Wojciech LipiÅ„ski

List of Publications by Year
in descending order

191	5,548	76322	102480
papers	citations	40 h-index	66 g-index

197	197	197	3010
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hydrogen as an energy vector. Renewable and Sustainable Energy Reviews, 2020, 120, 109620.	16.4	536
2	Thermodynamic Analysis of Isothermal Redox Cycling of Ceria for Solar Fuel Production. Energy & Fuels, 2013, 27, 5533-5544.	5.1	187
3	Techno-economic assessment of solidâ€“gas thermochemical energy storage systems for solar thermal power applications. Energy, 2018, 149, 473-484.	8.8	177
4	Efficiency of two-step solar thermochemical non-stoichiometric redox cycles withÂheat recovery. Energy, 2012, 37, 591-600.	8.8	175
5	Solar chemical reactor technology for industrial production of lime. Solar Energy, 2006, 80, 1355-1362.	6.1	133
6	Design and experimental investigation of a horizontal rotary reactor for the solar thermal production of lime. Energy, 2004, 29, 811-821.	8.8	132
7	Tomography-Based Heat and Mass Transfer Characterization of Reticulate Porous Ceramics for High-Temperature Processing. Journal of Heat Transfer, 2010, 132, .	2.1	118
8	Quantitative Comparison of Photothermal Heat Generation between Gold Nanospheres and Nanorods. Scientific Reports, 2016, 6, 29836.	3.3	114
9	Heat transfer model of a solar receiver-reactor for the thermal dissociation of ZnOâ€”Experimental validation at 10kW and scale-up to 1MW. Chemical Engineering Journal, 2009, 150, 502-508.	12.7	113
10	Research progress and challenges in hydrate-based carbon dioxide capture applications. Applied Energy, 2020, 269, 114928.	10.1	88
11	Heat Transfer Analysis of a Solid-Solid Heat Recuperation System for Solar-Driven Nonstoichiometric Redox Cycles. Journal of Solar Energy Engineering, Transactions of the ASME, 2013, 135, .	1.8	87
12	Numerical and experimental study of gasâ€“particle radiative heat exchange in a fluidized-bed reactor for steam-gasification of coal. Chemical Engineering Science, 2007, 62, 599-607.	3.8	71
13	Tomographic Characterization of a Semitransparent-Particle Packed Bed and Determination of its Thermal Radiative Properties. Journal of Heat Transfer, 2009, 131, .	2.1	67
14	Progress in heat transfer research for high-temperature solar thermal applications. Applied Thermal Engineering, 2021, 184, 116137.	6.0	67
15	Multitube Rotary Kiln for the Industrial Solar Production of Lime. Journal of Solar Energy Engineering, Transactions of the ASME, 2005, 127, 386-395.	1.8	66
16	Transient heat transfer in a directly-irradiated solar chemical reactor for the thermal dissociation of ZnO. Applied Thermal Engineering, 2008, 28, 524-531.	6.0	66
17	Review of Heat Transfer Research for Solar Thermochemical Applications. Journal of Thermal Science and Engineering Applications, 2013, 5, .	1.5	66
18	Application of the spatial averaging theorem to radiative heat transfer in two-phase media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 253-258.	2.3	65

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19	Concentrated solar thermochemical gasification of biomass: Principles, applications, and development. Renewable and Sustainable Energy Reviews, 2021, 150, 111484.	16.4	64
20	Heat Transfer Analysis of a Novel Pressurized Air Receiver for Concentrated Solar Power via Combined Cycles. Journal of Thermal Science and Engineering Applications, 2009, 1, .	1.5	63
21	Optics of solar central receiver systems: a review. Optics Express, 2016, 24, A985.	3.4	62
22	Design of a New 45â€‚kWe High-Flux Solar Simulator for High-Temperature Solar Thermal and Thermochemical Research. Journal of Solar Energy Engineering, Transactions of the ASME, 2011, 133, .	1.8	60
23	Experimental and numerical characterization of a new 45 kW_el multisource high-flux solar simulator. Optics Express, 2016, 24, A1360.	3.4	60
24	Discrete vs. continuum-scale simulation of radiative transfer in semitransparent two-phase media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1450-1459.	2.3	58
25	Optical Design of Multisource High-Flux Solar Simulators. Journal of Solar Energy Engineering, Transactions of the ASME, 2015, 137, .	1.8	58
26	Visible and near-infrared optical properties of ceria ceramics. Infrared Physics and Technology, 2013, 57, 101-109.	2.9	57
27	Towards Solar Thermochemical Carbon Dioxide Capture via Calcium Oxide Looping: A Review. Aerosol and Air Quality Research, 2014, 14, 500-514.	2.1	57
28	Design of a Solar Reactor to Split CO2 Via Isothermal Redox Cycling of Ceria. Journal of Solar Energy Engineering, Transactions of the ASME, 2015, 137, .	1.8	52
29	High-flux optical systems for solar thermochemistry. Solar Energy, 2017, 156, 133-148.	6.1	52
30	Modelling of solar thermochemical reaction systems. Solar Energy, 2017, 156, 149-168.	6.1	52
31	Approximate analytical solution to normal emittance of semi-transparent layer of an absorbing, scattering, and refracting medium. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1987-1994.	2.3	50
32	Efficient ceria nanostructures for enhanced solar fuel production via high-temperature thermochemical redox cycles. Journal of Materials Chemistry A, 2016, 4, 9614-9624.	10.3	49
33	Heterogeneous thermochemical decomposition under direct irradiation. International Journal of Heat and Mass Transfer, 2004, 47, 1907-1916.	4.8	48
34	Carbon dioxide hydrates for cold thermal energy storage: A review. Solar Energy, 2020, 211, 11-30.	6.1	48
35	Operational Performance of the University of Minnesota 45 kWe High-Flux Solar Simulator. Journal of Solar Energy Engineering, Transactions of the ASME, 2013, 135, .	1.8	47
36	A diffusion-based approximate model for radiation heat transfer in a solar thermochemical reactor. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 103, 601-610.	2.3	43

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37	Design of a compound parabolic concentrator for a multi-source high-flux solar simulator. Solar Energy, 2019, 183, 805-811.	6.1	43
38	Electrospun Manganese-Based Perovskites as Efficient Oxygen Exchange Redox Materials for Improved Solar Thermochemical CO₂ Splitting. ACS Applied Energy Materials, 2019, 2, 2494-2505.	5.1	43
39	Ablative heat transfer in a shrinking packedâ€bed of ZnO undergoing solar thermal dissociation. AICHE Journal, 2009, 55, 1659-1666.	3.6	42
40	Particleâ€“gas reacting flow under concentrated solar irradiation. International Journal of Heat and Mass Transfer, 2009, 52, 4997-5004.	4.8	42
41	Continuum radiative heat transfer modeling in media consisting of optically distinct components in the limit of geometrical optics. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2474-2480.	2.3	42
42	Transient Three-Dimensional Heat Transfer Model of a Solar Thermochemical Reactor for H2O and CO2 Splitting Via Nonstoichiometric Ceria Redox Cycling. Journal of Solar Energy Engineering, Transactions of the ASME, 2014, 136, .	1.8	42
43	A Model of Transient Heat and Mass Transfer in a Heterogeneous Medium of Ceria Undergoing Nonstoichiometric Reduction. Journal of Heat Transfer, 2013, 135, .	2.1	41
44	Earth-abundant transition metal oxides with extraordinary reversible oxygen exchange capacity for efficient thermochemical synthesis of solar fuels. Nano Energy, 2018, 50, 347-358.	16.0	40
45	COMBINED TWO-FLUX APPROXIMATION AND MONTE CARLO MODEL FOR IDENTIFICATION OF RADIATIVE PROPERTIES OF HIGHLY SCATTERING DISPERSED MATERIALS. Computational Thermal Sciences, 2012, 4, 365-378.	0.9	40
46	Gasâ€“Solid Reactions: Theory, Experiments and Case Studies Relevant to Earth and Planetary Processes. Reviews in Mineralogy and Geochemistry, 2018, 84, 1-56.	4.8	39
47	SIMPLIFIED APPROACHES TO RADIATIVE TRANSFER SIMULATIONS IN LASER-INDUCED HYPERTHERMIA OF SUPERFICIAL TUMORS. Computational Thermal Sciences, 2013, 5, 521-530.	0.9	38
48	Thermal reduction of ironâ€“manganese oxide particles in a high-temperature packed-bed solar thermochemical reactor. Chemical Engineering Journal, 2021, 412, 128255.	12.7	37
49	A Concept of a Novel Solar-Assisted Large-Scale Cleaning System (SALSCS) for Urban Air Remediation. Aerosol and Air Quality Research, 2015, 15, 1-10.	2.1	37
50	Highly efficient and durable solar thermal energy harvesting via scalable hierarchical coatings inspired by stony corals. Energy and Environmental Science, 2022, 15, 1893-1906.	30.8	37
51	Transient radiative heat transfer within a suspension of coal particles undergoing steam gasification. Heat and Mass Transfer, 2005, 41, 1021-1032.	2.1	36
52	An ablation model for the thermal decomposition of porous zinc oxide layer heated by concentrated solar radiation. International Journal of Heat and Mass Transfer, 2009, 52, 2444-2452.	4.8	36
53	Unsteady radiative heat transfer within a suspension of ZnO particles undergoing thermal dissociation. Chemical Engineering Science, 2006, 61, 7029-7035.	3.8	35
54	Thermodynamic Analyses of Fuel Production via Solar-Driven Non-stoichiometric Metal Oxide Redox Cycling. Part 2. Impact of Solidâ€“Gas Flow Configurations and Active Material Composition on System-Level Efficiency. Energy & Fuels, 2018, 32, 10848-10863.	5.1	35

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55	Transient temperature and thermal stress profiles in semi-transparent particles under high-flux irradiation. International Journal of Heat and Mass Transfer, 2007, 50, 2117-2123.	4.8	34
56	Friedman method kinetic analysis of CaO-based sorbent for high-temperature thermochemical energy storage. Chemical Engineering Science, 2019, 200, 236-247.	3.8	33
57	TRANSIENT RADIATION HEAT TRANSFER WITHIN A NONGRAY NONISOTHERMAL ABSORBING-EMITTING-SCATTERING SUSPENSION OF REACTING PARTICLES UNDERGOING SHRINKAGE. Numerical Heat Transfer, Part B: Fundamentals, 2005, 47, 443-457.	0.9	31
58	Hydrogen production of solar-driven steam gasification of sewage sludge in an indirectly irradiated fluidized-bed reactor. Applied Energy, 2020, 261, 114229.	10.1	31
59	The effects of morphology on the thermal reduction of nonstoichiometric ceria. Chemical Engineering Science, 2014, 111, 231-243.	3.8	30
60	Numerical modelling of radiation absorption in a novel multi-stage free-falling particle receiver. International Journal of Heat and Mass Transfer, 2020, 146, 118821.	4.8	30
61	Lattice Expansion in Optimally Doped Manganese Oxide: An Effective Structural Parameter for Enhanced Thermochemical Water Splitting. ACS Catalysis, 2019, 9, 9880-9890.	11.2	29
62	Tomography-Based Analysis of Radiative Transfer in Reacting Packed Beds Undergoing a Solid-Gas Thermochemical Transformation. Journal of Heat Transfer, 2010, 132, .	2.1	28
63	Thermodynamic analyses of solar thermal gasification of coal for hybrid solar-fossil power and fuel production. Energy, 2012, 44, 720-731.	8.8	28
64	Heat Transfer in a Solar Cavity Receiver: Design Considerations. Numerical Heat Transfer; Part A: Applications, 2012, 62, 445-461.	2.1	28
65	Radiative characterization of random fibrous media with long cylindrical fibers: Comparison of single- and multi-RTE approaches. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 202, 220-232.	2.3	28
66	Thermodynamic Analyses of Fuel Production via Solar-Driven Non-stoichiometric Metal Oxide Redox Cycling. Part 1. Revisiting Flow and Equilibrium Assumptions. Energy & Fuels, 2018, 32, 10838-10847.	5.1	28
67	Performance of a novel cold thermal storage material in an emulated air conditioning system using different storage strategies. International Journal of Refrigeration, 2019, 104, 259-269.	3.4	28
68	Thermodynamic analysis of solar thermochemical CO 2 capture via carbonation/calcination cycle with heat recovery. Energy, 2012, 45, 900-907.	8.8	27
69	Experimental and Numerical Determination of Thermal Radiative Properties of ZnO Particulate Media. Journal of Heat Transfer, 2010, 132, .	2.1	26
70	Transient Three-Dimensional Heat Transfer Model of a Solar Thermochemical Reactor for H2O and CO2 Splitting via Nonstoichiometric Ceria Redox Cycling. , 2013, , .		26
71	Effects of short-pulsed laser radiation on transient heating of superficial human tissues. International Journal of Heat and Mass Transfer, 2014, 78, 488-497.	4.8	26
72	Experimental Determination of Spectral Transmittance of Porous Cerium Dioxide in the Range 900â€“1700 nm. Journal of Heat Transfer, 2011, 133, .	2.1	25

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73	Temperature-based optical design, optimization and economics of solar polar-field central receiver systems with an optional compound parabolic concentrator. Solar Energy, 2020, 206, 1018-1032.	6.1	25
74	Effects of steam on the kinetics of calcium carbonate calcination. Chemical Engineering Science, 2021, 246, 116987.	3.8	25
75	Spectroscopic Goniometry System for Determining Thermal Radiative Properties of Participating Media. Experimental Heat Transfer, 2011, 24, 300-312.	3.2	24
76	A numerical model of transient thermal transport phenomena in a high-temperature solidâ€“gas reacting system for CO2 capture applications. International Journal of Heat and Mass Transfer, 2015, 85, 1058-1068.	4.8	24
77	A COMBINED P1 AND MONTE CARLO MODEL FOR MULTIDIMENSIONAL RADIATIVE TRANSFER PROBLEMS IN SCATTERING MEDIA. Computational Thermal Sciences, 2010, 2, 549-560.	0.9	24
78	Effect of Morphology on Spectral Radiative Properties of Three-Dimensionally Ordered Macroporous Ceria Packed Bed. Journal of Heat Transfer, 2013, 135, .	2.1	23
79	Thermal transport model of a sorbent particle undergoing calcinationâ€“carbonation cycling. AICHE Journal, 2015, 61, 2647-2656.	3.6	23
80	Numerical and experimental investigation of a novel multi-stage falling particle receiver. AIP Conference Proceedings, 2019, , .	0.4	23
81	The effect of sodium dodecyl sulfate and dodecyltrimethylammonium chloride on the kinetics of CO2 hydrate formation in the presence of tetra-n-butyl ammonium bromide for carbon capture applications. Energy, 2021, 227, 120424.	8.8	23
82	Optical design of a flat-facet solar concentrator. Solar Energy, 2012, 86, 1962-1966.	6.1	22
83	Thermal Model of a Solar Thermochemical Reactor for Metal Oxide Reduction. Journal of Solar Energy Engineering, Transactions of the ASME, 2020, 142, .	1.8	22
84	Transient heat and mass transfer analysis in a porous ceria structure ofÂa novel solar redox reactor. International Journal of Thermal Sciences, 2015, 92, 138-149.	4.9	21
85	Radiation Absorption in a Particle Curtain Exposed to Direct High-Flux Solar Irradiation. Journal of Solar Energy Engineering, Transactions of the ASME, 2018, 140, .	1.8	20
86	A 28 kWe multi-source high-flux solar simulator: Design, characterization, and modeling. Solar Energy, 2020, 211, 569-583.	6.1	20
87	Concentration-Dependent Solar Thermochemical CO ₂ /H ₂ O Splitting Performance by Vanadiaâ€“Ceria Multiphase Metal Oxide Systems. Research, 2020, 2020, 3049534.	5.7	20
88	Heterogeneous thermochemical decomposition of a semi-transparent particle under direct irradiation. Chemical Engineering Science, 2011, 66, 2677-2689.	3.8	19
89	Experimental Determination of the Extinction Coefficient for a Packed-Bed Particulate Medium. Experimental Heat Transfer, 2006, 19, 69-79.	3.2	18
90	Experimental Determination of Transmittance of Porous Cerium Dioxide Media in the Spectral Range of 300â€“1,100 nm. Experimental Heat Transfer, 2011, 24, 285-299.	3.2	18

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91	Thermodynamic Guiding Principles for Designing Nonstoichiometric Redox Materials for Solar Thermochemical Fuel Production: Ceria, Perovskites, and Beyond. Energy Technology, 2022, 10, 2000925.	3.8	17
92	Design improvement of compact double-pipe heat exchangers equipped with tube-side helical insert and annulus-side helical strip: Hydrothermal and exergy analyses. Applied Thermal Engineering, 2021, 190, 116805.	6.0	17
93	Thermodynamic Analyses of Fuel Production Via Solar-Driven Ceria-Based Nonstoichiometric Redox Cycling: A Case Study of the Isothermal Membrane Reactor System. Journal of Solar Energy Engineering, Transactions of the ASME, 2019, 141, .	1.8	16
94	Experimental demonstration of vanadium-doped nanostructured ceria for enhanced solar thermochemical syngas production. Nano Energy, 2021, 81, 105639.	16.0	16
95	Optical characterisation of aluminaâ€“mullite materials for solar particle receiver applications. Solar Energy Materials and Solar Cells, 2021, 230, 111170.	6.2	16
96	Progress in thermal transport modeling of carbonate-based reacting systems. International Journal of Numerical Methods for Heat and Fluid Flow, 2017, 27, 1098-1107.	2.8	15
97	Structural Rearrangement in LSM Perovskites for Enhanced Syngas Production via Solar Thermochemical Redox Cycles. ACS Catalysis, 2020, 10, 8263-8276.	11.2	15
98	Annular Compound Parabolic Concentrator. Journal of Solar Energy Engineering, Transactions of the ASME, 2006, 128, 121-124.	1.8	14
99	TRANSMITTANCE ENHANCEMENT OF PACKED-BED PARTICULATE MEDIA. Experimental Heat Transfer, 2008, 21, 73-82.	3.2	14
100	Spectral radiative properties of three-dimensionally ordered macroporous ceria particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 143, 63-72.	2.3	14
101	High-temperature optical and radiative properties of aluminaâ€“silica-based ceramic materials for solar thermal applications. Solar Energy Materials and Solar Cells, 2022, 242, 111710.	6.2	14
102	Experimental and numerical analysis of CO2 and CH4 hydrate formation kinetics in microparticles: A comparative study based on shrinking core model. Chemical Engineering Journal, 2022, 446, 137247.	12.7	14
103	Effect of pore-level geometry on far-field radiative properties of three-dimensionally ordered macroporous ceria particle. Applied Optics, 2014, 53, 1290.	1.8	13
104	Enhanced oxygen exchange capacity in nano-structured vanadiaâ€“ceria multi-phase oxygen carriers for solar thermal fuel production. Journal of Materials Chemistry A, 2019, 7, 27347-27360.	10.3	13
105	Solar-driven gasification in an indirectly-irradiated thermochemical reactor with a clapboard-type internally-circulating fluidized bed. Energy Conversion and Management, 2021, 248, 114795.	9.2	13
106	Optical analysis of a solar thermochemical system with a rotating tower reflector and a receiverâ€“reactor array. Optics Express, 2020, 28, 19429.	3.4	13
107	Determination of thermal radiative properties of packed-bed media containing a mixture of polydispersed particles. International Journal of Thermal Sciences, 2009, 48, 1510-1516.	4.9	12
108	Effect of non-stoichiometry on optical, radiative, and thermal characteristics of ceria undergoing reduction. Optics Express, 2018, 26, A360.	3.4	12

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109	Reflective optics for redirecting convergent radiative beams in concentrating solar applications. Solar Energy, 2019, 191, 707-718.	6.1	12
110	Thermodynamic analysis of a combined-cycle solar thermal power plant with manganese oxide-based thermochemical energy storage. E3S Web of Conferences, 2017, 22, 00102.	0.5	11
111	High-Temperature Gasâ€“Solid Reactions in Industrial Processes. Reviews in Mineralogy and Geochemistry, 2018, 84, 499-514.	4.8	11
112	Thermochemical CO₂ splitting performance of perovskite coated porous ceramics. RSC Advances, 2020, 10, 23049-23057.	3.6	11
113	Optical and radiative characterisation of aluminaâ€“silica based ceramic materials for high-temperature solar thermal applications. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 272, 107754.	2.3	11
114	Concentrating collector systems for solar thermal and thermochemical applications. Advances in Chemical Engineering, 2021, 58, 1-53.	0.9	11
115	Heterogeneous Thermochemical Decomposition of a Semi-Transparent Particle Under High-Flux Irradiationâ€”Changing Grain Size Versus Shrinking Core Models. Numerical Heat Transfer; Part A: Applications, 2012, 62, 412-431.	2.1	10
116	THERMAL TRANSPORT MODEL OF A PACKED-BED REACTOR FOR SOLAR THERMOCHEMICAL CO2 CAPTURE. Special Topics and Reviews in Porous Media, 2015, 6, 197-209.	1.1	10
117	Simple methods for identification of radiative properties of highly-porous ceria ceramics in the range of semi-transparency. International Journal of Numerical Methods for Heat and Fluid Flow, 2017, 27, 1108-1117.	2.8	10
118	A Highâ€Efficiency Wavelengthâ€Tunable Monolayer LED with Hybrid Continuousâ€Pulsed Injection. Advanced Materials, 2021, 33, e2101375.	21.0	10
119	Experimental and numerical study on thermal performance of an indirectly irradiated solar reactor with a clapboard-type internally circulating fluidized bed. Applied Energy, 2022, 305, 117976.	10.1	10
120	High-flux solar simulator technology. , 2016, , .		9
121	A Solar Reactor Design for Research on Calcium Oxide-Based Carbon Dioxide Capture. Journal of Solar Energy Engineering, Transactions of the ASME, 2017, 139, .	1.8	9
122	Unsteady Radiative Heat Transfer Model of a Ceria Particle Suspension Undergoing Solar Thermochemical Reduction. Journal of Thermophysics and Heat Transfer, 2019, 33, 63-77.	1.6	9
123	Amine infused hydrogel-based CO2 gas storage technology for CO2 hydrate-based cold thermal energy storage. Journal of CO2 Utilization, 2021, 53, 101705.	6.8	9
124	Optical analysis of a multi-aperture solar central receiver system for high-temperature concentrating solar applications. Optics Express, 2020, 28, 37654.	3.4	9
125	Thermodynamic analysis of an epitrochoidal rotary reactor for solar hydrogen production via a water-splitting thermochemical cycle using nonstoichiometric ceria. Energy Conversion and Management, 2022, 268, 115968.	9.2	9
126	Heterogeneous thermochemical decomposition of a semi-transparent particle under high-flux irradiation: uniform versus non-uniform irradiation. Heat and Mass Transfer, 2014, 50, 1031-1036.	2.1	8

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127	2017 P.V. Danckwerts Memorial Lecture special issue editorial: Advances in emerging technologies of chemical engineering towards sustainable energy and environment: Solar and biomass. Chemical Engineering Science, 2020, 215, 115384.	3.8	8
128	Convectiveâ€“conductive heat transfer in dual-scale porous media: Theoretical model development and numerical validation. International Journal of Heat and Mass Transfer, 2020, 157, 119950.	4.8	8
129	Effect of surface radiative properties of a CO_2 sorbent particle on its interactions with high-flux solar irradiation. Optics Express, 2015, 23, A752.	3.4	7
130	Investigation of novel hydroxyapatite-doped CaO material for calcination-carbonation thermochemical energy storage. AIP Conference Proceedings, 2018, , .	0.4	7
131	Numerical determination of permeability and Forchheimer coefficient in dual-scale porous media. International Communications in Heat and Mass Transfer, 2021, 122, 105089.	5.6	7
132	Mesoporous silica-encaged ultrafine ceriaâ€“nickel hydroxide nanocatalysts for solar thermochemical dry methane reforming. Applied Physics Letters, 2022, 120, .	3.3	7
133	Determination of Optical Constants of Ceria By Combined Analytical and Experimental Approaches. Jom, 2013, 65, 1694-1701.	1.9	6
134	Thermodynamic Analyses of Single Brayton and Combined Braytonâ€“Rankine Cycles for Distributed Solar Thermal Power Generation. Journal of Solar Energy Engineering, Transactions of the ASME, 2013, 135, .	1.8	6
135	Optical Analysis of a Heliostat Array With Linked Tracking. Journal of Solar Energy Engineering, Transactions of the ASME, 2013, 135, .	1.8	6
136	Solar Thermochemical Processes. World Scientific Series in Current Energy Issues, 2016, , 345-394.	0.1	6
137	Development of ASTRI high-temperature solar receivers. AIP Conference Proceedings, 2017, , .	0.4	6
138	Micro-scale heat transfer modelling of the contact line region of a boiling-sodium bubble. International Journal of Heat and Mass Transfer, 2020, 160, 120106.	4.8	6
139	Numerical modelling of ceria undergoing reduction in a particleâ€“gas counter-flow: Effects of chemical kinetics under isothermal conditions. Chemical Engineering Science, 2020, 218, 115553.	3.8	6
140	A method for in situ measurement of directional and spatial radiosity distributions from complex-shaped solar thermal receivers. Solar Energy, 2020, 201, 732-745.	6.1	6
141	Liquid fuel productionviasupercritical water gasification of algae: a role for solar heat integration?. Sustainable Energy and Fuels, 2021, 5, 6269-6297.	4.9	6
142	Redox Performance of Ceriaâ€“Vanadia Mixed-Phase Reticulated Porous Ceramics for Solar Thermochemical Syngas Production. Energy & Fuels, 2021, 35, 16791-16798.	5.1	6
143	Numerical modelling of radiative heat transfer in a polydispersion of ceramic particles under direct high-flux solar irradiation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 278, 108008.	2.3	6
144	Optical alignment and radiative flux characterization of a multi-source high-flux solar simulator. Solar Energy, 2022, 236, 434-444.	6.1	6

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145	Effects of Tween 80 on clathrate and semiclathrate CO2 hydrate formation kinetics for carbon capture from CO2-rich gas mixtures. Carbon Capture Science & Technology, 2022, 4, 100053.	10.4	6
146	Tomography-Based Heat and Mass Transfer Characterization of Reticulate Porous Ceramics for High-Temperature Processing. , 2009, , .		5
147	Thermal transport and chemical conversion in single reacting sorbent particles. AICHE Journal, 2021, 67, e17267.	3.6	5
148	Heat transfer modelling of an isolated bubble in sodium pool boiling. International Journal of Thermal Sciences, 2022, 179, 107678.	4.9	5
149	Comparison-based optical study on a point-line-coupling-focus system with linear Fresnel heliostats. Optics Express, 2016, 24, A966.	3.4	4
150	A sodium boiler and phase-change energy storage system. AIP Conference Proceedings, 2019, , .	0.4	4
151	Editorial: Sustainable Hydrogen for Energy, Fuel and Commodity Applications. Frontiers in Energy Research, 2021, 9, .	2.3	4
152	Thermodynamic Analysis of a Conceptual Fixed-Bed Solar Thermochemical Cavity Receiverâ€“Reactor Array for Water Splitting Via Ceria Redox Cycling. Frontiers in Energy Research, 2021, 9, .	2.3	4
153	Feature issue introduction: light, energy and the environment, 2015. Optics Express, 2016, 24, A981.	3.4	3
154	Heat transfer in directly-irradiated high-temperature solidâ€“gas flows laden with polydisperse particles. Applied Mathematical Modelling, 2022, 110, 698-722.	4.2	3
155	Heat Transfer Analysis of a Novel Pressurized Air Receiver for Concentrated Solar Power Via Combined Cycles. , 2009, , .		2
156	Design of a Solar Thermochemical Reactor for Calcium Oxide Based Carbon Dioxide Capture. , 2015, , .		2
157	Cyclic oxygen exchange capacity of Ce-doped V₂O₅ materials for syngas production via high-temperature thermochemical-looping reforming of methane. RSC Advances, 2021, 11, 23095-23104.	3.6	2
158	Operational Performance of the University of Minnesota 45kWe High-Flux Solar Simulator. , 2012, , .		2
159	A 45 kWe Multi-Source High-Flux Solar Simulator. , 2014, , .		2
160	Heat and Mass Transfer Model of a Packed-Bed Reactor for Solar Thermochemical CO2 Capture. , 2014, , .		2
161	A Numerical Model of Transient Thermal Transport Phenomena in a High-Temperature Solid-Gas Reacting System for CO2 Capture Applications. , 2014, , .		2
162	Hydrothermal characteristics of fluid flow in a circular tube fitted with free rotating axial-turbine-type swirl generators: Design, swirl strength, and performance analyses. International Journal of Thermal Sciences, 2022, 173, 107384.	4.9	2

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163	Topological and hydrodynamic analyses of solar thermochemical reactors for aerodynamic-aided window protection. Engineering Applications of Computational Fluid Mechanics, 2022, 16, 1195-1210.	3.1	2
164	Heat Transfer Analysis of a Solid-Solid Heat Recuperation System for Solar-Driven Non-Stoichiometric Redox Cycles. , 2012, , .		1
165	Effect of Morphology on Spectral Radiative Properties of Three-Dimensionally Ordered Macroporous Ceria Packed Bed. , 2013, , .		1
166	Radiation Characteristics of a Particle Curtain in a Free-Falling Particle Solar Receiver. , 2017, , .		1
167	Effect of specific surface area on syngas production performance of pure ceria in high-temperature thermochemical redox cycling coupled to methane partial oxidation. RSC Advances, 2020, 10, 36617-36626.	3.6	1
168	Photogrammetric Measurement and Alignment of Radiation Modules in a High-Flux Solar Simulator. , 2018, , .		1
169	13. High-Temperature Gasâ€“Solid Reactions in Industrial Processes. , 2018, , 499-511.		1
170	SPECTRAL RADIATIVE PROPERTIES OF THREE-DIMENSIONALLY ORDERED MACROPOROUS CERIA PARTICLES. , 2013, , .		1
171	A Combined P1 and Monte Carlo Model for Radiative Transfer in Multi-Dimensional Anisotropically Scattering Media. , 2010, , .		1
172	THERMAL MODELLING OF A SOLAR THERMOCHEMICAL REACTOR FOR METAL OXIDE REDUCTION. , 2018, , .		1
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