

Marek Tkacz

List of Publications by Year in descending order

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78
all docs

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docs citations

78
times ranked

1701
citing authors

#	ARTICLE	IF	CITATIONS
1	Isotopic dependence of the frequency of optical vibrations in molybdenum monohydride. Journal of Alloys and Compounds, 2022, 893, 162299.	2.8	2
2	Lattice dynamics of high-pressure hydrides studied by inelastic neutron scattering. Journal of Alloys and Compounds, 2022, 905, 164208.	2.8	9
3	Synthesis, Structure, and Electric Conductivity of Higher Hydrides of Ytterbium at High Pressure. Inorganic Chemistry, 2022, 61, 8694-8702.	1.9	3
4	High-pressure phase transition of AB ₃ -type compounds: case of tellurium trioxide. RSC Advances, 2021, 11, 14316-14322.	1.7	0
5	Neutron scattering study of tantalum monohydride and monodeuteride. International Journal of Hydrogen Energy, 2021, 46, 20630-20639.	3.8	5
6	Neutron scattering study of tantalum dihydride. Physical Review B, 2020, 102, .	1.1	8
7	<i>T</i> - <i>P</i> - <i>X</i> Phase Diagram of the Water-Hydrogen System at Pressures up to 10 kbar. Journal of Physical Chemistry C, 2019, 123, 3696-3702.	1.5	3
8	Superconductivity at 250 K in lanthanum hydride under high pressures. Nature, 2019, 569, 528-531.	13.7	960
9	High-Pressure Synthesis of Novel Polyhydrides of Zr and Hf with a Th ₄ H ₁₅ -Type Structure. Journal of Physical Chemistry C, 2019, 123, 30059-30066.	1.5	14
10	Dihydride formation in the palladium-rhodium alloys under high hydrogen pressure. International Journal of Hydrogen Energy, 2017, 42, 340-346.	3.8	16
11	Pressure-induced metallization in Erbium trihydride. Solid State Communications, 2017, 263, 23-26.	0.9	5
12	Study of phase stability and isotope effect in dysprosium trihydride at high pressure. Journal of Alloys and Compounds, 2017, 722, 946-952.	2.8	2
13	Phase stability of some rare earth trihydrides under high pressure. International Journal of Hydrogen Energy, 2017, 42, 29344-29349.	3.8	7
14	High-pressure synthesis of tantalum dihydride. Physical Review B, 2017, 96, .	1.1	22
15	Nonstoichiometric molybdenum hydride. Journal of Alloys and Compounds, 2017, 694, 51-54.	2.8	19
16	T-P phase diagram of the Mo-H system revisited. Journal of Alloys and Compounds, 2016, 672, 623-629.	2.8	12
17	Synthesis of ruthenium hydride. Physical Review B, 2016, 93, .	1.1	27
18	Novel highly sensitive Cu-based SERS platforms for biosensing applications. Journal of Raman Spectroscopy, 2015, 46, 428-433.	1.2	35

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19	High pressure studies of cobalt-hydrogen system by X-ray diffraction. Journal of Alloys and Compounds, 2015, 650, 884-886.	2.8	12
20	Properties of Ti ₃ AlH ₆ and Ti ₃ AlD ₆ systems at high pressure studied by synchrotron X-ray diffraction analysis. Journal of Alloys and Compounds, 2015, 619, 78-81.	2.8	1
21	High pressure studies of terbium trihydride. X-ray, Raman and DFT investigations. Journal of Alloys and Compounds, 2014, 597, 58-62.	2.8	4
22	Neutron spectroscopy of nickel deuteride. Journal of Alloys and Compounds, 2013, 580, S109-S113.	2.8	8
23	Polymorphism, Hydrogen Bond Properties, and Vibrational Structure of 1H-Pyrrolo[3,2-h]Quinoline Dimers. Journal of Atomic, Molecular, and Optical Physics, 2012, 2012, 1-11.	0.5	3
24	High-Pressure Gas Hydrates of Argon: Compositions and Equations of State. Journal of Physical Chemistry B, 2011, 115, 9564-9569.	1.2	11
25	New phase in the water-hydrogen system. Journal of Alloys and Compounds, 2011, 509, S860-S863.	2.8	42
26	High-pressure studies of LaH ₃ (̑=0.00, 0.15). Journal of Alloys and Compounds, 2009, 468, 191-194.	2.8	8
27	Two triple points in the H ₂ O-H ₂ system. High Pressure Research, 2009, 29, 250-253.	0.4	6
28	Phase Transitions in the Water-Hydrogen System at Pressures up to 4.7 kbar. Journal of Physical Chemistry B, 2009, 113, 779-785.	1.2	16
29	High-pressure Raman spectroscopy study of I _± and I ₃ polymorphs of AlH ₃ . Journal of Raman Spectroscopy, 2008, 39, 922-927.	1.2	24
30	Crystal structure and lattice dynamics of chromium hydrides. Journal of Alloys and Compounds, 2007, 430, 22-28.	2.8	22
31	Pressure induced phase transformation of REH ₃ . Journal of Alloys and Compounds, 2007, 446-447, 593-597.	2.8	27
32	First Determination of Volume Changes and Enthalpies of the High-Pressure Decomposition Reaction of the Structure H Methane Hydrate to the Cubic Structure I Methane Hydrate and Fluid Methane. Journal of Physical Chemistry B, 2007, 111, 12795-12798.	1.2	6
33	Pressure-induced structural phase transition in rare-earth trihydrides. Part II. SmH ₃ and compressibility systematics. Solid State Communications, 2007, 141, 302-305.	0.9	34
34	Pressure-induced structural phase transition in rare-earth trihydrides. Part III. Systematics: General and geometric approach. Solid State Communications, 2007, 141, 354-358.	0.9	29
35	Raman spectroscopy study of REH ₃ under pressure. Solid State Communications, 2007, 142, 337-341.	0.9	13
36	Hexagonal to cubic phase transition in YH ₃ under high pressure. Solid State Communications, 2005, 133, 477-480.	0.9	50

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37	Pressure-induced structural phase transition in rare-earth trihydrides. Part I. (GdH ₃ , HoH ₃ , LuH ₃). Solid State Communications, 2005, 133, 481-486.	0.9	48
38	High pressure studies of the erbium-hydrogen system. Solid State Communications, 2005, 135, 226-231.	0.9	26
39	Isotope effect in a Cu-H(D) system with hexagonal hydride phase. Journal of Alloys and Compounds, 2005, 404-406, 368-371.	2.8	7
40	T-P phase diagrams and isotope effects in the Mo-H/D systems. Journal of Physics Condensed Matter, 2004, 16, 8387-8398.	0.7	18
41	Pressure induced hexagonal to cubic phase transformation in erbium trihydride. Solid State Communications, 2004, 130, 219-221.	0.9	49
42	High-pressure synthesis of a new copper hydride from elements. Solid State Communications, 2004, 131, 169-173.	0.9	32
43	Decomposition of the hexagonal copper hydride at high pressure. Solid State Communications, 2004, 132, 37-41.	0.9	16
44	High pressure studies of GdMn ₂ and its hydrides. Journal of Alloys and Compounds, 2004, 375, 62-66.	2.8	7
45	and NMR study in copper hydride. Journal of Alloys and Compounds, 2004, 384, 71-75.	2.8	4
46	Heat capacity of copper hydride. Thermochemica Acta, 2003, 400, 121-129.	1.2	19
47	Thermodynamic properties of iron hydride. Journal of Alloys and Compounds, 2002, 330-332, 25-28.	2.8	9
48	Useful equations of state of hydrogen and deuterium. Journal of Alloys and Compounds, 2002, 330-332, 89-92.	2.8	34
49	Electronic band structure calculation and nuclear spin-lattice relaxation in chromium hydrides. Journal of Alloys and Compounds, 2002, 340, 67-73.	2.8	2
50	Magnetic properties of cubic and hexagonal chromium hydrides: a comparison of the magnetic susceptibility with the ⁵³ Cr NMR Knight shift. Journal of Alloys and Compounds, 2001, 322, 82-88.	2.8	11
51	The influence of hydrogenation on superconducting properties of MgB ₂ . Low Temperature Physics, 2001, 27, 780-782.	0.2	11
52	Enthalpies of formation and decomposition of nickel hydride and nickel deuteride derived from (p,c,T) relationships. Journal of Chemical Thermodynamics, 2001, 33, 891-897.	1.0	15
53	Studies of the thermal decomposition of copper hydride. Thermochemica Acta, 2000, 363, 157-163.	1.2	35
54	High pressure studies of the rhodium-hydrogen system in diamond anvil cell. Journal of Chemical Physics, 1998, 108, 2084-2087.	1.2	29

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55	High Pressure Studies of the FCC Chromium Hydride.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1998, 7, 263-265.	0.1	2
56	Magnetic susceptibility, ^1H and ^{53}Cr NMR in cubic $\text{CrH}_0.93$. Zeitschrift Für Physik B-Condensed Matter, 1997, 104, 255-264.	1.1	5
57	Double clathrate hydrates with helium and hydrogen. Supramolecular Chemistry, 1994, 3, 181-183.	1.5	37
58	^{53}Cr knight shift and magnetic susceptibility of hexagonal $\text{CrH}_0.93$. Physica B: Condensed Matter, 1994, 193, 102-108.	1.3	6
59	Structural investigations under high pressure conditions. Fresenius' Journal of Analytical Chemistry, 1994, 349, 97-101.	1.5	1
60	A Pressure Induced Phase Separation in $\text{PdH}_{0.6}$ *. Zeitschrift Fur Physikalische Chemie, 1993, 179, 57-62.	1.4	4
61	Upper limit of neutron emission from the chemical reaction of LiD with heavy water. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 168, 83-86.	0.9	0
62	The influence of high pressure (up to 10 kbar) on the limiting currents of the Cd(II)/Cd(Hg) system. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1991, 308, 189-202.	0.3	6
63	High pressure X-ray studies of palladium hydride and deuteride. High Pressure Research, 1990, 4, 387-389.	0.4	3
64	High pressure X-ray diffraction study of copper hydride at room temperature. High Pressure Research, 1990, 6, 85-90.	0.4	11
65	High Pressure X-Ray Diffraction Study of Copper Hydride at Room Temperature*. Zeitschrift Fur Physikalische Chemie, 1989, 163, 467-468.	1.4	11
66	Kinetics of Hydride Formation and Decomposition at High Hydrogen Pressures*. Zeitschrift Fur Physikalische Chemie, 1989, 163, 457-466.	1.4	1
67	Kinetics of nickel hydride formation and decomposition in high pressure of gaseous hydrogen. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1986, 139-140, 688-693.	0.9	0
68	Heats of formation and decomposition of nickel and $\text{Ni}_0.8\text{Cu}_0.2$ hydrides measured in high pressures of gaseous hydrogen. Journal of the Less Common Metals, 1985, 113, 83-87.	0.9	9
69	Resistometric studies of the Ta-H system at high pressures and low temperatures. Journal of the Less Common Metals, 1984, 101, 523-527.	0.9	7
70	Asymmetric induction in the high-pressure cycloaddition of 2,3-O-isopropylidene-D-glyceraldehyde to 1-methoxybuta-1,3-diene. Journal of the Chemical Society Chemical Communications, 1983, , 540.	2.0	28
71	The Equilibrium Between Solid Aluminium Hydride and Gaseous Hydrogen. Zeitschrift Fur Physikalische Chemie, 1983, 135, 27-38.	1.4	53
72	Stereochemistry of Diels-Alder reactions at high pressure. 4. Asymmetric induction in high-pressure cycloadditions of (R)-(-)-menthyl glyoxylate and symmetric 1,3-dienes. Journal of Organic Chemistry, 1979, 44, 3347-3352.	1.7	53