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	Storing solar energy in continuously moving redox particles â€“ Experimental analysis of charging and discharging reactors. Applied Energy, 2022, 308, 118271.	5.1	12
2	Experimental and Numerical Investigation of the Dehydration of Ca(OH)2 at Low Steam Pressures. Processes, 2022, 10, 325.	1.3	7
3	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
4	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
5	Electricity storage based on coupled thermochemical reactions: The Thermochemical Battery. Journal of Energy Storage, 2021, 33, 102104.	3.9	2
6	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
7	Thermal applications in vehicles using Hydralloy C5 in single and coupled metal hydride systems. Applied Energy, 2021, 287, 116534.	5.1	15
8	Operation strategies for gas solid reactions in thermal energy storage systems. Journal of Energy Storage, 2021, 40, 102767.	3.9	4
9	Using thermochemical reactions in thermal energy storage systems. , 2021, , 477-495.		0
10	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
11	Investigation of Ca12Al14O33 Mayenite for hydration/dehydration thermochemical energy storage. Journal of Energy Storage, 2020, 31, 101647.	3.9	3
12	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
13	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
14	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
15	A Compact Thermally Driven Cooling System Based on Metal Hydrides. Energies, 2020, 13, 2482.	1.6	9
16	Numerical Investigations of a Counter-Current Moving Bed Reactor for Thermochemical Energy Storage at High Temperatures. Energies, 2020, 13, 772.	1.6	9
17	Thermal energy storage combined with a temperature boost: An underestimated feature of thermochemical systems. Applied Energy, 2020, 262, 114530.	5.1	27
18	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

#	Article	IF	Citations
19	A Moving Bed Reactor for Thermochemical Energy Storage Based on Metal Oxides. Energies, 2020, 13, 1232.	1.6	12
20	Preheating components with metal hydrides or lime â€“ Small, high power, no additional energy. Proceedings, 2020, , 501-510.	0.2	0
21	Analysis of a Lab-Scale Heat Transformation Demonstrator Based on a Gasâ€“Solid Reaction. Energies, 2019, 12, 2234.	1.6	10
22	Experimental investigation of continuous heat extraction of metal oxides in a moving bed reactor. AIP Conference Proceedings, 2019, , .	0.3	2
23	Characterization of metal hydrides for thermal applications in vehicles below 0ÂÂ°C. International Journal of Hydrogen Energy, 2019, 44, 4878-4888.	3.8	21
24	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
25	High Carnallite-Bearing Material for Thermochemical Energy Storage: Thermophysical Characterization. ACS Sustainable Chemistry and Engineering, 2018, 6, 6135-6145.	3.2	11
26	A systematic screening of salt hydrates as materials for a thermochemical heat transformer. Thermochimica Acta, 2018, 659, 136-150.	1.2	72
27	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
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	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
30	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
31	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
32	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
33	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
34	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
35	Investigations on thermochemical energy storage based on manganese-iron oxide in a lab-scale reactor. AIP Conference Proceedings, 2017, , .	0.3	5
36	Development of a moving bed pilot plant for thermochemical energy storage with CaO/Ca(OH)2. AIP Conference Proceedings, 2016, , .	0.3	35

#	Article	IF	Citations
37	Heat transformation based on CaCl2/H2O â€“ Part B: Open operation principle. Applied Thermal Engineering, 2016, 102, 641-647.	3.0	23
38	Heat transformation based on CaCl2/H2O â€“ Part A: Closed operation principle. Applied Thermal Engineering, 2016, 102, 615-621.	3.0	30
39	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
40	Long-term cycle stability of metal hydride-graphite composites. International Journal of Hydrogen Energy, 2015, 40, 16375-16382.	3.8	39
41	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
42	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
43	Experimental results of a 10ÂkW high temperature thermochemical storage reactor based on calcium hydroxide. Applied Thermal Engineering, 2014, 62, 553-559.	3.0	142
44	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
45	Reversible hydration behavior of CaCl2 at high H2O partial pressures for thermochemical energy storage. Thermochimica Acta, 2013, 560, 76-81.	1.2	81
46	An energy-efficient air-conditioning system for hydrogen driven cars. International Journal of Hydrogen Energy, 2011, 36, 3215-3221.	3.8	32
47	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
48	Experimental analysis of fast metal hydride reaction bed dynamics. International Journal of Hydrogen Energy, 2010, 35, 8755-8761.	3.8	27