Giovanni Capurso

List of Publications by Year
in descending order

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36 papers	1,232 citations	430754 18 h-index	360920 35 g-index
36 all docs	36 docs citations	36 times ranked	1224 citing authors

#	Article	IF	Citations
1	A Novel Emergency Gas-to-Power System Based on an Efficient and Long-Lasting Solid-State Hydride Storage System: Modeling and Experimental Validation. Energies, 2022, 15, 844.	1.6	3
2	De-hydrogenation/Rehydrogenation Properties and Reaction Mechanism of AmZn(NH2)n-2nLiH Systems (A = Li, K, Na, and Rb). Sustainability, 2022, 14, 1672.	1.6	2
3	Development and experimental validation of kinetic models for the hydrogenation/dehydrogenation of Mg/Al based metal waste for energy storage. Journal of Magnesium and Alloys, 2022, 10, 2761-2774.	5.5	11
4	An effective activation method for industrially produced TiFeMn powder for hydrogen storage. Journal of Alloys and Compounds, 2022, 919, 165847.	2.8	6
5	HYDRIDE4MOBILITY: An EU HORIZON 2020 project on hydrogen powered fuel cell utility vehicles using metal hydrides in hydrogen storage and refuelling systems. International Journal of Hydrogen Energy, 2021, 46, 35896-35909.	3.8	34
6	200 NL H2 hydrogen storage tank using MgH2â€“TiH2â€“C nanocomposite as H storage material. International Journal of Hydrogen Energy, 2021, 46, 19046-19059.	3.8	16
7	Fundamental hydrogen storage properties of TiFe-alloy with partial substitution of Fe by Ti and Mn. Journal of Alloys and Compounds, 2021, 874, 159925.	2.8	39
8	Modeling the kinetic behavior of the Li-RHC system for energy-hydrogen storage: (I) absorption. International Journal of Hydrogen Energy, 2021, 46, 32110-32125.	3.8	5
9	Conversion of magnesium waste into a complex magnesium hydride system: Mg(NH₂)₂â€“LiH. Sustainable Energy and Fuels, 2020, 4, 1915-1923.	2.5	16
10	Enhanced Stability of Li-RHC Embedded in an Adaptive TPXâ„¢ Polymer Scaffold. Materials, 2020, 13, 991.	1.3	14
11	Efficient Synthesis of Alkali Borohydrides from Mechanochemical Reduction of Borates Using Magnesiumâ€“Aluminum-Based Waste. Metals, 2019, 9, 1061.	1.0	22
12	Hydrogen sorption kinetics, hydrogen permeability, and thermal properties of compacted 2LiBH4MgH2 doped with activated carbon nanofibers. International Journal of Hydrogen Energy, 2019, 44, 15218-15227.	3.8	12
13	Effect of the Process Parameters on the Energy Transfer during the Synthesis of the 2LiBH4-MgH2 Reactive Hydride Composite for Hydrogen Storage. Metals, 2019, 9, 349.	1.0	11
14	Scale-up of milling in a 100ÂL device for processing of TiFeMn alloy for hydrogen storage applications: Procedure and characterization. International Journal of Hydrogen Energy, 2019, 44, 29282-29290.	3.8	18
15	Application of hydrides in hydrogen storage and compression: Achievements, outlook and perspectives. International Journal of Hydrogen Energy, 2019, 44, 7780-7808.	3.8	486
16	Insights into the Rbâ€“Mgâ€“Nâ€“H System: an Ordered Mixed Amide/Imide Phase and a Disordered Amide/Hydride Solid Solution. Inorganic Chemistry, 2018, 57, 3197-3205.	1.9	11
17	Waste Mg-Al based alloys for hydrogen storage. International Journal of Hydrogen Energy, 2018, 43, 16738-16748.	3.8	54
18	Fundamental Material Properties of the 2LiBH4-MgH2 Reactive Hydride Composite for Hydrogen Storage: (II) Kinetic Properties. Energies, 2018, 11, 1170.	1.6	21

#	Article	IF	Citations
19	Air-stable metal hydride-polymer composites of Mg(NH2)2â€“LiH and TPXâ„¢. Materials Today Energy, 2018, 10, 98-107.	2.5	22
20	Metal Hydrideâ€Based Hydrogen Storage Tank Coupled with an Urban Concept Fuel Cell Vehicle: Off Board Tests. Advanced Sustainable Systems, 2018, 2, 1800004.	2.7	15
21	Fundamental Material Properties of the 2LiBH4-MgH2 Reactive Hydride Composite for Hydrogen Storage: (I) Thermodynamic and Heat Transfer Properties. Energies, 2018, 11, 1081.	1.6	24
22	Development of a modular room-temperature hydride storage system for vehicular applications. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	30
23	Metal hydrides for concentrating solarÂthermal power energy storage. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	95
24	Mesoporous silica sub-micron spheres as drug dissolution enhancers: Influence of drug and matrix chemistry on functionality and stability. Materials Science and Engineering C, 2016, 59, 585-593.	3.8	7
25	Hydrogen storage characteristics of magnesium impregnated on the porous channels of activated charcoal scaffold. International Journal of Hydrogen Energy, 2014, 39, 20045-20053.	3.8	41
26	The structural change of graphene oxide in a methanol dispersion. RSC Advances, 2014, 4, 32914-32917.	1.7	24
27	Study on Laâ€“Mg based ternary system for hydrogen storage. Journal of Alloys and Compounds, 2013, 580, S159-S162.	2.8	16
28	Nanoconfinement in activated mesoporous carbon of calcium borohydride for improved reversible hydrogen storage. Nanotechnology, 2012, 23, 385401.	1.3	24
29	Nanoconfined mixed Li and Mg borohydrides as materials for solid state hydrogen storage. International Journal of Hydrogen Energy, 2012, 37, 10768-10773.	3.8	25
30	Hydrogen sorption kinetics of magnesium hydride enhanced by the addition of Zr 8 Ni 21 alloy. Journal of Alloys and Compounds, 2012, 530, 111-115.	2.8	46
31	Ball-milling and AlB2 addition effects on the hydrogen sorption properties of the CaH2+MgB2 system. Journal of Alloys and Compounds, 2011, 509, S714-S718.	2.8	13
32	Performance tests of a small hydrogen reactor based on Mgâ€“Al pellets. Journal of Alloys and Compounds, 2011, 509, S646-S649.	2.8	10
33	Pellets of MgH2-based composites as practical material for solid state hydrogen storage. International Journal of Hydrogen Energy, 2010, 35, 3565-3571.	3.8	32
34	Improvement of dehydrogenation kinetics of LiBH4dispersed on modified multi-walled carbon nanotubes. Nanotechnology, 2010, 21, 065707.	1.3	22
35	Innovative Systems for Hydrogen Storage. Advances in Science and Technology, 2010, 72, 176-181.	0.2	1
36	Engineering Solutions in Scale-Up and Tank Design for Metal Hydrides. Materials Science Forum, 0, 941, 2220-2225.	0.3	4