

# Xianping Chen

## List of Publications by Citations

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188  
papers

4,030  
citations

33  
h-index

57  
g-index

221  
ext. papers

5,251  
ext. citations

5.2  
avg, IF

5.96  
L-index

#	Paper	IF	Citations
188	Carbon nanotube based biosensors. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 207, 690-715	8.5	321
187	Nanowire-based gas sensors. <i>Sensors and Actuators B: Chemical</i> , <b>2013</b> , 177, 178-195	8.5	293
186	A review of small heat pipes for electronics. <i>Applied Thermal Engineering</i> , <b>2016</b> , 96, 1-17	5.8	145
185	The electronic and optical properties of novel germanene and antimonene heterostructures. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 5434-5441	7.1	127
184	Ab Initio Study of the Adsorption of Small Molecules on Stanene. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 13987-13994	3.8	113
183	One-Pot Hydrothermal Synthesis of Carbon Dots with Efficient Up- and Down-Converted Photoluminescence for the Sensitive Detection of Morin in a Dual-Readout Assay. <i>Langmuir</i> , <b>2017</b> , 33, 1043-1050	4	110
182	Adsorption of gas molecules on graphene-like InN monolayer: A first-principle study. <i>Applied Surface Science</i> , <b>2017</b> , 404, 291-299	6.7	94
181	Electronic structure and optical properties of graphene/stanene heterobilayer. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 16302-9	3.6	91
180	First-Principles Study of Sulfur Dioxide Sensor Based on Phosphorenes. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 660-662	4.4	90
179	Hybrid Chloroantimonates(III): Thermally Induced Triple-Mode Reversible Luminescent Switching and Laser-Printable Rewritable Luminescent Paper. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 9974-9978	16.4	81
178	First Principles Investigation of Small Molecules Adsorption on Antimonene. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 134-137	4.4	80
177	Superior Selectivity and Sensitivity of C3N Sensor in Probing Toxic Gases NO2 and SO2. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 284-287	4.4	77
176	Two-dimensional GeS with tunable electronic properties via external electric field and strain. <i>Nanotechnology</i> , <b>2016</b> , 27, 274001	3.4	68
175	An AlAs/germanene heterostructure with tunable electronic and optical properties via external electric field and strain. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 8171-8178	7.1	65
174	ZnO/WSe2 vdW heterostructure for photocatalytic water splitting. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 7104-7113	7.1	57
173	Molecular modeling of temperature dependence of solubility parameters for amorphous polymers. <i>Journal of Molecular Modeling</i> , <b>2012</b> , 18, 2333-41	2	57
172	Sulfur Dioxide and Nitrogen Dioxide Gas Sensor Based on Arsenene: A First-Principle Study. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 661-664	4.4	55

171	Ultra-High Sensitive NO Gas Sensor Based on Tunable Polarity Transport in CVD-WS/IGZO p-N Heterojunction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 40850-40859	9.5	55
170	First-principles study of the effect of functional groups on polyaniline backbone. <i>Scientific Reports</i> , <b>2015</b> , 5, 16907	4.9	54
169	Design of graphene-like gallium nitride and WS <sub>2</sub> /WSe <sub>2</sub> nanocomposites for photocatalyst applications. <i>Science China Materials</i> , <b>2016</b> , 59, 1027-1036	7.1	53
168	Effect of multilayer structure, stacking order and external electric field on the electrical properties of few-layer boron-phosphide. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 16229-36	3.6	53
167	A Dual-Functional Graphene-Based Self-Alarm Health-Monitoring E-Skin. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1904706	15.6	51
166	Exploration of new ferromagnetic, semiconducting and biocompatible NbX (X = Cl, Br or I) monolayers with considerable visible and infrared light absorption. <i>Nanoscale</i> , <b>2017</b> , 9, 2992-3001	7.7	48
165	AlN/BP Heterostructure Photocatalyst for Water Splitting. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 145-148	4.4	48
164	Density-Functional Calculation of Methane Adsorption on Graphenes. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 1366-1368	4.4	44
163	Impact of the functional group on the working range of polyaniline as carbon dioxide sensors. <i>Sensors and Actuators B: Chemical</i> , <b>2012</b> , 175, 15-21	8.5	42
162	Electrical and Optical Properties of Germanene on Single-Layer BeO Substrate. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 20350-20356	3.8	39
161	Sea urchin-like microstructure pressure sensors with an ultra-broad range and high sensitivity. <i>Nature Communications</i> , <b>2021</b> , 12, 1776	17.4	39
160	High Selective Gas Detection for small molecules based on Germanium selenide monolayer. <i>Applied Surface Science</i> , <b>2018</b> , 433, 575-581	6.7	37
159	Tuning the electronic properties and work functions of graphene/fully hydrogenated h-BN heterobilayers via heteronuclear dihydrogen bonding and electric field control. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 16386-95	3.6	36
158	Catalytic mechanisms, basic roles, and biotechnological and environmental significance of halogenating enzymes. <i>Acta Biochimica Et Biophysica Sinica</i> , <b>2008</b> , 40, 183-93	2.8	36
157	SiGe/h-BN heterostructure with inspired electronic and optical properties: a first-principles study. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 10082-10089	7.1	36
156	Electrical-Thermal-Luminous-Chromatic model of phosphor-converted white light-emitting diodes. <i>Applied Thermal Engineering</i> , <b>2014</b> , 63, 588-597	5.8	35
155	Recent advances in 2D/nanostructured metal sulfide-based gas sensors: mechanisms, applications, and perspectives. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 24943-24976	13	33
154	Step-stress accelerated testing of high-power LED lamps based on subsystem isolation method. <i>Microelectronics Reliability</i> , <b>2015</b> , 55, 1784-1789	1.2	32

153	Two dimensional XAs (X = Si, Ge, Sn) monolayers as promising photocatalysts for water splitting hydrogen production with high carrier mobility. <i>Applied Materials Today</i> , <b>2018</b> , 13, 276-284	6.6	32
152	Nitrogen Dioxide Gas Sensor Based on Monolayer SnS: A First-Principle Study. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 983-986	4.4	29
151	Selective gas adsorption and I <sub>V</sub> response of monolayer boron phosphide introduced by dopants: A first-principle study. <i>Applied Surface Science</i> , <b>2018</b> , 427, 176-188	6.7	29
150	The electronic and optical properties of silicene/g-ZnS heterobilayers: a theoretical study. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 7004-7012	7.1	28
149	Functionalization-induced changes in the structural and physical properties of amorphous polyaniline: a first-principles and molecular dynamics study. <i>Scientific Reports</i> , <b>2016</b> , 6, 20621	4.9	27
148	Highly sensitive sensor based on ordered porous ZnO nanosheets for ethanol detecting application. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 326, 128952	8.5	27
147	Validation of forcefields in predicting the physical and thermophysical properties of emeraldine base polyaniline. <i>Molecular Simulation</i> , <b>2011</b> , 37, 990-996	2	26
146	Monolayer Tellurene-Based Gas Sensor to Detect SF <sub>6</sub> Decompositions: A First-Principles Study. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 1522-1525	4.4	25
145	Adsorption of Gas Molecules on Graphene-Like ZnO Nanosheets: The Roles of Gas Concentration, Layer Number, and Heterolayer. <i>Advanced Materials Interfaces</i> , <b>2017</b> , 4, 1700647	4.6	25
144	Molecular modeling of protonic acid doping of emeraldine base polyaniline for chemical sensors. <i>Sensors and Actuators B: Chemical</i> , <b>2012</b> , 174, 210-216	8.5	25
143	Graphene oxide humidity sensor with laser-induced graphene porous electrodes. <i>Sensors and Actuators B: Chemical</i> , <b>2020</b> , 325, 128790	8.5	24
142	Tellurene Nanoflake-Based NO Sensors with Superior Sensitivity and a Sub-Parts-per-Billion Detection Limit. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 47704-47713	9.5	24
141	Gas-sensing properties of Ptn-doped WSe <sub>2</sub> to SF <sub>6</sub> decomposition products. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2021</b> , 97, 452-459	6.3	24
140	First-principles approach to design and evaluation of graphene as methane sensors. <i>Materials and Design</i> , <b>2017</b> , 119, 397-405	8.1	23
139	Tunable electronic structure and enhanced optical properties in quasi-metallic hydrogenated/fluorinated SiC heterobilayer. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 7406-7414	7.1	23
138	Ab Initio Study of Temperature, Humidity, and Covalent Functionalization-Induced Bandgap Change of Single-Walled Carbon Nanotubes. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 606-608	4.4	22
137	A promising two-dimensional channel material: monolayer antimonide phosphorus. <i>Science China Materials</i> , <b>2016</b> , 59, 648-656	7.1	22
136	Controlling information duration on rewritable luminescent paper based on hybrid antimony (III) chloride/small-molecule absorbates. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	21

135	Highly selective fluorescent visual detection of perfluorooctane sulfonate via blue fluorescent carbon dots and berberine chloride hydrate. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2019</b> , 207, 262-269	4.4	21
134	Intriguing electronic insensitivity and high carrier mobility in monolayer hexagonal YN. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 4943-4951	7.1	20
133	A two-dimensional van der Waals CdS/germanene heterojunction with promising electronic and optoelectronic properties: DFT + NEGF investigations. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 18330-18337	3.6	19
132	DFT coupled with NEGF study of ultra-sensitive HCN and HNC gases detection and distinct I-V response based on phosphorene. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 30852-30860	3.6	19
131	Promoting sensitivity and selectivity of HCHO sensor based on strained InP3 monolayer: A DFT study. <i>Applied Surface Science</i> , <b>2018</b> , 459, 554-561	6.7	19
130	Considering the spin-orbit coupling effect on the photocatalytic performance of AlN/MX2 nanocomposites. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 9412-9420	7.1	19
129	High-performance humidity sensor using Schottky-contacted SnS nanoflakes for noncontact healthcare monitoring. <i>Nanotechnology</i> , <b>2020</b> , 31, 055501	3.4	19
128	One-step laser fabrication of phosphorus-doped porous graphene electrodes for high-performance flexible microsupercapacitor. <i>Carbon</i> , <b>2021</b> , 180, 56-66	10.4	19
127	SnSe monolayer: A promising candidate of SO2 sensor with high adsorption quantity. <i>Applied Surface Science</i> , <b>2019</b> , 484, 33-38	6.7	18
126	A hybrid prediction method on luminous flux maintenance of high-power LED lamps. <i>Applied Thermal Engineering</i> , <b>2016</b> , 95, 482-490	5.8	18
125	Thermal Transient Effect and Improved Junction Temperature Measurement Method in High-Voltage Light-Emitting Diodes. <i>IEEE Electron Device Letters</i> , <b>2013</b> , 34, 1172-1174	4.4	18
124	First-Principles Study of Nitric Oxide Sensor Based on Blue Phosphorus Monolayer. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 1139-1142	4.4	18
123	Au (n=1,2) cluster doped MoSe2 nanosheet as a promising gas-sensing material for C2H4 gas in oil-immersed transformer. <i>Applied Surface Science</i> , <b>2021</b> , 541, 148356	6.7	17
122	Adsorption Behavior of Nucleobases on Doped MoS2 Monolayer: A DFT Study. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 30949-30957	3.8	17
121	A Novel Ultra-Sensitive Nitrogen Dioxide Sensor Based on Germanium Monosulfide Monolayer. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 1590-1593	4.4	16
120	Improved Performance of Flexible Graphene Heater Based on Repeated Laser Writing. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 501-504	4.4	16
119	Highly sensitive and selective detection of perfluorooctane sulfonate based on the Janus Green B resonance light scattering method. <i>Analytical Methods</i> , <b>2016</b> , 8, 8042-8048	3.2	16
118	Thermal degradation kinetics of LED lamps in step-up-stress and step-down-stress accelerated degradation testing. <i>Applied Thermal Engineering</i> , <b>2016</b> , 107, 918-926	5.8	15

117	A DFT study of In doped Ti2O: a superior NO2 gas sensor with selective adsorption and distinct optical response. <i>Applied Surface Science</i> , <b>2019</b> , 494, 162-169	6.7	15
116	Sorption and Diffusion of Water Vapor and Carbon Dioxide in Sulfonated Polyaniline as Chemical Sensing Materials. <i>Sensors</i> , <b>2016</b> , 16,	3.8	15
115	Tuning the electronic and optical properties of graphane/silicane and fhBN/silicane nanosheets via interfacial dihydrogen bonding and electrical field control. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 8962-8972	7.1	15
114	Preparation of magnetic molecularly imprinted polymers for the rapid and selective separation and enrichment of perfluorooctane sulfonate. <i>Journal of Separation Science</i> , <b>2017</b> , 40, 2819-2826	3.4	14
113	Molecular model for the charge carrier density dependence of conductivity of polyaniline as chemical sensing materials. <i>Sensors and Actuators B: Chemical</i> , <b>2013</b> , 177, 856-861	8.5	14
112	Arsenic Phosphorus Monolayer: A Promising Candidate for H2S Sensor and NO Degradation With High Sensitivity and Selectivity. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 1321-1324	4.4	14
111	Determining the thermal stress limit of LED lamps using highly accelerated decay testing. <i>Applied Thermal Engineering</i> , <b>2016</b> , 102, 1451-1461	5.8	14
110	A CMOS-Compatible Hybrid Plasmonic Slot Waveguide With Enhanced Field Confinement. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 456-458	4.4	13
109	Tellurene based biosensor for detecting DNA/RNA nucleobases and amino acids: A theoretical insight. <i>Applied Surface Science</i> , <b>2020</b> , 532, 147451	6.7	13
108	Germanene on single-layer ZnSe substrate: novel electronic and optical properties. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 16067-16076	3.6	13
107	A simple and highly sensitive assay of perfluorooctanoic acid based on resonance light scattering technique. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , <b>2016</b> , 159, 7-12	4.4	12
106	Facile and Scalable Fabrication of High-Performance Microsupercapacitors Based on Laser-Scribed Heteroatom-Doped Porous Graphene. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 22426-22437	9.5	11
105	SWCNT-bridged laser-induced graphene fibers decorated with MnO2 nanoparticles for high-performance flexible micro-supercapacitors. <i>Carbon</i> , <b>2021</b> , 183, 128-137	10.4	11
104	Two-dimensional penta-SiAs2: a potential metal-free photocatalyst for overall water splitting. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 11980-11987	7.1	10
103	Adsorption properties of Ag2OMoSe2 towards SF6 decomposed products. <i>Vacuum</i> , <b>2021</b> , 189, 110248	3.7	10
102	Reduced graphene-oxide transducers for biosensing applications beyond the Debye-screening limit. <i>Biosensors and Bioelectronics</i> , <b>2019</b> , 130, 352-359	11.8	10
101	Photothermal effects induced by surface plasmon resonance at graphene/gold nanointerfaces: A multiscale modeling study. <i>Biosensors and Bioelectronics</i> , <b>2019</b> , 126, 470-477	11.8	10
100	The intriguing electronic and optical properties modulation of hydrogen and fluorine codecorated silicene layers. <i>Applied Surface Science</i> , <b>2017</b> , 398, 73-80	6.7	9

99	Piezo-capacitive behavior of a magnetically structured particle-based conductive polymer with high sensitivity and a wide working range. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 5401-5411	7.1	9
98	A polymer based miniature loop heat pipe with silicon substrate and temperature sensors for high brightness light-emitting diodes. <i>Microelectronics Reliability</i> , <b>2014</b> , 54, 1355-1362	1.2	9
97	Forcefields based molecular modeling on the mechanical and physical properties of emeraldine base polyaniline. <i>Procedia Engineering</i> , <b>2010</b> , 5, 1268-1271		9
96	High sensitivity gas sensor to detect SF <sub>6</sub> decomposition components based on monolayer antimonide phosphorus. <i>Chemical Physics Letters</i> , <b>2020</b> , 756, 137868	2.5	9
95	Novel electronic structures and enhanced optical properties of boron phosphide/blue phosphorene and F4TCNQ/blue phosphorene heterostructures: a DFT + NEGF study. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 28777-28785	3.6	9
94	An investigation of the positive effects of doping an Al atom on the adsorption of CO on BN nanosheets: a DFT study. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 9368-9374	3.6	8
93	Monolayer ZnS as a Promising Candidate for NH <sub>3</sub> Sensor: A First-Principle Study. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 6515-6521	4	8
92	Numerical Thermal Analysis and Optimization of Multi-Chip LED Module Using Response Surface Methodology and Genetic Algorithm. <i>IEEE Access</i> , <b>2017</b> , 5, 16459-16468	3.5	8
91	A Monolayer Composite of h-BN Doped by a Nano Graphene Domain: As Sensitive Material for SO <sub>2</sub> Gas Detection. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1404-1407	4.4	8
90	Piezoelectricity of Janus Sb <sub>2</sub> Se <sub>2</sub> Te monolayers: A first-principles study. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 125109	2.5	8
89	. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 42, 561-564	4.4	8
88	Hybrid Plasmonics Slot THz Waveguide for Subwavelength Field Confinement and Crosstalk Between Two Waveguides. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2017</b> , 23, 1-5	3.8	7
87	Film-mulched maize production: response to controlled-release urea fertilization. <i>Journal of Agricultural Science</i> , <b>2017</b> , 155, 1299-1310	1	7
86	Novel GaN-based nanocomposites: Effective band structure and optical property tuning by tensile strain or external field. <i>Applied Surface Science</i> , <b>2018</b> , 427, 554-562	6.7	7
85	PbSnSeBased Gas Sensor to Detect SF <sub>6</sub> Decompositions: DFT and NEGF Calculations. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 5322-5325	2.9	7
84	Genetic Algorithm (GA)-Based Inclinometer Layout Optimization. <i>Sensors</i> , <b>2015</b> , 15, 9136-55	3.8	6
83	Tunable electronic properties of silicene/GaP heterobilayer: Effects of electric field or biaxial tensile strain. <i>Chemical Physics Letters</i> , <b>2018</b> , 700, 114-121	2.5	6
82	Gas Sensor Based on Semihydrogenated and Semifluorinated h-BN for SF <sub>6</sub> Decomposition Components Detection. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 1878-1885	2.9	6

81	Graphene-based film heater fabricated by laser writing. <i>Materials Letters</i> , <b>2021</b> , 284, 128869	3.3	6
80	Monolayer Janus TeSe-based gas sensor to detect SO and NO: a first-principles study. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 1675-1683	3.6	6
79	A novel Hf <sub>2</sub> CO <sub>2</sub> /WS <sub>2</sub> van der Waals heterostructure as a potential candidate for overall water splitting photocatalyst. <i>Materials Science in Semiconductor Processing</i> , <b>2021</b> , 133, 105947	4.3	6
78	Laser synthesis of superhydrophilic O/S co-doped porous graphene derived from sodium lignosulfonate for enhanced microsupercapacitors. <i>Journal of Power Sources</i> , <b>2021</b> , 513, 230558	8.9	6
77	Properties-enhanced gas sensor based on Cu-doped tellurene monolayer to detect acetone molecule: a first-principles study. <i>Molecular Physics</i> , <b>2021</b> , 119, e1864490	1.7	6
76	Color Shift Modeling of Light-Emitting Diode Lamps in Step-Loaded Stress Testing. <i>IEEE Photonics Journal</i> , <b>2017</b> , 9, 1-14	1.8	5
75	An experimental investigation of a 100-W high-power light-emitting diode array using vapor chamber based plate. <i>Advances in Mechanical Engineering</i> , <b>2015</b> , 7, 168781401562007	1.2	5
74	A theoretical study of TiMoSe <sub>2</sub> as a noninvasive type-1 diabetes diagnosis material for detecting acetone from exhaled breath. <i>Vacuum</i> , <b>2020</b> , 182, 109729	3.7	5
73	Integrated Sensing and Warning Multifunctional Devices Based on the Combined Mechanical and Thermal Effect of Porous Graphene. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 53049-53057	9.5	5
72	Theoretical investigations of novel Janus PbSSe monolayer as a potential multifunctional material for piezoelectric, photovoltaic, and thermoelectric applications. <i>Nanoscale</i> , <b>2021</b> , 13, 15611-15623	7.7	5
71	An Integrated Luminescent Information Encryption/Decryption and Anticounterfeiting Chip Based on Laser Induced Graphene. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2103255	15.6	5
70	Design of 400 V Miniature DC Solid State Circuit Breaker with SiC MOSFET. <i>Micromachines</i> , <b>2019</b> , 10,	3.3	4
69	Sc <sub>2</sub> CF <sub>2</sub> /Janus MoSSe heterostructure: A potential Z-scheme photocatalyst with ultra-high solar-to-hydrogen efficiency. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> ,	6.7	4
68	Adsorption property of CO, NO, and NO <sub>2</sub> gas molecules on Co <sub>3</sub> -MoSe <sub>2</sub> monolayer. <i>Sensors and Actuators A: Physical</i> , <b>2021</b> , 319, 112547	3.9	4
67	The Influence of Tensile Stress on Polyaniline as Strain Sensor. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 1636-1638	4.4	4
66	Adsorption and gas-sensing properties of C <sub>2</sub> H <sub>4</sub> , CH <sub>4</sub> , H <sub>2</sub> , H <sub>2</sub> O on metal oxides (CuO, NiO) modified SnS <sub>2</sub> monolayer: A DFT study. <i>Results in Physics</i> , <b>2021</b> , 28, 104680	3.7	4
65	Electronic properties of Pt <sub>n</sub> (n=4, 13, 15) nanoclusters decorated MoSe <sub>2</sub> monolayer and its effect on C <sub>2</sub> H <sub>2</sub> adsorption: First principles study. <i>Applied Surface Science</i> , <b>2021</b> , 563, 150375	6.7	4
64	Adsorption characteristics of H <sub>2</sub> S, SO <sub>2</sub> , SO <sub>2</sub> F <sub>2</sub> , SOF <sub>2</sub> , and N <sub>2</sub> on NiO/MoSe <sub>2</sub> monolayer for gas-sensing applications. <i>Vacuum</i> , <b>2021</b> , 193, 110506	3.7	4



63	Facile fabrication of rGO/LIG-based temperature sensor with high sensitivity. <i>Materials Letters</i> , <b>2021</b> , 304, 130637	3.3	4
62	SnS monolayer as gas sensors: Insights from a first-principles investigation <b>2017</b> ,		3
61	Tunable electronic and optical properties of the WS/IGZO heterostructure via an external electric field and strain: a theoretical study. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 14713-14721	3.6	3
60	SiAs <sub>2</sub> /GeP <sub>2</sub> heterostructure for solar cell: A first-principles calculation. <i>Chemical Physics Letters</i> , <b>2019</b> , 729, 65-68	2.5	3
59	A numerical procedure for simulating thermal oxidation diffusion of epoxy molding compounds. <i>Microelectronics Reliability</i> , <b>2015</b> , 55, 1877-1881	1.2	3
58	Two-dimensional penta-SnH monolayer for nanoelectronics and photocatalytic water splitting: a first-principles study.. <i>RSC Advances</i> , <b>2018</b> , 8, 11799-11806	3.7	3
57	. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , <b>2019</b> , 26, 1154-1162	2.3	3
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54	SiC MOSFET Threshold-Voltage Instability Under High Temperature Aging <b>2018</b> ,		3
53	Adsorption and gas-sensing properties of Aun (n=1-10) cluster doped MoTe <sub>2</sub> for NH <sub>3</sub> , NO <sub>2</sub> , and SO <sub>2</sub> gas molecules. <i>Surfaces and Interfaces</i> , <b>2022</b> , 30, 101883	4.1	3
52	Investigations of SiC VDMOSFET With Floating Island Structure Based on TCAD. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 2295-2300	2.9	2
51	Highly Selective Adsorption on SiSe Monolayer and Effect of Strain Engineering: A DFT Study. <i>Sensors</i> , <b>2020</b> , 20,	3.8	2
50	Effects of stress-loading test methods on the degradation of light-emitting diode modules. <i>Microelectronics Reliability</i> , <b>2016</b> , 64, 635-639	1.2	2
49	Overdriving reliability of chip scale packaged LEDs: Quantitatively analyzing the impact of component. <i>Microelectronics Reliability</i> , <b>2017</b> , 78, 197-204	1.2	2
48	Modelling for electric devices: Adsorption of polluted gases on g-ZnO monolayer <b>2017</b> ,		2
47	Flavin-dependent Tryptophan Halogenases and Their Use in Formation of Novel Tryptophan Derived Compounds. <i>Chinese Journal of Chemistry</i> , <b>2008</b> , 26, 1486-1492	4.9	2
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45	Laser In-Situ synthesis of metallic cobalt decorated porous graphene for flexible In-Plane microsupercapacitors. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 610, 775-775	9.3	2
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43	The inactivation mechanism of chemical disinfection against SARS-CoV-2: from MD and DFT perspectives.. <i>RSC Advances</i> , <b>2020</b> , 10, 40480-40488	3.7	2
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41	The study of adsorption behavior of small molecules on stanene: A search of superior gas sensors <b>2016</b> ,		2
40	Thermal Inductance in GaN Devices. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 1473-1476	4.4	2
39	Electronic structure and transport properties of 2D RhTeCl: a NEGF-DFT study. <i>Nanoscale</i> , <b>2019</b> , 11, 20461-20466	4.1	2
38	A C2N/ZnSe heterostructure with type-II band alignment and excellent photocatalytic water splitting performance. <i>New Journal of Chemistry</i> , <b>2021</b> , 45, 13571-13578	3.6	2
37	Co, Rh decorated GaNNTs for online monitoring of characteristic decomposition products in oil-immersed transformer. <i>Applied Surface Science</i> , <b>2021</b> , 561, 150072	6.7	2
36	Type-II AsP/Sc2CO2 van der Waals heterostructure: an excellent photocatalyst for overall water splitting. <i>International Journal of Hydrogen Energy</i> , <b>2021</b> , 46, 32882-32892	6.7	2
35	A DFT study of As doped WSe2: A NO2 sensing material with ultra-high selectivity in the atmospheric environment. <i>Materials Today Communications</i> , <b>2021</b> , 28, 102654	2.5	2
34	Adsorption and sensing performances of ZnO-g-C3N4 monolayer toward SF6 decomposition products. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2021</b> , 134, 114909	3	2
33	. <i>IEEE Journal of Emerging and Selected Topics in Power Electronics</i> , <b>2021</b> , 9, 6329-6343	5.6	2
32	The promotion of sulfuric vacancy in two-dimensional molybdenum disulfide on the sensing performance of SF6 decomposition components. <i>Applied Surface Science</i> , <b>2022</b> , 571, 151377	6.7	2
31	Nomex paper-based double-sided laser-induced graphene for multifunctional human-machine interfaces. <i>Carbon</i> , <b>2022</b> , 193, 68-76	10.4	2
30	Metal Oxides/Carbon Felt Pressure Sensors with Ultra-Broad-Range High Sensitivity. <i>Advanced Materials Interfaces</i> , <b>2022</b> , 9, 2101663	4.6	2
29	Fluorosilicene/chlorosilicene bilayer semiconductor with tunable electronic and optical properties. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 055701	2.5	1
28	Adsorption of gases on monolayer GeSe: A first principle study <b>2017</b> ,		1

27	<b>2016,</b>			1
26	Indium Selenide/Antimonene Heterostructure for Multifunctional Optoelectronics. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 1-7		2.9	1
25	High-Performance Flexible Heater with Command-Responding Function Attained by Direct Laser Writing on Nomex Paper. <i>IEEE Electron Device Letters</i> , <b>2022</b> , 1-1		4.4	1
24	Porous ZnO/rGO Nanosheet-Based NO <sub>2</sub> Gas Sensor with High Sensitivity and ppb-Level Detection Limit at Room Temperature. <i>Advanced Materials Interfaces</i> , <b>2021</b> , 8, 2101511		4.6	1
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22	Capacitance creep and recovery behavior of magnetorheological elastomers. <i>Journal of Intelligent Material Systems and Structures</i> , <b>2020</b> , 1045389X2096991		2.3	1
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20	Monolayer square-Ag <sub>2</sub> X (X = S, Se): Excellent n-type thermoelectric materials with high power factors. <i>Applied Surface Science</i> , <b>2021</b> , 550, 149230		6.7	1
19	Gas-Sensing Properties of CuS-MoSe Nanosheets to NO and NH Gases. <i>ACS Omega</i> , <b>2021</b> , 6, 16517-16523.	3.9		1
18	A first-principle study of H <sub>2</sub> , CO, CH <sub>4</sub> , H <sub>2</sub> S and SO <sub>2</sub> gas molecules on antimonene <b>2016,</b>			1
17	Adsorption of CO <sub>2</sub> and CO gas on impurity-decorated phosphorenes: A first-principles study <b>2016,</b>			1
16	Design and Simulation of 1800V 40A 4H-SiC SBD Using TCAD <b>2018,</b>			1
15	Paper Title The Breakdown Voltage of AlGaN/GaN HEMT is Restricted to The Structure Parameters of The Device: A Study Based on TCAD <b>2018,</b>			1
14	Adsorption and gas sensing properties of CuO modified MoSe <sub>2</sub> to C <sub>3</sub> F <sub>7</sub> CN decomposition products. <i>Materials Today Communications</i> , <b>2021</b> , 28, 102677		2.5	1
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