Xiaohui Yu

List of Publications by Year
in descending order

42 papers	905 citations	471509 17 h-index	477307 29 g-index
42 all docs	42 docs citations	42 times ranked	1279 citing authors

#	Article	IF	Citations
1	High-Temperature Superconducting Phase in Clathrate Calcium Hydride <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>CaH</mml:mi></mml:mrow><mml:mrow><mml:mn>6</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> up to 215ÂK at a Pressure of 172ÂGPa. Physical Review Letters, 2022, 128, 167001.	7.8	149
2	Splash-Resistant and Light-Weight Silk-Sheathed Wires for Textile Electronics. Nano Letters, 2018, 18, 7085-7091.	9.1	98
3	Ultrastrong Boron Frameworks in ZrB₁₂: A Highway for Electron Conducting. Advanced Materials, 2017, 29, 1604003.	21.0	71
4	Encapsulation kinetics and dynamics of carbon monoxide in clathrate hydrate. Nature Communications, 2014, 5, 4128.	12.8	62
5	Synthesis, Hardness, and Electronic Properties of Stoichiometric VN and CrN. Crystal Growth and Design, 2016, 16, 351-358.	3.0	50
6	Crystal structure and encapsulation dynamics of ice II-structured neon hydrate. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10456-10461.	7.1	36
7	Robust Interlayer Exciton in WS₂/MoSe₂ van der Waals Heterostructure under High Pressure. Nano Letters, 2021, 21, 8035-8042.	9.1	30
8	Synthesis of Onion-Like Î´-MoN Catalyst for Selective Hydrogenation. Journal of Physical Chemistry C, 2017, 121, 19451-19460.	3.1	29
9	Our research progress in heteroaggregation and homoaggregation of organic Ï€â€conjugated systems. Aggregate, 2021, 2, e35.	9.9	28
10	Strain stiffening, high load-invariant hardness, and electronic anomalies of boron phosphide under pressure. Physical Review B, 2020, 101, .	3.2	24
11	Monoclinic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>EuSn</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> : A Novel High-Pressure Network Structure. Physical Review Letters, 2021, 126, 155701.	7.8	24
12	Anthocyanin composition and expression analysis of anthocyanin biosynthetic genes in kidney bean pod. Plant Physiology and Biochemistry, 2015, 97, 304-312.	5.8	22
13	The tomato floral homeotic protein FBP1-like gene, SlGLO1, plays key roles in petal and stamen development. Scientific Reports, 2016, 6, 20454.	3.3	22
14	High Pressure Phase-Transformation Induced Texture Evolution and Strengthening in Zirconium Metal: Experiment and Modeling. Scientific Reports, 2015, 5, 12552.	3.3	21
15	Electronic structures and mechanical properties of Al(111)/ZrB₂(0001) heterojunctions from first-principles calculation. Molecular Physics, 2015, 113, 1794-1801.	1.7	21
16	Silencing of SlHB2 Improves Drought, Salt Stress Tolerance, and Induces Stress-Related Gene Expression in Tomato. Journal of Plant Growth Regulation, 2017, 36, 578-589.	5.1	19
17	Double Ï€-Extended Helicene Derivatives Containing Pentagonal Rings: Synthesis, Crystal Analyses, and Photophysics. Journal of Organic Chemistry, 2021, 86, 17535-17542.	3.2	19
18	Unusual Mott transition in multiferroic PbCrO ₃. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15320-15325.	7.1	18

#	Article	IF	Citations
19	Molecular Characterization of Nine Tissue-Specific or Stress-Responsive Genes of Histone Deacetylase in Tomato (Solanum lycopersicum). Journal of Plant Growth Regulation, 2017, 36, 566-577.	5.1	16
20	Ab Initio Studies on the Clathrate Hydrates of Some Nitrogen- and Sulfur-Containing Gases. Journal of Physical Chemistry A, 2017, 121, 2620-2626.	2.5	16
21	Dimensional crossover tuned by pressure in layered magnetic NiPS3. Science China: Physics, Mechanics and Astronomy, 2021, 64, 1.	5.1	16
22	Elastic, magnetic and electronic properties of iridium phosphide Ir2P. Scientific Reports, 2016, 6, 21787.	3.3	15
23	Grand Canonical Monte Carlo Simulations on Phase Equilibria of Methane, Carbon Dioxide, and Their Mixture Hydrates. Journal of Physical Chemistry B, 2018, 122, 9724-9737.	2.6	13
24	Superconducting phase diagrams of S-doped <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>2</mml:mn><mml:mi>H</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi mathvariant="normal">Se</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> under hydrostatic pressure. Physical Review B, 2020, 102, .	3.2	10
25	Magnetic and electric field dependent anisotropic magnetoelectric multiferroicity in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Sm</mml:mi><mml:msub><mml:mi>Mn</mml:mi><mml:mi mathvariant="normal">O</mml:mi><mml:mn>12</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2021, 104, .	3.2	9
26	Synthesis and Phase Behavior of Methane Hydrate in a Layered Double Hydroxide: An Experimental and Molecular Dynamics Simulation Study. Journal of Physical Chemistry C, 2021, 125, 7889-7897.	3.1	8
27	Pressure-driven electronic and structural phase transition in intrinsic magnetic topological insulator <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mn</mml:mi><mml:msub><mml:mi>Sb</mml:mi> Physical Review B, 2021, 104, .	3.2	8
28	Engineering Interlayer Electronâ€“Phonon Coupling in WS₂/BN Heterostructures. Nano Letters, 2022, 22, 2725-2733.	9.1	7
29	Magnetic origin of phase stability in cubic Î³-MoN. Applied Physics Letters, 2018, 113, 221901.	3.3	6
30	Physical realization of topological Roman surface by spin-induced ferroelectric polarization in cubic lattice. Nature Communications, 2022, 13, 2373.	12.8	6
31	Phase Stability and Compressibility of 3R-MoN2 at High Pressure. Scientific Reports, 2019, 9, 10524.	3.3	5
32	High-Pressure Synthesis of Two Polymorphic HgMnO3 Phases and Distinct Magnetism from 2D to 3D. Inorganic Chemistry, 2020, 59, 3887-3893.	4.0	5
33	Superconductivity in the van der Waals crystal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>SnS</mml:mi><mml:mn>2</mml:mn></mml:msub> up to 105 GPa. Physical Review B, 2022, 105, .	3.2	5
34	Improper multiferroiclike transition in a metal. Physical Review B, 2022, 105, .	3.2	4
35	Stoichiometric Î´-NbN: The Most Incompressible Cubic Transition Metal Mononitride. Physica Status Solidi (B): Basic Research, 2017, 254, 1700063.	1.5	3
36	The discovery of a superhard P-type transparent semiconductor: Al_{2.69}B₅₀. Materials Horizons, 2022, 9, 748-755.	12.2	3

#	Article	IF	Citations
37	Compressive-tensile deformation of nanocrystalline nickel at high pressure and temperature conditions. Applied Physics Letters, 2013, 103, 043118.	3.3	2
38	Pressure-induced shift of Tc and structural transition in â€œ122â€•type pnictide superconductor Ca0.34Na0.66Fe2As2. AIP Advances, 2016, 6, 075104.	1.3	2
39	Compressibility and thermoelasticity of CrN. High Pressure Research, 2020, 40, 423-433.	1.2	2
40	Enhancement of Aâ€²-site Mn3+ spin ordering by B-site Mn4+ substitution in quadruple perovskite PbMn3Cr3MnO12. Applied Physics Letters, 2021, 118, 262403.	3.3	1
41	Physiological, biochemical, and molecular differences in chloroplast synthesis between leaf and corolla of cabbage (Brassica rapa L. var. chinensis) and rapeseed (Brassica napus L.). Plant Growth Regulation, 2017, 82, 91-101.	3.4	0
42	Structure Determination, Mechanical Properties, Thermal Stability of Co2MoB4 and Fe2MoB4. Materials, 2022, 15, 3031.	2.9	0