

Hai-Lin Peng

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

232
papers

22,797
citations

69
h-index

149
g-index

247
ext. papers

25,933
ext. citations

13.1
avg, IF

6.88
L-index

#	Paper	IF	Citations
232	High-Performance 3D Vertically Oriented Graphene Photodetector Using a Floating Indium Tin Oxide Channel.. <i>Sensors</i> , 2022 , 22,	3.8	1
231	Vertical Graphene-Reinforced Titanium Alloy Bipolar Plates in Fuel Cells.. <i>Advanced Materials</i> , 2022 , e21110565	14	2
230	Slip-line-guided Growth of Graphene.. <i>Advanced Materials</i> , 2022 , e2201188	24	1
229	Electrostatic interaction determines thermal conductivity anisotropy of Bi ₂ O ₂ Se. <i>Cell Reports Physical Science</i> , 2021 , 2, 100624	6.1	3
228	Hydrophilic, Clean Graphene for Cell Culture and Cryo-EM Imaging. <i>Nano Letters</i> , 2021 , 21, 9587-9593	11.5	1
227	Intrinsic Wettability in Pristine Graphene. <i>Advanced Materials</i> , 2021 , e2103620	24	9
226	Charge Transfer Properties of Heterostructures Formed by Bi O Se and Transition Metal Dichalcogenide Monolayers. <i>Small</i> , 2021 , e2106078	11	2
225	Recent Progress on Two-Dimensional Materials. <i>Wuli Huaxue Xuebao/Acta Physico - Chimica Sinica</i> , 2021 , 2108017-0	3.8	69
224	Transfer-Enabled Fabrication of Graphene Wrinkle Arrays for Epitaxial Growth of AlN Films. <i>Advanced Materials</i> , 2021 , e2105851	24	2
223	Temperature dependence of quantum oscillations from non-parabolic dispersions. <i>Nature Communications</i> , 2021 , 12, 6213	17.4	1
222	Unravelling a Zigzag Pathway for Hot Carrier Collection with Graphene Electrode. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 2886-2891	6.4	0
221	Hetero-site nucleation for growing twisted bilayer graphene with a wide range of twist angles. <i>Nature Communications</i> , 2021 , 12, 2391	17.4	31
220	Tunable Pore Size from Sub-Nanometer to a Few Nanometers in Large-Area Graphene Nanoporous Atomically Thin Membranes. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	2
219	Preparation of two-dimensional [Bi ₂ O ₂]-based layered materials: Progress and prospects. <i>APL Materials</i> , 2021 , 9, 060905	5.7	4
218	Hot-Carrier Cooling in High-Quality Graphene Is Intrinsically Limited by Optical Phonons. <i>ACS Nano</i> , 2021 ,	16.7	8
217	Coplanar High Mobility and Interplanar Van Der Waals Heterojunction in Layered Two-Dimensional Bi ₂ Se ₃ Nanosheets. <i>IEEE Electron Device Letters</i> , 2021 , 42, 871-874	4.4	0
216	Quasi-one-dimensional TaSe ₃ : A New Topological Superconductor Candidate. <i>Matter</i> , 2021 , 4, 19-21	12.7	1

215	2D Bi ₂ O ₂ Se: An Emerging Material Platform for the Next-Generation Electronic Industry. <i>Accounts of Materials Research</i> , 2021 , 2, 842-853	7.5	5
214	Atomically Thin Bilayer Janus Membranes for Cryo-electron Microscopy. <i>ACS Nano</i> , 2021 , 15, 16562-16571	16.7	2
213	Broadband Bi ₂ O ₂ Se Photodetectors from Infrared to Terahertz. <i>Advanced Functional Materials</i> , 2021 , 31, 2009554	15.6	26
212	Toward Epitaxial Growth of Misorientation-Free Graphene on Cu(111) Foils.. <i>ACS Nano</i> , 2021 ,	16.7	4
211	Superclean Growth of Graphene Using a Cold-Wall Chemical Vapor Deposition Approach. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 17214-17218	16.4	16
210	Controllable inversion symmetry breaking in single layer graphene induced by sub-lattice contrasted charge polarization. <i>Carbon</i> , 2020 , 163, 63-69	10.4	1
209	Superclean Growth of Graphene Using a Cold-Wall Chemical Vapor Deposition Approach. <i>Angewandte Chemie</i> , 2020 , 132, 17367-17371	3.6	1
208	n-Type Dirac-Source Field-Effect Transistors Based on a Graphene/Carbon Nanotube Heterojunction. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000258	6.4	6
207	Large Single-Crystal Cu Foils with High-Index Facets by Strain-Engineered Anomalous Grain Growth. <i>Advanced Materials</i> , 2020 , 32, e2002034	24	28
206	Realization and transport investigation of a single layer-twisted bilayer graphene junction. <i>Carbon</i> , 2020 , 163, 105-112	10.4	2
205	Exploiting Two-Dimensional Bi O Se for Trace Oxygen Detection. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 17938-17943	16.4	14
204	Unveiling the Fine Structural Distortion of Atomically Thin Bi O Se by Third-Harmonic Generation. <i>Advanced Materials</i> , 2020 , 32, e2002831	24	5
203	Quantitative Analyses of the Interfacial Properties of Current Collectors at the Mesoscopic Level in Lithium Ion Batteries by Using Hierarchical Graphene. <i>Nano Letters</i> , 2020 , 20, 2175-2182	11.5	12
202	Utilization of Synergistic Effect of Dimension-Differentiated Hierarchical Nanomaterials for Transparent and Flexible Wireless Communicational Elements. <i>Advanced Materials Technologies</i> , 2020 , 5, 1901057	6.8	2
201	Interlayer Decoupling in 30° Twisted Bilayer Graphene Quasicrystal. <i>ACS Nano</i> , 2020 , 14, 1656-1664	16.7	31
200	High-Mobility Flexible Oxyselenide Thin-Film Transistors Prepared by a Solution-Assisted Method. <i>Journal of the American Chemical Society</i> , 2020 , 142, 2726-2731	16.4	25
199	Robust ultraclean atomically thin membranes for atomic-resolution electron microscopy. <i>Nature Communications</i> , 2020 , 11, 541	17.4	21
198	Transport signatures of relativistic quantum scars in a graphene cavity. <i>Physical Review B</i> , 2020 , 101,	3.3	2

197	Catalyst-Free Synthesis of Few-Layer Graphdiyne Using a Microwave-Induced Temperature Gradient at a Solid/Liquid Interface. <i>Advanced Functional Materials</i> , 2020 , 30, 2001396	15.6	28
196	Vertical graphene nanosheetsmodified Al current collectors for high-performance sodium-ion batteries. <i>Nano Research</i> , 2020 , 13, 1948-1954	10	14
195	Sub-10mK-Resolution Thermal-Bolometric Integrated FET-Type Sensors Based on Layered Bi2O2Se Semiconductor Nanosheets 2020 ,		1
194	Vapor-Liquid-Solid Growth of Bi2O2Se Nanoribbons for High-Performance Transistors. <i>Wuli Huaxue Xuebao/Acta Physico - Chimica Sinica</i> , 2020 , 36, 1908038-0	3.8	5
193	Surface photovoltaic effect and electronic structure of Bi_2Se_3 . <i>Physical Review Materials</i> , 2020 , 4,	3.2	1
192	Understanding Interlayer Contact Conductance in Twisted Bilayer Graphene. <i>Small</i> , 2020 , 16, e1902844	11	13
191	Optical Properties and Photocarrier Dynamics of Bi2O2Se Monolayer and Nanoplates. <i>Advanced Optical Materials</i> , 2020 , 8, 1901567	8.1	10
190	Graphene Acoustic Phonon-Mediated Pseudo-Landau Levels Tailoring Probed by Scanning Tunneling Spectroscopy. <i>Small</i> , 2020 , 16, e1905202	11	2
189	Exploiting Two-Dimensional Bi2O2Se for Trace Oxygen Detection. <i>Angewandte Chemie</i> , 2020 , 132, 18094-18099	4.6	9
188	Growth of Ultraflat Graphene with Greatly Enhanced Mechanical Properties. <i>Nano Letters</i> , 2020 , 20, 6798-6806	11.5	5
187	Determination of interatomic coupling between two-dimensional crystals using angle-resolved photoemission spectroscopy. <i>Nature Communications</i> , 2020 , 11, 3582	17.4	6
186	A native oxide high- κ gate dielectric for two-dimensional electronics. <i>Nature Electronics</i> , 2020 , 3, 473-478	28.4	58
185	Uniform High- κ Amorphous Native Oxide Synthesized by Oxygen Plasma for Top-Gated Transistors. <i>Nano Letters</i> , 2020 , 20, 7469-7475	11.5	14
184	New Growth Frontier: Superclean Graphene. <i>ACS Nano</i> , 2020 , 14, 10796-10803	16.7	19
183	Controlled Growth of Single-Crystal Graphene Films. <i>Advanced Materials</i> , 2020 , 32, e1903266	24	58
182	A Force-Engineered Lint Roller for Superclean Graphene. <i>Advanced Materials</i> , 2019 , 31, e1902978	24	31
181	A Single-Electron Transistor Made of a 3D Topological Insulator Nanoplate. <i>Advanced Materials</i> , 2019 , 31, e1903686	24	5
180	High-performance sub-10 nm monolayer BiOSe transistors. <i>Nanoscale</i> , 2019 , 11, 532-540	7.7	128

179	Asymmetry allows photocurrent in intrinsic graphene. <i>Nature Nanotechnology</i> , 2019 , 14, 105-106	28.7	7
178	Growth of 12-inch uniform monolayer graphene film on molten glass and its application in Pbl2-based photodetector. <i>Nano Research</i> , 2019 , 12, 1888-1893	10	6
177	Dirac-cone induced gating enhancement in single-molecule field-effect transistors. <i>Nanoscale</i> , 2019 , 11, 13117-13125	7.7	8
176	Single particle cryo-EM reconstruction of 52 kDa streptavidin at 3.2 Angstrom resolution. <i>Nature Communications</i> , 2019 , 10, 2386	17.4	71
175	Synthesis challenges for graphene industry. <i>Nature Materials</i> , 2019 , 18, 520-524	27	217
174	Layer-dependent ultrafast dynamics of In ₂ Se ₃ nanoflakes. <i>2D Materials</i> , 2019 , 6, 035034	5.9	9
173	Universal conductance fluctuations and phase-coherent transport in a semiconductor BiOSe nanoplate with strong spin-orbit interaction. <i>Nanoscale</i> , 2019 , 11, 10622-10628	7.7	9
172	Towards super-clean graphene. <i>Nature Communications</i> , 2019 , 10, 1912	17.4	89
171	Copper-Containing Carbon Feedstock for Growing Superclean Graphene. <i>Journal of the American Chemical Society</i> , 2019 , 141, 7670-7674	16.4	30
170	Transfer-Medium-Free Nanofiber-Reinforced Graphene Film and Applications in Wearable Transparent Pressure Sensors. <i>ACS Nano</i> , 2019 , 13, 5541-5548	16.7	55
169	Scalable and ultrafast epitaxial growth of single-crystal graphene wafers for electrically tunable liquid-crystal microlens arrays. <i>Science Bulletin</i> , 2019 , 64, 659-668	10.6	50
168	Wafer-Scale Growth of Single-Crystal 2D Semiconductor on Perovskite Oxides for High-Performance Transistors. <i>Nano Letters</i> , 2019 , 19, 2148-2153	11.5	52
167	Bioactive Functionalized Monolayer Graphene for High-Resolution Cryo-Electron Microscopy. <i>Journal of the American Chemical Society</i> , 2019 , 141, 4016-4025	16.4	44
166	Heterogeneous nucleation and growth of electrodeposited lithium metal on the basal plane of single-layer graphene. <i>Energy Storage Materials</i> , 2019 , 16, 419-425	19.4	52
165	Molecular Beam Epitaxy and Electronic Structure of Atomically Thin Oxyselenide Films. <i>Advanced Materials</i> , 2019 , 31, e1901964	24	29
164	Exploitation of Bi ₂ O ₂ Se/graphene van der Waals heterojunction for creating efficient photodetectors and short-channel field-effect transistors. <i>Information Materials</i> , 2019 , 1, 390-395	23.1	24
163	Nitrogen cluster doping for high-mobility/conductivity graphene films with millimeter-sized domains. <i>Science Advances</i> , 2019 , 5, eaaw8337	14.3	39
162	Macroscale single crystal graphene templated directional alignment of liquid-crystal microlens array for light field imaging. <i>Applied Physics Letters</i> , 2019 , 115, 071903	3.4	3

161	Large-Area Synthesis of Superclean Graphene via Selective Etching of Amorphous Carbon with Carbon Dioxide. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 14446-14451	16.4	43
160	Large-Area Synthesis of Superclean Graphene via Selective Etching of Amorphous Carbon with Carbon Dioxide. <i>Angewandte Chemie</i> , 2019 , 131, 14588-14593	3.6	2
159	Early Lithium Plating Behavior in Confined Nanospace of 3D Lithiophilic Carbon Matrix for Stable Solid-State Lithium Metal Batteries. <i>Small</i> , 2019 , 15, e1904216	11	44
158	Bolometric Effect in Bi O Se Photodetectors. <i>Small</i> , 2019 , 15, e1904482	11	39
157	Frontispiece: Large-Area Synthesis of Superclean Graphene via Selective Etching of Amorphous Carbon with Carbon Dioxide. <i>Angewandte Chemie - International Edition</i> , 2019 , 58,	16.4	1
156	Biomass Hydroxyapatite-templated Synthesis of 3D Graphene. <i>Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica</i> , 2019 , 35, 1112-1118	3.8	9
155	Coulomb-dominated oscillations in a graphene quantum Hall Fabry-Pérot interferometer. <i>Chinese Physics B</i> , 2019 , 28, 127203	1.2	2
154	Toward Mass Production of CVD Graphene Films. <i>Advanced Materials</i> , 2019 , 31, e1800996	24	123
153	Low Residual Carrier Concentration and High Mobility in 2D Semiconducting BiOSe. <i>Nano Letters</i> , 2019 , 19, 197-202	11.5	56
152	Defects guided wrinkling in graphene on copper substrate. <i>Carbon</i> , 2019 , 143, 736-742	10.4	23
151	Truly Concomitant and Independently Expressed Short- and Long-Term Plasticity in a Bi O Se-Based Three-Terminal Memristor. <i>Advanced Materials</i> , 2019 , 31, e1805769	24	62
150	Revealing the Contribution of Individual Factors to Hydrogen Evolution Reaction Catalytic Activity. <i>Advanced Materials</i> , 2018 , 30, e1706076	24	54
149	Charge transport and electron-hole asymmetry in low-mobility graphene/hexagonal boron nitride heterostructures. <i>Journal of Applied Physics</i> , 2018 , 123, 064303	2.5	1
148	Surprisingly fast cooling in graphene-based van der Waals stacks. <i>Science China Materials</i> , 2018 , 61, 1017-1018	10.18	2
147	Greatly Enhanced Anticorrosion of Cu by Commensurate Graphene Coating. <i>Advanced Materials</i> , 2018 , 30, 1702944	24	85
146	Strong spin-orbit interaction and magnetotransport in semiconductor BiOSe nanoplates. <i>Nanoscale</i> , 2018 , 10, 2704-2710	7.7	37
145	Multiple single cell screening and DNA MDA amplification chip for oncogenic mutation profiling. <i>Lab on A Chip</i> , 2018 , 18, 723-734	7.2	6
144	Switching Vertical to Horizontal Graphene Growth Using Faraday Cage-Assisted PECVD Approach for High-Performance Transparent Heating Device. <i>Advanced Materials</i> , 2018 , 30, 1704839	24	53

143	Anisotropic Strain Relaxation of Graphene by Corrugation on Copper Crystal Surfaces. <i>Small</i> , 2018 , 14, e1800725	11	25
142	Single crystalline electronic structure and growth mechanism of aligned square graphene sheets. <i>APL Materials</i> , 2018 , 6, 036107	5.7	1
141	Low-field magnetotransport in graphene cavity devices. <i>Nanotechnology</i> , 2018 , 29, 205707	3.4	1
140	Raman Spectra and Strain Effects in Bismuth Oxychalcogenides. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 19970-19980	3.8	44
139	Low-Temperature Heteroepitaxy of 2D Pbl /Graphene for Large-Area Flexible Photodetectors. <i>Advanced Materials</i> , 2018 , 30, e1803194	24	61
138	Ultrafast and highly sensitive infrared photodetectors based on two-dimensional oxyselenide crystals. <i>Nature Communications</i> , 2018 , 9, 3311	17.4	135
137	Dirac-source field-effect transistors as energy-efficient, high-performance electronic switches. <i>Science</i> , 2018 , 361, 387-392	33.3	146
136	Soft transparent graphene contact lens electrodes for conformal full-cornea recording of electroretinogram. <i>Nature Communications</i> , 2018 , 9, 2334	17.4	65
135	Identifying EGFR-Expressed Cells and Detecting EGFR Multi-Mutations at Single-Cell Level by Microfluidic Chip. <i>Nano-Micro Letters</i> , 2018 , 10, 16	19.5	4
134	Low-Temperature and Rapid Growth of Large Single-Crystalline Graphene with Ethane. <i>Small</i> , 2018 , 14, 1702916	11	30
133	Investigation of black phosphorus as a nano-optical polarization element by polarized Raman spectroscopy. <i>Nano Research</i> , 2018 , 11, 3154-3163	10	12
132	Diverse Atomically Sharp Interfaces and Linear Dichroism of 1TReS2-ReSe2 Lateral pñ Heterojunctions. <i>Advanced Functional Materials</i> , 2018 , 28, 1804696	15.6	35
131	Ultrafast Broadband Charge Collection from Clean Graphene/CHNHPbl Interface. <i>Journal of the American Chemical Society</i> , 2018 , 140, 14952-14957	16.4	21
130	Bridging the Gap between Reality and Ideal in Chemical Vapor Deposition Growth of Graphene. <i>Chemical Reviews</i> , 2018 , 118, 9281-9343	68.1	160
129	Electronic structures and unusually robust bandgap in an ultrahigh-mobility layered oxide semiconductor, BiOSe. <i>Science Advances</i> , 2018 , 4, eaat8355	14.3	103
128	Fast Growth of Strain-Free AlN on Graphene-Buffered Sapphire. <i>Journal of the American Chemical Society</i> , 2018 , 140, 11935-11941	16.4	54
127	Self-modulation doping effect in the high-mobility layered semiconductor Bi2O2Se. <i>Physical Review B</i> , 2018 , 97,	3.3	45
126	Epitaxial Growth of Ternary Topological Insulator Bi Te Se 2D Crystals on Mica. <i>Small</i> , 2017 , 13, 1603572	11	16

125	Controlled Synthesis of High-Mobility Atomically Thin Bismuth Oxyselenide Crystals. <i>Nano Letters</i> , 2017 , 17, 3021-3026	11.5	145
124	Electrical and Photoresponse Properties of Inversion Asymmetric Topological Insulator BiTeCl Nanoplates. <i>ChemNanoMat</i> , 2017 , 3, 406-410	3.5	5
123	Epitaxial growth of large-area and highly crystalline anisotropic ReSe ₂ atomic layer. <i>Nano Research</i> , 2017 , 10, 2732-2742	10	47
122	Substrate Doping Effect and Unusually Large Angle van Hove Singularity Evolution in Twisted Bi- and Multilayer Graphene. <i>Advanced Materials</i> , 2017 , 29, 1606741	24	29
121	Clean Transfer of Large Graphene Single Crystals for High-Intactness Suspended Membranes and Liquid Cells. <i>Advanced Materials</i> , 2017 , 29, 1700639	24	50
120	Vertical Graphene Growth on SiO ₂ Microparticles for Stable Lithium Ion Battery Anodes. <i>Nano Letters</i> , 2017 , 17, 3681-3687	11.5	185
119	Electron-Hole Symmetry Breaking in Charge Transport in Nitrogen-Doped Graphene. <i>ACS Nano</i> , 2017 , 11, 4641-4650	16.7	31
118	Formation mechanism of overlapping grain boundaries in graphene chemical vapor deposition growth. <i>Chemical Science</i> , 2017 , 8, 2209-2214	9.4	31
117	The Way towards Ultrafast Growth of Single-Crystal Graphene on Copper. <i>Advanced Science</i> , 2017 , 4, 1700087	13.6	32
116	High electron mobility and quantum oscillations in non-encapsulated ultrathin semiconducting BiOSe. <i>Nature Nanotechnology</i> , 2017 , 12, 530-534	28.7	332
115	Rapid growth of angle-confined large-domain graphene bicrystals. <i>Nano Research</i> , 2017 , 10, 1189-1199	10	7
114	Plasmonic hot electron tunneling photodetection in vertical Au/graphene hybrid nanostructures. <i>Laser and Photonics Reviews</i> , 2017 , 11, 1600148	8.3	45
113	Graphene-Armored Aluminum Foil with Enhanced Anticorrosion Performance as Current Collectors for Lithium-Ion Battery. <i>Advanced Materials</i> , 2017 , 29, 1703882	24	53
112	Near-Atomic Resolution Structure Determination in Over-Focus with Volta Phase Plate by Cs-Corrected Cryo-EM. <i>Structure</i> , 2017 , 25, 1623-1630.e3	5.2	28
111	Chemical Intercalation of Topological Insulator Grid Nanostructures for High-Performance Transparent Electrodes. <i>Advanced Materials</i> , 2017 , 29, 1703424	24	17
110	Chemical Patterning of High-Mobility Semiconducting 2D Bi ₂ O ₃ Se Crystals for Integrated Optoelectronic Devices. <i>Advanced Materials</i> , 2017 , 29, 1704060	24	101
109	Out-of-Plane Piezoelectricity and Ferroelectricity in Layered Bi ₂ Se ₃ Nanoflakes. <i>Nano Letters</i> , 2017 , 17, 5508-5513	11.5	317
108	Low-energy transmission electron diffraction and imaging of large-area graphene. <i>Science Advances</i> , 2017 , 3, e1603231	14.3	18

107	Hierarchical Graphene Foam for Efficient Omnidirectional Solar-Thermal Energy Conversion. <i>Advanced Materials</i> , 2017 , 29, 1702590	24	480
106	Wrinkle-Free Single-Crystal Graphene Wafer Grown on Strain-Engineered Substrates. <i>ACS Nano</i> , 2017 , 11, 12337-12345	16.7	112
105	Nonlocal Response in Infrared Detector with Semiconducting Carbon Nanotubes and Graphdiyne. <i>Advanced Science</i> , 2017 , 4, 1700472	13.6	21
104	Ultrafast epitaxial growth of metre-sized single-crystal graphene on industrial Cu foil. <i>Science Bulletin</i> , 2017 , 62, 1074-1080	10.6	326
103	Synthesis of Hierarchical Graphdiyne-Based Architecture for Efficient Solar Steam Generation. <i>Chemistry of Materials</i> , 2017 , 29, 5777-5781	9.6	155
102	Visualizing fast growth of large single-crystalline graphene by tunable isotopic carbon source. <i>Nano Research</i> , 2017 , 10, 355-363	10	24
101	Surface Monocrystallization of Copper Foil for Fast Growth of Large Single-Crystal Graphene under Free Molecular Flow. <i>Advanced Materials</i> , 2016 , 28, 8968-8974	24	110
100	Graphene Encapsulated Copper Microwires as Highly MRI Compatible Neural Electrodes. <i>Nano Letters</i> , 2016 , 16, 7731-7738	11.5	57
99	Growing three-dimensional biomorphic graphene powders using naturally abundant diatomite templates towards high solution processability. <i>Nature Communications</i> , 2016 , 7, 13440	17.4	71
98	Chemically Engineered Substrates for Patternable Growth of Two-Dimensional Chalcogenide Crystals. <i>ACS Nano</i> , 2016 , 10, 10317-10323	16.7	14
97	Selectively enhanced photocurrent generation in twisted bilayer graphene with van Hove singularity. <i>Nature Communications</i> , 2016 , 7, 10699	17.4	88
96	Rapid Growth of Large Single-Crystalline Graphene via Second Passivation and Multistage Carbon Supply. <i>Advanced Materials</i> , 2016 , 28, 4671-7	24	52
95	A transparent, conducting tape for flexible electronics. <i>Nano Research</i> , 2016 , 9, 917-924	10	31
94	Surface Engineering of Copper Foils for Growing Centimeter-Sized Single-Crystalline Graphene. <i>ACS Nano</i> , 2016 , 10, 2922-9	16.7	78
93	Low-Temperature Growth of Two-Dimensional Layered Chalcogenide Crystals on Liquid. <i>Nano Letters</i> , 2016 , 16, 2103-7	11.5	39
92	Large-area chemical vapor deposition-grown monolayer graphene-wrapped silver nanowires for broad-spectrum and robust antimicrobial coating. <i>Nano Research</i> , 2016 , 9, 963-973	10	44
91	Weak antilocalization and electron-electron interaction in coupled multiple-channel transport in a Bi ₂ Se ₃ thin film. <i>Nanoscale</i> , 2016 , 8, 1879-85	7.7	40
90	Probe of local impurity states by bend resistance measurements in graphene cross junctions. <i>Nanotechnology</i> , 2016 , 27, 245204	3.4	2

89	Edge-States-Induced Disruption to the Energy Band Alignment at Thickness-Modulated Molybdenum Sulfide Junctions. <i>Advanced Electronic Materials</i> , 2016 , 2, 1600048	6.4	14
88	Tuning Chemical Potential Difference across Alternately Doped Graphene p-n Junctions for High-Efficiency Photodetection. <i>Nano Letters</i> , 2016 , 16, 4094-101	11.5	26
87	Two-Dimensional (CHNH)PbBr Perovskite Crystals for High-Performance Photodetector. <i>Journal of the American Chemical Society</i> , 2016 , 138, 16612-16615	16.4	273
86	Building Large-Domain Twisted Bilayer Graphene with van Hove Singularity. <i>ACS Nano</i> , 2016 , 10, 6725-306.7	6.7	40
85	Raman spectroscopic characterization of stacking configuration and interlayer coupling of twisted multilayer graphene grown by chemical vapor deposition. <i>Carbon</i> , 2016 , 110, 225-231	10.4	24
84	Ultrafast growth of single-crystal graphene assisted by a continuous oxygen supply. <i>Nature Nanotechnology</i> , 2016 , 11, 930-935	28.7	277
83	Controlled synthesis of single-crystal SnSe nanoplates. <i>Nano Research</i> , 2015 , 8, 288-295	10	170
82	Direct growth of large-area graphene and boron nitride heterostructures by a co-segregation method. <i>Nature Communications</i> , 2015 , 6, 6519	17.4	173
81	A Roadmap for Controlled Production of Topological Insulator Nanostructures and Thin Films. <i>Small</i> , 2015 , 11, 3290-305	11	36
80	Comparison of Nanocarbon-Silicon Solar Cells with Nanotube-Si or Graphene-Si Contact. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 17088-94	9.5	16
79	van Hove Singularity Enhanced Photochemical Reactivity of Twisted Bilayer Graphene. <i>Nano Letters</i> , 2015 , 15, 5585-9	11.5	41
78	Strong Second-Harmonic Generation in Atomic Layered GaSe. <i>Journal of the American Chemical Society</i> , 2015 , 137, 7994-7	16.4	206
77	Patterning two-dimensional chalcogenide crystals of Bi ₂ Se ₃ and In ₂ Se ₃ and efficient photodetectors. <i>Nature Communications</i> , 2015 , 6, 6972	17.4	133
76	Monodisperse Copper Chalcogenide Nanocrystals: Controllable Synthesis and the Pinning of Plasmonic Resonance Absorption. <i>Journal of the American Chemical Society</i> , 2015 , 137, 12006-12	16.4	52
75	Thickness-Dependent Dielectric Constant of Few-Layer InBeN Nanoflakes. <i>Nano Letters</i> , 2015 , 15, 8136-40	11.5	67
74	2D Hybrid Nanostructured Dirac Materials for Broadband Transparent Electrodes. <i>Advanced Materials</i> , 2015 , 27, 4315-21	24	8
73	Roll-to-Roll Green Transfer of CVD Graphene onto Plastic for a Transparent and Flexible Triboelectric Nanogenerator. <i>Advanced Materials</i> , 2015 , 27, 5210-6	24	215
72	Roll-to-Roll Encapsulation of Metal Nanowires between Graphene and Plastic Substrate for High-Performance Flexible Transparent Electrodes. <i>Nano Letters</i> , 2015 , 15, 4206-13	11.5	357

71	Building graphene p-n junctions for next-generation photodetection. <i>Nano Today</i> , 2015 , 10, 701-716	17.9	37
70	Two-Dimensional Materials Beyond Graphene: an Emerging Field with Blooming Progress. <i>Acta Chimica Sinica</i> , 2015 , 73, 861	3.3	2
69	Controllable co-segregation synthesis of wafer-scale hexagonal boron nitride thin films. <i>Advanced Materials</i> , 2014 , 26, 1776-81	24	73
68	Epitaxy and photoresponse of two-dimensional GaSe crystals on flexible transparent mica sheets. <i>ACS Nano</i> , 2014 , 8, 1485-90	16.7	245
67	Creating one-dimensional nanoscale periodic ripples in a continuous mosaic graphene monolayer. <i>Physical Review Letters</i> , 2014 , 113, 086102	7.4	97
66	Epitaxial growth of asymmetrically-doped bilayer graphene for photocurrent generation. <i>Small</i> , 2014 , 10, 2245-50	11	4
65	Chemistry makes graphene beyond graphene. <i>Journal of the American Chemical Society</i> , 2014 , 136, 12194-200	16.4	184
64	Novel graphene oxide semiconductor nanowire phototransistors. <i>Journal of Materials Chemistry C</i> , 2014 , 2, 1592	7.1	18
63	Interlayer vibrational modes in few-quintuple-layer Bi ₂ Te ₃ and Bi ₂ Se ₃ two-dimensional crystals: Raman spectroscopy and first-principles studies. <i>Physical Review B</i> , 2014 , 90,	3.3	68
62	Trifluoromethylation of graphene. <i>APL Materials</i> , 2014 , 2, 092505	5.7	2
61	Photochemical Modification of Graphene. <i>Acta Chimica Sinica</i> , 2014 , 72, 289	3.3	4
60	Plasmon-enhanced photothermoelectric conversion in chemical vapor deposited graphene p-n junctions. <i>Journal of the American Chemical Society</i> , 2013 , 135, 10926-9	16.4	52
59	Designed CVD growth of graphene via process engineering. <i>Accounts of Chemical Research</i> , 2013 , 46, 2263-74	24.3	152
58	The edge- and basal-plane-specific electrochemistry of a single-layer graphene sheet. <i>Scientific Reports</i> , 2013 , 3, 2248	4.9	367
57	Clean and efficient transfer of CVD-grown graphene by electrochemical etching of metal substrate. <i>Journal of Electroanalytical Chemistry</i> , 2013 , 688, 243-248	4.1	28
56	Controlled growth of atomically thin In ₂ Se ₃ flakes by van der Waals epitaxy. <i>Journal of the American Chemical Society</i> , 2013 , 135, 13274-7	16.4	156
55	CuInSe ₂ nanowires from facile chemical transformation of In ₂ Se ₃ and their integration in single-nanowire devices. <i>ACS Nano</i> , 2013 , 7, 3205-11	16.7	19
54	Photo-induced free radical modification of graphene. <i>Small</i> , 2013 , 9, 1134-43	11	24

53	Photoinduced methylation of graphene. <i>Small</i> , 2013 , 9, 1348-52	11	27
52	Janus graphene from asymmetric two-dimensional chemistry. <i>Nature Communications</i> , 2013 , 4, 1443	17.4	196
51	Free radical reactions in two dimensions: a case study on photochlorination of graphene. <i>Small</i> , 2013 , 9, 1388-96	11	15
50	Self-powered flexible and transparent photovoltaic detectors based on CdSe nanobelt/graphene Schottky junctions. <i>Nanoscale</i> , 2013 , 5, 5576-81	7.7	75
49	Synthesis of boron-doped graphene monolayers using the sole solid feedstock by chemical vapor deposition. <i>Small</i> , 2013 , 9, 1316-20	11	157
48	Observing electronic structures on ex-situ grown topological insulator thin films. <i>Physica Status Solidi - Rapid Research Letters</i> , 2013 , 7, 130-132	2.5	10
47	Selective-area van der Waals epitaxy of topological insulator grid nanostructures for broadband transparent flexible electrodes. <i>Advanced Materials</i> , 2013 , 25, 5959-64	24	35
46	Modulation-doped growth of mosaic graphene with single-crystalline p-n junctions for efficient photocurrent generation. <i>Nature Communications</i> , 2012 , 3, 1280	17.4	87
45	Topological insulator nanostructures for near-infrared transparent flexible electrodes. <i>Nature Chemistry</i> , 2012 , 4, 281-6	17.6	270
44	Controlled synthesis of topological insulator nanoplate arrays on mica. <i>Journal of the American Chemical Society</i> , 2012 , 134, 6132-5	16.4	152
43	Topological insulator nanostructures: Materials synthesis, Raman spectroscopy, and transport properties. <i>Frontiers of Physics</i> , 2012 , 7, 208-217	3.7	17
42	Defect-like structures of graphene on copper foils for strain relief investigated by high-resolution scanning tunneling microscopy. <i>ACS Nano</i> , 2011 , 5, 4014-22	16.7	165
41	Photochemical chlorination of graphene. <i>ACS Nano</i> , 2011 , 5, 5957-61	16.7	284
40	Toward clean and crackless transfer of graphene. <i>ACS Nano</i> , 2011 , 5, 9144-53	16.7	588
39	Rapid surface oxidation as a source of surface degradation factor for Bi ₂ Se ₃ . <i>ACS Nano</i> , 2011 , 5, 4698-703	16.7	279
38	Formation of bilayer bernal graphene: layer-by-layer epitaxy via chemical vapor deposition. <i>Nano Letters</i> , 2011 , 11, 1106-10	11.5	320
37	Aharonov-Bohm interference in topological insulator nanoribbons. <i>Nature Materials</i> , 2010 , 9, 225-9	27	660
36	Magnetic doping and kondo effect in bi(2)se(3) nanoribbons. <i>Nano Letters</i> , 2010 , 10, 1076-81	11.5	109

35	Few-layer nanoplates of Bi ₂ Se ₃ and Bi ₂ Te ₃ with highly tunable chemical potential. <i>Nano Letters</i> , 2010 , 10, 2245-50	11.5	370
34	Topological insulator nanowires and nanoribbons. <i>Nano Letters</i> , 2010 , 10, 329-33	11.5	263
33	Epitaxial heterostructures of ultrathin topological insulator nanoplate and graphene. <i>Nano Letters</i> , 2010 , 10, 2870-6	11.5	195
32	Organic charge-transfer complexes for STM-based thermochemical-hole-burning memory. <i>Coordination Chemistry Reviews</i> , 2010 , 254, 1151-1168	23.2	12
31	Vacancy ordering and lithium insertion in III ₂ VI ₃ nanowires. <i>Nano Research</i> , 2009 , 2, 327-335	10	24
30	Three-dimensional interconnected silica nanotubes templated from hyperbranched nanowires. <i>Small</i> , 2009 , 5, 437-9	11	14
29	Nanoscale Electronic Inhomogeneity in In ₂ Se ₃ Nanoribbons Revealed by Microwave Impedance Microscopy. <i>Nano Letters</i> , 2009 , 9, 1265-9	11.5	82
28	Crystalline-amorphous core-shell silicon nanowires for high capacity and high current battery electrodes. <i>Nano Letters</i> , 2009 , 9, 491-5	11.5	1036
27	Shape Evolution of Layer-Structured Bismuth Oxychloride Nanostructures via Low-Temperature Chemical Vapor Transport. <i>Chemistry of Materials</i> , 2009 , 21, 247-252	9.6	136
26	Phase transformations in one-dimensional materials: applications in electronics and energy sciences. <i>Journal of Materials Chemistry</i> , 2009 , 19, 5879		9
25	Anisotropy of chemical transformation from In ₂ Se ₃ to CuInSe ₂ nanowires through solid state reaction. <i>Journal of the American Chemical Society</i> , 2009 , 131, 7973-5	16.4	48
24	Single nanorod devices for battery diagnostics: a case study on LiMn ₂ O ₄ . <i>Nano Letters</i> , 2009 , 9, 4109-14	11.5	108
23	High-performance lithium battery anodes using silicon nanowires. <i>Nature Nanotechnology</i> , 2008 , 3, 31-5	28.7	5216
22	Formation of chiral branched nanowires by the Eshelby Twist. <i>Nature Nanotechnology</i> , 2008 , 3, 477-81	28.7	198
21	Large anisotropy of electrical properties in layer-structured In ₂ Se ₃ nanowires. <i>Nano Letters</i> , 2008 , 8, 1511-6	11.5	96
20	Spinel LiMn ₂ O ₄ nanorods as lithium ion battery cathodes. <i>Nano Letters</i> , 2008 , 8, 3948-52	11.5	518
19	Structure, Physical Properties and Phase Transition of a Quasi-One-Dimensional Organic Semiconductor DBA(TCNQ) ₂ . <i>Journal of Physical Chemistry C</i> , 2008 , 112, 11001-11006	3.8	15
18	Thermochemical Hole Burning on TEA(TCNQ) ₂ Single Crystal at Varied Temperatures in UHV System. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 2004-2007	3.8	4

17	Thermochemical hole burning performance of TCNQ-based charge transfer complexes with different electrical conductivities. <i>Nanotechnology</i> , 2008 , 19, 235303	3.4	1
16	Anisotropic Thermochemical Hole Burning Phenomenon on TTF/TCNQ Single Crystal. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 631-635	3.8	12
15	Ordered Vacancy Compounds and Nanotube Formation in CuInSe ₂ /CdS Core/Shell Nanowires. <i>Nano Letters</i> , 2007 , 7, 3734-3738	11.5	73
14	Fast, completely reversible li insertion in vanadium pentoxide nanoribbons. <i>Nano Letters</i> , 2007 , 7, 490-5	11.5	359
13	Morphology control of layer-structured gallium selenide nanowires. <i>Nano Letters</i> , 2007 , 7, 199-203	11.5	71
12	Synthesis and phase transformation of In ₂ Se ₃ and CuInSe ₂ nanowires. <i>Journal of the American Chemical Society</i> , 2007 , 129, 34-5	16.4	151
11	Phase-Change Nanowires for Non Volatile Memory. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 997, 1		
10	Hyperbranched lead selenide nanowire networks. <i>Nano Letters</i> , 2007 , 7, 1095-9	11.5	121
9	Synthesis and characterization of phase-change nanowires. <i>Nano Letters</i> , 2006 , 6, 1514-7	11.5	127
8	Thermochemical hole burning on a series of N-substituted morpholinium 7,7,8,8-tetracyanoquinodimethane charge-transfer complexes for data storage. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 22486-90	3.4	21
7	Thermochemical hole burning on a triethylammonium bis-7,7,8,8-tetracyanoquinodimethane charge-transfer complex using single-walled carbon nanotube scanning tunneling microscopy tips. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 3526-30	3.4	22
6	Scanning tunneling microscope-based thermochemical hole burning on a series of charge transfer complexes. <i>Applied Physics Letters</i> , 2005 , 86, 133105	3.4	9
5	Thermochemical Hole Burning on DPA(TCNQ) ₂ and MEM(TCNQ) ₂ Charge Transfer Complexes Using a Scanning Tunneling Microscope. <i>Journal of Physical Chemistry B</i> , 2004 , 108, 14800-14803	3.4	10
4	The role of Cu crystallographic orientations towards growing superclean graphene on meter-sized scale. <i>Nano Research</i> , 1	10	0
3	Single particle cryo-EM reconstruction of 52 kDa streptavidin at 3.2 Angstrom resolution		3
2	Toward batch synthesis of high-quality graphene by cold-wall chemical vapor deposition approach. <i>Nano Research</i> , 1	10	0
1	Graphene Membranes for Multi-Dimensional Electron Microscopy Imaging: Preparation, Application and Prospect. <i>Advanced Functional Materials</i> , 2202502	15.6	2