# Kuo Bao

List of Publications by Year
in descending order



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|---|---|---|---|
| 46 papers | 692 citations | 686830 13 h-index | 610482 24 g-index |
| 47 all docs | 47 docs citations | 47 times ranked | 790 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 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. | 2.8 | 8 |
| 2 | Synthesis, Characterization, and First-Principles Analysis of the MAB-Like Ternary Transition-Metal Boride Fe(MoB)<sub>2</sub>. Inorganic Chemistry, 2022, 61, 11046-11056. | 1.9 | 6 |
| 3 | An electrically conductive and ferromagnetic nano-structure manganese mono-boride with high Vickers hardness. Nanoscale, 2021, 13, 18570-18577. | 2.8 | 9 |
| 4 | Pressure-Induced Transition from Spin to Superconducting States in Novel MnN<sub>2</sub>. ACS Omega, 2021, 6, 21830-21836. | 1.6 | 2 |
| 5 | Revealing the Unusual Boron-Pinned Layered Substructure in Superconducting Hard Molybdenum Semiboride. ACS Omega, 2021, 6, 21436-21443. | 1.6 | 5 |
| 6 | 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. | 1.4 | 5 |
| 7 | A novel hard superconductor obtained in di-molybdenum carbide (Mo2C) with Moâ€“C octahedral structure. Journal of Alloys and Compounds, 2021, 881, 160631. | 2.8 | 8 |
| 8 | Bonding Properties of Manganese Nitrides at High Pressure and the Discovery of MnN<sub>4</sub>with Planar N<sub>4</sub>Rings. Journal of Physical Chemistry C, 2021, 125, 24605-24612. | 1.5 | 8 |
| 9 | Synthesis and characterization of a strong ferromagnetic and high hardness intermetallic compound Fe<sub>2</sub>B. Physical Chemistry Chemical Physics, 2020, 22, 27425-27432. | 1.3 | 15 |
| 10 | Double-zigzag boron chain-enhanced Vickers hardness and manganese bilayers-induced high d-electron mobility in Mn<sub>3</sub>B<sub>4</sub>. Physical Chemistry Chemical Physics, 2019, 21, 2697-2705. | 1.3 | 18 |
| 11 | 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. | 1.9 | 10 |
| 12 | Revealing the Unusual Rigid Boron Chain Substructure in Hard and Superconductive Tantalum Monoboride. Chemistry - A European Journal, 2019, 25, 5051-5057. | 1.7 | 9 |
| 13 | Superconductivity with high hardness in Mo<sub>3</sub>C<sub>2</sub>. Inorganic Chemistry Frontiers, 2019, 6, 1282-1288. | 3.0 | 16 |
| 14 | Structural and Dynamic Properties of the High-Pressure, High-Temperature Phase of Solid Ammonia Borane. Journal of Physical Chemistry C, 2019, 123, 6326-6332. | 1.5 | 5 |
| 15 | Complete ligand reinforcing the structure of cubic-CrN. Journal of Alloys and Compounds, 2019, 783, 232-236. | 2.8 | 2 |
| 16 | Revealing unusual rigid diamond net analogues in superhard titanium carbides. RSC Advances, 2018, 8, 14479-14487. | 1.7 | 9 |
| 17 | Emergent property of high hardness for C-rich ruthenium carbides: partial covalent Ruâ€“Ru bonds. Physical Chemistry Chemical Physics, 2018, 20, 6108-6115. | 1.3 | 5 |
| 18 | A Novel High-Density Phase and Amorphization of Nitrogen-Rich 1H-Tetrazole (CH2N4) under High Pressure. Scientific Reports, 2017, 7, 39249. | 1.6 | 12 |

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|---|---|---|---|
| 19 | A first-principles investigation of a new hard multi-layered MnB<sub>2</sub> structure. RSC Advances, 2017, 7, 10559-10563. | 1.7 | 10 |
| 20 | A Novel Polymerization of Nitrogen in Beryllium Tetranitride at High Pressure. Journal of Physical Chemistry C, 2017, 121, 9766-9772. | 1.5 | 67 |
| 21 | Manganese mono-boride, an inexpensive room temperature ferromagnetic hard material. Scientific Reports, 2017, 7, 43759. | 1.6 | 47 |
| 22 | Structural stability and electronic property in K<sub>2</sub>S under pressure. RSC Advances, 2017, 7, 7424-7430. | 1.7 | 13 |
| 23 | Unexpected stable stoichiometries and superconductivity of potassium-rich sulfides. RSC Advances, 2017, 7, 44884-44889. | 1.7 | 5 |
| 24 | Pressure-induced structural transformation of CaC2. Journal of Chemical Physics, 2016, 144, 194506. | 1.2 | 5 |
| 25 | Ab initio molecular dynamic study of solid-state transitions of ammonium nitrate. Scientific Reports, 2016, 6, 18918. | 1.6 | 5 |
| 26 | 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, . | 1.1 | 33 |
| 27 | Investigating Robust Honeycomb Borophenes Sandwiching Manganese Layers in Manganese Diboride. Inorganic Chemistry, 2016, 55, 11140-11146. | 1.9 | 31 |
| 28 | Pressure-induced phase transition of SnH<sub>4</sub>: a new layered structure. RSC Advances, 2016, 6, 10456-10461. | 1.7 | 10 |
| 29 | Crossover from metal to insulator in dense lithium-rich compound CLi <sub>4</sub>. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2366-2369. | 3.3 | 21 |
| 30 | Pressure-induced structural changes in NH<sub>4</sub>Br. Journal of Chemical Physics, 2015, 143, 064505. | 1.2 | 2 |
| 31 | High-temperature Superconductivity in compressed Solid Silane. Scientific Reports, 2015, 5, 8845. | 1.6 | 25 |
| 32 | Effects of magnetic ordering and electron correlations on the stability of FeN. RSC Advances, 2015, 5, 31270-31274. | 1.7 | 13 |
| 33 | A novel stable hydrogen-rich SnH8 under high pressure. RSC Advances, 2015, 5, 107637-107641. | 1.7 | 9 |
| 34 | Phase diagram, mechanical properties, and electronic structure of Nbâ€“N compounds under pressure. Physical Chemistry Chemical Physics, 2015, 17, 22837-22845. | 1.3 | 27 |
| 35 | Structural properties of ammonium iodide under high pressure. RSC Advances, 2015, 5, 40336-40340. | 1.7 | 8 |
| 36 | The hydrogenâ€bond effect on the high pressure behavior of hydrazinium monochloride. Journal of Raman Spectroscopy, 2015, 46, 266-272. | 1.2 | 8 |

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|---|---|---|---|
| 37 | An ultra-incompressible ternary transition metal carbide. RSC Advances, 2014, 4, 63544-63548. | 1.7 | 7 |
| 38 | Pressure induced phase transition in MH2 (M = V, Nb). Journal of Chemical Physics, 2014, 140, 114703. | 1.2 | 18 |
| 39 | The crystal structure of IrB<sub>2</sub>: a first-principle calculation. RSC Advances, 2014, 4, 63442-63446. | 1.7 | 10 |
| 40 | Experimental verification of the high pressure crystal structures in NH3BH3. Journal of Chemical Physics, 2014, 140, 244507. | 1.2 | 11 |
| 41 | Mechanical and metallic properties of tantalum nitrides from first-principles calculations. RSC Advances, 2014, 4, 10133. | 1.7 | 55 |
| 42 | Structural stability and compressive behavior of ZrH<sub>2</sub>under hydrostatic pressure and nonhydrostatic pressure. RSC Advances, 2014, 4, 46780-46786. | 1.7 | 13 |
| 43 | High pressure superconducting phase of BI3: an ab initio study. RSC Advances, 2014, 4, 32068-32074. | 1.7 | 4 |
| 44 | Nitrogen concentration driving the hardness of rhenium nitrides. Scientific Reports, 2014, 4, 4797. | 1.6 | 61 |
| 45 | Manganese borides synthesized at high pressure and high temperature. Journal of Applied Physics, 2012, 111, 112616. | 1.1 | 13 |
| 46 | How to get superhard MnB2: a first-principles study. Journal of Materials Chemistry, 2012, 22, 17630. | 6.7 | 9 |