## Takahiro Ishikawa

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/2655276/publications.pdf

Version: 2024-02-01

40 papers

771 citations

933447 10 h-index 28 g-index

41 all docs

41 docs citations

41 times ranked 705 citing authors

#	Article	IF	CITATIONS
1	Crystal structure of the superconducting phase of sulfur hydride. Nature Physics, 2016, 12, 835-838.	16.7	392
2	Superconducting H5S2 phase in sulfur-hydrogen system under high-pressure. Scientific Reports, 2016, 6, 23160.	3.3	56
3	Materials informatics based on evolutionary algorithms: Application to search for superconducting hydrogen compounds. Physical Review B, 2019, 100, .	3.2	39
4	Determining the Structure of Phosphorus in PhaseÂIV. Physical Review Letters, 2006, 96, 095502.	7.8	34
5	Theoretical study of the structure of calcium in phases IV and V via $\langle i \rangle$ ab initio $\langle i \rangle$ metadynamics simulation. Physical Review B, 2008, 77, .	3.2	33
6	First-Principles Study on Superconductivity of P- and Cl-Doped H <sub>3</sub> S. Journal of the Physical Society of Japan, 2018, 87, 124711.	1.6	25
7	High-pressure phases of calcium: Prediction of phase VI and upper-pressure phases from first principles. Physical Review B, 2010, 81, .	3.2	19
8	Stacking-disordered phase of iron in the Earth's inner core from first principles. Physical Review B, 2011, 83, .	3.2	19
9	Evolutionary construction of a formation-energy convex hull: Practical scheme and application to a carbon-hydrogen binary system. Physical Review B, 2020, 101, .	3.2	16
10	Pressure-induced stacking sequence variations in gold from first principles. Physical Review B, 2013, 88, .	3.2	15
11	Phase with pressure-induced shuttlewise deformation in dense solid atomic hydrogen. Physical Review B, 2014, 90, .	3.2	10
12	Lattice dynamics effects on finite-temperature stability of R1 $\hat{a}$ °Fe (R = Y, Ce, Nd, Sm, and Dy) alloys from first principles. Journal of Alloys and Compounds, 2021, 874, 159754.	5 <b>.</b> 5	10
13	Origin of the simple modulated structures and the pressure induced superconductivity. Journal of Physics: Conference Series, 2010, 215, 012107.	0.4	8
14	Review on distorted face-centered cubic phase in yttrium via genetic algorithm. High Pressure Research, 2015, 35, 37-41.	1.2	7
15	Chemical Trend of Superconducting Critical Temperatures in Hole-Doped CuBO <sub>2</sub> , CuAlO <sub>2</sub> , CuGaO <sub>2</sub> , and CulnO <sub>2</sub> . Journal of the Physical Society of Japan, 2016, 85, 094711.	1.6	7
16	Charge-density waves, incommensurate modulations and superconductivity in phosphorus and iodine. High Pressure Research, 2008, 28, 459-467.	1,2	6
17	First-principles study on superconductivity of simple cubic, modulated and simple hexagonal phases in phosphorus. High Pressure Research, 2012, 32, 3-10.	1.2	6
18	Phase Stability and Superconductivity of Compressed Argon–Hydrogen Compounds from First-Principles. Journal of the Physical Society of Japan, 2017, 86, 124711.	1.6	6

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19	Theoretical Evidences for Enhanced Superconducting Transition Temperature of CaSi <sub>2</sub> in a High-Pressure AlB <sub>2</sub> Phase. Journal of the Physical Society of Japan, 2008, 77, 104712.	1.6	5
20	Review of high pressure phases of calcium by first-principles calculations. Journal of Physics: Conference Series, 2010, 215, 012105.	0.4	5
21	Metallization of solid iodine in phase I: X-ray diffraction measurements, electrical resistance measurements, and <i>ab initio </i> calculations. High Pressure Research, 2013, 33, 186-190.	1.2	5
22	Evolutionary search for cobalt-rich compounds in the yttrium-cobalt-boron system. Physical Review Materials, 2021, 5, .	2.4	5
23	Monoclinic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>YFe</mml:mi><mml:mn>12<td>l:m<b>2</b>L#<td>nl<b>:ត</b>ាsub&gt;<!--<u-->m</td></td></mml:mn></mml:msub></mml:math>	l:m <b>2</b> L# <td>nl<b>:ត</b>ាsub&gt;<!--<u-->m</td>	nl <b>:ត</b> ាsub> <u m
24	Origin of enhanced superconducting transition temperature through structural transformation in CaSi <sub>2</sub> . Journal of Physics: Conference Series, 2008, 121, 052010.	0.4	4
25	Band structure and pressure-induced metallic transition in iodine – GW calculation. High Pressure Research, 2014, 34, 215-221.	1.2	4
26	First-Principles Molecular Dynamics Simulation for Calcium under High-Pressure: Thermodynamic Effect on Simple Cubic Structure. Journal of the Physical Society of Japan, 2012, 81, 124601.	1.6	3
27	First-principles study on superconductivity of solid oxygen. High Pressure Research, 2012, 32, 457-463.	1.2	3
28	Potential energy surface trekking: Application to carbon at terapascal pressures. Computational Materials Science, 2014, 92, 36-40.	3.0	3
29	Superconductivity of compressed solid argon from first principles. Physical Review B, 2015, 91, .	3.2	3
30	Beryllium polyhydride <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Be</mml:mi><mml:m anthvariant="normal">H<mml:mn>8</mml:mn></mml:m></mml:msub><mml:msub><mml:mrow><mml:mo>(</mml:mo></mml:mrow></mml:msub></mml:mrow></mml:math>	mn>4 <td>ាl:mn&gt;&gt;&lt;រាកា!:msub:</td>	ាl:mn>><រាកា!:msub:
31	synthesized at high pressure and temperature. Physical Review Materials, 2020, 4, .  High-Pressure Synthesis of Superconducting Sn <sub>3</sub> S <sub>4</sub> Using a Diamond Anvil Cell with a Boron-Doped Diamond Heater. Inorganic Chemistry, 2022, 61, 4476-4483.	4.0	3
32	Crystal structure searching by free energy surface trekking: application to carbon at 1 TPa. Journal of Physics: Conference Series, 2014, 500, 162003.	0.4	2
33	Superconductivity of hydrogen superoxide under high pressure. Superconductor Science and Technology, 2020, 33, 114003.	3.5	2
34	Determining the structure of compressed calcium in phase V by theab-initiomolecular dynamics simulation. Journal of Physics: Conference Series, 2008, 121, 012004.	0.4	1
35	Ab initio study on the high superconducting transition temperature in calcium under high pressure. High Pressure Research, 2009, 29, 204-207.	1.2	1
36	First-principles molecular dynamics study on simple cubic calcium: comparison with simple cubic phosphorus. High Pressure Research, 2012, 32, 11-17.	1.2	1

#	Article	IF	CITATIONS
37	Structural and electronic properties of YH <sub>3</sub> at high pressure – band calculation by the GW approximation. High Pressure Research, 2012, 32, 464-470.	1.2	1
38	First-principles study on superconductivity of the gold–indium alloy under high pressure. High Pressure Research, 2013, 33, 152-157.	1.2	1
39	Hydrogen-Storing Salt NaCl(H <sub>2</sub> ) Synthesized at High Pressure and High Temperature. Journal of Physical Chemistry C, 2019, 123, 25074-25080.	3.1	1
40	Recent Progress on High-Temperature Superconducting Sulfur Hydride. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 2018, 28, 251-259.	0.0	0