

# CITATION REPORT

List of articles citing

The rising star of 2D black phosphorus beyond graphene: synthesis, properties and electronic applications

DOI: 10.1088/2053-1583/aa8d37  
2D Materials, 2018, 5, 014002.

**Source:** <https://exaly.com/paper-pdf/69629047/citation-report.pdf>

**Version:** 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

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

#	Paper	IF	Citations
176	Robust Zirconium Phosphate Phosphonate Nanosheets Containing Palladium Nanoparticles as Efficient Catalyst for Alkynes and Nitroarenes Hydrogenation Reactions. <i>ACS Applied Nano Materials</i> , <b>2018</b> , 1, 1750-1757	5.6	18
175	All-phosphorus flexible devices with non-collinear electrodes: a first principles study. <b>2018</b> , 20, 7167-7172		7
174	Recent progress in 2D group-VA semiconductors: from theory to experiment. <b>2018</b> , 47, 982-1021		549
173	Hybrid 2D Dual-Metal Organic Frameworks for Enhanced Water Oxidation Catalysis. <b>2018</b> , 28, 1801554		367
172	Monte Carlo study of magnetic and thermodynamic properties of a 2D boron clusters in a magnetic field. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2018</b> , 101, 94-102	3	38
171	Structure and properties of intrinsic and extrinsic defects in black phosphorus. <b>2018</b> , 10, 19536-19546		21
170	Flexible Plasmonic Pressure Sensor Based on Layered Two-Dimensional Heterostructures. <b>2018</b> , 36, 5678-5684		5
169	Nanocellulose: Recent advances and its prospects in environmental remediation. <b>2018</b> , 9, 2479-2498		144
168	n- and p-type ohmic contacts at monolayer gallium nitride-metal interfaces. <b>2018</b> , 20, 24239-24249		10
167	Recent Advances on Black Phosphorus for Energy Storage, Catalysis, and Sensor Applications. <b>2018</b> , 30, e1800295		166
166	Synthesis of vertically aligned CaTiO nanotubes with simple hydrothermal method and its photoelectrochemical property. <b>2018</b> , 29, 385605		6
165	Two-Dimensional Metal Nanomaterials: Synthesis, Properties, and Applications. <b>2018</b> , 118, 6409-6455		467
164	Black Phosphorus: Degradation Favors Lubrication. <b>2018</b> , 18, 5618-5627		71
163	In-plane thermal transport in black phosphorene/graphene layered heterostructures: a molecular dynamics study. <b>2018</b> , 20, 21151-21162		21
162	Giant conductance anisotropy in black phosphorene tuned by external electric field. <b>2018</b> , 30, 33LT01		3
161	Cr(VI) remediation from aqueous environment through modified-TiO-mediated photocatalytic reduction. <b>2018</b> , 9, 1448-1470		68
160	Role of out-of-plane dielectric thickness in the electrostatic simulation of atomically thin lateral junctions. <b>2018</b> , 123, 214302		7

159	Anisotropic interfacial properties of monolayer GeSe-metal contacts. <b>2019</b> , 34, 095021		5
158	Transport characteristics of multi-terminal pristine and defective phosphorene systems. <b>2019</b> , 30, 455705		3
157	Engineering Optical Absorption in Graphene and Other 2D Materials: Advances and Applications. <b>2019</b> , 7, 1900595		62
156	Improved Dreyding force field for single layer black phosphorus. <b>2019</b> , 21, 16804-16817		7
155	Information theoretic analysis of Landau levels in monolayer phosphorene under magnetic and electric fields. <b>2019</b> , 6, 106316		2
154	Black phosphorus-Au filter paper-based three-dimensional SERS substrate for rapid detection of foodborne bacteria. <i>Applied Surface Science</i> , <b>2019</b> , 497, 143825	6.7	21
153	Broadband photodetection of 2D Bi <sub>2</sub> O <sub>2</sub> Se/MoSe <sub>2</sub> heterostructure. <b>2019</b> , 54, 14742-14751		24
152	Anisotropic thermal conductivity in direction-specific black phosphorus nanoflakes. <b>2019</b> , 9, 1311-1316		4
151	Transport and photogalvanic properties of covalent functionalized monolayer black phosphorus. <b>2019</b> , 43, 377-385		5
150	NiCo hydroxide nanosheets on plasma-reduced Co-based metal-organic nanocages for electrocatalytic water oxidation. <b>2019</b> , 7, 4950-4959		42
149	A virtual-source emission-diffusion I-V model for ultra-thin black phosphorus field-effect transistors. <b>2019</b> , 125, 165706		6
148	Memristive devices based on emerging two-dimensional materials beyond graphene. <b>2019</b> , 11, 12413-12435		64
147	Gate-tunable large spin polarization in a few-layer black phosphorus-based spintronic device. <b>2019</b> , 11, 11872-11878		9
146	Recent Advances in 2D Lateral Heterostructures. <i>Nano-Micro Letters</i> , <b>2019</b> , 11, 48	19.5	58
145	Optical and Optoelectronic Properties of Black Phosphorus and Recent Photonic and Optoelectronic Applications. <b>2019</b> , 3, 1900165		43
144	Surface Coordination of Black Phosphorus with Modified Cisplatin. <b>2019</b> , 30, 1658-1664		14
143	High-Performance WS Monolayer Light-Emitting Tunneling Devices Using 2D Materials Grown by Chemical Vapor Deposition. <b>2019</b> , 13, 4530-4537		34
142	A FRET assay for the quantitation of inhibitors of exonuclease EcoRV by using parchment paper inkjet-printed with graphene oxide and FAM-labelled DNA. <b>2019</b> , 186, 211		6

141	Interfacial engineering of graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> )-based metal sulfide heterojunction photocatalysts for energy conversion: A review. <i>Chinese Journal of Catalysis</i> , <b>2019</b> , 40, 289-319	11.3	309
140	A water splitting photocatalysis: Blue phosphorus/g-GeC van der Waals heterostructure. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 093902	3.4	34
139	Preparations, properties and applications of low-dimensional black phosphorus. <i>Chemical Engineering Journal</i> , <b>2019</b> , 370, 120-135	14.7	46
138	Few layer 2D pnictogens catalyze the alkylation of soft nucleophiles with esters. <b>2019</b> , 10, 509		45
137	First-principles study of elastic, thermal and optical properties of a metal-shrouded two-dimensional semiconductor Tl <sub>2</sub> O. <b>2019</b> , 293, 40-47		4
136	Near-Field Thermal Radiation of Nanopatterned Black Phosphorene Mediated by Topological Transitions of Phosphorene Plasmons. <b>2019</b> , 23, 188-199		16
135	Exfoliation of Calcium Germanide by Alkyl Halides. <b>2019</b> , 31, 10126-10134		12
134	Two-dimensional group-VA nanomaterials beyond black phosphorus: synthetic methods, properties, functional nanostructures and applications. <b>2019</b> , 7, 25712-25771		34
133	Tuning 2D Black Phosphorus: Defect Tailoring and Surface Functionalization. <b>2019</b> , 31, 9917-9938		16
132	Crystallographic Characterization of Black Phosphorene and its Application in Nanostructures. <b>2019</b> , 12,		15
131	Atomic-level insight into the mechanism of 0D/2D black phosphorus quantum dot/graphitic carbon nitride (BPQD/GCN) metal-free heterojunction for photocatalysis. <i>Applied Surface Science</i> , <b>2019</b> , 463, 1148-1153	6.7	55
130	Two-dimensional black phosphorus: A new star in energy applications and the barrier to stability. <b>2019</b> , 14, 51-58		34
129	Study of indium and antimony incorporation into SnS <sub>2</sub> single crystals. <b>2019</b> , 507, 180-188		9
128	Computational Design of Single-Molybdenum Catalysts for the Nitrogen Reduction Reaction. <b>2019</b> , 123, 2347-2352		50
127	Few-layer phosphorene: An emerging electrode material for electrochemical energy storage. <b>2019</b> , 15, 18-33		36
126	Surface and Heterointerface Engineering of 2D MXenes and Their Nanocomposites: Insights into Electro- and Photocatalysis. <b>2019</b> , 5, 18-50		365
125	Effect of tensile and compression deformation on the electronic structure and optical properties of single-layer black phosphorus. <b>2020</b> , 578, 411755		6
124	Scalable and energy-efficient synthesis of CoxP for overall water splitting in alkaline media by high energy ball milling. <i>Sustainable Energy and Fuels</i> , <b>2020</b> , 4, 1723-1729	5.8	9

123	Advances of 2D bismuth in energy sciences. <b>2020</b> , 49, 263-285	78
122	Rapid exfoliation for few-layer enriched black phosphorus dispersion via a superhydrophobic silicon-nanowire-embedded microfluidic process. <b>2020</b> , 22, 699-706	6
121	Recent advances in low-dimensional semiconductor nanomaterials and their applications in high-performance photodetectors. <b>2020</b> , 2, 291-317	54
120	Degradation of Black Phosphorus and Strategies to Enhance Its Ambient Lifetime. <b>2020</b> , 7, 2001102	10
119	Stabilization of Black Phosphorus by Sonication-Assisted Simultaneous Exfoliation and Functionalization. <b>2020</b> , 26, 17581-17587	1
118	Preparing dangling bonds by nanoholes on graphene oxide nanosheets and their enhanced magnetism.. <b>2020</b> , 10, 36378-36385	4
117	Dielectric properties and compensation behaviors of a monolayer naphthalene-like nanoisland: Monte Carlo simulations. <b>2020</b> , 67, 113-123	2
116	Transition metal (TM=Cr, Mn, Fe, Co, Ni) doped phosphorene as anode material for lithium-ion batteries predicted from first-principle calculations. <b>2020</b> , 183, 109877	7
115	Design and synthesis of two-dimensional materials and their heterostructures. <b>2020</b> , 13-54	1
114	Dilution effects on compensation temperature in borophene core-shell structure: Monte Carlo simulations. <b>2020</b> , 316-317, 113944	8
113	Polarization and dielectric susceptibility of a monolayer coronene like nano-structure: Monte Carlo study. <b>2020</b> , 384, 126783	4
112	Black Phosphorus Nanosheet with High Thermal Conversion Efficiency for Photodynamic/Photothermal/Immunotherapy. <b>2020</b> , 6, 4940-4948	28
111	Non-Carbon 2D Materials-Based Field-Effect Transistor Biosensors: Recent Advances, Challenges, and Future Perspectives. <b>2020</b> , 20,	5
110	Tunable Bragg reflector with parallel bulk Dirac semimetals at terahertz frequencies. <b>2020</b> , 67, 1010-1016	1
109	Functional inks and extrusion-based 3D printing of 2D materials: a review of current research and applications. <b>2020</b> , 12, 19007-19042	38
108	Controllable Thermal Oxidation and Photoluminescence Enhancement in Quasi-1D van der Waals ZrS <sub>3</sub> Flakes. <b>2020</b> , 2, 3756-3764	4
107	Comparative Study on the Adsorption Capacities of the Three Black Phosphorus-Based Materials for Methylene Blue in Water. <b>2020</b> , 12, 8335	4
106	Performance Analysis of Blue Phosphorene Dual Gate Nano FET(DG-NFET). <b>2020</b> ,	

105	Pb-Based Halide Perovskites: Recent Advances in Photo(electro)catalytic Applications and Looking Beyond. <b>2020</b> , 30, 1909667		46
104	Experimental Study on Thermal Conductivity and Rectification in Suspended Monolayer MoS. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 28306-28312	9.5	9
103	Synthesis Techniques, Optoelectronic Properties, and Broadband Photodetection of Thin-Film Black Phosphorus. <b>2020</b> , 8, 2000045		18
102	Two-Dimensional Black Phosphorus: An Emerging Anode Material for Lithium-Ion Batteries. <i>Nano-Micro Letters</i> , <b>2020</b> , 12, 120	19.5	26
101	Polarization and bandgap characteristics of monolayer black phosphorene in magnetic field. <b>2020</b> , 34, 2050314		1
100	Scalable Synthesis of a MoS <sub>2</sub> /Black Phosphorus Heterostructure for pH-Universal Hydrogen Evolution Catalysis. <b>2020</b> , 12, 2840-2848		26
99	Mechanical, electronic and optical properties of bulk and monolayer GeSe <sub>2</sub> . <b>2020</b> , 34, 2050034		2
98	Partial sodiation induced laminate structure and high cycling stability of black phosphorous for sodium-ion batteries. <b>2020</b> , 12, 19609-19616		5
97	Magnetic properties of naphthalene-like nano-structure with RKKY interactions: Monte Carlo simulations. <b>2020</b> , 64, 295-304		15
96	Highly Selective Adsorption on SiSe Monolayer and Effect of Strain Engineering: A DFT Study. <b>2020</b> , 20,		2
95	A self-powered photodetector based on two-dimensional boron nanosheets. <b>2020</b> , 12, 5313-5323		36
94	Cryo-induced closely bonded heterostructure for effective CO <sub>2</sub> conversion: The case of ultrathin BP nanosheets/g-C <sub>3</sub> N <sub>4</sub> . <b>2020</b> , 49, 89-95		30
93	Electrical transport properties in group-V elemental ultrathin 2D layers. <b>2020</b> , 4,		18
92	Strain-tunable photogalvanic effect in phosphorene. <b>2020</b> , 24, 101154		0
91	Advanced Functional Electroactive and Photoactive Materials for Monitoring the Environmental Pollutants. <b>2021</b> , 31, 2008227		11
90	Recent Advances in Hybridization, Doping, and Functionalization of 2D Xenos. <b>2021</b> , 31, 2005471		10
89	Analogies between the topological insulator phase of 2D Dirac materials and the superradiant phase of atom-field systems. <b>2021</b> , 121, e26464		1
88	Recent advances in 2D black phosphorus based materials for gas sensing applications. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 9, 3773-3794	7.1	20

87	Coordination-Driven Enhancement of Radiosensitization by Black Phosphorus Regulating Tumor Metabolism. <b>2021</b> , 15, 3047-3060		20
86	New graphane: inspiration from the structure correlation with phosphorene. <b>2021</b> , 23, 15302-15312		0
85	Photogating effect in two-dimensional photodetectors. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2021</b> , 70, 027801-027801		0
84	Mechanical properties of aerospace epoxy composites reinforced with 2D nano-fillers: current status and road to industrialization. <b>2021</b> , 3, 2741-2776		12
83	Non-equilibrium band broadening, gap renormalization and band inversion in black phosphorus. <i>2D Materials</i> , <b>2021</b> , 8, 025020	5-9	5
82	The oxidation and thermal stability of two-dimensional transition metal carbides and/or carbonitrides (MXenes) and the improvement based on their surface state. <b>2021</b> , 8, 2164-2182		9
81	Interface dark excitons at sharp lateral two-dimensional heterostructures. <b>2021</b> , 96, 045815		
80	Blume-Capel model of a borophene layers structure with RKKY interactions: Monte Carlo simulations. <b>2021</b> , 573, 141-153		3
79	Lithium-Sulfur Battery Cathode Design: Tailoring Metal-Based Nanostructures for Robust Polysulfide Adsorption and Catalytic Conversion. <b>2021</b> , e2008654		60
78	Heterostructures of 2D materials-quantum dots (QDs) for optoelectronic devices: challenges and opportunities. <i>Emergent Materials</i> , <b>2021</b> , 4, 901-922	3-5	3
77	Cytocompatibility of stabilized black phosphorus nanosheets tailored by directly conjugated polymeric micelles for human breast cancer therapy. <b>2021</b> , 11, 9304		6
76	Point-Defect Engineering: Leveraging Imperfections in Graphitic Carbon Nitride (g-C N ) Photocatalysts toward Artificial Photosynthesis. <i>Small</i> , <b>2021</b> , 17, e2006851	11	49
75	Synthesis of lateral heterostructure of 2D materials for optoelectronic devices: challenges and opportunities. <i>Emergent Materials</i> , <b>2021</b> , 4, 923-949	3-5	5
74	A Comparison of Thermal and Magnetic Behaviors in Triangular, Square and Pentagonal Husimi-Like Structures: Monte Carlo Simulations. <i>Spin</i> , 2150013	1-3	0
73	High detectivity and responsivity in black phosphorus/SnS <sub>2</sub> heterostructure with broken-gap energy band alignment. <i>Japanese Journal of Applied Physics</i> , <b>2021</b> , 60, 065003	1-4	2
72	Experiments combined with first-principles calculations to compare the enhancement of Ag-doping and -functionalization on the sensing properties of two-dimensional SnS. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2021</b> , 131, 114752	3	4
71	Hall and bend resistance of a phosphorene Hall bar. <i>Physical Review B</i> , <b>2021</b> , 104,	3-3	0
70	Tunable Schottky contact in graphene/InP <sub>3</sub> van der Waals heterostructures. <i>Applied Surface Science</i> , <b>2021</b> , 554, 149608	6-7	5

69	Narrow-bandgap materials for optoelectronics applications. <i>Frontiers of Physics</i> , <b>2022</b> , 17, 1	3.7	5
68	Black Phosphorus Nanoflakes Vertically Stacked on MoS <sub>2</sub> Nanoflakes as Heterostructures for Photodetection. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 6928-6935	5.6	7
67	Biaxial Strain-Induced Electronic Structure and Optical Properties of SiP <sub>2</sub> S Monolayer. <i>Journal of Electronic Materials</i> , <b>2021</b> , 50, 6253-6260	1.9	2
66	Strategies and Applications for Improving the Stability of Black Phosphorus in Physical Environment. <i>Advanced Engineering Materials</i> , <b>2021</b> , 23, 2100450	3.5	3
65	Enhanced light absorption in monolayer tungsten disulfide with dielectric Bragg reflector and metallic thin film. <i>Optik</i> , <b>2021</b> , 239, 166781	2.5	
64	Direct Growth of van der Waals Tin Diodide Monolayers. <i>Advanced Science</i> , <b>2021</b> , 8, e2100009	13.6	1
63	Two-dimensional heterostructures and their device applications: progress, challenges and opportunities—Review. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 433001	3	6
62	Sensitivity enhancement using anisotropic black phosphorus and antimonene in bi-metal layer-based surface plasmon resonance biosensor. <i>Superlattices and Microstructures</i> , <b>2021</b> , 156, 106969	2.8	8
61	Development of non-enzymatic and photothermal immuno-sensing assay for detecting the enrofloxacin in animal derived food by utilizing black phosphorus-platinum two-dimensional nanomaterials. <i>Food Chemistry</i> , <b>2021</b> , 357, 129766	8.5	5
60	Photosynthetic Cyanobacteria-Hybridized Black Phosphorus Nanosheets for Enhanced Tumor Photodynamic Therapy. <i>Small</i> , <b>2021</b> , 17, e2102113	11	10
59	Site-specific symmetry sensitivity of angle-resolved photoemission spectroscopy in layered palladium diselenide. <i>2D Materials</i> ,	5.9	1
58	Recent progress in two-dimensional materials for microwave absorption applications. <i>Chemical Engineering Journal</i> , <b>2021</b> , 425, 131558	14.7	9
57	Recent developments in the photodetector applications of Schottky diodes based on 2D materials. <i>Journal of Materials Chemistry C</i> ,	7.1	21
56	Black phosphorus: device and application. <b>2021</b> , 139-163		0
55	Up-scalable emerging energy conversion technologies enabled by 2D materials: from miniature power harvesters towards grid-connected energy systems. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 3352-3392	35.4	6
54	Recent advancements and opportunities of decorated graphitic carbon nitride toward solar fuel production and beyond. <i>Sustainable Energy and Fuels</i> , <b>2021</b> , 5, 4457-4511	5.8	8
53	The electrical, thermal, and thermoelectric properties of black phosphorus. <i>APL Materials</i> , <b>2020</b> , 8, 1209037	9.7	5
52	Plasmonic biosensor based on excellently absorbable adjustable plasmon-induced transparency in black phosphorus and graphene metamaterials. <i>New Journal of Physics</i> , <b>2020</b> , 22, 073049	2.9	15



51	Alkalized SnS Nanoflakes with Enhanced Sensing Properties towards Methanol Vapor. <i>ECS Journal of Solid State Science and Technology</i> , <b>2020</b> , 9, 121013	2	2
50	Ultra-narrowband perfect absorption of monolayer two-dimensional materials enabled by all-dielectric subwavelength gratings. <i>Optics Express</i> , <b>2020</b> , 28, 38592-38602	3.3	2
49	Polarization-independent plasmonic absorption in stacked anisotropic 2D material nanostructures. <i>Optics Letters</i> , <b>2020</b> , 45, 93	3	67
48	Determining the dispersion stability of black phosphorus colloids by 3D light scattering. <i>Optical Materials Express</i> , <b>2019</b> , 9, 423	2.6	2
47	Electronic structure and photocatalytic properties of H, F modified two-dimensional GeTe. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2020</b> , 69, 056301	0.6	2
46	Structure and Fundamental Properties of Black Phosphorus. <i>Engineering Materials</i> , <b>2020</b> , 139-156	0.4	
45	Resonant Multi-phonon Raman scattering of black phosphorus. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2020</b> , 69, 167803	0.6	2
44	Tunable contact resistance in transition metal dichalcogenide lateral heterojunctions. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	1
43	Shedding light on the energy applications of emerging 2D hybrid organic-inorganic halide perovskites.. <i>IScience</i> , <b>2022</b> , 25, 103753	6.1	2
42	Sensitivity enhancement of a graphene, zinc sulfide-based surface plasmon resonance biosensor with an Ag metal configuration in the visible region. <i>Journal of Computational Electronics</i> , 1	1.8	4
41	Integration of geospatial technology for mapping of algae: an economical perspective for assessing nanocellulose. <b>2022</b> , 289-310		
40	A High-Performance Schottky Photodiode with Asymmetric Metal Contacts Constructed on 2D Bi <sub>2</sub> O <sub>2</sub> Se. <i>Advanced Electronic Materials</i> , 2100987	6.4	6
39	Thermal transport mechanism for different structure. <b>2022</b> , 47-113		
38	2D Materials for Wearable Energy Harvesting. <i>Advanced Materials Technologies</i> , 2101623	6.8	1
37	Surface Plasmon Biosensor Based on Bi <sub>2</sub> Te <sub>3</sub> Antimonene Heterostructure for the Detection of Cancer Cells. <i>Applied Optics</i> ,	1.7	3
36	Formation of black phosphorus quantum dots via shock-induced phase transformation. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 141902	3.4	1
35	MXene-Derived Quantum Dot@Gold Nanobones Heterostructure-Based Electrochemiluminescence Sensor for Triple-Negative Breast Cancer Diagnosis.. <i>Analytical Chemistry</i> , <b>2021</b> , 93, 17086-17093	7.8	10
34	Electrical and galvanomagnetic properties of black phosphorus single crystals. <i>Modern Electronic Materials</i> , <b>2021</b> , 7, 127-139	0.3	

33	2D layered black arsenic-phosphorus materials: Synthesis, properties, and device applications. <i>Nano Research</i> , <b>2022</b> , 15, 3737-3752	10	3
32	Next-Generation Intelligent MXene-Based Electrochemical Aptasensors for Point-of-Care Cancer Diagnostics.. <i>Nano-Micro Letters</i> , <b>2022</b> , 14, 100	19.5	8
31	Two-Dimensional Quantum Dot-Based Electrochemical Biosensors.. <i>Biosensors</i> , <b>2022</b> , 12,	5.9	1
30	Nanocellulose in Industrial Wastewater Treatment: An Overview. <i>Water Science and Technology Library</i> , <b>2022</b> , 209-236	0.3	
29	InP and graphene employed surface plasmon resonance sensor for measurement of sucrose concentration: a numerical approach. <i>Optical Engineering</i> , <b>2022</b> , 61,	1.1	3
28	Synthetic 2D tellurium nanosheets with intense TE wave polarization absorption by employing the PVD method. <i>Journal of Nanoparticle Research</i> , <b>2022</b> , 24,	2.3	
27	Effect of MoO <sub>3</sub> buffer layer on the electronic structure of Al-BP interface. <i>Journal Physics D: Applied Physics</i> ,	3	0
26	MXenes for electrocatalysis applications: Modification and hybridization. <i>Chinese Journal of Catalysis</i> , <b>2022</b> , 43, 2057-2090	11.3	6
25	Experimental Realization and Computational Investigations of B2S <sub>2</sub> as a New 2D Material with Potential Applications. <i>ACS Applied Materials &amp; Interfaces</i> ,	9.5	2
24	Point-to-face contact heterojunctions: Interfacial design of 0D nanomaterials on 2D g-C <sub>3</sub> N <sub>4</sub> towards photocatalytic energy applications.		4
23	Magnetic Properties and Compensation Temperature of a Mixed Monolayer Coronene-Like Nanostructure: Monte Carlo Study.		0
22	Tunable multi-narrowband perfect absorber based on graphene and black phosphorus metamaterial. <b>2022</b> , 270, 169932		1
21	It takes two: advances in employing the interactions between black phosphorous and metals in various applications. <b>2022</b> , 10, 18490-18508		0
20	Electrical and galvanomagnetic properties of black phosphorus single crystals. <b>2022</b> , 25, 5-22		0
19	Design and Modelling of High-Performance Surface Plasmon Resonance Refractive Index Sensor Using BaTiO <sub>3</sub> , MXene and Nickel Hybrid Nanostructure.		0
18	2D Xenes: Optical and Optoelectronic Properties and Applications in Photonic Devices. 2206507		0
17	Investigation of anisotropic absorption in the hybrid L-shaped graphene-black phosphorene structure. <b>2022</b> , 115554		0
16	Advances in nonprecious metal catalysts for efficient water oxidation in alkaline media.		0

- 15 Electronic and optical properties of lateral heterostructures within monolayer black phosphorene and group-IV monochalcogenides. **2022**, 454, 128495 ○
- 14 Emerging low-dimensional black phosphorus: from physical-optical properties to biomedical applications. ○
- 13 Black-phosphorus-based junctions and their optoelectronic device applications. ○
- 12 Strong Interlayer Interaction for Engineering Two-Dimensional Materials. ○
- 11 Dielectric Properties of Ovalene-Like Nano-structure with RKKY Interactions: Monte Carlo Study. ○
- 10 Tuning the Band Structure of Zn-Doped SnS<sub>2</sub> Nanosheet-Based Thin Films by Atomic Layer Deposition for Photoelectric Devices. **2022**, 5, 18199-18208 ○
- 9 Pixel-wise classification in graphene-detection with tree-based machine learning algorithms. **2022**, 3, 045029 ○
- 8 Progress in the synthesis of 2D black phosphorus beyond exfoliation. **2022**, 9, 041318 1
- 7 Printed Electronics Based on 2D Material Inks: Preparation, Properties, and Applications toward Memristors. 2201156 ○
- 6 The tunability of electronic and transport properties of InSe/MoSe<sub>2</sub> van der Waals heterostructure: A first-principles study. **2023**, 36, 102634 ○
- 5 Graphite and Bismuth Selenide under Electrical Explosion in Confined Environment: Exfoliation, Phase Transition, and Surface Decoration. 2201568 1
- 4 Black Phosphorous and Cytop Nanofilm-Based Long-Range SPR Sensor with Enhanced Quality Factor. **2023**, 2023, 1-10 ○
- 3 Numerical Analysis of Black Phosphorus-Assisted Copper-Based Bimetallic-Enhanced Surface Plasmon Resonance Biosensor. **2023**, 220, ○
- 2 Trends in the Preparation and Passivation Techniques of Black Phosphorus Nanostructures for Optoelectronics Applications: A Review. **2023**, 6, 3159-3183 ○
- 1 Smith-Purcell Radiation from Highly Mobile Carriers in 2D Quantum Materials. ○