Marc Linder

List of Publications by Year
in descending order

48	1,407	304602	330025
papers	citations	22 h-index	37 g-index

48	48	48	859
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimental results of a 10ÂkW high temperature thermochemical storage reactor based on calcium hydroxide. Applied Thermal Engineering, 2014, 62, 553-559.	3.0	142
2	Power generation based on the Ca(OH)2/ CaO thermochemical storage system â€“ Experimental investigation of discharge operation modes in lab scale and corresponding conceptual process design. Applied Energy, 2017, 203, 594-607.	5.1	85
3	Thermochemical energy storage with CaO/Ca(OH)2 â€“ Experimental investigation of the thermal capability at low vapor pressures in a lab scale reactor. Applied Energy, 2017, 188, 672-681.	5.1	83
4	Reversible hydration behavior of CaCl2 at high H2O partial pressures for thermochemical energy storage. Thermochimica Acta, 2013, 560, 76-81.	1.2	81
5	A systematic screening of salt hydrates as materials for a thermochemical heat transformer. Thermochimica Acta, 2018, 659, 136-150.	1.2	72
6	Thermodynamic and kinetic investigation of a technical grade manganese-iron binary oxide for thermochemical energy storage. Solar Energy, 2017, 153, 471-485.	2.9	65
7	Investigations on thermochemical energy storage based on technical grade manganese-iron oxide in a lab-scale packed bed reactor. Solar Energy, 2017, 153, 200-214.	2.9	65
8	Experimental results of a compact thermally driven cooling system based on metal hydrides. International Journal of Hydrogen Energy, 2010, 35, 7623-7632.	3.8	47
9	SSH2S: Hydrogen storage in complex hydrides for an auxiliary power unit based on high temperature proton exchange membrane fuel cells. Journal of Power Sources, 2017, 342, 853-860.	4.0	47
10	Study of the structural, thermodynamic and cyclic effects of vanadium and titanium substitution in laves-phase AB2 hydrogen storage alloys. International Journal of Hydrogen Energy, 2017, 42, 20103-20110.	3.8	46
11	Experimental analysis of encapsulated CaO/Ca(OH)2 granules as thermochemical storage in a novel moving bed reactor. Applied Thermal Engineering, 2020, 169, 114961.	3.0	42
12	Long-term cycle stability of metal hydride-graphite composites. International Journal of Hydrogen Energy, 2015, 40, 16375-16382.	3.8	39
13	Development of a moving bed pilot plant for thermochemical energy storage with CaO/Ca(OH)2. AIP Conference Proceedings, 2016, , .	0.3	35
14	Adiabatic magnesium hydride system for hydrogen storage based on thermochemical heat storage: Numerical analysis of the dehydrogenation. Applied Energy, 2019, 236, 1034-1048.	5.1	33
15	An energy-efficient air-conditioning system for hydrogen driven cars. International Journal of Hydrogen Energy, 2011, 36, 3215-3221.	3.8	32
16	Experimental investigation of a liquid cooled high temperature proton exchange membrane (HT-PEM) fuel cell coupled to a sodium alanate tank. International Journal of Hydrogen Energy, 2014, 39, 5931-5941.	3.8	32
17	Heat transformation based on CaCl2/H2O â€“ Part A: Closed operation principle. Applied Thermal Engineering, 2016, 102, 615-621.	3.0	30
18	Open and closed metal hydride system for high thermal power applications: Preheating vehicle components. International Journal of Hydrogen Energy, 2017, 42, 11469-11481.	3.8	30

#	Article	IF	Citations
19	Thermodynamic and kinetic investigations of the SrBr2 hydration and dehydration reactions for thermochemical energy storage and heat transformation. Applied Energy, 2020, 277, 115432.	5.1	29
20	Experimental analysis of fast metal hydride reaction bed dynamics. International Journal of Hydrogen Energy, 2010, 35, 8755-8761.	3.8	27
21	Thermal energy storage combined with a temperature boost: An underestimated feature of thermochemical systems. Applied Energy, 2020, 262, 114530.	5.1	27
22	Performance analysis of a gas-solid thermochemical energy storage using numerical and experimental methods. International Journal of Heat and Mass Transfer, 2021, 167, 120797.	2.5	27
23	Heat transformation based on CaCl2/H2O â€“ Part B: Open operation principle. Applied Thermal Engineering, 2016, 102, 641-647.	3.0	23
24	Numerical analysis of the hydration of calcium oxide in a fixed bed reactor based on lab-scale experiments. Applied Energy, 2020, 261, 114351.	5.1	22
25	Characterization of metal hydrides for thermal applications in vehicles below 0ÂÂ°C. International Journal of Hydrogen Energy, 2019, 44, 4878-4888.	3.8	21
26	High capacity, low pressure hydrogen storage based on magnesium hydride and thermochemical heat storage: Experimental proof of concept. Applied Energy, 2020, 271, 115226.	5.1	21
27	A Novel Thermochemical Long Term Storage Concept: Balance of Renewable Electricity and Heat Demand in Buildings. Frontiers in Energy Research, 2020, 8, .	1.2	20
28	Standardized hydrogen storage module with high utilization factor based on metal hydride-graphite composites. Journal of Power Sources, 2017, 342, 970-979.	4.0	19
29	Review on thermal applications for metal hydrides in fuel cell vehicles: Operation modes, recent developments and crucial design aspects. Renewable and Sustainable Energy Reviews, 2022, 162, 112385.	8.2	17
30	Measurement of thermochemical properties of some metal hydrides â€“ Titanium (Ti), misch metal (Mm) and lanthanum (La) based alloys. International Journal of Hydrogen Energy, 2013, 38, 5288-5301.	3.8	15
31	Numerical investigation of hydrogen charging performance for a combination reactor with embedded metal hydride and coolant tubes. International Journal of Hydrogen Energy, 2015, 40, 6626-6638.	3.8	15
32	Thermal applications in vehicles using Hydralloy C5 in single and coupled metal hydride systems. Applied Energy, 2021, 287, 116534.	5.1	15
33	A Moving Bed Reactor for Thermochemical Energy Storage Based on Metal Oxides. Energies, 2020, 13, 1232.	1.6	12
34	Storing solar energy in continuously moving redox particles â€“ Experimental analysis of charging and discharging reactors. Applied Energy, 2022, 308, 118271.	5.1	12
35	High Carnallite-Bearing Material for Thermochemical Energy Storage: Thermophysical Characterization. ACS Sustainable Chemistry and Engineering, 2018, 6, 6135-6145.	3.2	11
36	Analysis of a Lab-Scale Heat Transformation Demonstrator Based on a Gasâ€“Solid Reaction. Energies, 2019, 12, 2234.	1.6	10

#	Article	IF	Citations
37	Experimental investigation of a novel mechanically fluidized bed reactor for thermochemical energy storage with calcium hydroxide/calcium oxide. Applied Energy, 2022, 315, 118976.	5.1	10
38	A Compact Thermally Driven Cooling System Based on Metal Hydrides. Energies, 2020, 13, 2482.	1.6	9
39	Numerical Investigations of a Counter-Current Moving Bed Reactor for Thermochemical Energy Storage at High Temperatures. Energies, 2020, 13, 772.	1.6	9
40	Optimization of hydrogen charging process parameters for an advanced complex hydride reactor concept. International Journal of Hydrogen Energy, 2014, 39, 17726-17739.	3.8	7
41	Experimental and Numerical Investigation of the Dehydration of Ca(OH)2 at Low Steam Pressures. Processes, 2022, 10, 325.	1.3	7
42	Investigations on thermochemical energy storage based on manganese-iron oxide in a lab-scale reactor. AIP Conference Proceedings, 2017, , .	0.3	5
43	Operation strategies for gas solid reactions in thermal energy storage systems. Journal of Energy Storage, 2021, 40, 102767.	3.9	4
44	Investigation of Ca12Al14O33 Mayenite for hydration/dehydration thermochemical energy storage. Journal of Energy Storage, 2020, 31, 101647.	3.9	3
45	Experimental investigation of continuous heat extraction of metal oxides in a moving bed reactor. AIP Conference Proceedings, 2019, , .	0.3	2
46	Electricity storage based on coupled thermochemical reactions: The Thermochemical Battery. Journal of Energy Storage, 2021, 33, 102104.	3.9	2
47	Using thermochemical reactions in thermal energy storage systems. , 2021, , 477-495.		0
48	Preheating components with metal hydrides or lime â€“ Small, high power, no additional energy. Proceedings, 2020, , 501-510.	0.2	0