

# Sike Wu

## List of Publications by Year in descending order

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Version: 2024-02-01

70  
papers

1,959  
citations

279798

23  
h-index

254184

43  
g-index

70  
all docs

70  
docs citations

70  
times ranked

1751  
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of void fraction calculation on fidelity of CFD-DEM simulation of gas-solid bubbling fluidized beds. AICHE Journal, 2014, 60, 2000-2018.	3.6	228
2	Application of Chemical Looping Concept for Air Separation at High Temperatures. Energy & Fuels, 2010, 24, 190-198.	5.1	185
3	A review on high-temperature thermochemical energy storage based on metal oxides redox cycle. Energy Conversion and Management, 2018, 168, 421-453.	9.2	140
4	Selection of Suitable Oxygen Carriers for Chemical Looping Air Separation: A Thermodynamic Approach. Energy & Fuels, 2012, 26, 2038-2045.	5.1	120
5	Techno-economic analysis of an integrated liquid air and thermochemical energy storage system. Energy Conversion and Management, 2020, 205, 112341.	9.2	117
6	The state-of-the-art in pyrolysis modelling of lignocellulosic solid fuels. Fire and Materials, 2006, 30, 1-34.	2.0	106
7	Reactivity of Al <sub>2</sub> O <sub>3</sub> - or SiO <sub>2</sub> -Supported Cu-, Mn-, and Co-Based Oxygen Carriers for Chemical Looping Air Separation. Energy & Fuels, 2014, 28, 1284-1294.	5.1	81
8	Analysis on Chemical Reaction Kinetics of CuO/SiO <sub>2</sub> Oxygen Carriers for Chemical Looping Air Separation. Energy & Fuels, 2014, 28, 173-182.	5.1	62
9	Thermodynamic analysis of a novel hybrid thermochemical-compressed air energy storage system powered by wind, solar and/or off-peak electricity. Energy Conversion and Management, 2019, 180, 1268-1280.	9.2	52
10	Experimental and numerical analysis of sawdust-char combustion reactivity in a drop tube reactor. Combustion Science and Technology, 2003, 175, 793-823.	2.3	47
11	Influence of Controlled Aggregation on Thermal Conductivity of Nanofluids. Journal of Heat Transfer, 2016, 138, .	2.1	45
12	Techno-Economic Assessment of Integrated Chemical Looping Air Separation for Oxy-Fuel Combustion: An Australian Case Study. Energy & Fuels, 2015, 29, 2074-2088.	5.1	44
13	The Impact of the Thermal Comfort Models on the Prediction of Building Energy Consumption. Sustainability, 2018, 10, 3609.	3.2	39
14	Flame deflagration in side-on vented detonation tubes: A large scale study. Journal of Hazardous Materials, 2018, 345, 38-47.	12.4	38
15	Integration Options and Economic Analysis of an Integrated Chemical Looping Air Separation Process for Oxy-fuel Combustion. Energy & Fuels, 2016, 30, 1741-1755.	5.1	37
16	Impact of suspended coal dusts on methane deflagration properties in a large-scale straight duct. Journal of Hazardous Materials, 2017, 338, 334-342.	12.4	37
17	Thermodynamic Assessment of a Novel Concept for Integrated Gasification Chemical Looping Combustion of Solid Fuels. Energy & Fuels, 2012, 26, 287-295.	5.1	34
18	Characterization of Biochars Derived from Pyrolysis of Biomass and Calcium Oxide Mixtures. Energy & Fuels, 2018, 32, 4167-4177.	5.1	33

#	ARTICLE	IF	CITATIONS
19	The Significance of the Adaptive Thermal Comfort Limits on the Air-Conditioning Loads in a Temperate Climate. <i>Sustainability</i> , 2019, 11, 328.	3.2	32
20	Redox Characteristics of Fe-Ni/SiO <sub>2</sub> Bimetallic Oxygen Carriers in CO under Conditions Pertinent to Chemical Looping Combustion. <i>Energy &amp; Fuels</i> , 2012, 26, 75-84.	5.1	31
21	Application of Concrete and Demolition Waste as CO <sub>2</sub> Sorbent in Chemical Looping Gasification of Biomass. <i>Energy &amp; Fuels</i> , 2012, 26, 2046-2057.	5.1	31
22	Investigations into Physicochemical Changes in Thermal Coals during Low-Temperature Ionic Liquid Treatment. <i>Energy &amp; Fuels</i> , 2015, 29, 7080-7088.	5.1	29
23	The Significance of Temperature Based Approach Over the Energy Based Approaches in the Buildings Thermal Assessment. <i>Environmental and Climate Technologies</i> , 2017, 19, 39-50.	1.4	29
24	Novel Calcium-Looping-Based Biomass-Integrated Gasification Combined Cycle: Thermodynamic Modeling and Experimental Study. <i>Energy &amp; Fuels</i> , 2016, 30, 1730-1740.	5.1	19
25	The impact of carbonate salts on char formation and gas evolution during the slow pyrolysis of biomass, cellulose, and lignin. <i>Sustainable Energy and Fuels</i> , 2020, 4, 5987-6003.	4.9	18
26	Sulfidation of Iron-Based Sorbents Supported on Activated Chars during the Desulfurization of Coke Oven Gases: Effects of Mo and Ce Addition. <i>Energy &amp; Fuels</i> , 2014, 28, 2481-2489.	5.1	16
27	Equilibrium thermodynamic analyses of methanol production via a novel Chemical Looping Carbon Arrestor process. <i>Energy Conversion and Management</i> , 2015, 96, 392-402.	9.2	15
28	The effects of coal dust concentrations and particle sizes on the minimum auto-ignition temperature of a coal dust cloud. <i>Fire and Materials</i> , 2017, 41, 908-915.	2.0	14
29	Comments on the effect of liquid layering on the thermal conductivity of nanofluids. <i>Journal of Nanoparticle Research</i> , 2009, 11, 1501-1507.	1.9	13
30	A unique phase change redox cycle using CuO/Cu <sub>2</sub> O for utility-scale energy storage. <i>Energy Conversion and Management</i> , 2019, 188, 366-380.	9.2	13
31	Flame spread over porous sand beds wetted with propenol. <i>Fire and Materials</i> , 2011, 35, 61-70.	2.0	12
32	A Novel Hybrid Chemical-Looping Oxy Combustor Process for the Combustion of Solid and Gaseous Fuels: Thermodynamic Analysis. <i>Energy &amp; Fuels</i> , 2015, 29, 602-617.	5.1	12
33	Numerical Study of the Orientation of Cylindrical Particles in a Circulating Fluidized Bed. <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 12806-12817.	3.7	12
34	Numerical investigation of heterogeneous nucleation of water vapour on PM <sub>10</sub> for particulate abatement. <i>Canadian Journal of Chemical Engineering</i> , 2019, 97, 930-939.	1.7	12
35	Effect of Tube Size on Flame and Pressure Wave Propagation in a Tube Closed at One End: A Numerical Study. <i>Combustion Science and Technology</i> , 2020, 192, 1731-1753.	2.3	12
36	Kinetics and Mechanism of Catalytic Oxidation of NO in Coal Combustion Flue Gas over Co-Doped Mn-Ti Oxide Catalyst. <i>Energy &amp; Fuels</i> , 2020, 34, 6052-6058.	5.1	12

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37	A phase change calcium looping thermochemical energy storage system based on CaCO <sub>3</sub> /CaO-CaCl <sub>2</sub> . Energy Conversion and Management, 2021, 227, 113503.	9.2	12
38	An Experimental Investigation of the Catalytic Activity of Natural Calcium-Rich Minerals and a Novel Dual-Supported CaO@Ca <sub>12</sub> Al <sub>14</sub> O <sub>33</sub> /Al <sub>2</sub> O <sub>3</sub> Catalyst for Biotar Steam Reforming. Energy & Fuels, 2018, 32, 4269-4277.	5.1	11
39	Quantum Chemical Molecular Dynamics Simulations of 1,3-Dichloropropene Combustion. Journal of Physical Chemistry A, 2015, 119, 9307-9316.	2.5	10
40	Flame Propagation and Reflections of Pressure Waves through Fixed Beds of RTO Devices: A CFD Study. Industrial & Engineering Chemistry Research, 2019, 58, 23389-23404.	3.7	10
41	Experimental Study on Fundamental Mechanisms of Ferro-Fluidics for an Electromagnetic Energy Harvester. Industrial & Engineering Chemistry Research, 2016, 55, 12491-12501.	3.7	9
42	Systematic Study of Pressure Fluctuation in the Riser of a Dual Inter-Connected Circulating Fluidized Bed: Using Single and Binary Particle Species. Processes, 2019, 7, 890.	2.8	9
43	Capture and Mitigation of Fugitive Methane: Examining the Characteristics of Methane Explosions in an Explosion Chamber Connected to a Venting Duct. Energy & Fuels, 2020, 34, 645-654.	5.1	9
44	A statistical study on the combined effects of wall thermal mass and thermal resistance on internal air temperatures. Journal of Building Physics, 2015, 38, 419-443.	2.4	8
45	Formation of persistent organic pollutants from 2,4,5-trichlorothiophenol combustion: a density functional theory investigation. Journal of Molecular Modeling, 2016, 22, 128.	1.8	8
46	Thermochemical Conversion of Biomass in the Presence of Molten Alkali-Metal Carbonates under Reducing Environments of N <sub>2</sub> and CO <sub>2</sub> . Energies, 2020, 13, 5395.	3.1	8
47	CFD Investigation of Flame and Pressure Wave Propagation through Variable Concentration Methane-Air Mixtures in a Tube Closed at One End. Combustion Science and Technology, 2021, 193, 1203-1230.	2.3	8
48	Structural Investigation of the Synthesized Few-Layer Graphene from Coal under Microwave. Nanomaterials, 2022, 12, 57.	4.1	8
49	Experimental evaluation and analysis of methane fire and explosion mitigation using isolation valves integrated with a vent system. Journal of Hazardous Materials, 2017, 339, 301-309.	12.4	7
50	Healthy Power: Reimagining Hospitals as Sustainable Energy Hubs. Sustainability, 2020, 12, 8554.	3.2	7
51	Gas Transition: Renewable Hydrogen's Future in Eastern Australia's Energy Networks. Energies, 2021, 14, 3968.	3.1	7
52	Experimental and mathematical analysis of fuel penetration through unconsolidated porous media. Fire and Materials, 2013, 37, 160-170.	2.0	5
53	A simple model for predicting solid concentration distribution in binary solid liquid fluidized beds. AIChE Journal, 2017, 63, 469-484.	3.6	5
54	The importance of air movement in warmer temperatures: a novel SET* house case study. Architectural Science Review, 2017, 60, 225-238.	2.2	5

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55	Ice nucleation of water droplet containing solid particles under weak ultrasonic vibration. <i>Ultrasonics Sonochemistry</i> , 2021, 70, 105301.	8.2	5
56	A novel slag carbon arrestor process for energy recovery in steelmaking industry. <i>Fuel Processing Technology</i> , 2017, 155, 124-133.	7.2	4
57	Microwave-Assisted Coal-Derived Few-Layer Graphene as an Anode Material for Lithium-Ion Batteries. <i>Materials</i> , 2021, 14, 6468.	2.9	4
58	A PROCESS FOR DISPOSAL OF HALON 1301 (CBrF <sub>3</sub> ). <i>Chemical Engineering Communications</i> , 1999, 176, 195-200.	2.6	3
59	Estimation of the carbonation reaction kinetic parameters for dilute methane and carbon dioxide conditions in a calcium looping process. <i>Environmental Progress and Sustainable Energy</i> , 2018, 37, 1312-1318.	2.3	3
60	Stone Dust Looping for Ventilation Air Methane Abatement: A 1 m <sup>3</sup> /s Pilot-Scale Study. <i>Energy &amp; Fuels</i> , 2019, 33, 12568-12577.	5.1	3
61	The interplay between ternary molten carbonate and biomaterials during pressurized slow pyrolysis. <i>Reaction Chemistry and Engineering</i> , 0, , .	3.7	3
62	Short communication: effects of char oxidation on re-ignition characteristics of wood-based materials. <i>Fire and Materials</i> , 2000, 24, 303-304.	2.0	2
63	Formation of benzofuran and chlorobenzofuran from 1,3-dichloropropene: A quantum chemical investigation. <i>International Journal of Quantum Chemistry</i> , 2015, 115, 1739-1745.	2.0	2
64	Contribution of thermal resistance and thermal mass to the energy demand of walling systems / Beitrag des Wärmedurchlasswiderstandes und der thermischen Masse zum Energiebedarf von Wandsystemen. <i>Mauerwerk</i> , 2015, 19, 64-73.	0.1	2
65	CFD Modeling of Flame Jump across Air Gap between Evas <sup>®</sup> and Capture Duct for Ventilation Air Methane Abatement. <i>Processes</i> , 2021, 9, 2278.	2.8	2
66	A response to Murshed et al., <i>J Nanopart Res</i> (2010) 12:2007â€“2010. <i>Journal of Nanoparticle Research</i> , 2011, 13, 4395-4396.	1.9	1
67	Derivation of Kinetics and Design Parameters for a Carbonator Reactor in a Greenhouse Calcium Looping Process. <i>Energy Technology</i> , 2017, 5, 644-655.	3.8	1
68	Comparative Study of Data Mining Techniques for Predicting Explosions in Coal Mines. , 2020, , .		1
69	Short Communication: a methodology for evaluating the effect of drying on the heat of combustion of wood-based materials. <i>Fire and Materials</i> , 2000, 24, 165-166.	2.0	0
70	Short Communication: application of a surrogate material in assessing the impact of porosity on re-ignition of wood-based materials. <i>Fire and Materials</i> , 2002, 26, 99-101.	2.0	0