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	The metallization and superconductivity of dense hydrogen sulfide. Journal of Chemical Physics, 2014, 140, 174712.	3.0	612
2	High-Pressure Hydrogen Sulfide from First Principles: A Strongly Anharmonic Phonon-Mediated Superconductor. Physical Review Letters, 2015, 114, 157004.	7.8	377
3	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
4	Pressure-stabilized superconductive yttrium hydrides. Scientific Reports, 2015, 5, 9948.	3.3	257
5	Quantum hydrogen-bond symmetrization in the superconducting hydrogen sulfide system. Nature, 2016, 532, 81-84.	27.8	222
6	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
7	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
8	Lightweight, Superelastic Yet Thermoconductive Boron Nitride Nanocomposite Aerogel for Thermal Energy Regulation. ACS Nano, 2019, 13, 7860-7870.	14.6	143
9	High-Energy Density and Superhard Nitrogen-Rich B-N Compounds. Physical Review Letters, 2015, 115, 105502.	7.8	132
10	Route to high-energy density polymeric nitrogen t-N via Heâ˜N compounds. Nature Communications, 2018, 9, 722.	12.8	131
11	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
12	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
13	Dissociation of methane under high pressure. Journal of Chemical Physics, 2010, 133, 144508.	3.0	101
14	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></mml -intercalated <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="n	3.2	98
15	Electrical Control of Magnetic Phase Transition in a Type-I Multiferroic Double-Metal Trihalide Monolayer. Physical Review Letters, 2020, 124, 067602.	7.8	84
16	Singleâ€Atom Iron Catalysts on Overhangâ€Eave Carbon Cages for Highâ€Performance Oxygen Reduction Reaction. Angewandte Chemie, 2020, 132, 7454-7459.	2.0	80
17	Crystal Structure and Superconductivity of PH₃ at High Pressures. Journal of Physical Chemistry C, 2016, 120, 3458-3461.	3.1	78
18	Metallic Icosahedron Phase of Sodium at Terapascal Pressures. Physical Review Letters, 2015, 114, 125501.	7.8	75

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19	Hydrogenâ€rich superconductors at high pressures. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2018, 8, e1330.	14.6	57
20	Effect of covalent bonding on the superconducting critical temperature of the H-S-Se system. Physical Review B, 2018, 98, .	3.2	54
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	Formation of ammoniaâ€“helium compounds at high pressure. Nature Communications, 2020, 11, 3164.	12.8	39
23	Superconductivity in dense carbon-based materials. Physical Review B, 2016, 93, .	3.2	37
24	Surfaces/Interfaces Modification for Vacancies Enhancing Lithium Storage Capability of Cu2O Ultrasmall Nanocrystals. ACS Applied Materials & Interfaces, 2018, 10, 35137-35144.	8.0	31
25	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
26	Isotope effect in superconducting lanthanum hydride under high compression. Physical Review B, 2020, 101, .	3.2	28
27	Prediction of a Superhard Carbon-Rich Câ€“N Compound Comparable to Diamond. Journal of Physical Chemistry C, 2015, 119, 28614-28619.	3.1	26
28	The role of CALYPSO in the discovery of high-T_c hydrogen-rich superconductors*. Chinese Physics B, 2019, 28, 107104.	1.4	25
29	High-pressure phase transformations in CaH2. Journal of Physics Condensed Matter, 2008, 20, 045211.	1.8	24
30	Materials by design at high pressures. Chemical Science, 2022, 13, 329-344.	7.4	24
31	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></m monolayer with a high critical temperature. Physical Review B, 2020, 102, .	3.2	22
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	Sol Electrolyte: Pathway to Longâ€Term Stable Lithium Metal Anode. Advanced Functional Materials, 2021, 31, 2100594.	14.9	19
35	Computational Design of Novel Hydrogen-Rich YSâ€“H Compounds. ACS Omega, 2019, 4, 14317-14323.	3.5	17
36	Activating Titanium Dioxide as a New Efficient Electrocatalyst: From Theory to Experiment. ACS Applied Materials & Interfaces, 2020, 12, 11607-11615.	8.0	17

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37	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
38	Hidden porous boron nitride as a high-efficiency membrane for hydrogen purification. Physical Chemistry Chemical Physics, 2020, 22, 22778-22784.	2.8	16
39	Hard BN Clathrate Superconductors. Journal of Physical Chemistry Letters, 2019, 10, 2554-2560.	4.6	14
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	Prediction of superhard B₂N₃ with two-dimensional metallicity. Journal of Materials Chemistry C, 2019, 7, 4527-4532.	5.5	13
42	Pressure-induced boron clathrates with ambient-pressure superconductivity. Journal of Materials Chemistry C, 2021, 9, 13782-13788.	5.5	12
43	Evidence of Phononâ€Mediated Superconductivity in LaH₁₀ at High Pressure. Annalen Der Physik, 2021, 533, 2000518.	2.4	12
44	Prediction of strain-induced phonon-mediated superconductivity in monolayer YS. Journal of Materials Chemistry C, 2019, 7, 11184-11190.	5.5	11
45	A B₂N monolayer: a direct band gap semiconductor with high and highly anisotropic carrier mobility. Nanoscale, 2022, 14, 930-938.	5.6	11
46	Superconducting hydrogen tubes in hafnium hydrides at high pressure. Physical Review B, 2021, 104, .	3.2	11
47	A cage boron allotrope with high superconductivity at ambient pressure. Journal of Materials Chemistry C, 2021, 9, 8258-8264.	5.5	10
48	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
49	<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
50	Metal-Element-Incorporation Induced Superconducting Hydrogen Clathrate Structure at High Pressure. Chinese Physics Letters, 2021, 38, 027401.	3.3	8
51	Pressure-stabilized unconventional stoichiometric yttrium sulfides. Physical Review Research, 2020, 2, .	3.6	8
52	Tunable Zero Linear Compressibility under a Rational Designed Mechanism of Modular â€œDumbbellâ€: A Density Functional Theory Study. , 2022, 4, 541-547.		8
53	Metal-Decoration-Free Li₃C₂ Monolayer with Heptacoordinate Carbons as a Promising Hydrogen Storage Medium. , 2022, 4, 1402-1410.		8
54	Helium incorporation induced direct-gap silicides. Npj Computational Materials, 2021, 7, .	8.7	6

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55	Prediction of high-pressure phases of Weyl semimetal NbAs and NbP. Scientific Reports, 2017, 7, 13251.	3.3	5
56	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:m compound at the extreme condition of planetary interiors. Physical Review B, 2022, 105, .	3.2	5
57	Pressure-Induced Structural Phase Transition and Superconductivity in NaSn5. Inorganic Chemistry, 2020, 59, 484-490.	4.0	4
58	High-Pressure Phases and Properties of the Mg3Sb2 Compound. ACS Omega, 2020, 5, 31902-31907.	3.5	3
59	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
60	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
61	Superconductivity in S-rich phases of lanthanum sulfide under high pressure. Physical Review Materials, 2022, 6, .	2.4	3
62	Two-dimensional Si₂S with a negative Poisson's ratio and promising optoelectronic properties. Nanoscale, 2022, 14, 10573-10580.	5.6	3
63	Ti-fraction-induced electronic and magnetic transformations in titanium oxide films. Journal of Chemical Physics, 2019, 150, 154704.	3.0	2
64	Prediction of pressure-induced phase transformations in Mg₃As₂. RSC Advances, 2019, 9, 34401-34405.	3.6	2
65	Pressure-induced transition from pure electronic to mixed ionic-electronic conduction in strontium hydride. Applied Physics Letters, 2022, 120, 073904.	3.3	2
66	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></mml compound at high pressure and high temperature. Physical Review B, 2022, 106, .	3.2	1
67	Frontispiz: Fabricating Dualâ€Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. Angewandte Chemie, 2020, 132, .	2.0	0
68	Frontispiece: Fabricating Dualâ€Atom Iron Catalysts for Efficient Oxygen Evolution Reaction: A Heteroatom Modulator Approach. Angewandte Chemie - International Edition, 2020, 59, .	13.8	0
69	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