

JuliÅ;n Puszkiel

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3136596/publications.pdf>

Version: 2024-02-01

49
papers

1,541
citations

304368

22
h-index

301761

39
g-index

49
all docs

49
docs citations

49
times ranked

1201
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of hydrides in hydrogen storage and compression: Achievements, outlook and perspectives. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 7780-7808.	3.8	486
2	Tetrahydroborates: Development and Potential as Hydrogen Storage Medium. <i>Inorganics</i> , 2017, 5, 74.	1.2	58
3	Thermodynamic and kinetic studies of Mg ₂ FeH ₆ after mechanical milling followed by sintering. <i>Journal of Alloys and Compounds</i> , 2008, 463, 134-142.	2.8	52
4	Thermodynamic and kinetic characterization of the synthesized Mg ₂ FeH ₆ /MgH ₂ hydrides mixture. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 3555-3560.	3.8	50
5	Nanoconfined 2LiBH ₄ /MgH ₂ /TiCl ₃ in carbon aerogel scaffold for reversible hydrogen storage. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 3275-3282.	3.8	49
6	Hydrogen storage properties of Mg _x Fe (x: 2, 3 and 15) compounds produced by reactive ball milling. <i>Journal of Power Sources</i> , 2009, 186, 185-193.	4.0	47
7	Tuning LiBH ₄ for Hydrogen Storage: Destabilization, Additive, and Nanoconfinement Approaches. <i>Molecules</i> , 2020, 25, 163.	1.7	46
8	Reversible hydrogen storage from 6LiBH ₄ /MCl ₃ (M = Ce, Gd) composites by in-situ formation of MH ₂ . <i>International Journal of Hydrogen Energy</i> , 2011, 36, 563-570.	3.8	41
9	Sorption behavior of the MgH ₂ /Mg ₂ FeH ₆ hydride storage system synthesized by mechanical milling followed by sintering. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 14618-14630.	3.8	37
10	2LiBH ₄ /MgH ₂ /0.13TiCl ₄ confined in nanoporous structure of carbon aerogel scaffold for reversible hydrogen storage. <i>Journal of Alloys and Compounds</i> , 2014, 599, 78-86.	2.8	36
11	Hydrogen storage in Mg/LiBH ₄ composites catalyzed by FeF ₃ . <i>Journal of Power Sources</i> , 2014, 267, 799-811.	4.0	36
12	Effect of Fe additive on the hydrogenation-dehydrogenation properties of 2LiH + 2MgB ₂ /2LiBH ₄ + 2MgH ₂ system. <i>Journal of Power Sources</i> , 2015, 284, 606-616.	4.0	31
13	Reversible hydrogen storage in metal-doped Mg/LiBH ₄ composites. <i>Scripta Materialia</i> , 2009, 60, 667-670.	2.6	29
14	Design of a Nanometric AlTi Additive for MgB ₂ -Based Reactive Hydride Composites with Superior Kinetic Properties. <i>Journal of Physical Chemistry C</i> , 2018, 122, 7642-7655.	1.5	29
15	In Situ Formation of TiB ₂ Nanoparticles for Enhanced Dehydrogenation/Hydrogenation Reaction Kinetics of LiBH ₄ /MgH ₂ as a Reversible Solid-State Hydrogen Storage Composite System. <i>Journal of Physical Chemistry C</i> , 2018, 122, 11671-11681.	1.5	29
16	Magnesium- and intermetallic alloys-based hydrides for energy storage: modelling, synthesis and properties. <i>Progress in Energy</i> , 2022, 4, 032007.	4.6	29
17	A novel catalytic route for hydrogenation and dehydrogenation of 2LiH + MgB ₂ via in situ formed core-shell Li _x TiO ₂ nanoparticles. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12922-12933.	5.2	27
18	Structural and kinetic investigation of the hydride composite Ca(BH ₄) ₂ + MgH ₂ system doped with NbF ₅ for solid-state hydrogen storage. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 27328-27342.	1.3	25

#	ARTICLE	IF	CITATIONS
19	Changing the dehydrogenation pathway of LiBH_4 - MgH_2 via nanosized lithiated TiO_2 . <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 7455-7460.	1.3	25
20	Improved kinetic behaviour of $\text{Mg}(\text{NH}_2)_2$ - 2LiH doped with nanostructured K-modified- $\text{Li}_x\text{Ti}_y\text{O}_z$ for hydrogen storage. <i>Scientific Reports</i> , 2020, 10, 8.	1.6	25
21	Fundamental Material Properties of the 2LiBH_4 - MgH_2 Reactive Hydride Composite for Hydrogen Storage: (I) Thermodynamic and Heat Transfer Properties. <i>Energies</i> , 2018, 11, 1081.	1.6	24
22	CO_2 reutilization for methane production via a catalytic process promoted by hydrides. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 19825-19834.	1.3	24
23	Efficient Synthesis of Alkali Borohydrides from Mechanochemical Reduction of Borates Using Magnesium-Aluminum-Based Waste. <i>Metals</i> , 2019, 9, 1061.	1.0	22
24	Fundamental Material Properties of the 2LiBH_4 - MgH_2 Reactive Hydride Composite for Hydrogen Storage: (II) Kinetic Properties. <i>Energies</i> , 2018, 11, 1170.	1.6	21
25	Tuning the reaction mechanism and hydrogenation/dehydrogenation properties of $6\text{Mg}(\text{NH}_2)_2$ - 9LiH system by adding LiBH_4 . <i>International Journal of Hydrogen Energy</i> , 2019, 44, 11920-11929.	3.8	21
26	Designing an AB ₂ -Type Alloy (TiZr-CrMnMo) for the Hybrid Hydrogen Storage Concept. <i>Energies</i> , 2020, 13, 2751.	1.6	20
27	Scale-up of milling in a 100 L device for processing of TiFeMn alloy for hydrogen storage applications: Procedure and characterization. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 29282-29290.	3.8	18
28	New Insight on the Hydrogen Absorption Evolution of the Mg-Fe-H System under Equilibrium Conditions. <i>Metals</i> , 2018, 8, 967.	1.0	17
29	Cyclic stability and structure of nanoconfined Ti-doped NaAlH_4 . <i>International Journal of Hydrogen Energy</i> , 2016, 41, 4159-4167.	3.8	16
30	Conversion of magnesium waste into a complex magnesium hydride system: $\text{Mg}(\text{NH}_2)_2$ - 2LiH . <i>Sustainable Energy and Fuels</i> , 2020, 4, 1915-1923.	2.5	16
31	KNH_2 - KH : a metal amide-hydride solid solution. <i>Chemical Communications</i> , 2016, 52, 11760-11763.	2.2	14
32	Hydrogen cycling properties of $x\text{Mg-Fe}$ materials (x: 2, 3 and 15) produced by reactive ball milling. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 1688-1698.	3.8	14
33	A new mutually destabilized reactive hydride system: LiBH_4 - Mg_2NiH_4 . <i>Journal of Energy Chemistry</i> , 2019, 34, 240-254.	7.1	14
34	Enhanced Stability of Li-RHC Embedded in an Adaptive TPX, ϕ Polymer Scaffold. <i>Materials</i> , 2020, 13, 991.	1.3	14
35	Enhanced hydrogen sorption kinetics of $\text{Mg}_50\text{Ni-LiBH}_4$ composite by CeCl_3 addition. <i>Journal of Power Sources</i> , 2010, 195, 3266-3274.	4.0	13
36	A novel polymorph of gadolinium tetrahydroborate produced by mechanical milling. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 10324-10328.	3.8	12

#	ARTICLE	IF	CITATIONS
37	Influence of milling parameters on the sorption properties of the LiHâ€“MgB ₂ system doped with TiCl ₃ . Journal of Alloys and Compounds, 2015, 645, S299-S303.	2.8	12
38	Effect of the Process Parameters on the Energy Transfer during the Synthesis of the 2LiBH ₄ -MgH ₂ Reactive Hydride Composite for Hydrogen Storage. Metals, 2019, 9, 349.	1.0	11
39	CO ₂ reactivity with Mg ₂ NiH ₄ synthesized by <i>in situ</i> monitoring of mechanical milling. Physical Chemistry Chemical Physics, 2020, 22, 1944-1952.	1.3	11
40	Kinetic alteration of the 6Mg(NH ₂) ₂ â€“9LiHâ€“LiBH ₄ system by co-adding YCl ₃ and Li ₃ N. Physical Chemistry Chemical Physics, 2017, 19, 32105-32115.	1.3	10
41	Enhancement Effect of Bimetallic Amide K ₂ Mn(NH ₂) ₄ and In-Situ Formed KH and Mn ₄ N on the Dehydrogenation/Hydrogenation Properties of Liâ€“Mgâ€“Nâ€“H System. Energies, 2019, 12, 2779.	1.6	9
42	A comprehensive study on lithium-based reactive hydride composite (Li-RHC) as a reversible solid-state hydrogen storage system toward potential mobile applications. RSC Advances, 2021, 11, 23122-23135.	1.7	6
43	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
44	Dual application of Ti-catalyzed Li-RHC composite for H ₂ purification and CO methanation. International Journal of Hydrogen Energy, 2020, 45, 19493-19504.	3.8	3
45	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
46	Synthesis of Mg ₁₅ Fe materials for hydrogen storage applying ball milling procedures. Journal of Alloys and Compounds, 2010, 495, 655-658.	2.8	2
47	Enhanced Hydrogen Storage Properties of Li-RHC System with In-House Synthesized AlTi ₃ Nanoparticles. Energies, 2021, 14, 7853.	1.6	2
48	Theoretical and experimental study of the intrinsic physical properties of the Mgâ€“MgH ₂ system. International Journal of Hydrogen Energy, 2010, 35, 6042-6047.	3.8	0
49	Estudio y caracterizaci3n del efecto de compuestos con titanio sobre el sistema hidruro Li-B-Mg-H con alta capacidad de almacenamiento de hidr3geno. Revista Materia, 2018, 23, .	0.1	0