

Chr Sattler

List of Publications by Year in descending order

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188
papers

6,407
citations

61857

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196
all docs

196
docs citations

196
times ranked

3587
citing authors

#	ARTICLE	IF	CITATIONS
1	Reticulated Porous Perovskite Structures for Thermochemical Solar Energy Storage. <i>Advanced Energy Materials</i> , 2022, 12, .	10.2	17
2	A particle receiver-driven thermochemical cycle employing elemental sulphur for solar thermochemical energy storage: Investigation of particles as concentrated sunlight harvesting media and sulphur trioxide splitting catalysts. <i>Solar Energy</i> , 2022, 234, 21-38.	2.9	4
3	Holistic View on Synthetic Natural Gas Production: A Technical, Economic and Environmental Analysis. <i>Energies</i> , 2022, 15, 1608.	1.6	9
4	Study of a new receiver-reactor cavity system with multiple mobile redox units for solar thermochemical water splitting. <i>Solar Energy</i> , 2022, 235, 118-128.	2.9	7
5	Operation optimization of an array of receiver-reactors for solar fuel production. <i>AIP Conference Proceedings</i> , 2022, , .	0.3	1
6	Solar thermochemical energy storage in elemental sulphur: Design, development and construction of a lab-scale sulphuric acid splitting reactor powered by hot ceramic particles. <i>AIP Conference Proceedings</i> , 2022, , .	0.3	1
7	Solar calcium looping cycle for CO ₂ capturing in a cement plant. Definition of process parameters and reactors selection. <i>Solar Energy</i> , 2022, 238, 189-202.	2.9	11
8	Oxidation kinetics of La and Yb incorporated Zr-doped ceria for solar thermochemical fuel production in the context of dopant ionic radius and valence. <i>Open Ceramics</i> , 2022, 10, 100269.	1.0	3
9	Techno-Economic Assessment of the Integration of Direct Air Capture and the Production of Solar Fuels. <i>Energies</i> , 2022, 15, 5017.	1.6	4
10	Electrochemical Hydrogen Production Powered by PV/CSP Hybrid Power Plants: A Modelling Approach for Cost Optimal System Design. <i>Energies</i> , 2021, 14, 3437.	1.6	18
11	Recent progress towards solar energy integration into low-pressure green ammonia production technologies. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 25121-25136.	3.8	20
12	Two-step thermochemical electrolysis: An approach for green hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 24909-24918.	3.8	41
13	Synergies between Direct Air Capture Technologies and Solar Thermochemical Cycles in the Production of Methanol. <i>Energies</i> , 2021, 14, 4818.	1.6	10
14	Impact of bed motion on the wall-to-bed heat transfer for powders in a rotary kiln and effect of built-ins. <i>International Journal of Heat and Mass Transfer</i> , 2021, 177, 121473.	2.5	5
15	High performance solar receiverâ€“reactor for hydrogen generation. <i>Renewable Energy</i> , 2021, 179, 1217-1232.	4.3	11
16	Oxygen Crossover in Solidâ€“Solid Heat Exchangers for Solar Water and Carbon Dioxide Splitting: A Thermodynamic Analysis. <i>Journal of Energy Resources Technology, Transactions of the ASME</i> , 2021, 143, .	1.4	5
17	Integration assessment of the hybrid sulphur cycle with a copper production plant. <i>Energy Conversion and Management</i> , 2021, 249, 114832.	4.4	5
18	Solar thermal methane reforming. <i>Advances in Chemical Engineering</i> , 2021, 58, 91-130.	0.5	1

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19	High temperature production of hydrogen: Assessment of non-renewable resources technologies and emerging trends. International Journal of Hydrogen Energy, 2020, 45, 26022-26035.	3.8	49
20	Assessment of sustainable high temperature hydrogen production technologies. International Journal of Hydrogen Energy, 2020, 45, 26156-26165.	3.8	43
21	CO2 emission reduction in the cement industry by using a solar calciner. Renewable Energy, 2020, 145, 1578-1596.	4.3	77
22	Calibration of parameters for DEM simulations of solar particle receivers by bulk experiments and surrogate functions. Powder Technology, 2020, 364, 831-844.	2.1	13
23	A techno-economic perspective on solar-to-hydrogen concepts through 2025. Sustainable Energy and Fuels, 2020, 4, 5818-5834.	2.5	27
24	Performance analysis of operational strategies for monolithic receiver-reactor arrays in solar thermochemical hydrogen production plants. International Journal of Hydrogen Energy, 2020, 45, 26104-26116.	3.8	20
25	Redox thermochemistry of Ca-Mn-based perovskites for oxygen atmosphere control in solar-thermochemical processes. Solar Energy, 2020, 198, 612-622.	2.9	16
26	Efficiency assessment of solar redox reforming in comparison to conventional reforming. International Journal of Hydrogen Energy, 2020, 45, 4137-4151.	3.8	6
27	Isothermal relaxation kinetics for the reduction and oxidation of SrFeO ₃ based perovskites. Physical Chemistry Chemical Physics, 2020, 22, 2466-2474.	1.3	24
28	Methanol production using hydrogen from concentrated solar energy. International Journal of Hydrogen Energy, 2020, 45, 26117-26125.	3.8	22
29	Parametric investigation of a volumetric solar receiver-reactor. Solar Energy, 2020, 204, 256-269.	2.9	11
30	Solar rotary kiln for continuous treatment of particle material: Chemical experiments from micro to milli meter particle size. AIP Conference Proceedings, 2020, , .	0.3	7
31	Future Fuels—Analyses of the Future Prospects of Renewable Synthetic Fuels. Energies, 2020, 13, 138.	1.6	25
32	Demonstration Reactor System for the Indirect Solar-Thermochemical Reduction of Redox Particles—The Particle Mix Reactor. Journal of Energy Resources Technology, Transactions of the ASME, 2020, 142, .	1.4	3
33	Oxygen Crossover in Solid-Solid Heat Exchangers for Solar Water and Carbon Dioxide Splitting: A Thermodynamic Analysis. , 2020, , .		1
34	Ammonia and nitrogen-based fertilizer production by solar-thermochemical processes. AIP Conference Proceedings, 2020, , .	0.3	1
35	Solar energy conversion and storage through sulphur-based thermochemical cycles implemented on centrifugal particle receivers. AIP Conference Proceedings, 2020, , .	0.3	3
36	Modeling, simulation and economic analysis of CSP-driven solar fuel plant for diesel and gasoline production. AIP Conference Proceedings, 2019, , .	0.3	0

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37	Carbon Capture for CO ₂ Emission Reduction in the Cement Industry in Germany. <i>Energies</i> , 2019, 12, 2432.	1.6	33
38	Solar fuels production: Two-step thermochemical cycles with cerium-based oxides. <i>Progress in Energy and Combustion Science</i> , 2019, 75, 100785.	15.8	122
39	One year with synlight " Review of operating experience. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	5
40	Materials design of perovskite solid solutions for thermochemical applications. <i>Energy and Environmental Science</i> , 2019, 12, 1369-1384.	15.6	122
41	Air separation and selective oxygen pumping via temperature and pressure swing oxygen adsorption using a redox cycle of SrFeO ₃ perovskite. <i>Chemical Engineering Science</i> , 2019, 203, 68-75.	1.9	53
42	Solar treatment of cohesive particles in a directly irradiated rotary kiln. <i>Solar Energy</i> , 2019, 182, 480-490.	2.9	55
43	Solar Thermochemical Cycles for Fuel Production in Germany. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2019, 141, .	1.1	6
44	Redox Behavior of Solid Solutions in the SrFe _{1-x} Cu _x O ₃ System for Application in Thermochemical Oxygen Storage and Air Separation. <i>Energy Technology</i> , 2019, 7, 131-139.	1.8	28
45	Oxide particles as combined heat storage medium and sulphur trioxide decomposition catalysts for solar hydrogen production through sulphur cycles. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 9830-9840.	3.8	10
46	Moving Brick Receiver"Reactor: A Solar Thermochemical Reactor and Process Design With a Solid"Solid Heat Exchanger and On-Demand Production of Hydrogen and/or Carbon Monoxide. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2019, 141, .	1.1	13
47	Redox Oxides-Based Solar Thermochemistry and Its Materialization to Reactor/Heat Exchanger Concepts for Efficient Solar Energy Harvesting, Transformation and Storage. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2019, 141, .	1.1	12
48	Performance Assessment of a Heat Recovery System for Monolithic Receiver-Reactors. <i>Journal of Solar Energy Engineering, Transactions of the ASME</i> , 2019, 141, .	1.1	9
49	Thermochemical oxygen pumping for improved hydrogen production in solar redox cycles. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 9802-9810.	3.8	30
50	Demonstration Reactor System for the Indirect Solar-Thermochemical Reduction of Redox Particles: The Particle Mix Reactor. , 2019, , .		0
51	Mitigation methods for errors in oxygen measurement with redox cycling of materials for hydrogen and syngas production. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 9165-9180.	3.8	1
52	Citric acid auto-combustion synthesis of Ti-containing perovskites via aqueous precursors. <i>Solid State Ionics</i> , 2018, 315, 92-97.	1.3	9
53	Experimental and numerical analysis of a solar rotary kiln for continuous treatment of particle material. <i>AIP Conference Proceedings</i> , 2018, , .	0.3	5
54	(Solar) Mixed Reforming of Methane: Potential and Limits in Utilizing CO ₂ as Feedstock for Syngas Production" A Thermodynamic Analysis. <i>Energies</i> , 2018, 11, 2537.	1.6	8

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55	Oxides and porous structures based on earth-abundant elements for hybrid sensible/thermochemical solar energy storage in air-operated solar thermal power plants. AIP Conference Proceedings, 2018, , .	0.3	3
56	Development of a Novel Solar Photoelectrochemical Tandem Reactor With a Perforated Photocathode for Simultaneous Hydrogen Production and Waste Water Treatment. , 2018, , .		1
57	Demonstration of thermochemical oxygen pumping for atmosphere control in reduction reactions. Solar Energy, 2018, 170, 273-279.	2.9	30
58	4.18 Solar Fuels. , 2018, , 733-761.		1
59	Solar thermochemical heat storage via the Co ₃ O ₄ /CoO looping cycle: Storage reactor modelling and experimental validation. Solar Energy, 2017, 144, 453-465.	2.9	58
60	Exploitation of thermochemical cycles based on solid oxide redox systems for thermochemical storage of solar heat. Part 6: Testing of Mn-based combined oxides and porous structures. Solar Energy, 2017, 149, 227-244.	2.9	52
61	Design, development, construction and operation of a novel metal hydride compressor. International Journal of Hydrogen Energy, 2017, 42, 12364-12374.	3.8	40
62	Solar hydrogen production via sulphur based thermochemical water-splitting. Solar Energy, 2017, 156, 30-47.	2.9	72
63	Redox chemistry of CaMnO ₃ and Ca _{0.8} Sr _{0.2} MnO ₃ oxygen storage perovskites. Journal of Materials Chemistry A, 2017, 5, 7912-7919.	5.2	79
64	Experimental evaluation of a pilot-scale thermochemical storage system for a concentrated solar power plant. Applied Energy, 2017, 189, 66-75.	5.1	92
65	Hydrogen production by coupling pressurized high temperature electrolyser with solar tower technology. International Journal of Hydrogen Energy, 2017, 42, 13498-13509.	3.8	28
66	Heat transfer in a directly irradiated ceria particle bed under vacuum conditions. Solar Energy, 2017, 158, 737-745.	2.9	7
67	Applications and limitations of two step metal oxide thermochemical redox cycles; a review. Journal of Materials Chemistry A, 2017, 5, 18951-18966.	5.2	133
68	Design of a pilot scale directly irradiated, high temperature, and low pressure moving particle cavity chamber for metal oxide reduction. Solar Energy, 2017, 157, 365-376.	2.9	23
69	Experimental proof of concept of a pilot-scale thermochemical storage unit. AIP Conference Proceedings, 2017, , .	0.3	11
70	Fabrication and testing of CONTISOL: A new receiver-reactor for day and night solar thermochemistry. Applied Thermal Engineering, 2017, 127, 46-57.	3.0	10
71	Redox thermodynamics and phase composition in the system SrFeO ₃ –SrMnO ₃ . Solid State Ionics, 2017, 308, 149-155.	1.3	59
72	Vacuum pumping options for application in solar thermochemical redox cycles – Assessment of mechanical-, jet- and thermochemical pumping systems. Solar Energy, 2017, 141, 91-102.	2.9	74

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73	Particle Conveyer for Solar Thermo-Chemical Processes and Related Solid Heat Recovery Systems. , 2016, , .		0
74	Thermodynamic Model of a Solar Receiver for Superheating of Sulfur Trioxide and Steam at Pilot Plant Scale. , 2016, , .		0
75	Design and construction of a cascading pressure reactor prototype for solar-thermochemical hydrogen production. AIP Conference Proceedings, 2016, , .	0.3	14
76	Entropy Analysis of Solar Two-Step Thermochemical Cycles for Water and Carbon Dioxide Splitting. Entropy, 2016, 18, 24.	1.1	10
77	Solar-Driven Continuous Methane Reforming Reactor. Green Energy and Technology, 2016, , 249-255.	0.4	1
78	SolarSyngas: Results from a virtual institute developing materials and key components for solar thermochemical fuel production. AIP Conference Proceedings, 2016, , .	0.3	2
79	Modeling of a Solar Receiver for Superheating Sulfuric Acid. Journal of Solar Energy Engineering, Transactions of the ASME, 2016, 138, .	1.1	6
80	A solar receiver-storage modular cascade based on porous ceramic structures for hybrid sensible/thermochemical solar energy storage. AIP Conference Proceedings, 2016, , .	0.3	5
81	Out-of-Lab Solar Photocatalytic Hydrogen Production in the Presence of Methanol Employing the Solar Concentrator SoCRatus. , 2016, , .		1
82	Particleâ€“particle heat transfer coefficient in a binary packed bed of alumina and zirconia-ceria particles. Applied Thermal Engineering, 2016, 101, 101-111.	3.0	11
83	Exploitation of thermochemical cycles based on solid oxide redox systems for thermochemical storage of solar heat. Part 5: Testing of porous ceramic honeycomb and foam cascades based on cobalt and manganese oxides for hybrid sensible/thermochemical heat storage. Solar Energy, 2016, 139, 676-694.	2.9	43
84	On the assessment of renewable industrial processes: Case study for solar co-production of methanol and power. Applied Energy, 2016, 183, 121-132.	5.1	24
85	Statistical thermodynamics of non-stoichiometric ceria and ceria zirconia solid solutions. Physical Chemistry Chemical Physics, 2016, 18, 23147-23154.	1.3	50
86	High temperature hydrogen production: Design of a 750 KW demonstration plant for a two step thermochemical cycle. Solar Energy, 2016, 135, 232-241.	2.9	41
87	Perovskite oxides for application in thermochemical air separation and oxygen storage. Journal of Materials Chemistry A, 2016, 4, 13652-13659.	5.2	110
88	Solar thermochemical hydrogen production using ceria zirconia solid solutions: Efficiency analysis. International Journal of Hydrogen Energy, 2016, 41, 19320-19328.	3.8	47
89	Exploitation of thermochemical cycles based on solid oxide redox systems for thermochemical storage of solar heat. Part 4: Screening of oxides for use in cascaded thermochemical storage concepts. Solar Energy, 2016, 139, 695-710.	2.9	79
90	Modelling and scaling analysis of a solar reactor for sulphuric acid cracking in a hybrid sulphur cycle process for thermochemical hydrogen production. International Journal of Hydrogen Energy, 2016, 41, 8008-8019.	3.8	9

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91	Oxidation and Reduction Reaction Kinetics of Mixed Cerium Zirconium Oxides. Journal of Physical Chemistry C, 2016, 120, 2027-2035.	1.5	47
92	Available online Efficiency potential of indirectly heated solar reforming with different types of solar air receivers. Applied Thermal Engineering, 2016, 92, 202-209.	3.0	11
93	Solar Aluminum Recycling in a Directly Heated Rotary Kiln. , 2016, , 235-240.		2
94	Solar-Aided Syngas Production via Two-Step, Redox-Pair-Based Thermochemical Cycles. , 2015, , 475-513.		1
95	Hybrid Sensible/Thermochemical Storage of Solar Energy in Cascades of Redox-Oxide-Pair-Based Porous Ceramics. , 2015, , .		2
96	Modeling of a Solar Receiver for Superheating Sulfuric Acid. , 2015, , .		0
97	Counter flow sweep gas demand for the ceria redox cycle. Solar Energy, 2015, 122, 1011-1022.	2.9	44
98	Making Fuel While the Sun Shines. Mechanical Engineering, 2015, 137, 46-51.	0.0	0
99	Numerical Model to Design a Thermochemical Storage System for Solar Power Plant. Energy Procedia, 2015, 75, 2137-2143.	1.8	11
100	Thermodynamics of CeO ₂ Thermochemical Fuel Production. Energy & Fuels, 2015, 29, 1001-1009.	2.5	115
101	Ceria Doped with Zirconium and Lanthanide Oxides to Enhance Solar Thermochemical Production of Fuels. Journal of Physical Chemistry C, 2015, 119, 6929-6938.	1.5	71
102	Hybrid Sensible/Thermochemical Solar Energy Storage Concepts Based on Porous Ceramic Structures and Redox Pair Oxides Chemistry. Energy Procedia, 2015, 69, 706-715.	1.8	18
103	Solar power tower as heat and electricity source for a solid oxide electrolyzer: a case study. International Journal of Energy Research, 2015, 39, 1120-1130.	2.2	24
104	Hydrogen production via thermochemical water splitting. , 2015, , 319-347.		4
105	Design of a Thermochemical Storage System for Air-operated Solar Tower Power Plants. Energy Procedia, 2015, 69, 1039-1048.	1.8	10
106	Process modelling and heat management of the solar hybrid sulfur cycle. International Journal of Hydrogen Energy, 2015, 40, 4461-4473.	3.8	14
107	Development of a Solar Fuels Roadmap for South Africa. Energy Procedia, 2015, 69, 1838-1848.	1.8	1
108	Concept analysis of an indirect particle-based redox process for solar-driven H ₂ O/CO ₂ splitting. Solar Energy, 2015, 113, 158-170.	2.9	40

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109	Exploitation of thermochemical cycles based on solid oxide redox systems for thermochemical storage of solar heat. Part 2: Redox oxide-coated porous ceramic structures as integrated thermochemical reactors/heat exchangers. <i>Solar Energy</i> , 2015, 114, 440-458.	2.9	94
110	Exploitation of thermochemical cycles based on solid oxide redox systems for thermochemical storage of solar heat. Part 3: Cobalt oxide monolithic porous structures as integrated thermochemical reactors/heat exchangers. <i>Solar Energy</i> , 2015, 114, 459-475.	2.9	88
111	Efficiency assessment of a two-step thermochemical water-splitting process based on a dynamic process model. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 12108-12119.	3.8	15
112	Development of a simulation-software for a hydrogen production process on a solar tower. <i>Solar Energy</i> , 2015, 112, 205-217.	2.9	3
113	A review on solar thermal syngas production via redox pair-based water/carbon dioxide splitting thermochemical cycles. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 42, 254-285.	8.2	316
114	Cobalt Oxide-Based Structured Thermochemical Reactors/Heat Exchangers for Solar Thermal Energy Storage in Concentrated Solar Power Plants. , 2014, , .		12
115	Solar thermal reforming of methane feedstocks for hydrogen and syngas productionâ€”A review. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 29, 656-682.	8.2	306
116	Heat recovery concept for thermochemical processes using a solid heat transfer medium. <i>Applied Thermal Engineering</i> , 2014, 73, 1006-1013.	3.0	42
117	Solar Hydrogen by High-temperature Electrolysis: Flowsheeting and Experimental Analysis of a Tube-type Receiver Concept for Superheated Steam Production. <i>Energy Procedia</i> , 2014, 49, 1960-1969.	1.8	20
118	Thermochemical Solar Energy Storage Via Redox Oxides: Materials and Reactor/Heat Exchanger Concepts. <i>Energy Procedia</i> , 2014, 49, 1034-1043.	1.8	107
119	Exploitation of thermochemical cycles based on solid oxide redox systems for thermochemical storage of solar heat. Part 1: Testing of cobalt oxide-based powders. <i>Solar Energy</i> , 2014, 102, 189-211.	2.9	147
120	Tâ€”S diagram efficiency analysis of two-step thermochemical cycles for solar water splitting under various process conditions. <i>Energy</i> , 2014, 67, 298-308.	4.5	32
121	Solid Phase Heat Recovery and Multi Chamber Reduction for Redox Cycles. , 2014, , .		10
122	Design of a Concentrator With a Rectangular Flat Focus and Operation With a Suspension Reactor for Experiments in the Field of Photocatalytic Water Splitting. , 2014, , .		0
123	Making Fuel While the Sun Shines. <i>Mechanical Engineering</i> , 2014, 136, 38-43.	0.0	0
124	Isothermal Water Splitting. <i>Science</i> , 2013, 341, 470-471.	6.0	39
125	Analysis and improvement of a high-efficiency solar cavity reactor design for a two-step thermochemical cycle for solar hydrogen production from water. <i>Solar Energy</i> , 2013, 97, 26-38.	2.9	31
126	Thermal model for the optimization of a solar rotary kiln to be used as high temperature thermochemical reactor. <i>Solar Energy</i> , 2013, 95, 279-289.	2.9	37

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127	Sulphur based thermochemical cycles: Development and assessment of key components of the process. International Journal of Hydrogen Energy, 2013, 38, 6197-6204.	3.8	32
128	Solar Thermal Water Splitting. , 2013, , 63-86.		5
129	Material Analysis of Coated Siliconized Silicon Carbide (SiSiC) Honeycomb Structures for Thermochemical Hydrogen Production. Materials, 2013, 6, 421-436.	1.3	9
130	Sulfur Based Thermochemical Energy Storage for Concentrated Solar Power. , 2013, , .		5
131	Thermogravimetric Analysis of Zirconia-Doped Ceria for Thermochemical Production of Solar Fuel. American Journal of Analytical Chemistry, 2013, 04, 37-45.	0.3	63
132	Materials-Related Aspects of Thermochemical Water and Carbon Dioxide Splitting: A Review. Materials, 2012, 5, 2015-2054.	1.3	129
133	Techno-economic analysis of combined concentrating solar power and desalination plant configurations in Israel and Jordan. Desalination and Water Treatment, 2012, 41, 9-25.	1.0	52
134	Development of a Concentrator With a Rectangular Flat Focus Used for Hydrogen Production via Photocatalytic Water Splitting Employing Solar Radiation. , 2012, , .		0
135	Development and test of a solar reactor for decomposition of sulphuric acid in thermochemical hydrogen production. International Journal of Hydrogen Energy, 2012, 37, 16615-16622.	3.8	43
136	Solar-heated rotary kiln for thermochemical energy storage. Solar Energy, 2012, 86, 3040-3048.	2.9	165
137	Numerical analysis of operation conditions and design aspects of a sulfur trioxide decomposer for solar energy conversion. International Journal of Energy Research, 2012, 36, 798-808.	2.2	1
138	Hydrogen production via sulfur-based thermochemical cycles: Part 3: Durability and post-characterization of silicon carbide honeycomb substrates coated with metal oxide-based candidate catalysts for the sulfuric acid decomposition step. International Journal of Hydrogen Energy, 2012, 37, 8190-8203.	3.8	33
139	Development of a system model for a hydrogen production process on a solar tower. Solar Energy, 2012, 86, 99-111.	2.9	32
140	Technologies and trends in solar power and fuels. Energy and Environmental Science, 2011, 4, 2503.	15.6	78
141	Examples of Solar Thermal Fuel Production. , 2011, , .		0
142	HycycleS: a project on nuclear and solar hydrogen production by sulphur-based thermochemical cycles. International Journal of Nuclear Hydrogen Production and Applications, 2011, 2, 202.	0.2	7
143	A multicriteria approach for evaluating high temperature hydrogen production processes. International Journal of Multicriteria Decision Making, 2011, 1, 177.	0.1	4
144	Potential of hybridisation of the thermochemical hybrid-sulphur cycle for the production of hydrogen by using nuclear and solar energy in the same plant. International Journal of Nuclear Hydrogen Production and Applications, 2011, 2, 178.	0.2	6

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145	Modeling of a solar receiver-reactor for sulfur-based thermochemical cycles for hydrogen generation. International Journal of Energy Research, 2011, 35, 449-458.	2.2	12
146	Hydrogen production via sulfur-based thermochemical cycles: Part 2: Performance evaluation of Fe ₂ O ₃ -based catalysts for the sulfuric acid decomposition step. International Journal of Hydrogen Energy, 2011, 36, 6496-6509.	3.8	71
147	Test operation of a 100kW pilot plant for solar hydrogen production from water on a solar tower. Solar Energy, 2011, 85, 634-644.	2.9	138
148	Investigations of the Regeneration Step of a Thermochemical Cycle Using Mixed Iron Oxides Coated on SiSiC Substrates. , 2011, , .		1
149	Numerical Optimization of a Volumetric Solar Receiver-Reactor for Thermochemical Hydrogen Generation via Decomposition of Sulfur Trioxide. , 2010, , .		1
150	Solar Thermochemical Generation of Hydrogen: Development of a Receiver Reactor for the Decomposition of Sulfuric Acid. Journal of Solar Energy Engineering, Transactions of the ASME, 2009, 131, .	1.1	25
151	Simulation of a Volumetric Solar Receiver-Reactor for Hydrogen Producing Thermochemical Cycles. , 2009, , .		2
152	Simulation of a Solar Receiver-Reactor for Hydrogen Production. , 2009, , .		6
153	Thermodynamic analysis of two-step solar water splitting with mixed iron oxides. International Journal of Energy Research, 2009, 33, 893-902.	2.2	44
154	Experimental study on sulfur trioxide decomposition in a volumetric solar receiver-reactor. International Journal of Energy Research, 2009, 33, 799-812.	2.2	23
155	Kinetic investigations of the hydrogen production step of a thermochemical cycle using mixed iron oxides coated on ceramic substrates. International Journal of Energy Research, 2009, 34, n/a-n/a.	2.2	9
156	Operational strategy of a two-step thermochemical process for solar hydrogen production. International Journal of Hydrogen Energy, 2009, 34, 4537-4545.	3.8	94
157	Prospects of solar thermal hydrogen production processes. International Journal of Hydrogen Energy, 2009, 34, 4256-4267.	3.8	186
158	FUELS â€™ HYDROGEN PRODUCTION Natural Gas: Solar-Thermal Steam Reforming. , 2009, , 300-312.		4
159	FUELS â€™ HYDROGEN PRODUCTION Thermochemical Cycles. , 2009, , 384-393.		3
160	HYDROGEN PRODUCTION VIA WATER SPLITTING IN SOLAR REACTORS: THE HYDROSOL PROCESS. , 2009, , .		0
161	Economic comparison of solar hydrogen generation by means of thermochemical cycles and electrolysis. International Journal of Hydrogen Energy, 2008, 33, 4511-4519.	3.8	108
162	Analysis of Thermodynamics of Two-Step Solar Water Splitting. , 2008, , .		0

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163	Kinetic Investigations of a Two-Step Thermochemical Water-Splitting Cycle Using Mixed Iron Oxides Fixed on Ceramic Substrates. , 2008, , .		1
164	Characterization and Evaluation of the Efficiency of TiO ₂ /Zinc Phthalocyanine Nanocomposites as Photocatalysts for Wastewater Treatment Using Solar Irradiation. International Journal of Photoenergy, 2008, 2008, 1-12.	1.4	44
165	HYTHEC: An EC funded search for a long term massive hydrogen production route using solar and nuclear technologies. International Journal of Hydrogen Energy, 2007, 32, 1516-1529.	3.8	127
166	Solar Thermochemical Generation of Hydrogen: Development of a Receiver Reactor for the Decomposition of Sulfuric Acid. , 2007, , .		1
167	Double-Focus Configuration at DLR Solar Furnace for Operating a Continuous Reactor. , 2006, , 29.		0
168	Study of kinetic parameters related to the degradation of an industrial effluent using Fenton-like reactions. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 179, 269-275.	2.0	36
169	Hydrogen Production by Solar Reforming of Natural Gas: A Comparison Study of Two Possible Process Configurations. Journal of Solar Energy Engineering, Transactions of the ASME, 2006, 128, 16-23.	1.1	79
170	Solar Hydrogen Production by a Two-Step Cycle Based on Mixed Iron Oxides. Journal of Solar Energy Engineering, Transactions of the ASME, 2006, 128, 125-133.	1.1	140
171	Efficient Solar Thermal Processes From Carbon Based to Carbon Free Hydrogen Production. , 2006, , .		0
172	Solar Hydrogen Production by a Two-Step Cycle Based on Mixed Iron Oxides. , 2005, , 671.		5
173	Solar water splitting for hydrogen production with monolithic reactors. Solar Energy, 2005, 79, 409-421.	2.9	242
174	Construção e estudos de performance de um reator fotoquímico tipo CPC ("Compound Parabolic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.3	12
175	Paper mill wastewater detoxification by solar photocatalysis. Water Science and Technology, 2004, 49, 189-193.	1.2	17
176	Solar photocatalytic water detoxification of paper mill effluents. Energy, 2004, 29, 835-843.	4.5	30
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