

# Jonathan R Scheffe

## List of Publications by Year in descending order

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35  
papers

3,620  
citations

236925

25  
h-index

361022

35  
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36  
all docs

36  
docs citations

36  
times ranked

2035  
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterization of Zr-Doped Ceria and Sr-Doped La-Mn Perovskites as Redox Intermediates for Solar Chemical-Looping Reforming of Methane. <i>Energy Technology</i> , 2022, 10, 2100473.	3.8	5
2	Solar Hydrogen Production. <i>Energy Technology</i> , 2022, 10, .	3.8	4
3	Improved Performance and Efficiency of Lanthanum-Strontium-Manganese Perovskites Undergoing Isothermal Redox Cycling under Controlled pH <sub>2</sub> O/pH <sub>2</sub> . <i>Energy &amp; Fuels</i> , 2020, 34, 16918-16926.	5.1	10
4	A Laser-Based Heating System for Studying the Morphological Stability of Porous Ceria and Porous La <sub>0.6</sub> Sr <sub>0.4</sub> MnO <sub>3</sub> Perovskite during Solar Thermochemical Redox Cycling. <i>Energies</i> , 2020, 13, 5935.	3.1	1
5	Facile CO <sub>2</sub> separation and subsequent H <sub>2</sub> production via chemical-looping combustion over ceria-zirconia solid solutions. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 8545-8556.	2.8	3
6	Oxygen Nonstoichiometry and Defect Equilibria of Yttrium Manganite Perovskites with Strontium A-Site and Aluminum B-Site Doping. <i>Journal of Physical Chemistry C</i> , 2020, 124, 4448-4458.	3.1	7
7	Solar Reactor Demonstration of Efficient and Selective Syngas Production via Chemical-Looping Dry Reforming of Methane over Ceria. <i>Energy Technology</i> , 2020, 8, 2000053.	3.8	28
8	Beyond Ceria: Theoretical Investigation of Isothermal and Near-Isothermal Redox Cycling of Perovskites for Solar Thermochemical Fuel Production. <i>Energy &amp; Fuels</i> , 2019, 33, 12871-12884.	5.1	32
9	Role of Surface Oxygen Vacancy Concentration on the Dissociation of Methane over Nonstoichiometric Ceria. <i>Journal of Physical Chemistry C</i> , 2019, 123, 13208-13218.	3.1	25
10	Experimental Framework for Evaluation of the Thermodynamic and Kinetic Parameters of Metal-Oxides for Solar Thermochemical Fuel Production. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2019, 141, .	1.8	11
11	Kinetic insights into the reduction of ceria facilitated via the partial oxidation of methane. <i>Materials Today Energy</i> , 2018, 9, 39-48.	4.7	25
12	Advances and trends in redox materials for solar thermochemical fuel production. <i>Solar Energy</i> , 2017, 156, 3-20.	6.1	130
13	Theoretical and Experimental Investigation of Solar Methane Reforming through the Nonstoichiometric Ceria Redox Cycle. <i>Energy Technology</i> , 2017, 5, 2138-2149.	3.8	41
14	Reticulated porous ceria undergoing thermochemical reduction with high-flux irradiation. <i>International Journal of Heat and Mass Transfer</i> , 2017, 107, 439-449.	4.8	78
15	Response to Rebuttal to "Theoretical and Experimental Investigation of Solar Methane Reforming through the Nonstoichiometric Ceria Redox Cycle". <i>Energy Technology</i> , 2017, 5, 2153-2155.	3.8	1
16	Combined Ceria Reduction and Methane Reforming in a Solar-Driven Particle-Transport Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2017, 56, 10300-10308.	3.7	38
17	CO <sub>2</sub> Capture Using Aqueous Potassium Carbonate Promoted by Ethylaminoethanol: A Kinetic Study. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 5238-5246.	3.7	32
18	Experimental Demonstration of the Thermochemical Reduction of Ceria in a Solar Aerosol Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 10618-10625.	3.7	41

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19	Lanthanum Manganite Perovskites with Ca/Sr A-site and Al B-site Doping as Effective Oxygen Exchange Materials for Solar Thermochemical Fuel Production. <i>Energy Technology</i> , 2015, 3, 1130-1142.	3.8	116
20	Kinetics of CO <sub>2</sub> Reduction over Nonstoichiometric Ceria. <i>Journal of Physical Chemistry C</i> , 2015, 119, 16452-16461.	3.1	114
21	Demonstration of the Entire Production Chain to Renewable Kerosene via Solar Thermochemical Splitting of H <sub>2</sub> O and CO <sub>2</sub> . <i>Energy &amp; Fuels</i> , 2015, 29, 3241-3250.	5.1	167
22	Morphological Characterization and Effective Thermal Conductivity of Dual-Scale Reticulated Porous Structures. <i>Materials</i> , 2014, 7, 7173-7195.	2.9	38
23	Thermochemical CO <sub>2</sub> splitting <i>via</i> redox cycling of ceria reticulated foam structures with dual-scale porosities. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 10503-10511.	2.8	171
24	Thermal Reduction of Ceria within an Aerosol Reactor for H <sub>2</sub> O and CO <sub>2</sub> Splitting. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 2175-2182.	3.7	75
25	Oxygen exchange materials for solar thermochemical splitting of H <sub>2</sub> O and CO <sub>2</sub> : a review. <i>Materials Today</i> , 2014, 17, 341-348.	14.2	322
26	Diffusion of Oxygen in Ceria at Elevated Temperatures and Its Application to H <sub>2</sub> O/CO <sub>2</sub> Splitting Thermochemical Redox Cycles. <i>Journal of Physical Chemistry C</i> , 2014, 118, 5216-5225.	3.1	119
27	Kinetics and mechanism of solar-thermochemical H <sub>2</sub> production by oxidation of a cobalt ferrite-zirconia composite. <i>Energy and Environmental Science</i> , 2013, 6, 963.	30.8	123
28	Lanthanum-Strontium-Manganese Perovskites as Redox Materials for Solar Thermochemical Splitting of H <sub>2</sub> O and CO <sub>2</sub> . <i>Energy &amp; Fuels</i> , 2013, 27, 4250-4257.	5.1	306
29	Synthesis, Characterization, and Thermochemical Redox Performance of Hf <sup>4+</sup> , Zr <sup>4+</sup> , and Sc <sup>3+</sup> Doped Ceria for Splitting CO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2013, 117, 24104-24114.	3.1	153
30	Solar Thermochemical CO <sub>2</sub> Splitting Utilizing a Reticulated Porous Ceria Redox System. <i>Energy &amp; Fuels</i> , 2012, 26, 7051-7059.	5.1	331
31	Thermodynamic Analysis of Cerium-Based Oxides for Solar Thermochemical Fuel Production. <i>Energy &amp; Fuels</i> , 2012, 26, 1928-1936.	5.1	213
32	Syngas production by simultaneous splitting of H <sub>2</sub> O and CO <sub>2</sub> via ceria redox reactions in a high-temperature solar reactor. <i>Energy and Environmental Science</i> , 2012, 5, 6098-6103.	30.8	393
33	Hydrogen Production via Chemical Looping Redox Cycles Using Atomic Layer Deposition-Synthesized Iron Oxide and Cobalt Ferrites. <i>Chemistry of Materials</i> , 2011, 23, 2030-2038.	6.7	153
34	A spinel ferrite/hercynite water-splitting redox cycle. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 3333-3340.	7.1	210
35	Atomic layer deposition of iron(III) oxide on zirconia nanoparticles in a fluidized bed reactor using ferrocene and oxygen. <i>Thin Solid Films</i> , 2009, 517, 1874-1879.	1.8	103