A K Geim

List of Publications by Year
in descending order

300 papers	293,263 citations	332 136 h-index	176 315 g-index
333 all docs	333 docs citations	333 times ranked	122731 citing authors

#	Article	IF	Citations
1	Electric Field Effect in Atomically Thin Carbon Films. Science, 2004, 306, 666-669.	20.9	57,819
2	The rise of graphene. Nature Materials, 2007, 6, 183-191.	26.6	35,745
3	The electronic properties of graphene. Reviews of Modern Physics, 2009, 81, 109-162.	46.3	21,238
4	Two-dimensional gas of massless Dirac fermions in graphene. Nature, 2005, 438, 197-200.	36.2	19,319
5	Raman Spectrum of Graphene and Graphene Layers. Physical Review Letters, 2006, 97, 187401.	8.0	12,982
6	Graphene: Status and Prospects. Science, 2009, 324, 1530-1534.	20.9	12,381
7	Two-dimensional atomic crystals. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10451-10453.	7.6	10,450
8	Van der Waals heterostructures. Nature, 2013, 499, 419-425.	36.2	8,754
9	Detection of individual gas molecules adsorbed on graphene. Nature Materials, 2007, 6, 652-655.	26.6	7,246
10	The structure of suspended graphene sheets. Nature, 2007, 446, 60-63.	36.2	4,581
11	Control of Graphene's Properties by Reversible Hydrogenation: Evidence for Graphane. Science, 2009, 323, 610-613.	20.9	3,806
12	Chiral tunnelling and the Klein paradox inÂgraphene. Nature Physics, 2006, 2, 620-625.	11.8	3,445
13	Monitoring dopants by Raman scattering in an electrochemically top-gated graphene transistor. Nature Nanotechnology, 2008, 3, 210-215.	30.5	3,186
14	Giant Intrinsic Carrier Mobilities in Graphene and Its Bilayer. Physical Review Letters, 2008, 100, 016602.	8.0	2,983
15	Unconventional quantum Hall effect and Berryâ€™s phase of 2Ï€ in bilayer graphene. Nature Physics, 2006, 2, 177-180.	11.8	1,811
16	Biased Bilayer Graphene: Semiconductor with a Gap Tunable by the Electric Field Effect. Physical Review Letters, 2007, 99, 216802.	8.0	1,756
17	Uniaxial strain in graphene by Raman spectroscopy:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>G</mml:mi></mml:math>peak splitting, GrÃ¼neisen parameters, and sample orientation. Physical Review B, 2009, 79, .	3.3	1,707
18	Making graphene visible. Applied Physics Letters, 2007, 91, .	3.2	1,676

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19	Energy gaps and a zero-field quantum Hall effect in graphene by strain engineering. Nature Physics, 2010, 6, 30-33.	11.8	1,598
20	Vertical field-effect transistor based on grapheneâ€“WS2 heterostructures for flexible and transparent electronics. Nature Nanotechnology, 2013, 8, 100-103.	30.5	1,572
21	Micrometer-Scale Ballistic Transport in Encapsulated Graphene at Room Temperature. Nano Letters, 2011, 11, 2396-2399.	9.5	1,481
22	Graphene-Based Liquid Crystal Device. Nano Letters, 2008, 8, 1704-1708.	9.5	1,461
23	Tunable sieving of ions using graphene oxide membranes. Nature Nanotechnology, 2017, 12, 546-550.	30.5	1,448
24	Light-emitting diodes by band-structure engineering in van der Waals heterostructures. Nature Materials, 2015, 14, 301-306.	26.6	1,436
25	Breakdown of the adiabatic Bornâ€“Oppenheimer approximation in graphene. Nature Materials, 2007, 6, 198-201.	26.6	1,249
26	Microfabricated adhesive mimicking gecko foot-hair. Nature Materials, 2003, 2, 461-463.	26.6	1,207
27	Fluorographene: A Twoâ€Dimensional Counterpart of Teflon. Small, 2010, 6, 2877-2884.	11.2	1,177
28	Cloning of Dirac fermions in graphene superlattices. Nature, 2013, 497, 594-597.	36.2	1,137
29	High electron mobility, quantum Hall effect and anomalous optical response in atomically thin InSe. Nature Nanotechnology, 2017, 12, 223-227.	30.5	1,050
30	Molecular Doping of Graphene. Nano Letters, 2008, 8, 173-177.	9.5	1,040
31	Hunting for Monolayer Boron Nitride: Optical and Raman Signatures. Small, 2011, 7, 465-468.	11.2	994
32	Cross-sectional imaging of individual layers and buried interfaces of graphene-based heterostructures and superlattices. Nature Materials, 2012, 11, 764-767.	26.6	828
33	Strong Suppression of Weak Localization in Graphene. Physical Review Letters, 2006, 97, 016801.	8.0	816
34	Raman fingerprint of charged impurities in graphene. Applied Physics Letters, 2007, 91, .	3.2	813
35	Strong plasmonic enhancement of photovoltage in graphene. Nature Communications, 2011, 2, 458.	13.2	786
36	Spin-half paramagnetism in graphene induced by point defects. Nature Physics, 2012, 8, 199-202.	11.8	760

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37	Commensurateâ€“incommensurate transition in graphene on hexagonal boron nitride. Nature Physics, 2014, 10, 451-456.	11.8	760
38	Electron Tunneling through Ultrathin Boron Nitride Crystalline Barriers. Nano Letters, 2012, 12, 1707-1710.	9.5	758
39	Optical conductivity of graphene in the visible region of the spectrum. Physical Review B, 2008, 78, .	3.3	740
40	Dirac cones reshaped by interaction effects in suspended graphene. Nature Physics, 2011, 7, 701-704.	11.8	713
41	Proton transport through one-atom-thick crystals. Nature, 2014, 516, 227-230.	36.2	701
42	Square ice in graphene nanocapillaries. Nature, 2015, 519, 443-445.	36.2	632
43	Macroscopic Graphene Membranes and Their Extraordinary Stiffness. Nano Letters, 2008, 8, 2442-2446.	9.5	628
44	Nanofabricated media with negative permeability at visible frequencies. Nature, 2005, 438, 335-338.	36.2	603
45	The rise of graphene. , 2009, , 11-19.		601
46	Making Graphene Luminescent by Oxygen Plasma Treatment. ACS Nano, 2009, 3, 3963-3968.	15.3	597
47	Ultrathin graphene-based membrane with preciseÂmolecular sieving and ultrafast solventÂpermeation. Nature Materials, 2017, 16, 1198-1202.	26.6	583
48	Free-standing graphene at atomic resolution. Nature Nanotechnology, 2008, 3, 676-681.	30.5	581
49	Single-Layer Behavior and Its Breakdown in Twisted Graphene Layers. Physical Review Letters, 2011, 106, 126802.	8.0	557
50	Resonant tunnelling and negative differential conductance in graphene transistors. Nature Communications, 2013, 4, 1794.	13.2	551
51	Impermeable barrier films and protective coatings based on reduced graphene oxide. Nature Communications, 2014, 5, 4843.	13.2	530
52	Molecular transport through capillaries made with atomic-scale precision. Nature, 2016, 538, 222-225.	36.2	525
53	Tunable metalâ€“insulator transition in double-layer graphene heterostructures. Nature Physics, 2011, 7, 958-961.	11.8	493
54	Spectroscopic ellipsometry of graphene and an exciton-shifted van Hove peak in absorption. Physical Review B, 2010, 81, .	3.3	481

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55	Electron scattering on microscopic corrugations in graphene. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 195-204.	3.5	479
56	Surface-Enhanced Raman Spectroscopy of Graphene. ACS Nano, 2010, 4, 5617-5626.	15.3	446
57	Raman Spectroscopy of Graphene and Bilayer under Biaxial Strain: Bubbles and Balloons. Nano Letters, 2012, 12, 617-621.	9.5	443
58	Twist-controlled resonant tunnelling in graphene/boron nitride/graphene heterostructures. Nature Nanotechnology, 2014, 9, 808-813.	30.5	440
59	Of flying frogs and levitrons. European Journal of Physics, 1997, 18, 307-313.	0.6	413
60	Subjecting a Graphene Monolayer to Tension and Compression. Small, 2009, 5, 2397-2402.	11.2	408
61	Singular phase nano-optics in plasmonic metamaterials for label-free single-molecule detection. Nature Materials, 2013, 12, 304-309.	26.6	397
62	Phase transitions in individual sub-micrometre superconductors. Nature, 1997, 390, 259-262.	36.2	389
63	Strong Coulomb drag and broken symmetry in double-layer graphene. Nature Physics, 2012, 8, 896-901.	11.8	373
64	Quality Heterostructures from Two-Dimensional Crystals Unstable in Air by Their Assembly in Inert Atmosphere. Nano Letters, 2015, 15, 4914-4921.	9.5	373
65	Nobel Lecture: Random walk to graphene. Reviews of Modern Physics, 2011, 83, 851-862.	46.3	365
66	Limits on Intrinsic Magnetism in Graphene. Physical Review Letters, 2010, 105, 207205.	8.0	358
67	Effect of a High-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Îº</mml:mi></mml:math>Environment on Charge Carrier Mobility in Graphene. Physical Review Letters, 2009, 102, 206603.	8.0	356
68	Thermal Conductivity of Graphene in Corbino Membrane Geometry. ACS Nano, 2010, 4, 1889-1892.	15.3	355
69	Limits on Charge Carrier Mobility in Suspended Graphene due to Flexural Phonons. Physical Review Letters, 2010, 105, 266601.	8.0	354
70	Superballistic flow of viscous electron fluid through graphene constrictions. Nature Physics, 2017, 13, 1182-1185.	11.8	305
71	Electronic properties of graphene. Physica Status Solidi (B): Basic Research, 2007, 244, 4106-4111.	1.6	304
72	Resonant Scattering by Realistic Impurities in Graphene. Physical Review Letters, 2010, 105, 056802.	8.0	304

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73	Universal shape and pressure inside bubbles appearing in van der Waals heterostructures. Nature Communications, 2016, 7, 12587.	13.2	285
74	Generating quantizing pseudomagnetic fields by bending graphene ribbons. Physical Review B, 2010, 81, .	3.3	280
75	Electrically controlled water permeation through graphene oxide membranes. Nature, 2018, 559, 236-240.	36.2	277
76	Cyclotron resonance study of the electron and hole velocity in graphene monolayers. Physical Review B, 2007, 76, .	3.3	272
77	Carbon Wonderland. Scientific American, 2008, 298, 90-97.	0.0	267
78	On Resonant Scatterers As a Factor Limiting Carrier Mobility in Graphene. Nano Letters, 2010, 10, 3868-3872.	9.5	262
79	Generic miniband structure of graphene on a hexagonal substrate. Physical Review B, 2013, 87, .	3.3	262
80	Two Dimensional Electrons in a Lateral Magnetic Superlattice. Physical Review Letters, 1995, 74, 3009-3012.	8.0	257
81	Dissipative Quantum Hall Effect in Graphene near the Dirac Point. Physical Review Letters, 2007, 98, 196806.	8.0	256
82	Magnon-assisted tunnelling in van der Waals heterostructures based on CrBr3. Nature Electronics, 2018, 1, 344-349.	18.9	256
83	Interaction phenomena in graphene seen through quantum capacitance. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3282-3286.	7.6	247
84	Limits on gas impermeability of graphene. Nature, 2020, 579, 229-232.	36.2	247
85	Diamagnetic levitation: Flying frogs and floating magnets (invited). Journal of Applied Physics, 2000, 87, 6200-6204.	2.3	243
86	WSe₂ Light-Emitting Tunneling Transistors with Enhanced Brightness at Room Temperature. Nano Letters, 2015, 15, 8223-8228.	9.5	237
87	Paramagnetic Meissner effect in small superconductors. Nature, 1998, 396, 144-146.	36.2	236
88	Dual origin of defect magnetism in graphene and its reversible switching by molecular doping. Nature Communications, 2013, 4, 2010.	13.2	236
89	Resonant terahertz detection using graphene plasmons. Nature Communications, 2018, 9, 5392.	13.2	226
90	Graphene-protected copper and silver plasmonics. Scientific Reports, 2014, 4, 5517.	3.4	224

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91	Commensurability Effects in Viscosity of Nanoconfined Water. ACS Nano, 2016, 10, 3685-3692.	15.3	213
92	Electronic properties of a biased graphene bilayer. Journal of Physics Condensed Matter, 2010, 22, 175503.	1.9	210
93	Density of States and Zero Landau Level Probed through Capacitance of Graphene. Physical Review Letters, 2010, 105, 136801.	8.0	205
94	Nonlocal transport and the hydrodynamic shear viscosity in graphene. Physical Review B, 2015, 92, .	3.3	205
95	Capillary condensation under atomic-scale confinement. Nature, 2020, 588, 250-253.	36.2	200
96	Ballistic Hall micromagnetometry. Applied Physics Letters, 1997, 71, 2379-2381.	3.2	195
97	Quantum oscillations of the critical current and high-field superconducting proximity in ballisticÂgraphene. Nature Physics, 2016, 12, 318-322.	11.8	192
98	Visualizing Poiseuille flow of hydrodynamic electrons. Nature, 2019, 576, 75-79.	36.2	188
99	Molecular streaming and its voltage control in Ã¥ngstrÃ¶m-scale channels. Nature, 2019, 567, 87-90.	36.2	180
100	Graphene bubbles with controllable curvature. Applied Physics Letters, 2011, 99, .	3.2	179
101	Development of a universal stress sensor for graphene and carbon fibres. Nature Communications, 2011, 2, .	13.2	177
102	Binder-free highly conductive graphene laminate for low cost printed radio frequency applications. Applied Physics Letters, 2015, 106, .	3.2	175
103	Magnetization of Mesoscopic Superconducting Disks. Physical Review Letters, 1997, 79, 4653-4656.	8.0	173
104	Infrared spectroscopy of electronic bands in bilayer graphene. Physical Review B, 2009, 79, .	3.3	173
105	Heterostructures Produced from Nanosheet-Based Inks. Nano Letters, 2014, 14, 3987-3992.	9.5	171
106	Charge-polarized interfacial superlattices in marginally twisted hexagonal boron nitride. Nature Communications, 2021, 12, 347.	13.2	165
107	Non-quantized penetration of magnetic field in the vortex state of superconductors. Nature, 2000, 407, 55-57.	36.2	163
108	How Close Can One Approach the Dirac Point in Graphene Experimentally?. Nano Letters, 2012, 12, 4629-4634.	9.5	163

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109	Hierarchy of Hofstadter states and replica quantum Hall ferromagnetism in graphene superlattices. Nature Physics, 2014, 10, 525-529.	11.8	163
110	Highly Flexible and Conductive Printed Graphene for Wireless Wearable Communications Applications. Scientific Reports, 2016, 5, 18298.	3.4	163
111	Fermi-edge singularity in resonant tunneling. Physical Review Letters, 1994, 72, 2061-2064.	8.0	162
112	Nanoscale thermal imaging of dissipation in quantum systems. Nature, 2016, 539, 407-410.	36.2	162
113	Interfacial ferroelectricity in marginally twisted 2D semiconductors. Nature Nanotechnology, 2022, 17, 390-395.	30.5	157
114	Diamagnetically stabilized magnet levitation. American Journal of Physics, 2001, 69, 702-713.	0.8	153
115	Two-dimensional electron and hole gases at the surface of graphite. Physical Review B, 2005, 72, .	3.3	151
116	Nonvolatile Switching in Graphene Field-Effect Devices. IEEE Electron Device Letters, 2008, 29, 952-954.	4.2	150
117	Ballistic molecular transport through two-dimensional channels. Nature, 2018, 558, 420-424.	36.2	150
118	Gap opening in the zeroth Landau level of graphene. Physical Review B, 2009, 80, .	3.3	146
119	Van der Waals pressure and its effect on trapped interlayer molecules. Nature Communications, 2016, 7, 12168.	13.2	146
120	Fluidity onset in graphene. Nature Communications, 2018, 9, 4533.	13.2	146
121	Random Walk to Graphene (Nobel Lecture). Angewandte Chemie - International Edition, 2011, 50, 6966-6985.	14.8	143
122	Graphene as a transparent conductive support for studying biological molecules by transmission electron microscopy. Applied Physics Letters, 2010, 97, .	3.2	139
123	Indirect excitons in van der Waals heterostructures at room temperature. Nature Communications, 2018, 9, 1895.	13.2	137
124	Magnet levitation at your fingertips. Nature, 1999, 400, 323-324.	36.2	136
125	Evidence of flat bands and correlated states in buckled graphene superlattices. Nature, 2020, 584, 215-220.	36.2	132
126	Gate Tunable Infrared Phonon Anomalies in Bilayer Graphene. Physical Review Letters, 2009, 103, 116804.	8.0	128

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127	Scalable and efficient separation of hydrogen isotopes using graphene-based electrochemical pumping. Nature Communications, 2017, 8, 15215.	13.2	128
128	Strained Bubbles in van der Waals Heterostructures as Local Emitters of Photoluminescence with Adjustable Wavelength. ACS Photonics, 2019, 6, 516-524.	6.9	123
129	Graphene prehistory. Physica Scripta, 2012, T146, 014003.	2.5	115
130	Macroscopic self-reorientation of interacting two-dimensional crystals. Nature Communications, 2016, 7, 10800.	13.2	115
131	Tunable van Hove singularities and correlated states in twisted monolayerâ€“bilayer graphene. Nature Physics, 2021, 17, 619-626.	11.8	115
132	Scattering of electrons in graphene by clusters of impurities. Physical Review B, 2009, 79, .	3.3	111
133	Superconductivity in Ca-doped graphene laminates. Scientific Reports, 2016, 6, 23254.	3.4	111
134	Raman Fingerprint of Aligned Graphene/h-BN Superlattices. Nano Letters, 2013, 13, 5242-5246.	9.5	105
135	Micromagnetometry of two-dimensional ferromagnets. Nature Electronics, 2019, 2, 457-463.	18.9	104
136	From One Electron to One Hole: Quasiparticle Counting in Graphene Quantum Dots Determined by Electrochemical and Plasma Etching. Small, 2010, 6, 1469-1473.	11.2	102
137	Long-term memory and synapse-like dynamics in two-dimensional nanofluidic channels. Science, 2023, 379, 161-167.	20.9	102
138	Electronic phase separation in multilayer rhombohedral graphite. Nature, 2020, 584, 210-214.	36.2	95
139	Electrostatically Confined Monolayer Graphene Quantum Dots with Orbital and Valley Splittings. Nano Letters, 2016, 16, 5798-5805.	9.5	94
140	Subatomic movements of a domain wall in the Peierls potential. Nature, 2003, 426, 812-816.	36.2	92
141	Extremely large magnetoresistance in few-layer graphene/boronâ€“nitride heterostructures. Nature Communications, 2015, 6, 8337.	13.2	92
142	Asymmetric scattering and diffraction of two-dimensional electrons at quantized tubes of magnetic flux. Physical Review Letters, 1992, 69, 2252-2255.	8.0	91
143	Electron hydrodynamics dilemma: Whirlpools or no whirlpools. Physical Review B, 2016, 94, .	3.3	91
144	Quantum capacitance measurements of electron-hole asymmetry and next-nearest-neighbor hopping in graphene. Physical Review B, 2013, 88, .	3.3	89

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145	Unraveling the 3D Atomic Structure of a Suspended Graphene/hBN van der Waals Heterostructure. Nano Letters, 2017, 17, 1409-1416.	9.5	88
146	Electron transport in graphene. Physics-Uspekhi, 2008, 51, 744-748.	2.3	86
147	Intercalant-independent transition temperature in superconducting black phosphorus. Nature Communications, 2017, 8, 15036.	13.2	86
148	Fine Structure in Magnetization of Individual Fluxoid States. Physical Review Letters, 2000, 85, 1528-1531.	8.0	85
149	Composite super-moirÃ© lattices in double-aligned graphene heterostructures. Science Advances, 2019, 5, eaay8897.	10.9	84
150	Phonon-Assisted Resonant Tunneling of Electrons in Grapheneâ€“Boron Nitride Transistors. Physical Review Letters, 2016, 116, 186603.	8.0	83
151	Magnetoresistance of vertical Co-graphene-NiFe junctions controlled by charge transfer and proximity-induced spin splitting in graphene. 2D Materials, 2017, 4, 031004.	4.5	81
152	Edge currents shunt the insulating bulk in gapped graphene. Nature Communications, 2017, 8, 14552.	13.2	80
153	Unusual Suppression of the Superconducting Energy Gap and Critical Temperature in Atomically Thin NbSe₂. Nano Letters, 2018, 18, 2623-2629.	9.5	79
154	In situ manipulation of van der Waals heterostructures for twistronics. Science Advances, 2020, 6, .	10.9	79
155	Water friction in nanofluidic channels made from two-dimensional crystals. Nature Communications, 2021, 12, 3092.	13.2	79
156	Giant oscillations in a triangular network of one-dimensional states in marginally twisted graphene. Nature Communications, 2019, 10, 4008.	13.2	77
157	Submicron sensors of local electric field with single-electron resolution at room temperature. Applied Physics Letters, 2006, 88, 013901.	3.2	76
158	Quantum resistance metrology in graphene. Applied Physics Letters, 2008, 93, .	3.2	73
159	Formation of Monolayer Graphene by Annealing Sacrificial Nickel Thin Films. Journal of Physical Chemistry C, 2009, 113, 16565-16567.	3.3	71
160	Direct determination of the crystallographic orientation of graphene edges by atomic resolution imaging. Applied Physics Letters, 2010, 97, .	3.2	71
161	Giant Magnetodrag in Graphene at Charge Neutrality. Physical Review Letters, 2013, 111, 166601.	8.0	70
162	Electrically pumped single-defect light emitters in WSe ₂. 2D Materials, 2016, 3, 025038.	4.5	70

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163	Perfect proton selectivity in ion transport through two-dimensional crystals. Nature Communications, 2019, 10, 4243.	13.2	70
164	Indirect Excitons and Trions in MoSe₂/WSe₂ van der Waals Heterostructures. Nano Letters, 2020, 20, 1869-1875.	9.5	69
165	High thermal conductivity of hexagonal boron nitride laminates. 2D Materials, 2016, 3, 011004.	4.5	68
166	Stacking Boundaries and Transport in Bilayer Graphene. Nano Letters, 2014, 14, 2052-2057.	9.5	67
167	Resonant tunnelling between the chiral Landau states of twisted graphene lattices. Nature Physics, 2015, 11, 1057-1062.	11.8	67
168	Viscous electron fluids. Physics Today, 2020, 73, 28-34.	0.4	67
169	Giant photoeffect in proton transport through graphene membranes. Nature Nanotechnology, 2018, 13, 300-303.	30.5	66
170	High-order fractal states in graphene superlattices. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5135-5139.	7.6	66
171	Highly efficient and selective extraction of gold by reduced graphene oxide. Nature Communications, 2022, 13, .	13.2	66
172	Stacking Order in Graphite Films Controlled by van der Waals Technology. Nano Letters, 2019, 19, 8526-8532.	9.5	64
173	Large tunable valley splitting in edge-free graphene quantum dots on boron nitride. Nature Nanotechnology, 2018, 13, 392-397.	30.5	63
174	Imaging work and dissipation in the quantum Hall state in graphene. Nature, 2019, 575, 628-633.	36.2	61
175	New nonlocal magnetoresistance effect at the crossover between the classical and quantum transport regimes. Physical Review Letters, 1991, 67, 3014-3017.	8.0	60
176	Manifestation of ripples in freeâ€standing graphene in lattice images obtained in an aberrationâ€corrected scanning transmission electron microscope. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1117-1122.	1.9	60
177	Failure of Conductance Quantization in Two-Dimensional Topological Insulators due to Nonmagnetic Impurities. Physical Review Letters, 2019, 122, 016601.	8.0	59
178	Tunnel field-effect transistors for sensitive terahertz detection. Nature Communications, 2021, 12, 543.	13.2	59
179	Revealing common artifacts due to ferromagnetic inclusions in highly oriented pyrolytic graphite. Europhysics Letters, 2012, 97, 47001.	2.0	58
180	Graphene-hexagonal boron nitride resonant tunneling diodes as high-frequency oscillators. Applied Physics Letters, 2015, 107, .	3.2	58

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181	Simultaneous voltage and current density imaging of flowing electrons in two dimensions. Nature Nanotechnology, 2019, 14, 480-487.	30.5	58
182	Proton and Li-Ion Permeation through Graphene with Eight-Atom-Ring Defects. ACS Nano, 2020, 14, 7280-7286.	15.3	58
183	Control of excitons in multi-layer van der Waals heterostructures. Applied Physics Letters, 2016, 108, .	3.2	56
184	Scaling of the quantum Hall plateau-plateau transition in graphene. Physical Review B, 2009, 80, .	3.3	55
185	Upconverted electroluminescence via Auger scattering of interlayer excitons in van der Waals heterostructures. Nature Communications, 2019, 10, 2335.	13.2	54
186	Multiple flux jumps and irreversible behavior of thin Al superconducting rings. Physical Review B, 2003, 67, .	3.3	52
187	Giant Spin-Hall Effect Induced by the Zeeman Interaction in Graphene. Physical Review Letters, 2011, 107, 096601.	8.0	52
188	Landau Level Spectroscopy of Electron-Electron Interactions in Graphene. Physical Review Letters, 2015, 114, 126804.	8.0	52
189	Memory effects in individual submicrometer ferromagnets. Physical Review B, 1998, 58, 12201-12206.	3.3	50
190	Atomically thin micas as proton-conducting membranes. Nature Nanotechnology, 2019, 14, 962-966.	30.5	50
191	Excess resistivity in graphene superlattices caused by umklapp electronâ€“electron scattering. Nature Physics, 2019, 15, 32-36.	11.8	50
192	Long-range nontopological edge currents in charge-neutral graphene. Nature, 2021, 593, 528-534.	36.2	50
193	Breakdown of universal scaling of conductance fluctuations in high magnetic fields. Physical Review Letters, 1992, 69, 1248-1251.	8.0	49
194	Ballistic two-dimensional electrons in a random magnetic field. Physical Review B, 1994, 49, 5749-5752.	3.3	49
195	Planar and van der Waals heterostructures for vertical tunnelling single electron transistors. Nature Communications, 2019, 10, 230.	13.2	48
196	Control of electron-electron interaction in graphene by proximity screening. Nature Communications, 2020, 11, 2339.	13.2	48
197	Resonant tunneling through donor molecules. Physical Review B, 1994, 50, 8074-8077.	3.3	47
198	Blue Energy Conversion from Holey-Graphene-like Membranes with a High Density of Subnanometer Pores. Nano Letters, 2020, 20, 8634-8639.	9.5	47

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199	Transport of hydrogen isotopes through interlayer spacing in van der Waals crystals. Nature Nanotechnology, 2018, 13, 468-472.	30.5	45
200	Sub-bandgap Voltage Electroluminescence and Magneto-oscillations in a WSe₂ Light-Emitting van der Waals Heterostructure. Nano Letters, 2017, 17, 1425-1430.	9.5	44
201	Atomically resolved imaging of highly ordered alternating fluorinated graphene. Nature Communications, 2014, 5, 4902.	13.2	43
202	Nonlocal Response and Anamorphosis: The Case of Few-Layer Black Phosphorus. Nano Letters, 2015, 15, 6991-6995.	9.5	42
203	Scattering of ballistic electrons at a mesoscopic spot of strong magnetic field. Physical Review B, 2002, 65, .	3.3	41
204	Dimensional reduction, quantum Hall effect and layer parity in graphite films. Nature Physics, 2019, 15, 437-442.	11.8	41
205	Dâˆ’centers probed by resonant tunneling spectroscopy. Physical Review B, 1996, 53, 9554-9557.	3.3	40
206	Even-Denominator Filling Factors in the Thermoelectric Power of a Two-Dimensional Electron Gas. Physical Review Letters, 1996, 76, 3630-3633.	8.0	40
207	Raman spectroscopy of highly pressurized graphene membranes. Applied Physics Letters, 2016, 108, .	3.2	39
208	Cascaded Optical Field Enhancement in Composite Plasmonic Nanostructures. Physical Review Letters, 2010, 105, 246806.	8.0	38
209	Submicron probes for Hall magnetometry over the extended temperature range from helium to room temperature. Journal of Applied Physics, 2003, 93, 10053-10057.	2.3	37
210	Tunnel spectroscopy of localised electronic states in hexagonal boron nitride. Communications Physics, 2018, 1, .	5.3	36
211	Exponentially selective molecular sieving through angstrom pores. Nature Communications, 2021, 12, 7170.	13.2	36
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