

Wenhan Zhou

List of Publications by Year in descending order

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Version: 2024-02-01

44
papers

1,868
citations

361045

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253896

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docs citations

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times ranked

2715
citing authors

#	ARTICLE	IF	CITATIONS
1	CsPbBr ₃ Quantum Dots 2.0: Benzenesulfonic Acid Equivalent Ligand Awakens Complete Purification. <i>Advanced Materials</i> , 2019, 31, e1900767.	11.1	329
2	Antimonene Oxides: Emerging Tunable Direct Bandgap Semiconductor and Novel Topological Insulator. <i>Nano Letters</i> , 2017, 17, 3434-3440.	4.5	250
3	Ultrathin Bismuth Nanosheets for Stable Na-Ion Batteries: Clarification of Structure and Phase Transition by in Situ Observation. <i>Nano Letters</i> , 2019, 19, 1118-1123.	4.5	124
4	Recent progress in 2D group IV α IV monochalcogenides: synthesis, properties and applications. <i>Nanotechnology</i> , 2019, 30, 252001.	1.3	104
5	Two-dimensional GeS with tunable electronic properties via external electric field and strain. <i>Nanotechnology</i> , 2016, 27, 274001.	1.3	85
6	Modulating Epitaxial Atomic Structure of Antimonene through Interface Design. <i>Advanced Materials</i> , 2019, 31, e1902606.	11.1	84
7	Two-dimensional SiP: an unexplored direct band-gap semiconductor. <i>2D Materials</i> , 2017, 4, 015030.	2.0	78
8	Designing sub-10-nm Metal-Oxide-Semiconductor Field-Effect Transistors via Ballistic Transport and Disparate Effective Mass: The Case of Two-Dimensional $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" \rangle \langle \text{mml:mrow} \langle \text{mml:mi} \rangle \text{Bi} \langle \text{mml:mi} \rangle \langle \text{mml:mi} \mathit{variant="normal"} \rangle \text{N} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. <i>Physical Review Applied</i> , 2020, 13, .	1.5	69
9	Ultrathin tellurium dioxide: emerging direct bandgap semiconductor with high-mobility transport anisotropy. <i>Nanoscale</i> , 2018, 10, 8397-8403.	2.8	66
10	A class of Pb-free double perovskite halide semiconductors with intrinsic ferromagnetism, large spin splitting and high Curie temperature. <i>Materials Horizons</i> , 2018, 5, 961-968.	6.4	59
11	Anisotropic In α Plane Ballistic Transport in Monolayer Black Arsenic α Phosphorus FETs. <i>Advanced Electronic Materials</i> , 2020, 6, 1901281.	2.6	59
12	First-principles study of SO ₂ sensors based on phosphorene and its isoelectronic counterparts: GeS, GeSe, SnS, SnSe. <i>Chemical Physics Letters</i> , 2017, 686, 83-87.	1.2	51
13	Mechanistic Understanding of Two-Dimensional Phosphorus, Arsenic, and Antimony High-Capacity Anodes for Fast-Charging Lithium/Sodium Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 29559-29566.	1.5	38
14	A highly sensitive and selective SnS ₂ monolayer sensor in detecting SF ₆ decomposition gas. <i>Applied Surface Science</i> , 2021, 541, 148494.	3.1	38
15	DFT coupled with NEGF study of a promising two-dimensional channel material: black phosphorene-type GaTeCl. <i>Nanoscale</i> , 2018, 10, 3350-3355.	2.8	37
16	Two-Dimensional Pnictogen for Field-Effect Transistors. <i>Research</i> , 2019, 2019, 1046329.	2.8	34
17	Uncovering the Anisotropic Electronic Structure of 2D Group VA-VA Monolayers for Quantum Transport. <i>IEEE Electron Device Letters</i> , 2021, 42, 66-69.	2.2	31
18	Layer-controlled band alignment, work function and optical properties of few-layer GeSe. <i>Physica B: Condensed Matter</i> , 2017, 519, 90-94.	1.3	27

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19	Unusual Electronic Transitions in Two-dimensional Layered SnSb Driven by Electronic State Rehybridization. <i>Physical Review Applied</i> , 2019, 11, .	1.5	21
20	Ultrascaled Double-Gate Monolayer SnS_2 MOSFETs for High-Performance and Low-Power Applications. <i>Physical Review Applied</i> , 2020, 14, .	1.5	21
21	Modulating tunneling width and energy window for high-on-current two-dimensional tunnel field-effect transistors. <i>Nano Energy</i> , 2021, 81, 105642. Dipole-Engineering Strategy for Regulating the Electronic Contact of a Two-Dimensional	8.2	20

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37	Topologically protected states and half-metal behaviors: Defect-strain synergy effects in two-dimensional antimonene. <i>Physical Review Materials</i> , 2019, 3, .	0.9	7
38	High-Performance Monolayer BeN ₂ Transistors With Ultrahigh On-State Current: A DFT Coupled With NEGF Study. <i>IEEE Transactions on Electron Devices</i> , 2022, 69, 4501-4506.	1.6	7
39	Quantum Transport in Monolayer \pm CS Field-Effect Transistors. <i>Advanced Electronic Materials</i> , 2021, 7, 2001169.	2.6	6
40	High-Performance <i>p</i> -Type 2D FET Based on Monolayer GeC with High Hole Mobility: A DFT-NEGF Study. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	6
41	Perovskite oxides as a 2D dielectric. <i>Nature Electronics</i> , 2022, 5, 199-200.	13.1	5
42	First-principle study of puckered arsenene MOSFET. <i>Journal of Semiconductors</i> , 2020, 41, 082006.	2.0	4
43	Unexpected band gap evolution and high carrier mobility sparked by the orbital variation in two-dimensional GaGeX (X = S, Se, Te). <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2022, 138, 115112.	1.3	4
44	Group V materials: From bulk to monolayer. <i>Chinese Science Bulletin</i> , 2017, 62, 2233-2251.	0.4	0