

Kai-Hui Liu

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235
papers

8,721
citations

51
h-index

88
g-index

257
ext. papers

10,847
ext. citations

12.8
avg, IF

6.05
L-index

#	Paper	IF	Citations
235	Evolution of interlayer coupling in twisted molybdenum disulfide bilayers. <i>Nature Communications</i> , 2014 , 5, 4966	17.4	410
234	Ultrafast epitaxial growth of metre-sized single-crystal graphene on industrial Cu foil. <i>Science Bulletin</i> , 2017 , 62, 1074-1080	10.6	326
233	Ultrafast growth of single-crystal graphene assisted by a continuous oxygen supply. <i>Nature Nanotechnology</i> , 2016 , 11, 930-935	28.7	277
232	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
231	Wafer-Scale Growth and Transfer of Highly-Oriented Monolayer MoS Continuous Films. <i>ACS Nano</i> , 2017 , 11, 12001-12007	16.7	264
230	Quantification of light-enhanced ionic transport in lead iodide perovskite thin films and its solar cell applications. <i>Light: Science and Applications</i> , 2017 , 6, e16243	16.7	257
229	Epitaxial growth of a 100-square-centimetre single-crystal hexagonal boron nitride monolayer on copper. <i>Nature</i> , 2019 , 570, 91-95	50.4	247
228	Optical Anisotropy of Black Phosphorus in the Visible Regime. <i>Journal of the American Chemical Society</i> , 2016 , 138, 300-5	16.4	217
227	Strong Second-Harmonic Generation in Atomic Layered GaSe. <i>Journal of the American Chemical Society</i> , 2015 , 137, 7994-7	16.4	206
226	Light-Independent Ionic Transport in Inorganic Perovskite and Ultrastable Cs-Based Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 4122-4128	6.4	186
225	Far-field nanoscale infrared spectroscopy of vibrational fingerprints of molecules with graphene plasmons. <i>Nature Communications</i> , 2016 , 7, 12334	17.4	174
224	Observation of Strong Interlayer Coupling in MoS ₂ /WS ₂ Heterostructures. <i>Advanced Materials</i> , 2016 , 28, 1950-6	24	172
223	An atlas of carbon nanotube optical transitions. <i>Nature Nanotechnology</i> , 2012 , 7, 325-9	28.7	154
222	High-Mobility Multilayered MoS Flakes with Low Contact Resistance Grown by Chemical Vapor Deposition. <i>Advanced Materials</i> , 2017 , 29, 1604540	24	153
221	Direct synthesis of B-C-N single-walled nanotubes by bias-assisted hot filament chemical vapor deposition. <i>Journal of the American Chemical Society</i> , 2006 , 128, 6530-1	16.4	150
220	Superlubricity between MoS Monolayers. <i>Advanced Materials</i> , 2017 , 29, 1701474	24	138
219	Atomic-Scale Probing of the Dynamics of Sodium Transport and Intercalation-Induced Phase Transformations in MoS ₂ . <i>ACS Nano</i> , 2015 , 9, 11296-301	16.7	136

218	Three-dimensional spirals of atomic layered MoS ₂ . <i>Nano Letters</i> , 2014 , 14, 6418-23	11.5	136
217	Ultrafast and highly sensitive infrared photodetectors based on two-dimensional oxyselenide crystals. <i>Nature Communications</i> , 2018 , 9, 3311	17.4	135
216	Gate-tunable third-order nonlinear optical response of massless Dirac fermions in graphene. <i>Nature Photonics</i> , 2018 , 12, 430-436	33.9	129
215	Sub-10 nm Nanopattern Architecture for 2D Material Field-Effect Transistors. <i>Nano Letters</i> , 2017 , 17, 1065-1070	11.5	126
214	Atomic scale insights into structure instability and decomposition pathway of methylammonium lead iodide perovskite. <i>Nature Communications</i> , 2018 , 9, 4807	17.4	113
213	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
212	Converting Metallic Single-Walled Carbon Nanotubes into Semiconductors by Boron/Nitrogen Co-Doping. <i>Advanced Materials</i> , 2008 , 20, 3615-3619	24	95
211	Interfacial engineering in graphene bandgap. <i>Chemical Society Reviews</i> , 2018 , 47, 3059-3099	58.5	94
210	Correlations between Immobilizing Ions and Suppressing Hysteresis in Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2016 , 1, 266-272	20.1	93
209	Simulations of Quantum Transport in Sub-5-nm Monolayer Phosphorene Transistors. <i>Physical Review Applied</i> , 2018 , 10,	4.3	90
208	Robust Stacking-Independent Ultrafast Charge Transfer in MoS ₂ /WS ₂ Bilayers. <i>ACS Nano</i> , 2017 , 11, 12020-12026	16.9	89
207	In situ TEM studies of oxygen vacancy migration for electrically induced resistance change effect in cerium oxides. <i>Micron</i> , 2010 , 41, 301-5	2.3	87
206	Greatly Enhanced Anticorrosion of Cu by Commensurate Graphene Coating. <i>Advanced Materials</i> , 2018 , 30, 1702944	24	85
205	Moiré Phonons in Twisted Bilayer MoS ₂ . <i>ACS Nano</i> , 2018 , 12, 8770-8780	16.7	85
204	Multiwall boron carbonitride/carbon nanotube junction and its rectification behavior. <i>Journal of the American Chemical Society</i> , 2007 , 129, 9562-3	16.4	83
203	High-throughput optical imaging and spectroscopy of individual carbon nanotubes in devices. <i>Nature Nanotechnology</i> , 2013 , 8, 917-22	28.7	80
202	Monitoring Local Strain Vector in Atomic-Layered MoSe ₂ by Second-Harmonic Generation. <i>Nano Letters</i> , 2017 , 17, 7539-7543	11.5	80
201	Photoconducting response on bending of individual ZnO nanowires. <i>Journal of Materials Chemistry</i> , 2009 , 19, 1002-1005		75

200	Possible absence of critical thickness and size effect in ultrathin perovskite ferroelectric films. <i>Nature Communications</i> , 2017 , 8, 15549	17.4	74
199	Chirality-dependent transport properties of double-walled nanotubes measured in situ on their field-effect transistors. <i>Journal of the American Chemical Society</i> , 2009 , 131, 62-3	16.4	72
198	Graphene photonic crystal fibre with strong and tunable light-matter interaction. <i>Nature Photonics</i> , 2019 , 13, 754-759	33.9	69
197	Seeded growth of large single-crystal copper foils with high-index facets. <i>Nature</i> , 2020 , 581, 406-410	50.4	68
196	Engineering active edge sites of fractal-shaped single-layer MoS ₂ catalysts for high-efficiency hydrogen evolution. <i>Nano Energy</i> , 2018 , 51, 786-792	17.1	64
195	Photoelectric conversion on Earth's surface via widespread Fe- and Mn-mineral coatings. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 9741-9746	11.5	62
194	Interlayer-State-Coupling Dependent Ultrafast Charge Transfer in MoS/WS Bilayers. <i>Advanced Science</i> , 2017 , 4, 1700086	13.6	61
193	Kinetic modulation of graphene growth by fluorine through spatially confined decomposition of metal fluorides. <i>Nature Chemistry</i> , 2019 , 11, 730-736	17.6	61
192	In situ atomic-scale observation of reversible sodium ions migration in layered metal dichalcogenide SnS ₂ nanostructures. <i>Nano Energy</i> , 2017 , 32, 302-309	17.1	60
191	Systematic determination of absolute absorption cross-section of individual carbon nanotubes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 7564-9	11.5	59
190	Growth of high-density-aligned and semiconducting-enriched single-walled carbon nanotubes: decoupling the conflict between density and selectivity. <i>ACS Nano</i> , 2014 , 8, 554-62	16.7	58
189	Single-Crystal Atomic-Layered Molybdenum Disulfide Nanobelts with High Surface Activity. <i>ACS Nano</i> , 2015 , 9, 6478-83	16.7	57
188	Precise control of the interlayer twist angle in large scale MoS homostructures. <i>Nature Communications</i> , 2020 , 11, 2153	17.4	55
187	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
186	Quantum-coupled radial-breathing oscillations in double-walled carbon nanotubes. <i>Nature Communications</i> , 2013 , 4, 1375	17.4	52
185	Designed Growth of Large-Size 2D Single Crystals. <i>Advanced Materials</i> , 2020 , 32, e2000046	24	51
184	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
183	Controllable Growth of Aligned Monocrystalline CsPbBr ₃ Microwire Arrays for Piezoelectric-Induced Dynamic Modulation of Single-Mode Lasing. <i>Advanced Materials</i> , 2019 , 31, e1900647	24	50

182	Van der Waals-coupled electronic states in incommensurate double-walled carbon nanotubes. <i>Nature Physics</i> , 2014 , 10, 737-742	16.2	50
181	Band Structure Engineering of Interfacial Semiconductors Based on Atomically Thin Lead Iodide Crystals. <i>Advanced Materials</i> , 2019 , 31, e1806562	24	49
180	In situ probing mechanical properties of individual tungsten oxide nanowires directly grown on tungsten tips inside transmission electron microscope. <i>Applied Physics Letters</i> , 2006 , 89, 221908	3.4	49
179	High-Resolution Tracking Asymmetric Lithium Insertion and Extraction and Local Structure Ordering in SnS ₂ . <i>Nano Letters</i> , 2016 , 16, 5582-8	11.5	48
178	Reversible Healing Effect of Water Molecules on Fully Crystallized Metal Halide Perovskite Film. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 4759-4765	3.8	45
177	Green Synthesis of Porous Cocoon-like rGO for Enhanced Microwave-Absorbing Performances. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 42865-42874	9.5	42
176	In situ probing electrical response on bending of ZnO nanowires inside transmission electron microscope. <i>Applied Physics Letters</i> , 2008 , 92, 213105	3.4	41
175	New Pathway for Hot Electron Relaxation in Two-Dimensional Heterostructures. <i>Nano Letters</i> , 2018 , 18, 6057-6063	11.5	37
174	Importance of diameter control on selective synthesis of semiconducting single-walled carbon nanotubes. <i>ACS Nano</i> , 2014 , 8, 8564-72	16.7	37
173	Optical fibres with embedded two-dimensional materials for ultrahigh nonlinearity. <i>Nature Nanotechnology</i> , 2020 , 15, 987-991	28.7	37
172	Doping-Induced Second-Harmonic Generation in Centrosymmetric Graphene from Quadrupole Response. <i>Physical Review Letters</i> , 2019 , 122, 047401	7.4	35
171	Tuning the photo-response in monolayer MoS ₂ by plasmonic nano-antenna. <i>Scientific Reports</i> , 2016 , 6, 23626	4.9	35
170	BN-Enabled Epitaxy of Pb(1-x)Sn(x)Se Nanoplates on SiO ₂ /Si for High-Performance Mid-Infrared Detection. <i>Small</i> , 2015 , 11, 5388-94	11	34
169	Direct observation of highly confined phonon polaritons in suspended monolayer hexagonal boron nitride. <i>Nature Materials</i> , 2021 , 20, 43-48	27	34
168	Epitaxy of Single-Crystalline GaN Film on CMOS-Compatible Si(100) Substrate Buffered by Graphene. <i>Advanced Functional Materials</i> , 2019 , 29, 1905056	15.6	33
167	Sensitive and Robust Ultraviolet Photodetector Array Based on Self-Assembled Graphene/C Hybrid Films. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 38326-38333	9.5	33
166	The Way towards Ultrafast Growth of Single-Crystal Graphene on Copper. <i>Advanced Science</i> , 2017 , 4, 1700087	13.6	32
165	Intrinsic radial breathing oscillation in suspended single-walled carbon nanotubes. <i>Physical Review B</i> , 2011 , 83,	3.3	32

164	Ultrafast nonlinear photoresponse of single-wall carbon nanotubes: a broadband degenerate investigation. <i>Nanoscale</i> , 2016 , 8, 9304-9	7.7	32
163	Dual-coupling-guided epitaxial growth of wafer-scale single-crystal WS monolayer on vicinal a-plane sapphire. <i>Nature Nanotechnology</i> , 2021 ,	28.7	31
162	Elastic Properties and Fracture Behaviors of Biaxially Deformed, Polymorphic MoTe. <i>Nano Letters</i> , 2019 , 19, 761-769	11.5	31
161	Nanoassembly Growth Model for Subdomain and Grain Boundary Formation in 1T' Layered ReS ₂ . <i>Advanced Functional Materials</i> , 2019 , 29, 1906385	15.6	30
160	Unique Transformation from Graphene to Carbide on Re(0001) Induced by Strong Carbon-Metal Interaction. <i>Journal of the American Chemical Society</i> , 2017 , 139, 17574-17581	16.4	29
159	Controllable Growth of (n, n) Family of Semiconducting Carbon Nanotubes. <i>CheM</i> , 2019 , 5, 1182-1193	16.2	27
158	Product-Specific Active Site Motifs of Cu for Electrochemical CO ₂ Reduction. <i>CheM</i> , 2021 , 7, 406-420	16.2	27
157	SWCNT-MoS ₂ -SWCNT Vertical Point Heterostructures. <i>Advanced Materials</i> , 2017 , 29, 1604469	24	26
156	Carbon Nanotubes as an Ultrafast Emitter with a Narrow Energy Spread at Optical Frequency. <i>Advanced Materials</i> , 2017 , 29, 1701580	24	25
155	Probing the crystallographic orientation of two-dimensional atomic crystals with supramolecular self-assembly. <i>Nature Communications</i> , 2017 , 8, 377	17.4	25
154	The Coalescence Behavior of Two-Dimensional Materials Revealed by Multiscale Imaging during Chemical Vapor Deposition Growth. <i>ACS Nano</i> , 2020 , 14, 1902-1918	16.7	24
153	Efficient All-Optical Plasmonic Modulators with Atomically Thin Van Der Waals Heterostructures. <i>Advanced Materials</i> , 2020 , 32, e1907105	24	24
152	Continuously Graded Quantum Dots: Synthesis, Applications in Quantum Dot Light-Emitting Diodes, and Perspectives. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 5967-5978	6.4	24
151	Atomic imaging of mechanically induced topological transition of ferroelectric vortices. <i>Nature Communications</i> , 2020 , 11, 1840	17.4	24
150	2D Materials: Superlubricity between MoS ₂ Monolayers (Adv. Mater. 27/2017). <i>Advanced Materials</i> , 2017 , 29,	24	23
149	Atomic-scale observations of electrical and mechanical manipulation of topological polar flux closure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 18954-18963	11.5	23
148	Subunit cell-level measurement of polarization in an individual polar vortex. <i>Science Advances</i> , 2019 , 5, eaav4355	14.3	23
147	Universal Imaging of Full Strain Tensor in 2D Crystals with Third-Harmonic Generation. <i>Advanced Materials</i> , 2019 , 31, e1808160	24	21

146	Graphene-Assisted Epitaxy of Nitrogen Lattice Polarity GaN Films on Non-Polar Sapphire Substrates for Green Light Emitting Diodes. <i>Advanced Functional Materials</i> , 2020 , 30, 2001283	15.6	21
145	Broadband nonlinear optical response of monolayer MoSe2 under ultrafast excitation. <i>Applied Physics Letters</i> , 2018 , 112, 031108	3.4	21
144	Ultrafast Broadband Charge Collection from Clean Graphene/CHNHPBI Interface. <i>Journal of the American Chemical Society</i> , 2018 , 140, 14952-14957	16.4	21
143	Tracking sodium migration in TiS using in situ TEM. <i>Nanoscale</i> , 2019 , 11, 7474-7480	7.7	20
142	Direct determination of atomic structure of large-indexed carbon nanotubes by electron diffraction: application to double-walled nanotubes. <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 125412 ³		20
141	Massive Growth of Graphene Quartz Fiber as a Multifunctional Electrode. <i>ACS Nano</i> , 2020 , 14, 5938-5945	16.7	20
140	Characteristics of desert varnish from nanometer to micrometer scale: A photo-oxidation model on its formation. <i>Chemical Geology</i> , 2019 , 522, 55-70	4.2	19
139	Ultrafast Catalyst-Free Graphene Growth on Glass Assisted by Local Fluorine Supply. <i>ACS Nano</i> , 2019 , 13, 10272-10278	16.7	19
138	Broad-Spectral-Range Sustainability and Controllable Excitation of Hyperbolic Phonon Polaritons in hMoO. <i>Advanced Materials</i> , 2020 , 32, e2002014	24	19
137	Interfacial Engineering of Van der Waals Coupled 2D Layered Materials. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1601054	4.6	18
136	Surface-Facet-Dependent Phonon Deformation Potential in Individual Strained Topological Insulator Bi2Se3 Nanoribbons. <i>ACS Nano</i> , 2015 , 9, 10244-51	16.7	18
135	High Conversion Efficiency Carbon Nanotube-Based Barrier-Free Bipolar-Diode Photodetector. <i>ACS Nano</i> , 2016 , 10, 9595-9601	16.7	18
134	Chemical Intercalation of Topological Insulator Grid Nanostructures for High-Performance Transparent Electrodes. <i>Advanced Materials</i> , 2017 , 29, 1703424	24	17
133	Superstable copper nanowire network electrodes by single-crystal graphene covering and their applications in flexible nanogenerator and light-emitting diode. <i>Nano Energy</i> , 2020 , 71, 104638	17.1	17
132	High-Performance Photoinduced Memory with Ultrafast Charge Transfer Based on MoS /SWCNTs Network Van Der Waals Heterostructure. <i>Small</i> , 2019 , 15, e1804661	11	17
131	Photovoltaic Effect and Evidence of Carrier Multiplication in Graphene Vertical Homo Junctions with Asymmetrical Metal Contacts. <i>ACS Nano</i> , 2015 , 9, 8851-8	16.7	15
130	Selective growth of chirality-enriched semiconducting carbon nanotubes by using bimetallic catalysts from salt precursors. <i>Nanoscale</i> , 2018 , 10, 6922-6927	7.7	15
129	Sub-10 nm stable graphene quantum dots embedded in hexagonal boron nitride. <i>Nanoscale</i> , 2019 , 11, 4226-4230	7.7	15

128	2D Polarized Materials: Ferromagnetic, Ferrovalley, Ferroelectric Materials, and Related Heterostructures. <i>Advanced Materials</i> , 2021 , 33, e2004469	24	15
127	Emerging properties of two-dimensional twisted bilayer materials. <i>Chinese Physics B</i> , 2019 , 28, 107304	1.2	14
126	Visualizing grain boundaries in monolayer MoSe ₂ using mild H ₂ O vapor etching. <i>Nano Research</i> , 2018 , 11, 4082-4089	10	14
125	Eukaryotic microbial communities in hypersaline soils and sediments from the alkaline hypersaline Huama Lake as revealed by 454 pyrosequencing. <i>Antonie Van Leeuwenhoek</i> , 2014 , 105, 871-80	2.1	14
124	Ultrafast Optical Modulation of Harmonic Generation in Two-Dimensional Materials. <i>Nano Letters</i> , 2020 , 20, 8053-8058	11.5	14
123	Creating polar antivortex in PbTiO ₃ /SrTiO ₃ superlattice. <i>Nature Communications</i> , 2021 , 12, 2054	17.4	14
122	Polarized Water Driven Dynamic PN Junction-Based Direct-Current Generator. <i>Research</i> , 2021 , 2021, 7505638	7.8	14
121	Gate Switching of Ultrafast Photoluminescence in Graphene. <i>Nano Letters</i> , 2018 , 18, 7985-7990	11.5	14
120	Real-Time Observation of Carbon Nanotube Etching Process Using Polarized Optical Microscope. <i>Advanced Materials</i> , 2017 , 29, 1701959	24	13
119	Measurement of complex optical susceptibility for individual carbon nanotubes by elliptically polarized light excitation. <i>Nature Communications</i> , 2018 , 9, 3387	17.4	13
118	Higher-order harmonic resonances and mechanical properties of individual cadmium sulphide nanowires measured by in situ transmission electron microscopy. <i>Journal of Electron Microscopy</i> , 2010 , 59, 285-9		13
117	Giant enhancement of optical nonlinearity in two-dimensional materials by multiphoton-excitation resonance energy transfer from quantum dots. <i>Nature Photonics</i> ,	33.9	13
116	Reconstruction of structured laser beams through a multimode fiber based on digital optical phase conjugation. <i>Optics Letters</i> , 2018 , 43, 3333-3336	3	12
115	Identification of Copper Surface Index by Optical Contrast. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800377	17.6	12
114	Quiver-quenched optical-field-emission from carbon nanotubes. <i>Applied Physics Letters</i> , 2017 , 111, 133101	10.4	11
113	Ultralong aligned single-walled carbon nanotubes on flexible fluorophlogopite mica for strain sensors. <i>Nano Research</i> , 2012 , 5, 443-449	10	11
112	Single-mode lasing of CsPbBr ₃ perovskite NWs enabled by the Vernier effect. <i>Nanoscale</i> , 2021 , 13, 4432-4438	11.7	11
111	Negative friction coefficient in microscale graphite/mica layered heterojunctions. <i>Science Advances</i> , 2020 , 6, eaaz6787	14.3	10

110	Strong-coupled hybrid structure of carbon nanotube and MoS monolayer with ultrafast interfacial charge transfer. <i>Nanoscale</i> , 2019 , 11, 17195-17200	7.7	10
109	The Impacts of Adhesion on the Wear Property of Graphene. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1900721	4.21	10
108	Pushing the conductance and transparency limit of monolayer graphene electrodes for flexible organic light-emitting diodes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 25991-25998	11.5	10
107	Ultralow-frequency Raman system down to 10 cm ⁻¹ with longpass edge filters and its application to the interface coupling in t(2+2)LGs. <i>Review of Scientific Instruments</i> , 2016 , 87, 053122	1.7	10
106	A simple method to tune graphene growth between monolayer and bilayer. <i>AIP Advances</i> , 2016 , 6, 025026	2.6	10
105	Atomic-scale imaging of CHNHPbI structure and its decomposition pathway. <i>Nature Communications</i> , 2021 , 12, 5516	17.4	10
104	Multiple electronic Raman scatterings in a single metallic carbon nanotube. <i>Physical Review B</i> , 2016 , 93,	3.3	9
103	Rotational scanning and multiple-spot focusing through a multimode fiber based on digital optical phase conjugation. <i>Applied Physics Express</i> , 2018 , 11, 062501	2.4	9
102	Complete structural characterization of single carbon nanotubes by Rayleigh scattering circular dichroism. <i>Nature Nanotechnology</i> , 2021 , 16, 1073-1078	28.7	9
101	Direct observation of weakened interface clamping effect enabled ferroelastic domain switching. <i>Acta Materialia</i> , 2019 , 171, 184-189	8.4	8
100	Remote Lightning and Ultrafast Transition: Intrinsic Modulation of Exciton Spatiotemporal Dynamics in Monolayer MoS. <i>ACS Nano</i> , 2020 , 14, 6897-6905	16.7	8
99	Sandwiched graphene/hBN/graphene photonic crystal fibers with high electro-optical modulation depth and speed. <i>Nanoscale</i> , 2020 , 12, 14472-14478	7.7	8
98	Atomic origin of spin-valve magnetoresistance at the SrRuO grain boundary. <i>National Science Review</i> , 2020 , 7, 755-762	10.8	8
97	Extreme nonlinear strong-field photoemission from carbon nanotubes. <i>Nature Communications</i> , 2019 , 10, 4891	17.4	8
96	Cr-Doped Pd Metallene Endows a Practical Formaldehyde Sensor New Limit and High Selectivity. <i>Advanced Materials</i> , 2021 , e2105276	24	8
95	High-Throughput Determination of Statistical Structure Information for Horizontal Carbon Nanotube Arrays by Optical Imaging. <i>Advanced Materials</i> , 2016 , 28, 2018-23	24	8
94	Robust circular polarization of indirect Q-K transitions in bilayer 3RWS2. <i>Physical Review B</i> , 2019 , 100,	3.3	7
93	Giant Valley Coherence at Room Temperature in 3R WS with Broken Inversion Symmetry. <i>Research</i> , 2019 , 2019, 6494565	7.8	7

92	Enhanced Electrochemical Methanation of Carbon Dioxide at the Single-Layer Hexagonal Boron Nitride/Cu Interfacial Perimeter. <i>Nano Letters</i> , 2021 , 21, 4469-4476	11.5	7
91	Colors of Single-Wall Carbon Nanotubes. <i>Advanced Materials</i> , 2021 , 33, e2006395	24	7
90	Ultrafast and low-power optoelectronic infrared-to-visible upconversion devices. <i>Photonics Research</i> , 2019 , 7, 1161	6	6
89	Measuring phonon dispersion at an interface. <i>Nature</i> , 2021 , 599, 399-403	50.4	6
88	Polarizer-free polarimetric image sensor through anisotropic two-dimensional GeSe. <i>Science China Materials</i> , 2021 , 64, 1230-1237	7.1	6
87	Rich information on 2D materials revealed by optical second harmonic generation. <i>Nanoscale</i> , 2020 , 12, 22891-22903	7.7	6
86	Direct Current Electricity Generation from Dynamic Polarized Water Semiconductor Interface. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 14180-14187	3.8	6
85	Power- and Spectral-Dependent Photon-Recycling Effects in a Double-Junction Gallium Arsenide Photodiode. <i>ACS Photonics</i> , 2019 , 6, 59-65	6.3	6
84	Engineering Ultrafast Carrier Dynamics at the Graphene/GaAs Interface by Bulk Doping Level. <i>Advanced Optical Materials</i> , 2019 , 7, 1900580	8.1	5
83	Unveiling the Fine Structural Distortion of Atomically Thin Bi O Se by Third-Harmonic Generation. <i>Advanced Materials</i> , 2020 , 32, e2002831	24	5
82	Direct synthesis of self-aligned single-walled carbon nanotubes on paper. <i>Carbon</i> , 2012 , 50, 1179-1185	10.4	5
81	Augmenting photoluminescence of monolayer MoS ₂ using high order modes in a metal dimer-on-film nanocavity. <i>Photonics Research</i> , 2021 , 9, 501	6	5
80	Gate tunable Kondo effect in magnetic molecule decorated graphene. <i>Solid State Communications</i> , 2018 , 278, 24-30	1.6	5
79	Band evolution of two-dimensional transition metal dichalcogenides under electric fields. <i>Applied Physics Letters</i> , 2019 , 115, 083104	3.4	4
78	Low-temperature epitaxy of transferable high-quality Pd(111) films on hybrid graphene/Cu(111) substrate. <i>Nano Research</i> , 2019 , 12, 2712-2717	10	4
77	Large-scale aligned silicon carbonitride nanotube arrays: Synthesis, characterization, and field emission property. <i>Journal of Applied Physics</i> , 2007 , 101, 114306	2.5	4
76	Engineering of atomic-scale flexoelectricity at grain boundaries.. <i>Nature Communications</i> , 2022 , 13, 216	17.4	4
75	Bandgap opening in graphene. <i>Chinese Science Bulletin</i> , 2017 , 62, 2220-2232	2.9	4

74	Structured light beams created through a multimode fiber via virtual Fourier filtering based on digital optical phase conjugation. <i>Applied Optics</i> , 2020 , 59, 701-705	1.7	4
73	Patterning Graphene Films by HO-Based Magnetic-Assisted UV Photolysis. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 55382-55389	9.5	4
72	Engineering polar vortex from topologically trivial domain architecture. <i>Nature Communications</i> , 2021 , 12, 4620	17.4	4
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70	Structure-Property relations in individual carbon nanotubes [Invited]. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2016 , 33, C102	1.7	4
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