

# Fabrice Leardini

## List of Publications by Year in descending order

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47  
papers

839  
citations

471061

17  
h-index

500791

28  
g-index

48  
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48  
docs citations

48  
times ranked

1257  
citing authors

#	ARTICLE	IF	CITATIONS
1	Imaging the Kirkendall effect in pyrite (FeS <sub>2</sub> ) thin films: Cross-sectional microstructure and chemical features. <i>Acta Materialia</i> , 2021, 205, 116582.	3.8	4
2	Borocarbonitride Layers on Titanium Dioxide Nanoribbons for Efficient Photoelectrocatalytic Water Splitting. <i>Materials</i> , 2021, 14, 5490.	1.3	4
3	Ultrathin Transparent B <sub>x</sub> C <sub>y</sub> N 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
4	Experimental behaviour of a three-stage metal hydride hydrogen compressor. <i>JPhys Energy</i> , 2020, 2, 034006.	2.3	8
5	How to Design Hydrogen Storage Materials? Fundamentals, Synthesis, and Storage Tanks. <i>Advanced Sustainable Systems</i> , 2019, 3, 1900043.	2.7	90
6	A fast synthesis route of boron <sub>x</sub> carbon <sub>y</sub> nitrogen ultrathin layers towards highly mixed ternary B <sub>x</sub> C <sub>y</sub> N phases. <i>2D Materials</i> , 2019, 6, 035015.	2.0	10
7	Unconventional Approaches to Hydrogen Sorption Reactions: Non-Thermal and Non-Straightforward Thermally Driven Methods. <i>ChemPhysChem</i> , 2019, 20, 1248-1260.	1.0	5
8	Synthesis and functionalization of graphite oxide: structural, morphological and thermal properties for hydrogen storage. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 5044-5051.	1.1	3
9	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
10	Chemical vapor deposition growth of boron <sub>x</sub> carbon <sub>y</sub> nitrogen layers from methylamine borane thermolysis products. <i>Nanotechnology</i> , 2018, 29, 025603.	1.3	21
11	High Current Density Electrical Breakdown of TiS <sub>3</sub> Nanoribbon-Based Field-Effect Transistors. <i>Advanced Functional Materials</i> , 2017, 27, 1605647.	7.8	52
12	On the van der Pauw's method applied to the measurement of low thermal conductivity materials. <i>Review of Scientific Instruments</i> , 2016, 87, 084902.	0.6	4
13	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
14	Influence of temperature on thermoelectric properties of Fe <sub>x</sub> Co <sub>1-x</sub> S <sub>2</sub> thin films: A semiconductor to semimetal conversion. <i>Thin Solid Films</i> , 2016, 600, 19-24.	0.8	20
15	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
16	In-vacuum thermolysis of ethane 1,2-diamineborane for the synthesis of ternary borocarbonitrides. <i>Nanotechnology</i> , 2016, 27, 435601.	1.3	17
17	Realistic simulation in a single stage hydrogen compressor based on AB <sub>2</sub> alloys. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 9780-9788.	3.8	22
18	Synthesis of Ternary Borocarbonitrides by High Temperature Pyrolysis of Ethane 1,2-Diamineborane. <i>Materials</i> , 2015, 8, 5974-5985.	1.3	13

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19	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
20	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
21	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
22	A spectroscopic investigation of hydrogenated Li doped fullerene. <i>Journal of Alloys and Compounds</i> , 2013, 580, S67-S69.	2.8	7
23	Reversible hydrogen storage in the Ni-rich pseudo-binary Mg <sub>6</sub> Pd <sub>0.25</sub> Ni <sub>0.75</sub> intermetallic compound: Reaction pathway, thermodynamic and kinetic properties. <i>Journal of Alloys and Compounds</i> , 2013, 548, 96-104.	2.8	17
24	Rotational dynamics in ammonia borane: Evidence of strong isotope effects. <i>Journal of Alloys and Compounds</i> , 2013, 580, S63-S66.	2.8	6
25	Anelastic spectroscopy investigation of nano-confined alanates. <i>Journal of Alloys and Compounds</i> , 2013, 580, S70-S72.	2.8	0
26	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
27	Ion beam analysis of as-received, H-implanted and post implanted annealed fusion steels. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2012, 271, 27-32.	0.6	8
28	First-principles phase stability calculations and estimation of finite temperature effects on pseudo-binary Mg <sub>6</sub> (Pd <sub>x</sub> Ni <sub>1-x</sub> ) compounds. <i>Intermetallics</i> , 2011, 19, 502-510.	1.8	11
29	Synthesis of hexagonal C14/C36 and cubic C15 ZrCr <sub>2</sub> Laves phases and thermodynamic stability of their hydrides. <i>Journal of Physics and Chemistry of Solids</i> , 2011, 72, 1334-1342.	1.9	27
30	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
31	Deuteration properties of CaNi <sub>5-x</sub> Cu <sub>x</sub> system. <i>Journal of Power Sources</i> , 2011, 196, 4342-4346.	4.0	3
32	Homogeneity range and crystal structure of Ni substituted Mg <sub>6</sub> (Pd,Ni) complex intermetallic compounds. <i>Journal of Physics and Chemistry of Solids</i> , 2010, 71, 1259-1263.	1.9	7
33	A thermodynamic study of the hydrogenation of the pseudo-binary Mg <sub>6</sub> Pd <sub>0.5</sub> Ni <sub>0.5</sub> intermetallic compound. <i>Intermetallics</i> , 2010, 18, 233-241.	1.8	28
34	A new metastable crystalline phase in the Cr-Zr system. <i>Intermetallics</i> , 2010, 18, 1099-1101.	1.8	4
35	A new pseudo-binary Mg <sub>6</sub> Ni <sub>0.5</sub> Pd <sub>0.5</sub> intermetallic compound stabilised by Pd for hydrogen storage. <i>Journal of Alloys and Compounds</i> , 2010, 495, 663-666.	2.8	14
36	Hydrogen desorption in nanocrystalline MgH <sub>2</sub> thin films at room temperature. <i>Journal of Alloys and Compounds</i> , 2010, 495, 650-654.	2.8	27

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37	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
38	Ultrasonic irradiation as a tool to modify the H-desorption from hydrides: MgH <sub>2</sub> suspended in decane. <i>Ultrasonics Sonochemistry</i> , 2009, 16, 810-816.	3.8	17
39	Crystal structure and hydrogenation properties of pseudo-binary Mg <sub>6</sub> Pd <sub>0.5</sub> Ni <sub>0.5</sub> complex metallic alloy. <i>Journal of Solid State Chemistry</i> , 2009, 182, 2890-2896.	1.4	17
40	Interaction of hydrogen with the $\hat{1}^2$ -Al <sub>3</sub> Mg <sub>2</sub> complex metallic alloy: Experimental reliability of theoretical predictions. <i>Journal of Alloys and Compounds</i> , 2009, 472, 565-570.	2.8	18
41	Hydrogen Absorption/Desorption Mechanism in Potassium Alanate (KAlH <sub>4</sub> ) and Enhancement by TiCl <sub>3</sub> Doping. <i>Journal of Physical Chemistry C</i> , 2009, 113, 6845-6851.	1.5	48
42	Hydrogen absorption and desorption in rapidly solidified Mg- Al alloys. <i>Journal of Physics: Conference Series</i> , 2009, 144, 012016.	0.3	3
43	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
44	Polynomial-interpolation algorithm for van der Pauw Hall measurement in a metal hydride film. <i>Measurement Science and Technology</i> , 2008, 19, 105106.	1.4	0
45	H/D Isotope Effects in LaNi <sub>4.5</sub> Mn <sub>0.5</sub> Electrodes. <i>Journal of the Electrochemical Society</i> , 2007, 154, A507.	1.3	2
46	An experimental system to investigate kinetics and isotopic properties of the electrolytic metal hydride formation. <i>Journal of Alloys and Compounds</i> , 2005, 404-406, 720-723.	2.8	0
47	Anodic formation of microcrystals by electrolysis of KBr single crystals. <i>Solid State Ionics</i> , 2004, 168, 197-204.	1.3	0