Dian-Hui Wang

List of Publications by Year
in descending order

31 papers	586 citations	759055 12 h-index	610775 24 g-index
31 all docs	31 docs citations	31 times ranked	779 citing authors

#	Article	IF	Citations
1	Interface-coupling of CoFe-LDH on MXene as high-performance oxygen evolution catalyst. Materials Today Energy, 2019, 12, 453-462.	2.5	162
2	Dynamic Ag⁺-intercalation with AgSnSe₂ nano-precipitates in Cl-doped polycrystalline SnSe₂ toward ultra-high thermoelectric performance. Journal of Materials Chemistry A, 2019, 7, 9761-9772.	5.2	50
3	Mechanical properties and chemical bonding of the Osâ€“B system: A first-principles study. Acta Materialia, 2012, 60, 4208-4217.	3.8	42
4	Significantly enhanced photocatalytic activity of visible light responsive AgBr/Bi 2 Sn 2 O 7 heterostructured composites. Applied Surface Science, 2017, 426, 1173-1181.	3.1	42
5	AgBr/MgBi 2 O 6 heterostructured composites with highly efficient visible-light-driven photocatalytic activity. Journal of Physics and Chemistry of Solids, 2018, 117, 94-100.	1.9	34
6	First-principle investigation of hydrogen solubility and diffusivity in transition metal-doped vanadium membranes and their mechanical properties. Journal of Alloys and Compounds, 2019, 805, 747-756.	2.8	28
7	Theoretical investigation of molybdenum/tungsten-vanadium solid solution alloy membranes: Thermodynamic stability and hydrogen permeation. Journal of Membrane Science, 2020, 608, 118200.	4.1	26
8	Photocatalytic removal of MB and hydrogen evolution in water by (Sr0.6Bi0.305)2Bi2O7/TiO2 heterostructures under visible-light irradiation. Applied Surface Science, 2021, 544, 148920.	3.1	24
9	Dissolution, diffusion, and penetration of H in the group VB metals investigated by first-principles method. International Journal of Hydrogen Energy, 2019, 44, 29083-29091.	3.8	18
10	Theoretical Studies of High-Pressure Phases, Electronic Structure, and Vibrational Properties of NaNH₂. Journal of Physical Chemistry C, 2012, 116, 8387-8393.	1.5	17
11	(Sr0.6Bi0.305)2Bi2O7 as a new visible-light-responsive photocatalyst: An experimental and theoretical study. Materials Research Bulletin, 2019, 118, 110484.	2.7	16
12	Investigation of adsorption, dissociation, and diffusion properties of hydrogen on the V (1â€¯0â€¯0) surface and in the bulk: A first-principles calculation. Journal of Advanced Research, 2020, 21, 25-34.	4.4	14
13	First-Principles Investigation of Atomic Hydrogen Adsorption and Diffusion on/into Mo-doped Nb (100) Surface. Applied Sciences (Switzerland), 2018, 8, 2466.	1.3	11
14	Electronic, Optical, Mechanical and Lattice Dynamical Properties of MgBi2O6: A First-Principles Study. Applied Sciences (Switzerland), 2019, 9, 1267.	1.3	10
15	Characterisation of the temperature-dependent M1 to R phase transition in W-doped VO2 nanorod aggregates by Rietveld refinement and theoretical modelling. Physical Chemistry Chemical Physics, 2020, 22, 7984-7994.	1.3	9
16	Pressure-induced structural transitions of LiNH2: A first-principle study. Journal of Alloys and Compounds, 2012, 544, 129-133.	2.8	8
17	BaC: a thermodynamically stable layered superconductor. Physical Chemistry Chemical Physics, 2014, 16, 20780-20784.	1.3	8
18	Prediction of thermodynamically stable Liâ€“B compounds at ambient pressure. Physical Chemistry Chemical Physics, 2017, 19, 8471-8477.	1.3	8

#	Article	IF	Citations
19	Effects of Ni doping on various properties of NbH phases: A first-principles investigation. Scientific Reports, 2017, 7, 6535.	1.6	7
20	Facile One-Step Hydrothermal Fabrication of (Sr0.6Bi0.305)2Bi2O7/SnO2 Heterojunction with Excellent Photocatalytic Activity. Nanomaterials, 2020, 10, 321.	1.9	7
21	First-principles studies of electronic, optical, and mechanical properties of Î³ -Bi 2 Sn 2 O 7. Chinese Physics B, 2016, 25, 067801.	0.7	6
22	Pressure-induced influence on the crystal structure, electronic structure and thermoelectric properties of NaB3: A first-principles study. Journal of Alloys and Compounds, 2018, 731, 323-331.	2.8	6
23	AgBr/(Sr0.6Bi0.305)2Bi2O7 Heterostructured Composites: Fabrication, Characterization, and Significantly Enhanced Photocatalytic Activity. Catalysts, 2019, 9, 394.	1.6	6
24	Electronic structure, thermodynamics, and thermoelectric properties of Î² -BaCu 2 S 2 : A first-principles study. Computational Materials Science, 2015, 103, 105-110.	1.4	5
25	Effects of Mo alloying on stability and diffusion of hydrogen in the Nb16H phase: a first-principles investigation. RSC Advances, 2019, 9, 19495-19500.	1.7	5
26	Hydrogen Transportation Behaviour of Vâ€“Ni Solid Solution: A First-Principles Investigation. Materials, 2021, 14, 2603.	1.3	5
27	Correlation between dielectric loss, microstructures and phase structures in a novel Mg n+1 Ti n O 3n+1 microwave ceramic system. Materials Chemistry and Physics, 2017, 198, 35-41.	2.0	4
28	Structural evolutions and electronic properties of Au n Gd (n = 6â€“15) small clusters: A first principles study. Chinese Physics B, 2018, 27, 083601.	0.7	3
29	One-Step Hydrothermal Synthesis of Nanostructured MgBi2O6/TiO2 Composites for Enhanced Hydrogen Production. Nanomaterials, 2022, 12, 1302.	1.9	3
30	Alloying Effect Study on Thermodynamic Stability of MgH2 by First-principles Calculation. Chinese Journal of Chemical Physics, 2016, 29, 545-548.	0.6	2
31	Structural stabilities of AMgH3 hydrides with perovskite structure. , 2016, , .		0