Wei-Xiao Ji

List of Publications by Year
in descending order

79	2,307	218381	223531
papers	citations	26 h-index	46 g-index

80	80	80	1815
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Intrinsic Dirac half-metal and quantum anomalous Hall phase in a hexagonal metal-oxide lattice. Physical Review B, 2017, 96, .	1.1	161
2	Unexpected Giant-Gap Quantum Spin Hall Insulator in Chemically Decorated Plumbene Monolayer. Scientific Reports, 2016, 6, 20152.	1.6	157
3	Ethynyl-functionalized stanene film: a promising candidate as large-gap quantum spin Hall insulator. New Journal of Physics, 2015, 17, 083036.	1.2	148
4	Effect of Amidogen Functionalization on Quantum Spin Hall Effect in Bi/Sb(111) Films. ACS Applied Materials & Interfaces, 2017, 9, 41443-41453.	4.0	139
5	Two-dimensional arsenene oxide: A realistic large-gap quantum spin Hall insulator. Applied Physics Letters, 2017, 110, .	1.5	123
6	Controllable band structure and topological phase transition in two-dimensional hydrogenated arsenene. Scientific Reports, 2016, 6, 20342.	1.6	81
7	Large-gap quantum spin Hall state in functionalized dumbbell stanene. Applied Physics Letters, 2016, 108, .	1.5	80
8	New family of room temperature quantum spin Hall insulators in two-dimensional germanene films. Journal of Materials Chemistry C, 2016, 4, 2088-2094.	2.7	74
9	Silicon-based chalcogenide: Unexpected quantum spin Hall insulator with sizable band gap. Applied Physics Letters, 2016, 109, 182109.	1.5	68
10	Silicane as an Inert Substrate of Silicene: A Promising Candidate for FET. Journal of Physical Chemistry C, 2014, 118, 25278-25283.	1.5	64
11	Tunable electronic and magnetic properties in germanene by alkali, alkaline-earth, group III and 3d transition metal atom adsorption. Physical Chemistry Chemical Physics, 2014, 16, 15968.	1.3	61
12	Tunable quantum spin Hall effect via strain in two-dimensional arsenene monolayer. Journal Physics D: Applied Physics, 2016, 49, 055305.	1.3	61
13	Discovery of intrinsic quantum anomalous Hall effect in organic Mn-DCA lattice. Applied Physics Letters, 2017, 110, .	1.5	61
14	Discovery of a novel spin-polarized nodal ring in a two-dimensional HK lattice. Nanoscale, 2018, 10, 20748-20753.	2.8	54
15	High-temperature Dirac half-metal PdCl₃: a promising candidate for realizing quantum anomalous Hall effect. Journal of Materials Chemistry C, 2018, 6, 10284-10291.	2.7	52
16	Room Temperature Quantum Spin Hall Insulator in Ethynyl-Derivative Functionalized Stanene Films. Scientific Reports, 2016, 6, 18879.	1.6	49
17	Na₂C monolayer: a novel 2p Dirac half-metal with multiple symmetry-protected Dirac cones. Nanoscale, 2018, 10, 13645-13651.	2.8	38
18	A planar C₃Ca₂ film: a novel 2p Dirac half metal. Journal of Materials Chemistry C, 2017, 5, 8504-8508.	2.7	37

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19	Tunability of the Quantum Spin Hall Effect in Bi(110) Films: Effects of Electric Field and Strain Engineering. ACS Applied Materials & Interfaces, 2017, 9, 21515-21523.	4.0	32
20	Glide Mirror Plane Protected Nodal-Loop in an Anisotropic Half-Metallic MnNF Monolayer. Journal of Physical Chemistry Letters, 2020, 11, 485-491.	2.1	32
21	Emergence of ferrimagnetic half-metallicity in two-dimensional MXene Mo3N2F2. Applied Physics Letters, 2017, 111, .	1.5	30
22	The magnetic and optical properties of 3d transition metal doped SnO₂ nanosheets. RSC Advances, 2015, 5, 24306-24312.	1.7	29
23	Magnetic anisotropy and ferroelectric-driven magnetic phase transition in monolayer Cr₂Ge₂Te₆. Nanoscale, 2022, 14, 3632-3643.	2.8	29
24	First-principles study of small Pdâ€“Au alloy clusters on graphene. RSC Advances, 2014, 4, 55781-55789.	1.7	27
25	Functionalized Thallium Antimony Films as Excellent Candidates for Large-Gap Quantum Spin Hall Insulator. Scientific Reports, 2016, 6, 21351.	1.6	27
26	First-principles prediction on bismuthylene monolayer as a promising quantum spin Hall insulator. Nanoscale, 2017, 9, 8207-8212.	2.8	26
27	Two-dimensional GaGeTe film: a promising graphene-like material with tunable band structure and high carrier mobility. Journal of Materials Chemistry C, 2017, 5, 8847-8853.	2.7	26
28	Two-dimensional honeycomb-kagome Ta₂S₃: a promising single-spin Dirac fermion and quantum anomalous hall insulator with half-metallic edge states. Nanoscale, 2019, 11, 5666-5673.	2.8	26
29	Robust Room-Temperature Quantum Spin Hall Effect in Methyl-functionalized InBi honeycomb film. Scientific Reports, 2016, 6, 23242.	1.6	25
30	Discovery of multiferroics with tunable magnetism in two-dimensional lead oxide. Applied Physics Letters, 2020, 116, .	1.5	24
31	First-principles prediction of a giant-gap quantum spin Hall insulator in Pb thin film. Physical Chemistry Chemical Physics, 2016, 18, 31862-31868.	1.3	23
32	Robust room-temperature inversion-asymmetry topological transitions in functionalized HgSe monolayer. Journal of Materials Chemistry C, 2016, 4, 2243-2251.	2.7	22
33	Prediction of flatness-driven quantum spin Hall effect in functionalized germanene and stanene. Physical Chemistry Chemical Physics, 2016, 18, 28134-28139.	1.3	21
34	Discovery of a new quantum spin Hall phase in bilayer plumbene. Chemical Physics Letters, 2018, 712, 78-82.	1.2	20
35	Two-Dimensional Large Gap Topological Insulators with Tunable Rashba Spin-Orbit Coupling in Group-IV films. Scientific Reports, 2017, 7, 45923.	1.6	19
36	Tunable Electronic and Topological Properties of Germanene by Functional Group Modification. Nanomaterials, 2018, 8, 145.	1.9	19

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37	Giant gap quantum spin Hall effect and valley-polarized quantum anomalous Hall effect in cyanided bismuth bilayers. New Journal of Physics, 2016, 18, 083002.	1.2	18
38	Design of ferromagnetism in Co-doped SnO2 nanosheets: a first-principles study. RSC Advances, 2014, 4, 9602.	1.7	17
39	First-principles study of AlN nanosheets with chlorination. RSC Advances, 2014, 4, 7500.	1.7	17
40	Prediction of tunable quantum spin Hall effect in methyl-functionalized tin film. Journal of Materials Chemistry C, 2017, 5, 2656-2661.	2.7	16
41	Unconventional band inversion and intrinsic quantum spin Hall effect in functionalized group-V binary films. Scientific Reports, 2017, 7, 6126.	1.6	16
42	Two-Dimensional Honeycomb B₂Se with Orthogonal Lattice: High Stability and Strong Anisotropic Dirac Cone. Journal of Physical Chemistry C, 2020, 124, 7558-7565.	1.5	16
43	Electronic structure and optical properties of Bi,N co-doped SnO2. Journal of Materials Science, 2015, 50, 6993-6999.	1.7	15
44	Stanene cyanide: a novel candidate of Quantum Spin Hall insulator at high temperature. Scientific Reports, 2015, 5, 18604.	1.6	14
45	Quantum spin Hall insulator BiXH (XH = OH, SH) monolayers with a large bulk band gap. Physical Chemistry Chemical Physics, 2018, 20, 13632-13636.	1.3	14
46	Controllable electronic and magnetic properties in a two-dimensional germanene heterostructure. Physical Chemistry Chemical Physics, 2016, 18, 12169-12174.	1.3	13
47	A two-dimensional robust topological insulator with coexisting ferroelectric and valley polarization. Journal of Materials Chemistry C, 2019, 7, 9406-9412.	2.7	13
48	High hydrogen storage capacity in calciumâ€decorated silicene nanostructures. Physica Status Solidi (B): Basic Research, 2015, 252, 2072-2078.	0.7	12
49	2D ternary nitrides XNY (X=Ti, Zr, Hf; Y F, Cl, Br) with applications as photoelectric and photocatalytic materials featuring mechanical and optical anisotropy: A DFT study. Journal of Solid State Chemistry, 2021, 303, 122517.	1.4	12
50	Two-dimensional Weyl semi-half-metallic NiCS₃ with a band structure controllable by the direction of magnetization. Physical Chemistry Chemical Physics, 2021, 23, 12068-12074.	1.3	11
51	First-principles prediction of inversion-asymmetric topological insulator in hexagonal BiPbH monolayer. Journal of Materials Chemistry C, 2016, 4, 8750-8757.	2.7	10
52	A new topological crystalline insulator in two-dimensional PbPo with tunable large bulk gaps. Journal of Materials Chemistry C, 2016, 4, 8745-8749.	2.7	9
53	Prediction of half-metallic ferromagnetism in C-doped CdS nanowire. RSC Advances, 2014, 4, 24399.	1.7	8
54	Quantum spin Hall phase transitions in two-dimensional SbBi alloy films. Journal of Materials Chemistry C, 2017, 5, 2649-2655.	2.7	8

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55	Prediction of topological crystalline insulators and topological phase transitions in two-dimensional PbTe films. Physical Chemistry Chemical Physics, 2017, 19, 29647-29652.	1.3	8
56	Nontrivial topology and topological phase transition in two-dimensional monolayer Tl. Physical Chemistry Chemical Physics, 2018, 20, 24790-24795.	1.3	8
57	Electronic Structural and Optical Properties of Multilayer Blue Phosphorus: A First-Principle Study. Journal of Nanomaterials, 2019, 2019, 1-8.	1.5	8
58	Films based on group IVâ€“Vâ€“VI elements for the design of a large-gap quantum spin Hall insulator with tunable Rashba splitting. RSC Advances, 2017, 7, 11636-11643.	1.7	6
59	Strain-Mediated Stability of Structures and Electronic Properties of ReS2, Janus ReSSe, and ReSe2 Monolayers. Journal of Nanomaterials, 2019, 2019, 1-8.	1.5	6
60	Two-dimensional ligand-functionalized plumbene: A promising candidate for ferroelectric and topological order with a large bulk band gap. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 120, 114095.	1.3	6
61	Half-Dirac semimetals and the quantum anomalous Hall effect in Kagome Cd₂N₃ lattices. Nanoscale Advances, 2021, 3, 847-854.	2.2	6
62	First-principles prediction of graphene/SnO2 heterostructure as a promising candidate for FET. RSC Advances, 2015, 5, 35377-35383.	1.7	5
63	Prediction of topological property in TlPBr₂ monolayer with appreciable Rashba effect. Physical Chemistry Chemical Physics, 2018, 20, 4308-4316.	1.3	5
64	Strain-Tuned Topological Insulator and Rashba-Induced Anisotropic Momentum-Locked Dirac Cones in Two-Dimensional SeTe Monolayers. ACS Applied Materials & Interfaces, 2018, 10, 43962-43969.	4.0	5
65	Discovery of a ferroelastic topological insulator in a two-dimensional tetragonal lattice. Physical Chemistry Chemical Physics, 2019, 21, 5165-5169.	1.3	5
66	Bismuth oxide film: a promising room-temperature quantum spin Hall insulator. Journal of Physics Condensed Matter, 2018, 30, 105303.	0.7	4
67	Strain-Induced Quantum Spin Hall Effect in Two-Dimensional Methyl-Functionalized Silicene SiCH3. Nanomaterials, 2018, 8, 698.	1.9	4
68	A novel spin-valley-coupled nodal-ring semimetal in single-layer Ta₂C₃. Physical Chemistry Chemical Physics, 2021, 23, 12280-12287.	1.3	4
69	Anisotropic nodal loop in NiB₂ monolayer with nonsymmorphic configuration. Nanoscale, 2022, 14, 1264-1270.	2.8	4
70	Hydrogenated group-IV binary monolayers: a new family of inversion-asymmetric topological insulators. RSC Advances, 2016, 6, 79452-79458.	1.7	3
71	Novel optical properties of MoS2 on monolayer zinc tellurium substrate. Journal of Materials Science, 2016, 51, 4580-4587.	1.7	3
72	Novel 2D Germanene Dioxide Monolayers: Mechanical Properties, Holeâ€Mobility Values, and Carrier Mobility. Annalen Der Physik, 2018, 530, 1800214.	0.9	3

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73	Quantum spin Hall state in cyanided dumbbell stanene. RSC Advances, 2016, 6, 86089-86094.	1.7	2
74	IZrP: Two-dimensional narrow band gap semiconductor with high Stability, anisotropic electronic properties and high carrier mobility. Computational and Theoretical Chemistry, 2021, 1205, 113458.	1.1	2
75	First-Principles Prediction on Long-Range Ferromagnetism Induced by Vacancies in SnO₂ Nanosheet. Journal of the Physical Society of Japan, 2014, 83, 104601.	0.7	1
76	Discovery of asymmetric NaXBi (X= Sn /Pb) monolayers with non-trivial topological properties. RSC Advances, 2018, 8, 27995-28001.	1.7	1
77	Strain-Tuned Nodal Ring in Two-Dimensional Zn₃C₆S₆ Monolayers. Journal of Nanomaterials, 2020, 2020, 1-6.	1.5	1
78	Intrinsic direct bandgap semiconductor with high stability, strong anisotropy and controllable edge position in BrHfN monolayer. Physica E: Low-Dimensional Systems and Nanostructures, 2022, 135, 114971.	1.3	1
79	Monolayer NbNSe with High Fermi Velocity and Anisotropic Properties. Physica Status Solidi (B): Basic Research, 0, , .	0.7	1