman Spectroscopy of Titanium Trisulfide (TiS₃) Nanoribbons and Nanosheets. ACS Applied Materials & Interfaces, 2015, 7, 24185-24190.	8.0	89
86	Phase transitions of Josephson-tunnel-junction arrays at zero and full frustration. Physical Review B, 1987, 35, 7291-7294.	3.2	88
87	Electronic excitation spectrum of metallic carbon nanotubes. Physical Review B, 2005, 71, .	3.2	88
88	Mechanical properties of freely suspended atomically thin dielectric layers of mica. Nano Research, 2012, 5, 550-557.	10.4	87
89	In situ imaging of electromigration-induced nanogap formation by transmission electron microscopy. Applied Physics Letters, 2007, 91, .	3.3	85
90	Gate-tunable diode and photovoltaic effect in an organicâ€“2D layered material pâ€“n junction. Nanoscale, 2015, 7, 15442-15449.	5.6	84

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91	Charge transport and singleâ€electron effects in nanoscale systems. Physica Status Solidi (B): Basic Research, 2008, 245, 1455-1470.	1.5	80
92	Direct Observation of Magnetic Anisotropy in an IndividualFe4Single-Molecule Magnet. Physical Review Letters, 2012, 109, 147203.	7.8	78
93	Single-molecule transport in three-terminal devices. Journal of Physics Condensed Matter, 2008, 20, 374121.	1.8	77
94	Dynamics of vortices in underdamped Josephson-junction arrays. Physical Review Letters, 1991, 66, 2531-2534.	7.8	76
95	A gate-tunable single-molecule diode. Nanoscale, 2016, 8, 8919-8923.	5.6	76
96	The superconducting transition of 2-D Josephson-junction arrays in a small perpendicular magnetic field. Journal of Low Temperature Physics, 1990, 79, 289-310.	1.4	74
97	Visualizing the Motion of Graphene Nanodrums. Nano Letters, 2016, 16, 2768-2773.	9.1	74
98	Mechanically controlled quantum interference in graphene break junctions. Nature Nanotechnology, 2018, 13, 1126-1131.	31.5	73
99	Quantum Dots at Room Temperature Carved out from Few-Layer Graphene. Nano Letters, 2012, 12, 6096-6100.	9.1	72
100	Pumping of Vibrational Excitations in the Coulomb-Blockade Regime in a Suspended Carbon Nanotube. Physical Review Letters, 2009, 102, 225501.	7.8	71
101	Folded MoS2 layers with reduced interlayer coupling. Nano Research, 2014, 7, 572-578.	10.4	71
102	Buckling beam micromechanical memory with on-chip readout. Applied Physics Letters, 2009, 94, .	3.3	70
103	Ballistic Vortices in Josephson-Junction Arrays. Europhysics Letters, 1992, 18, 343-348.	2.0	69
104	Electrical properties and mechanical stability of anchoring groups for single-molecule electronics. Beilstein Journal of Nanotechnology, 2015, 6, 1558-1567.	2.8	69
105	Large Conductance Variations in a Mechanosensitive Single-Molecule Junction. Nano Letters, 2018, 18, 5981-5988.	9.1	69
106	Magnetic and electronic phase transitions probed by nanomechanical resonators. Nature Communications, 2020, 11, 2698.	12.8	69
107	A Nanoelectromechanical Single-Atom Switch. Nano Letters, 2009, 9, 2940-2945.	9.1	67
108	Whirling Modes and Parametric Instabilities in the Discrete Sine-Gordon Equation: Experimental Tests in Josephson Rings. Physical Review Letters, 1995, 74, 379-382.	7.8	62

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109	Fast and reliable identification of atomically thin layers of TaSe2 crystals. Nano Research, 2013, 6, 191-199.	10.4	62
110	Vibrational Excitations in Weakly Coupled Single-Molecule Junctions: A Computational Analysis. ACS Nano, 2008, 2, 1445-1451.	14.6	61
111	An All-Electric Single-Molecule Motor. ACS Nano, 2010, 4, 6681-6686.	14.6	61
112	Exchange Coupling Inversion in a High-Spin Organic Triradical Molecule. Nano Letters, 2016, 16, 2066-2071.	9.1	60
113	Highly Anisotropic Mechanical and Optical Properties of 2D Layered As₂S₃ Membranes. ACS Nano, 2019, 13, 10845-10851.	14.6	60
114	Mechanical stiffening, bistability, and bit operations in a microcantilever. Applied Physics Letters, 2010, 97, 193107.	3.3	59
115	Q-factor control of a microcantilever by mechanical sideband excitation. Applied Physics Letters, 2011, 99, .	3.3	59
116	Strong and tunable mode coupling in carbon nanotube resonators. Physical Review B, 2012, 86, .	3.2	59
117	Electric-Field Control of Interfering Transport Pathways in a Single-Molecule Anthraquinone Transistor. Nano Letters, 2015, 15, 5569-5573.	9.1	59
118	Massively parallel fabrication of crack-defined gold break junctions featuring sub-3â€‰nm gaps for molecular devices. Nature Communications, 2018, 9, 3433.	12.8	59
119	Controlling the anisotropy of a van der Waals antiferromagnet with light. Science Advances, 2021, 7, .	10.3	59
120	A reference-free clustering method for the analysis of molecular break-junction measurements. Applied Physics Letters, 2019, 114, .	3.3	57
121	Influence of the Chemical Structure on the Stability and Conductance of Porphyrin Singleâ€Molecule Junctions. Angewandte Chemie - International Edition, 2011, 50, 11223-11226.	13.8	56
122	Statistical analysis of singleâ€molecule breaking traces. Physica Status Solidi (B): Basic Research, 2013, 250, 2431-2436.	1.5	56
123	Superconductor-to-Insulator Transitions in Non and Fully Frustrated Josephson-Junction Arrays. Europhysics Letters, 1992, 19, 541-546.	2.0	55
124	A Comprehensive Study of Extended Tetrathiafulvalene Cruciform Molecules for Molecular Electronics: Synthesis and Electrical Transport Measurements. Journal of the American Chemical Society, 2014, 136, 16497-16507.	13.7	55
125	Room-temperature stability of Pt nanogaps formed by self-breaking. Applied Physics Letters, 2009, 94, .	3.3	52
126	Sandwich-type gated mechanical break junctions. Nanotechnology, 2010, 21, 265201.	2.6	52

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127	Coupling carbon nanotube mechanics to a superconducting circuit. Scientific Reports, 2012, 2, 599.	3.3	52
128	Conductance Switching and Vibrational Fine Structure of a [2â€‰Ã—â€‰2] Co^{II}₄ Gridlike Single Molecule Measured in a Threeâ€Terminal Device. Small, 2010, 6, 174-178.	10.0	51
129	Fast and Efficient Photodetection in Nanoscale Quantum-Dot Junctions. Nano Letters, 2012, 12, 5740-5743.	9.1	51
130	Phase transition of frustrated two-dimensional Josephson junction arrays. Journal of Low Temperature Physics, 1991, 82, 67-92.	1.4	50
131	Phenomenological model of vortex dynamics in arrays of Josephson junctions. Physical Review B, 1991, 43, 10218-10228.	3.2	50
132	Redox-Induced Gating of the Exchange Interactions in a Single Organic Diradical. ACS Nano, 2017, 11, 5879-5883.	14.6	50
133	Robust graphene-based molecular devices. Nature Nanotechnology, 2019, 14, 957-961.	31.5	50
134	Probing the charge of a quantum dot with a nanomechanical resonator. Physical Review B, 2012, 86, .	3.2	49
135	Tuning nonlinear damping in graphene nanoresonators by parametricâ€“direct internal resonance. Nature Communications, 2021, 12, 1099.	12.8	49
136	Quantum interference effects at room temperature in OPV-based single-molecule junctions. Nanoscale Research Letters, 2013, 8, 234.	5.7	48
137	Vortex dynamics in two-dimensional underdamped, classical Josephson-junction arrays. Physical Review B, 1993, 47, 295-304.	3.2	47
138	Sequential Electron Transport and Vibrational Excitations in an Organic Molecule Coupled to Few-Layer Graphene Electrodes. ACS Nano, 2016, 10, 2521-2527.	14.6	47
139	Static Capacitive Pressure Sensing Using a Single Graphene Drum. ACS Applied Materials & Interfaces, 2017, 9, 43205-43210.	8.0	47
140	Single-Molecule Resonant Tunneling Diode. Journal of Physical Chemistry C, 2015, 119, 5697-5702.	3.1	46
141	Spin-state dependent conductance switching in single molecule-graphene junctions. Nanoscale, 2018, 10, 7905-7911.	5.6	46
142	Effect of Metal Complexation on the Conductance of Single-Molecular Wires Measured at Room Temperature. Journal of the American Chemical Society, 2014, 136, 8314-8322.	13.7	45
143	A versatile low-temperature setup for the electrical characterization of single-molecule junctions. Review of Scientific Instruments, 2011, 82, 053907.	1.3	44
144	Proximity-Induced Shiba States in a Molecular Junction. Physical Review Letters, 2017, 118, 117001.	7.8	44

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145	Sensitive capacitive pressure sensors based on graphene membrane arrays. Microsystems and Nanoengineering, 2020, 6, 102.	7.0	44
146	Complete mapping of the thermoelectric properties of a single molecule. Nature Nanotechnology, 2021, 16, 426-430.	31.5	44
147	Stochastic switching of cantilever motion. Nature Communications, 2013, 4, 2624.	12.8	42
148	Opto-thermally excited multimode parametric resonance in graphene membranes. Scientific Reports, 2018, 8, 9366.	3.3	42
149	Quantum dots in carbon nanotubes. Semiconductor Science and Technology, 2006, 21, S52-S63.	2.0	41
150	Effect of undercut on the resonant behaviour of silicon nitride cantilevers. Journal of Micromechanics and Microengineering, 2009, 19, 035003.	2.6	41
151	Sealing Graphene Nanodrums. Nano Letters, 2019, 19, 5313-5318.	9.1	41
152	Dynamics of 2D material membranes. 2D Materials, 2021, 8, 042001.	4.4	41
153	Quantum Transport through a Single Conjugated Rigid Molecule, a Mechanical Break Junction Study. Accounts of Chemical Research, 2018, 51, 1359-1367.	15.6	40
154	Large birefringence and linear dichroism in TiS₃ nanosheets. Nanoscale, 2018, 10, 12424-12429.	5.6	40
155	Coherent phase slip in arrays of underdamped Josephson tunnel junctions. Physical Review B, 1988, 38, 5154-5157.	3.2	39
156	High-Frequency Stochastic Switching of Graphene Resonators Near Room Temperature. Nano Letters, 2019, 19, 1282-1288.	9.1	39
157	Optomechanics for thermal characterization of suspended graphene. Physical Review B, 2017, 96, .	3.2	38
158	Time-domain response of atomically thin MoS2 nanomechanical resonators. Applied Physics Letters, 2014, 105, .	3.3	37
159	Tracking molecular resonance forms of donorâ€“acceptor pushâ€“pull molecules by single-molecule conductance experiments. Nature Communications, 2015, 6, 10233.	12.8	36
160	Transition from Strong to Weak Electronic Coupling in a Single-Molecule Junction. Physical Review Letters, 2016, 117, 126804.	7.8	36
161	Vortices in two-dimensional superconducting weakly coupled wire networks. Physical Review B, 1994, 50, 340-350.	3.2	35
162	MoS₂-on-paper optoelectronics: drawing photodetectors with van der Waals semiconductors beyond graphite. Nanoscale, 2020, 12, 19068-19074.	5.6	34

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163	Thinâ€film growth of the chargeâ€densityâ€wave oxide Rb0.30MoO3. Applied Physics Letters, 1996, 68, 3823-3825.	3.3	33
164	Ground-State Spin Blockade in a Single-Molecule Junction. Physical Review Letters, 2019, 122, 197701.	7.8	33
165	Strongly coupled modes in a weakly driven micromechanical resonator. Applied Physics Letters, 2012, 101, .	3.3	32
166	Fiske modes in one-dimensional parallel Josephson-junction arrays. Physical Review B, 1994, 49, 12945-12952.	3.2	31
167	Tunable Charge-Density Wave Transport in a Current-Effect Transistor. Physical Review Letters, 2000, 84, 534-537.	7.8	31
168	Charge transport in a zincâ€“porphyrin single-molecule junction. Beilstein Journal of Nanotechnology, 2011, 2, 714-719.	2.8	31
169	Planar nanocontacts with atomically controlled separation. Applied Physics Letters, 2003, 83, 3782-3784.	3.3	30
170	A statistical approach to inelastic electron tunneling spectroscopy on fullerene-terminated molecules. Physical Chemistry Chemical Physics, 2011, 13, 14325.	2.8	30
171	Interactions between directly- and parametrically-driven vibration modes in a micromechanical resonator. Physical Review B, 2011, 84, .	3.2	30
172	Unravelling the conductance path through single-porphyrin junctions. Chemical Science, 2019, 10, 8299-8305.	7.4	30
173	Can One Define the Conductance of Amino Acids?. Biomolecules, 2019, 9, 580.	4.0	29
174	Charge-Density-Wave Current Conversion in SubmicronNbSe3Wires. Physical Review Letters, 2000, 84, 538-541.	7.8	28
175	Negative Resistance and Local Charge-Density-Wave Dynamics. Physical Review Letters, 2001, 87, 126401.	7.8	28
176	Coupling between electronic transport and longitudinal phonons in suspended nanotubes. New Journal of Physics, 2005, 7, 243-243.	2.9	28
177	Electromigrated molecular junctions. Physica Status Solidi (B): Basic Research, 2006, 243, 3408-3412.	1.5	28
178	Nanoelectromechanics of suspended carbon nanotubes. New Journal of Physics, 2008, 10, 095003.	2.9	28
179	Tunable Backaction of a DC SQUID on an Integrated Micromechanical Resonator. Physical Review Letters, 2010, 105, 207203.	7.8	28
180	High-quality-factor tantalum oxide nanomechanical resonators by laser oxidation of TaSe2. Nano Research, 2015, 8, 2842-2849.	10.4	27

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181	Probing transverse magnetic anisotropy by electronic transport through a single-molecule magnet. Physical Review B, 2015, 91, .	3.2	27
182	On-chip Heaters for Tension Tuning of Graphene Nanodrums. Nano Letters, 2018, 18, 2852-2858.	9.1	27
183	Characterization of Nanometer-Spaced Few-Layer Graphene Electrodes. Graphene, 2012, 01, 26-29.	1.0	27
184	Modelling suspended carbon nanotube resonators. Physica Status Solidi (B): Basic Research, 2007, 244, 4252-4256.	1.5	26
185	Oneâ€dimensional parallel Josephsonâ€junction arrays as a tool for diagnostics. Applied Physics Letters, 1994, 65, 2102-2104.	3.3	25
186	Symmetry Breakdown in Franckeite: Spontaneous Strain, Rippling, and Interlayer MoirÃ©. Nano Letters, 2020, 20, 1141-1147.	9.1	25
187	Electroluminescence spectra in weakly coupled single-molecule junctions. Physical Review B, 2010, 81, .	3.2	24
188	Ultrathin complex oxide nanomechanical resonators. Communications Physics, 2020, 3, .	5.3	24
189	Substitution Pattern Controlled Quantum Interference in [2.2]Paracyclophane-Based Single-Molecule Junctions. Journal of the American Chemical Society, 2021, 143, 13944-13951.	13.7	24
190	Single electron tunnelling through highâ€Q singleâ€wall carbon nanotube NEMS resonators. Physica Status Solidi (B): Basic Research, 2010, 247, 2974-2979.	1.5	23
191	A New Class of Extended Tetrathiafulvalene Cruciform Molecules for Molecular Electronics with Dithiafulveneâ€4,5â€Dithiolate Anchoring Groups. Advanced Materials, 2013, 25, 405-409.	21.0	23
192	Colorimetry Technique for Scalable Characterization of Suspended Graphene. Nano Letters, 2016, 16, 6792-6796.	9.1	23
193	Graphene gas osmometers. 2D Materials, 2017, 4, 011002.	4.4	23
194	Looking Ahead: Challenges and Opportunities in Organometallic Chemistryâ€. Organometallics, 2011, 30, 7-12.	2.3	22
195	Bonding and Electronic Transport Properties of Fullerene and Fullerene Derivatives in Breakâ€Junction Geometries. Small, 2013, 9, 209-214.	10.0	22
196	Observing magnetic anisotropy in electronic transport through individual single-molecule magnets. Journal of Physics Condensed Matter, 2015, 27, 113202.	1.8	22
197	Porphyrins as building blocks for single-molecule devices. Nanoscale, 2021, 13, 15500-15525.	5.6	22
198	Chemical Design and Magnetic Ordering in Thin Layers of 2D Metalâ€“Organic Frameworks (MOFs). Journal of the American Chemical Society, 2021, 143, 18502-18510.	13.7	22

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