Philip Kim

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84,918 105 291 275 h-index g-index citations papers 7.98 12.9 93,774 299 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
275	Experimental observation of the quantum Hall effect and Berry's phase in graphene. <i>Nature</i> , 2005 , 438, 201-4	50.4	10820
274	Large-scale pattern growth of graphene films for stretchable transparent electrodes. <i>Nature</i> , 2009 , 457, 706-10	50.4	8675
273	Ultrahigh electron mobility in suspended graphene. Solid State Communications, 2008, 146, 351-355	1.6	5892
272	Boron nitride substrates for high-quality graphene electronics. <i>Nature Nanotechnology</i> , 2010 , 5, 722-6	28.7	4874
271	Energy band-gap engineering of graphene nanoribbons. <i>Physical Review Letters</i> , 2007 , 98, 206805	7.4	4124
270	Thermal transport measurements of individual multiwalled nanotubes. <i>Physical Review Letters</i> , 2001 , 87, 215502	7.4	2461
269	Room-temperature quantum Hall effect in graphene. Science, 2007, 315, 1379	33.3	2342
268	Atomic structure and electronic properties of single-walled carbon nanotubes. <i>Nature</i> , 1998 , 391, 62-64	ł 50.4	2107
267	One-dimensional electrical contact to a two-dimensional material. <i>Science</i> , 2013 , 342, 614-7	33.3	1676
266	Atomically thin p-n junctions with van der Waals heterointerfaces. <i>Nature Nanotechnology</i> , 2014 , 9, 676	-8 8.7	1598
265	Thermal conductivity of individual silicon nanowires. <i>Applied Physics Letters</i> , 2003 , 83, 2934-2936	3.4	1342
264	Current saturation in zero-bandgap, top-gated graphene field-effect transistors. <i>Nature Nanotechnology</i> , 2008 , 3, 654-9	28.7	1223
263	Hofstadter's butterfly and the fractal quantum Hall effect in moir uperlattices. <i>Nature</i> , 2013 , 497, 598-	· 69 024	1084
262	Tuning the graphene work function by electric field effect. <i>Nano Letters</i> , 2009 , 9, 3430-4	11.5	1073
261	Nanotube nanotweezers. <i>Science</i> , 1999 , 286, 2148-50	33.3	1010
260	Dirac charge dynamics in graphene by infrared spectroscopy. <i>Nature Physics</i> , 2008 , 4, 532-535	16.2	983
259	Temperature-dependent transport in suspended graphene. <i>Physical Review Letters</i> , 2008 , 101, 096802	7.4	911

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258	Electric field effect tuning of electron-phonon coupling in graphene. <i>Physical Review Letters</i> , 2007 , 98, 166802	7.4	872	
257	Multi-terminal transport measurements of MoS2 using a van der Waals heterostructure device platform. <i>Nature Nanotechnology</i> , 2015 , 10, 534-40	28.7	868	
256	The role of surface oxygen in the growth of large single-crystal graphene on copper. <i>Science</i> , 2013 , 342, 720-3	33.3	868	
255	Quantum interference and Klein tunnelling in graphene heterojunctions. <i>Nature Physics</i> , 2009 , 5, 222-2	26 6.2	858	
254	Measurement of scattering rate and minimum conductivity in graphene. <i>Physical Review Letters</i> , 2007 , 99, 246803	7.4	803	
253	Flexible and transparent MoS2 field-effect transistors on hexagonal boron nitride-graphene heterostructures. <i>ACS Nano</i> , 2013 , 7, 7931-6	16.7	800	
252	Graphene barristor, a triode device with a gate-controlled Schottky barrier. <i>Science</i> , 2012 , 336, 1140-3	33.3	748	
251	Observation of the fractional quantum Hall effect in graphene. <i>Nature</i> , 2009 , 462, 196-9	50.4	746	
250	Visualizing individual nitrogen dopants in monolayer graphene. <i>Science</i> , 2011 , 333, 999-1003	33.3	697	
249	Performance of monolayer graphene nanomechanical resonators with electrical readout. <i>Nature Nanotechnology</i> , 2009 , 4, 861-7	28.7	694	
248	Controlling electron-phonon interactions in graphene at ultrahigh carrier densities. <i>Physical Review Letters</i> , 2010 , 105, 256805	7.4	652	
247	Atmospheric oxygen binding and hole doping in deformed graphene on a SiOßubstrate. <i>Nano Letters</i> , 2010 , 10, 4944-51	11.5	615	
246	Landau-level splitting in graphene in high magnetic fields. <i>Physical Review Letters</i> , 2006 , 96, 136806	7.4	610	
245	Measuring Thermal and Thermoelectric Properties of One-Dimensional Nanostructures Using a Microfabricated Device. <i>Journal of Heat Transfer</i> , 2003 , 125, 881-888	1.8	557	
244	Thermoelectric and magnetothermoelectric transport measurements of graphene. <i>Physical Review Letters</i> , 2009 , 102, 096807	7.4	552	
243	Structure and Electronic Properties of Carbon Nanotubes. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 2794-2809	3.4	545	
242	Controlled charge trapping by molybdenum disulphide and graphene in ultrathin heterostructured memory devices. <i>Nature Communications</i> , 2013 , 4, 1624	17.4	504	
241	High-resolution scanning tunneling microscopy imaging of mesoscopic graphene sheets on an insulating surface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 9209-12	11.5	494	

240	Reversible basal plane hydrogenation of graphene. <i>Nano Letters</i> , 2008 , 8, 4597-602	11.5	479
239	Tailoring electrical transport across grain boundaries in polycrystalline graphene. <i>Science</i> , 2012 , 336, 1143-6	33.3	469
238	Infrared spectroscopy of Landau levels of graphene. <i>Physical Review Letters</i> , 2007 , 98, 197403	7.4	444
237	Electron transport in disordered graphene nanoribbons. <i>Physical Review Letters</i> , 2010 , 104, 056801	7.4	429
236	Electronic transport and quantum hall effect in bipolar graphene p-n-p junctions. <i>Physical Review Letters</i> , 2007 , 99, 166804	7.4	403
235	Covalently bridging gaps in single-walled carbon nanotubes with conducting molecules. <i>Science</i> , 2006 , 311, 356-9	33.3	390
234	Connecting dopant bond type with electronic structure in N-doped graphene. <i>Nano Letters</i> , 2012 , 12, 4025-31	11.5	381
233	Electric field modulation of galvanomagnetic properties of mesoscopic graphite. <i>Physical Review Letters</i> , 2005 , 94, 176803	7.4	363
232	Electron tunneling through atomically flat and ultrathin hexagonal boron nitride. <i>Applied Physics Letters</i> , 2011 , 99, 243114	3.4	348
231	Multicomponent fractional quantum Hall effect in graphene. <i>Nature Physics</i> , 2011 , 7, 693-696	16.2	347
230	Fabrication and electric-field-dependent transport measurements of mesoscopic graphite devices. <i>Applied Physics Letters</i> , 2005 , 86, 073104	3.4	335
229	Observation of the Dirac fluid and the breakdown of the Wiedemann-Franz law in graphene. <i>Science</i> , 2016 , 351, 1058-61	33.3	328
228	Electronic Density of States of Atomically Resolved Single-Walled Carbon Nanotubes: Van Hove Singularities and End States. <i>Physical Review Letters</i> , 1999 , 82, 1225-1228	7.4	313
227	Near-field focusing and magnification through self-assembled nanoscale spherical lenses. <i>Nature</i> , 2009 , 460, 498-501	50.4	290
226	Label-free single-molecule detection of DNA-hybridization kinetics with a carbon nanotube field-effect transistor. <i>Nature Nanotechnology</i> , 2011 , 6, 126-32	28.7	287
225	Quantum Hall states near the charge-neutral Dirac point in graphene. <i>Physical Review Letters</i> , 2007 , 99, 106802	7.4	285
224	Atomic and electronic reconstruction at the van der Waals interface in twisted bilayer graphene. <i>Nature Materials</i> , 2019 , 18, 448-453	27	282
223	Alcohol Vapor Sensors Based on Single-Walled Carbon Nanotube Field Effect Transistors. <i>Nano Letters</i> , 2003 , 3, 877-881	11.5	276

(2013-2015)

2	.22	Highly Stable, Dual-Gated MoS2 Transistors Encapsulated by Hexagonal Boron Nitride with Gate-Controllable Contact, Resistance, and Threshold Voltage. <i>ACS Nano</i> , 2015 , 9, 7019-26	16.7	256	
2	.21	Two-dimensional van der Waals materials. <i>Physics Today</i> , 2016 , 69, 38-44	0.9	256	
2	.20	Spin and valley quantum Hall ferromagnetism in graphene. <i>Nature Physics</i> , 2012 , 8, 550-556	16.2	255	
2	.19	Scaling of resistance and electron mean free path of single-walled carbon nanotubes. <i>Physical Review Letters</i> , 2007 , 98, 186808	7.4	243	
2	.18	Charge transfer chemical doping of few layer graphenes: charge distribution and band gap formation. <i>Nano Letters</i> , 2009 , 9, 4133-7	11.5	240	
2	17	Carbon wonderland. <i>Scientific American</i> , 2008 , 298, 90-7	0.5	235	
2	.16	Oxygen-activated growth and bandgap tunability of large single-crystal bilayer graphene. <i>Nature Nanotechnology</i> , 2016 , 11, 426-31	28.7	227	
2	.15	Modulation of thermoelectric power of individual carbon nanotubes. <i>Physical Review Letters</i> , 2003 , 91, 256801	7.4	226	
2	14	Single-gate bandgap opening of bilayer graphene by dual molecular doping. <i>Advanced Materials</i> , 2012 , 24, 407-11	24	212	
2	.13	Band structure asymmetry of bilayer graphene revealed by infrared spectroscopy. <i>Physical Review Letters</i> , 2009 , 102, 037403	7.4	207	
2	12	Tunable spin-polarized correlated states in twisted double bilayer graphene. <i>Nature</i> , 2020 , 583, 221-22.	550.4	191	
2	.11	Probing dark excitons in atomically thin semiconductors via near-field coupling to surface plasmon polaritons. <i>Nature Nanotechnology</i> , 2017 , 12, 856-860	28.7	191	
2	.10	Nature of the quantum metal in a two-dimensional crystalline superconductor. <i>Nature Physics</i> , 2016 , 12, 208-212	16.2	177	
2	.09	Cyclotron resonance in bilayer graphene. <i>Physical Review Letters</i> , 2008 , 100, 087403	7.4	168	
2	.08	Low-Temperature Ohmic Contact to Monolayer MoS by van der Waals Bonded Co/h-BN Electrodes. <i>Nano Letters</i> , 2017 , 17, 4781-4786	11.5	164	
2	.07	Observation of graphene bubbles and effective mass transport under graphene films. <i>Nano Letters</i> , 2009 , 9, 332-7	11.5	164	
2	.06	Photonic crystals for nano-light in moir[graphene superlattices. <i>Science</i> , 2018 , 362, 1153-1156	33.3	164	
2	.05	Nanoscale atoms in solid-state chemistry. <i>Science</i> , 2013 , 341, 157-60	33.3	162	

204	Electron and optical phonon temperatures in electrically biased graphene. <i>Physical Review Letters</i> , 2010 , 104, 227401	7.4	162
203	Graphene based heterostructures. <i>Solid State Communications</i> , 2012 , 152, 1275-1282	1.6	158
202	Electronic transport in locally gated graphene nanoconstrictions. <i>Applied Physics Letters</i> , 2007 , 91, 192	10374	156
201	Temperature dependent electron transport in graphene. <i>European Physical Journal: Special Topics</i> , 2007 , 148, 15-18	2.3	155
200	Single-walled carbon nanotube probes for high-resolution nanostructure imaging. <i>Applied Physics Letters</i> , 1998 , 73, 3465-3467	3.4	152
199	Structure and control of charge density waves in two-dimensional 1T-TaS2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 15054-9	11.5	151
198	Directing and sensing changes in molecular conformation on individual carbon nanotube field effect transistors. <i>Journal of the American Chemical Society</i> , 2005 , 127, 15045-7	16.4	151
197	Observation of anomalous phonon softening in bilayer graphene. <i>Physical Review Letters</i> , 2008 , 101, 136804	7.4	147
196	Water-gated charge doping of graphene induced by mica substrates. <i>Nano Letters</i> , 2012 , 12, 648-54	11.5	146
195	Symmetry breaking in the zero-energy Landau level in bilayer graphene. <i>Physical Review Letters</i> , 2010 , 104, 066801	7.4	140
194	Electrical control of interlayer exciton dynamics in atomically thin heterostructures. <i>Science</i> , 2019 , 366, 870-875	33.3	135
193	Raman spectroscopy of lithographically patterned graphene nanoribbons. <i>ACS Nano</i> , 2011 , 5, 4123-30	16.7	134
192	Dirac electrons in a dodecagonal graphene quasicrystal. <i>Science</i> , 2018 , 361, 782-786	33.3	132
191	Chemoresponsive monolayer transistors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006 , 103, 11452-6	11.5	131
190	Heterointerface effects in the electrointercalation of van der Waals heterostructures. <i>Nature</i> , 2018 , 558, 425-429	50.4	125
189	Flexible and transparent gas molecule sensor integrated with sensing and heating graphene layers. <i>Small</i> , 2014 , 10, 3685-91	11	123
188	Tunable Electrical and Optical Characteristics in Monolayer Graphene and Few-Layer MoS2 Heterostructure Devices. <i>Nano Letters</i> , 2015 , 15, 5017-24	11.5	122
187	Channel length scaling in graphene field-effect transistors studied with pulsed current-voltage measurements. <i>Nano Letters</i> , 2011 , 11, 1093-7	11.5	122

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186	Quasi-continuous growth of ultralong carbon nanotube arrays. <i>Journal of the American Chemical Society</i> , 2005 , 127, 15336-7	16.4	122
185	Quantum Hall effect in graphene. Solid State Communications, 2007, 143, 14-19	1.6	121
184	Raman enhancement on graphene: adsorbed and intercalated molecular species. <i>ACS Nano</i> , 2010 , 4, 7005-13	16.7	118
183	Large Excitonic Reflectivity of Monolayer MoSe_{2} Encapsulated in Hexagonal Boron Nitride. <i>Physical Review Letters</i> , 2018 , 120, 037402	7.4	117
182	Transport in inhomogeneous quantum critical fluids and in the Dirac fluid in graphene. <i>Physical Review B</i> , 2016 , 93,	3.3	115
181	Evidence for a spin phase transition at charge neutrality in bilayer graphene. <i>Nature Physics</i> , 2013 , 9, 154-158	16.2	115
180	Graphene Field-Effect Transistors Based on Boron Nitride Dielectrics. <i>Proceedings of the IEEE</i> , 2013 , 101, 1609-1619	14.3	114
179	Electrical control of charged carriers and excitons in atomically thin materials. <i>Nature Nanotechnology</i> , 2018 , 13, 128-132	28.7	113
178	Bilayer graphene. Tunable fractional quantum Hall phases in bilayer graphene. Science, 2014, 345, 61-4	33.3	113
177	Electronic compressibility of layer-polarized bilayer graphene. <i>Physical Review B</i> , 2012 , 85,	3.3	112
176	Mesoscopic thermal and thermoelectric measurements of individual carbon nanotubes. <i>Solid State Communications</i> , 2003 , 127, 181-186	1.6	111
175	Enhanced Thermoelectric Power in Graphene: Violation of the Mott Relation by Inelastic Scattering. <i>Physical Review Letters</i> , 2016 , 116, 136802	7.4	109
174	Specular interband Andreev reflections at van der Waals interfaces between graphene and NbSe2. <i>Nature Physics</i> , 2016 , 12, 328-332	16.2	108
173	Diameter dependence of the transport properties of antimony telluride nanowires. <i>Nano Letters</i> , 2010 , 10, 3037-40	11.5	108
172	Large physisorption strain in chemical vapor deposition of graphene on copper substrates. <i>Nano Letters</i> , 2012 , 12, 2408-13	11.5	107
171	Single Crystals of Electrically Conductive Two-Dimensional Metal-Organic Frameworks: Structural and Electrical Transport Properties. <i>ACS Central Science</i> , 2019 , 5, 1959-1964	16.8	105
170	Epitaxial growth of molecular crystals on van der waals substrates for high-performance organic electronics. <i>Advanced Materials</i> , 2014 , 26, 2812-7	24	103
169	Electron transport in a multichannel one-dimensional conductor: molybdenum selenide nanowires. <i>Physical Review Letters</i> , 2006 , 96, 076601	7.4	103

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168	Nanocrystalline Graphite Growth on Sapphire by Carbon Molecular Beam Epitaxy. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 4491-4494	3.8	102
167	Theory of correlated insulating behaviour and spin-triplet superconductivity in twisted double bilayer graphene. <i>Nature Communications</i> , 2019 , 10, 5333	17.4	102
166	Quantum Hall drag of exciton condensate in graphene. <i>Nature Physics</i> , 2017 , 13, 746-750	16.2	101
165	Mesoscopic thermal transport and energy dissipation in carbon nanotubes. <i>Physica B: Condensed Matter</i> , 2002 , 323, 67-70	2.8	101
164	Spectromicroscopy of single and multilayer graphene supported by a weakly interacting substrate. <i>Physical Review B</i> , 2008 , 78,	3.3	97
163	Valleytronics: Opportunities, Challenges, and Paths Forward. <i>Small</i> , 2018 , 14, e1801483	11	96
162	Band structure engineering of 2D materials using patterned dielectric superlattices. <i>Nature Nanotechnology</i> , 2018 , 13, 566-571	28.7	87
161	Inking elastomeric stamps with micro-patterned, single layer graphene to create high-performance OFETs. <i>Advanced Materials</i> , 2011 , 23, 3531-5	24	87
160	Interaction-induced shift of the cyclotron resonance of graphene using infrared spectroscopy. <i>Physical Review Letters</i> , 2010 , 104, 067404	7.4	86
159	Thermal probing of energy dissipation in current-carrying carbon nanotubes. <i>Journal of Applied Physics</i> , 2009 , 105, 104306	2.5	86
158	Radio frequency electrical transduction of graphene mechanical resonators. <i>Applied Physics Letters</i> , 2010 , 97, 243111	3.4	84
157	Ultraclean patterned transfer of single-layer graphene by recyclable pressure sensitive adhesive films. <i>Nano Letters</i> , 2015 , 15, 3236-40	11.5	83
156	Synthesis and electrical characterization of magnetic bilayer graphene intercalate. <i>Nano Letters</i> , 2011 , 11, 860-5	11.5	83
155	Inducing superconducting correlation in quantum Hall edge states. <i>Nature Physics</i> , 2017 , 13, 693-698	16.2	77
154	Unbalanced Hole and Electron Diffusion in Lead Bromide Perovskites. <i>Nano Letters</i> , 2017 , 17, 1727-173	32 11.5	75
153	Thermoelectric power measurements of wide band gap semiconducting nanowires. <i>Applied Physics Letters</i> , 2009 , 94, 022106	3.4	75
152	RF performance of top-gated, zero-bandgap graphene field-effect transistors 2008,		75
151	Magnetic resonance spectroscopy of an atomically thin material using a single-spin qubit. <i>Science</i> , 2017 , 355, 503-507	33.3	74

150	Renormalization of the graphene dispersion velocity determined from scanning tunneling spectroscopy. <i>Physical Review Letters</i> , 2012 , 109, 116802	7.4	73	
149	Electric field-tunable superconductivity in alternating-twist magic-angle trilayer graphene. <i>Science</i> , 2021 , 371, 1133-1138	33.3	73	
148	Li Intercalation into Graphite: Direct Optical Imaging and Cahn-Hilliard Reaction Dynamics. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 2151-6	6.4	71	
147	Corrugation in exfoliated graphene: an electron microscopy and diffraction study. <i>ACS Nano</i> , 2010 , 4, 4879-89	16.7	70	
146	Optical phonon mixing in bilayer graphene with a broken inversion symmetry. <i>Physical Review B</i> , 2009 , 80,	3.3	70	
145	Magnetoresistance measurements of graphene at the charge neutrality point. <i>Physical Review Letters</i> , 2012 , 108, 106804	7.4	69	
144	Imaging viscous flow of the Dirac fluid in graphene. <i>Nature</i> , 2020 , 583, 537-541	50.4	69	
143	Ultra-confined mid-infrared resonant phonon polaritons in van der Waals nanostructures. <i>Science Advances</i> , 2018 , 4, eaat7189	14.3	68	
142	Phonon Speed, Not Scattering, Differentiates Thermal Transport in Lead Halide Perovskites. <i>Nano Letters</i> , 2017 , 17, 5734-5739	11.5	67	
141	Measurement of the 월1/3 fractional quantum hall energy gap in suspended graphene. <i>Physical Review Letters</i> , 2011 , 106, 046801	7.4	66	
140	Electronic Transport in Graphene Heterostructures. <i>Annual Review of Condensed Matter Physics</i> , 2011 , 2, 101-120	19.7	65	
139	Atomic lattice disorder in charge-density-wave phases of exfoliated dichalcogenides (1T-TaS2). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 11420-11424	1 ^{11.5}	62	
138	High-resolution spatial mapping of the temperature distribution of a Joule self-heated graphene nanoribbon. <i>Applied Physics Letters</i> , 2011 , 99, 183105	3.4	61	
137	Direct imaging of charged impurity density in common graphene substrates. <i>Nano Letters</i> , 2013 , 13, 357	76-189	60	
136	Graphene field-effect transistors based on boron nitride gate dielectrics 2010,		60	
135	Tuning Electrical Conductance of MoS Monolayers through Substitutional Doping. <i>Nano Letters</i> , 2020 , 20, 4095-4101	11.5	59	
134	Extracting subnanometer single shells from ultralong multiwalled carbon nanotubes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 14155-8	11.5	59	
133	Graphene nanoribbon devices at high bias. <i>Nano Convergence</i> , 2014 , 1, 1	9.2	57	

132	Organic Field Effect Transistors Based on Graphene and Hexagonal Boron Nitride Heterostructures. <i>Advanced Functional Materials</i> , 2014 , 24, 5157-5163	15.6	57
131	Imaging Cyclotron Orbits of Electrons in Graphene. <i>Nano Letters</i> , 2016 , 16, 1690-4	11.5	55
130	Polariton nanophotonics using phase-change materials. <i>Nature Communications</i> , 2019 , 10, 4487	17.4	53
129	Single-layer graphene cathodes for organic photovoltaics. <i>Applied Physics Letters</i> , 2011 , 98, 123303	3.4	53
128	Creation of Nanocrystals Through a Solid-Solid Phase Transition Induced by an STM Tip. <i>Science</i> , 1996 , 274, 757-760	33.3	53
127	Heterostructures based on inorganic and organic van der Waals systems. <i>APL Materials</i> , 2014 , 2, 09251	l 5.7	52
126	Selective excitation and imaging of ultraslow phonon polaritons in thin hexagonal boron nitride crystals. <i>Light: Science and Applications</i> , 2018 , 7, 27	16.7	51
125	Electrically integrated SU-8 clamped graphene drum resonators for strain engineering. <i>Applied Physics Letters</i> , 2013 , 102, 153101	3.4	51
124	Electrically Tunable Valley Dynamics in Twisted WSe_{2}/WSe_{2} Bilayers. <i>Physical Review Letters</i> , 2020 , 124, 217403	7.4	50
123	Diameter-dependent thermoelectric figure of merit in single-crystalline Bi nanowires. <i>Nanoscale</i> , 2015 , 7, 5053-9	7.7	50
122	Landau level spectroscopy of electron-electron interactions in graphene. <i>Physical Review Letters</i> , 2015 , 114, 126804	7.4	49
121	Multilayer graphene grown by precipitation upon cooling of nickel on diamond. <i>Carbon</i> , 2011 , 49, 1006-	101.2	48
120	van der Waals Solids from Self-Assembled Nanoscale Building Blocks. <i>Nano Letters</i> , 2016 , 16, 1445-9	11.5	47
119	Ferromagnetic ordering in superatomic solids. <i>Journal of the American Chemical Society</i> , 2014 , 136, 169.	266341	47
118	Graphene-Based Josephson-Junction Single-Photon Detector. <i>Physical Review Applied</i> , 2017 , 8,	4.3	47
117	Chemically Modulated Band Gap in Bilayer Graphene Memory Transistors with High On/Off Ratio. <i>ACS Nano</i> , 2015 , 9, 9034-42	16.7	46
116	Scanning Tunneling Microscopy and Spectroscopy Studies of Single Wall Carbon Nanotubes. Journal of Materials Research, 1998 , 13, 2380-2388	2.5	46
115	Broken mirror symmetry in excitonic response of reconstructed domains in twisted MoSe/MoSe bilayers. <i>Nature Nanotechnology</i> , 2020 , 15, 750-754	28.7	46

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114	Measurement of collective dynamical mass of Dirac fermions in graphene. <i>Nature Nanotechnology</i> , 2014 , 9, 594-9	28.7	45
113	Patterning Superatom Dopants on Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2016 , 16, 3385-9	11.5	44
112	Excitons in a reconstructed moir[potential in twisted WSe/WSe homobilayers. <i>Nature Materials</i> , 2021 , 20, 480-487	27	44
111	Making angle-resolved photoemission measurements on corrugated monolayer crystals: Suspended exfoliated single-crystal graphene. <i>Physical Review B</i> , 2011 , 84,	3.3	43
110	Collapse of Landau levels in gated graphene structures. <i>Physical Review Letters</i> , 2011 , 106, 066601	7.4	43
109	Observation of magnetophonon resonance of Dirac fermions in graphite. <i>Physical Review Letters</i> , 2010 , 105, 227401	7.4	43
108	Engineering phonon polaritons in van der Waals heterostructures to enhance in-plane optical anisotropy. <i>Science Advances</i> , 2019 , 5, eaau7171	14.3	42
107	Single Electron Transistor with Single Aromatic Ring Molecule Covalently Connected to Graphene Nanogaps. <i>Nano Letters</i> , 2017 , 17, 5335-5341	11.5	39
106	Study of Graphene-based 2D-Heterostructure Device Fabricated by All-Dry Transfer Process. <i>ACS Applied Materials & Applied & Applied Materials & Applied & A</i>	9.5	38
105	Plasmon Reflections by Topological Electronic Boundaries in Bilayer Graphene. <i>Nano Letters</i> , 2017 , 17, 7080-7085	11.5	37
104	Controlled Electrochemical Intercalation of Graphene/h-BN van der Waals Heterostructures. <i>Nano Letters</i> , 2018 , 18, 460-466	11.5	37
103	Raman scattering and tunable electronphonon coupling in single layer graphene. <i>Solid State Communications</i> , 2007 , 143, 39-43	1.6	37
102	Controlling Excitons in an Atomically Thin Membrane with a Mirror. <i>Physical Review Letters</i> , 2020 , 124, 027401	7.4	36
101	Unusual transport properties in carbon based nanoscaled materials: nanotubes and graphene. <i>Physica Status Solidi (B): Basic Research</i> , 2006 , 243, 3418-3422	1.3	36
100	Mechanical Detection and Imaging of Hyperbolic Phonon Polaritons in Hexagonal Boron Nitride. <i>ACS Nano</i> , 2017 , 11, 8741-8746	16.7	34
99	STM study of single-walled carbon nanotubes. <i>Carbon</i> , 2000 , 38, 1741-1744	10.4	34
98	Graphene-based Josephson junction microwave bolometer. <i>Nature</i> , 2020 , 586, 42-46	50.4	32
97	Multilayer graphene films grown by molecular beam deposition. <i>Solid State Communications</i> , 2010 , 150, 809-811	1.6	30

96	Electronic transport measurements in graphene nanoribbons. <i>Physica Status Solidi (B): Basic Research</i> , 2007 , 244, 4134-4137	1.3	30
95	Holography of the Dirac Fluid in Graphene with Two Currents. <i>Physical Review Letters</i> , 2017 , 118, 03660	01 _{7.4}	29
94	Electron-phonon instability in graphene revealed by global and local noise probes. <i>Science</i> , 2019 , 364, 154-157	33.3	29
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