Kuo Bao

List of Publications by Year
in descending order

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46 papers	692 citations	687363 13 h-index	610901 24 g-index
47 all docs	47 docs citations	47 times ranked	790 citing authors

#	Article	IF	Citations
1	A Novel Polymerization of Nitrogen in Beryllium Tetranitride at High Pressure. Journal of Physical Chemistry C, 2017, 121, 9766-9772.	3.1	67
2	Nitrogen concentration driving the hardness of rhenium nitrides. Scientific Reports, 2014, 4, 4797.	3.3	61
3	Mechanical and metallic properties of tantalum nitrides from first-principles calculations. RSC Advances, 2014, 4, 10133.	3.6	55
4	Manganese mono-boride, an inexpensive room temperature ferromagnetic hard material. Scientific Reports, 2017, 7, 43759.	3.3	47
5	Potentially superhard hcp<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Cr</mml:mi><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>compound studied at high pressure. Physical Review B, 2016, 93, .	3.2	33
6	Investigating Robust Honeycomb Borophenes Sandwiching Manganese Layers in Manganese Diboride. Inorganic Chemistry, 2016, 55, 11140-11146.	4.0	31
7	Phase diagram, mechanical properties, and electronic structure of Nbâ€"N compounds under pressure. Physical Chemistry Chemical Physics, 2015, 17, 22837-22845.	2.8	27
8	High-temperature Superconductivity in compressed Solid Silane. Scientific Reports, 2015, 5, 8845.	3.3	25
9	Crossover from metal to insulator in dense lithium-rich compound CLi ₄. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2366-2369.	7.1	21
10	Pressure induced phase transition in MH2 (M = V, Nb). Journal of Chemical Physics, 2014, 140, 114703.	3.0	18
11	Double-zigzag boron chain-enhanced Vickers hardness and manganese bilayers-induced high d-electron mobility in Mn₃B₄. Physical Chemistry Chemical Physics, 2019, 21, 2697-2705.	2.8	18
12	Superconductivity with high hardness in Mo₃C₂. Inorganic Chemistry Frontiers, 2019, 6, 1282-1288.	6.0	16
13	Synthesis and characterization of a strong ferromagnetic and high hardness intermetallic compound Fe₂B. Physical Chemistry Chemical Physics, 2020, 22, 27425-27432.	2.8	15
14	Manganese borides synthesized at high pressure and high temperature. Journal of Applied Physics, 2012, 111, 112616.	2.5	13
15	Structural stability and compressive behavior of ZrH₂under hydrostatic pressure and nonhydrostatic pressure. RSC Advances, 2014, 4, 46780-46786.	3.6	13
16	Effects of magnetic ordering and electron correlations on the stability of FeN. RSC Advances, 2015, 5, 31270-31274.	3.6	13
17	Structural stability and electronic property in K₂S under pressure. RSC Advances, 2017, 7, 7424-7430.	3.6	13
18	A Novel High-Density Phase and Amorphization of Nitrogen-Rich 1H-Tetrazole (CH2N4) under High Pressure. Scientific Reports, 2017, 7, 39249.	3.3	12

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19	Experimental verification of the high pressure crystal structures in NH3BH3. Journal of Chemical Physics, 2014, 140, 244507.	3.0	11
20	The crystal structure of IrB₂: a first-principle calculation. RSC Advances, 2014, 4, 63442-63446.	3.6	10
21	Pressure-induced phase transition of SnH₄: a new layered structure. RSC Advances, 2016, 6, 10456-10461.	3.6	10
22	A first-principles investigation of a new hard multi-layered MnB₂ structure. RSC Advances, 2017, 7, 10559-10563.	3.6	10
23	Role of TMâ€"TM Connection Induced by Opposite d-Electron States on the Hardness of Transition-Metal (TM = Cr, W) Mononitrides. Inorganic Chemistry, 2019, 58, 15573-15579.	4.0	10
24	How to get superhard MnB2: a first-principles study. Journal of Materials Chemistry, 2012, 22, 17630.	6.7	9
25	A novel stable hydrogen-rich SnH8 under high pressure. RSC Advances, 2015, 5, 107637-107641.	3.6	9
26	Revealing unusual rigid diamond net analogues in superhard titanium carbides. RSC Advances, 2018, 8, 14479-14487.	3.6	9
27	Revealing the Unusual Rigid Boron Chain Substructure in Hard and Superconductive Tantalum Monoboride. Chemistry - A European Journal, 2019, 25, 5051-5057.	3.3	9
28	An electrically conductive and ferromagnetic nano-structure manganese mono-boride with high Vickers hardness. Nanoscale, 2021, 13, 18570-18577.	5.6	9
29	Structural properties of ammonium iodide under high pressure. RSC Advances, 2015, 5, 40336-40340.	3.6	8
30	The hydrogenâ€bond effect on the high pressure behavior of hydrazinium monochloride. Journal of Raman Spectroscopy, 2015, 46, 266-272.	2.5	8
31	A novel hard superconductor obtained in di-molybdenum carbide (Mo2C) with Moâ€"C octahedral structure. Journal of Alloys and Compounds, 2021, 881, 160631.	5.5	8
32	Bonding Properties of Manganese Nitrides at High Pressure and the Discovery of MnN₄with Planar N₄Rings. Journal of Physical Chemistry C, 2021, 125, 24605-24612.	3.1	8
33	Insight the effect of rigid boron chain substructure on mechanical, magnetic and electrical properties of Î²-FeB. Journal of Alloys and Compounds, 2022, 896, 162767.	5.5	8
34	An ultra-incompressible ternary transition metal carbide. RSC Advances, 2014, 4, 63544-63548.	3.6	7
35	Synthesis, Characterization, and First-Principles Analysis of the MAB-Like Ternary Transition-Metal Boride Fe(MoB)₂. Inorganic Chemistry, 2022, 61, 11046-11056.	4.0	6
36	Pressure-induced structural transformation of CaC2. Journal of Chemical Physics, 2016, 144, 194506.	3.0	5

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37	Ab initio molecular dynamic study of solid-state transitions of ammonium nitrate. Scientific Reports, 2016, 6, 18918.	3.3	5
38	Unexpected stable stoichiometries and superconductivity of potassium-rich sulfides. RSC Advances, 2017, 7, 44884-44889.	3.6	5
39	Emergent property of high hardness for C-rich ruthenium carbides: partial covalent Ruâ€"Ru bonds. Physical Chemistry Chemical Physics, 2018, 20, 6108-6115.	2.8	5
40	Structural and Dynamic Properties of the High-Pressure, High-Temperature Phase of Solid Ammonia Borane. Journal of Physical Chemistry C, 2019, 123, 6326-6332.	3.1	5
41	Revealing the Unusual Boron-Pinned Layered Substructure in Superconducting Hard Molybdenum Semiboride. ACS Omega, 2021, 6, 21436-21443.	3.5	5
42	Hardness, magnetic, elastic, and electronic properties of manganese semi-boride synthesized by high pressure and high temperature. Journal of Solid State Chemistry, 2021, 302, 122386.	2.9	5
43	High pressure superconducting phase of BI3: an ab initio study. RSC Advances, 2014, 4, 32068-32074.	3.6	4
44	Pressure-induced structural changes in NH₄Br. Journal of Chemical Physics, 2015, 143, 064505.	3.0	2
45	Complete ligand reinforcing the structure of cubic-CrN. Journal of Alloys and Compounds, 2019, 783, 232-236.	5.5	2
46	Pressure-Induced Transition from Spin to Superconducting States in Novel MnN₂. ACS Omega, 2021, 6, 21830-21836.	3.5	2