Philip Kim

List of Publications by Year in descending order

291 papers	100,860 citations	1040 113 h-index	442 274 g-index
299 all docs	299 docs citations	299 times ranked	60246 citing authors

#	Article	IF	Citations
1	Experimental observation of the quantum Hall effect and Berry's phase in graphene. Nature, 2005, 438, 201-204.	13.7	12,153
2	Large-scale pattern growth of graphene films for stretchable transparent electrodes. Nature, 2009, 457, 706-710.	13.7	9,624
3	Ultrahigh electron mobility in suspended graphene. Solid State Communications, 2008, 146, 351-355.	0.9	6,963
4	Boron nitride substrates for high-quality graphene electronics. Nature Nanotechnology, 2010, 5, 722-726.	15.6	5,794
5	Energy Band-Gap Engineering of Graphene Nanoribbons. Physical Review Letters, 2007, 98, 206805.	2.9	4,635
6	Thermal Transport Measurements of Individual Multiwalled Nanotubes. Physical Review Letters, 2001, 87, 215502.	2.9	2,853
7	Room-Temperature Quantum Hall Effect in Graphene. Science, 2007, 315, 1379-1379.	6.0	2,662
8	Atomic structure and electronic properties of single-walled carbon nanotubes. Nature, 1998, 391, 62-64.	13.7	2,355
9	One-Dimensional Electrical Contact to a Two-Dimensional Material. Science, 2013, 342, 614-617.	6.0	2,236
10	Atomically thin pâ€“n junctions with van der Waals heterointerfaces. Nature Nanotechnology, 2014, 9, 676-681.	15.6	1,953
11	Thermal conductivity of individual silicon nanowires. Applied Physics Letters, 2003, 83, 2934-2936.	1.5	1,536
12	Current saturation in zero-bandgap, top-gated graphene field-effect transistors. Nature Nanotechnology, 2008, 3, 654-659.	15.6	1,426
13	Hofstadterâ€™s butterfly and the fractal quantum Hall effect in moirÃ© superlattices. Nature, 2013, 497, 598-602.	13.7	1,404
14	Tuning the Graphene Work Function by Electric Field Effect. Nano Letters, 2009, 9, 3430-3434.	4.5	1,255
15	Nanotube Nanotweezers. Science, 1999, 286, 2148-2150.	6.0	1,119
16	Dirac charge dynamics in graphene by infrared spectroscopy. Nature Physics, 2008, 4, 532-535.	6.5	1,111
17	Multi-terminal transport measurements of MoS2 using a van der Waals heterostructure device platform. Nature Nanotechnology, 2015, 10, 534-540.	15.6	1,099
18	Temperature-Dependent Transport in Suspended Graphene. Physical Review Letters, 2008, 101, 096802.	2.9	1,044

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19	Quantum interference and Klein tunnelling in graphene heterojunctions. Nature Physics, 2009, 5, 222-226.	6.5	1,011
20	Electric Field Effect Tuning of Electron-Phonon Coupling in Graphene. Physical Review Letters, 2007, 98, 166802.	2.9	996
21	The Role of Surface Oxygen in the Growth of Large Single-Crystal Graphene on Copper. Science, 2013, 342, 720-723.	6.0	977
22	Flexible and Transparent MoS₂ Field-Effect Transistors on Hexagonal Boron Nitride-Graphene Heterostructures. ACS Nano, 2013, 7, 7931-7936.	7.3	947
23	Measurement of Scattering Rate and Minimum Conductivity in Graphene. Physical Review Letters, 2007, 99, 246803.	2.9	905
24	Observation of the fractional quantum Hall effect in graphene. Nature, 2009, 462, 196-199.	13.7	877
25	Graphene Barristor, a Triode Device with a Gate-Controlled Schottky Barrier. Science, 2012, 336, 1140-1143.	6.0	862
26	Performance of monolayer graphene nanomechanical resonators with electrical readout. Nature Nanotechnology, 2009, 4, 861-867.	15.6	847
27	Controlling Electron-Phonon Interactions in Graphene at Ultrahigh Carrier Densities. Physical Review Letters, 2010, 105, 256805.	2.9	801
28	Visualizing Individual Nitrogen Dopants in Monolayer Graphene. Science, 2011, 333, 999-1003.	6.0	774
29	Atmospheric Oxygen Binding and Hole Doping in Deformed Graphene on a SiO₂ Substrate. Nano Letters, 2010, 10, 4944-4951.	4.5	706
30	Measuring Thermal and Thermoelectric Properties of One-Dimensional Nanostructures Using a Microfabricated Device. Journal of Heat Transfer, 2003, 125, 881-888.	1.2	698
31	Landau-Level Splitting in Graphene in High Magnetic Fields. Physical Review Letters, 2006, 96, 136806.	2.9	694
32	Structure and Electronic Properties of Carbon Nanotubes. Journal of Physical Chemistry B, 2000, 104, 2794-2809.	1.2	646
33	Thermoelectric and Magnetothermoelectric Transport Measurements of Graphene. Physical Review Letters, 2009, 102, 096807.	2.9	639
34	Controlled charge trapping by molybdenum disulphide and graphene in ultrathin heterostructured memory devices. Nature Communications, 2013, 4, 1624.	5.8	595
35	High-resolution scanning tunneling microscopy imaging of mesoscopic graphene sheets on an insulating surface. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 9209-9212.	3.3	553
36	Tailoring Electrical Transport Across Grain Boundaries in Polycrystalline Graphene. Science, 2012, 336, 1143-1146.	6.0	535

#	Article	IF	Citations
37	Reversible Basal Plane Hydrogenation of Graphene. Nano Letters, 2008, 8, 4597-4602.	4.5	513
38	Infrared Spectroscopy of Landau Levels of Graphene. Physical Review Letters, 2007, 98, 197403.	2.9	501
39	Observation of the Dirac fluid and the breakdown of the Wiedemann-Franz law in graphene. Science, 2016, 351, 1058-1061.	6.0	491
40	Connecting Dopant Bond Type with Electronic Structure in N-Doped Graphene. Nano Letters, 2012, 12, 4025-4031.	4.5	471
41	Electron Transport in Disordered Graphene Nanoribbons. Physical Review Letters, 2010, 104, 056801.	2.9	456
42	Atomic and electronic reconstruction at the van der Waals interface in twisted bilayer graphene. Nature Materials, 2019, 18, 448-453.	13.3	454
43	Covalently Bridging Gaps in Single-Walled Carbon Nanotubes with Conducting Molecules. Science, 2006, 311, 356-359.	6.0	438
44	Electronic Transport and Quantum Hall Effect in Bipolar Graphene<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>p</mml:mi><mml:mtext mathvariant="normal">â^'</mml:mtext><mml:mi>n</mml:mi><mml:mtext mathvariant="normal">â^'</mml:mtext><mml:mi>p</mml:mi></mml:math>Junctions. Physical Review Letters, 2007, 99, 166804.	2.9	434
45	Electron tunneling through atomically flat and ultrathin hexagonal boron nitride. Applied Physics Letters, 2011, 99, .	1.5	425
46	Multicomponent fractional quantum Hall effect inÂgraphene. Nature Physics, 2011, 7, 693-696.	6.5	405
47	Electric Field Modulation of Galvanomagnetic Properties of Mesoscopic Graphite. Physical Review Letters, 2005, 94, 176803.	2.9	385
48	Tunable spin-polarized correlated states in twisted double bilayer graphene. Nature, 2020, 583, 221-225.	13.7	385
49	Two-dimensional van der Waals materials. Physics Today, 2016, 69, 38-44.	0.3	381
50	Fabrication and electric-field-dependent transport measurements of mesoscopic graphite devices. Applied Physics Letters, 2005, 86, 073104.	1.5	368
51	Label-free single-molecule detection of DNA-hybridization kinetics with a carbon nanotube field-effect transistor. Nature Nanotechnology, 2011, 6, 126-132.	15.6	360
52	Electronic Density of States of Atomically Resolved Single-Walled Carbon Nanotubes: Van Hove Singularities and End States. Physical Review Letters, 1999, 82, 1225-1228.	2.9	343
53	Near-field focusing and magnification through self-assembled nanoscale spherical lenses. Nature, 2009, 460, 498-501.	13.7	338
54	Highly Stable, Dual-Gated MoS₂ Transistors Encapsulated by Hexagonal Boron Nitride with Gate-Controllable Contact, Resistance, and Threshold Voltage. ACS Nano, 2015, 9, 7019-7026.	7.3	331

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55	Quantum Hall States near the Charge-Neutral Dirac Point in Graphene. Physical Review Letters, 2007, 99, 106802.	2.9	329
56	Alcohol Vapor Sensors Based on Single-Walled Carbon Nanotube Field Effect Transistors. Nano Letters, 2003, 3, 877-881.	4.5	308
57	Spin and valley quantum Hall ferromagnetism inÂgraphene. Nature Physics, 2012, 8, 550-556.	6.5	307
58	Oxygen-activated growth and bandgap tunability of large single-crystal bilayer graphene. Nature Nanotechnology, 2016, 11, 426-431.	15.6	287
59	Scaling of Resistance and Electron Mean Free Path of Single-Walled Carbon Nanotubes. Physical Review Letters, 2007, 98, 186808.	2.9	285
60	Photonic crystals for nano-light in moirÃ© graphene superlattices. Science, 2018, 362, 1153-1156.	6.0	273
61	Probing dark excitons in atomically thin semiconductors via near-field coupling to surface plasmon polaritons. Nature Nanotechnology, 2017, 12, 856-860.	15.6	270
62	Charge Transfer Chemical Doping of Few Layer Graphenes: Charge Distribution and Band Gap Formation. Nano Letters, 2009, 9, 4133-4137.	4.5	263
63	Electric fieldâ€“tunable superconductivity in alternating-twist magic-angle trilayer graphene. Science, 2021, 371, 1133-1138.	6.0	261
64	Carbon Wonderland. Scientific American, 2008, 298, 90-97.	1.0	260
65	Electrical control of interlayer exciton dynamics in atomically thin heterostructures. Science, 2019, 366, 870-875.	6.0	255
66	Modulation of Thermoelectric Power of Individual Carbon Nanotubes. Physical Review Letters, 2003, 91, 256801.	2.9	251
67	Low-Temperature Ohmic Contact to Monolayer MoS₂ by van der Waals Bonded Co/h-BN Electrodes. Nano Letters, 2017, 17, 4781-4786.	4.5	233
68	Singleâ€Gate Bandgap Opening of Bilayer Graphene by Dual Molecular Doping. Advanced Materials, 2012, 24, 407-411.	11.1	228
69	Nature of the quantum metal in a two-dimensional crystalline superconductor. Nature Physics, 2016, 12, 208-212.	6.5	228
70	Band Structure Asymmetry of Bilayer Graphene Revealed by Infrared Spectroscopy. Physical Review Letters, 2009, 102, 037403.	2.9	223
71	Dirac electrons in a dodecagonal graphene quasicrystal. Science, 2018, 361, 782-786.	6.0	223
72	Valleytronics: Opportunities, Challenges, and Paths Forward. Small, 2018, 14, e1801483.	5.2	221

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73	Imaging viscous flow of the Dirac fluid in graphene. Nature, 2020, 583, 537-541.	13.7	213
74	Single Crystals of Electrically Conductive Two-Dimensional Metalâ€“Organic Frameworks: Structural and Electrical Transport Properties. ACS Central Science, 2019, 5, 1959-1964.	5.3	211
75	Structure and control of charge density waves in two-dimensional 1T-TaS ₂. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15054-15059.	3.3	205
76	Nanoscale Atoms in Solid-State Chemistry. Science, 2013, 341, 157-160.	6.0	199
77	Observation of Graphene Bubbles and Effective Mass Transport under Graphene Films. Nano Letters, 2009, 9, 332-337.	4.5	198
78	Electron and Optical Phonon Temperatures in Electrically Biased Graphene. Physical Review Letters, 2010, 104, 227401.	2.9	190
79	Graphene based heterostructures. Solid State Communications, 2012, 152, 1275-1282.	0.9	184
80	Heterointerface effects in the electrointercalation of van der Waals heterostructures. Nature, 2018, 558, 425-429.	13.7	184
81	Cyclotron Resonance in Bilayer Graphene. Physical Review Letters, 2008, 100, 087403.	2.9	178
82	Quantum Hall drag of exciton condensate inÂgraphene. Nature Physics, 2017, 13, 746-750.	6.5	173
83	Electronic transport in locally gated graphene nanoconstrictions. Applied Physics Letters, 2007, 91, .	1.5	171
84	Theory of correlated insulating behaviour and spin-triplet superconductivity in twisted double bilayer graphene. Nature Communications, 2019, 10, 5333.	5.8	171
85	Temperature dependent electron transport in graphene. European Physical Journal: Special Topics, 2007, 148, 15-18.	1.2	170
86	Single-walled carbon nanotube probes for high-resolution nanostructure imaging. Applied Physics Letters, 1998, 73, 3465-3467.	1.5	169
87	Water-Gated Charge Doping of Graphene Induced by Mica Substrates. Nano Letters, 2012, 12, 648-654.	4.5	166
88	Large Excitonic Reflectivity of Monolayer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>MoSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></ in Hexagonal Boron Nitride. Physical Review Letters, 2018, 120, 037402.	2.9	165
89	Directing and Sensing Changes in Molecular Conformation on Individual Carbon Nanotube Field Effect Transistors. Journal of the American Chemical Society, 2005, 127, 15045-15047.	6.6	162
90	Observation of Anomalous Phonon Softening in Bilayer Graphene. Physical Review Letters, 2008, 101, 136804.	2.9	160

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91	Specular interband Andreev reflections at van der Waals interfaces between graphene and NbSe2. Nature Physics, 2016, 12, 328-332.	6.5	159
92	Quantum Hall effect in graphene. Solid State Communications, 2007, 143, 14-19.	0.9	157
93	Band structure engineering of 2D materials using patterned dielectric superlattices. Nature Nanotechnology, 2018, 13, 566-571.	15.6	157
94	Symmetry Breaking in the Zero-Energy Landau Level in Bilayer Graphene. Physical Review Letters, 2010, 104, 066801.	2.9	153
95	Tunable Electrical and Optical Characteristics in Monolayer Graphene and Few-Layer MoS₂ Heterostructure Devices. Nano Letters, 2015, 15, 5017-5024.	4.5	150
96	Transport in inhomogeneous quantum critical fluids and in the Dirac fluid in graphene. Physical Review B, 2016, 93, .	1.1	149
97	Raman Spectroscopy of Lithographically Patterned Graphene Nanoribbons. ACS Nano, 2011, 5, 4123-4130.	7.3	148
98	Flexible and Transparent Gas Molecule Sensor Integrated with Sensing and Heating Graphene Layers. Small, 2014, 10, 3685-3691.	5.2	142
99	Enhanced Thermoelectric Power in Graphene: Violation of the Mott Relation by Inelastic Scattering. Physical Review Letters, 2016, 116, 136802.	2.9	142
100	Electrical control of charged carriers and excitons in atomically thin materials. Nature Nanotechnology, 2018, 13, 128-132.	15.6	142
101	Chemoresponsive monolayer transistors. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11452-11456.	3.3	141
102	Evidence for a spin phase transition at charge neutrality in bilayer graphene. Nature Physics, 2013, 9, 154-158.	6.5	138
103	Raman Enhancement on Graphene: Adsorbed and Intercalated Molecular Species. ACS Nano, 2010, 4, 7005-7013.	7.3	137
104	Graphene Field-Effect Transistors Based on Boronâ€“Nitride Dielectrics. Proceedings of the IEEE, 2013, 101, 1609-1619.	16.4	137
105	Tunable fractional quantum Hall phases in bilayer graphene. Science, 2014, 345, 61-64.	6.0	137
106	Channel Length Scaling in Graphene Field-Effect Transistors Studied with Pulsed Currentâ^'Voltage Measurements. Nano Letters, 2011, 11, 1093-1097.	4.5	135
107	Inducing superconducting correlation in quantum Hall edge states. Nature Physics, 2017, 13, 693-698.	6.5	132
108	Quasi-Continuous Growth of Ultralong Carbon Nanotube Arrays. Journal of the American Chemical Society, 2005, 127, 15336-15337.	6.6	131

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109	Mesoscopic thermal and thermoelectric measurements of individual carbon nanotubes. Solid State Communications, 2003, 127, 181-186.	0.9	122
110	Large Physisorption Strain in Chemical Vapor Deposition of Graphene on Copper Substrates. Nano Letters, 2012, 12, 2408-2413.	4.5	122
111	Electronic compressibility of layer-polarized bilayer graphene. Physical Review B, 2012, 85, .	1.1	121
112	Epitaxial Growth of Molecular Crystals on van der Waals Substrates for Highâ€Performance Organic Electronics. Advanced Materials, 2014, 26, 2812-2817.	11.1	120
113	Mesoscopic thermal transport and energy dissipation in carbon nanotubes. Physica B: Condensed Matter, 2002, 323, 67-70.	1.3	118
114	Electron Transport in a Multichannel One-Dimensional Conductor: Molybdenum Selenide Nanowires. Physical Review Letters, 2006, 96, 076601.	2.9	118
115	Nanocrystalline Graphite Growth on Sapphire by Carbon Molecular Beam Epitaxy. Journal of Physical Chemistry C, 2011, 115, 4491-4494.	1.5	113
116	Radio frequency electrical transduction of graphene mechanical resonators. Applied Physics Letters, 2010, 97, .	1.5	112
117	Diameter Dependence of the Transport Properties of Antimony Telluride Nanowires. Nano Letters, 2010, 10, 3037-3040.	4.5	111
118	Magnetic resonance spectroscopy of an atomically thin material using a single-spin qubit. Science, 2017, 355, 503-507.	6.0	110
119	Excitons in a reconstructed moirÃ© potential in twisted WSe2/WSe2 homobilayers. Nature Materials, 2021, 20, 480-487.	13.3	109
120	Polariton nanophotonics using phase-change materials. Nature Communications, 2019, 10, 4487.	5.8	106
121	Broken mirror symmetry in excitonic response of reconstructed domains in twisted MoSe2/MoSe2 bilayers. Nature Nanotechnology, 2020, 15, 750-754.	15.6	106
122	Spectromicroscopy of single and multilayer graphene supported by a weakly interacting substrate. Physical Review B, 2008, 78, .	1.1	105
123	Ultraclean Patterned Transfer of Single-Layer Graphene by Recyclable Pressure Sensitive Adhesive Films. Nano Letters, 2015, 15, 3236-3240.	4.5	101
124	Inking Elastomeric Stamps with Microâ€Patterned, Single Layer Graphene to Create Highâ€Performance OFETs. Advanced Materials, 2011, 23, 3531-3535.	11.1	100
125	Unbalanced Hole and Electron Diffusion in Lead Bromide Perovskites. Nano Letters, 2017, 17, 1727-1732.	4.5	100
126	Ultra-confined mid-infrared resonant phonon polaritons in van der Waals nanostructures. Science Advances, 2018, 4, eaat7189.	4.7	100

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127	Tuning Electrical Conductance of MoS₂ Monolayers through Substitutional Doping. Nano Letters, 2020, 20, 4095-4101.	4.5	100
128	Bilayer Wigner crystals in a transition metal dichalcogenide heterostructure. Nature, 2021, 595, 48-52.	13.7	98
129	Thermal probing of energy dissipation in current-carrying carbon nanotubes. Journal of Applied Physics, 2009, 105, .	1.1	97
130	Phonon Speed, Not Scattering, Differentiates Thermal Transport in Lead Halide Perovskites. Nano Letters, 2017, 17, 5734-5739.	4.5	94
131	RF performance of top-gated, zero-bandgap graphene field-effect transistors. , 2008, , .		92
132	Synthesis and Electrical Characterization of Magnetic Bilayer Graphene Intercalate. Nano Letters, 2011, 11, 860-865.	4.5	92
133	Electronic Transport in Graphene Heterostructures. Annual Review of Condensed Matter Physics, 2011, 2, 101-120.	5.2	92
134	Li Intercalation into Graphite: Direct Optical Imaging and Cahnâ€“Hilliard Reaction Dynamics. Journal of Physical Chemistry Letters, 2016, 7, 2151-2156.	2.1	92
135	Interaction-Induced Shift of the Cyclotron Resonance of Graphene Using Infrared Spectroscopy. Physical Review Letters, 2010, 104, 067404.	2.9	91
136	Electrically Tunable Valley Dynamics in Twisted <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></ Bilayers. Physical Review Letters, 2020, 124, 217403.	2.9	89
137	Graphene-based Josephson junction microwave bolometer. Nature, 2020, 586, 42-46.	13.7	88
138	Magnetoresistance Measurements of Graphene at the Charge Neutrality Point. Physical Review Letters, 2012, 108, 106804.	2.9	87
139	Renormalization of the Graphene Dispersion Velocity Determined from Scanning Tunneling Spectroscopy. Physical Review Letters, 2012, 109, 116802.	2.9	86
140	Atomic lattice disorder in charge-density-wave phases of exfoliated dichalcogenides (1T-TaS) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 T 113, 11420-11424.	3.3	86
141	Graphene nanoribbon devices at high bias. Nano Convergence, 2014, 1, 1.	6.3	84
142	40 years of the quantum Hall effect. Nature Reviews Physics, 2020, 2, 397-401.	11.9	84
143	Thermoelectric power measurements of wide band gap semiconducting nanowires. Applied Physics Letters, 2009, 94, 022106.	1.5	82
144	Corrugation in Exfoliated Graphene: An Electron Microscopy and Diffraction Study. ACS Nano, 2010, 4, 4879-4889.	7.3	78

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145	Measurement of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î½</mml:mi><mml:mo>=</mml:mo><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mn>3</mml:mn</mml:math> Quantum Hall Energy Gap in Suspended Graphene. Physical Review Letters, 2011, 106, 046801.	2.9	77
146	Selective excitation and imaging of ultraslow phonon polaritons in thin hexagonal boron nitride crystals. Light: Science and Applications, 2018, 7, 27.	7.7	75
147	Graphene-Based Josephson-Junction Single-Photon Detector. Physical Review Applied, 2017, 8, .	1.5	74
148	Optical phonon mixing in bilayer graphene with a broken inversion symmetry. Physical Review B, 2009, 80, .	1.1	73
149	Engineering phonon polaritons in van der Waals heterostructures to enhance in-plane optical anisotropy. Science Advances, 2019, 5, eaau7171.	4.7	71
150	Direct Imaging of Charged Impurity Density in Common Graphene Substrates. Nano Letters, 2013, 13, 3576-3580.	4.5	70
151	Imaging Cyclotron Orbits of Electrons in Graphene. Nano Letters, 2016, 16, 1690-1694.	4.5	68
152	Graphene field-effect transistors based on boron nitride gate dielectrics. , 2010, , .		67
153	Electrically integrated SU-8 clamped graphene drum resonators for strain engineering. Applied Physics Letters, 2013, 102, 153101.	1.5	67
154	Extracting subnanometer single shells from ultralong multiwalled carbon nanotubes. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 14155-14158.	3.3	64
155	Organic Field Effect Transistors Based on Graphene and Hexagonal Boron Nitride Heterostructures. Advanced Functional Materials, 2014, 24, 5157-5163.	7.8	64
156	High-resolution spatial mapping of the temperature distribution of a Joule self-heated graphene nanoribbon. Applied Physics Letters, 2011, 99, .	1.5	62
157	Single-layer graphene cathodes for organic photovoltaics. Applied Physics Letters, 2011, 98, .	1.5	60
158	30Â°-Twisted Bilayer Graphene Quasicrystals from Chemical Vapor Deposition. Nano Letters, 2020, 20, 3313-3319.	4.5	60
159	Creation of Nanocrystals Through a Solid-Solid Phase Transition Induced by an STM Tip. Science, 1996, 274, 757-760.	6.0	59
160	Ferromagnetic Ordering in Superatomic Solids. Journal of the American Chemical Society, 2014, 136, 16926-16931.	6.6	58
161	Across the border. Nature Materials, 2010, 9, 792-793.	13.3	57
162	Heterostructures based on inorganic and organic van der Waals systems. APL Materials, 2014, 2, .	2.2	57

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164	Multilayer graphene grown by precipitation upon cooling of nickel on diamond. Carbon, 2011, 49, 1006-1012.	5.4	56
165	Chemically Modulated Band Gap in Bilayer Graphene Memory Transistors with High On/Off Ratio. ACS Nano, 2015, 9, 9034-9042.	7.3	56
166	van der Waals Solids from Self-Assembled Nanoscale Building Blocks. Nano Letters, 2016, 16, 1445-1449.	4.5	56
167	Diameter-dependent thermoelectric figure of merit in single-crystalline Bi nanowires. Nanoscale, 2015, 7, 5053-5059.	2.8	55
168	Controlling Excitons in an Atomically Thin Membrane with a Mirror. Physical Review Letters, 2020, 124, 027401.	2.9	55
169	Measurement of collective dynamical mass of Dirac fermions in graphene. Nature Nanotechnology, 2014, 9, 594-599.	15.6	53
170	Interlayer fractional quantum Hall effect in a coupled graphene double layer. Nature Physics, 2019, 15, 893-897.	6.5	53
171	Landau Level Spectroscopy of Electron-Electron Interactions in Graphene. Physical Review Letters, 2015, 114, 126804.	2.9	52
172	Single Electron Transistor with Single Aromatic Ring Molecule Covalently Connected to Graphene Nanogaps. Nano Letters, 2017, 17, 5335-5341.	4.5	50
173	Controlled Electrochemical Intercalation of Graphene/h-BN van der Waals Heterostructures. Nano Letters, 2018, 18, 460-466.	4.5	49
174	Scanning Tunneling Microscopy and Spectroscopy Studies of Single Wall Carbon Nanotubes. Journal of Materials Research, 1998, 13, 2380-2388.	1.2	48
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176	Study of Graphene-based 2D-Heterostructure Device Fabricated by All-Dry Transfer Process. ACS Applied Materials & Interfaces, 2016, 8, 3072-3078.	4.0	48
177	Plasmon Reflections by Topological Electronic Boundaries in Bilayer Graphene. Nano Letters, 2017, 17, 7080-7085.	4.5	48
178	Mechanical Detection and Imaging of Hyperbolic Phonon Polaritons in Hexagonal Boron Nitride. ACS Nano, 2017, 11, 8741-8746.	7.3	48
179	Aharonovâ€“Bohm effect in graphene-based Fabryâ€“PÃ©rot quantum Hall interferometers. Nature Nanotechnology, 2021, 16, 563-569.	15.6	48
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182	Patterning Superatom Dopants on Transition Metal Dichalcogenides. Nano Letters, 2016, 16, 3385-3389.	4.5	47
183	Modulation of mechanical resonance by chemical potential oscillation in graphene. Nature Physics, 2016, 12, 240-244.	6.5	47
184	Electron-phonon instability in graphene revealed by global and local noise probes. Science, 2019, 364, 154-157.	6.0	47
185	Josephson junction infrared single-photon detector. Science, 2021, 372, 409-412.	6.0	45
186	Raman scattering and tunable electronâ€“phonon coupling in single layer graphene. Solid State Communications, 2007, 143, 39-43.	0.9	43
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