Yinwei Li

List of Publications by Year
in descending order

69 papers	3,989 citations	218677 26 h-index	118850 62 g-index
71 all docs	71 docs citations	71 times ranked	3433 citing authors

#	ARTICLE	IF	CITATIONS
1	A B₂N monolayer: a direct band gap semiconductor with high and highly anisotropic carrier mobility. Nanoscale, 2022, 14, 930-938.	5.6	11
2	Materials by design at high pressures. Chemical Science, 2022, 13, 329-344.	7.4	24
3	Pressure-stabilized MnB₆ that exhibits high-temperature ferromagnetism and high ductility at ambient pressure. Journal of Materials Chemistry C, 2022, 10, 4365-4371.	5.5	3
4	Pressure-induced transition from pure electronic to mixed ionic-electronic conduction in strontium hydride. Applied Physics Letters, 2022, 120, 073904.	3.3	2
5	Tunable Zero Linear Compressibility under a Rational Designed Mechanism of Modular â€œDumbbellâ€: A Density Functional Theory Study. , 2022, 4, 541-547.		8
6	Highly Efficient Nanoflower-like Bifunctional Electrocatalyst Co-W-B-P/CF for Overall Water Splitting. ACS Applied Energy Materials, 2022, 5, 4259-4269.	5.1	10
7	Formation of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">N</mml:mi><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mtext>â^'</mml:mtext><mml:mi>Xe</mml:mi></mml compound at the extreme condition of planetary interiors. Physical Review B, 2022, 105, .	3.2	5
8	Superconductivity in S-rich phases of lanthanum sulfide under high pressure. Physical Review Materials, 2022, 6, .	2.4	3
9	Two-dimensional Si₂S with a negative Poisson's ratio and promising optoelectronic properties. Nanoscale, 2022, 14, 10573-10580.	5.6	3
10	Metal-Decoration-Free Li₃C₂ Monolayer with Heptacoordinate Carbons as a Promising Hydrogen Storage Medium. , 2022, 4, 1402-1410.		8
11	Formation of solid <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>SiO</mml:mi><mml:mn>2</mml:mn></m compound at high pressure and high temperature. Physical Review B, 2022, 106, .	3.2	1
12	Conduction transition and electronic conductivity enhancement of cesium azide by pressure-directed grain boundary engineering. Journal of Materials Chemistry C, 2021, 9, 4764-4770.	5.5	3
13	A cage boron allotrope with high superconductivity at ambient pressure. Journal of Materials Chemistry C, 2021, 9, 8258-8264.	5.5	10
14	Pressure-induced boron clathrates with ambient-pressure superconductivity. Journal of Materials Chemistry C, 2021, 9, 13782-13788.	5.5	12
15	Metal-Element-Incorporation Induced Superconducting Hydrogen Clathrate Structure at High Pressure. Chinese Physics Letters, 2021, 38, 027401.	3.3	8
16	Sol Electrolyte: Pathway to Longâ€Term Stable Lithium Metal Anode. Advanced Functional Materials, 2021, 31, 2100594.	14.9	19
17	Helium incorporation induced direct-gap silicides. Npj Computational Materials, 2021, 7, .	8.7	6
18	Evidence of Phononâ€Mediated Superconductivity in LaH₁₀ at High Pressure. Annalen Der Physik, 2021, 533, 2000518.	2.4	12

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19	Superconducting hydrogen tubes in hafnium hydrides at high pressure. Physical Review B, 2021, 104, .	3.2	11
20	Pressure-Induced Structural Phase Transition and Superconductivity in NaSn5. Inorganic Chemistry, 2020, 59, 484-490.	4.0	4
21	The intrinsic magnetism, quantum anomalous Hall effect and Curie temperature in 2D transition metal trihalides. Physical Chemistry Chemical Physics, 2020, 22, 2429-2436.	2.8	42
22	Boron kagome-layer induced intrinsic superconductivity in a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MnB</mml:mi><mml:mn>3</mml:mn></mml:msub></mm monolayer with a high critical temperature. Physical Review B, 2020, 102, .	3.2	22
23	Hidden porous boron nitride as a high-efficiency membrane for hydrogen purification. Physical Chemistry Chemical Physics, 2020, 22, 22778-22784.	2.8	16
24	Frontispiz: Fabricating Dualâ€Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. Angewandte Chemie, 2020, 132, .	2.0	0
25	Frontispiece: Fabricating Dualâ€Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. Angewandte Chemie - International Edition, 2020, 59, .	13.8	0
26	High-Pressure Phases and Properties of the Mg3Sb2 Compound. ACS Omega, 2020, 5, 31902-31907.	3.5	3
27	Isotope effect in superconducting lanthanum hydride under high compression. Physical Review B, 2020, 101, .	3.2	28
28	Fabricating Dualâ€Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. Angewandte Chemie - International Edition, 2020, 59, 16013-16022.	13.8	151
29	Formation of ammoniaâ€"helium compounds at high pressure. Nature Communications, 2020, 11, 3164.	12.8	39
30	Singleâ€Atom Iron Catalysts on Overhangâ€Eave Carbon Cages for Highâ€Performance Oxygen Reduction Reaction. Angewandte Chemie, 2020, 132, 7454-7459.	2.0	80
31	Singleâ€Atom Iron Catalysts on Overhangâ€Eave Carbon Cages for Highâ€Performance Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2020, 59, 7384-7389.	13.8	264
32	Fabricating Dualâ€Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. Angewandte Chemie, 2020, 132, 16147-16156.	2.0	19
33	Synergistic Modulation of Active Sites and Charge Transport: N/S Co-doped C Encapsulated NiCo₂O₄/NiO Hollow Microrods for Boosting Oxygen Evolution Catalysis. Inorganic Chemistry, 2020, 59, 4080-4089.	4.0	19
34	Activating Titanium Dioxide as a New Efficient Electrocatalyst: From Theory to Experiment. ACS Applied Materials & Interfaces, 2020, 12, 11607-11615.	8.0	17
35	Electrical Control of Magnetic Phase Transition in a Type-I Multiferroic Double-Metal Trihalide Monolayer. Physical Review Letters, 2020, 124, 067602.	7.8	84
36	Titelbild: Singleâ€Atom Iron Catalysts on Overhangâ€Eave Carbon Cages for Highâ€Performance Oxygen Reduction Reaction (Angew. Chem. 19/2020). Angewandte Chemie, 2020, 132, 7341-7341.	2.0	0

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37	Route to high- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>T</mml:mi><mml:mi>c</mml:mi></mml:msub></mml:ma superconductivity via <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>CH</mml:mi><mml:mn>4</mml:mn></mml:msub></m -intercalated <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="n	3.2	98
38	Pressure-stabilized unconventional stoichiometric yttrium sulfides. Physical Review Research, 2020, 2, .	3.6	8
39	Prediction of strain-induced phonon-mediated superconductivity in monolayer YS. Journal of Materials Chemistry C, 2019, 7, 11184-11190.	5.5	11
40	Design Superior Alkaline Hydrogen Evolution Electrocatalyst by Engineering Dual Active Sites for Water Dissociation and Hydrogen Desorption. ACS Applied Materials & Interfaces, 2019, 11, 38771-38778.	8.0	13
41	The role of CALYPSO in the discovery of high-T_c hydrogen-rich superconductors*. Chinese Physics B, 2019, 28, 107104.	1.4	25
42	Computational Design of Novel Hydrogen-Rich YSâ€"H Compounds. ACS Omega, 2019, 4, 14317-14323.	3.5	17
43	Lightweight, Superelastic Yet Thermoconductive Boron Nitride Nanocomposite Aerogel for Thermal Energy Regulation. ACS Nano, 2019, 13, 7860-7870.	14.6	143
44	Ti-fraction-induced electronic and magnetic transformations in titanium oxide films. Journal of Chemical Physics, 2019, 150, 154704.	3.0	2
45	Hard BN Clathrate Superconductors. Journal of Physical Chemistry Letters, 2019, 10, 2554-2560.	4.6	14
46	Prediction of superhard B₂N₃ with two-dimensional metallicity. Journal of Materials Chemistry C, 2019, 7, 4527-4532.	5.5	13
47	Stoichiometric evolutions of PH3 under high pressure: implication for high-<i>T</i>c superconducting hydrides. National Science Review, 2019, 6, 524-531.	9.5	28
48	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="script">PT</mml:mi></mml:math> -symmetry-protected Dirac states in strain-induced hidden <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mo</mml:mi><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> monolayer. Physical Review B, 2019, 100, .	3.2	9
49	Prediction of pressure-induced phase transformations in Mg₃As₂. RSC Advances, 2019, 9, 34401-34405.	3.6	2
50	Route to high-energy density polymeric nitrogen t-N via Heâˆ'N compounds. Nature Communications, 2018, 9, 722.	12.8	131
51	B/N co-doped carbon nanosphere frameworks as high-performance electrodes for supercapacitors. Journal of Materials Chemistry A, 2018, 6, 8053-8058.	10.3	124
52	Hydrogenâ€rich superconductors at high pressures. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2018, 8, e1330.	14.6	57
53	Effect of covalent bonding on the superconducting critical temperature of the H-S-Se system. Physical Review B, 2018, 98, .	3.2	54
54	Surfaces/Interfaces Modification for Vacancies Enhancing Lithium Storage Capability of Cu2O Ultrasmall Nanocrystals. ACS Applied Materials & Interfaces, 2018, 10, 35137-35144.	8.0	31

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55	A hidden symmetry-broken phase of MoS₂ revealed as a superior photovoltaic material. Journal of Materials Chemistry A, 2018, 6, 16087-16093.	10.3	16
56	Porous Boron Carbon Nitride Nanosheets as Efficient Metal-Free Catalysts for the Oxygen Reduction Reaction in Both Alkaline and Acidic Solutions. ACS Energy Letters, 2017, 2, 306-312.	17.4	176
57	Prediction of high-pressure phases of Weyl semimetal NbAs and NbP. Scientific Reports, 2017, 7, 13251.	3.3	5
58	Dissociation products and structures of solid<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">S</mml:mi></mml:math>at strong compression. Physical Review B, 2016, 93, .	3.2	119
59	Superconductivity in dense carbon-based materials. Physical Review B, 2016, 93, .	3.2	37
60	Crystal Structure and Superconductivity of PH₃ at High Pressures. Journal of Physical Chemistry C, 2016, 120, 3458-3461.	3.1	78
61	Quantum hydrogen-bond symmetrization in the superconducting hydrogen sulfide system. Nature, 2016, 532, 81-84.	27.8	222
62	High-Energy Density and Superhard Nitrogen-Rich B-N Compounds. Physical Review Letters, 2015, 115, 105502.	7.8	132
63	Prediction of a Superhard Carbon-Rich Câ€“N Compound Comparable to Diamond. Journal of Physical Chemistry C, 2015, 119, 28614-28619.	3.1	26
64	Pressure-stabilized superconductive yttrium hydrides. Scientific Reports, 2015, 5, 9948.	3.3	257
65	High-Pressure Hydrogen Sulfide from First Principles: A Strongly Anharmonic Phonon-Mediated Superconductor. Physical Review Letters, 2015, 114, 157004.	7.8	377
66	Metallic Icosahedron Phase of Sodium at Terapascal Pressures. Physical Review Letters, 2015, 114, 125501.	7.8	75
67	The metallization and superconductivity of dense hydrogen sulfide. Journal of Chemical Physics, 2014, 140, 174712.	3.0	612
68	Dissociation of methane under high pressure. Journal of Chemical Physics, 2010, 133, 144508.	3.0	101
69	High-pressure phase transformations in CaH2. Journal of Physics Condensed Matter, 2008, 20, 045211.	1.8	24