

Jianxin Zhong

List of Publications by Year in descending order

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169
papers

6,333
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| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Environmentally Robust Black Phosphorus Nanosheets in Solution: Application for Self-Powered Photodetector. <i>Advanced Functional Materials</i> , 2017, 27, 1606834. | 14.9 | 342 |
| 2 | Few-Layer Black Phosphorus Nanosheets as Electrocatalysts for Highly Efficient Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2017, 7, 1700396. | 19.5 | 301 |
| 3 | High-Performance Photo-Electrochemical Photodetector Based on Liquid-Exfoliated Few-Layered InSe Nanosheets with Enhanced Stability. <i>Advanced Functional Materials</i> , 2018, 28, 1705237. | 14.9 | 258 |
| 4 | Solar Water Splitting by $\text{TiO}_2/\text{CdS}/\text{Co}^{\text{II}}\text{Pi}$ Nanowire Array Photoanode Enhanced with $\text{Co}^{\text{II}}\text{Pi}$ as Hole Transfer Relay and CdS as Light Absorber. <i>Advanced Functional Materials</i> , 2015, 25, 5706-5713. | 14.9 | 240 |
| 5 | A black/red phosphorus hybrid as an electrode material for high-performance Li-ion batteries and supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 6581-6588. | 10.3 | 160 |
| 6 | Large-scale production of ultrathin topological insulator bismuth telluride nanosheets by a hydrothermal intercalation and exfoliation route. <i>Journal of Materials Chemistry</i> , 2012, 22, 4921. | 6.7 | 158 |
| 7 | Self-Assembled Three-Dimensional Graphene-Based Aerogel with Embedded Multifarious Functional Nanoparticles and Its Excellent Photoelectrochemical Activities. <i>ACS Sustainable Chemistry and Engineering</i> , 2014, 2, 741-748. | 6.7 | 143 |
| 8 | 3D hierarchical porous graphene aerogel with tunable meso-pores on graphene nanosheets for high-performance energy storage. <i>Scientific Reports</i> , 2015, 5, 14229. | 3.3 | 139 |
| 9 | Enhanced thermoelectric properties in hybrid graphene/boron nitride nanoribbons. <i>Physical Review B</i> , 2012, 86, . | 3.2 | 138 |
| 10 | Cobalt phosphate modified TiO_2 nanowire arrays as co-catalysts for solar water splitting. <i>Nanoscale</i> , 2015, 7, 6722-6728. | 5.6 | 136 |
| 11 | MoS_2 -Quantum-Dot-Interspersed $\text{Li}_4\text{Ti}_5\text{O}_{12}$ Nanosheets with Enhanced Performance for Li^+ - and Na^+ -ion Batteries. <i>Advanced Functional Materials</i> , 2016, 26, 3349-3358. | 14.9 | 128 |
| 12 | Upconversion-P25-graphene composite as an advanced sunlight driven photocatalytic hybrid material. <i>Journal of Materials Chemistry</i> , 2012, 22, 11765. | 6.7 | 119 |
| 13 | Stochastic generation of complex crystal structures combining group and graph theory with application to carbon. <i>Physical Review B</i> , 2018, 97, . | 3.2 | 114 |
| 14 | Thermal transport in graphyne nanoribbons. <i>Physical Review B</i> , 2012, 85, . | 3.2 | 103 |
| 15 | Complex Low Energy Tetrahedral Polymorphs of Group IV Elements from First Principles. <i>Physical Review Letters</i> , 2018, 121, 175701. | 7.8 | 95 |
| 16 | Stone-Wales graphene: A two-dimensional carbon semimetal with magic stability. <i>Physical Review B</i> , 2019, 99, . | 3.2 | 95 |
| 17 | Temperature-Dependent Raman Responses of the Vapor-Deposited Tin Selenide Ultrathin Flakes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 4674-4679. | 3.1 | 94 |
| 18 | A Bond-order Theory on the Phonon Scattering by Vacancies in Two-dimensional Materials. <i>Scientific Reports</i> , 2014, 4, 5085. | 3.3 | 91 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Thermal and thermoelectric properties of monolayer indium triphosphide (InP_3): a first-principles study. <i>Journal of Materials Chemistry A</i> , 2018, 6, 21532-21541. | 10.3 | 91 |
| 20 | Black Phosphorus Nanosheets Modified with Au Nanoparticles as High Conductivity and High Activity Electrocatalyst for Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2020, 10, 2002424. | 19.5 | 79 |
| 21 | 3D Binder-free MoSe_2 Nanosheets/Carbon Cloth Electrodes for Efficient and Stable Hydrogen Evolution Prepared by Simple Electrophoresis Deposition Strategy. <i>Scientific Reports</i> , 2016, 6, 22516. | 3.3 | 75 |
| 22 | A rationally designed composite of alternating strata of Si nanoparticles and graphene: a high-performance lithium-ion battery anode. <i>Nanoscale</i> , 2013, 5, 8586. | 5.6 | 72 |
| 23 | Nanoindentation models and Young's modulus of monolayer graphene: A molecular dynamics study. <i>Applied Physics Letters</i> , 2013, 102, . | 3.3 | 72 |
| 24 | Hydrothermal synthesis of $\text{Ni}_3\text{S}_2/\text{graphene}$ electrode and its application in a supercapacitor. <i>RSC Advances</i> , 2014, 4, 37278-37283. | 3.6 | 71 |
| 25 | In situ shape and phase transformation synthesis of Co_3S_4 nanosheet arrays for high-performance electrochemical supercapacitors. <i>RSC Advances</i> , 2013, 3, 22922. | 3.6 | 66 |
| 26 | Rational Construction of a Functionalized V_2O_5 Nanosphere/MWCNT Layer-by-Layer Nanoarchitecture as Cathode for Enhanced Performance of Lithium-ion Batteries. <i>Advanced Functional Materials</i> , 2015, 25, 5633-5639. | 14.9 | 62 |
| 27 | Binder-free Si nanoparticles@carbon nanofiber fabric as energy storage material. <i>Electrochimica Acta</i> , 2013, 102, 246-251. | 5.2 | 60 |
| 28 | Lattice thermal conductivity of borophene from first principle calculation. <i>Scientific Reports</i> , 2017, 7, 45986. | 3.3 | 60 |
| 29 | Ballistic thermal rectification in asymmetric three-terminal graphene nanojunctions. <i>Physical Review B</i> , 2010, 82, . | 3.2 | 57 |
| 30 | A novel $\text{WS}_2/\text{NbSe}_2$ vdW heterostructure as an ultrafast charging and discharging anode material for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 17040-17048. | 10.3 | 53 |
| 31 | Direct Vapor Deposition Growth of 1e^2 MoTe_2 on Carbon Cloth for Electrocatalytic Hydrogen Evolution. <i>ACS Applied Energy Materials</i> , 2020, 3, 3212-3219. | 5.1 | 52 |
| 32 | Thermal conductance modulator based on folded graphene nanoribbons. <i>Applied Physics Letters</i> , 2011, 99, 233101. | 3.3 | 50 |
| 33 | Two-dimensional topological insulators with tunable band gaps: Single-layer HgTe and HgSe . <i>Scientific Reports</i> , 2015, 5, 14115. | 3.3 | 50 |
| 34 | Thermoelectric properties of gamma-graphyne nanoribbons and nanojunctions. <i>Journal of Applied Physics</i> , 2013, 114, . | 2.5 | 49 |
| 35 | Surface and substrate induced effects on thin films of the topological insulators Bi_2Se_3 and Bi_2Te_3 . <i>Journal of Applied Physics</i> , 2013, 114, . | 3.2 | 49 |
| 36 | Electrochemically reduced graphene oxide with porous structure as a binder-free electrode for high-rate supercapacitors. <i>RSC Advances</i> , 2014, 4, 13673. | 3.6 | 48 |

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|----|--|------|-----------|
| 37 | Tunable Electronic and Optical Properties of 2D Monoelemental Materials Beyond Graphene for Promising Applications. <i>Energy and Environmental Materials</i> , 2021, 4, 522-543. | 12.8 | 48 |
| 38 | SnS 2 nanoplates embedded in 3D interconnected graphene network as anode material with superior lithium storage performance. <i>Applied Surface Science</i> , 2015, 355, 7-13. | 6.1 | 47 |
| 39 | Electrostatic properties of few-layer MoS2 films. <i>AIP Advances</i> , 2013, 3, . | 1.3 | 46 |
| 40 | Phonon mean free path spectrum and thermal conductivity for Si1âˆ™xGex nanowires. <i>Applied Physics Letters</i> , 2014, 104, . | 3.3 | 46 |
| 41 | Few-Layer Antimonene Nanosheet: A Metal-Free Bifunctional Electrocatalyst for Effective Water Splitting. <i>ACS Applied Energy Materials</i> , 2019, 2, 4774-4781. | 5.1 | 46 |
| 42 | Asymmetric transport in asymmetric T-shaped graphene nanoribbons. <i>Applied Physics Letters</i> , 2008, 93, 092104. | 3.3 | 45 |
| 43 | Transport Properties of Hybrid Zigzag Graphene and Boron Nitride Nanoribbons. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10836-10841. | 3.1 | 45 |
| 44 | Electrochemical properties of high-power supercapacitors using ordered NiO coated Si nanowire array electrodes. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 104, 545-550. | 2.3 | 44 |
| 45 | An architected TiO2 nanosheet with discrete integrated nanocrystalline subunits and its application in lithium batteries. <i>Journal of Materials Chemistry</i> , 2012, 22, 21513. | 6.7 | 44 |
| 46 | Three-dimensional network current collectors supported Si nanowires for lithium-ion battery applications. <i>Electrochimica Acta</i> , 2013, 88, 766-771. | 5.2 | 44 |
| 47 | TiO ₂ /Bi ₂ S ₃ coreâ€shell nanowire arrays for photoelectrochemical hydrogen generation. <i>RSC Advances</i> , 2015, 5, 13544-13549. | 3.6 | 44 |
| 48 | Structure, stability and electronic properties of tricycle type graphane. <i>Physica Status Solidi - Rapid Research Letters</i> , 2012, 6, 427-429. | 2.4 | 43 |
| 49 | Nitrogen-doped grapheneâ€Fe3O4 architecture as anode material for improved Li-ion storage. <i>RSC Advances</i> , 2014, 4, 17653. | 3.6 | 41 |
| 50 | Flexible Bismuth Selenide /Graphene composite paper for lithium-ion batteries. <i>Ceramics International</i> , 2017, 43, 1437-1442. | 4.8 | 41 |
| 51 | Two-Dimensional Carbon Allotropes and Nanoribbons based on 2,6-Polyazulene Chains: Stacking Stabilities and Electronic Properties. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 732-738. | 4.6 | 41 |
| 52 | Vertically aligned TiO2/(CdS, CdTe, CdSTe) core/shell nanowire array for photoelectrochemical hydrogen generation. <i>Journal of Power Sources</i> , 2015, 280, 5-11. | 7.8 | 40 |
| 53 | Ultraviolet, visible, and near infrared photoresponse properties of solution processed graphene oxide. <i>Applied Surface Science</i> , 2013, 266, 332-336. | 6.1 | 39 |
| 54 | Strain engineering the structures and electronic properties of Janus monolayer transition-metal dichalcogenides. <i>Journal of Applied Physics</i> , 2019, 125, . | 2.5 | 39 |

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|----|--|------|-----------|
| 55 | Large-scale carambola-like V ₂ O ₅ nanoflowers arrays on microporous reed carbon as improved electrochemical performances lithium-ion batteries cathode. Journal of Energy Chemistry, 2020, 51, 388-395. | 12.9 | 38 |
| 56 | Hydrothermal exfoliated molybdenum disulfide nanosheets as anode material for lithium ion batteries. Journal of Energy Chemistry, 2014, 23, 207-212. | 12.9 | 36 |
| 57 | Anisotropic thermal transport in Weyl semimetal TaAs: a first principles calculation. Physical Chemistry Chemical Physics, 2016, 18, 16709-16714. | 2.8 | 36 |
| 58 | Si-Cmma: A silicon thin film with excellent stability and Dirac nodal loop. Physical Review B, 2019, 100, . | 3.2 | 36 |
| 59 | Unified superradiant phase transitions. Physical Review A, 2019, 100, . | 2.5 | 36 |
| 60 | Density functional theory study of Fe adatoms adsorbed monolayer and bilayer MoS ₂ sheets. Journal of Applied Physics, 2013, 114, . | 2.5 | 35 |
| 61 | Photodetectors Based on SnS ₂ /Graphene Heterostructure on Rigid and Flexible Substrates. ChemNanoMat, 2018, 4, 373-378. | 2.8 | 34 |
| 62 | High-Throughput Screening of Two-Dimensional Planar sp ² Carbon Space Associated with a Labeled Quotient Graph. Journal of Physical Chemistry Letters, 2021, 12, 11511-11519. | 4.6 | 34 |
| 63 | The structural, electronic and magnetic properties of bi-layered MoS ₂ with transition-metals doped in the interlayer. RSC Advances, 2013, 3, 12939. | 3.6 | 33 |
| 64 | Cobalt phosphate modified 3D TiO ₂ /BiVO ₄ composite inverse opals photoanode for enhanced photoelectrochemical water splitting. Applied Surface Science, 2019, 464, 544-551. | 6.1 | 33 |
| 65 | Newly discovered graphyne allotrope with rare and robust Dirac node loop. Nanoscale, 2021, 13, 3564-3571. | 5.6 | 33 |
| 66 | Introduction of nitrogen defects into a graphitic carbon nitride framework by selenium vapor treatment for enhanced photocatalytic hydrogen production. Applied Surface Science, 2019, 476, 552-559. | 6.1 | 32 |
| 67 | Five low energy phosphorene allotropes constructed through gene segments recombination. Scientific Reports, 2017, 7, 46431. | 3.3 | 31 |
| 68 | Phase controllable synthesis of SnSe and SnSe ₂ films with tunable photoresponse properties. Applied Surface Science, 2021, 541, 148615. | 6.1 | 31 |
| 69 | Intrinsic piezoelectricity of monolayer group IV-V MX ₂ : SiP ₂ , SiAs ₂ , GeP ₂ , and GeAs ₂ . Applied Physics Letters, 2020, 116, . | 3.3 | 30 |
| 70 | Electron transport of folded graphene nanoribbons. Journal of Applied Physics, 2009, 106, . | 2.5 | 28 |
| 71 | Size and boundary scattering controlled contribution of spectral phonons to the thermal conductivity in graphene ribbons. Journal of Applied Physics, 2014, 115, . | 2.5 | 28 |
| 72 | First-principles prediction of a novel hexagonal phosphorene allotrope. Physica Status Solidi - Rapid Research Letters, 2016, 10, 563-565. | 2.4 | 28 |

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| 73 | General Programmable Growth of Hybrid Core–Shell Nanostructures with Liquid Metal Nanodroplets. <i>Advanced Materials</i> , 2021, 33, e2008024. | 21.0 | 28 |
| 74 | One-step hydrothermal fabrication and enhancement of the photocatalytic performance of CdMoO ₄ /CdS hybrid materials. <i>RSC Advances</i> , 2014, 4, 8772. | 3.6 | 27 |
| 75 | New Two-Dimensional Wide Band Gap Hydrocarbon Insulator by Hydrogenation of a Biphenylene Sheet. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 8889-8896. | 4.6 | 26 |
| 76 | The intrinsic thermal transport properties of the biphenylene network and the influence of hydrogenation: a first-principles study. <i>Journal of Materials Chemistry C</i> , 2021, 9, 16945-16951. | 5.5 | 26 |
| 77 | Hydrothermal synthesis of NiSe ₂ nanosheets on carbon cloths for photoelectrochemical hydrogen generation. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 768-772. | 2.2 | 23 |
| 78 | Anomalous Temperature-Dependent Raman Scattering of Vapor-Deposited Two-Dimensional Bi Thin Films. <i>Journal of Physical Chemistry C</i> , 2018, 122, 24459-24466. | 3.1 | 22 |
| 79 | First-principles simulations on the new hybrid phases of germanene with alkali metal atoms coverage. <i>Applied Surface Science</i> , 2016, 360, 707-714. | 6.1 | 21 |
| 80 | ZnSe/CdS/CdSe triple-sensitized ZnO nanowire arrays for multi-bandgap photoelectrochemical hydrogen generation. <i>RSC Advances</i> , 2014, 4, 47429-47435. | 3.6 | 20 |
| 81 | Design lithium storage materials by lithium adatoms adsorption at the edges of zigzag silicene nanoribbon: A first principle study. <i>Applied Surface Science</i> , 2017, 406, 161-169. | 6.1 | 20 |
| 82 | Thermoelectric properties of graphene nanoribbons with surface roughness. <i>Applied Physics Letters</i> , 2018, 112, . | 3.3 | 20 |
| 83 | Synthesis and characterization of few-layer Sb ₂ Te ₃ nanoplates with electrostatic properties. <i>RSC Advances</i> , 2012, 2, 10694. | 3.6 | 19 |
| 84 | Quantum oscillation of Rashba spin splitting in topological insulator Bi ₂ Se ₃ induced by the quantum size effects of Pb adlayers. <i>Physical Review B</i> , 2012, 86, . | 3.2 | 19 |
| 85 | Photoresponse improvement in liquid-exfoliated SnSe nanosheets by reduced graphene oxide hybridization. <i>Journal of Materials Science</i> , 2018, 53, 4371-4377. | 3.7 | 19 |
| 86 | Broadband Nonlinear Optical Response of Single-Crystalline Bismuth Thin Film. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35863-35870. | 8.0 | 19 |
| 87 | Photoelectrochemical water oxidation in \pm -Fe ₂ O ₃ thin films enhanced by a controllable wet-chemical Ti-doping strategy and Co–Pi co-catalyst modification. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 21444-21453. | 2.2 | 19 |
| 88 | Quantum confinement in graphene quantum dots. <i>Physica Status Solidi - Rapid Research Letters</i> , 2014, 8, 436-440. | 2.4 | 18 |
| 89 | Tunable photoelectronic properties of hydrogenated-silicene/halogenated-silicene superlattices for water splitting. <i>Journal of Applied Physics</i> , 2020, 127, . | 2.5 | 18 |
| 90 | Synthesis of Si/TiO ₂ core–shell nanoparticles as anode material for high performance lithium ion batteries. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 12813-12819. | 2.2 | 17 |

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| 91 | Systematic Enumeration of Low-Energy Graphyne Allotropes Based on a Coordination-Constrained Searching Strategy. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020, 14, 2000437. | 2.4 | 17 |
| 92 | Self-Powered Ultra-Broadband and Flexible Photodetectors Based on the Bismuth Films by Vapor Deposition. <i>ACS Applied Electronic Materials</i> , 2020, 2, 1254-1262. | 4.3 | 17 |
| 93 | One-Photon Solutions to the Multiqubit Multimode Quantum Rabi Model for Fast $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle \text{mml:mrow}>\langle \text{mml:mi}>W</mml:mi></mml:mrow></mml:math>$ -State Generation. <i>Physical Review Letters</i> , 2021, 127, 043604. | 7.8 | 17 |
| 94 | Large-Gap Quantum Spin Hall State and Temperature-Induced Lifshitz Transition in $\text{Bi}_{4-4}\text{Br}_{4-4}$. <i>ACS Nano</i> , 2022, 16, 3036-3044. | 14.6 | 17 |
| 95 | Exploring co-catalytic graphene frameworks for improving photocatalytic activity of Tin disulfide nanoplates. <i>Solar Energy</i> , 2017, 157, 905-910. | 6.1 | 16 |
| 96 | Allotropes of Phosphorus with Remarkable Stability and Intrinsic Piezoelectricity. <i>Physical Review Applied</i> , 2018, 9, . | 3.8 | 16 |
| 97 | Robust transport of charge carriers in in-plane 1\AA^2 -2H MoTe ₂ homojunctions with ohmic contact. <i>Nano Research</i> , 2021, 14, 1311-1318. | 10.4 | 16 |
| 98 | Morphology engineering of atomic layer defect-rich CoSe_2 nanosheets for highly selective electrosynthesis of hydrogen peroxide. <i>Journal of Materials Chemistry A</i> , 2021, 9, 21340-21346. | 10.3 | 16 |
| 99 | Composition-optimized $\text{TiO}_2/\text{CdS}_x\text{Se}_{1-x}$ core/shell nanowire arrays for photoelectrochemical hydrogen generation. <i>Journal of Applied Physics</i> , 2014, 116, . | 2.5 | 15 |
| 100 | Ultralow thermal conductivity in $\text{Si}/\text{Ge}_x\text{Si}_{1-x}$ core-shell nanowires. <i>Journal of Applied Physics</i> , 2013, 113, . | 2.5 | 14 |
| 101 | In-situ investigation of graphene oxide under UV irradiation: Evolution of work function. <i>AIP Advances</i> , 2015, 5, . | 1.3 | 14 |
| 102 | Evolution of the electronic and magnetic properties of zigzag silicene nanoribbon used for hydrogen storage material. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 27184-27205. | 7.1 | 14 |
| 103 | Valleytronic properties of monolayer WSe_2 in external magnetic field. <i>AIP Advances</i> , 2019, 9, . | 1.3 | 14 |
| 104 | The thermoelectric properties of monolayer SiP and GeP from first-principles calculations. <i>Journal of Applied Physics</i> , 2019, 126, . | 2.5 | 14 |
| 105 | Role of Atomic Interaction in Electronic Hybridization in Two-Dimensional Ag_2Ge Nanosheets. <i>Journal of Physical Chemistry C</i> , 2017, 121, 16754-16760. | 3.1 | 13 |
| 106 | Lateral and Vertical MoSe_2 - MoS_2 Heterostructures via Epitaxial Growth: Triggered by High-Temperature Annealing and Precursor Concentration. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 5027-5035. | 4.6 | 13 |
| 107 | Photogalvanic-Effect-Induced Spin-Polarized Current in Defective Silicene with H Vacancies. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020, 14, 2000395. | 2.4 | 13 |
| 108 | Fermi level tuning of topological insulator $\text{Bi}_2(\text{SexTe}_{1-x})_3$ nanoplates. <i>Journal of Applied Physics</i> , 2013, 113, 024306. | 2.5 | 12 |

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|-----|---|------|-----------|
| 109 | Optoelectronic properties of type-II SePtTe/InS van der Waals heterojunction. Journal of Applied Physics, 2020, 128, . | 2.5 | 12 |
| 110 | Epitaxial Growth of Quasi-One-Dimensional Bismuth-Halide Chains with Atomically Sharp Topological Non-Trivial Edge States. ACS Nano, 2021, 15, 14850-14857. | 14.6 | 12 |
| 111 | Dual-phase spinel $\text{Li}_{4-x}\text{Ti}_x\text{O}_{12}$ /anatase TiO_2 nanosheet anchored 3D reduced graphene oxide aerogel scaffolds as self-supporting electrodes for high-performance Na- and Li-ion batteries. RSC Advances, 2017, 7, 52702-52711. | 3.6 | 11 |
| 112 | Dirac-Weyl semimetal phase in noncentrosymmetric transition metal monochalcogenides MoTe and WTe. Journal of Materials Chemistry C, 2019, 7, 12151-12159. | 5.5 | 11 |
| 113 | Localization, phases, and transitions in three-dimensional extended Lieb lattices. Physical Review B, 2020, 102, . | 3.2 | 11 |
| 114 | Morphological alteration of anatase titania nanostructures depend on the amount of Na ion intercalation. Crystal Research and Technology, 2012, 47, 738-745. | 1.3 | 10 |
| 115 | First-principles prediction of two hexagonal silicon crystals as potential absorbing layer materials for solar-cell application. Journal of Applied Physics, 2018, 124, . | 2.5 | 10 |
| 116 | Enhanced photoresponse of graphene oxide functionalised SnSe films. AIP Advances, 2018, 8, 075123. | 1.3 | 10 |
| 117 | $\text{Sn}_2\text{Te}/\text{TeIn}_2\text{Se}$: a type-II heterojunction as a water-splitting photocatalyst with high solar energy harvesting. Journal of Materials Chemistry C, 2021, 9, 7734-7744. | 5.5 | 10 |
| 118 | Synthesis, characterization and electrostatic properties of WS ₂ nanostructures. AIP Advances, 2014, 4, . | 1.3 | 9 |
| 119 | Ab initio prediction of a new allotrope of two-dimensional silicon. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1600422. | 2.4 | 9 |
| 120 | Electrodeposition of Cu-Ga precursor layer for CuGaS ₂ solar energy thin film from alcohol solution. Ionics, 2017, 23, 1027-1033. | 2.4 | 9 |
| 121 | Thermally oxidation synthesis of CuO nanoneedles on Cu foam and its enhanced lithium storage performance. Journal of Materials Science: Materials in Electronics, 2017, 28, 2353-2357. | 2.2 | 9 |
| 122 | Antimony Thin Film as a Robust Broadband Saturable Absorber. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-7. | 2.9 | 9 |
| 123 | Photo-response of solution-processed hybrid germanium selenide nanosheets based photoelectrochemical devices. Ceramics International, 2021, 47, 17411-17416. | 4.8 | 9 |
| 124 | Transport Properties of Zigzag Graphene Nanoribbons Decorated by Carboxyl Group Chains. Journal of Physical Chemistry C, 2011, 115, 21893-21898. | 3.1 | 8 |
| 125 | Spin transistor based on T-shaped graphene junctions. Journal of Applied Physics, 2011, 110, 033701. | 2.5 | 8 |
| 126 | Surface Potential of Graphene Oxide Investigated by Kelvin Probe Force Microscopy. Fullerenes Nanotubes and Carbon Nanostructures, 2015, 23, 777-781. | 2.1 | 8 |

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|-----|--|------|-----------|
| 127 | Giant spin splitting, strong valley selective circular dichroism and valley-spin coupling induced in silicene. Physical Review B, 2016, 94, . | 3.2 | 8 |
| 128 | Ballistic thermoelectric properties of nitrogenated holey graphene nanostructures. Journal of Applied Physics, 2017, 122, . | 2.5 | 8 |
| 129 | Few-Layer I^2 - $\text{http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll">SnSe - \text{http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll">SnSe with Strong Visible Light Absorbance and Ultrahigh Carrier Mobility. Physical Review Applied, 2020, 13,$ | 3.8 | 8 |
| 130 | Dewetting and detachment of Pt nanofilms on graphitic substrates: A molecular dynamics study. Journal of Applied Physics, 2015, 117, 064304. | 2.5 | 7 |
| 131 | Strain Modulation of Black Phosphorene for the Hydrogen Evolution Reaction Activity. Physica Status Solidi (B): Basic Research, 2021, 258, 2100195. | 1.5 | 7 |
| 132 | Type-II lateral SnSe/GeTe heterostructures for solar photovoltaic applications with high efficiency. Nanoscale Advances, 2021, 3, 3643-3649. | 4.6 | 7 |
| 133 | Unique Arrangement of Atoms Leads to Low Thermal Conductivity: A Comparative Study of Monolayer Mg_2C . Journal of Physical Chemistry Letters, 2021, 12, 10353-10358. | 4.6 | 7 |
| 134 | Black Phosphorus Quantum Dots as Hole Capturers in Group-VA Monoelemental Heterostructures for the Application of High-Performance Flexible Photodetectors. ACS Sustainable Chemistry and Engineering, 2021, 9, 14918-14926. | 6.7 | 7 |
| 135 | Enhancement of thermoelectric properties of gamma-graphyne nanoribbons with edge modulation. European Physical Journal B, 2015, 88, 1. | 1.5 | 6 |
| 136 | First-principles study of the structures and fundamental electronic properties of two-dimensional $\text{P}_{0.5}\text{As}_{0.5}$ alloy. Physica Status Solidi (B): Basic Research, 2017, 254, 1700157. | 1.5 | 6 |
| 137 | Effect of sulphur pressure on properties of ZnS thin film prepared by chemical bath deposition technique. Journal of Materials Science: Materials in Electronics, 2019, 30, 13230-13237. | 2.2 | 6 |
| 138 | Modulation of the electron transport properties in graphene nanoribbons doped with BN chains. AIP Advances, 2014, 4, 067123. | 1.3 | 5 |
| 139 | Mechanical behavior of silicon carbide nanoparticles under uniaxial compression. Journal of Nanoparticle Research, 2016, 18, 1. | 1.9 | 5 |
| 140 | Optimizing the thermoelectric performance of graphyne nanotube via applying radial strain. Journal of Applied Physics, 2017, 121, 125112. | 2.5 | 5 |
| 141 | Functionalization of the electronic and magnetic properties of silicene by halogen atoms unilateral adsorption: a first-principles study. Journal of Physics Condensed Matter, 2018, 30, 365001. | 1.8 | 5 |
| 142 | Local conductivity of graphene oxide study by conductive atomic force microscope. Journal of Applied Physics, 2019, 126, . | 2.5 | 5 |
| 143 | Effects of contact oxidization on the transport properties of Au/ZGNR junctions. Physica Status Solidi - Rapid Research Letters, 2012, 6, 457-459. | 2.4 | 4 |
| 144 | Photodetectors: Environmentally Robust Black Phosphorus Nanosheets in Solution: Application for Self-Powered Photodetector (Adv. Funct. Mater. 18/2017). Advanced Functional Materials, 2017, 27, . | 14.9 | 4 |

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