Christian Knoll

List of Publications by Year
in descending order

33 papers	286 citations	1040056 9 h-index	940533 16 g-index
35 all docs	35 docs citations	35 times ranked	315 citing authors

#	Article	IF	Citations
1	High-Temperature Energy Storage: Kinetic Investigations of the CuO/Cu₂O Reaction Cycle. Energy & Fuels, 2017, 31, 2324-2334.	5.1	53
2	Combining in-situ X-ray diffraction with thermogravimetry and differential scanning calorimetry â€“ An investigation of Co3O4, MnO2 and PbO2 for thermochemical energy storage. Solar Energy, 2017, 153, 11-24.	6.1	29
3	Probing cycle stability and reversibility in thermochemical energy storage â€“ CaC2O4Â·H2O as perfect match?. Applied Energy, 2017, 187, 1-9.	10.1	27
4	Cycle Stability and Hydration Behavior of Magnesium Oxide and Its Dependence on the Precursor-Related Particle Morphology. Nanomaterials, 2018, 8, 795.	4.1	19
5	An extension of the NPK method to include the pressure dependency of solid state reactions. Thermochimica Acta, 2017, 654, 168-178.	2.7	18
6	A Modified Synthetic Pathway for the Synthesis of so far Inaccessible N1â€Functionalized Tetrazole Ligands â€“ Synthesis and Characterization of the 1D Chainâ€Type Spin Crossover Compound [Fe(3ditz)₃](BF₄)₂. European Journal of Inorganic Chemistry, 2013, 2013, 984-991.	2.0	15
7	Tuning the performance of MgO for thermochemical energy storage by dehydration â€“ From fundamentals to phase impurities. Applied Energy, 2019, 253, 113562.	10.1	15
8	Calcium Doping Facilitates Water Dissociation in Magnesium Oxide. Advanced Sustainable Systems, 2018, 2, 1700096.	5.3	12
9	Hexakis (propargyl-1H-tetrazole) Iron(II) X2 [X = BF4, ClO4]â€”Spin Switchable Complexes with Functionalization Potential and the Myth of the Explosive SCO Compound. Magnetochemistry, 2016, 2, 12.	2.4	9
10	Medium-temperature thermochemical energy storage with transition metal ammoniates â€“ A systematic material comparison. Applied Energy, 2021, 285, 116470.	10.1	9
11	Pressure effects on the carbonation of MeO (Meâ€¯=â€¯Co, Mn, Pb, Zn) for thermochemical energy storage. Applied Energy, 2019, 252, 113451.	10.1	8
12	Magnesium oxide from natural magnesite samples as thermochemical energy storage material. Energy Procedia, 2019, 158, 4861-4869.	1.8	8
13	Halogenated Alkyltetrazoles for the Rational Design of Fe^{II} Spinâ€Crossover Materials: Fineâ€Tuning of the Ligand Size. Chemistry - A European Journal, 2018, 24, 5271-5280.	3.3	8
14	An unusually water-poor 5,5â€²-azobistetrazolate of dysprosium: stabilization of a nitrogen-rich heterocycle by a minimum of hydrogen bonds. New Journal of Chemistry, 2013, 37, 3840.	2.8	7
15	Methodology to determine the apparent specific heat capacity of metal hydroxides for thermochemical energy storage. Journal of Thermal Analysis and Calorimetry, 2018, 133, 207-215.	3.6	7
16	Picomolar Traces of Americium(III) Introduce Drastic Changes in the Structural Chemistry of Terbium(III): A Break in the â€œGadolinium Breakâ€. Angewandte Chemie - International Edition, 2017, 56, 13264-13269.	13.8	6
17	Azobis[tetrazolide]â€Carbonates of the Lanthanides â€“ Breaking the Gadolinium Break. European Journal of Inorganic Chemistry, 2018, 2018, 1969-1975.	2.0	6
18	Cooperativity in spin crossover materials as ligand's responsibility â€“ investigations of the Fe(<scp>ii</scp>) â€“ 1,3-bis((1<i>H</i>-tetrazol-1-yl)methyl)bicyclo[1.1.1]pentane system. Dalton Transactions, 2018, 47, 5553-5557.	3.3	5

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19	ATR or transmissionâ€"A variable temperature study comparing both techniques using [Fe(3ditz)3](BF4)2 as model system. Vibrational Spectroscopy, 2016, 86, 198-205.	2.2	4
20	Low-temperature carbonatization of metal oxides. Energy Procedia, 2019, 158, 4870-4881.	1.8	4
21	CuSO4/[Cu(NH3)4]SO4-Composite Thermochemical Energy Storage Materials. Nanomaterials, 2020, 10, 2485.	4.1	4
22	Aryl and Heteroaryl N1â€Tetrazoles through Ligandâ€Free Suzukiâ€Reaction under Aerobic, Aqueous Conditions. European Journal of Organic Chemistry, 2017, 2017, 2416-2424.	2.4	3
23	Microwave alkylation of lithium tetrazolate. Monatshefte FÃ¼r Chemie, 2017, 148, 131-137.	1.8	3
24	Bifunctional Fe(ii) spin crossover-complexes based on Ï‰-(1H-tetrazol-1-yl) carboxylic acids. Dalton Transactions, 2020, 49, 17183-17193.	3.3	3
25	Ammonium bis(salicylaldehyde thiosemicarbazonato)ferrate(III), a supramolecular material containing low-spin Fe^{III}. Acta Crystallographica Section C, Structural Chemistry, 2020, 76, 625-631.	0.5	2
26	Pikomolare Spuren von Am^{III} verursachen drastische Unterschiede in der Koordinationschemie von Tb^{III}: ein Sprung Ã¼ber die â€œGadoliniumeckeâ€. Angewandte Chemie, 2017, 129, 13448-13453.	2.0	1
27	Unsaturated Aryl and Heteroaryl N1-Tetrazoles from 1-Allyl-1H-tetrazole. Synthesis, 2018, 50, 1007-1014.	2.3	1
28	Innentitelbild: Pikomolare Spuren von Am^{III} verursachen drastische Unterschiede in der Koordinationschemie von Tb^{III}: ein Sprung Ã¼ber die â€œGadoliniumeckeâ€•(Angew. Chem.) Tj ETQq0 0 0 rgBT /Overlock	2.0	0
29	Azobis[tetrazolide]-Carbonates of the Lanthanides - Breaking the Gadolinium Break. European Journal of Inorganic Chemistry, 2018, 2018, 1954-1954.	2.0	0
30	Thermochemical Energy Storage: Calcium Doping Facilitates Water Dissociation in Magnesium Oxide (Adv. Sustainable Syst. 1/2018). Advanced Sustainable Systems, 2018, 2, 1870004.	5.3	0
31	Moisture-triggered ambient-temperature carbonatization of main group II metal oxides under elevated CO2 pressure. , 2017, , .		0
32	Lab-scale demonstration of thermochemical energy storage with NH3 and impregnated-loaded zeolites. , 2017, , .		0
33	Metal-Oxides for Thermochemical Energy Storage â€" from Gas-Triggered Isothermal Cycling to Low-Temperature Applications with Increased O2 Pressure. , 2017, , .		0