

Xuefeng Wang

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199
papers

9,986
citations

49
h-index

96
g-index

214
ext. papers

12,134
ext. citations

9.8
avg, IF

6.12
L-index

#	Paper	IF	Citations
199	Hopping transport through defect-induced localized states in molybdenum disulphide. <i>Nature Communications</i> , 2013 , 4, 2642	17.4	740
198	Facile synthesis of high-quality graphene nanoribbons. <i>Nature Nanotechnology</i> , 2010 , 5, 321-5	28.7	671
197	Towards intrinsic charge transport in monolayer molybdenum disulfide by defect and interface engineering. <i>Nature Communications</i> , 2014 , 5, 5290	17.4	448
196	Electrical characterization of back-gated bi-layer MoS ₂ field-effect transistors and the effect of ambient on their performances. <i>Applied Physics Letters</i> , 2012 , 100, 123104	3.4	420
195	Integrated digital inverters based on two-dimensional anisotropic ReS ₂ field-effect transistors. <i>Nature Communications</i> , 2015 , 6, 6991	17.4	417
194	Graphene and related two-dimensional materials: Structure-property relationships for electronics and optoelectronics. <i>Applied Physics Reviews</i> , 2017 , 4, 021306	17.3	368
193	High-Electron-Mobility and Air-Stable 2D Layered PtSe FETs. <i>Advanced Materials</i> , 2017 , 29, 1604230	24	368
192	A Self-Healable, Highly Stretchable, and Solution Processable Conductive Polymer Composite for Ultrasensitive Strain and Pressure Sensing. <i>Advanced Functional Materials</i> , 2018 , 28, 1705551	15.6	285
191	Two-dimensional quasi-freestanding molecular crystals for high-performance organic field-effect transistors. <i>Nature Communications</i> , 2014 , 5, 5162	17.4	270
190	A MoS ₂ /PTCDA Hybrid Heterojunction Synapse with Efficient Photoelectric Dual Modulation and Versatility. <i>Advanced Materials</i> , 2019 , 31, e1806227	24	203
189	Planar carbon nanotube-graphene hybrid films for high-performance broadband photodetectors. <i>Nature Communications</i> , 2015 , 6, 8589	17.4	197
188	Probing Carrier Transport and Structure-Property Relationship of Highly Ordered Organic Semiconductors at the Two-Dimensional Limit. <i>Physical Review Letters</i> , 2016 , 116, 016602	7.4	180
187	Analyzing the Carrier Mobility in Transition-Metal Dichalcogenide MoS ₂ Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2017 , 27, 1604093	15.6	178
186	High-Performance Monolayer WS ₂ Field-Effect Transistors on High-Dielectrics. <i>Advanced Materials</i> , 2015 , 27, 5230-4	24	177
185	Realization of Room-Temperature Phonon-Limited Carrier Transport in Monolayer MoS ₂ by Dielectric and Carrier Screening. <i>Advanced Materials</i> , 2016 , 28, 547-52	24	161
184	Bandgap engineering of two-dimensional semiconductor materials. <i>Npj 2D Materials and Applications</i> , 2020 , 4,	8.8	152
183	Nontrivial Berry phase and type-II Dirac transport in the layered material PdTe ₂ . <i>Physical Review B</i> , 2017 , 96,	3.3	135

182	Evidence of intrinsic ferromagnetism in individual dilute magnetic semiconducting nanostructures. <i>Nature Nanotechnology</i> , 2009 , 4, 523-7	28.7	131
181	Intrinsic magnetic topological insulator phases in the Sb doped MnBiTe bulks and thin flakes. <i>Nature Communications</i> , 2019 , 10, 4469	17.4	122
180	Ultrahigh mobility and efficient charge injection in monolayer organic thin-film transistors on boron nitride. <i>Science Advances</i> , 2017 , 3, e1701186	14.3	115
179	2D Single-Crystalline Molecular Semiconductors with Precise Layer Definition Achieved by Floating-Coffee-Ring-Driven Assembly. <i>Advanced Functional Materials</i> , 2016 , 26, 3191-3198	15.6	113
178	Epitaxial Ultrathin Organic Crystals on Graphene for High-Efficiency Phototransistors. <i>Advanced Materials</i> , 2016 , 28, 5200-5	24	109
177	Stretchable elastic synaptic transistors for neurologically integrated soft engineering systems. <i>Science Advances</i> , 2019 , 5, eaax4961	14.3	107
176	Programmable transition metal dichalcogenide homojunctions controlled by nonvolatile ferroelectric domains. <i>Nature Electronics</i> , 2020 , 3, 43-50	28.4	98
175	Evidence of Both Surface and Bulk Dirac Bands and Anisotropic Nonsaturating Magnetoresistance in ZrSiS. <i>Advanced Electronic Materials</i> , 2016 , 2, 1600228	6.4	98
174	Structural evidence of secondary phase segregation from the Raman vibrational modes in Zn _{1-x} CoxO (0. <i>Applied Physics Letters</i> , 2007 , 91, 031908	3.4	93
173	Uniform and ultrathin high- κ gate dielectrics for two-dimensional electronic devices. <i>Nature Electronics</i> , 2019 , 2, 563-571	28.4	93
172	Defects as a factor limiting carrier mobility in WSe ₂ : A spectroscopic investigation. <i>Nano Research</i> , 2016 , 9, 3622-3631	10	89
171	Design strategies for two-dimensional material photodetectors to enhance device performance. <i>Informa\squareMaterials</i> , 2019 , 1, 33-53	23.1	85
170	Aggregation-based growth and magnetic properties of inhomogeneous Cu-doped ZnO nanocrystals. <i>Applied Physics Letters</i> , 2007 , 90, 212502	3.4	82
169	Precise, Self-Limited Epitaxy of Ultrathin Organic Semiconductors and Heterojunctions Tailored by van der Waals Interactions. <i>Nano Letters</i> , 2016 , 16, 3754-9	11.5	81
168	200 GHz Maximum Oscillation Frequency in CVD Graphene Radio Frequency Transistors. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 25645-25649	9.5	80
167	Structural, optical and magnetic properties of Co-doped ZnO nanorods with hidden secondary phases. <i>Nanotechnology</i> , 2008 , 19, 455702	3.4	79
166	Epitaxial growth of wafer-scale molybdenum disulfide semiconductor single crystals on sapphire. <i>Nature Nanotechnology</i> , 2021 , 16, 1201-1207	28.7	75
165	Angle-selective perfect absorption with two-dimensional materials. <i>Light: Science and Applications</i> , 2016 , 5, e16052	16.7	70

164	Enhancing magnetic ordering in Cr-doped Bi ₂ Se ₃ using high-TC ferrimagnetic insulator. <i>Nano Letters</i> , 2015 , 15, 764-9	11.5	69
163	Mesoporous iron oxide directly anchored on a graphene matrix for lithium-ion battery anodes with enhanced strain accommodation. <i>RSC Advances</i> , 2013 , 3, 699-703	3.7	68
162	Graphene/Organic Semiconductor Heterojunction Phototransistors with Broadband and Bi-directional Photoresponse. <i>Advanced Materials</i> , 2018 , 30, e1804020	24	68
161	ZnO-nanorods/graphene heterostructure: a direct electron transfer glucose biosensor. <i>Scientific Reports</i> , 2016 , 6, 32327	4.9	63
160	Improving the Performance of Graphene Phototransistors Using a Heterostructure as the Light-Absorbing Layer. <i>Nano Letters</i> , 2017 , 17, 6391-6396	11.5	61
159	Two-dimensional universal conductance fluctuations and the electron-phonon interaction of surface states in Bi ₂ Te ₂ Se microflakes. <i>Scientific Reports</i> , 2012 , 2, 595	4.9	61
158	MoTe p-n Homojunctions Defined by Ferroelectric Polarization. <i>Advanced Materials</i> , 2020 , 32, e1907937	24	60
157	Ultra-Low-Power Smart Electronic Nose System Based on Three-Dimensional Tin Oxide Nanotube Arrays. <i>ACS Nano</i> , 2018 , 12, 6079-6088	16.7	57
156	Evidence of weak localization in quantum interference effects observed in epitaxial La _{0.7} Sr _{0.3} MnO ₃ ultrathin films. <i>Scientific Reports</i> , 2016 , 6, 26081	4.9	53
155	Graphene Hybrid Structures for Integrated and Flexible Optoelectronics. <i>Advanced Materials</i> , 2020 , 32, e1902039	24	53
154	Sensitive and Ultrabroadband Phototransistor Based on Two-Dimensional Bi ₂ O ₂ Se Nanosheets. <i>Advanced Functional Materials</i> , 2019 , 29, 1905806	15.6	53
153	2D Materials Based Optoelectronic Memory: Convergence of Electronic Memory and Optical Sensor. <i>Research</i> , 2019 , 2019, 9490413	7.8	53
152	Mo-O bond doping and related-defect assisted enhancement of photoluminescence in monolayer MoS ₂ . <i>AIP Advances</i> , 2014 , 4, 123004	1.5	52
151	Topological transport and atomic tunnelling-clustering dynamics for aged Cu-doped Bi ₂ Te ₃ crystals. <i>Nature Communications</i> , 2014 , 5, 5022	17.4	50
150	Band Structure Engineering of Interfacial Semiconductors Based on Atomically Thin Lead Iodide Crystals. <i>Advanced Materials</i> , 2019 , 31, e1806562	24	49
149	Solvothermal Synthesis of Lateral Heterojunction Sb ₂ Te ₃ /Bi ₂ Te ₃ Nanoplates. <i>Nano Letters</i> , 2015 , 15, 5905-11	11.5	48
148	Imperfect oriented attachment: Direct activation of high-temperature ferromagnetism in diluted magnetic semiconductor nanocrystals. <i>Applied Physics Letters</i> , 2006 , 88, 223108	3.4	48
147	High-Performance Black Phosphorus Field-Effect Transistors with Long-Term Air Stability. <i>Nano Letters</i> , 2019 , 19, 331-337	11.5	46

146	Efficient and Layer-Dependent Exciton Pumping across Atomically Thin Organic-Inorganic Type-I Heterostructures. <i>Advanced Materials</i> , 2018 , 30, e1803986	24	46
145	Solvent-Based Soft-Patterning of Graphene Lateral Heterostructures for Broadband High-Speed Metal-Semiconductor-Metal Photodetectors. <i>Advanced Materials Technologies</i> , 2017 , 2, 1600241	6.8	43
144	Speed up Ferroelectric Organic Transistor Memories by Using Two-Dimensional Molecular Crystalline Semiconductors. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 18127-18133	9.5	42
143	Three-Dimensional Topological Insulator BiTe/Organic Thin Film Heterojunction Photodetector with Fast and Wideband Response from 450 to 3500 Nanometers. <i>ACS Nano</i> , 2019 , 13, 755-763	16.7	42
142	Scaling dopant states in a semiconducting nanostructure by chemically resolved electron energy-loss spectroscopy: a case study on Co-doped ZnO. <i>Journal of the American Chemical Society</i> , 2010 , 132, 6492-7	16.4	39
141	High-Mobility Sm-Doped Bi ₂ Se ₃ Ferromagnetic Topological Insulators and Robust Exchange Coupling. <i>Advanced Materials</i> , 2015 , 27, 4823-9	24	36
140	Strong optical response and light emission from a monolayer molecular crystal. <i>Nature Communications</i> , 2019 , 10, 5589	17.4	36
139	Solution-Processed 2D Molecular Crystals: Fabrication Techniques, Transistor Applications, and Physics. <i>Advanced Materials Technologies</i> , 2019 , 4, 1800182	6.8	36
138	The positive piezoconductive effect in graphene. <i>Nature Communications</i> , 2015 , 6, 8119	17.4	32
137	Experimental evidence and control of the bulk-mediated intersurface coupling in topological insulator Bi ₂ Te ₂ Se nanoribbons. <i>Physical Review B</i> , 2015 , 91,	3.3	31
136	Spin-Coated Crystalline Molecular Monolayers for Performance Enhancement in Organic Field-Effect Transistors. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 1318-1323	6.4	31
135	Layer-Defining Strategy to Grow Two-Dimensional Molecular Crystals on a Liquid Surface down to the Monolayer Limit. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 16082-16086	16.4	31
134	Experimental Observation of the Gate-Controlled Reversal of the Anomalous Hall Effect in the Intrinsic Magnetic Topological Insulator MnBiTe Device. <i>Nano Letters</i> , 2020 , 20, 709-714	11.5	31
133	Low-Power Complementary Inverter with Negative Capacitance 2D Semiconductor Transistors. <i>Advanced Functional Materials</i> , 2020 , 30, 2003859	15.6	31
132	Giant Tunability of the Two-Dimensional Electron Gas at the Interface of BaO/SrTiO. <i>Nano Letters</i> , 2017 , 17, 6878-6885	11.5	29
131	Low-voltage, High-performance Organic Field-Effect Transistors Based on 2D Crystalline Molecular Semiconductors. <i>Scientific Reports</i> , 2017 , 7, 7830	4.9	29
130	Tuning the transport behavior of centimeter-scale WTe ₂ ultrathin films fabricated by pulsed laser deposition. <i>Applied Physics Letters</i> , 2017 , 111, 031906	3.4	29
129	Band Structure Perfection and Superconductivity in Type-II Dirac Semimetal Ir Pt Te. <i>Advanced Materials</i> , 2018 , 30, e1801556	24	28

128	Sub-thermionic, ultra-high-gain organic transistors and circuits. <i>Nature Communications</i> , 2021 , 12, 1928	17.4	28
127	Repairing atomic vacancies in single-layer MoSe ₂ field-effect transistor and its defect dynamics. <i>Npj Quantum Materials</i> , 2017 , 2,	5	27
126	Ultrahigh Stability 3D TI Bi ₂ Se ₃ /MoO ₃ Thin Film Heterojunction Infrared Photodetector at Optical Communication Waveband. <i>Advanced Functional Materials</i> , 2020 , 30, 1909659	15.6	25
125	Broadband photocarrier dynamics and nonlinear absorption of PLD-grown WTe ₂ semimetal films. <i>Applied Physics Letters</i> , 2018 , 112, 171112	3.4	25
124	A Gd@C single-molecule electret. <i>Nature Nanotechnology</i> , 2020 , 15, 1019-1024	28.7	25
123	Oxide Synaptic Transistors Coupled With Triboelectric Nanogenerators for Bio-Inspired Tactile Sensing Application. <i>IEEE Electron Device Letters</i> , 2020 , 41, 617-620	4.4	24
122	ZrO ₂ Ferroelectric FET for Non-volatile Memory Application. <i>IEEE Electron Device Letters</i> , 2019 , 40, 1419-1422	4.4	24
121	Realization of vertical and lateral van der Waals heterojunctions using two-dimensional layered organic semiconductors. <i>Nano Research</i> , 2017 , 10, 1336-1344	10	23
120	Formation and properties of chalcogenide glasses in the GeS ₂ -Ga ₂ S ₃ -CdS system. <i>Materials Chemistry and Physics</i> , 2004 , 83, 284-288	4.4	23
119	Transport evidence of 3D topological nodal-line semimetal phase in ZrSiS. <i>Frontiers of Physics</i> , 2018 , 13, 1	3.7	22
118	Visualizing plasmon coupling in closely spaced chains of Ag nanoparticles by electron energy-loss spectroscopy. <i>Small</i> , 2010 , 6, 446-51	11	22
117	Anomalous quantization trajectory and parity anomaly in Co cluster decorated BiSbTeSe nanodevices. <i>Nature Communications</i> , 2017 , 8, 977	17.4	21
116	Three-Dimensional Anisotropic Magnetoresistance in the Dirac Node-Line Material ZrSiSe. <i>Scientific Reports</i> , 2018 , 8, 9340	4.9	21
115	Ultrahigh Hall mobility and suppressed backward scattering in layered semiconductor Bi ₂ O ₂ Se. <i>Applied Physics Letters</i> , 2018 , 113, 072106	3.4	21
114	Directly writing 2D organic semiconducting crystals for high-performance field-effect transistors. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 11246-11251	7.1	21
113	pJ-Level Energy-Consuming, Low-Voltage Ferroelectric Organic Field-Effect Transistor Memories. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 2335-2340	6.4	20
112	Precise Extraction of Charge Carrier Mobility for Organic Transistors. <i>Advanced Functional Materials</i> , 2020 , 30, 1904508	15.6	20
111	Three-dimensional monolithic micro-LED display driven by atomically thin transistor matrix. <i>Nature Nanotechnology</i> , 2021 , 16, 1231-1236	28.7	20

110	Tailoring exciton dynamics of monolayer transition metal dichalcogenides by interfacial electron-phonon coupling. <i>Communications Physics</i> , 2019 , 2,	5.4	19
109	Direct Demonstration of the Emergent Magnetism Resulting from the Multivalence Mn in a LaMnO3 Epitaxial Thin Film System. <i>Advanced Electronic Materials</i> , 2018 , 4, 1800055	6.4	19
108	Uniform wurtzite MnSe nanocrystals with surface-dependent magnetic behavior. <i>Nano Research</i> , 2013 , 6, 275-285	10	19
107	Lattice dynamics of Dirac node-line semimetal ZrSiS. <i>Physical Review B</i> , 2017 , 96,	3.3	19
106	Coupled relaxation channels of excitons in monolayer MoSe. <i>Nanoscale</i> , 2017 , 9, 18546-18551	7.7	19
105	Uniform nucleation and epitaxy of bilayer molybdenum disulfide on sapphire.. <i>Nature</i> , 2022 , 605, 69-75	50.4	19
104	Controllable synthesis and magnetotransport properties of Cd3As2 Dirac semimetal nanostructures. <i>RSC Advances</i> , 2017 , 7, 17689-17696	3.7	18
103	Identification of defect-related emissions in ZnO hybrid materials. <i>Applied Physics Letters</i> , 2015 , 107, 021902	3.4	18
102	Experimental evidence on the Altshuler-Aronov-Spivak interference of the topological surface states in the exfoliated Bi2Te3 nanoflakes. <i>Applied Physics Letters</i> , 2012 , 100, 083107	3.4	18
101	Flexible field-effect transistor arrays with patterned solution-processed organic crystals. <i>AIP Advances</i> , 2013 , 3, 052123	1.5	18
100	Light-modulated vertical heterojunction phototransistors with distinct logical photocurrents. <i>Light: Science and Applications</i> , 2020 , 9, 167	16.7	18
99	Graphene nanoribbons for quantum electronics. <i>Nature Reviews Physics</i> ,	23.6	18
98	Quantum oscillations in type-II Dirac semimetal PtTe2. <i>Physical Review B</i> , 2018 , 97,	3.3	17
97	Intrinsic ferromagnetism and quantum transport transition in individual Fe-doped BiSe topological insulator nanowires. <i>Nanoscale</i> , 2017 , 9, 12372-12378	7.7	16
96	Recent breakthroughs in two-dimensional van der Waals magnetic materials and emerging applications. <i>Nano Today</i> , 2020 , 34, 100902	17.9	16
95	Few-Layer Organic Crystalline van der Waals Heterojunctions for Ultrafast UV Phototransistors. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000062	6.4	15
94	A molecular understanding of the gas-phase reduction and doping of graphene oxide. <i>Nano Research</i> , 2012 , 5, 361-368	10	15
93	Interfacial Flat-Lying Molecular Monolayers for Performance Enhancement in Organic Field-Effect Transistors. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 22513-22519	9.5	14

92	Nanocrystal-Embedded-Insulator (NEI) Ferroelectric Field-Effect Transistor Featuring Low Operating Voltages and Improved Synaptic Behavior. <i>IEEE Electron Device Letters</i> , 2019 , 40, 1933-1936	4.4	14
91	Indications of topological transport by universal conductance fluctuations in Bi ₂ Te ₂ Se microflakes. <i>Applied Physics Express</i> , 2014 , 7, 065202	2.4	14
90	Suppressed carrier density for the patterned high mobility two-dimensional electron gas at Al ₂ O ₃ /SrTiO ₃ heterointerfaces. <i>Applied Physics Letters</i> , 2017 , 111, 021602	3.4	14
89	Magnetic and electrical properties of Fe ₃ N on-plane GaN. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 315002	3	14
88	Soft and transient magnesium plasmonics for environmental and biomedical sensing. <i>Nano Research</i> , 2018 , 11, 4390-4400	10	13
87	Room-temperature observations of the weak localization in low-mobility graphene films. <i>Journal of Applied Physics</i> , 2013 , 114, 214502	2.5	13
86	Direct observation of high spin polarization in CoFeAl thin films. <i>Scientific Reports</i> , 2018 , 8, 8074	4.9	13
85	Oxygen pressure-tuned epitaxy and magnetic properties of magnetite thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 2017 , 432, 472-476	2.8	12
84	Evidence of layered transport of bulk carriers in Fe-doped Bi ₂ Se ₃ topological insulators. <i>Solid State Communications</i> , 2015 , 211, 29-33	1.6	12
83	Unveiling the structural origin of the high carrier mobility of a molecular monolayer on boron nitride. <i>Physical Review B</i> , 2014 , 90,	3.3	12
82	Broadband near-infrared emission in Tm ³⁺ -Dy ³⁺ codoped amorphous chalcogenide films fabricated by pulsed laser deposition. <i>Optics Express</i> , 2011 , 19, 26529-35	3.3	12
81	Observation of Shubnikov-de Haas Oscillations in Large-Scale Weyl Semimetal WTe ₂ Films. <i>Chinese Physics Letters</i> , 2020 , 37, 017104	1.8	12
80	Ultrafast Orbital-Oriented Control of Magnetization in Half-Metallic La Sr MnO Films. <i>Advanced Materials</i> , 2019 , 31, e1806443	24	11
79	Unveiling the piezoelectric nature of polar phase P(VDF-TrFE) at quasi-two-dimensional limit. <i>Scientific Reports</i> , 2018 , 8, 532	4.9	11
78	Topological Phase Transition-Induced Triaxial Vector Magnetoresistance in (BiIn)Se Nanodevices. <i>ACS Nano</i> , 2018 , 12, 1537-1543	16.7	11
77	(Er, Yb)-co-doped multifunctional ZnO transparent hybrid materials: fabrication, luminescent and magnetic properties. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 155404	3	11
76	Third harmonic generation in Dirac semimetal Cd ₃ As ₂ . <i>Applied Physics Letters</i> , 2020 , 117, 011102	3.4	11
75	Nontrivial surface state transport in Bi ₂ Se ₃ topological insulator nanoribbons. <i>Applied Physics Letters</i> , 2017 , 110, 053108	3.4	10

74	Polarimetric Three-Dimensional Topological Insulators/Organics Thin Film Heterojunction Photodetectors. <i>ACS Nano</i> , 2019 , 13, 10810-10817	16.7	10
73	Magnitude and Spatial Distribution Control of the Supercurrent in BiOSe-Based Josephson Junction. <i>Nano Letters</i> , 2020 , 20, 2569-2575	11.5	10
72	Quantum oscillation and nontrivial transport in the Dirac semimetal Cd ₃ As ₂ nanodevice. <i>Applied Physics Letters</i> , 2016 , 108, 183103	3.4	10
71	The Material Efforts for Quantized Hall Devices Based on Topological Insulators. <i>Advanced Materials</i> , 2020 , 32, e1904593	24	10
70	Peculiar Magnetotransport Features of Ultranarrow Graphene Nanoribbons under High Magnetic Field. <i>ACS Nano</i> , 2016 , 10, 1853-8	16.7	9
69	Electrolyte gate controlled metal-insulator transitions of the CaZrO ₃ /SrTiO ₃ heterointerface. <i>Applied Physics Letters</i> , 2019 , 115, 061601	3.4	9
68	Graphene nanoribbons: chemical stitching. <i>Nature Nanotechnology</i> , 2014 , 9, 875-6	28.7	9
67	Thickness-Dependent Asymmetric Potential Landscape and Polarization Relaxation in Ferroelectric Hf _x Zr _{1-x} O ₂ Thin Films through Interfacial Bound Charges. <i>Advanced Electronic Materials</i> , 2019 , 5, 1900554	6.4	8
66	Enhanced quantum coherence in graphene caused by Pd cluster deposition. <i>Applied Physics Letters</i> , 2015 , 106, 023108	3.4	8
65	Calibrating the atomic balance by carbon nanoclusters. <i>Applied Physics Letters</i> , 2010 , 96, 033103	3.4	8
64	Unsaturated magnetoconductance of epitaxial La _{0.7} Sr _{0.3} MnO ₃ thin films in pulsed magnetic fields up to 60 T. <i>AIP Advances</i> , 2017 , 7, 056404	1.5	7
63	Tuning the electrical transport of type II Weyl semimetal WTe nanodevices by Ga ⁺ ion implantation. <i>Scientific Reports</i> , 2017 , 7, 12688	4.9	7
62	Spin-ARPES EUV Beamline for Ultrafast Materials Research and Development. <i>Applied Sciences (Switzerland)</i> , 2019 , 9, 370	2.6	7
61	Ultrafast microwave synthesis of rambutan-like CMK-3/carbon nanotubes nanocomposites for high-performance supercapacitor electrode materials. <i>Scientific Reports</i> , 2020 , 10, 6227	4.9	7
60	Observation of bimolecular recombination in high mobility semiconductor Bi ₂ O ₂ Se using ultrafast spectroscopy. <i>Applied Physics Letters</i> , 2018 , 113, 061104	3.4	7
59	Unique Current-Direction-Dependent ON/OFF Switching in BiSbTeSe ₂ Topological Insulator-Based Spin Valve Transistors. <i>IEEE Electron Device Letters</i> , 2016 , 1-1	4.4	7
58	The mechanism exploration for zero-field ferromagnetism in intrinsic topological insulator MnBi ₂ Te ₄ by Bi ₂ Te ₃ intercalations. <i>Applied Physics Letters</i> , 2020 , 116, 221902	3.4	6
57	Layered Semiconductor Bi ₂ O ₂ Se for Broadband Pulse Generation in the Near-Infrared. <i>IEEE Photonics Technology Letters</i> , 2019 , 31, 1056-1059	2.2	6

56	Retina-Inspired Self-Powered Artificial Optoelectronic Synapses with Selective Detection in Organic Asymmetric Heterojunctions.. <i>Advanced Science</i> , 2022 , e2103494	13.6	6
55	Third-order nonlinear optical properties of WTe2 films synthesized by pulsed laser deposition. <i>Photonics Research</i> , 2019 , 7, 1493	6	6
54	1D Mixed-Stack Cocrystals Based on Perylene Diimide toward Ambipolar Charge Transport. <i>Small</i> , 2021 , 17, e2006574	11	6
53	Sizeable Kane-Mele-like spin orbit coupling in graphene decorated with iridium clusters. <i>Applied Physics Letters</i> , 2016 , 108, 203106	3.4	6
52	Phase transition and anomalous scaling in the quantum Hall transport of topological-insulator SnBi1.1Sb0.9Te2S devices. <i>Physical Review B</i> , 2019 , 99,	3.3	6
51	Layered Topological Insulators and Semimetals for Magnetoresistance Type Sensors. <i>Advanced Quantum Technologies</i> , 2018 , 2, 1800039	4.3	6
50	The study on quantum material WTe2. <i>Advances in Physics: X</i> , 2018 , 3, 1468279	5.1	6
49	Cobalt-Carbon Complexes Induced Ferromagnetism in Chemically Modified Perovskite Dilute Magnetic Complex Oxides. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 18258-18265	3.8	5
48	Anomalous Hall study of magnetic topological insulator Cr0.15(Bi0.1Sb0.9)1.85Te3 microflakes. <i>Solid State Communications</i> , 2015 , 223, 45-49	1.6	5
47	Ultra-Narrowband Photodetector with High Responsivity Enabled by Integrating Monolayer J-Aggregate Organic Crystal with Graphene. <i>Advanced Optical Materials</i> , 2021 , 9, 2100158	8.1	5
46	Recent Advances on Spin-Polarized Two-Dimensional Electron Gases at Oxide Interfaces. <i>ACS Applied Electronic Materials</i> , 2021 , 3, 128-144	4	5
45	Spin valley and giant quantum spin Hall gap of hydrofluorinated bismuth nanosheet. <i>Scientific Reports</i> , 2018 , 8, 7436	4.9	4
44	Synthesis and magnetotransport properties of Bi ₂ Se ₃ nanowires. <i>Chinese Physics B</i> , 2017 , 26, 096101	1.2	4
43	Transistors: Realization of Room-Temperature Phonon-Limited Carrier Transport in Monolayer MoS ₂ by Dielectric and Carrier Screening (Adv. Mater. 3/2016). <i>Advanced Materials</i> , 2016 , 28, 546-546	24	4
42	High-Performance CVD MoS ₂ Transistors with Self-Aligned Top-Gate and Bi Contact 2021 ,		4
41	A Smarter Pavlovian Dog with Optically Modulated Associative Learning in an Organic Ferroelectric Neuromem.. <i>Research</i> , 2021 , 2021, 9820502	7.8	4
40	Enhancement of tunneling electroresistance by interfacial cation intermixing in ferroelectric tunnel junctions. <i>Applied Surface Science</i> , 2020 , 512, 145707	6.7	3
39	Transition-metal dichalcogenides: Group-10 expands the spectrum. <i>Science China: Physics, Mechanics and Astronomy</i> , 2016 , 59, 1	3.6	3

38	2 step of conductance fluctuations due to the broken time-reversal symmetry in bulk-insulating BiSbTeSe ₂ devices. <i>Applied Physics Letters</i> , 2018 , 112, 243106	3.4	3
37	Strain-driven lattice distortion and the resultant magnetic properties of La _{0.7} Sr _{0.3} MnO ₃ /BaTiO ₃ superlattices. <i>Applied Physics Letters</i> , 2019 , 115, 201604	3.4	3
36	Quantum oscillations and nontrivial transport in (Bi _{0.92} In _{0.08}) ₂ Se ₃ . <i>Chinese Physics B</i> , 2017 , 26, 127305	3.05	3
35	Shubnikov de Haas quantum oscillation of the surface states in the metallic Bismuth Telluride sheets. <i>European Physical Journal D</i> , 2013 , 67, 1	1.3	3
34	Large Linear Magnetoresistance of High-Mobility 2D Electron System at Nonisostructural BaZrO ₃ /SrTiO ₃ Heterointerfaces. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2101235	4.6	3
33	Low-Temperature Tunneling Electroresistance in Ferromagnetic Metal/Ferroelectric/Semiconductor Tunnel Junctions. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 23282-23288	9.5	3
32	Quantum Electronics: Evidence of Both Surface and Bulk Dirac Bands and Anisotropic Nonsaturating Magnetoresistance in ZrSiS (Adv. Electron. Mater. 10/2016). <i>Advanced Electronic Materials</i> , 2016 , 2,	6.4	3
31	Large-Area Freestanding Weyl Semimetal WTe ₂ Membranes. <i>Chinese Physics Letters</i> , 2021 , 38, 017101	1.8	3
30	Multiplexed neurochemical transmission emulated using a dual-excitatory synaptic transistor. <i>Npj 2D Materials and Applications</i> , 2021 , 5,	8.8	3
29	Controlling relaxation dynamics of excitonic states in monolayer transition metal dichalcogenides WS ₂ through interface engineering. <i>Applied Physics Letters</i> , 2021 , 118, 121104	3.4	3
28	Electrical spin polarization through spin-momentum locking in topological-insulator nanostructures. <i>Chinese Physics B</i> , 2018 , 27, 097307	1.2	3
27	Probing Coulomb Interactions on Charge Transport in Few-Layer Organic Crystalline Semiconductors by the Gated van der Pauw Method. <i>Advanced Electronic Materials</i> , 2020 , 6, 2000136	6.4	3
26	Photodetectors: Solvent-Based Soft-Patterning of Graphene Lateral Heterostructures for Broadband High-Speed Metal-Semiconductor-Metal Photodetectors (Adv. Mater. Technol. 2/2017). <i>Advanced Materials Technologies</i> , 2017 , 2,	6.8	2
25	Observation of Small Polaron and Acoustic Phonon Coupling in Ultrathin La _{0.7} Sr _{0.3} MnO ₃ /SrTiO ₃ Structures. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019 , 13, 1800657	2.5	2
24	Layer-Defining Strategy to Grow Two-Dimensional Molecular Crystals on a Liquid Surface down to the Monolayer Limit. <i>Angewandte Chemie</i> , 2019 , 131, 16228-16232	3.6	2
23	Laser irradiation induced enhancement on the ultrafast third-order optical nonlinearity of chalcogenide glass. <i>Optical Materials</i> , 2006 , 28, 1020-1024	3.3	2
22	Charge Carrier Mediation and Ferromagnetism induced in MnBi ₆ Te ₁₀ Magnetic Topological Insulators by antimony doping. <i>Journal Physics D: Applied Physics</i> ,	3	2
21	Plasmonic evolution of atomically size-selected Au clusters by electron energy loss spectrum.. <i>National Science Review</i> , 2021 , 8, nwaa282	10.8	2

20	A compact model for transition metal dichalcogenide field effect transistors with effects of interface traps. <i>Science China Information Sciences</i> , 2021 , 64, 1	3.4	2
19	Room-temperature ferromagnetism observed in Nd-doped In ₂ O ₃ dilute magnetic semiconducting nanowires. <i>Chinese Physics B</i> , 2016 , 25, 097502	1.2	2
18	Impurity band assisted carrier relaxation in Cr doped topological insulator Bi ₂ Se ₃ . <i>Applied Physics Letters</i> , 2021 , 118, 081103	3.4	2
17	Phototransistors: Graphene/Organic Semiconductor Heterojunction Phototransistors with Broadband and Bi-directional Photoresponse (Adv. Mater. 49/2018). <i>Advanced Materials</i> , 2018 , 30, 1870379	3.4	2
16	Large-area fabrication of 2D layered topological semimetal films and emerging applications. <i>Advances in Physics: X</i> , 2022 , 7,	5.1	2
15	Experimental observation on a temperature-induced decoupling between the surface states in topological insulator nanoplates Bi ₂ 0.15(TeSe) _{3+0.15} . <i>Applied Physics A: Materials Science and Processing</i> , 2016 , 122, 1	2.6	1
14	Magnetic anisotropy of half-metallic Co ₂ FeAl ultra-thin films epitaxially grown on GaAs(001). <i>AIP Advances</i> , 2019 , 9, 065002	1.5	1
13	Charge-Transfer-Induced Multivalent States with Resultant Emergent Magnetism in Transition-Metal Oxide Heterostructures. <i>Advanced Electronic Materials</i> , 2021 , 7, 2000803	6.4	1
12	Coexistence of ferromagnetism and topology by charge carrier engineering in the intrinsic magnetic topological insulator MnBi ₄ Te ₇ . <i>Physical Review B</i> , 2021 , 104,	3.3	1
11	Fully Optical Modulation of the Two-Dimensional Electron Gas at the AlO/SrTiO Interface.. <i>Journal of Physical Chemistry Letters</i> , 2022 , 2976-2985	6.4	1
10	Molecular-Layer-Defined Asymmetric Schottky Contacts in Organic Planar Diodes for Self-Powered Optoelectronic Synapses.. <i>Journal of Physical Chemistry Letters</i> , 2022 , 2338-2347	6.4	1
9	Band Engineering: Band Structure Engineering of Interfacial Semiconductors Based on Atomically Thin Lead Iodide Crystals (Adv. Mater. 17/2019). <i>Advanced Materials</i> , 2019 , 31, 1970121	24	
8	Effect of Superparamagnetic Fe ₃ O ₄ Nanoparticles on Schottky Barriers of Graphene. <i>IEEE Transactions on Magnetics</i> , 2015 , 51, 1-4	2	
7	Photodetectors: Ultrahigh Stability 3D TI Bi ₂ Se ₃ /MoO ₃ Thin Film Heterojunction Infrared Photodetector at Optical Communication Waveband (Adv. Funct. Mater. 12/2020). <i>Advanced Functional Materials</i> , 2020 , 30, 2070078	15.6	
6	Layered topological semimetals for spintronics 2020 , 273-298		
5	Pressure Effect on Electronic and Excitonic Properties of Purely J-Aggregated Monolayer Organic Semiconductor. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 5896-5901	6.4	
4	Emergent Ferromagnetism: Direct Demonstration of the Emergent Magnetism Resulting from the Multivalence Mn in a LaMnO ₃ Epitaxial Thin Film System (Adv. Electron. Mater. 6/2018). <i>Advanced Electronic Materials</i> , 2018 , 4, 1870030	6.4	
3	Innenrücktitelbild: Layer-Defining Strategy to Grow Two-Dimensional Molecular Crystals on a Liquid Surface down to the Monolayer Limit (Angew. Chem. 45/2019). <i>Angewandte Chemie</i> , 2019 , 131, 16479-16479	3.6	

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1 Observation of an anisotropic ultrafast spin relaxation process in large-area WTe₂ films. *Journal of Applied Physics*, **2022**, 131, 163903 2.5