Didier Blanchard

List of Publications by Year
in descending order

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40	1,811	361045	315357
papers	citations	20 h-index	38 g-index

42	42	42	1718
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Materials for hydrogen-based energy storage â€“ past, recent progress and future outlook. Journal of Alloys and Compounds, 2020, 827, 153548.	2.8	518
2	Nanoconfined LiBH₄ as a Fast Lithium Ion Conductor. Advanced Functional Materials, 2015, 25, 184-192.	7.8	176
3	Synchrotron X-ray and neutron diffraction studies of NaAlH4 containing Ti additives. Journal of Alloys and Compounds, 2004, 376, 215-221.	2.8	155
4	Desorption of LiAlH4 with Ti- and V-based additives. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2004, 108, 54-59.	1.7	113
5	All-Solid-State Lithium-Sulfur Battery Based on a Nanoconfined LiBH₄Electrolyte. Journal of the Electrochemical Society, 2016, 163, A2029-A2034.	1.3	90
6	Effect of Heat Treatment on the Lithium Ion Conduction of the LiBH₄â€“LiI Solid Solution. Journal of Physical Chemistry C, 2013, 117, 3249-3257.	1.5	65
7	Lithium Conductivity and Ions Dynamics in LiBH₄/SiO₂ Solid Electrolytes Studied by Solid-State NMR and Quasi-Elastic Neutron Scattering and Applied in Lithiumâ€“Sulfur Batteries. Journal of Physical Chemistry C, 2018, 122, 15264-15275.	1.5	51
8	Complex hydrides as room-temperature solid electrolytes for rechargeable batteries. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	48
9	Ammonia dynamics in magnesium ammine from DFT and neutron scattering. Energy and Environmental Science, 2010, 3, 448.	15.6	47
10	Reversibility of Al/Ti Modified LiBH₄. Journal of Physical Chemistry C, 2009, 113, 14059-14066.	1.5	46
11	Full-cell hydride-based solid-state Li batteries for energy storage. International Journal of Hydrogen Energy, 2019, 44, 7875-7887.	3.8	46
12	Hindered Rotational Energy Barriers of BH₄^{â€“} Tetrahedra in Î²-Mg(BH₄)₂ from Quasielastic Neutron Scattering and DFT Calculations. Journal of Physical Chemistry C, 2012, 116, 2013-2023.	1.5	43
13	Li-ion Conduction in the LiBH₄:LiI System from Density Functional Theory Calculations and Quasi-Elastic Neutron Scattering. Journal of Physical Chemistry C, 2013, 117, 9084-9091.	1.5	43
14	Isothermal decomposition of LiAlD4 with and without additives. Journal of Alloys and Compounds, 2005, 404-406, 743-747.	2.8	34
15	Correlation between current density and layer structure for fine particle deposition in a laboratory electrostatic precipitator. IEEE Transactions on Industry Applications, 2002, 38, 832-839.	3.3	26
16	The influence of silica surface groups on the Li-ion conductivity of LiBH₄/SiO₂ nanocomposites. Physical Chemistry Chemical Physics, 2019, 21, 22456-22466.	1.3	24
17	Visualization of Dissolutionâ€Precipitation Processes in Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2022, 12, .	10.2	24
18	Electron microscopy studies of lithium aluminium hydrides. Journal of Alloys and Compounds, 2005, 395, 307-312.	2.8	23

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19	Hydrogen Rotational and Translational Diffusion in Calcium Borohydride from Quasielastic Neutron Scattering and DFT Calculations. Journal of Physical Chemistry C, 2010, 114, 20249-20257.	1.5	23
20	Analytical Electron Microscopy Studies of Lithium Aluminum Hydrides with Ti- and V-Based Additives. Journal of Physical Chemistry B, 2005, 109, 4350-4356.	1.2	21
21	Pressure-induced phase transitions of theLiAlD4system. Physical Review B, 2005, 72, .	1.1	20
22	Effect of electro-aero-dynamically induced secondary flow on transport of fine particles in an electrostatic precipitator. Journal of Electrostatics, 2001, 51-52, 212-217.	1.0	19
23	Drift velocity of fine particles estimated from fractional efficiency measurements in a laboratory-scaled electrostatic precipitator. IEEE Transactions on Industry Applications, 2002, 38, 852-857.	3.3	19
24	The location of Ti containing phases after the completion of the NaAlH4+xTiCl3 milling process. Journal of Alloys and Compounds, 2012, 513, 597-605.	2.8	18
25	Ionic conductivity and the formation of cubic CaH2 in the LiBH4â€“Ca(BH4)2 composite. Journal of Solid State Chemistry, 2014, 211, 81-89.	1.4	18
26	Accelerated DFT-Based Design of Materials for Ammonia Storage. Chemistry of Materials, 2015, 27, 4552-4561.	3.2	18
27	Solid solution bariumâ€“strontium chlorides with tunable ammonia desorption properties and superior storage capacity. Journal of Solid State Chemistry, 2015, 221, 32-36.	1.4	14
28	In-situ neutron imaging study of NH3 absorption and desorption in SrCl2 within a heat storage prototype reactor. Journal of Energy Storage, 2020, 29, 101388.	3.9	10
29	Sr(NH3)8Cl2-Expanded Natural Graphite composite for thermochemical heat storage applications studied by in-situ neutron imaging. Journal of Energy Storage, 2021, 34, 102176.	3.9	10
30	Analysis of the decomposition gases from Î± and Î²-Cd(BH4)2 synthesized by temperature controlled mechanical milling. Journal of Alloys and Compounds, 2013, 547, 76-80.	2.8	8
31	Effects of LiBF4 Addition on the Lithium-Ion Conductivity of LiBH4. Molecules, 2022, 27, 2187.	1.7	7
32	LiAlD4 with VCl3 additives: Influence of ball-milling energies. Journal of Alloys and Compounds, 2008, 458, 467-473.	2.8	6
33	Layered double hydroxides as advanced tracks to promote ionic conductivity in metal borohydride. Materials Chemistry Frontiers, 2021, 5, 4989-4996.	3.2	6
34	Intrinsic kinetics in local modelling of thermochemical heat storage systems. Applied Thermal Engineering, 2021, 192, 116880.	3.0	6
35	In operando Raman and optical study of lithium polysulfides dissolution in lithiumâ€“sulfur cells with carrageenan binder. JPhys Energy, 2021, 3, 044003.	2.3	4
36	Neutron radiography for local modelling of thermochemical heat storage reactors: Case study on SrCl2â€NH3. International Journal of Heat and Mass Transfer, 2021, 178, 121287.	2.5	4

#	Article	IF	Citations
37	Synthesis, Structure and NH3 Sorption Properties of Mixed Mg1-xMnx(NH3)6Cl2 Ammines. Energies, 2020, 13, 2746.	1.6	3
38	Small-Angle Neutron Scattering Characterization of SrCl₂â€“ENG Composites for Thermochemical Heat Storage. ACS Applied Materials & Interfaces, 2021, 13, 34213-34226.	4.0	3
39	Numerical Design of a Reactor for an Ammonia-SrCl2 Thermochemical Storage System. , 2019, , .		2
40	(Invited) Light Metal Hydride Nanocomposites As Room Temperature Solid Electrolytes. ECS Meeting Abstracts, 2018, , .	0.0	0