Ivan A Kruglov

List of Publications by Year
in descending order

26 papers	1,256 citations	430754 18 h-index	552653 26 g-index
28 all docs	28 docs citations	28 times ranked	971 citing authors

#	Article	IF	Citations
1	Superconductivity at 253â€¯K in lanthanumâ€“yttrium ternary hydrides. Materials Today, 2021, 48, 18-28.	8.3	119
2	Synthesis of clathrate cerium superhydride CeH9 at 80-100 GPa with atomic hydrogen sublattice. Nature Communications, 2019, 10, 4453.	5.8	117
3	On Distribution of Superconductivity in Metal Hydrides. Current Opinion in Solid State and Materials Science, 2020, 24, 100808.	5.6	104
4	Actinium Hydrides AcH₁₀, AcH₁₂, and AcH₁₆ as High-Temperature Conventional Superconductors. Journal of Physical Chemistry Letters, 2018, 9, 1920-1926.	2.1	100
5	Hydrogen sulfide at high pressure: Change in stoichiometry. Physical Review B, 2016, 93, .	1.1	97
6	High-Temperature Superconductivity in a Thâ€“H System under Pressure Conditions. ACS Applied Materials & Interfaces, 2018, 10, 43809-43816.	4.0	95
7	Uranium polyhydrides at moderate pressures: Prediction, synthesis, and expected superconductivity. Science Advances, 2018, 4, eaat9776.	4.7	82
8	Synthesis of molecular metallic barium superhydride: pseudocubic BaH12. Nature Communications, 2021, 12, 273.	5.8	66
9	Superconductivity of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LaH</mml:mi><mml:mn>10</mml:mn></mml:msub></m and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>LaH</mml:mi><mml:mn>16</mml:mn></mml:msub></m polyhydrides. Physical Review B, 2020, 101, .	1.1	62
10	Energy-free machine learning force field for aluminum. Scientific Reports, 2017, 7, 8512.	1.6	50
11	Machine learning scheme for fast extraction of chemically interpretable interatomic potentials. AIP Advances, 2016, 6, .	0.6	49
12	Iron Superhydrides FeH₅ and FeH₆: Stability, Electronic Properties, and Superconductivity. Journal of Physical Chemistry C, 2018, 122, 4731-4736.	1.5	48
13	Topological phase singularities in atomically thin high-refractive-index materials. Nature Communications, 2022, 13, 2049.	5.8	43
14	Novel Strongly Correlated Europium Superhydrides. Journal of Physical Chemistry Letters, 2021, 12, 32-40.	2.1	33
15	Phase diagram of uranium from<i>ab initio</i>calculations and machine learning. Physical Review B, 2019, 100, .	1.1	28
16	Refined phase diagram of the H-S system with high- Tc superconductivity. Physical Review B, 2017, 96, .	1.1	25
17	Machine Learning for Optical Gas Sensing: A Leaky-Mode Humidity Sensor as Example. IEEE Sensors Journal, 2020, 20, 6954-6963.	2.4	24
18	Search for stable cocrystals of energetic materials using the evolutionary algorithm USPEX. Physical Chemistry Chemical Physics, 2020, 22, 16822-16830.	1.3	21

#	Article	IF	Citations
19	Superconductivity in bulk polycrystalline metastable phases of Sb2Te3 and Bi2Te3 quenched after high-pressureâ€“high-temperature treatment. Chemical Physics Letters, 2015, 631-632, 97-102.	1.2	20
20	Boron monosulfide: Equation of state and pressure-induced phase transition. Journal of Applied Physics, 2018, 123, .	1.1	13
21	Broadband Optical Properties of Atomically Thin PtS2 and PtSe2. Nanomaterials, 2021, 11, 3269.	1.9	13
22	Monoclinic structure and electrical properties of metastable Sb₂Te₃and Bi_{0.4}Sb_{1.6}Te₃phases. Physica Status Solidi (B): Basic Research, 2015, 252, 267-273.	0.7	12
23	Broadband Optical Constants and Nonlinear Properties of SnS2 and SnSe2. Nanomaterials, 2022, 12, 141.	1.9	11
24	Srâ€Doped Superionic Hydrogen Glass: Synthesis and Properties of SrH₂₂. Advanced Materials, 2022, 34, e2200924.	11.1	10
25	Prediction and Synthesis of Dysprosium Hydride Phases at High Pressure. Inorganic Chemistry, 2020, 59, 5303-5312.	1.9	6
26	Plasmonâ€“Polariton Modes in Fullerenes. Journal of Physical Chemistry Letters, 2021, 12, 11873-11877.	2.1	1