

# Jian-Min Zhang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8019005/publications.pdf>

Version: 2024-02-01

52  
papers

766  
citations

687363

13  
h-index

552781

26  
g-index

52  
all docs

52  
docs citations

52  
times ranked

783  
citing authors

#	ARTICLE	IF	CITATIONS
1	Calculation of the surface energy of FCC metals with modified embedded-atom method. Applied Surface Science, 2004, 229, 34-42.	6.1	267
2	The structural, electronic and magnetic properties of a novel quaternary Heusler alloy TiZrCoSn. Journal of Physics and Chemistry of Solids, 2017, 105, 9-15.	4.0	42
3	The structural, electronic, magnetic and mechanical properties of quaternary Heusler alloys ZrTiCrZ (Z=Al, Ga, In, Si, Ge, Sn): a first-principles study. Journal Physics D: Applied Physics, 2016, 49, 255002.	3.1	35
4	Electronic structures and magnetic properties of the transition-metal atoms (Mn, Fe, Co and Ni) doped WS <sub>2</sub> : A first-principles study. Superlattices and Microstructures, 2016, 98, 148-157.	3.1	28
5	The structure, electronic, magnetic and optical properties of the Mn doped and Mn-X (X=F, Cl, Br, I and Tl) ETQq1 1 0.784314 rgBT C 138-145.	5.5	28
6	Effects of 5d transition metals doping on the structural, electronic and magnetic properties of monolayer SnS <sub>2</sub> . Thin Solid Films, 2020, 705, 138045.	1.8	21
7	Modulating the Band Gap of the FeS <sub>2</sub> by O and Se Doping. Journal of Physical Chemistry C, 2017, 121, 19334-19340.	3.1	18
8	Modulating the electronic, magnetic and optical properties of 1T-SnSe <sub>2</sub> monolayer by defects: An ab initio study. Superlattices and Microstructures, 2020, 145, 106621.	3.1	17
9	The electronic, magnetic and optical properties of single-layer CrS <sub>2</sub> with vacancy defects. Journal of Magnetism and Magnetic Materials, 2019, 487, 165300.	2.3	16
10	Thermodynamic stability, magnetism and half-metallicity of various (100) surfaces of Heusler alloy Ti <sub>2</sub> FeSn. Materials Chemistry and Physics, 2017, 192, 253-259.	4.0	15
11	First-principles study of transition-metal atoms adsorption on GaN nanotube. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 43, 22-27.	2.7	14
12	First-principle study of single TM atoms X (X=Fe, Ru or Os) doped monolayer WS <sub>2</sub> systems. Superlattices and Microstructures, 2018, 117, 155-162.	3.1	14
13	First-principles study of the half-metallic and magnetic properties for new yttrium-based full-Heusler alloys Y <sub>2</sub> CrZ (Z = Al, Ga, In). Solid State Communications, 2017, 264, 19-25.	1.9	13
14	Preserving the half-metallicity at the quaternary Heusler CoFeCrAl (001)-oriented thin films: A first-principles study. Materials Chemistry and Physics, 2020, 240, 122262.	4.0	12
15	Electronic, magnetic and optical properties of blue phosphorene doped with Y, Zr, Nb and Mo: A first-principles study. Thin Solid Films, 2021, 720, 138523.	1.8	12
16	The structural, electronic, magnetic and elastic properties of the binary Heusler alloys Mn <sub>2</sub> Z (Z=As, Sb, Bi): a first-principles study. Materials Research Express, 2017, 4, 116501. <sup>11</sup>	1.6	11
17	First-principles prediction of the quaternary half-metallic ferromagnets TiZrZ (Z=Al, Ga or In) for spintronics applications. Thin Solid Films, 2019, 690, 137564.	1.8	11
18	Theoretical study on the electronic structure, optical and photocatalytic properties of type-II As/CdO van der Waals heterostructure. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114888.	2.7	11

#	ARTICLE	IF	CITATIONS
19	The structural, electronic, magnetic and elastic properties of Ge doped half-Heusler compounds $Mn_2Ge_xAs_{1-x}$ ( $x=0.25, 0.50, 0.75, 1.00$ ). Journal of Magnetism and Magnetic Materials, 2018, 460, 461-470.	2.3	10
20	Structural, electronic, magnetic, and optical properties of monolayer $WS_2$ doped with Co-X6 ( $X=S, N$ ). Tj ETQq 0 0 rgBT /Overlo	1.8	10
21	First-Principles Predictions on the Effects of Pb Doping on the Structural, Electronic, Magnetic, and Mechanical Properties of the $TiZrCoTi_{1-x}Pb_x$ ( $x=0.00, 0.25, 0.50, 0.75, 1.00$ ). Tj ETQq 1 1 0.7843 1 1800566.	1.5	10
22	Effects of the vacancy and doping on the electronic and magnetic characteristics of $ZrSe_2$ monolayer: A first-principles investigation. Thin Solid Films, 2021, 732, 138790.	1.8	10
23	First-principles investigation on electronic structure, magnetic states and optical properties of Mn-doped $SnS_2$ monolayer via strain engineering. Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114842.	2.7	10
24	First-principles study on the magnetic and half-metallic properties of the Heusler alloy $Ti_2CoSn$ (110) surface. Surface Science, 2016, 644, 109-112.	1.9	9
25	The structural, electronic, magnetic and optical properties of the half-metallic binary alloys $ZCl_3$ ( $Z=Be, Mg, Ca, Sr$ ): A first-principles study. Superlattices and Microstructures, 2018, 118, 230-241.	3.1	9
26	Feasibility of band gap engineering of iron pyrite ( $FeS_2$ ) by codoping Os, Ru or Zn together with O. Materials Chemistry and Physics, 2020, 244, 122742.	4.0	9
27	Structural, electronic and magnetic properties in bulk and various (001) surfaces of $X_2CoIn$ ( $X=Ti, Zr$ ) Heusler alloy. Applied Surface Science, 2018, 457, 403-410.	6.1	8
28	The structural, electronic and magnetic properties of $CoS_2$ under pressure. Solid State Communications, 2018, 273, 60-65.	1.9	7
29	Magnetic and electronic properties of zigzag boron nitride nanoribbons with nonmetallic atom asymmetric passivation. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 108, 174-180.	2.7	7
30	Changing the Electronic and Magnetic Properties of Monolayer $HfS_2$ by Doping and Vacancy Defects: Insight from First-Principles Calculations. Physica Status Solidi (B): Basic Research, 2020, 257, 1900768.	1.5	7
31	Theoretical perspective on the electronic structure and optoelectronic properties of type-II $SiC/CrS_2$ van der Waals heterostructure with high carrier mobilities. Journal of Physics Condensed Matter, 2021, 33, 215302.	1.8	7
32	The structural, magnetic, electronic and optical properties of the cluster $Fe-X_6$ ( $X=S, N, O$ or $F$ ) doped monolayer $WS_2$ . Superlattices and Microstructures, 2018, 114, 274-283.	3.1	6
33	First-principles study on the structural, electronic, and magnetic properties in (001) and (110) surfaces of quaternary Heusler alloy $TiZrCoAl$ . Materials Chemistry and Physics, 2019, 224, 93-99.	4.0	6
34	Tailoring the electronic and optical properties of $ZrS_2/ZrSe_2$ vdW heterostructure by strain engineering. Thin Solid Films, 2022, 755, 139332.	1.8	6
35	First-principles study on the magnetic and half-metallic properties in bulk and (001) surface of $Ti_2CoSn$ Heusler alloy. Thin Solid Films, 2016, 609, 19-24.	1.8	5
36	The structural, electronic and magnetic properties of $Co_{1-x}FexS_2$ . Materials Research Express, 2018, 5, 016507.	1.6	5

#	ARTICLE	IF	CITATIONS
37	The effect of pressure on the structural, elastic, electronic, magnetic, and optical properties of Mo-doped ZnSe alloy. Journal of Magnetism and Magnetic Materials, 2019, 474, 14-24.	2.3	5
38	Improving the magnetic, electronic and optical properties of the monolayer WSe <sub>2</sub> via Mn-X (X=O, S, Se) Tj ETQq 0 0 0 rgBT /Overlock	1.8	5
39	Half-metallic properties of CoS <sub>2</sub> , doped CoN <sub>0.25</sub> S <sub>1.75</sub> and CoP <sub>0.25</sub> S <sub>1.75</sub> . Materials Research Express, 2017, 4, 086306.	1.6	4
40	First-principles predictions of half-metallic, magnetic, and optical properties of the (001) surface of Ge doped half-Heusler alloys Mn <sub>2</sub> G <sub>x</sub> As <sub>1-x</sub> (x=0.00, 0.25, 0.50, 0.75, and 1.00). Thin Solid Films, 2019, 679, 1899-109.	1.8	4
41	Half-metallic, Magnetic, and Optical Properties for the (001) Surface of Binary Heusler Alloy MgCl <sub>3</sub> . Journal of Electronic Materials, 2019, 48, 2563-2571.	2.2	4
42	The structure, electronic, magnetic and optical properties of the Co-X (X = B, C, N, O or F) codoped single-layer WS <sub>2</sub> . Physica E: Low-Dimensional Systems and Nanostructures, 2021, 134, 114917.	2.7	4
43	Properties of hydrogen doped Cu nanowires and nanocontacts: a density-functional theory study. Materials Research Express, 2017, 4, 095010.	1.6	3
44	First-principles study on the structural, electronic, and magnetic properties of bulk and (001) surface of RuS <sub>2</sub> . Journal of Physics and Chemistry of Solids, 2019, 129, 227-233.	4.0	2
45	Bandgap engineering of the (001) oriented thin-films of the Heusler alloys Co <sub>2</sub> xFe <sub>x</sub> CrAl (x=0.00, 0.25,) Tj ETQq 1 1 0.7843 1.4 rgBT /Overlock	1.8	2
46	Stable half-metallicity in the (001)-oriented thin films of Co-doped full-Heusler alloys Ti <sub>2</sub> Fe <sub>1-x</sub> Co <sub>x</sub> Sn (x=0.00, 0.25, 0.50, 0.75 or) Tj ETQq 0 0 0 rgBT /Overlock	1.8	2
47	Effects of the Tc, Ru, Rh and Cd substitution doping on the structural, electronic, magnetic and optical properties of blue P monolayer. Thin Solid Films, 2022, 756, 139386.	1.8	2
48	Ferroelectrically mediated optical absorption in short-period (LaMnO <sub>3</sub> ) <sub>2</sub> /BaTiO <sub>3</sub> /(SrMnO <sub>3</sub> ) <sub>2</sub> superlattices: A viewpoint from first-principles. Journal of Applied Physics, 2019, 125, 065301.	2.5	1
49	Theoretical study of half-metallicity in the bulk and (001) oriented thin-films of the CoMn <sub>1-x</sub> Fe <sub>x</sub> CrAl and CoMn <sub>1-x</sub> Co <sub>x</sub> CrAl (x=0.00, 0.25, 0.50, 0.75 or 1.00) Heusler alloys. Materials Chemistry and Physics, 2020, 253, 123297.	4.0	1
50	First principles study of the structural, electronic, magnetic and optical properties of the Fe doped CoS <sub>2</sub> thin films. Thin Solid Films, 2022, 751, 139228.	1.8	1
51	First-principles study of the structural and electronic properties of CoX <sub>0.25</sub> S <sub>1.75</sub> (X = F, Cl, or Br). Journal of Physics and Chemistry of Solids, 2018, 123, 284-293.	4.0	0
52	The Structural, Electronic, and Magnetic Properties of Cobalt Disulfide Doped with Oxygen, Selenium, or Tellurium. Journal of Electronic Materials, 2019, 48, 483-493.	2.2	0