Youjun Lu

List of Publications by Year in descending order

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80	3,357	136950	144013
papers	citations	32 h-index	57 g-index

80	80	80	2100
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermodynamic modeling and analysis of biomass gasification for hydrogen production in supercritical water. Chemical Engineering Journal, 2007, 131, 233-244.	12.7	217
2	Thermodynamic analysis of hydrogen production from biomass gasification in supercritical water. Energy Conversion and Management, 2006, 47, 1515-1528.	9.2	194
3	Hydrogen production by coal gasification in supercritical water with a fluidized bed reactor. International Journal of Hydrogen Energy, 2010, 35, 7151-7160.	7.1	187
4	Supercritical water gasification research and development in China. Journal of Supercritical Fluids, 2015, 96, 144-150.	3.2	179
5	Toward High-Value Hydrocarbon Generation by Photocatalytic Reduction of CO₂ in Water Vapor. ACS Catalysis, 2019, 9, 5590-5602.	11.2	151
6	Hydrogen production from glycerol by supercritical water gasification in a continuous flow tubular reactor. International Journal of Hydrogen Energy, 2012, 37, 5559-5568.	7.1	145
7	Solar fuels production: Two-step thermochemical cycles with cerium-based oxides. Progress in Energy and Combustion Science, 2019, 75, 100785.	31.2	122
8	Materials design of perovskite solid solutions for thermochemical applications. Energy and Environmental Science, 2019, 12, 1369-1384.	30.8	122
9	Hydrogen production by supercritical water gasification of biomass: Explore the way to maximum hydrogen yield and high carbon gasification efficiency. International Journal of Hydrogen Energy, 2012, 37, 3177-3185.	7.1	110
10	Hydrogen production by biomass gasification in supercritical water over Ni/Î³Al2O3 and Ni/CeO2-Î³Al2O3 catalysts. International Journal of Hydrogen Energy, 2010, 35, 7161-7168.	7.1	104
11	Hydrogen production from supercritical water gasification of alkaline wheat straw pulping black liquor in continuous flow system. International Journal of Hydrogen Energy, 2011, 36, 13528-13535.	7.1	102
12	Hydrogen production by partial oxidative gasification of biomass and its model compounds in supercritical water. International Journal of Hydrogen Energy, 2010, 35, 3001-3010.	7.1	101
13	Industrialization prospects for hydrogen production by coal gasification in supercritical water and novel thermodynamic cycle power generation system with no pollution emission. Science China Technological Sciences, 2015, 58, 1989-2002.	4.0	88
14	Hydrogen production by biomass gasification in supercritical water using concentrated solar energy: System development and proof of concept. International Journal of Hydrogen Energy, 2010, 35, 7134-7141.	7.1	83
15	Hydrogen production by biomass gasification in supercritical water with bimetallic Niâ€“M/Î³Al2O3 catalysts (MÂ=ÂCu, Co and Sn). International Journal of Hydrogen Energy, 2011, 36, 14391-14400.	7.1	80
16	Technical and economic evaluation of solar hydrogen production by supercritical water gasification of biomass in China. International Journal of Hydrogen Energy, 2011, 36, 14349-14359.	7.1	77
17	Minimum fluidization velocities for supercritical water fluidized bed within the range of 633â€“693K and 23â€“27MPa. International Journal of Multiphase Flow, 2013, 49, 78-82.	3.4	67
18	Hydrogen production by supercritical water gasification of biomass: Particle and residence time distribution in fluidized bed reactor. International Journal of Hydrogen Energy, 2013, 38, 13117-13124.	7.1	57

#	Article	IF	Citations
19	Hydrogen production by supercritical water gasification of glucose with Ni/CeO2/Al2O3: Effect of Ce loading. Fuel, 2013, 103, 193-199.	6.4	55
20	Hydrogen production by biomass gasification in a supercritical water fluidized bed reactor: A CFD-DEM study. Journal of Supercritical Fluids, 2018, 131, 26-36.	3.2	55
21	Solar receiver/reactor for hydrogen production with biomass gasification in supercritical water. International Journal of Hydrogen Energy, 2013, 38, 13038-13044.	7.1	54
22	A CFDâ€“DEM study of bubble dynamics in fluidized bed using flood fill method. Chemical Engineering Journal, 2015, 274, 123-131.	12.7	53
23	Fluid hydrodynamic characteristics in supercritical water fluidized bed: A DEM simulation study. Chemical Engineering Science, 2014, 117, 283-292.	3.8	49
24	Co-precipitated Niâ€“Mgâ€“Al catalysts for hydrogen production by supercritical water gasification of glucose. International Journal of Hydrogen Energy, 2013, 38, 9688-9700.	7.1	46
25	Flow structure and bubble dynamics in supercritical water fluidized bed and gas fluidized bed: A comparative study. International Journal of Multiphase Flow, 2015, 73, 130-141.	3.4	46
26	Behavior of nickel catalysts in supercritical water gasification of glucose: Influence of support. Biomass and Bioenergy, 2014, 67, 125-136.	5.7	45
27	Evaluation of stability and catalytic activity of Ni catalysts for hydrogen production by biomass gasification in supercritical water. Carbon Resources Conversion, 2019, 2, 95-101.	5.9	45
28	A numerical study of bed expansion in supercritical water fluidized bed with a non-spherical particle drag model. Chemical Engineering Research and Design, 2015, 104, 164-173.	5.6	39
29	A new quantitative measurement method for mixing and segregation of binary-mixture fluidized bed by capacitance probe. Chemical Engineering Journal, 2017, 326, 99-108.	12.7	38
30	The influence of alkali precipitation on supercritical water gasification of glucose and the alkali recovery in fluidized-bed reactor. International Journal of Hydrogen Energy, 2013, 38, 13293-13299.	7.1	37
31	Hydrogen Production by Supercritical Water Gasification of Biomass with Homogeneous and Heterogeneous Catalyst. Advances in Condensed Matter Physics, 2014, 2014, 1-9.	1.1	37
32	Bed to wall heat transfer in supercritical water fluidized bed: Comparison with the gasâ€“solid fluidized bed. Applied Thermal Engineering, 2015, 88, 297-305.	6.0	34
33	Solar fuel production at high temperatures using ceria as a dense membrane. Energy, 2016, 104, 53-63.	8.8	32
34	Numerical analysis of heat transfer and solid volume fraction profiles around a horizontal tube immersed in a supercritical water fluidized bed. Applied Thermal Engineering, 2016, 93, 200-213.	6.0	29
35	Reactivity of Ni, Cr and Zr doped ceria in CO2 splitting for CO production via two-step thermochemical cycle. International Journal of Hydrogen Energy, 2018, 43, 13754-13763.	7.1	29
36	Supercritical water gasification of glucose in fluidized bed reactor: A numerical study. International Journal of Hydrogen Energy, 2017, 42, 7857-7865.	7.1	28

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37	Fluidization behavior in high-pressure water at temperature from ambient to supercritical. Powder Technology, 2016, 304, 89-100.	4.2	26
38	Flow separation from a spherical particle in supercritical water. Chemical Engineering Research and Design, 2014, 92, 2273-2282.	5.6	22
39	Investigation of hydrogen oxidation in supercritical H2O/CO2 mixtures using ReaxFF molecular dynamics simulation. Journal of Supercritical Fluids, 2020, 155, 104661.	3.2	22
40	Cyclone separation in a supercritical water circulating fluidized bed reactor for coal/biomass gasification: Structural design and numerical analysis. Particuology, 2018, 39, 55-67.	3.6	20
41	Reactivity and Efficiency of Ceria-Based Oxides for Solar CO₂ Splitting via Isothermal and Near-Isothermal Cycles. Energy & Fuels, 2018, 32, 736-746.	5.1	20
42	Fluidization of Particles in Supercritical Water: A Comprehensive Study on Bubble Hydrodynamics. Industrial & Engineering Chemistry Research, 2019, 58, 2036-2051.	3.7	19
43	Fluidization of solids with water in supercritical conditions â€“ Characteristics of pressure fluctuations. Chemical Engineering Research and Design, 2016, 109, 657-666.	5.6	18
44	Development of a Detailed Kinetic Model for Hydrogen Oxidation in Supercritical H₂O/CO₂ Mixtures. Energy & Fuels, 2020, 34, 15379-15388.	5.1	18
45	Numerical study on laminar free convection heat transfer between sphere particle and high pressure water in pseudo-critical zone. Thermal Science, 2014, 18, 1293-1303.	1.1	17
46	Numerical simulation of bubble behavior in a quasi-2D fluidized bed using a bubble-based EMMS model. Particuology, 2019, 46, 40-54.	3.6	17
47	Minimum bubbling fluidization velocity in a supercritical water fluidized bed acquired by the dual-capacitance probe method. Chemical Engineering Science, 2019, 199, 359-370.	3.8	15
48	Kinetic study on hydrogen oxidation in supercritical H2O/CO2 mixtures. Fuel Processing Technology, 2019, 193, 123-130.	7.2	15
49	Numerical Study on the Mixed Convection Heat Transfer between a Sphere Particle and High Pressure Water in Pseudocritical Zone. Advances in Mechanical Engineering, 2013, 5, 527182.	1.6	15
50	Effect of cohesive powders on pressure fluctuation characteristics of a binary gas-solid fluidized bed. Korean Journal of Chemical Engineering, 2018, 35, 2117-2126.	2.7	12
51	Experimental Study on the Two-Phase Flow Structure in a Supercritical Water-Fluidized Bed. Industrial & Engineering Chemistry Research, 2019, 58, 20099-20108.	3.7	12
52	Numerical investigation of binary particle mixing in gas-solid fluidized bed with a bubble-based drag EMMS model. Advanced Powder Technology, 2020, 31, 1529-1542.	4.1	11
53	Bubble dynamic wave velocity in fluidized bed. Chemical Engineering Science, 2016, 147, 21-29.	3.8	10
54	Experimental study of wall-to-bed heat transfer in a supercritical water fluidized bed. International Journal of Multiphase Flow, 2018, 109, 26-34.	3.4	10

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55	Experimental investigation of pressure fluctuation propagation in two orthogonal directions using a clapboard-type internally circulating fluidized bed. Advanced Powder Technology, 2020, 31, 3395-3407.	4.1	10
56	Oxidative degradation of quinazoline in supercritical water: a combined ReaxFF and DFT study. Molecular Simulation, 2018, 44, 1508-1519.	2.0	9
57	Bubble behavior in gasâ€“solid bubbling fluidized beds based on EMMS model: Comparison of 2D, Q2D, and 3D simulations. Chemical Engineering Research and Design, 2019, 149, 65-80.	5.6	9
58	Onset of slugging fluidization in supercritical water fluidized bed. Particuology, 2020, 52, 47-56.	3.6	8
59	Drag coefficient and volume fraction of bubbles in a supercritical water fluidized bed. Particuology, 2021, 57, 127-138.	3.6	8
60	Modeling of Wall-to-Bed Heat Transfer in a Supercritical Water Fluidized Bed by the Packet Approach. Industrial & Engineering Chemistry Research, 2020, 59, 22640-22655.	3.7	8
61	Kinetic Model for High-Pressure Methanol Oxidation in Gas Phase and Supercritical Water. Energy & Fuels, 2022, 36, 575-588.	5.1	8
62	Wall-to-bed heat transfer in supercritical water fluidized bed using CFD-DEM. Particuology, 2021, 56, 113-123.	3.6	6
63	Kinetic modeling of carbon monoxide oxidation and water gas shift reaction in supercritical water. Journal of Supercritical Fluids, 2021, 171, 105165.	3.2	6
64	Fluidization of particles in SCW fluidized bed: Voidage distribution of emulsion phase. Particuology, 2022, 63, 60-75.	3.6	5
65	A comparative investigation of flow structures in three-dimensional supercritical water and gas-solid fluidized bed via two-fluid model simulations. Journal of Supercritical Fluids, 2022, 181, 105515.	3.2	5
66	Numerical study of hydrogen hydrothermal combustion characteristics in a coaxial nozzle burner. Journal of Supercritical Fluids, 2022, 183, 105537.	3.2	5
67	Fluidization in Supercritical Water: Heat Transfer between Particle and Supercritical Water. International Journal of Chemical Reactor Engineering, 2018, 16, .	1.1	4
68	Catalysis in Supercritical Water Gasification of Biomass: Status and Prospects. Biofuels and Biorefineries, 2014, , 343-371.	0.5	4
69	Contact-Based Method to Evaluate Mixing in Multicomponent Experiments and Simulations. Industrial & Engineering Chemistry Research, 2021, 60, 16126-16142.	3.7	4
70	Numerical simulation of local and global mixing/segregation characteristics in a gasâ€“solid fluidized bed. Chinese Journal of Chemical Engineering, 2022, 44, 72-86.	3.5	3
71	Mesoscale-Structure-Dependent EMMS Drag Model for an SCW Fluidized Bed: Formulation of Conservation Equations Based on Structures in Subphases. Industrial & Engineering Chemistry Research, 0, , .	3.7	3
72	Particle convective heat transfer near the wall in a supercritical water fluidized bed by single particle model coupled with CFD-DEM. Particuology, 2023, 73, 47-58.	3.6	3

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73	Unsteady-state bubble dynamic wave velocity of gasâ€“solid bubbling fluidized bed. Chemical Engineering Research and Design, 2017, 126, 255-264.	5.6	2
74	An investigation of the relationship between statistical analysis and multiscale analysis in a circulating fluidised bed. Chemical Engineering Research and Design, 2018, 140, 175-193.	5.6	2
75	Instantaneous mixing characteristics of binary mixtures differing in density in a gasâ€'solid fluidised bed. Particuology, 2020, 53, 63-71.	3.6	2
76	A method to deal with constant wall flux boundary condition in a fluidized bed by CFD-DEM. Chemical Engineering Journal, 2021, 406, 126880.	12.7	2
77	Oxidation Kinetics of Methane and Methane/Methanol Mixtures in Supercritical Water. Industrial & Engineering Chemistry Research, 2022, 61, 3889-3899.	3.7	2
78	Detailed chemical kinetics simulation of hydrogen hydrothermal combustion characteristics: Special effects of supercritical H2O/CO2 mixtures. Journal of Supercritical Fluids, 2022, 188, 105677.	3.2	2
79	Numerical Modeling of CO2 Splitting in High-Temperature Solar-Driven Oxygen Permeation Membrane Reactors. Journal of Solar Energy Engineering, Transactions of the ASME, 2021, 143, .	1.8	1
80	A Review on Supercritical Fluidization. , 0, , .		0