Hai-Lin Peng

List of Publications by Year
in descending order

239 papers	28,893 citations	6613 79 h-index	5120 166 g-index
247 all docs	247 docs citations	247 times ranked	31170 citing authors

#	Article	IF	Citations
1	Transferâ€Enabled Fabrication of Graphene Wrinkle Arrays for Epitaxial Growth of AlN Films. Advanced Materials, 2022, 34, e2105851.	21.0	15
2	The role of Cu crystallographic orientations towards growing superclean graphene on meter-sized scale. Nano Research, 2022, 15, 3775-3780.	10.4	3
3	Intrinsic Wettability in Pristine Graphene. Advanced Materials, 2022, 34, e2103620.	21.0	28
4	High-Performance 3D Vertically Oriented Graphene Photodetector Using a Floating Indium Tin Oxide Channel. Sensors, 2022, 22, 959.	3.8	3
5	Surface-bulk coupling in a Bi2Te3 nanoplate grown by van der Waals epitaxy. Nanoscale, 2022, , .	5.6	0
6	Verticalâ€Grapheneâ€Reinforced Titanium Alloy Bipolar Plates in Fuel Cells. Advanced Materials, 2022, 34, e2110565.	21.0	31
7	Toward Epitaxial Growth of Misorientation-Free Graphene on Cu(111) Foils. ACS Nano, 2022, 16, 285-294.	14.6	40
8	Strain-Free Layered Semiconductors for 2D Transistors with On-State Current Density Exceeding 1.3 mA Î¼m^{â€“1}. Nano Letters, 2022, 22, 3770-3776.	9.1	17
9	Slipâ€Lineâ€Guided Growth of Graphene. Advanced Materials, 2022, 34, e2201188.	21.0	7
10	Toward batch synthesis of high-quality graphene by cold-wall chemical vapor deposition approach. Nano Research, 2022, 15, 9683-9688.	10.4	6
11	Graphene Membranes for Multiâ€Dimensional Electron Microscopy Imaging: Preparation, Application, and Prospect. Advanced Functional Materials, 2022, 32, .	14.9	4
12	Quasi-one-dimensional TaSe3: A New Topological Superconductor Candidate. Matter, 2021, 4, 19-21.	10.0	7
13	Unravelling a Zigzag Pathway for Hot Carrier Collection with Graphene Electrode. Journal of Physical Chemistry Letters, 2021, 12, 2886-2891.	4.6	2
14	Hetero-site nucleation for growing twisted bilayer graphene with a wide range of twist angles. Nature Communications, 2021, 12, 2391.	12.8	92
15	Tunable Pore Size from Sub-Nanometer to a Few Nanometers in Large-Area Graphene Nanoporous Atomically Thin Membranes. ACS Applied Materials & Interfaces, 2021, 13, 29926-29935.	8.0	23
16	Preparation of two-dimensional [Bi2O2]-based layered materials: Progress and prospects. APL Materials, 2021, 9, .	5.1	16
17	Hot-Carrier Cooling in High-Quality Graphene Is Intrinsically Limited by Optical Phonons. ACS Nano, 2021, 15, 11285-11295.	14.6	43
18	Coplanar High Mobility and Interplanar Van Der Waals Heterojunction in Layered Two-Dimensional Biâ„Oâ„Se Nanosheets. IEEE Electron Device Letters, 2021, 42, 871-874.	3.9	2

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19	2D Bi₂O₂Se: An Emerging Material Platform for the Next-Generation Electronic Industry. Accounts of Materials Research, 2021, 2, 842-853.	11.7	39
20	Atomically Thin Bilayer Janus Membranes for Cryo-electron Microscopy. ACS Nano, 2021, 15, 16562-16571.	14.6	5
21	Broadband Bi₂O₂Se Photodetectors from Infrared to Terahertz. Advanced Functional Materials, 2021, 31, 2009554.	14.9	65
22	Recent Progress on Two-Dimensional Materials. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2021, .	4.9	269
23	Special topic on 2D materials chemistry. APL Materials, 2021, 9, 100401.	5.1	0
24	Temperature dependence of quantum oscillations from non-parabolic dispersions. Nature Communications, 2021, 12, 6213.	12.8	14
25	Electrostatic interaction determines thermal conductivity anisotropy of Bi2O2Se. Cell Reports Physical Science, 2021, 2, 100624.	5.6	8
26	Hydrophilic, Clean Graphene for Cell Culture and Cryo-EM Imaging. Nano Letters, 2021, 21, 9587-9593.	9.1	7
27	Charge Transfer Properties of Heterostructures Formed by Bi 2 O 2 Se and Transition Metal Dichalcogenide Monolayers. Small, 2021, , 2106078.	10.0	8
28	Controlled Growth of Singleâ€Crystal Graphene Films. Advanced Materials, 2020, 32, e1903266.	21.0	95
29	Understanding Interlayer Contact Conductance in Twisted Bilayer Graphene. Small, 2020, 16, e1902844.	10.0	27
30	Optical Properties and Photocarrier Dynamics of Bi₂O₂Se Monolayer and Nanoplates. Advanced Optical Materials, 2020, 8, 1901567.	7.3	24
31	Graphene Acoustic Phononâ€Mediated Pseudoâ€Landau Levels Tailoring Probed by Scanning Tunneling Spectroscopy. Small, 2020, 16, 1905202.	10.0	2
32	Exploiting Twoâ€Dimensional Bi₂O₂Se for Trace Oxygen Detection. Angewandte Chemie, 2020, 132, 18094-18099.	2.0	7
33	Growth of Ultraflat Graphene with Greatly Enhanced Mechanical Properties. Nano Letters, 2020, 20, 6798-6806.	9.1	19
34	Determination of interatomic coupling between two-dimensional crystals using angle-resolved photoemission spectroscopy. Nature Communications, 2020, 11, 3582.	12.8	10
35	A native oxide high-Î² gate dielectric for two-dimensional electronics. Nature Electronics, 2020, 3, 473-478.	26.0	141
36	Uniform High-k Amorphous Native Oxide Synthesized by Oxygen Plasma for Top-Gated Transistors. Nano Letters, 2020, 20, 7469-7475.	9.1	37

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37	New Growth Frontier: Superclean Graphene. ACS Nano, 2020, 14, 10796-10803.	14.6	41
38	Superclean Growth of Graphene Using a Coldâ€Wall Chemical Vapor Deposition Approach. Angewandte Chemie - International Edition, 2020, 59, 17214-17218.	13.8	28
39	Controllable inversion symmetry breaking in single layer graphene induced by sub-lattice contrasted charge polarization. Carbon, 2020, 163, 63-69.	10.3	2
40	Superclean Growth of Graphene Using a Coldâ€Wall Chemical Vapor Deposition Approach. Angewandte Chemie, 2020, 132, 17367-17371.	2.0	4
41	nâ€Type Diracâ€Source Fieldâ€Effect Transistors Based on a Graphene/Carbon Nanotube Heterojunction. Advanced Electronic Materials, 2020, 6, 2000258.	5.1	16
42	Large Singleâ€Crystal Cu Foils with Highâ€Index Facets by Strainâ€Engineered Anomalous Grain Growth. Advanced Materials, 2020, 32, e2002034.	21.0	45
43	Realization and transport investigation of a single layer-twisted bilayer graphene junction. Carbon, 2020, 163, 105-112.	10.3	4
44	Superconductivity in an Al-twisted bilayer graphene-Al junction device. Japanese Journal of Applied Physics, 2020, 59, SGGI07.	1.5	2
45	Exploiting Twoâ€Dimensional Bi₂O₂Se for Trace Oxygen Detection. Angewandte Chemie - International Edition, 2020, 59, 17938-17943.	13.8	31
46	Unveiling the Fine Structural Distortion of Atomically Thin Bi₂O₂Se by Thirdâ€Harmonic Generation. Advanced Materials, 2020, 32, e2002831.	21.0	13
47	Quantitative Analyses of the Interfacial Properties of Current Collectors at the Mesoscopic Level in Lithium Ion Batteries by Using Hierarchical Graphene. Nano Letters, 2020, 20, 2175-2182.	9.1	18
48	Utilization of Synergistic Effect of Dimensionâ€Differentiated Hierarchical Nanomaterials for Transparent and Flexible Wireless Communicational Elements. Advanced Materials Technologies, 2020, 5, 1901057.	5.8	4
49	Interlayer Decoupling in 30Â° Twisted Bilayer Graphene Quasicrystal. ACS Nano, 2020, 14, 1656-1664.	14.6	64
50	High-Mobility Flexible Oxyselenide Thin-Film Transistors Prepared by a Solution-Assisted Method. Journal of the American Chemical Society, 2020, 142, 2726-2731.	13.7	47
51	Robust ultraclean atomically thin membranes for atomic-resolution electron microscopy. Nature Communications, 2020, 11, 541.	12.8	37
52	Transport signatures of relativistic quantum scars in a graphene cavity. Physical Review B, 2020, 101, .	3.2	3
53	Catalystâ€Free Synthesis of Fewâ€Layer Graphdiyne Using a Microwaveâ€Induced Temperature Gradient at a Solid/Liquid Interface. Advanced Functional Materials, 2020, 30, 2001396.	14.9	54
54	Vertical graphene nanosheetsmodified Al current collectors for high-performance sodium-ion batteries. Nano Research, 2020, 13, 1948-1954.	10.4	26

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55	Sub-10mK-Resolution Thermal-Bolometric Integrated FET-Type Sensors Based on Layered Bi2O2Se Semiconductor Nanosheets. , 2020, , .		2
56	Vapor-Liquid-Solid Growth of Bi₂O₂Se Nanoribbons for High-Performance Transistors. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2020, 36, 1908038-0.	4.9	10
57	Surface photovoltaic effect and electronic structure of Î² -InSe. Physical Review Materials, 2020, 4, .	2.4	3
58	Heterogeneous nucleation and growth of electrodeposited lithium metal on the basal plane of single-layer graphene. Energy Storage Materials, 2019, 16, 419-425.	18.0	77
59	Molecular Beam Epitaxy and Electronic Structure of Atomically Thin Oxyselenide Films. Advanced Materials, 2019, 31, e1901964.	21.0	59
60	Exploitation of Bi₂O₂Se/graphene van der Waals heterojunction for creating efficient photodetectors and shortâ€channel fieldâ€effect transistors. InformaÄ•nÃ-MateriÃ¡ly, 2019, 1, 390-395.	17.3	36
61	Nitrogen cluster doping for high-mobility/conductivity graphene films with millimeter-sized domains. Science Advances, 2019, 5, eaaw8337.	10.3	77
62	Macroscale single crystal graphene templated directional alignment of liquid-crystal microlens array for light field imaging. Applied Physics Letters, 2019, 115, .	3.3	6
63	Largeâ€Area Synthesis of Superclean Graphene via Selective Etching of Amorphous Carbon with Carbon Dioxide. Angewandte Chemie - International Edition, 2019, 58, 14446-14451.	13.8	64
64	Largeâ€Area Synthesis of Superclean Graphene via Selective Etching of Amorphous Carbon with Carbon Dioxide. Angewandte Chemie, 2019, 131, 14588-14593.	2.0	5
65	Early Lithium Plating Behavior in Confined Nanospace of 3D Lithiophilic Carbon Matrix for Stable Solidâ€State Lithium Metal Batteries. Small, 2019, 15, e1904216.	10.0	61
66	Bolometric Effect in Bi₂O₂Se Photodetectors. Small, 2019, 15, e1904482.	10.0	68
67	Frontispiece: Largeâ€Area Synthesis of Superclean Graphene via Selective Etching of Amorphous Carbon with Carbon Dioxide. Angewandte Chemie - International Edition, 2019, 58, .	13.8	2
68	A Forceâ€Engineered Lint Roller for Superclean Graphene. Advanced Materials, 2019, 31, e1902978.	21.0	40
69	A Singleâ€Electron Transistor Made of a 3D Topological Insulator Nanoplate. Advanced Materials, 2019, 31, e1903686.	21.0	10
70	High-performance sub-10 nm monolayer Bi₂O₂Se transistors. Nanoscale, 2019, 11, 532-540.	5.6	196
71	Asymmetry allows photocurrent in intrinsic graphene. Nature Nanotechnology, 2019, 14, 105-106.	31.5	11
72	Growth of 12-inch uniform monolayer graphene film on molten glass and its application in PbI2-based photodetector. Nano Research, 2019, 12, 1888-1893.	10.4	16

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73	Dirac-cone induced gating enhancement in single-molecule field-effect transistors. Nanoscale, 2019, 11, 13117-13125.	5.6	11
74	Single particle cryo-EM reconstruction of 52â€‰kDa streptavidin at 3.2 Angstrom resolution. Nature Communications, 2019, 10, 2386.	12.8	106
75	Synthesis challenges for graphene industry. Nature Materials, 2019, 18, 520-524.	27.5	389
76	Layer-dependent ultrafast dynamics of Î±-In₂Se₃ nanoflakes. 2D Materials, 2019, 6, 035034.	4.4	14
77	Universal conductance fluctuations and phase-coherent transport in a semiconductor Bi₂O₂Se nanoplate with strong spinâ€“orbit interaction. Nanoscale, 2019, 11, 10622-10628.	5.6	16
78	Towards super-clean graphene. Nature Communications, 2019, 10, 1912.	12.8	133
79	Copper-Containing Carbon Feedstock for Growing Superclean Graphene. Journal of the American Chemical Society, 2019, 141, 7670-7674.	13.7	47
80	Transfer-Medium-Free Nanofiber-Reinforced Graphene Film and Applications in Wearable Transparent Pressure Sensors. ACS Nano, 2019, 13, 5541-5548.	14.6	96
81	Scalable and ultrafast epitaxial growth of single-crystal graphene wafers for electrically tunable liquid-crystal microlens arrays. Science Bulletin, 2019, 64, 659-668.	9.0	66
82	Wafer-Scale Growth of Single-Crystal 2D Semiconductor on Perovskite Oxides for High-Performance Transistors. Nano Letters, 2019, 19, 2148-2153.	9.1	82
83	Bioactive Functionalized Monolayer Graphene for High-Resolution Cryo-Electron Microscopy. Journal of the American Chemical Society, 2019, 141, 4016-4025.	13.7	69
84	Coulomb-dominated oscillations in a graphene quantum Hall Fabryâ€“PÃ©rot interferometer. Chinese Physics B, 2019, 28, 127203.	1.4	2
85	Toward Mass Production of CVD Graphene Films. Advanced Materials, 2019, 31, e1800996.	21.0	218
86	Low Residual Carrier Concentration and High Mobility in 2D Semiconducting Bi₂O₂Se. Nano Letters, 2019, 19, 197-202.	9.1	95
87	Defects guided wrinkling in graphene on copper substrate. Carbon, 2019, 143, 736-742.	10.3	27
88	Truly Concomitant and Independently Expressed Shortâ€•and Longâ€Term Plasticity in a Bi₂O₂Seâ€Based Threeâ€Terminal Memristor. Advanced Materials, 2019, 31, e1805769.	21.0	85
89	Biomass Hydroxyapatite-templated Synthesis of 3D Graphene. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2019, 35, 1112-1118.	4.9	10
90	Atomic Resolution Characterization of Ordered Fluctuation Structure in Î±-Cu₂Se. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2019, 35, 137-138.	4.9	0

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91	Revealing the Contribution of Individual Factors to Hydrogen Evolution Reaction Catalytic Activity. Advanced Materials, 2018, 30, e1706076.	21.0	86
92	Charge transport and electron-hole asymmetry in low-mobility graphene/hexagonal boron nitride heterostructures. Journal of Applied Physics, 2018, 123, .	2.5	3
93	Surprisingly fast cooling in graphene-based van der Waals stacks. Science China Materials, 2018, 61, 1017-1018.	6.3	2
94	Greatly Enhanced Anticorrosion of Cu by Commensurate Graphene Coating. Advanced Materials, 2018, 30, 1702944.	21.0	113
95	Strong spinâ€“orbit interaction and magnetotransport in semiconductor Bi₂O₂Se nanoplates. Nanoscale, 2018, 10, 2704-2710.	5.6	49
96	Multiple single cell screening and DNA MDA amplification chip for oncogenic mutation profiling. Lab on A Chip, 2018, 18, 723-734.	6.0	6
97	Switching Vertical to Horizontal Graphene Growth Using Faraday Cageâ€Assisted PECVD Approach for Highâ€Performance Transparent Heating Device. Advanced Materials, 2018, 30, 1704839.	21.0	62
98	Anisotropic Strain Relaxation of Graphene by Corrugation on Copper Crystal Surfaces. Small, 2018, 14, e1800725.	10.0	46
99	Single crystalline electronic structure and growth mechanism of aligned square graphene sheets. APL Materials, 2018, 6, .	5.1	2
100	Low-field magnetotransport in graphene cavity devices. Nanotechnology, 2018, 29, 205707.	2.6	1
101	Identifying EGFR-Expressed Cells and Detecting EGFR Multi-Mutations at Single-Cell Level by Microfluidic Chip. Nano-Micro Letters, 2018, 10, 16.	27.0	6
102	Lowâ€Temperature and Rapid Growth of Large Singleâ€Crystalline Graphene with Ethane. Small, 2018, 14, 1702916.	10.0	39
103	Investigation of black phosphorus as a nano-optical polarization element by polarized Raman spectroscopy. Nano Research, 2018, 11, 3154-3163.	10.4	19
104	Diverse Atomically Sharp Interfaces and Linear Dichroism of 1T' ReS₂â€ReSe₂ Lateral pâ€“n Heterojunctions. Advanced Functional Materials, 2018, 28, 1804696.	14.9	50
105	Ultrafast Broadband Charge Collection from Clean Graphene/CH₃NH₃PbI₃ Interface. Journal of the American Chemical Society, 2018, 140, 14952-14957.	13.7	29
106	Bridging the Gap between Reality and Ideal in Chemical Vapor Deposition Growth of Graphene. Chemical Reviews, 2018, 118, 9281-9343.	47.7	260
107	Electronic structures and unusually robust bandgap in an ultrahigh-mobility layered oxide semiconductor, Bi ₂ O ₂ Se. Science Advances, 2018, 4, eaat8355.	10.3	167
108	Fast Growth of Strain-Free AlN on Graphene-Buffered Sapphire. Journal of the American Chemical Society, 2018, 140, 11935-11941.	13.7	75

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109	Self-modulation doping effect in the high-mobility layered semiconductor <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi>Se</mml:mi></mml:mrow></mml:math>. Physical Review B, 2018, 97, .	3.8	63
110	Raman Spectra and Strain Effects in Bismuth Oxychalcogenides. Journal of Physical Chemistry C, 2018, 122, 19970-19980.	3.1	76
111	Lowâ€Temperature Heteroepitaxy of 2D PbI₂/Graphene for Largeâ€Area Flexible Photodetectors. Advanced Materials, 2018, 30, e1803194.	21.0	93
112	Ultrafast and highly sensitive infrared photodetectors based on two-dimensional oxyselenide crystals. Nature Communications, 2018, 9, 3311.	12.8	213
113	Dirac-source field-effect transistors as energy-efficient, high-performance electronic switches. Science, 2018, 361, 387-392.	12.6	226
114	Soft transparent graphene contact lens electrodes for conformal full-cornea recording of electroretinogram. Nature Communications, 2018, 9, 2334.	12.8	95
115	Epitaxial Growth of Ternary Topological Insulator Bi₂Te₂Se 2D Crystals on Mica. Small, 2017, 13, 1603572.	10.0	20
116	Controlled Synthesis of High-Mobility Atomically Thin Bismuth Oxyselenide Crystals. Nano Letters, 2017, 17, 3021-3026.	9.1	222
117	Electrical and Photoresponse Properties of Inversion Asymmetric Topological Insulator BiTeCl Nanoplates. ChemNanoMat, 2017, 3, 406-410.	2.8	5
118	Epitaxial growth of large-area and highly crystalline anisotropic ReSe2 atomic layer. Nano Research, 2017, 10, 2732-2742.	10.4	69
119	Substrate Doping Effect and Unusually Large Angle van Hove Singularity Evolution in Twisted Biâ€•and Multilayer Graphene. Advanced Materials, 2017, 29, 1606741.	21.0	43
120	Clean Transfer of Large Graphene Single Crystals for Highâ€Intactness Suspended Membranes and Liquid Cells. Advanced Materials, 2017, 29, 1700639.	21.0	80
121	Vertical Graphene Growth on SiO Microparticles for Stable Lithium Ion Battery Anodes. Nano Letters, 2017, 17, 3681-3687.	9.1	241
122	Electronâ€“Hole Symmetry Breaking in Charge Transport in Nitrogen-Doped Graphene. ACS Nano, 2017, 11, 4641-4650.	14.6	46
123	Formation mechanism of overlapping grain boundaries in graphene chemical vapor deposition growth. Chemical Science, 2017, 8, 2209-2214.	7.4	35
124	The Way towards Ultrafast Growth of Singleâ€Crystal Graphene on Copper. Advanced Science, 2017, 4, 1700087.	11.2	40
125	High electron mobility and quantum oscillations in non-encapsulated ultrathin semiconducting Bi2O2Se. Nature Nanotechnology, 2017, 12, 530-534.	31.5	507
126	Rapid growth of angle-confined large-domain graphene bicrystals. Nano Research, 2017, 10, 1189-1199.	10.4	9

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127	Plasmonic hot electron tunneling photodetection in vertical Auâ€“graphene hybrid nanostructures. Laser and Photonics Reviews, 2017, 11, 1600148.	8.7	61
128	Grapheneâ€Armored Aluminum Foil with Enhanced Anticorrosion Performance as Current Collectors for Lithiumâ€Ion Battery. Advanced Materials, 2017, 29, 1703882.	21.0	85
129	Near-Atomic Resolution Structure Determination in Over-Focus with Volta Phase Plate by Cs-Corrected Cryo-EM. Structure, 2017, 25, 1623-1630.e3.	3.3	34
130	Chemical Intercalation of Topological Insulator Grid Nanostructures for Highâ€Performance Transparent Electrodes. Advanced Materials, 2017, 29, 1703424.	21.0	21
131	Chemical Patterning of Highâ€Mobility Semiconducting 2D Bi₂O₂Se Crystals for Integrated Optoelectronic Devices. Advanced Materials, 2017, 29, 1704060.	21.0	142
132	Out-of-Plane Piezoelectricity and Ferroelectricity in Layered Î±-In₂Se₃ Nanoflakes. Nano Letters, 2017, 17, 5508-5513.	9.1	567
133	Low-energy transmission electron diffraction and imaging of large-area graphene. Science Advances, 2017, 3, e1603231.	10.3	35
134	Hierarchical Graphene Foam for Efficient Omnidirectional Solarâ€“Thermal Energy Conversion. Advanced Materials, 2017, 29, 1702590.	21.0	675
135	Wrinkle-Free Single-Crystal Graphene Wafer Grown on Strain-Engineered Substrates. ACS Nano, 2017, 11, 12337-12345.	14.6	172
136	Nonlocal Response in Infrared Detector with Semiconducting Carbon Nanotubes and Graphdiyne. Advanced Science, 2017, 4, 1700472.	11.2	29
137	Ultrafast epitaxial growth of metre-sized single-crystal graphene on industrial Cu foil. Science Bulletin, 2017, 62, 1074-1080.	9.0	454
138	Synthesis of Hierarchical Graphdiyne-Based Architecture for Efficient Solar Steam Generation. Chemistry of Materials, 2017, 29, 5777-5781.	6.7	206
139	Visualizing fast growth of large single-crystalline graphene by tunable isotopic carbon source. Nano Research, 2017, 10, 355-363.	10.4	30
140	Probe of local impurity states by bend resistance measurements in graphene cross junctions. Nanotechnology, 2016, 27, 245204.	2.6	2
141	Edgeâ€Statesâ€Induced Disruption to the Energy Band Alignment at Thicknessâ€Modulated Molybdenum Sulfide Junctions. Advanced Electronic Materials, 2016, 2, 1600048.	5.1	18
142	Tuning Chemical Potential Difference across Alternately Doped Graphene pâ€“n Junctions for High-Efficiency Photodetection. Nano Letters, 2016, 16, 4094-4101.	9.1	34
143	Two-Dimensional (C₄H₉NH₃)₂PbBr₄ Perovskite Crystals for High-Performance Photodetector. Journal of the American Chemical Society, 2016, 138, 16612-16615.	13.7	341
144	Building Large-Domain Twisted Bilayer Graphene with van Hove Singularity. ACS Nano, 2016, 10, 6725-6730.	14.6	53

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145	Raman spectroscopic characterization of stacking configuration and interlayer coupling of twisted multilayer graphene grown by chemical vapor deposition. Carbon, 2016, 110, 225-231.	10.3	28
146	Ultrafast growth of single-crystal graphene assisted by a continuous oxygen supply. Nature Nanotechnology, 2016, 11, 930-935.	31.5	330
147	Surface Monocrystallization of Copper Foil for Fast Growth of Large Singleâ€Crystal Graphene under Free Molecular Flow. Advanced Materials, 2016, 28, 8968-8974.	21.0	128
148	Fieldâ€Effect Transistors: Edgeâ€States â€Induced Disruption to the Energy Band Alignment at Thicknessâ€Modulated Molybdenum Sulfide Junctions (Adv. Electron. Mater. 8/2016). Advanced Electronic Materials, 2016, 2, .	5.1	0
149	Graphene Encapsulated Copper Microwires as Highly MRI Compatible Neural Electrodes. Nano Letters, 2016, 16, 7731-7738.	9.1	82
150	Growing three-dimensional biomorphic graphene powders using naturally abundant diatomite templates towards high solution processability. Nature Communications, 2016, 7, 13440.	12.8	93
151	Chemically Engineered Substrates for Patternable Growth of Two-Dimensional Chalcogenide Crystals. ACS Nano, 2016, 10, 10317-10323.	14.6	16
152	Selectively enhanced photocurrent generation in twisted bilayer graphene with van Hove singularity. Nature Communications, 2016, 7, 10699.	12.8	136
153	Rapid Growth of Large Singleâ€Crystalline Graphene via Second Passivation and Multistage Carbon Supply. Advanced Materials, 2016, 28, 4671-4677.	21.0	69
154	A transparent, conducting tape for flexible electronics. Nano Research, 2016, 9, 917-924.	10.4	44
155	Surface Engineering of Copper Foils for Growing Centimeter-Sized Single-Crystalline Graphene. ACS Nano, 2016, 10, 2922-2929.	14.6	89
156	Low-Temperature Growth of Two-Dimensional Layered Chalcogenide Crystals on Liquid. Nano Letters, 2016, 16, 2103-2107.	9.1	45
157	Large-area chemical vapor deposition-grown monolayer graphene-wrapped silver nanowires for broad-spectrum and robust antimicrobial coating. Nano Research, 2016, 9, 963-973.	10.4	60
158	Weak antilocalization and electronâ€“electron interaction in coupled multiple-channel transport in a Bi₂Se₃ thin film. Nanoscale, 2016, 8, 1879-1885.	5.6	49
159	2D Hybrid Nanostructured Dirac Materials for Broadband Transparent Electrodes. Advanced Materials, 2015, 27, 4315-4321.	21.0	8
160	Rollâ€toâ€Roll Green Transfer of CVD Graphene onto Plastic for a Transparent and Flexible Triboelectric Nanogenerator. Advanced Materials, 2015, 27, 5210-5216.	21.0	273
161	Roll-to-Roll Encapsulation of Metal Nanowires between Graphene and Plastic Substrate for High-Performance Flexible Transparent Electrodes. Nano Letters, 2015, 15, 4206-4213.	9.1	410
162	Building graphene pâ€“n junctions for next-generation photodetection. Nano Today, 2015, 10, 701-716.	11.9	45

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163	Controlled synthesis of single-crystal SnSe nanoplates. Nano Research, 2015, 8, 288-295.	10.4	207
164	Direct growth of large-area graphene and boron nitride heterostructures by a co-segregation method. Nature Communications, 2015, 6, 6519.	12.8	190
165	A Roadmap for Controlled Production of Topological Insulator Nanostructures and Thin Films. Small, 2015, 11, 3290-3305.	10.0	42
166	Comparison of Nanocarbonâ€“Silicon Solar Cells with Nanotubeâ€“Si or Grapheneâ€“Si Contact. ACS Applied Materials & Interfaces, 2015, 7, 17088-17094.	8.0	17
167	van Hove Singularity Enhanced Photochemical Reactivity of Twisted Bilayer Graphene. Nano Letters, 2015, 15, 5585-5589.	9.1	59
168	Strong Second-Harmonic Generation in Atomic Layered GaSe. Journal of the American Chemical Society, 2015, 137, 7994-7997.	13.7	273
169	Patterning two-dimensional chalcogenide crystals of Bi2Se3 and In2Se3 and efficient photodetectors. Nature Communications, 2015, 6, 6972.	12.8	172
170	Monodisperse Copper Chalcogenide Nanocrystals: Controllable Synthesis and the Pinning of Plasmonic Resonance Absorption. Journal of the American Chemical Society, 2015, 137, 12006-12012.	13.7	61
171	Thickness-Dependent Dielectric Constant of Few-Layer In₂Se₃ Nanoflakes. Nano Letters, 2015, 15, 8136-8140.	9.1	99
172	Two-Dimensional Materials Beyond Graphene: an Emerging Field with Blooming Progress. Acta Chimica Sinica, 2015, 73, 861.	1.4	2
173	Fluorescence Quenching Effect of Rhodanmine 6G on Two-Dimensional Bi₂Se₃Crystals. Acta Chimica Sinica, 2015, 73, 944.	1.4	1
174	Interlayer vibrational modes in few-quintuple-layer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:m xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Bi</mml:mi><mml:mn>2</mml:mn></mml:m crystals: Raman spectroscopy and. Physical Review B, 2014, 90, .	3.7	87
175	Trifluoromethylation of graphene. APL Materials, 2014, 2, .	5.1	5
176	Controllable Coâ€segregation Synthesis of Waferâ€Scale Hexagonal Boron Nitride Thin Films. Advanced Materials, 2014, 26, 1776-1781.	21.0	87
177	Epitaxy and Photoresponse of Two-Dimensional GaSe Crystals on Flexible Transparent Mica Sheets. ACS Nano, 2014, 8, 1485-1490.	14.6	285
178	Creating One-Dimensional Nanoscale Periodic Ripples in a Continuous Mosaic Graphene Monolayer. Physical Review Letters, 2014, 113, 086102.	7.8	111
179	Epitaxial Growth of Asymmetricallyâ€Doped Bilayer Graphene for Photocurrent Generation. Small, 2014, 10, 2245-2250.	10.0	6
180	Chemistry Makes Graphene beyond Graphene. Journal of the American Chemical Society, 2014, 136, 12194-12200.	13.7	235

#	Article	IF	Citations
181	Novel grapheneâ€“oxideâ€“semiconductor nanowire phototransistors. Journal of Materials Chemistry C, 2014, 2, 1592.	5.5	19
182	Photochemical Modification of Graphene. Acta Chimica Sinica, 2014, 72, 289.	1.4	7
183	Plasmon-Enhanced Photothermoelectric Conversion in Chemical Vapor Deposited Graphene pâ€“n Junctions. Journal of the American Chemical Society, 2013, 135, 10926-10929.	13.7	61
184	Designed CVD Growth of Graphene via Process Engineering. Accounts of Chemical Research, 2013, 46, 2263-2274.	15.6	172
185	The edge- and basal-plane-specific electrochemistry of a single-layer graphene sheet. Scientific Reports, 2013, 3, 2248.	3.3	432
186	Clean and efficient transfer of CVD-grown graphene by electrochemical etching of metal substrate. Journal of Electroanalytical Chemistry, 2013, 688, 243-248.	3.8	38
187	Controlled Growth of Atomically Thin In₂Se₃ Flakes by van der Waals Epitaxy. Journal of the American Chemical Society, 2013, 135, 13274-13277.	13.7	192
188	CuInSe₂ Nanowires from Facile Chemical Transformation of In₂Se₃ and Their Integration in Single-Nanowire Devices. ACS Nano, 2013, 7, 3205-3211.	14.6	20
189	Photoâ€induced Free Radical Modification of Graphene. Small, 2013, 9, 1134-1143.	10.0	29
190	Photoinduced Methylation of Graphene. Small, 2013, 9, 1348-1352.	10.0	29
191	Janus graphene from asymmetric two-dimensional chemistry. Nature Communications, 2013, 4, 1443.	12.8	231
192	Free Radical Reactions in Two Dimensions: A Case Study on Photochlorination of Graphene. Small, 2013, 9, 1388-1396.	10.0	19
193	Self-powered flexible and transparent photovoltaic detectors based on CdSe nanobelt/graphene Schottky junctions. Nanoscale, 2013, 5, 5576.	5.6	80
194	Synthesis of Boronâ€Doped Graphene Monolayers Using the Sole Solid Feedstock by Chemical Vapor Deposition. Small, 2013, 9, 1316-1320.	10.0	181
195	Observing electronic structures on exâ€situ grown topological insulator thin films. Physica Status Solidi - Rapid Research Letters, 2013, 7, 130-132.	2.4	10
196	Selectiveâ€Area Van der Waals Epitaxy of Topological Insulator Grid Nanostructures for Broadband Transparent Flexible Electrodes. Advanced Materials, 2013, 25, 5959-5964.	21.0	39
197	Modulation-doped growth of mosaic graphene with single-crystalline pâ€“n junctions for efficient photocurrent generation. Nature Communications, 2012, 3, 1280.	12.8	97
198	Topological insulator nanostructures for near-infrared transparent flexible electrodes. Nature Chemistry, 2012, 4, 281-286.	13.6	309

#	Article	IF	Citations
199	Controlled Synthesis of Topological Insulator Nanoplate Arrays on Mica. Journal of the American Chemical Society, 2012, 134, 6132-6135.	13.7	169
200	Topological insulator nanostructures: Materials synthesis, Raman spectroscopy, and transport properties. Frontiers of Physics, 2012, 7, 208-217.	5.0	22
201	Rapid Surface Oxidation as a Source of Surface Degradation Factor for Bi₂Se₃. ACS Nano, 2011, 5, 4698-4703.	14.6	320
202	Formation of Bilayer Bernal Graphene: Layer-by-Layer Epitaxy via Chemical Vapor Deposition. Nano Letters, 2011, 11, 1106-1110.	9.1	365
203	Defect-like Structures of Graphene on Copper Foils for Strain Relief Investigated by High-Resolution Scanning Tunneling Microscopy. ACS Nano, 2011, 5, 4014-4022.	14.6	186
204	Properties of photochlorinated graphene. , 2011, , .		0
205	Photochemical Chlorination of Graphene. ACS Nano, 2011, 5, 5957-5961.	14.6	337
206	Toward Clean and Crackless Transfer of Graphene. ACS Nano, 2011, 5, 9144-9153.	14.6	701
207	Few-Layer Nanoplates of Bi₂Se₃ and Bi₂Te₃ with Highly Tunable Chemical Potential. Nano Letters, 2010, 10, 2245-2250.	9.1	403
208	Topological Insulator Nanowires and Nanoribbons. Nano Letters, 2010, 10, 329-333.	9.1	298
209	Epitaxial Heterostructures of Ultrathin Topological Insulator Nanoplate and Graphene. Nano Letters, 2010, 10, 2870-2876.	9.1	203
210	Organic charge-transfer complexes for STM-based thermochemical-hole-burning memory. Coordination Chemistry Reviews, 2010, 254, 1151-1168.	18.8	15
211	Aharonovâ€“Bohm interference in topological insulator nanoribbons. Nature Materials, 2010, 9, 225-229.	27.5	727
212	Magnetic Doping and Kondo Effect in Bi₂Se₃ Nanoribbons. Nano Letters, 2010, 10, 1076-1081.	9.1	119
213	Vacancy ordering and lithium insertion in III2VI3 nanowires. Nano Research, 2009, 2, 327-335.	10.4	26
214	Threeâ€Dimensional Interconnected Silica Nanotubes Templated from Hyperbranched Nanowires. Small, 2009, 5, 437-439.	10.0	14
215	Nanoscale Electronic Inhomogeneity in In₂Se₃ Nanoribbons Revealed by Microwave Impedance Microscopy. Nano Letters, 2009, 9, 1265-1269.	9.1	91
216	Crystalline-Amorphous Coreâ”Shell Silicon Nanowires for High Capacity and High Current Battery Electrodes. Nano Letters, 2009, 9, 491-495.	9.1	1,110

#	Article	IF	Citations
217	Shape Evolution of Layer-Structured Bismuth Oxychloride Nanostructures via Low-Temperature Chemical Vapor Transport. Chemistry of Materials, 2009, 21, 247-252.	6.7	146
218	Phase transformations in one-dimensional materials: applications in electronics and energy sciences. Journal of Materials Chemistry, 2009, 19, 5879.	6.7	10
219	Anisotropy of Chemical Transformation from In₂Se₃ to CuInSe₂ Nanowires through Solid State Reaction. Journal of the American Chemical Society, 2009, 131, 7973-7975.	13.7	50
220	Single Nanorod Devices for Battery Diagnostics: A Case Study on LiMn₂O₄. Nano Letters, 2009, 9, 4109-4114.	9.1	114
221	High-performance lithium battery anodes using silicon nanowires. Nature Nanotechnology, 2008, 3, 31-35.	31.5	5,860
222	Formation of chiral branched nanowires by the Eshelby Twist. Nature Nanotechnology, 2008, 3, 477-481.	31.5	218
223	Large Anisotropy of Electrical Properties in Layer-Structured In₂Se₃ Nanowires. Nano Letters, 2008, 8, 1511-1516.	9.1	108
224	Spinel LiMn₂O₄ Nanorods as Lithium Ion Battery Cathodes. Nano Letters, 2008, 8, 3948-3952.	9.1	579
225	Structure, Physical Properties and Phase Transition of a Quasi-One-Dimensional Organic Semiconductor DBA(TCNQ)2. Journal of Physical Chemistry C, 2008, 112, 11001-11006.	3.1	15
226	Thermochemical Hole Burning on TEA(TCNQ)2Single Crystal at Varied Temperatures in UHV System. Journal of Physical Chemistry C, 2008, 112, 2004-2007.	3.1	4
227	Thermochemical hole burning performance of TCNQ-based charge transfer complexes with different electrical conductivities. Nanotechnology, 2008, 19, 235303.	2.6	1
228	Phase-Change Nanowires for Non Volatile Memory. Materials Research Society Symposia Proceedings, 2007, 997, 1.	0.1	0
229	Hyperbranched Lead Selenide Nanowire Networks. Nano Letters, 2007, 7, 1095-1099.	9.1	131
230	Anisotropic Thermochemical Hole Burning Phenomenon on TTFâ^'TCNQ Single Crystal. Journal of Physical Chemistry C, 2007, 111, 631-635.	3.1	13
231	Ordered Vacancy Compounds and Nanotube Formation in CuInSe₂â^'CdS Coreâ^'Shell Nanowires. Nano Letters, 2007, 7, 3734-3738.	9.1	77
232	Fast, Completely Reversible Li Insertion in Vanadium Pentoxide Nanoribbons. Nano Letters, 2007, 7, 490-495.	9.1	375
233	Morphology Control of Layer-Structured Gallium Selenide Nanowires. Nano Letters, 2007, 7, 199-203.	9.1	79
234	Synthesis and Phase Transformation of In2Se3 and CuInSe2 Nanowires. Journal of the American Chemical Society, 2007, 129, 34-35.	13.7	158

#	Article	IF	Citations
235	Synthesis and Characterization of Phase-Change Nanowires. Nano Letters, 2006, 6, 1514-1517.	9.1	137
236	Scanning tunneling microscope-based thermochemical hole burning on a series of charge transfer complexes. Applied Physics Letters, 2005, 86, 133105.	3.3	9
237	Thermochemical Hole Burning on a Series of N-Substituted Morpholinium 7,7,8,8-Tetracyanoquinodimethane Charge-Transfer Complexes for Data Storage. Journal of Physical Chemistry B, 2005, 109, 22486-22490.	2.6	24
238	Thermochemical Hole Burning on a Triethylammonium Bis-7,7,8,8-tetracyanoquinodimethane Charge-Transfer Complex Using Single-Walled Carbon Nanotube Scanning Tunneling Microscopy Tips. Journal of Physical Chemistry B, 2005, 109, 3526-3530.	2.6	23
239	Thermochemical Hole Burning on DPA(TCNQ)2 and MEM(TCNQ)2 Charge Transfer Complexes Using a Scanning Tunneling Microscope. Journal of Physical Chemistry B, 2004, 108, 14800-14803.	2.6	10