

Haibo Zhao

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	One-Step Synthesis of CuO/Cu ₂ O Heterojunction by Flame Spray Pyrolysis for Cathodic Photoelectrochemical Sensing of Cysteine. ACS Applied Materials & Interfaces, 2017, 9, 40452-40460.	8.0	145
2	Analysis of four Monte Carlo methods for the solution of population balances in dispersed systems. Powder Technology, 2007, 173, 38-50.	4.2	122
3	Investigation of Chemical Looping Combustion of Coal with CuFe ₂ O ₄ Oxygen Carrier. Energy & Fuels, 2011, 25, 3344-3354.	5.1	114
4	Chemical looping combustion of coal in a 5 kWth interconnected fluidized bed reactor using hematite as oxygen carrier. Applied Energy, 2015, 157, 304-313.	10.1	105
5	Thermodynamic Investigation of Carbon Deposition and Sulfur Evolution in Chemical Looping Combustion with Syngas. Energy & Fuels, 2008, 22, 1012-1020.	5.1	92
6	Flame spray pyrolysis synthesized ZnO/CeO ₂ nanocomposites for enhanced CO ₂ photocatalytic reduction under UV-Vis light irradiation. Journal of CO ₂ Utilization, 2017, 18, 53-61.	6.8	89
7	Sol-Gel-Derived NiO/NiAl ₂ O ₄ Oxygen Carriers for Chemical-Looping Combustion by Coal Char. Energy & Fuels, 2008, 22, 898-905.	5.1	88
8	Computational fluid dynamics simulation for chemical looping combustion of coal in a dual circulation fluidized bed. Energy Conversion and Management, 2015, 105, 1-12.	9.2	79
9	Characterization and evaluation of Fe ₂ O ₃ /Al ₂ O ₃ oxygen carrier prepared by sol-gel combustion synthesis. Journal of Analytical and Applied Pyrolysis, 2011, 91, 105-113.	5.5	76
10	Numerical simulation of particle capture process of fibrous filters using Lattice Boltzmann two-phase flow model. Powder Technology, 2012, 227, 111-122.	4.2	76
11	Tailor-Made Core-Shell CaO/TiO ₂ -Al ₂ O ₃ Architecture as a High-Capacity and Long-Life CO ₂ Sorbent. Environmental Science & Technology, 2015, 49, 8237-8245.	10.0	76
12	Copper-Decorated Hematite as an Oxygen Carrier for in Situ Gasification Chemical Looping Combustion of Coal. Energy & Fuels, 2014, 28, 3970-3981.	5.1	74
13	Simulation Study of an 800 MW _e Oxy-combustion Pulverized-Coal-Fired Power Plant. Energy & Fuels, 2011, 25, 2405-2415.	5.1	73
14	Characterization of natural copper ore as oxygen carrier in chemical-looping with oxygen uncoupling of anthracite. International Journal of Greenhouse Gas Control, 2014, 22, 154-164.	4.6	73
15	Chemical-looping auto-thermal reforming of biomass using Cu-based oxygen carrier. Applied Energy, 2015, 157, 408-415.	10.1	73
16	Development of tailor-made oxygen carriers and reactors for chemical looping processes at Huazhong University of Science & Technology. International Journal of Greenhouse Gas Control, 2020, 93, 102898.	4.6	73
17	Synergistic effects of mixtures of iron ores and copper ores as oxygen carriers in chemical-looping combustion. Proceedings of the Combustion Institute, 2015, 35, 2811-2818.	3.9	72
18	Chemical looping gasification of biomass: Part I. screening Cu-Fe metal oxides as oxygen carrier and optimizing experimental conditions. Biomass and Bioenergy, 2018, 108, 146-156.	5.7	72

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19	Chemical Looping Combustion of Coal in China: Comprehensive Progress, Remaining Challenges, and Potential Opportunities. <i>Energy & Fuels</i> , 2020, 34, 6696-6734.	5.1	72
20	Thermoeconomic operation optimization of a coal-fired power plant. <i>Energy</i> , 2012, 42, 486-496.	8.8	69
21	Chemical looping gasification of coal using calcium ferrites as oxygen carrier. <i>Fuel Processing Technology</i> , 2019, 192, 75-86.	7.2	69
22	Effects of furnace chamber shape on the MILD combustion of natural gas. <i>Applied Thermal Engineering</i> , 2015, 76, 64-75.	6.0	65
23	Exergy Analysis of a 600 MW Oxy-combustion Pulverized-Coal-Fired Power Plant. <i>Energy & Fuels</i> , 2011, 25, 3854-3864.	5.1	64
24	Numerical study of combustion characteristics for pulverized coal under oxy-MILD operation. <i>Fuel Processing Technology</i> , 2015, 135, 80-90.	7.2	62
25	Reducing Statistical Noise and Extending the Size Spectrum by Applying Weighted Simulation Particles in Monte Carlo Simulation of Coagulation. <i>Aerosol Science and Technology</i> , 2009, 43, 781-793.	3.1	58
26	Decomposition mechanisms of Cu-based oxygen carriers for chemical looping with oxygen uncoupling based on density functional theory calculations. <i>Combustion and Flame</i> , 2015, 162, 1265-1274.	5.2	58
27	On the high performance of a core-shell structured CaO-CuO/MgO@Al ₂ O ₃ material in calcium looping integrated with chemical looping combustion (CaL-CLC). <i>Chemical Engineering Journal</i> , 2019, 368, 504-512.	12.7	58
28	Chemical looping combustion of a Chinese anthracite with Fe ₂ O ₃ -based and CuO-based oxygen carriers. <i>Fuel Processing Technology</i> , 2012, 96, 104-115.	7.2	57
29	An economic feasibility study of O ₂ /CO ₂ recycle combustion technology based on existing coal-fired power plants in China. <i>Fuel</i> , 2009, 88, 1135-1142.	6.4	56
30	Simulation of filtration process for multi-fiber filter using the Lattice-Boltzmann two-phase flow model. <i>Journal of Aerosol Science</i> , 2013, 66, 164-178.	3.8	56
31	Evaluation of CaO-decorated Fe ₂ O ₃ /Al ₂ O ₃ as an oxygen carrier for in-situ gasification chemical looping combustion of plastic wastes. <i>Fuel</i> , 2016, 165, 235-243.	6.4	56
32	A differentially weighted Monte Carlo method for two-component coagulation. <i>Journal of Computational Physics</i> , 2010, 229, 6931-6945.	3.8	55
33	Evaluation of Manganese Minerals for Chemical Looping Combustion. <i>Energy & Fuels</i> , 2015, 29, 6605-6615.	5.1	54
34	Chemical-looping gasification of biomass: Part II. Tar yields and distributions. <i>Biomass and Bioenergy</i> , 2018, 108, 178-189.	5.7	54
35	Self-assembly template combustion synthesis of a core-shell CuO@TiO ₂ @Al ₂ O ₃ hierarchical structure as an oxygen carrier for the chemical-looping processes. <i>Combustion and Flame</i> , 2015, 162, 3030-3045.	5.2	53
36	Comprehensive investigation of process characteristics for oxy-steam combustion power plants. <i>Energy Conversion and Management</i> , 2015, 99, 92-101.	9.2	53

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37	Kinetics of redox reactions of CuO@TiO ₂ @Al ₂ O ₃ for chemical looping combustion and chemical looping with oxygen uncoupling. <i>Combustion and Flame</i> , 2020, 213, 255-267.	5.2	53
38	Chemical looping combustion of high-sulfur coal with NiFe ₂ O ₄ -combined oxygen carrier. <i>Journal of Thermal Analysis and Calorimetry</i> , 2014, 118, 1593-1602.	3.6	50
39	Optimization and control for CO ₂ compression and purification unit in oxy-combustion power plants. <i>Energy</i> , 2015, 83, 416-430.	8.8	50
40	A population balance-Monte Carlo method for particle coagulation in spatially inhomogeneous systems. <i>Computers and Fluids</i> , 2013, 71, 196-207.	2.5	49
41	Characterization of a sol-gel derived CuO/CuAl ₂ O ₄ oxygen carrier for chemical looping combustion (CLC) of gaseous fuels: Relevance of gas-solid and oxygen uncoupling reactions. <i>Fuel Processing Technology</i> , 2015, 133, 210-219.	7.2	49
42	Effect of Reaction Temperature on the Chemical Looping Combustion of Coal with CuFe ₂ O ₄ Combined Oxygen Carrier. <i>Energy & Fuels</i> , 2017, 31, 5233-5245.	5.1	48
43	Ce-modified SrFeO ₃ - for ethane oxidative dehydrogenation coupled with CO ₂ splitting via a chemical looping scheme. <i>Applied Catalysis B: Environmental</i> , 2022, 303, 120894.	20.2	47
44	A new event-driven constant-volume method for solution of the time evolution of particle size distribution. <i>Journal of Computational Physics</i> , 2009, 228, 1412-1428.	3.8	46
45	Chemical-looping combustion of plastic wastes for in situ inhibition of dioxins. <i>Combustion and Flame</i> , 2018, 191, 9-18.	5.2	46
46	Performance of a 50-kW _{th} coal-fuelled chemical looping combustor. <i>International Journal of Greenhouse Gas Control</i> , 2018, 75, 98-106.	4.6	46
47	Using the Sol-Gel-Derived CuO/CuAl ₂ O ₄ Oxygen Carrier in Chemical Looping with Oxygen Uncoupling for Three Typical Coals. <i>Energy & Fuels</i> , 2013, 27, 2723-2731.	5.1	44
48	Performance of cement decorated copper ore as oxygen carrier in chemical-looping with oxygen uncoupling. <i>International Journal of Greenhouse Gas Control</i> , 2015, 41, 210-218.	4.6	43
49	Cement bonded fine hematite and copper ore particles as oxygen carrier in chemical looping combustion. <i>Applied Energy</i> , 2017, 204, 242-253.	10.1	43
50	Dynamics of premixed CH ₄ /air flames in a micro combustor with a plate flame holder and preheating channels. <i>Energy</i> , 2017, 139, 366-379.	8.8	43
51	Perovskite oxides for redox oxidative cracking of n-hexane under a cyclic redox scheme. <i>Applied Catalysis B: Environmental</i> , 2019, 246, 30-40.	20.2	43
52	The use of a low-cost oxygen carrier prepared from red mud and copper ore for in situ gasification chemical looping combustion of coal. <i>Fuel Processing Technology</i> , 2020, 205, 106460.	7.2	43
53	Continuous Operation of Interconnected Fluidized Bed Reactor for Chemical Looping Combustion of CH ₄ Using Hematite as Oxygen Carrier. <i>Energy & Fuels</i> , 2015, 29, 3257-3267.	5.1	42
54	Sulfur evolution in chemical looping combustion of coal with MnFe ₂ O ₄ oxygen carrier. <i>Journal of Environmental Sciences</i> , 2014, 26, 1062-1070.	6.1	40

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55	Reduction kinetics of hematite as oxygen carrier in chemical looping combustion. <i>Fuel Processing Technology</i> , 2017, 155, 160-167.	7.2	40
56	Thermoeconomic cost analysis of a 600MWe oxy-combustion pulverized-coal-fired power plant. <i>International Journal of Greenhouse Gas Control</i> , 2012, 9, 469-483.	4.6	39
57	Sulfur behavior in chemical-looping combustion using a copper ore oxygen carrier. <i>Applied Energy</i> , 2016, 166, 84-95.	10.1	39
58	Manganese Minerals as Oxygen Carriers for Chemical Looping Combustion of Coal. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 6539-6546.	3.7	38
59	On a Highly Reactive Fe_2O_3/Al_2O_3 Oxygen Carrier for <i>In Situ</i> Gasification Chemical Looping Combustion. <i>Energy & Fuels</i> , 2014, 28, 7043-7052.	5.1	37
60	Fate of Mercury in Volatiles and Char during <i>In Situ</i> Gasification Chemical-Looping Combustion of Coal. <i>Environmental Science & Technology</i> , 2019, 53, 7887-7892.	10.0	37
61	A clean coal utilization technology based on coal pyrolysis and chemical looping with oxygen uncoupling: Principle and experimental validation. <i>Energy</i> , 2016, 98, 181-189.	8.8	35
62	Flame spray pyrolysis synthesized CuO-TiO ₂ nanoparticles for catalytic combustion of lean CO. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 5499-5506.	3.9	35
63	<i>In-situ</i> gasification chemical looping combustion of plastic waste in a semi-continuously operated fluidized bed reactor. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 4389-4397.	3.9	35
64	CPFD simulation and optimization of a 50 kWth dual circulating fluidized bed reactor for chemical looping combustion of coal. <i>International Journal of Greenhouse Gas Control</i> , 2019, 90, 102800.	4.6	35
65	Multi-Monte Carlo method for coagulation and condensation/evaporation in dispersed systems. <i>Journal of Colloid and Interface Science</i> , 2005, 286, 195-208.	9.4	34
66	Chemical looping dechlorination through adsorbent-decorated Fe ₂ O ₃ /Al ₂ O ₃ oxygen carriers. <i>Combustion and Flame</i> , 2015, 162, 3503-3515.	5.2	34
67	Dynamics of methane/air premixed flame in a mesoscale diverging combustor with/without a cylindrical flame holder. <i>Fuel</i> , 2018, 232, 659-665.	6.4	34
68	Insight into the Oxidation Mechanism of a Cu-Based Oxygen Carrier ($Cu^{2+}/CuO \rightleftharpoons CuO$) in Chemical Looping Combustion. <i>Energy & Fuels</i> , 2020, 34, 8718-8725.	5.1	34
69	The Influence of Fiber Geometry and Orientation Angle on Filtration Performance. <i>Aerosol Science and Technology</i> , 2015, 49, 75-85.	3.1	33
70	Accelerating population balance-Monte Carlo simulation for coagulation dynamics from the Markov jump model, stochastic algorithm and GPU parallel computing. <i>Journal of Computational Physics</i> , 2015, 281, 844-863.	3.8	33
71	Chemical Looping Combustion of a Typical Lignite with a CaSO ₄ –CuO Mixed Oxygen Carrier. <i>Energy & Fuels</i> , 2017, 31, 13942-13954.	5.1	33
72	Sulfur Fate during the Lignite Pyrolysis Process in a Chemical Looping Combustion Environment. <i>Energy & Fuels</i> , 2018, 32, 4493-4501.	5.1	33

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73	Mechanistic investigation of chemical looping combustion of coal with Fe ₂ O ₃ oxygen carrier. <i>Fuel</i> , 2011, 90, 2359-2366.	6.4	32
74	Synthesis Gas Generation by Chemical-Looping Reforming of Biomass with Natural Copper Ore as Oxygen Carrier. <i>Waste and Biomass Valorization</i> , 2015, 6, 81-89.	3.4	32
75	Causes and mitigation of gas temperature deviation in tangentially fired tower-type boilers. <i>Applied Thermal Engineering</i> , 2018, 139, 135-143.	6.0	32
76	Modeling of Gravitational Wet Scrubbers with Electrostatic Enhancement. <i>Chemical Engineering and Technology</i> , 2008, 31, 1824-1837.	1.5	31
77	Dynamic modeling and control for pulverized-coal-fired oxy-combustion boiler island. <i>International Journal of Greenhouse Gas Control</i> , 2014, 30, 97-117.	4.6	31
78	Understanding CuO-support interaction in Cu-based oxygen carriers at a microcosmic level. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 4069-4077.	3.9	31
79	Anchoring mechanisms of methane/air premixed flame in a mesoscale diverging combustor with cylindrical flame holder. <i>Fuel</i> , 2018, 232, 591-599.	6.4	31
80	Low-temperature complete removal of toluene over highly active nanoparticles CuO-TiO ₂ synthesized via flame spray pyrolysis. <i>Applied Catalysis B: Environmental</i> , 2020, 264, 118427.	20.2	31
81	Lattice Boltzmann method for simulations of gas-particle flows over a backward-facing step. <i>Journal of Computational Physics</i> , 2013, 239, 57-71.	3.8	30
82	Chemical looping with oxygen uncoupling of high-sulfur coal using copper ore as oxygen carrier. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 3381-3388.	3.9	30
83	NiO/NiAl ₂ O ₄ oxygen carriers prepared by sol-gel for chemical-looping combustion fueled by gas. <i>Journal of Fuel Chemistry and Technology</i> , 2008, 36, 261-266.	2.0	29
84	Population Balance-Monte Carlo Simulation for Gas-to-Particle Synthesis of Nanoparticles. <i>Aerosol Science and Technology</i> , 2013, 47, 1125-1133.	3.1	29
85	Incorporating highly dispersed and stable Cu ⁺ into TiO ₂ lattice for enhanced photocatalytic CO ₂ reduction with water. <i>Applied Surface Science</i> , 2020, 507, 145095.	6.1	29
86	Blow-off mechanism of a holder-stabilized laminar premixed flame in a preheated mesoscale combustor. <i>Combustion and Flame</i> , 2020, 220, 358-367.	5.2	29
87	Excess enthalpy combustion of methane-air in a novel micro non-premixed combustor with a flame holder and preheating channels. <i>Fuel</i> , 2020, 271, 117518.	6.4	29
88	Sulfur fate during in-situ gasification chemical looping combustion (iG-CLC) of coal. <i>Chemical Engineering Journal</i> , 2021, 406, 126773.	12.7	29
89	Monte Carlo solution of wet removal of aerosols by precipitation. <i>Atmospheric Environment</i> , 2006, 40, 1510-1525.	4.1	28
90	Correcting the multi-Monte Carlo method for particle coagulation. <i>Powder Technology</i> , 2009, 193, 120-123.	4.2	28

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91	Batch fluidized bed test of SATS-derived CaO/TiO ₂ -Al ₂ O ₃ sorbent for calcium looping. <i>Fuel</i> , 2016, 170, 226-234.	6.4	28
92	Thermal performance of solid walls in a mesoscale combustor with a plate flame holder and preheating channels. <i>Energy</i> , 2018, 157, 448-459.	8.8	28
93	Dynamic simulation for mode switching strategy in a conceptual 600 MWe oxy-combustion pulverized-coal-fired boiler. <i>Fuel</i> , 2014, 137, 135-144.	6.4	27
94	Plantwide control and operating strategy for air separation unit in oxy-combustion power plants. <i>Energy Conversion and Management</i> , 2015, 106, 782-792.	9.2	27
95	Numerical study of pressure drop and diffusional collection efficiency of several typical noncircular fibers in filtration. <i>Powder Technology</i> , 2016, 292, 232-241.	4.2	27
96	Modifying the inter-phase drag via solid volume fraction gradient for CFD simulation of fast fluidized beds. <i>AIChE Journal</i> , 2017, 63, 2588-2598.	3.6	27
97	Using a hierarchically-structured CuO@TiO ₂ -Al ₂ O ₃ oxygen carrier for chemical looping air separation in a parallelized fluidized bed reactor. <i>Chemical Engineering Journal</i> , 2018, 334, 611-618.	12.7	27
98	Methane/air premixed flame topology structure in a mesoscale combustor with a plate flame holder and preheating channels. <i>Energy</i> , 2018, 165, 802-811.	8.8	27
99	Fate of fuel-nitrogen during in situ gasification chemical looping combustion of coal. <i>Fuel Processing Technology</i> , 2021, 215, 106710.	7.2	27
100	Migration and Redistribution of Sulfur Species during Chemical Looping Combustion of Coal with CuFe ₂ O ₄ Combined Oxygen Carrier. <i>Energy & Fuels</i> , 2016, 30, 8499-8510.	5.1	26
101	Chemical Looping Combustion of Petroleum Coke with CuFe ₂ O ₄ as Oxygen Carrier. <i>Chemical Engineering and Technology</i> , 2013, 36, 1488-1495.	1.5	25
102	Simultaneous measurement of internal and external properties of nanoparticles in flame based on thermophoresis. <i>Combustion and Flame</i> , 2015, 162, 2200-2213.	5.2	25
103	In-Depth Investigation of Chemical Looping Combustion of a Chinese Bituminous Coal with CuFe ₂ O ₄ Combined Oxygen Carrier. <i>Energy & Fuels</i> , 2016, 30, 2285-2294.	5.1	25
104	Comparison of Large-Scale Production Methods of Fe ₂ O ₃ /Al ₂ O ₃ Oxygen Carriers for Chemical Looping Combustion. <i>Chemical Engineering and Technology</i> , 2014, 37, 1211-1219.	1.5	24
105	Fast Monte Carlo simulation for particle coagulation in population balance. <i>Journal of Aerosol Science</i> , 2014, 74, 11-25.	3.8	24
106	Mechanism and kinetics of Cu ₂ O oxidation in chemical looping with oxygen uncoupling. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 4371-4378.	3.9	24
107	Thermoeconomic cost analysis of CO ₂ compression and purification unit in oxy-combustion power plants. <i>Energy Conversion and Management</i> , 2015, 106, 53-60.	9.2	23
108	Reduction kinetics analysis of sol-gel-derived CuO/CuAl ₂ O ₄ oxygen carrier for chemical looping with oxygen uncoupling. <i>Journal of Thermal Analysis and Calorimetry</i> , 2016, 123, 745-756.	3.6	23

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109	Using Copper Ore and Hematite Fine Particles as Raw Materials of an Oxygen Carrier for Chemical Looping Combustion of Coal: Spray Drying Granulation and Performance Evaluation. <i>Energy & Fuels</i> , 2020, 34, 8587-8599.	5.1	23
110	Flame spray pyrolysis made Pt/TiO ₂ photocatalysts with ultralow platinum loading and high hydrogen production activity. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 6503-6511.	3.9	23
111	Chemical-Looping with Oxygen Uncoupling of Different Coals Using Copper Ore as an Oxygen Carrier. <i>Energy & Fuels</i> , 2015, 29, 6625-6635.	5.1	22
112	Application of CaO-Decorated Iron Ore for Inhibiting Chlorobenzene during <i>In Situ</i> Gasification Chemical Looping Combustion of Plastic Waste. <i>Energy & Fuels</i> , 2016, 30, 5999-6008.	5.1	22
113	Evaluation of a hierarchically-structured CuO@TiO ₂ -Al ₂ O ₃ oxygen carrier for chemical looping with oxygen uncoupling. <i>Fuel</i> , 2017, 209, 402-410.	6.4	22
114	Kinetics model for the reduction of Fe ₂ O ₃ /Al ₂ O ₃ by CO in Chemical Looping Combustion. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 124, 137-146.	3.6	22
115	Investigation of Two Hematites as Oxygen Carrier and Two Low-Rank Coals as Fuel in Chemical Looping Combustion. <i>Energy & Fuels</i> , 2017, 31, 1896-1903.	5.1	21
116	Co and Mo Co-doped Fe ₂ O ₃ for Selective Ethylene Production via Chemical Looping Oxidative Dehydrogenation. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 8002-8011.	6.7	21
117	Multi-Monte Carlo method for particle coagulation: description and validation. <i>Applied Mathematics and Computation</i> , 2005, 167, 1383-1399.	2.2	20
118	Simulating and Modeling Particulate Removal Processes by Elliptical Fibers. <i>Aerosol Science and Technology</i> , 2014, 48, 207-218.	3.1	20
119	Exploring the microscopic reaction mechanism of H ₂ S and COS with CuO oxygen carrier in chemical looping combustion. <i>Fuel Processing Technology</i> , 2020, 205, 106431.	7.2	20
120	Flame spray pyrolysis synthesis and H ₂ S sensing properties of CuO-doped SnO ₂ nanoparticles. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 6743-6751.	3.9	20
121	A stochastic simulation for the collection process of fly ashes in single-stage electrostatic precipitators. <i>Fuel</i> , 2008, 87, 2082-2089.	6.4	19
122	Techno-economic evaluation of oxy-combustion coal-fired power plants. <i>Science Bulletin</i> , 2011, 56, 3333.	1.7	19
123	Particle-resolved simulation and modeling of the conversion rate of coal char in chemical looping with oxygen uncoupling. <i>Combustion and Flame</i> , 2020, 213, 331-342.	5.2	19
124	Anchoring mechanisms of a holder-stabilized premixed flame in a preheated mesoscale combustor. <i>Physics of Fluids</i> , 2020, 32, .	4.0	19
125	Long-term coal chemical looping gasification using a bimetallic oxygen carrier of natural hematite and copper ore. <i>Fuel</i> , 2022, 309, 122106.	6.4	19
126	CFD-population balance Monte Carlo simulation and numerical optimization for flame synthesis of TiO ₂ nanoparticles. <i>Proceedings of the Combustion Institute</i> , 2017, 36, 1099-1108.	3.9	18

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127	Experimental study on blow-off limit of a preheated and flame holder-stabilized laminar premixed flame. <i>Chemical Engineering Science</i> , 2020, 223, 115754.	3.8	18
128	Process design and exergy cost analysis of a chemical looping ammonia generation system using AlN/Al ₂ O ₃ as a nitrogen carrier. <i>Energy</i> , 2021, 230, 120767.	8.8	18
129	Synergetic effects of cement bonded copper ore and red mud as oxygen carrier during in-situ gasification chemical looping combustion of coal char. <i>Fuel</i> , 2021, 303, 121295.	6.4	18
130	Deep Insight into the Mechanism of Catalytic Combustion of CO and CH ₄ over SrTi _{1-x} B _x O ₃ (B = Co, Fe, Mn, Ni, and Cu) Perovskite via Flame Spray Pyrolysis. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52571-52587.	8.0	18
131	Dynamic exergy method and its application for CO ₂ compression and purification unit in oxy-combustion power plants. <i>Chemical Engineering Science</i> , 2016, 144, 336-345.	3.8	17
132	Intrinsic Reduction Kinetics Investigation on a Hematite Oxygen Carrier by CO in Chemical Looping Combustion. <i>Energy & Fuels</i> , 2017, 31, 3010-3018.	5.1	17
133	Molecular Dynamics Simulation of the Microscopic Sintering Process of CuO Nanograins Inside an Oxygen Carrier Particle. <i>Journal of Physical Chemistry C</i> , 2018, 122, 25595-25605.	3.1	17
134	Simultaneous Control over Lattice Doping and Nanocluster Modification of a Hybrid CuO _x /TiO ₂ Photocatalyst during Flame Synthesis for Enhancing Hydrogen Evolution. <i>Solar Rrl</i> , 2018, 2, 1800215.	5.8	17
135	Thermodynamic and economic performance of oxy-combustion power plants integrating chemical looping air separation. <i>Energy</i> , 2020, 206, 118136.	8.8	17
136	Two-component Brownian coagulation: Monte Carlo simulation and process characterization. <i>Particuology</i> , 2011, 9, 414-423.	3.6	16
137	Pyrolysis kinetics of perfusion tubes under non-isothermal and isothermal conditions. <i>Energy Conversion and Management</i> , 2015, 106, 1048-1056.	9.2	16
138	Numerical Investigation on the Improvement of Carbon Conversion in a Dual Circulating Fluidized Bed Reactor for Chemical Looping Combustion of Coal. <i>Energy & Fuels</i> , 2019, 33, 12801-12813.	5.1	16
139	Chemical Looping Combustion Characteristics of Coal with a Novel CaSO ₄ -Ca ₂ CuO ₃ Mixed Oxygen Carrier. <i>Energy & Fuels</i> , 2020, 34, 7316-7328.	5.1	16
140	Effect of conjugate heat exchange of flame holder on laminar premixed flame stabilization in a meso-scale diverging combustor. <i>Energy</i> , 2020, 198, 117294.	8.8	16
141	CuO Quantum Dots Supported by SrTiO ₃ Perovskite Using the Flame Spray Pyrolysis Method: Enhanced Activity and Excellent Thermal Resistance for Catalytic Combustion of CO and CH ₄ . <i>Environmental Science & Technology</i> , 2021, 55, 14080-14086.	10.0	16
142	Multi-parameter measurements of laminar sooting flames using thermophoretic sampling technique. <i>Combustion and Flame</i> , 2017, 180, 158-166.	5.2	15
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