

Fabrice Leardini

List of Publications by Year in descending order

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papers

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citations

471061

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48
all docs

48
docs citations

48
times ranked

1257
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanostructured materials for solid-state hydrogen storage: A review of the achievement of COST Action MP1103. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 14404-14428.	3.8	94
2	How to Design Hydrogen Storage Materials? Fundamentals, Synthesis, and Storage Tanks. <i>Advanced Sustainable Systems</i> , 2019, 3, 1900043.	2.7	90
3	High Current Density Electrical Breakdown of TiS ₃ Nanoribbon-Based Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2017, 27, 1605647.	7.8	52
4	Hydrogen Absorption/Desorption Mechanism in Potassium Alanate (KAlH ₄) and Enhancement by TiCl ₃ Doping. <i>Journal of Physical Chemistry C</i> , 2009, 113, 6845-6851.	1.5	48
5	Thermolytic Decomposition of Ethane 1,2-Diamineborane Investigated by Thermoanalytical Methods and in Situ Vibrational Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 17221-17230.	1.5	43
6	Reaction pathways for hydrogen desorption from magnesium hydride/hydroxide composites: bulk and interface effects. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 572-577.	1.3	34
7	A thermodynamic study of the hydrogenation of the pseudo-binary Mg ₆ Pd _{0.5} Ni _{0.5} intermetallic compound. <i>Intermetallics</i> , 2010, 18, 233-241.	1.8	28
8	Hydrogen desorption in nanocrystalline MgH ₂ thin films at room temperature. <i>Journal of Alloys and Compounds</i> , 2010, 495, 650-654.	2.8	27
9	Synthesis of hexagonal C14/C36 and cubic C15 ZrCr ₂ Laves phases and thermodynamic stability of their hydrides. <i>Journal of Physics and Chemistry of Solids</i> , 2011, 72, 1334-1342.	1.9	27
10	Realistic simulation in a single stage hydrogen compressor based on AB ₂ alloys. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 9780-9788.	3.8	22
11	Chemical vapor deposition growth of boron-carbon-nitrogen layers from methylamine borane thermolysis products. <i>Nanotechnology</i> , 2018, 29, 025603.	1.3	21
12	Influence of temperature on thermoelectric properties of Fe _x Co _{1-x} S ₂ thin films: A semiconductor to semimetal conversion. <i>Thin Solid Films</i> , 2016, 600, 19-24.	0.8	20
13	Microstructure Optimization of Mg-Alloys by the ECAP Process Including Numerical Simulation, SPD Treatments, Characterization, and Hydrogen Sorption Properties. <i>Molecules</i> , 2019, 24, 89.	1.7	20
14	An investigation on the thermodynamics and kinetics of magnesium hydride decomposition based on isotope effects. <i>International Journal of Hydrogen Energy</i> , 2011, 36, 8351-8357.	3.8	19
15	Operando Raman-mass spectrometry investigation of hydrogen release by thermolysis of ammonia borane confined in mesoporous materials. <i>Microporous and Mesoporous Materials</i> , 2016, 226, 454-465.	2.2	19
16	Interaction of hydrogen with the \hat{I}^2 -Al ₃ Mg ₂ complex metallic alloy: Experimental reliability of theoretical predictions. <i>Journal of Alloys and Compounds</i> , 2009, 472, 565-570.	2.8	18
17	Non-isothermal desorption process of hydrogenated nanocrystalline Pd-capped Mg films investigated by Ion Beam Techniques. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 2587-2596.	3.8	18
18	Isotope effects in the kinetics of simultaneous H and D thermal desorption from Pd. <i>Journal of Physics and Chemistry of Solids</i> , 2008, 69, 116-127.	1.9	17

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19	Ultrasonic irradiation as a tool to modify the H-desorption from hydrides: MgH ₂ suspended in decane. <i>Ultrasonics Sonochemistry</i> , 2009, 16, 810-816.	3.8	17
20	Crystal structure and hydrogenation properties of pseudo-binary Mg ₆ Pd _{0.5} Ni _{0.5} complex metallic alloy. <i>Journal of Solid State Chemistry</i> , 2009, 182, 2890-2896.	1.4	17
21	Reversible hydrogen storage in the Ni-rich pseudo-binary Mg ₆ Pd _{0.25} Ni _{0.75} intermetallic compound: Reaction pathway, thermodynamic and kinetic properties. <i>Journal of Alloys and Compounds</i> , 2013, 548, 96-104.	2.8	17
22	In-vacuum thermolysis of ethane 1,2-diamineborane for the synthesis of ternary borocarbonitrides. <i>Nanotechnology</i> , 2016, 27, 435601.	1.3	17
23	Ultrathin Transparent B ₂ C _x N _y Layers Grown on Titanium Substrates with Excellent Electrocatalytic Activity for the Oxygen Evolution Reaction. <i>ACS Applied Energy Materials</i> , 2020, 3, 1922-1932.	2.5	16
24	A new pseudo-binary Mg ₆ Ni _{0.5} Pd _{0.5} intermetallic compound stabilised by Pd for hydrogen storage. <i>Journal of Alloys and Compounds</i> , 2010, 495, 663-666.	2.8	14
25	Hydrogen Desorption Behavior of Calcium Amidoborane Obtained by Reactive Milling of Calcium Hydride and Ammonia Borane. <i>Journal of Physical Chemistry C</i> , 2012, 116, 24430-24435.	1.5	13
26	Synthesis of Ternary Borocarbonitrides by High Temperature Pyrolysis of Ethane 1,2-Diamineborane. <i>Materials</i> , 2015, 8, 5974-5985.	1.3	13
27	First-principles phase stability calculations and estimation of finite temperature effects on pseudo-binary Mg ₆ (Pd _x Ni _{1-x}) compounds. <i>Intermetallics</i> , 2011, 19, 502-510.	1.8	11
28	A fast synthesis route of boron-carbon-nitrogen ultrathin layers towards highly mixed ternary B ₂ C _x N _y phases. <i>2D Materials</i> , 2019, 6, 035015.	2.0	10
29	A step forward to the dehydrogenation reversibility of amine-borane adducts by coupling sodium and hydrocarbon groups. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 2763-2767.	3.8	9
30	Ion beam analysis of as-received, H-implanted and post implanted annealed fusion steels. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2012, 271, 27-32.	0.6	8
31	Experimental behaviour of a three-stage metal hydride hydrogen compressor. <i>JPhys Energy</i> , 2020, 2, 034006.	2.3	8
32	Homogeneity range and crystal structure of Ni substituted Mg ₆ (Pd,Ni) complex intermetallic compounds. <i>Journal of Physics and Chemistry of Solids</i> , 2010, 71, 1259-1263.	1.9	7
33	A spectroscopic investigation of hydrogenated Li doped fullerane. <i>Journal of Alloys and Compounds</i> , 2013, 580, S67-S69.	2.8	7
34	Rotational dynamics in ammonia borane: Evidence of strong isotope effects. <i>Journal of Alloys and Compounds</i> , 2013, 580, S63-S66.	2.8	6
35	Unconventional Approaches to Hydrogen Sorption Reactions: Non-Thermal and Non-Straightforward Thermally Driven Methods. <i>ChemPhysChem</i> , 2019, 20, 1248-1260.	1.0	5
36	A new metastable crystalline phase in the Cr-Zr system. <i>Intermetallics</i> , 2010, 18, 1099-1101.	1.8	4

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37	On the van der Pauw's method applied to the measurement of low thermal conductivity materials. Review of Scientific Instruments, 2016, 87, 084902.	0.6	4
38	Imaging the Kirkendall effect in pyrite (FeS ₂) thin films: Cross-sectional microstructure and chemical features. Acta Materialia, 2021, 205, 116582.	3.8	4
39	Borocarbonitride Layers on Titanium Dioxide Nanoribbons for Efficient Photoelectrocatalytic Water Splitting. Materials, 2021, 14, 5490.	1.3	4
40	Hydrogen absorption and desorption in rapidly solidified Mg- Al alloys. Journal of Physics: Conference Series, 2009, 144, 012016.	0.3	3
41	Deuteration properties of CaNi ₅ -xCu _x system. Journal of Power Sources, 2011, 196, 4342-4346.	4.0	3
42	Synthesis and functionalization of graphite oxide: structural, morphological and thermal properties for hydrogen storage. Journal of Materials Science: Materials in Electronics, 2019, 30, 5044-5051.	1.1	3
43	H/D Isotope Effects in LaNi _{4.5} Mn _{0.5} Electrodes. Journal of the Electrochemical Society, 2007, 154, A507.	1.3	2
44	Anodic formation of microcrystals by electrolysis of KBr single crystals. Solid State Ionics, 2004, 168, 197-204.	1.3	0
45	An experimental system to investigate kinetics and isotopic properties of the electrolytic metal hydride formation. Journal of Alloys and Compounds, 2005, 404-406, 720-723.	2.8	0
46	Polynomial-interpolation algorithm for van der Pauw Hall measurement in a metal hydride film. Measurement Science and Technology, 2008, 19, 105106.	1.4	0
47	Anelastic spectroscopy investigation of nano-confined alanates. Journal of Alloys and Compounds, 2013, 580, S70-S72.	2.8	0