Maximilian B Gorensek

List of Publications by Year
in descending order

35	642	623188	580395
papers	citations	14 h-index	25 g-index

37	37	37	491
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hybrid sulfur flowsheets using PEM electrolysis and a bayonet decomposition reactor. International Journal of Hydrogen Energy, 2009, 34, 4097-4114.	3.8	75
2	A thermodynamic analysis of the SO2/H2SO4 system in SO2-depolarized electrolysis. International Journal of Hydrogen Energy, 2009, 34, 6089-6095.	3.8	73
3	The Science and Technologies for Fusion Energy With Lasers and Direct-Drive Targets. IEEE Transactions on Plasma Science, 2010, 38, 690-703.	0.6	51
4	Quantifying Individual Potential Contributions of the Hybrid Sulfur Electrolyzer. Journal of the Electrochemical Society, 2010, 157, B952.	1.3	43
5	Hybrid sulfur cycle flowsheets for hydrogen production using high-temperature gas-cooled reactors. International Journal of Hydrogen Energy, 2011, 36, 12725-12741.	3.8	40
6	Development of the hybrid sulfur cycle for use with concentrated solar heat. I. Conceptual design. International Journal of Hydrogen Energy, 2017, 42, 20939-20954.	3.8	39
7	Development of a Thermophysical Properties Model for Flowsheet Simulation of Biomass Pyrolysis Processes. ACS Sustainable Chemistry and Engineering, 2019, 7, 9017-9027.	3.2	33
8	Development and testing of a PEM SO2-depolarized electrolyzer and an operating method that prevents sulfur accumulation. International Journal of Hydrogen Energy, 2015, 40, 13281-13294.	3.8	29
9	Relative economic incentives for hydrogen from nuclear, renewable, and fossil energy sources. International Journal of Hydrogen Energy, 2009, 34, 4237-4242.	3.8	27
10	Sulfur dioxide disproportionation for sulfur based thermochemical energy storage. Solar Energy, 2015, 118, 134-144.	2.9	25
11	Energy Efficiency Limits for a Recuperative Bayonet Sulfuric Acid Decomposition Reactor for Sulfur Cycle Thermochemical Hydrogen Production. Industrial & Engineering Chemistry Research, 2009, 48, 7232-7245.	1.8	21
12	Numerical modeling of a bayonet heat exchanger-based reactor for sulfuric acid decomposition in thermochemical hydrogen production processes. International Journal of Hydrogen Energy, 2017, 42, 20463-20472.	3.8	21
13	Review of Sulfuric Acid Decomposition Processes for Sulfur-Based Thermochemical Hydrogen Production Cycles. Processes, 2020, 8, 1383.	1.3	19
14	Thermodynamic modeling of the hybrid sulfur (HyS) cycle for hydrogen production. Fluid Phase Equilibria, 2018, 460, 175-188.	1.4	14
15	Thermodynamic representation of aqueous sodium nitrate and nitric acid solution with electrolyte NRTL model. Fluid Phase Equilibria, 2016, 407, 105-116.	1.4	13
16	Parametric study of operating conditions of an SO2-depolarized electrolyzer. International Journal of Hydrogen Energy, 2020, 45, 22408-22418.	3.8	13
17	Solar Thermochemical Hydrogen (STCH) Processes. Electrochemical Society Interface, 2018, 27, 53-56.	0.3	12
18	Separation of fine particle dispersions using periodic flows in a spining coiled tube. AICHE Journal, 1986, 32, 798-808.	1.8	11

#	Article	IF	Citations
19	A rigorous process modeling methodology for biomass fast pyrolysis with an entrainedâ€flow reactor. Journal of Advanced Manufacturing and Processing, 2020, 2, .	1.4	10
20	A new process developed for separation of lignin from ammonium hydroxide pretreatment solutions. Environmental Progress and Sustainable Energy, 2012, 31, 130-138.	1.3	9
21	Space Station Water Recovery Trade Studyâ€"Phase Change Technology. , 1988, , .		8
22	Pi-CO2 Aqueous Post-combustion CO2 Capture: Proof of Concept Through Thermodynamic, Hydrodynamic, and Gas-Lift Pump Modeling. Energy Procedia, 2014, 63, 286-292.	1.8	8
23	A Novel Approach to Modeling Biomass Pyrolysis in a Fluidized Bed Reactor. ACS Sustainable Chemistry and Engineering, 2020, 8, 14605-14615.	3.2	7
24	Process model-free analysis for thermodynamic efficiencies of sulfurâ€"iodine processes for thermochemical water decomposition. International Journal of Hydrogen Energy, 2009, 34, 4033-4040.	3.8	6
25	Modeling of a Bayonet Reactor for Sulfuric Acid Decomposition in Thermo-Electrochemical Sulfur Based Hydrogen Production Processes. ECS Transactions, 2017, 75, 7-15.	0.3	6
26	High-performance SO2-depolarized electrolysis cell using advanced polymer electrolyte membranes. International Journal of Hydrogen Energy, 2022, 47, 57-68.	3.8	6
27	Integration of facility modeling capabilities for nuclear nonproliferation analysis. Progress in Nuclear Energy, 2012, 54, 96-111.	1.3	5
28	CO2-Dissolved and Aqueous Gas Separation. Energy Procedia, 2017, 114, 2675-2681.	1.8	5
29	Electrode optimization for efficient hydrogen production using an SO2-depolarized electrolysis cell. International Journal of Hydrogen Energy, 2022, 47, 14180-14185.	3.8	4
30	Separation of fine-particle dispersions using periodic flows in a spinning coiled tube part II: Batch fractionation experiments. AICHE Journal, 1987, 33, 506-509.	1.8	3
31	Modeling Phase Equilibrium of Common Sugars Glucose, Fructose, and Sucrose in Mixed Solvents. Journal of Chemical & Engineering Data, 2021, 66, 4193-4205.	1.0	2
32	Thermochemical hydrogen processes. , 2022, , 63-82.		2
33	Development of a Sulfur Dioxide Depolarized Electrolyzer for Hydrogen Production Using the Hybrid Sulfur Thermochemical Process. , 2008, , .		1
34	Recent Advances in the Development of the Hybrid Sulfur Process for Hydrogen Production. ACS Symposium Series, 2010, , 141-154.	0.5	1
35	An Efficient Hybrid Sulfur Process Using PEM Electrolysis With a Bayonet Decomposition Reactor. , 2008, , .		0