

# Wei-Xiao Ji

## List of Publications by Year in Descending Order

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

76  
papers

1,801  
citations

22  
h-index

40  
g-index

80  
ext. papers

2,039  
ext. citations

4.5  
avg, IF

4.86  
L-index

| #  | Paper  | IF  | Citations |
|----|--|-----|-----------|
| 76 | Intrinsic direct bandgap semiconductor with high stability, strong anisotropy and controllable edge position in BrHfN monolayer. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2022</b> , 135, 114971 <sup>3</sup>           |     | 0         |
| 75 | A novel spin-valley-coupled nodal-ring semimetal in single-layer TaC. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 12280-12287   | 3.6 | 0         |
| 74 | IZrP: Two-dimensional narrow band gap semiconductor with high Stability, anisotropic electronic properties and high carrier mobility. <i>Computational and Theoretical Chemistry</i> , <b>2021</b> , 1205, 113458                                | 2   | 0         |
| 73 | 2D ternary nitrides XNY (X=Ti, Zr, Hf; YF, Cl, Br) with applications as photoelectric and photocatalytic materials featuring mechanical and optical anisotropy: A DFT study. <i>Journal of Solid State Chemistry</i> , <b>2021</b> , 303, 122517 | 3.3 | 2         |
| 72 | Half-Dirac semimetals and the quantum anomalous Hall effect in Kagome Cd <sub>2</sub> N <sub>3</sub> lattices. <i>Nanoscale Advances</i> , <b>2021</b> , 3, 847-854  | 5.1 | 3         |
| 71 | Two-dimensional Weyl semi-half-metallic NiCS with a band structure controllable by the direction of magnetization. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 12068-12074  | 3.6 | 5         |
| 70 | Discovery of multiferroics with tunable magnetism in two-dimensional lead oxide. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 172105  | 3.4 | 15        |
| 69 | Two-dimensional ligand-functionalized plumbene: A promising candidate for ferroelectric and topological order with a large bulk band gap. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2020</b> , 120, 114095               | 3   | 4         |
| 68 | Two-Dimensional Honeycomb B <sub>2</sub> Se with Orthogonal Lattice: High Stability and Strong Anisotropic Dirac Cone. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 7558-7565   | 3.8 | 8         |
| 67 | Glide Mirror Plane Protected Nodal-Loop in an Anisotropic Half-Metallic MnNF Monolayer. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 485-491   | 6.4 | 15        |
| 66 | Strain-Tuned Nodal Ring in Two-Dimensional Zn <sub>3</sub> C <sub>6</sub> S <sub>6</sub> Monolayers. <i>Journal of Nanomaterials</i> , <b>2020</b> , 2020, 1-6   | 3.2 | 1         |
| 65 | Discovery of a ferroelastic topological insulator in a two-dimensional tetragonal lattice. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 5165-5169  | 3.6 | 4         |
| 64 | Electronic Structural and Optical Properties of Multilayer Blue Phosphorus: A First-Principle Study. <i>Journal of Nanomaterials</i> , <b>2019</b> , 2019, 1-8   | 3.2 | 5         |
| 63 | Two-dimensional honeycomb-kagome TaS: a promising single-spin Dirac fermion and quantum anomalous hall insulator with half-metallic edge states. <i>Nanoscale</i> , <b>2019</b> , 11, 5666-5673  | 7.7 | 14        |
| 62 | A two-dimensional robust topological insulator with coexisting ferroelectric and valley polarization. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 9406-9412   | 7.1 | 8         |
| 61 | Strain-Mediated Stability of Structures and Electronic Properties of ReS <sub>2</sub> , Janus ReSSe, and ReSe <sub>2</sub> Monolayers. <i>Journal of Nanomaterials</i> , <b>2019</b> , 2019, 1-8   | 3.2 | 2         |
| 60 | Quantum spin Hall insulator BiXH (XH = OH, SH) monolayers with a large bulk band gap. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 13632-13636   | 3.6 | 9         |

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| 59 | Bismuth oxide film: a promising room-temperature quantum spin Hall insulator. <i>Journal of Physics Condensed Matter</i> , <b>2018</b> , 30, 105303   | 1.8 | 4  |
| 58 | Prediction of topological property in TlPb monolayer with appreciable Rashba effect. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 4308-4316   | 3.6 | 2  |
| 57 | Discovery of asymmetric NaXBi (X= Sn /Pb) monolayers with non-trivial topological properties.. <i>RSC Advances</i> , <b>2018</b> , 8, 27995-28001   | 3.7 | 1  |
| 56 | Tunable Electronic and Topological Properties of Germanene by Functional Group Modification. <i>Nanomaterials</i> , <b>2018</b> , 8,  | 5.4 | 13 |
| 55 | NaC monolayer: a novel 2p Dirac half-metal with multiple symmetry-protected Dirac cones. <i>Nanoscale</i> , <b>2018</b> , 10, 13645-13651   | 7.7 | 29 |
| 54 | Discovery of a novel spin-polarized nodal ring in a two-dimensional HK lattice. <i>Nanoscale</i> , <b>2018</b> , 10, 20748-20753  | 7.7 | 37 |
| 53 | Strain-Tuned Topological Insulator and Rashba-Induced Anisotropic Momentum-Locked Dirac Cones in Two-Dimensional SeTe Monolayers. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 43962-43969 | 9.5 | 5  |
| 52 | Strain-Induced Quantum Spin Hall Effect in Two-Dimensional Methyl-Functionalized Silicene SiCH <sub>3</sub> <i>Nanomaterials</i> , <b>2018</b> , 8,   | 5.4 | 4  |
| 51 | Novel 2D Germanene Dioxide Monolayers: Mechanical Properties, Hole-Mobility Values, and Carrier Mobility. <i>Annalen Der Physik</i> , <b>2018</b> , 530, 1800214  | 2.6 | 1  |
| 50 | Discovery of a new quantum spin Hall phase in bilayer plumbene. <i>Chemical Physics Letters</i> , <b>2018</b> , 712, 78-82  | 2.5 | 13 |
| 49 | Nontrivial topology and topological phase transition in two-dimensional monolayer Tl. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 24790-24795  | 3.6 | 6  |
| 48 | High-temperature Dirac half-metal PdCl <sub>3</sub> : a promising candidate for realizing quantum anomalous Hall effect. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 10284-10291                 | 7.1 | 37 |
| 47 | Films based on group IV/VI elements for the design of a large-gap quantum spin Hall insulator with tunable Rashba splitting. <i>RSC Advances</i> , <b>2017</b> , 7, 11636-11643                                 | 3.7 | 3  |
| 46 | Prediction of tunable quantum spin Hall effect in methyl-functionalized tin film. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 2656-2661  | 7.1 | 14 |
| 45 | Quantum spin Hall phase transitions in two-dimensional SbBi alloy films. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 2649-2655   | 7.1 | 7  |
| 44 | First-principles prediction on bismuthylene monolayer as a promising quantum spin Hall insulator. <i>Nanoscale</i> , <b>2017</b> , 9, 8207-8212   | 7.7 | 23 |
| 43 | Tunability of the Quantum Spin Hall Effect in Bi(110) Films: Effects of Electric Field and Strain Engineering. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 21515-21523                     | 9.5 | 20 |
| 42 | Discovery of intrinsic quantum anomalous Hall effect in organic Mn-DCA lattice. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 233107  | 3.4 | 52 |

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|----|--|-----|-----|
| 41 | Two-dimensional arsenene oxide: A realistic large-gap quantum spin Hall insulator. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 213101  | 3.4 | 100 |
| 40 | Two-Dimensional Large Gap Topological Insulators with Tunable Rashba Spin-Orbit Coupling in Group-IV films. <i>Scientific Reports</i> , <b>2017</b> , 7, 45923                               | 4.9 | 12  |
| 39 | Prediction of topological crystalline insulators and topological phase transitions in two-dimensional PbTe films. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 29647-29652 | 3.6 | 6   |
| 38 | A planar C3Ca2 film: a novel 2p Dirac half metal. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 8504-8508   | 7.1 | 28  |
| 37 | Unconventional band inversion and intrinsic quantum spin Hall effect in functionalized group-V binary films. <i>Scientific Reports</i> , <b>2017</b> , 7, 6126                               | 4.9 | 13  |
| 36 | Two-dimensional GaGeTe film: a promising graphene-like material with tunable band structure and high carrier mobility. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 8847-8853  | 7.1 | 13  |
| 35 | Intrinsic Dirac half-metal and quantum anomalous Hall phase in a hexagonal metal-oxide lattice. <i>Physical Review B</i> , <b>2017</b> , 96,   | 3.3 | 112 |
| 34 | Effect of Amidogen Functionalization on Quantum Spin Hall Effect in Bi/Sb(111) Films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 41443-41453                           | 9.5 | 101 |
| 33 | Emergence of ferrimagnetic half-metallicity in two-dimensional MXene Mo3N2F2. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 202405   | 3.4 | 18  |
| 32 | A new topological crystalline insulator in two-dimensional PbPo with tunable large bulk gaps. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 8745-8749                           | 7.1 | 7   |
| 31 | Hydrogenated group-IV binary monolayers: a new family of inversion-asymmetric topological insulators. <i>RSC Advances</i> , <b>2016</b> , 6, 79452-79458                                     | 3.7 | 2   |
| 30 | Functionalized Thallium Antimony Films as Excellent Candidates for Large-Gap Quantum Spin Hall Insulator. <i>Scientific Reports</i> , <b>2016</b> , 6, 21351                                 | 4.9 | 25  |
| 29 | Controllable band structure and topological phase transition in two-dimensional hydrogenated arsenene. <i>Scientific Reports</i> , <b>2016</b> , 6, 20342                                    | 4.9 | 72  |
| 28 | Room Temperature Quantum Spin Hall Insulator in Ethynyl-Derivative Functionalized Stanene Films. <i>Scientific Reports</i> , <b>2016</b> , 6, 18879  | 4.9 | 48  |
| 27 | First-principles prediction of a giant-gap quantum spin Hall insulator in Pb thin film. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 31862-31868                           | 3.6 | 16  |
| 26 | New family of room temperature quantum spin Hall insulators in two-dimensional germanene films. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 2088-2094                         | 7.1 | 66  |
| 25 | Novel optical properties of MoS2 on monolayer zinc tellurium substrate. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 4580-4587  | 4.3 | 2   |
| 24 | Tunable quantum spin Hall effect via strain in two-dimensional arsenene monolayer. <i>Journal Physics D: Applied Physics</i> , <b>2016</b> , 49, 055305                                      | 3   | 52  |

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| 23 | Unexpected Giant-Gap Quantum Spin Hall Insulator in Chemically Decorated Plumbene Monolayer. <i>Scientific Reports</i> , <b>2016</b> , 6, 20152                              | 4.9 | 131 |
| 22 | Large-gap quantum spin Hall state in functionalized dumbbell stanene. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 073104   | 3.4 | 77  |
| 21 | Robust Room-Temperature Quantum Spin Hall Effect in Methyl-functionalized InBi honeycomb film. <i>Scientific Reports</i> , <b>2016</b> , 6, 23242                            | 4.9 | 22  |
| 20 | Silicon-based chalcogenide: Unexpected quantum spin Hall insulator with sizable band gap. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 182109                         | 3.4 | 62  |
| 19 | Controllable electronic and magnetic properties in a two-dimensional germanene heterostructure. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 12169-74      | 3.6 | 10  |
| 18 | Robust room-temperature inversion-asymmetry topological transitions in functionalized HgSe monolayer. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 2243-2251   | 7.1 | 20  |
| 17 | First-principles prediction of inversion-asymmetric topological insulator in hexagonal BiPbH monolayer. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 8750-8757 | 7.1 | 7   |
| 16 | Quantum spin Hall state in cyanided dumbbell stanene. <i>RSC Advances</i> , <b>2016</b> , 6, 86089-86094   | 3.7 | 2   |
| 15 | Prediction of flatness-driven quantum spin Hall effect in functionalized germanene and stanene. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 28134-28139   | 3.6 | 15  |
| 14 | Giant gap quantum spin Hall effect and valley-polarized quantum anomalous Hall effect in cyanided bismuth bilayers. <i>New Journal of Physics</i> , <b>2016</b> , 18, 083002 | 2.9 | 14  |
| 13 | Electronic structure and optical properties of Bi,N co-doped SnO <sub>2</sub> . <i>Journal of Materials Science</i> , <b>2015</b> , 50, 6993-6999                            | 4.3 | 15  |
| 12 | The magnetic and optical properties of 3d transition metal doped SnO <sub>2</sub> nanosheets. <i>RSC Advances</i> , <b>2015</b> , 5, 24306-24312                             | 3.7 | 22  |
| 11 | First-principles prediction of graphene/SnO <sub>2</sub> heterostructure as a promising candidate for FET. <i>RSC Advances</i> , <b>2015</b> , 5, 35377-35383                | 3.7 | 5   |
| 10 | Ethynyl-functionalized stanene film: a promising candidate as large-gap quantum spin Hall insulator. <i>New Journal of Physics</i> , <b>2015</b> , 17, 083036                | 2.9 | 139 |
| 9  | Stanene cyanide: a novel candidate of Quantum Spin Hall insulator at high temperature. <i>Scientific Reports</i> , <b>2015</b> , 5, 18604                                    | 4.9 | 12  |
| 8  | High hydrogen storage capacity in calcium-decorated silicene nanostructures. <i>Physica Status Solidi (B): Basic Research</i> , <b>2015</b> , 252, 2072-2078                 | 1.3 | 9   |
| 7  | Design of ferromagnetism in Co-doped SnO <sub>2</sub> nanosheets: a first-principles study. <i>RSC Advances</i> , <b>2014</b> , 4, 9602                                      | 3.7 | 16  |
| 6  | Silicane as an Inert Substrate of Silicene: A Promising Candidate for FET. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 25278-25283                           | 3.8 | 55  |

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|---|---|-----|----|
| 5 | Tunable electronic and magnetic properties in germanene by alkali, alkaline-earth, group III and 3d transition metal atom adsorption. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 15968-78 | 3.6 | 56 |
| 4 | First-principles study of AlN nanosheets with chlorination. <i>RSC Advances</i> , <b>2014</b> , 4, 7500   | 3.7 | 17 |
| 3 | Prediction of half-metallic ferromagnetism in C-doped CdS nanowire. <i>RSC Advances</i> , <b>2014</b> , 4, 24399  | 3.7 | 8  |
| 2 | First-principles study of small PdAu alloy clusters on graphene. <i>RSC Advances</i> , <b>2014</b> , 4, 55781-55789   | 3.7 | 25 |
| 1 | First-Principles Prediction on Long-Range Ferromagnetism Induced by Vacancies in SnO <sub>2</sub> Nanosheet. <i>Journal of the Physical Society of Japan</i> , <b>2014</b> , 83, 104601                       | 1.5 | 1  |