Konstantin Novoselov

List of Publications by Year
in descending order

426 papers	288,771 citations	239 144 h-index	37 416 g-index
450 all docs	450 docs citations	450 times ranked	107576 citing authors

#	Article	IF	Citations
1	Electric Field Effect in Atomically Thin Carbon Films. Science, 2004, 306, 666-669.	6.0	56,177
2	The rise of graphene. Nature Materials, 2007, 6, 183-191.	13.3	35,008
3	The electronic properties of graphene. Reviews of Modern Physics, 2009, 81, 109-162.	16.4	20,779
4	Two-dimensional gas of massless Dirac fermions in graphene. Nature, 2005, 438, 197-200.	13.7	18,948
5	Raman Spectrum of Graphene and Graphene Layers. Physical Review Letters, 2006, 97, 187401.	2.9	12,689
6	Two-dimensional atomic crystals. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 10451-10453.	3.3	10,229
7	A roadmap for graphene. Nature, 2012, 490, 192-200.	13.7	8,011
8	Fine Structure Constant Defines Visual Transparency of Graphene. Science, 2008, 320, 1308-1308.	6.0	7,667
9	Detection of individual gas molecules adsorbed on graphene. Nature Materials, 2007, 6, 652-655.	13.3	7,114
10	2D materials and van der Waals heterostructures. Science, 2016, 353, aac9439.	6.0	4,958
11	The structure of suspended graphene sheets. Nature, 2007, 446, 60-63.	13.7	4,511
12	Control of Graphene's Properties by Reversible Hydrogenation: Evidence for Graphane. Science, 2009, 323, 610-613.	6.0	3,748
13	Chiral tunnelling and the Klein paradox inÂgraphene. Nature Physics, 2006, 2, 620-625.	6.5	3,383
14	Monitoring dopants by Raman scattering in an electrochemically top-gated graphene transistor. Nature Nanotechnology, 2008, 3, 210-215.	15.6	3,125
15	Giant Intrinsic Carrier Mobilities in Graphene and Its Bilayer. Physical Review Letters, 2008, 100, 016602.	2.9	2,919
16	Graphene plasmonics. Nature Photonics, 2012, 6, 749-758.	15.6	2,682
17	Room-Temperature Quantum Hall Effect in Graphene. Science, 2007, 315, 1379-1379.	6.0	2,662
18	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. Nanoscale, 2015, 7, 4598-4810.	2.8	2,452

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19	Field-Effect Tunneling Transistor Based on Vertical Graphene Heterostructures. Science, 2012, 335, 947-950.	6.0	2,268
20	Strong Light-Matter Interactions in Heterostructures of Atomically Thin Films. Science, 2013, 340, 1311-1314.	6.0	2,179
21	Chaotic Dirac Billiard in Graphene Quantum Dots. Science, 2008, 320, 356-358.	6.0	2,098
22	Catalysis with two-dimensional materials and their heterostructures. Nature Nanotechnology, 2016, 11, 218-230.	15.6	1,833
23	Unconventional quantum Hall effect and Berryâ€™s phase of 2Ï€ in bilayer graphene. Nature Physics, 2006, 2, 177-180.	6.5	1,785
24	Biased Bilayer Graphene: Semiconductor with a Gap Tunable by the Electric Field Effect. Physical Review Letters, 2007, 99, 216802.	2.9	1,728
25	Probing the Nature of Defects in Graphene by Raman Spectroscopy. Nano Letters, 2012, 12, 3925-3930.	4.5	1,696
26	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, .	1.1	1,662
27	Making graphene visible. Applied Physics Letters, 2007, 91, .	1.5	1,653
28	Vertical field-effect transistor based on grapheneâ€“WS2 heterostructures for flexible and transparent electronics. Nature Nanotechnology, 2013, 8, 100-103.	15.6	1,543
29	Graphene-Based Liquid Crystal Device. Nano Letters, 2008, 8, 1704-1708.	4.5	1,441
30	Micrometer-Scale Ballistic Transport in Encapsulated Graphene at Room Temperature. Nano Letters, 2011, 11, 2396-2399.	4.5	1,440
31	Light-emitting diodes by band-structure engineering in van der Waals heterostructures. Nature Materials, 2015, 14, 301-306.	13.3	1,397
32	Breakdown of the adiabatic Bornâ€“Oppenheimer approximation in graphene. Nature Materials, 2007, 6, 198-201.	13.3	1,229
33	Microfabricated adhesive mimicking gecko foot-hair. Nature Materials, 2003, 2, 461-463.	13.3	1,189
34	Fluorographene: A Twoâ€Đimensional Counterpart of Teflon. Small, 2010, 6, 2877-2884.	5.2	1,146
35	Magnetic 2D materials and heterostructures. Nature Nanotechnology, 2019, 14, 408-419.	15.6	1,109
36	Cloning of Dirac fermions in graphene superlattices. Nature, 2013, 497, 594-597.	13.7	1,107

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37	The mechanics of graphene nanocomposites: A review. Composites Science and Technology, 2012, 72, 1459-1476.	3.8	1,076
38	Molecular Doping of Graphene. Nano Letters, 2008, 8, 173-177.	4.5	1,025
39	High electron mobility, quantum Hall effect and anomalous optical response in atomically thin InSe. Nature Nanotechnology, 2017, 12, 223-227.	15.6	996
40	Hunting for Monolayer Boron Nitride: Optical and Raman Signatures. Small, 2011, 7, 465-468.	5.2	950
41	Raman Spectroscopy of Graphene Edges. Nano Letters, 2009, 9, 1433-1441.	4.5	933
42	Strong Suppression of Weak Localization in Graphene. Physical Review Letters, 2006, 97, 016801.	2.9	809
43	Raman fingerprint of charged impurities in graphene. Applied Physics Letters, 2007, 91, .	1.5	802
44	Cross-sectional imaging of individual layers and buried interfaces of graphene-based heterostructures and superlattices. Nature Materials, 2012, 11, 764-767.	13.3	796
45	Strong plasmonic enhancement of photovoltage in graphene. Nature Communications, 2011, 2, 458.	5.8	775
46	Commensurateâ€“incommensurate transition in graphene on hexagonal boron nitride. Nature Physics, 2014, 10, 451-456.	6.5	737
47	Electron Tunneling through Ultrathin Boron Nitride Crystalline Barriers. Nano Letters, 2012, 12, 1707-1710.	4.5	724
48	Nobel Lecture: Graphene: Materials in the Flatland. Reviews of Modern Physics, 2011, 83, 837-849.	16.4	708
49	Dirac cones reshaped by interaction effects in suspended graphene. Nature Physics, 2011, 7, 701-704.	6.5	703
50	Sub-diffractional volume-confined polaritons in the natural hyperbolic material hexagonal boron nitride. Nature Communications, 2014, 5, 5221.	5.8	686
51	Anomalously low dielectric constant of confined water. Science, 2018, 360, 1339-1342.	6.0	627
52	Resonantly hybridized excitons in moirÃ© superlattices in van der Waals heterostructures. Nature, 2019, 567, 81-86.	13.7	621
53	Detecting topological currents in graphene superlattices. Science, 2014, 346, 448-451.	6.0	619
54	Macroscopic Graphene Membranes and Their Extraordinary Stiffness. Nano Letters, 2008, 8, 2442-2446.	4.5	607

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55	Rayleigh Imaging of Graphene and Graphene Layers. Nano Letters, 2007, 7, 2711-2717.	4.5	590
56	Making Graphene Luminescent by Oxygen Plasma Treatment. ACS Nano, 2009, 3, 3963-3968.	7.3	587
57	Interfacial Stress Transfer in a Graphene Monolayer Nanocomposite. Advanced Materials, 2010, 22, 2694-2697.	11.1	551
58	Single-Layer Behavior and Its Breakdown in Twisted Graphene Layers. Physical Review Letters, 2011, 106, 126802.	2.9	547
59	Graphene: New bridge between condensed matter physics and quantum electrodynamics. Solid State Communications, 2007, 143, 3-13.	0.9	544
60	Resonant tunnelling and negative differential conductance in graphene transistors. Nature Communications, 2013, 4, 1794.	5.8	542
61	On the roughness of single- and bi-layer graphene membranes. Solid State Communications, 2007, 143, 101-109.	0.9	530
62	The rise of graphene. , 2009, , 11-19.		530
63	Negative local resistance caused by viscous electron backflow in graphene. Science, 2016, 351, 1055-1058.	6.0	516
64	Raman-scattering measurements and first-principles calculations of strain-induced phonon shifts in monolayer MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 87, .	1.1	495
65	Multiscale structural and electronic control of molybdenum disulfide foam for highly efficient hydrogen production. Nature Communications, 2017, 8, 14430.	5.8	488
66	Tunable metalâ€“insulator transition in double-layer graphene heterostructures. Nature Physics, 2011, 7, 958-961.	6.5	486
67	Spectroscopic ellipsometry of graphene and an exciton-shifted van Hove peak in absorption. Physical Review B, 2010, 81, .	1.1	477
68	Plasmon spectroscopy of free-standing graphene films. Physical Review B, 2008, 77, .	1.1	449
69	Ultrafast collinear scattering and carrier multiplication in graphene. Nature Communications, 2013, 4, 1987.	5.8	446
70	Twist-controlled resonant tunnelling in graphene/boron nitride/graphene heterostructures. Nature Nanotechnology, 2014, 9, 808-813.	15.6	435
71	Surface-Enhanced Raman Spectroscopy of Graphene. ACS Nano, 2010, 4, 5617-5626.	7.3	433
72	Electronic Properties of Graphene Encapsulated with Different Two-Dimensional Atomic Crystals. Nano Letters, 2014, 14, 3270-3276.	4.5	433

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73	Raman Spectroscopy of Graphene and Bilayer under Biaxial Strain: Bubbles and Balloons. Nano Letters, 2012, 12, 617-621.	4.5	431
74	High-temperature superfluidity with indirect excitons in van der Waals heterostructures. Nature Communications, 2014, 5, 4555.	5.8	413
75	Subjecting a Graphene Monolayer to Tension and Compression. Small, 2009, 5, 2397-2402.	5.2	400
76	Hyperbolic phonon-polaritons in boron nitride for near-field optical imaging and focusing. Nature Communications, 2015, 6, 7507.	5.8	399
77	Singular phase nano-optics in plasmonic metamaterials for label-free single-molecule detection. Nature Materials, 2013, 12, 304-309.	13.3	382
78	Excitonâ€“polaritons in van der Waals heterostructures embedded in tunable microcavities. Nature Communications, 2015, 6, 8579.	5.8	377
79	Graphene Spin Valve Devices. IEEE Transactions on Magnetics, 2006, 42, 2694-2696.	1.2	367
80	Strong Coulomb drag and broken symmetry in double-layer graphene. Nature Physics, 2012, 8, 896-901.	6.5	365
81	Graphene Sensors. IEEE Sensors Journal, 2011, 11, 3161-3170.	2.4	364
82	Quality Heterostructures from Two-Dimensional Crystals Unstable in Air by Their Assembly in Inert Atmosphere. Nano Letters, 2015, 15, 4914-4921.	4.5	358
83	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.	2.9	347
84	Limits on Charge Carrier Mobility in Suspended Graphene due to Flexural Phonons. Physical Review Letters, 2010, 105, 266601.	2.9	347
85	Interaction between Metal and Graphene: Dependence on the Layer Number of Graphene. ACS Nano, 2011, 5, 608-612.	7.3	324
86	High Broadâ€Band Photoresponsivity of Mechanically Formed InSeâ€“Graphene van der Waals Heterostructures. Advanced Materials, 2015, 27, 3760-3766.	11.1	320
87	Electronic properties of graphene. Physica Status Solidi (B): Basic Research, 2007, 244, 4106-4111.	0.7	291
88	Exploring the Interface of Graphene and Biology. Science, 2014, 344, 261-263.	6.0	285
89	Compression Behavior of Single-Layer Graphenes. ACS Nano, 2010, 4, 3131-3138.	7.3	282
90	Scalable Production of Graphene-Based Wearable E-Textiles. ACS Nano, 2017, 11, 12266-12275.	7.3	274

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91	Raman 2D-Band Splitting in Graphene: Theory and Experiment. ACS Nano, 2011, 5, 2231-2239.	7.3	271
92	Generating quantizing pseudomagnetic fields by bending graphene ribbons. Physical Review B, 2010, 81, .	1.1	270
93	Cyclotron resonance study of the electron and hole velocity in graphene monolayers. Physical Review B, 2007, 76, .	1.1	269
94	Thermal Conductivity of Graphene Laminate. Nano Letters, 2014, 14, 5155-5161.	4.5	268
95	Determination of the gate-tunable band gap and tight-binding parameters in bilayer graphene using infrared spectroscopy. Physical Review B, 2009, 80, .	1.1	266
96	Electrically controlled water permeation through graphene oxide membranes. Nature, 2018, 559, 236-240.	13.7	263
97	Interaction-Driven Spectrum Reconstruction in Bilayer Graphene. Science, 2011, 333, 860-863.	6.0	262
98	Thermal Properties of Grapheneâ€“Copperâ€“Graphene Heterogeneous Films. Nano Letters, 2014, 14, 1497-1503.	4.5	260
99	The Worldwide Graphene Flake Production. Advanced Materials, 2018, 30, e1803784.	11.1	260
100	Two-dimensional crystals-based heterostructures: materials with tailored properties. Physica Scripta, 2012, T146, 014006.	1.2	258
101	On Resonant Scatterers As a Factor Limiting Carrier Mobility in Graphene. Nano Letters, 2010, 10, 3868-3872.	4.5	256
102	Dissipative Quantum Hall Effect in Graphene near the Dirac Point. Physical Review Letters, 2007, 98, 196806.	2.9	255
103	Giant Nonlocality Near the Dirac Point in Graphene. Science, 2011, 332, 328-330.	6.0	255
104	Optimizing the Reinforcement of Polymer-Based Nanocomposites by Graphene. ACS Nano, 2012, 6, 2086-2095.	7.3	255
105	Sustainable Personal Protective Clothing for Healthcare Applications: A Review. ACS Nano, 2020, 14, 12313-12340.	7.3	252
106	Raman Spectroscopy of Boron-Doped Single-Layer Graphene. ACS Nano, 2012, 6, 6293-6300.	7.3	245
107	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.	3.3	239
108	Magnon-assisted tunnelling in van der Waals heterostructures based on CrBr3. Nature Electronics, 2018, 1, 344-349.	13.1	239

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109	Control of Radiation Damage in MoS₂ by Graphene Encapsulation. ACS Nano, 2013, 7, 10167-10174.	7.3	237
110	WSe₂ Light-Emitting Tunneling Transistors with Enhanced Brightness at Room Temperature. Nano Letters, 2015, 15, 8223-8228.	4.5	231
111	Graphene Reknits Its Holes. Nano Letters, 2012, 12, 3936-3940.	4.5	227
112	Graphene-protected copper and silver plasmonics. Scientific Reports, 2014, 4, 5517.	1.6	217
113	All inkjet-printed graphene-based conductive patterns for wearable e-textile applications. Journal of Materials Chemistry C, 2017, 5, 11640-11648.	2.7	217
114	Electronic properties of a biased graphene bilayer. Journal of Physics Condensed Matter, 2010, 22, 175503.	0.7	209
115	New directions in science and technology: two-dimensional crystals. Reports on Progress in Physics, 2011, 74, 082501.	8.1	206
116	Sustainable production of highly conductive multilayer graphene ink for wireless connectivity and IoT applications. Nature Communications, 2018, 9, 5197.	5.8	206
117	Highly Conductive, Scalable, and Machine Washable Grapheneâ€Based Eâ€Textiles for Multifunctional Wearable Electronic Applications. Advanced Functional Materials, 2020, 30, 2000293.	7.8	204
118	Mechanism of Gold-Assisted Exfoliation of Centimeter-Sized Transition-Metal Dichalcogenide Monolayers. ACS Nano, 2018, 12, 10463-10472.	7.3	203
119	Density of States and Zero Landau Level Probed through Capacitance of Graphene. Physical Review Letters, 2010, 105, 136801.	2.9	202
120	High-pressure Raman spectroscopy of graphene. Physical Review B, 2009, 80, .	1.1	188
121	Quantum oscillations of the critical current and high-field superconducting proximity in ballisticÂgraphene. Nature Physics, 2016, 12, 318-322.	6.5	179
122	Engineering Graphene Flakes for Wearable Textile Sensors <i>via</i> Highly Scalable and Ultrafast Yarn Dyeing Technique. ACS Nano, 2019, 13, 3847-3857.	7.3	179
123	Ultrasensitive gas detection of large-area boron-doped graphene. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14527-14532.	3.3	177
124	Graphene bubbles with controllable curvature. Applied Physics Letters, 2011, 99, .	1.5	176
125	Development of a universal stress sensor for graphene and carbon fibres. Nature Communications, 2011, 2, .	5.8	172
126	Metalâˆ’Graphene Interaction Studied via Atomic Resolution Scanning Transmission Electron Microscopy. Nano Letters, 2011, 11, 1087-1092.	4.5	172

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127	Graphene: Materials in the Flatland (Nobel Lecture). Angewandte Chemie - International Edition, 2011, 50, 6986-7002.	7.2	172
128	Infrared spectroscopy of electronic bands in bilayer graphene. Physical Review B, 2009, 79, .	1.1	170
129	Binder-free highly conductive graphene laminate for low cost printed radio frequency applications. Applied Physics Letters, 2015, 106, .	1.5	170
130	Valley-addressable polaritons in atomically thin semiconductors. Nature Photonics, 2017, 11, 497-501.	15.6	169
131	Influence of metal contacts and charge inhomogeneity on transport properties of graphene near the neutrality point. Solid State Communications, 2009, 149, 1068-1071.	0.9	168
132	Wafer-Scale and Wrinkle-Free Epitaxial Growth of Single-Orientated Multilayer Hexagonal Boron Nitride on Sapphire. Nano Letters, 2016, 16, 3360-3366.	4.5	167
133	Heterostructures Produced from Nanosheet-Based Inks. Nano Letters, 2014, 14, 3987-3992.	4.5	165
134	Non-quantized penetration of magnetic field in the vortex state of superconductors. Nature, 2000, 407, 55-57.	13.7	163
135	Tearing Graphene Sheets From Adhesive Substrates Produces Tapered Nanoribbons. Small, 2010, 6, 1108-1116.	5.2	163
136	Graphene devices for life. Nature Nanotechnology, 2014, 9, 744-745.	15.6	162
137	Hierarchy of Hofstadter states and replica quantum Hall ferromagnetism in graphene superlattices. Nature Physics, 2014, 10, 525-529.	6.5	161
138	Electron Transfer Kinetics on Mono- and Multilayer Graphene. ACS Nano, 2014, 8, 10089-10100.	7.3	160
139	How Close Can One Approach the Dirac Point in Graphene Experimentally?. Nano Letters, 2012, 12, 4629-4634.	4.5	159
140	Highly Flexible and Conductive Printed Graphene for Wireless Wearable Communications Applications. Scientific Reports, 2016, 5, 18298.	1.6	158
141	Mechanisms of Liquid-Phase Exfoliation for the Production of Graphene. ACS Nano, 2020, 14, 10976-10985.	7.3	157
142	Giant optical anisotropy in transition metal dichalcogenides for next-generation photonics. Nature Communications, 2021, 12, 854.	5.8	154
143	Photothermoelectric and Photoelectric Contributions to Light Detection in Metalâ€“Grapheneâ€“Metal Photodetectors. Nano Letters, 2014, 14, 3733-3742.	4.5	153
144	Purity of graphene oxide determines its antibacterial activity. 2D Materials, 2016, 3, 025025.	2.0	150

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145	The Magnetic Genome of Two-Dimensional van der Waals Materials. ACS Nano, 2022, 16, 6960-7079.	7.3	149
146	Two-dimensional electron and hole gases at the surface of graphite. Physical Review B, 2005, 72, .	1.1	148
147	Electrochemical Behavior of Monolayer and Bilayer Graphene. ACS Nano, 2011, 5, 8809-8815.	7.3	148
148	Gap opening in the zeroth Landau level of graphene. Physical Review B, 2009, 80, .	1.1	146
149	Ultraflexible and robust graphene supercapacitors printed on textiles for wearable electronics applications. 2D Materials, 2017, 4, 035016.	2.0	146
150	Deformation of Wrinkled Graphene. ACS Nano, 2015, 9, 3917-3925.	7.3	143
151	Strain Mapping in a Graphene Monolayer Nanocomposite. ACS Nano, 2011, 5, 3079-3084.	7.3	142
152	Direct Experimental Evidence of Metal-Mediated Etching of Suspended Graphene. ACS Nano, 2012, 6, 4063-4071.	7.3	141
153	All Inkjet-Printed Graphene-Silver Composite Ink on Textiles for Highly Conductive Wearable Electronics Applications. Scientific Reports, 2019, 9, 8035.	1.6	141
154	Nanolithography and manipulation of graphene using an atomic force microscope. Solid State Communications, 2008, 147, 366-369.	0.9	138
155	Graphene as a transparent conductive support for studying biological molecules by transmission electron microscopy. Applied Physics Letters, 2010, 97, .	1.5	138
156	Growth dynamics and gas transport mechanism of nanobubbles in graphene liquid cells. Nature Communications, 2015, 6, 6068.	5.8	136
157	Two-Dimensional Crystals: Beyond Graphene. Materials Express, 2011, 1, 10-17.	0.2	135
158	Towards super-clean graphene. Nature Communications, 2019, 10, 1912.	5.8	133
159	Charge-polarized interfacial superlattices in marginally twisted hexagonal boron nitride. Nature Communications, 2021, 12, 347.	5.8	132
160	Two-Dimensional Metalâ€“Chalcogenide Films in Tunable Optical Microcavities. Nano Letters, 2014, 14, 7003-7008.	4.5	129
161	Gate Tunable Infrared Phonon Anomalies in Bilayer Graphene. Physical Review Letters, 2009, 103, 116804.	2.9	127
162	Wideâ€Area Strain Sensors based upon Grapheneâ€Polymer Composite Coatings Probed by Raman Spectroscopy. Advanced Functional Materials, 2014, 24, 2865-2874.	7.8	122

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163	Exciton and trion dynamics in atomically thin<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoSe</mml:mi><mml:mn>2</mml:mn></mml:msub></m xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>WSe</mml:mi><mml:mn>2</mml:mn></mml:msub></m Effect of localization. Physical Review B, 2016, 94, .	1.1	121
164	High-temperature quantum oscillations caused by recurring Bloch states in graphene superlattices. Science, 2017, 357, 181-184.	6.0	117
165	High-Performance Graphene-Based Natural Fiber Composites. ACS Applied Materials & Interfaces, 2018, 10, 34502-34512.	4.0	116
166	Tuning the Pseudospin Polarization of Graphene by a Pseudomagnetic Field. Nano Letters, 2017, 17, 2240-2245.	4.5	113
167	Graphene-based surface heater for de-icing applications. RSC Advances, 2018, 8, 16815-16823.	1.7	112
168	Macroscopic self-reorientation of interacting two-dimensional crystals. Nature Communications, 2016, 7, 10800.	5.8	108
169	Doping mechanisms in graphene-MoS2 hybrids. Applied Physics Letters, 2013, 103, .	1.5	107
170	Photoelectrochemistry of Pristine Mono- and Few-Layer MoS₂. Nano Letters, 2016, 16, 2023-2032.	4.5	107
171	Imaging of Anomalous Internal Reflections of Hyperbolic Phonon-Polaritons in Hexagonal Boron Nitride. Nano Letters, 2016, 16, 3858-3865.	4.5	106
172	Ultrahigh Performance of Nanoengineered Graphene-Based Natural Jute Fiber Composites. ACS Applied Materials & Interfaces, 2019, 11, 21166-21176.	4.0	106
173	Tunable van Hove singularities and correlated states in twisted monolayerâ€“bilayer graphene. Nature Physics, 2021, 17, 619-626.	6.5	103
174	Raman Fingerprint of Aligned Graphene/h-BN Superlattices. Nano Letters, 2013, 13, 5242-5246.	4.5	102
175	Printable two-dimensional superconducting monolayers. Nature Materials, 2021, 20, 181-187.	13.3	102
176	From One Electron to One Hole: Quasiparticle Counting in Graphene Quantum Dots Determined by Electrochemical and Plasma Etching. Small, 2010, 6, 1469-1473.	5.2	98
177	Graphene-Enabled Adaptive Infrared Textiles. Nano Letters, 2020, 20, 5346-5352.	4.5	98
178	Multispectral graphene-based electro-optical surfaces with reversible tunability from visible to microwave wavelengths. Nature Photonics, 2021, 15, 493-498.	15.6	97
179	Recent advances in graphene and other 2D materials. Nano Materials Science, 2022, 4, 3-9.	3.9	97
180	Gain modulation by graphene plasmons in aperiodic lattice lasers. Science, 2016, 351, 246-248.	6.0	95

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181	All-2D Material Inkjet-Printed Capacitors: Toward Fully Printed Integrated Circuits. ACS Nano, 2019, 13, 54-60.	7.3	95
182	Electrostatically Confined Monolayer Graphene Quantum Dots with Orbital and Valley Splittings. Nano Letters, 2016, 16, 5798-5805.	4.5	93
183	Exfoliation of natural van der Waals heterostructures to a single unit cell thickness. Nature Communications, 2017, 8, 14410.	5.8	93
184	Micromagnetometry of two-dimensional ferromagnets. Nature Electronics, 2019, 2, 457-463.	13.1	93
185	Hetero-site nucleation for growing twisted bilayer graphene with a wide range of twist angles. Nature Communications, 2021, 12, 2391.	5.8	92
186	Subatomic movements of a domain wall in the Peierls potential. Nature, 2003, 426, 812-816.	13.7	91
187	Quantum capacitance measurements of electron-hole asymmetry and next-nearest-neighbor hopping in graphene. Physical Review B, 2013, 88, .	1.1	88
188	Tuning the valley and chiral quantum state of Dirac electrons in van der Waals heterostructures. Science, 2016, 353, 575-579.	6.0	88
189	Piezoelectricity in Monolayer Hexagonal Boron Nitride. Advanced Materials, 2020, 32, e1905504.	11.1	87
190	Two-dimensional adaptive membranes with programmable water and ionic channels. Nature Nanotechnology, 2021, 16, 174-180.	15.6	86
191	Interaction of Metals with Suspended Graphene Observed by Transmission Electron Microscopy. Journal of Physical Chemistry Letters, 2012, 3, 953-958.	2.1	85
192	Ferromagnetic two-dimensional crystals: Single layers of K<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>CuF<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>. Physical Review B, 2013, 88, .	1.1	85
193	Mobile metal adatoms on single layer, bilayer, and trilayer graphene: An<i>ab initio</i>DFT study with van der Waals corrections correlated with electron microscopy data. Physical Review B, 2013, 87, .	1.1	84
194	Electron transport in graphene. Physics-Uspekhi, 2008, 51, 744-748.	0.8	83
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