Xiaoli Huang

List of Publications by Citations

62 papers	1,482 citations	17 h-index	37 g-index
68 ext. papers	1,928 ext. citations	5.7 avg, IF	4.48 L-index

#	Paper	IF	Citations
62	Pressure-induced metallization of dense (H2S)H2S with high-Tc superconductivity. *Scientific Reports*, **2014**, 4, 6968	4.9	502
61	Pressure-induced decomposition of solid hydrogen sulfide. *Physical Review B*, **2015**, 91,	3.3	213
60	A Protocol to Fabricate Nanostructured New Phase: B31-Type MnS Synthesized under High Pressure. *Journal of the American Chemical Society*, **2015**, 137, 10297-303	16.4	55
59	Superconducting praseodymium superhydrides. *Science Advances*, **2020**, 6, eaax6849	14.3	49
58	Nitrogen concentration driving the hardness of rhenium nitrides. *Scientific Reports*, **2014**, 4, 4797	4.9	47
57	Polyhydride CeH with an atomic-like hydrogen clathrate structure. *Nature Communications*, **2019**, 10, 3461	17.4	44
56	New Metallic Ordered Phase of Perovskite CsPbI under Pressure. *Advanced Science*, **2019**, 6, 1900399	13.6	33
55	Divergent synthesis routes and superconductivity of ternary hydride MgSiH6 at high pressure. *Physical Review B*, **2017**, 96,	3.3	32
54	High-temperature superconductivity in sulfur hydride evidenced by alternating-current magnetic susceptibility. *National Science Review*, **2019**, 6, 713-718	10.8	32
53	Synthesis of molecular metallic barium superhydride: pseudocubic BaH. *Nature Communications*, **2021**, 12, 273	17.4	29
52	High-Pressure Synthesis of Magnetic Neodymium Polyhydrides. *Journal of the American Chemical Society*, **2020**, 142, 2803-2811	16.4	28
51	Pressure-Dependent Light Emission of Charged and Neutral Excitons in Monolayer MoSe. *Journal of Physical Chemistry Letters*, **2017**, 8, 3556-3563	6.4	28
50	Pressure-Induced Structures and Properties in Indium Hydrides. *Inorganic Chemistry*, **2015**, 54, 9924-8	5.1	23
49	Thermal equation of state of Molybdenum determined from in situ synchrotron X-ray diffraction with laser-heated diamond anvil cells. *Scientific Reports*, **2016**, 6, 19923	4.9	22
48	High-Pressure Formation of Cobalt Polyhydrides: A First-Principle Study. *Inorganic Chemistry*, **2018**, 57, 181-186	5.1	19
47	High-Temperature Superconducting Phases in Cerium Superhydride with a T_{c} up to 115 K below a Pressure of 1 Megabar. *Physical Review Letters*, **2021**, 127, 117001	7.4	19
46	First-principles study on the structural and electronic properties of metallic HfH2 under pressure. *Scientific Reports*, **2015**, 5, 11381	4.9	18

45	Hydrogen Bond in Compressed Solid Hydrazine. *Journal of Physical Chemistry C*, **2014**, 118, 3236-3243	3.8	14
44	Predicted Formation of H3(+) in Solid Halogen Polyhydrides at High Pressures. *Journal of Physical Chemistry A*, **2015**, 119, 11059-65	2.8	14
43	Coupling-Assisted Renormalization of Excitons and Vibrations in Compressed MoSe2/WSe2 Heterostructure. *Journal of Physical Chemistry C*, **2018**, 122, 5820-5828	3.8	13
42	Enhancement of T(c) in the atomic phase of iodine-doped hydrogen at high pressures. *Physical Chemistry Chemical Physics*, **2015**, 17, 32335-40	3.6	13
41	Predicted novel metallic metastable phases of polymeric nitrogen at high pressures. *New Journal of Physics*, **2013**, 15, 013010	2.9	13
40	Pressure-Induced Diversity of π-Stacking Motifs and Amorphous Polymerization in Pyrrole. *Journal of Physical Chemistry C*, **2014**, 118, 12420-12427	3.8	12
39	Superconducting Zirconium Polyhydrides at Moderate Pressures. *Journal of Physical Chemistry Letters*, **2020**, 11, 646-651	6.4	12
38	Structural stability and compressive behavior of ZrH2 under hydrostatic pressure and nonhydrostatic pressure. *RSC Advances*, **2014**, 4, 46780-46786	3.7	11
37	Novel Strongly Correlated Europium Superhydrides. *Journal of Physical Chemistry Letters*, **2021**, 12, 32-40	6.4	11
36	A Novel High-Density Phase and Amorphization of Nitrogen-Rich 1H-Tetrazole (CHN) under High Pressure. *Scientific Reports*, **2017**, 7, 39249	4.9	10
35	Unexpected calcium polyhydride CaH: A possible route to dissociation of hydrogen molecules. *Journal of Chemical Physics*, **2019**, 150, 044507	3.9	10
34	Experimental verification of the high pressure crystal structures in NH3BH3. *Journal of Chemical Physics*, **2014**, 140, 244507	3.9	10
33	Correlatively Dependent Lattice and Electronic Structural Evolutions in Compressed Monolayer Tungsten Disulfide. *Journal of Physical Chemistry Letters*, **2017**, 8, 941-947	6.4	9
32	High pressure Raman spectroscopy investigation on acetonitrile and acetonitrile–water mixture. *RSC Advances*, **2015**, 5, 84216-84222	3.7	9
31	The hydrogen-bond effect on the high pressure behavior of hydrazinium monochloride. *Journal of Raman Spectroscopy*, **2015**, 46, 266-272	2.3	8
30	Hydrogen-bond enhancement triggered structural evolution and band gap engineering of hybrid perovskite (CHCHNH)PbI under high pressure. *Physical Chemistry Chemical Physics*, **2020**, 22, 1841-1846	3.6	8
29	Broadband Emission Enhancement Induced by Self-Trapped Excited States in One-Dimensional EAPbI3 Perovskite under Pressure. *Journal of Physical Chemistry C*, **2020**, 124, 8984-8991	3.8	8
28	High-pressure spectroscopic study of silver azide. *RSC Advances*, **2016**, 6, 82270-82276	3.7	8

27	In situ synchrotron X-ray diffraction with laser-heated diamond anvil cells study of Pt up to 95 GPa and 3150 K. *RSC Advances*, **2015**, 5, 14603-14609	3.7	7
26	Structural properties of ammonium iodide under high pressure. *RSC Advances*, **2015**, 5, 40336-40340	3.7	7
25	The stability of B6 octahedron in BaB6 under high pressure. *RSC Advances*, **2016**, 6, 18077-18081	3.7	7
24	Superconductivity and equation of state of lanthanum at megabar pressures. *Physical Review B*, **2020**, 102,	3.3	7
23	Pressure-Induced Photoluminescence Adjustment and Lattice Disorder in Monolayer WSe2. *ChemNanoMat*, **2017**, 3, 238-244	3.5	6
22	Unravelling decomposition products of phosphine under high pressure. *Journal of Raman Spectroscopy*, **2018**, 49, 721-727	2.3	6
21	Crystal structures and properties of the CH4H2 compound under high pressure. *RSC Advances*, **2014**, 4, 37569	3.7	6
20	High-pressure Raman study of solid hydrogen up to 300 GPa. *Chinese Physics B*, **2016**, 25, 037401	1.2	6
19	Acoustic and elastic properties of silicone oil under high pressure. *RSC Advances*, **2015**, 5, 38056-38060	3.7	5
18	Superconducting ScH and LuH at Megabar Pressures. *Inorganic Chemistry*, **2021**, 60, 15330-15335	5.1	5
17	Pressure-Induced Amorphization and Recrystallization of SnI2. *Journal of Physical Chemistry C*, **2015**, 119, 19312-19317	3.8	4
16	Pressure-induced structural transformation of CaC2. *Journal of Chemical Physics*, **2016**, 144, 194506	3.9	4
15	New Phase of Ca(BH4)2 at Near Ambient Conditions. *Journal of Physical Chemistry C*, **2018**, 122, 14272-14276	3.7	3
14	High pressure superconducting phase of BI3: an ab initio study. *RSC Advances*, **2014**, 4, 32068-32074	3.7	3
13	High-pressure polymorphism as a step towards high density structures of LiAlH4. *Applied Physics Letters*, **2015**, 107, 041906	3.4	3
12	Metallization: New Metallic Ordered Phase of Perovskite CsPbI3 under Pressure (Adv. Sci. 14/2019). *Advanced Science*, **2019**, 6, 1970083	13.6	2
11	A New Superconducting 3R-WS Phase at High Pressure. *Journal of Physical Chemistry Letters*, **2021**, 12, 3321-3327	6.4	2
10	Wrinkle and near-resonance effects on the vibrational and electronic properties in compressed monolayer MoSe. *Physical Chemistry Chemical Physics*, **2021**, 23, 11709-11716	3.6	2

9	Elastic properties of single crystal hydrogen sulfide: A Brillouin scattering study under high pressure-temperature. *Journal of Applied Physics*, **2018**, 124, 125901	2.5	2
8	Sr-Doped Superionic Hydrogen Glass: Synthesis and Properties of SrH.. *Advanced Materials*, **2022**, e2200924	24	2
7	Increasing Interlayer Coupling Prevented the Deformation in Compressed Multilayer WSe2. *Journal of Physical Chemistry C*, **2018**, 122, 10261-10266	3.8	1
6	Pressure-induced structural changes in NH4Br. *Journal of Chemical Physics*, **2015**, 143, 064505	3.9	1
5	Strong Optical, Electrical, and Raman in-Plane Anisotropy in Corrugated Two-Dimensional Perovskite. *Journal of Physical Chemistry C*, **2021**, 125, 22630-22642	3.8	1
4	New Cage-Like Cerium Trihydride Stabilized at Ambient Conditions. *CCS Chemistry*,1012-1018	7.2	1
3	Elastic stability of CO2 phase I under high temperature and pressure. *Physical Review B*, **2018**, 98,	3.3	1
2	Pressure-Tuned Quantum Well Configuration in Two-Dimensional PA8Pb5I18 Perovskites for Highly Efficient Yellow Fluorescence. *ACS Applied Energy Materials*, **2021**, 4, 10003-10011	6.1	1
1	Disorder-order structural transition of single crystal hydrogen chloride under high pressure-temperature. *Physical Chemistry Chemical Physics*, **2019**, 21, 17655-17661	3.6	