Thomas Klassen

List of Publications by Year in Descending Order

249 papers	10,611 citations	49 h-index	96 g-index
270 ext. papers	11,726 ext. citations	4.7 avg, IF	6.16 L-index

#	Paper	IF	Citations
249	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	3.1	1
248	De-hydrogenation/Rehydrogenation Properties and Reaction Mechanism of AmZn(NH2)n-2nLiH Systems (A = Li, K, Na, and Rb). *Sustainability*, **2022**, 14, 1672	3.6	2
247	Tailoring nanocrystalline materials towards potential applications. *International Journal of Materials Research*, **2022**, 94, 610-614	0.5	
246	Design of a reference model for fast optimization of photo-electrochemical cells. *Sustainable Energy and Fuels*, **2022**, 6, 1489-1498	5.8	
245	Tailoring powder strengths for enhanced quality of cold sprayed Al6061 deposits. *Materials and Design*, **2022**, 215, 110494	8.1	0
244	Features of ceramic nanoparticle deformation in aerosol deposition explored by molecular dynamics simulation. *Surface and Coatings Technology*, **2021**, 127886	4.4	1
243	Enhanced Hydrogen Storage Properties of Li-RHC System with In-House Synthesized AlTi3 Nanoparticles. *Energies*, **2021**, 14, 7853	3.1	1
242	Aerosol Deposition of Ti3SiC2-MAX-Phase Coatings. *Journal of Thermal Spray Technology*, **2021**, 30, 1121	2.5	0
241	Process Selection for the Fabrication of Cavitation Erosion-Resistant Bronze Coatings by Thermal and Kinetic Spraying in Maritime Applications. *Journal of Thermal Spray Technology*, **2021**, 30, 1310	2.5	3
240	Nanoconfinement effects on hydrogen storage properties of MgH2 and LiBH4. *International Journal of Hydrogen Energy*, **2021**, 46, 23723-23723	6.7	9
239	Influence of MAX-Phase Deformability on Coating Formation by Cold Spraying. *Journal of Thermal Spray Technology*, **2021**, 30, 617-642	2.5	5
238	Aerosol-Deposited BiVO4 Photoelectrodes for Hydrogen Generation. *Journal of Thermal Spray Technology*, **2021**, 30, 603-616	2.5	2
237	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	3.7	4
236	Size Effects of Brittle Particles in Aerosol Deposition: Molecular Dynamics Simulation. *Journal of Thermal Spray Technology*, **2021**, 30, 503-522	2.5	6
235	Property prediction and crack growth behavior in cold sprayed Cu deposits. *Materials and Design*, **2021**, 206, 109826	8.1	5
234	Mg-based materials for hydrogen storage. *Journal of Magnesium and Alloys*, **2021**, 9, 1837-1837	8.8	18
233	Hydrogenation via a low energy mechanochemical approach: the MgB2 case. *JPhys Energy*, **2021**, 3, 044001	4.9	2

232	Modeling the kinetic behavior of the Li-RHC system for energy-hydrogen storage: (I) absorption. *International Journal of Hydrogen Energy*, **2021**, 46, 32110-32125	6.7	2
231	Effects of Ni-loading contents on dehydrogenation kinetics and reversibility of Mg2FeH6. *International Journal of Hydrogen Energy*, **2021**, 46, 32099-32109	6.7	2
230	Solid-state additive manufacturing of porous Ti-6Al-4V by supersonic impact. *Applied Materials Today*, **2020**, 21, 100865	6.6	6
229	Designing an AB2-Type Alloy (TiZr-CrMnMo) for the Hybrid Hydrogen Storage Concept. *Energies*, **2020**, 13, 2751	3.1	11
228	Conversion of magnesium waste into a complex magnesium hydride system: Mg(NH2)2□iH. *Sustainable Energy and Fuels*, **2020**, 4, 1915-1923	5.8	12
227	Enhanced Stability of Li-RHC Embedded in an Adaptive TPX□Polymer Scaffold. *Materials*, **2020**, 13,	3.5	6
226	Improved kinetic behaviour of Mg(NH)-2LiH doped with nanostructured K-modified-LiTiO for hydrogen storage. *Scientific Reports*, **2020**, 10, 8	4.9	12
225	Charge Transfer in c-Si(n)/TiO(ALD) at the Amorphous/Anatase Transition: A Transient Surface Photovoltage Spectroscopy Study. *ACS Applied Materials & Interfaces*, **2020**, 12, 3140-3149	9.5	11
224	Using the Emission of Muonic X-rays as a Spectroscopic Tool for the Investigation of the Local Chemistry of Elements. *Nanomaterials*, **2020**, 10,	5.4	3
223	Chemical and photoelectrochemical instability of amorphous TiO2 layers quantified by spectroscopic ellipsometry. *Journal of Materials Chemistry A*, **2020**, 8, 18173-18179	13	3
222	Efficient Synthesis of Alkali Borohydrides from Mechanochemical Reduction of Borates Using Magnesium□luminum-Based Waste. *Metals*, **2019**, 9, 1061	2.3	11
221	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	6.7	7
220	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	2.3	7
219	Scale-up of milling in a 100 L device for processing of TiFeMn alloy for hydrogen storage applications: Procedure and characterization. *International Journal of Hydrogen Energy*, **2019**, 44, 29282-29290	6.7	12
218	A new mutually destabilized reactive hydride system: LiBH4□Mg2NiH4. *Journal of Energy Chemistry*, **2019**, 34, 240-254	12	7
217	Tuning the reaction mechanism and hydrogenation/dehydrogenation properties of 6Mg(NH2)29LiH system by adding LiBH4. *International Journal of Hydrogen Energy*, **2019**, 44, 11920-11929	6.7	14
216	Enhancement Effect of Bimetallic Amide K2Mn(NH2)4 and In-Situ Formed KH and Mn4N on the Dehydrogenation/Hydrogenation Properties of LiMgN□H System. *Energies*, **2019**, 12, 2779	3.1	5
215	Optimization of Inconel 718 thick deposits by cold spray processing and annealing. *Surface and Coatings Technology*, **2019**, 378, 124997	4.4	11

214	Optimized photoactive coatings prepared with functionalized TiO2. *International Journal of Hydrogen Energy*, **2019**, 44, 31800-31807	6.7	3
213	Mechanically induced grain refinement, recovery and recrystallization of cold-sprayed iron aluminide coatings. *Surface and Coatings Technology*, **2019**, 380, 125069	4.4	5
212	Application of hydrides in hydrogen storage and compression: Achievements, outlook and perspectives. *International Journal of Hydrogen Energy*, **2019**, 44, 7780-7808	6.7	273
211	Optimization Adhesion in Cold Spraying onto Hard Substrates: A Case Study for Brass Coatings. *Journal of Thermal Spray Technology*, **2019**, 28, 124-134	2.5	11
210	Comment on Adiabatic shear instability is not necessary for adhesion in cold spray. *Scripta Materialia*, **2019**, 162, 512-514	5.6	42
209	Characterization of BiVO4 powders and cold gas sprayed layers by surface photovoltage techniques. *Catalysis Today*, **2019**, 321-322, 34-40	5.3	9
208	Insights into the Rb-Mg-N-H System: an Ordered Mixed Amide/Imide Phase and a Disordered Amide/Hydride Solid Solution. *Inorganic Chemistry*, **2018**, 57, 3197-3205	5.1	8
207	Waste Mg-Al based alloys for hydrogen storage. *International Journal of Hydrogen Energy*, **2018**, 43, 16738-16748	3.7	44
206	In vitro biodegradation testing of Mg-alloy EZK400 and manufacturing of implant prototypes using PM (powder metallurgy) methods. *Bioactive Materials*, **2018**, 3, 213-217	16.7	7
205	Design of a Nanometric AlTi Additive for MgB2-Based Reactive Hydride Composites with Superior Kinetic Properties. *Journal of Physical Chemistry C*, **2018**, 122, 7642-7655	3.8	22
204	Li NH-LiBH : a Complex Hydride with Near Ambient Hydrogen Adsorption and Fast Lithium Ion Conduction. *Chemistry - A European Journal*, **2018**, 24, 1342-1347	4.8	10
203	A hydride composite featuring mutual destabilisation and reversible boron exchange: Ca(BH4)2Mg2NiH4. *Journal of Materials Chemistry A*, **2018**, 6, 17929-17946	13	5
202	Recent Progress and New Perspectives on Metal Amide and Imide Systems for Solid-State Hydrogen Storage. *Energies*, **2018**, 11, 1027	3.1	33
201	Fundamental Material Properties of the 2LiBH4-MgH2 Reactive Hydride Composite for Hydrogen Storage: (I) Thermodynamic and Heat Transfer Properties. *Energies*, **2018**, 11, 1081	3.1	21
200	In Situ Formation of TiB2 Nanoparticles for Enhanced Dehydrogenation/Hydrogenation Reaction Kinetics of LiBH4MgH2 as a Reversible Solid-State Hydrogen Storage Composite System. *Journal of Physical Chemistry C*, **2018**, 122, 11671-11681	3.8	22
199	Metal Injection Molding (MIM) of Mg-Alloys. *Minerals, Metals and Materials Series*, **2018**, 239-251	0.3	3
198	Engineering Solutions in Scale-Up and Tank Design for Metal Hydrides. *Materials Science Forum*, **2018**, 941, 2220-2225	0.4	2
197	New Insight on the Hydrogen Absorption Evolution of the MgFeH System under Equilibrium Conditions. *Metals*, **2018**, 8, 967	2.3	13

196	Fundamental Material Properties of the 2LiBH4-MgH2 Reactive Hydride Composite for Hydrogen Storage: (II) Kinetic Properties. *Energies*, **2018**, 11, 1170	3.1	16
195	Air-stable metal hydride-polymer composites of Mg(NH2)2□iH and TPX□*Materials Today Energy*, **2018**, 10, 98-107	7	12
194	Solid State Hydrogen Storage in Alanates and Alanate-Based Compounds: A Review. *Metals*, **2018**, 8, 567	2.3	36
193	Metal Hydride-Based Hydrogen Storage Tank Coupled with an Urban Concept Fuel Cell Vehicle: Off Board Tests. *Advanced Sustainable Systems*, **2018**, 2, 1800004	5.9	11
192	Phase stability and hydrogen desorption in a quinary equimolar mixture of light-metals borohydrides. *International Journal of Hydrogen Energy*, **2018**, 43, 16793-16803	6.7	14
191	Hydrogenation Study of NaF/NaH/MgB2 Reactive Hydride Composites. *Journal of Physical Chemistry C*, **2017**, 121, 4093-4102	3.8	3
190	Influence of thermal properties and temperature of substrate on the quality of cold-sprayed deposits. *Acta Materialia*, **2017**, 127, 287-301	8.4	56
189	Changing the dehydrogenation pathway of LiBH-MgHvia nanosized lithiated TiO. *Physical Chemistry Chemical Physics*, **2017**, 19, 7455-7460	3.6	19
188	The Use of Neutron and Synchrotron Research for Aerospace and Automotive Materials and Components **2017**, 327-364		
187	Synthesis of Mg2FeD6 under low pressure conditions for Mg2FeH6 hydrogen storage studies. *International Journal of Hydrogen Energy*, **2017**, 42, 11422-11428	6.7	7
186	The effect of Sr(OH) on the hydrogen storage properties of the Mg(NH)-2LiH system. *Physical Chemistry Chemical Physics*, **2017**, 19, 8457-8464	3.6	13
185	Effects of Stoichiometry on the H -Storage Properties of Mg(NH) -LiH-LiBH Tri-Component Systems. *Chemistry - an Asian Journal*, **2017**, 12, 1758-1764	4.5	11
184	Transition and Alkali Metal Complex Ternary Amides for Ammonia Synthesis and Decomposition. *Chemistry - A European Journal*, **2017**, 23, 9766-9771	4.8	18
183	A novel catalytic route for hydrogenation□dehydrogenation of 2LiH + MgB2via in situ formed core□shell LixTiO2 nanoparticles. *Journal of Materials Chemistry A*, **2017**, 5, 12922-12933	13	19
182	Synthesis, structures and thermal decomposition of ammine MBH complexes (M = Li, Na, Ca). *Dalton Transactions*, **2017**, 46, 7770-7781	4.3	8
181	Warm Spraying of High-Strength Ni-Al-Bronze: Cavitation Characteristics and Property Prediction. *Journal of Thermal Spray Technology*, **2017**, 26, 265-277	2.5	8
180	Cold sprayed WO and TiO electrodes for photoelectrochemical water and methanol oxidation in renewable energy applications. *Dalton Transactions*, **2017**, 46, 12811-12823	4.3	15
179	Kinetic alteration of the 6Mg(NH)-9LiH-LiBH system by co-adding YCl and LiN. *Physical Chemistry Chemical Physics*, **2017**, 19, 32105-32115	3.6	8

178	Tetrahydroborates: Development and Potential as Hydrogen Storage Medium. *Inorganics*, **2017**, 5, 74	2.9	41
177	In Situ X-ray Diffraction Studies on the De/rehydrogenation Processes of the K2[Zn(NH2)4]-8LiH System. *Journal of Physical Chemistry C*, **2017**, 121, 1546-1551	3.8	10
176	Cold gas spraying – A promising technique for photoelectrodes. *Catalysis Today*, **2016**, 260, 140-147	5.3	12
175	Optimization and comprehensive characterization of metal hydride based hydrogen storage systems using in-situ Neutron Radiography. *Journal of Power Sources*, **2016**, 328, 567-577	8.9	5
174	KNH-KH: a metal amide-hydride solid solution. *Chemical Communications*, **2016**, 52, 11760-11763	5.8	12
173	Cyclic stability and structure of nanoconfined Ti-doped NaAlH 4. *International Journal of Hydrogen Energy*, **2016**, 41, 4159-4167	6.7	12
172	Cold spraying – A materials perspective. *Acta Materialia*, **2016**, 116, 382-407	8.4	417
171	Metal hydrides for concentrating solar thermal power energy storage. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	71
170	Magnesium Powder Injection Molding (MIM) of Orthopedic Implants for Biomedical Applications. *Jom*, **2016**, 68, 1191-1197	2.1	21
169	2LiBH4–MgH2 nanoconfined into carbon aerogel scaffold impregnated with ZrCl4 for reversible hydrogen storage. *Materials Chemistry and Physics*, **2016**, 169, 136-141	4.4	23
168	New synthesis route for ternary transition metal amides as well as ultrafast amide-hydride hydrogen storage materials. *Chemical Communications*, **2016**, 52, 5100-3	5.8	16
167	A new potassium-based intermediate and its role in the desorption properties of the K-Mg-N-H system. *Physical Chemistry Chemical Physics*, **2016**, 18, 3910-20	3.6	8
166	Ca(BH4)2-Mg2NiH4: on the pathway to a Ca(BH4)2 system with a reversible hydrogen cycle. *Chemical Communications*, **2016**, 52, 4836-9	5.8	24
165	Metal Injection Molding (MIM) of Magnesium and Its Alloys. *Metals*, **2016**, 6, 118	2.3	23
164	Development of a modular room-temperature hydride storage system for vehicular applications. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	20
163	First Direct Study of the Ammonolysis Reaction in the Most Common Alkaline and Alkaline Earth Metal Hydrides by in Situ SR-PXD. *Journal of Physical Chemistry C*, **2015**, 119, 934-943	3.8	17
162	Single Impact Bonding of Cold Sprayed Ti-6Al-4V Powders on Different Substrates. *Journal of Thermal Spray Technology*, **2015**, 24, 644-658	2.5	59
161	Scattering influences in quantitative fission neutron radiography for the in situ analysis of hydrogen distribution in metal hydrides. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2015**, 797, 158-164	1.2	3

160	Synchrotron Diffraction Studies of Hydrogen Absorption/Desorption on CaH2 + MgB2 Reactive Hydride Composite Mixed With Fluorinated Compounds. *Journal of Physical Chemistry C*, **2015**, 119, 11430-11437	3.8	4
159	Effect of Fe additive on the hydrogenation-dehydrogenation properties of 2LiH□+□MgB 2 /2LiBH 4 □+□MgH 2 system. *Journal of Power Sources*, **2015**, 284, 606-616	8.9	26
158	Strain-Induced Phase Transformation of MCrAlY. *Advanced Engineering Materials*, **2015**, 17, 723-731	3.5	14
157	Determination of plastic constitutive properties of microparticles through single particle compression. *Advanced Powder Technology*, **2015**, 26, 1544-1554	4.6	20
156	On the Hydrogenation of a NaH/AlB2 Mixture. *Journal of Physical Chemistry C*, **2015**, 119, 22826-22831	3.8	2
155	In situX-ray diffraction environments for high-pressure reactions. *Journal of Applied Crystallography* , **2015**, 48, 1234-1241	3.8	60
154	Influence of milling parameters on the sorption properties of the LiH□MgB2 system doped with TiCl3. *Journal of Alloys and Compounds*, **2015**, 645, S299-S303	5.7	10
153	Improvement of thermal stability and reduction of LiBH 4 /polymer host interaction of nanoconfined LiBH 4 for reversible hydrogen storage. *International Journal of Hydrogen Energy*, **2015**, 40, 392-402	6.7	21
152	Influence of spraying parameters on cold gas spraying of iron aluminide intermetallics. *Surface and Coatings Technology*, **2015**, 268, 99-107	4.4	21
151	Inkjet Printing of Functionalized TiO2 Catalytic Layer for Water Oxidation Reaction. *Materials Research Society Symposia Proceedings*, **2015**, 1776, 13-17		2
150	Simultaneous desorption behavior of M borohydrides and Mg2FeH6 reactive hydride composites (M = Mg, then Li, Na, K, Ca). *Applied Physics Letters*, **2015**, 107, 073905	3.4	13
149	Sorption properties and reversibility of Ti(IV) and Nb(V)-fluoride doped-Ca(BH4)2□MgH2 system. *Journal of Alloys and Compounds*, **2015**, 622, 989-994	5.7	14
148	Ternary Amides Containing Transition Metals for Hydrogen Storage: A Case Study with Alkali Metal Amidozincates. *ChemSusChem*, **2015**, 8, 3777-82	8.3	12
147	Structural and kinetic investigation of the hydride composite Ca(BH4)2 + MgH2 system doped with NbF5 for solid-state hydrogen storage. *Physical Chemistry Chemical Physics*, **2015**, 17, 27328-42	3.6	21
146	Coating formation, fracture mode and cavitation performance of Fe40Al deposited by cold gas spraying. *Surface Engineering*, **2015**, 31, 853-859	2.6	4
145	Design, sorption behaviour and energy management in a sodium alanate-based lightweight hydrogen storage tank. *International Journal of Hydrogen Energy*, **2015**, 40, 2984-2988	6.7	27
144	Transport phenomena versus intrinsic kinetics: Hydrogen sorption limiting sub-process in metal hydride beds. *International Journal of Hydrogen Energy*, **2014**, 39, 18952-18957	6.7	10
143	Effective nanoconfinement of 2LiBH 4 □MgH 2 via simply MgH 2 premilling for reversible hydrogen storages. *International Journal of Hydrogen Energy*, **2014**, 39, 15614-15626	6.7	34

142	Hydrogen storage systems from waste Mg alloys. *Journal of Power Sources*, **2014**, 270, 554-563	8.9	60
141	2LiBH4–MgH2–0.13TiCl4 confined in nanoporous structure of carbon aerogel scaffold for reversible hydrogen storage. *Journal of Alloys and Compounds*, **2014**, 599, 78-86	5.7	33
140	NaAlH4 production from waste aluminum by reactive ball milling. *International Journal of Hydrogen Energy*, **2014**, 39, 9877-9882	6.7	5
139	Hydrogen storage in Mg–LiBH4 composites catalyzed by FeF3. *Journal of Power Sources*, **2014**, 267, 799-807	8.9	33
138	Structural analysis of calcium reactive hydride composite for solid state hydrogen storage. *Journal of Applied Crystallography*, **2014**, 47, 67-75	3.8	16
137	Cold Spraying of Amorphous Cu50Zr50 Alloys. *Journal of Thermal Spray Technology*, **2014**, 24, 108	2.5	9
136	Cold Spraying of Cu-Al-Bronze for Cavitation Protection in Marine Environments. *Journal of Thermal Spray Technology*, **2014**, 24, 126	2.5	5
135	Effect of the Partial Replacement of CaH2 with CaF2 in the Mixed System CaH2 + MgB2. *Journal of Physical Chemistry C*, **2014**, 118, 28409-28417	3.8	15
134	Cold spraying of Cu-Al-Bronze for cavitation protection in marine environments. *Materialwissenschaft Und Werkstofftechnik*, **2014**, 45, 708-716	0.9	5
133	Cold Gas Sprayed TiO2-Based Electrodes for the Photo-Induced Water Oxidation. *ECS Transactions*, **2014**, 58, 21-30	1	5
132	Magnesium powder injection moulding for biomedical application. *Powder Metallurgy*, **2014**, 57, 331-340	1.9	21
131	Effect of NaH/MgB2 ratio on the hydrogen absorption kinetics of the system NaH + MgB2. *International Journal of Hydrogen Energy*, **2014**, 39, 5030-5036	6.7	12
130	Destabilization of LiBH4 by nanoconfinement in PMMA–BM polymer matrix for reversible hydrogen storage. *International Journal of Hydrogen Energy*, **2014**, 39, 5019-5029	6.7	50
129	Characterization of metal hydrides by in-situ XRD. *International Journal of Hydrogen Energy*, **2014**, 39, 9899-9903	6.7	34
128	Analysis of Thermal History and Residual Stress in Cold-Sprayed Coatings. *Journal of Thermal Spray Technology*, **2014**, 23, 84-90	2.5	53
127	Structural study of a new B-rich phase obtained by partial hydrogenation of 2NaH + MgB2. *International Journal of Hydrogen Energy*, **2013**, 38, 10479-10484	6.7	14
126	Sorption behavior of the MgH2–Mg2FeH6 hydride storage system synthesized by mechanical milling followed by sintering. *International Journal of Hydrogen Energy*, **2013**, 38, 14618-14630	6.7	31
125	MgH2 as dopant for improved activation of commercial Mg ingot. *Journal of Alloys and Compounds*, **2013**, 575, 364-369	5.7	18

124	Nanoconfined 2LiBH4MgH2TiCl3 in carbon aerogel scaffold for reversible hydrogen storage. *International Journal of Hydrogen Energy*, **2013**, 38, 3275-3282	6.7	45
123	Nanoconfined 2LiBH4MgH2 for reversible hydrogen storages: Reaction mechanisms, kinetics and thermodynamics. *International Journal of Hydrogen Energy*, **2013**, 38, 1932-1942	6.7	43
122	Effect of nitrogen flow rate on microstructures and mechanical properties of metallic coatings by warm spray deposition. *Surface and Coatings Technology*, **2013**, 232, 587-599	4.4	12
121	Photocatalytic degradation of oxalic and dichloroacetic acid on TiO2 coated metal substrates. *Catalysis Today*, **2013**, 209, 84-90	5.3	22
120	Effect of Substrate Temperature on Cold-Gas-Sprayed Coatings on Ceramic Substrates. *Journal of Thermal Spray Technology*, **2013**, 22, 422-432	2.5	34
119	Mechanical characterization of mechanically alloyed ultrafine-grained Ti5Si3+40vol% TiAl composites. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 579, 18-25	5.3	8
118	Cold Spraying of Ti2AlC MAX-Phase Coatings. *Journal of Thermal Spray Technology*, **2013**, 22, 406-412	2.5	40
117	Compaction pressure influence on material properties and sorption behaviour of LiBH4MgH2 composite. *International Journal of Hydrogen Energy*, **2013**, 38, 8357-8366	6.7	31
116	Chemical State, Distribution, and Role of Ti- and Nb-Based Additives on the Ca(BH4)2 System. *Journal of Physical Chemistry C*, **2013**, 117, 4394-4403	3.8	23
115	Ca(BH4)2 + MgH2: Desorption Reaction and Role of Mg on Its Reversibility. *Journal of Physical Chemistry C*, **2013**, 117, 3846-3852	3.8	32
114	Cold gas spraying of semiconductor coatings for the photooxidation of water **2013**,		1
113	Patterned CoCrMo and Al2 O3 surfaces for reduced free wear debris in artificial joint arthroplasty. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 3447-56	5.4	14
112	3CaH2 + 4MgB2 + CaF2 Reactive Hydride Composite as a Potential Hydrogen Storage Material: Hydrogenation and Dehydrogenation Pathway. *Journal of Physical Chemistry C*, **2012**, 116, 7207-7212	3.8	14
111	Influence of Stoichiometry on the Hydrogen Sorption Behavior in the LiFMgB2 System. *Journal of Physical Chemistry C*, **2012**, 116, 7010-7015	3.8	8
110	2LiBH4MgH2 in a ResorcinolFurfural Carbon Aerogel Scaffold for Reversible Hydrogen Storage. *Journal of Physical Chemistry C*, **2012**, 116, 1526-1534	3.8	41
109	Differential Scanning Calorimetry (DSC) and Synchrotron X-ray Diffraction Study of Unmilled and Milled LiBH4: A Partial Release of Hydrogen at Moderate Temperatures. *Crystals*, **2012**, 2, 1-21	2.3	11
108	Impact Conditions for Cold Spraying of Hard Metallic Glasses. *Journal of Thermal Spray Technology*, **2012**, 21, 531-540	2.5	35
107	Optimization of hydrogen storage tubular tanks based on light weight hydrides. *International Journal of Hydrogen Energy*, **2012**, 37, 2825-2834	6.7	37

106	Behavior of scaled-up sodium alanate hydrogen storage tanks during sorption. *International Journal of Hydrogen Energy*, **2012**, 37, 2807-2811	6.7	40
105	Economic potential of complex hydrides compared to conventional hydrogen storage systems. *International Journal of Hydrogen Energy*, **2012**, 37, 4204-4214	6.7	32
104	Enhanced volumetric hydrogen density in sodium alanate by compaction. *Journal of Power Sources*, **2011**, 196, 9254-9259	8.9	27
103	Sorption and desorption properties of a CaH2/MgB2/CaF2 reactive hydride composite as potential hydrogen storage material. *Journal of Solid State Chemistry*, **2011**, 184, 3104-3109	3.3	9
102	Activation of the reactive hydride composite 2NaBH4 + MgH2. *Scripta Materialia*, **2011**, 64, 1035-1038	5.6	36
101	Synthesis of nanocomposites and amorphous alloys by mechanical alloying. *Journal of Materials Science*, **2011**, 46, 6301-6315	4.3	49
100	Influence of Impact Angle and Gas Temperature on Mechanical Properties of Titanium Cold Spray Deposits. *Journal of Thermal Spray Technology*, **2011**, 20, 234-242	2.5	97
99	Formation of Cold-Sprayed Ceramic Titanium Dioxide Layers on Metal Surfaces. *Journal of Thermal Spray Technology*, **2011**, 20, 292-298	2.5	56
98	Metallization of Thin Al2O3 Layers in Power Electronics Using Cold Gas Spraying. *Journal of Thermal Spray Technology*, **2011**, 20, 299-306	2.5	28
97	On Parameter Selection in Cold Spraying. *Journal of Thermal Spray Technology*, **2011**, 20, 1161-1176	2.5	224
96	Characterization of Hydrogen Storage Materials and Systems with Photons and Neutrons. *Advanced Engineering Materials*, **2011**, 13, 730-736	3.5	23
95	Research with Neutron and Synchrotron Radiation on Aerospace and Automotive Materials and Components. *Advanced Engineering Materials*, **2011**, 13, 637-657	3.5	5
94	Effect of Transition Metal Fluorides on the Sorption Properties and Reversible Formation of Ca(BH4)2. *Journal of Physical Chemistry C*, **2011**, 115, 2497-2504	3.8	54
93	Nanoconfined 2LiBH4MgH2 Prepared by Direct Melt Infiltration into Nanoporous Materials. *Journal of Physical Chemistry C*, **2011**, 115, 10903-10910	3.8	69
92	Ca(BH4)2MgF2 Reversible Hydrogen Storage: Reaction Mechanisms and Kinetic Properties. *Journal of Physical Chemistry C*, **2011**, 115, 3762-3768	3.8	20
91	Experimental Evidence of Ca[B12H12] Formation During Decomposition of a Ca(BH4)2 + MgH2 Based Reactive Hydride Composite. *Journal of Physical Chemistry C*, **2011**, 115, 18010-18014	3.8	39
90	Basic principles and application potentials of cold gas spraying. *Materialwissenschaft Und Werkstofftechnik*, **2010**, 41, 575-584	0.9	16
89	Role of additives in LiBH4MgH2 reactive hydride composites for sorption kinetics. *Acta Materialia*, **2010**, 58, 3381-3389	8.4	170

88	From Particle Acceleration to Impact and Bonding in Cold Spraying. *Journal of Thermal Spray Technology*, **2009**, 18, 794-808	2.5	364
87	A search for new Mg- and K-containing alanates for hydrogen storage. *International Journal of Hydrogen Energy*, **2009**, 34, 4582-4586	6.7	15
86	Investigation of (Mg, Al, Li, H)-based hydride and alanate mixtures produced by reactive ball milling. *Journal of Alloys and Compounds*, **2009**, 476, 425-428	5.7	8
85	Reversible hydrogen storage in NaF□Al composites. *Journal of Alloys and Compounds*, **2009**, 477, 76-80	5.7	39
84	FUELS □HYDROGEN STORAGE | High Temperature Hydrides **2009**, 459-472		6
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