Nicholas AuYeung

List of Publications by Year
in descending order

29 papers	526 citations	687363 13 h-index	642732 23 g-index
31 all docs	31 docs citations	31 times ranked	521 citing authors

#	Article	IF	Citations
1	Thermochemical reduction modeling in a high-temperature moving-bed reactor for energy storage: 1D model. Applied Energy, 2022, 306, 118009.	10.1	16
2	A continuum model for heat and mass transfer in moving-bed reactors for thermochemical energy storage. Applied Energy, 2022, 313, 118842.	10.1	15
3	Methane Coupling to Ethylene and Longer-Chain Hydrocarbons by Low-Energy Electrical Discharge in Microstructured Reactors. Industrial & Engineering Chemistry Research, 2021, 60, 6950-6958.	3.7	6
4	An in-depth investigation of BaO2/BaO redox oxides for reversible solar thermochemical energy storage. Solar Energy Materials and Solar Cells, 2021, 223, 110957.	6.2	13
5	Hafnium based metallic glasses with high density and high glass-forming ability. Journal of Alloys and Compounds, 2021, 882, 160896.	5.5	13
6	Controlled dehumidification to extract clean water from a multicomponent gaseous mixture of organic contaminants. Journal of Water Process Engineering, 2021, 43, 102229.	5.6	3
7	Thermochemical heat recuperation for compressed air energy storage. Energy Conversion and Management, 2021, 250, 114889.	9.2	9
8	Rare-earth and precious-metal free Cu-based metallic glasses with superior glass-forming ability and processability. Applied Physics Letters, 2020, 116, .	3.3	17
9	Non-catalytic ethane cracking using concentrated solar energy. Chemical Engineering Journal, 2019, 355, 58-64.	12.7	7
10	Magnesium-manganese oxides for high temperature thermochemical energy storage. Journal of Energy Storage, 2019, 21, 599-610.	8.1	50
11	Energy storage based on SrCO3 and Sorbentsâ€"A probabilistic analysis towards realizing solar thermochemical power plants. Renewable Energy, 2019, 133, 770-786.	8.9	19
12	Magnesioferrites for solar thermochemical fuel production. Solar Energy, 2018, 163, 1-15.	6.1	16
13	Investigation into SrO/SrCO3 for high temperature thermochemical energy storage. Solar Energy, 2018, 160, 85-93.	6.1	72
14	Reactive Phaseâ€€Change Materials for Enhanced Thermal Energy Storage. Energy Technology, 2018, 6, 351-356.	3.8	5
15	Al2O3 coated LiCoO2 as cathode for high-capacity and long-cycling Li-ion batteries. Chinese Chemical Letters, 2018, 29, 1768-1772.	9.0	27
16	Dry Reforming in a Milli-Scale Reactor Driven by Simulated Sunlight. ChemEngineering, 2018, 2, 50.	2.4	2
17	Development of a small-scale solar thermochemical energy storage system. , 2017, , .		0
18	Effects of tangential-type boundary condition discontinuities on the accuracy of the lattice Boltzmann method for heat and mass transfer. Physical Review E, 2016, 94, 023307.	2.1	9

#	Article	IF	Citations
19	A transient heat transfer model for high temperature solar thermochemical reactors. International Journal of Hydrogen Energy, 2016, 41, 2307-2325.	7.1	25
20	Solar Thermochemical Energy Storage Through Carbonation Cycles of SrCO₃/SrO Supported on SrZrO₃. ChemSusChem, 2015, 8, 3793-3798.	6.8	58
21	Effects of Dopant Metal Variation and Material Synthesis Method on the Material Properties of Mixed Metal Ferrites in Yttria Stabilized Zirconia for Solar Thermochemical Fuel Production. International Journal of Photoenergy, 2015, 2015, 1-10.	2.5	7
22	Lattice Boltzmann method for conjugate heat and mass transfer with interfacial jump conditions. International Journal of Heat and Mass Transfer, 2015, 88, 306-322.	4.8	52
23	Experimental modeling of hydrogen producing steps in a novel sulfurâ€“sulfur thermochemical water splitting cycle. International Journal of Hydrogen Energy, 2015, 40, 2484-2492.	7.1	6
24	Thermal Reduction of Iron Oxide under Reduced Pressure and Implications on Thermal Conversion Efficiency for Solar Thermochemical Fuel Production. Industrial & Engineering Chemistry Research, 2015, 54, 6793-6803.	3.7	22
25	Cobalt Ferrite in YSZ for Use as Reactive Material in Solar Thermochemical Water and Carbon Dioxide Splitting, Part I: Material Characterization. Jom, 2013, 65, 1670-1681.	1.9	27
26	Cobalt Ferrite in YSZ for Use as Reactive Material in Solar Thermochemical Water and Carbon Dioxide Splitting, Part II: Kinetic Modeling. Jom, 2013, 65, 1682-1693.	1.9	13
27	Steam reformation of hydrogen sulfide. International Journal of Hydrogen Energy, 2013, 38, 6304-6313.	7.1	9
28	Parametric Study of Hydrocarbon Chain Growth from Methane via a Nonthermal Plasma Discharge Microreactor. Industrial & Engineering Chemistry Research, 0, , .	3.7	2
29	CO₂ Reduction by Multiple Low-Energy Electric Discharges in a Microstructured Reactor: Experiments and Modeling. Industrial & Engineering Chemistry Research, 0, , .	3.7	4