Juntao Wei

List of Publications by Year in descending order

47 papers	1,605 citations	257429 24 h-index	302107 39 g-index
47 all docs	47 docs citations	47 times ranked	1081 citing authors

#	Article	IF	Citations
1	Effect of torrefaction on pinewood pyrolysis kinetics and thermal behavior using thermogravimetric analysis. Bioresource Technology, 2019, 280, 104-111.	9.6	155
2	A mechanism investigation of synergy behaviour variations during blended char co-gasification of biomass and different rank coals. Renewable Energy, 2019, 131, 597-605.	8.9	91
3	Effect of torrefaction on the properties of rice straw high temperature pyrolysis char: Pore structure, aromaticity and gasification activity. Bioresource Technology, 2017, 228, 241-249.	9.6	86
4	A review on reactivity characteristics and synergy behavior of biomass and coal Co-gasification. International Journal of Hydrogen Energy, 2021, 46, 17116-17132.	7.1	82
5	Physicochemical evolution during rice straw and coal co-pyrolysis and its effect on co-gasification reactivity. Bioresource Technology, 2017, 227, 345-352.	9.6	80
6	Synergy mechanism analysis of petroleum coke and municipal solid waste (MSW)-derived hydrochar co-gasification. Applied Energy, 2017, 206, 1354-1363.	10.1	76
7	Synergistic effect on co-gasification reactivity of biomass-petroleum coke blended char. Bioresource Technology, 2017, 234, 33-39.	9.6	67
8	CO2 gasification of char from raw and torrefied biomass: Reactivity, kinetics and mechanism analysis. Bioresource Technology, 2019, 293, 122087.	9.6	67
9	Utilization of biomass ash for upgrading petroleum coke gasification: Effect of soluble and insoluble components. Energy, 2020, 192, 116642.	8.8	65
10	Co-gasification of bituminous coal and hydrochar derived from municipal solid waste: Reactivity and synergy. Bioresource Technology, 2017, 239, 482-489.	9.6	52
11	Understanding the Effect of Different Biomass Ash Additions on Pyrolysis Product Distribution, Char Physicochemical Characteristics, and Char Gasification Reactivity of Bituminous Coal. Energy & Fuels, 2019, 33, 3068-3076.	5.1	52
12	Reactivity, Synergy, and Kinetics Analysis of CO₂ Co-pyrolysis/Co-gasification of Biomass after Hydrothermal Treatment and Coal Blends. Energy & Fuels, 2020, 34, 294-303.	5.1	50
13	Study on reactivity characteristics and synergy behaviours of rice straw and bituminous coal co-gasification. Bioresource Technology, 2016, 220, 509-515.	9.6	49
14	Brief review on petroleum coke and biomass/coal co-gasification: Syngas production, reactivity characteristics, and synergy behavior. Fuel, 2021, 304, 121517.	6.4	48
15	Catalytic effects of alkali carbonates on coal char gasification. Journal of the Energy Institute, 2017, 90, 588-601.	5.3	44
16	Influence of Biomass Ash Additive on Reactivity Characteristics and Structure Evolution of Coal Charâ€“CO₂ Gasification. Energy & Fuels, 2018, 32, 10428-10436.	5.1	37
17	Effect of hydrothermal carbonization temperature on reactivity and synergy of co-gasification of biomass hydrochar and coal. Applied Thermal Engineering, 2021, 183, 116232.	6.0	37
18	Study on rapid pyrolysis and in-situ char gasification characteristics of coal and petroleum coke. International Journal of Hydrogen Energy, 2016, 41, 16823-16834.	7.1	34

#	Article	IF	Citations
19	Co-gasification reactivity and synergy of banana residue hydrochar and anthracite coal blends. Applied Energy, 2019, 250, 92-97.	10.1	34
20	Effect of biomass leachates on structure evolution and reactivity characteristic of petroleum coke gasification. Renewable Energy, 2020, 155, 111-120.	8.9	34
21	Co-pyrolysis Behavior and Char Structure Evolution of Raw/Torrefied Rice Straw and Coal Blends. Energy & Fuels, 2018, 32, 12469-12476.	5.1	32
22	Understanding the influence of iron on fluidity and crystallization characteristics of synthetic coal slags. Fuel Processing Technology, 2020, 209, 106532.	7.2	29
23	Migration and transformation of alkali/alkaline earth metal species during biomass and coal co-gasification: A review. Fuel Processing Technology, 2022, 235, 107376.	7.2	28
24	Advances on in-situ analysis of char structure evolution during thermochemical conversion of coal/biomass: A review. Fuel Processing Technology, 2022, 230, 107221.	7.2	26
25	Application of biomass leachate in regulating the fusibility of coal ash. Fuel, 2020, 268, 117338.	6.4	25
26	Deactivation mechanism of coal char gasification reactivity induced by cow manure biomass volatileâ€“coal char interactions. Fuel, 2021, 301, 121064.	6.4	22
27	Deep insight into the ash fusibility and viscosity fluctuation behavior during co-gasification of coal and indirect coal liquefaction residue. Fuel, 2021, 305, 121620.	6.4	20
28	Synergistic Effects of CaO and MgO on Ash Fusion Characteristics in Entrained-Flow Gasifier. Energy & Fuels, 2021, 35, 425-432.	5.1	19
29	Rapid co-pyrolysis of lignite and biomass blends: Analysis of synergy and gasification reactivity of residue char. Journal of Analytical and Applied Pyrolysis, 2019, 143, 104688.	5.5	17
30	A comparative study on pyrolysis reactivity and gas release characteristics of biomass and coal using TG-MS analysis. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2018, 40, 2063-2069.	2.3	15
31	Promoting effect of biomass ash additives on high-temperature gasification of petroleum coke: Reactivity and kinetic analysis. Journal of the Energy Institute, 2020, 93, 1364-1372.	5.3	15
32	Investigation on coal ash fusibility and fluidity during the co-gasification of coal and coal indirect liquefaction residue. Fuel Processing Technology, 2021, 221, 106949.	7.2	15
33	Decoupling of volatileâ€“char interaction in co-pyrolysis of cow manure and bituminous coal and deactivation mechanism of coal char reactivity. Energy, 2022, 251, 123891.	8.8	15
34	Correlation study between microstructure and fluidity of molten slag during co-gasification of coal and indirect coal liquefaction residue: Molecular dynamics simulation. Fuel, 2022, 326, 125031.	6.4	15
35	Investigation of the regeneration of a CO2-loaded ammonia solution with solid acid catalysts: A promising alternative for reducing regeneration energy. Fuel Processing Technology, 2020, 205, 106452.	7.2	13
36	Gasification under CO2â€“Steam Mixture: Kinetic Model Study Based on Shared Active Sites. Energies, 2017, 10, 1890.	3.1	12

#	Article	IF	Citations
37	Numerical Simulation of Heat Transfer and a Forging Plate Structure in a Radiant Syngas Cooler with Radiation Screens. Industrial & Engineering Chemistry Research, 2020, 59, 16483-16491.	3.7	9
38	Study on Char-Ash-Slag-Liquid Transition and Its Effect on Char Reactivity. Energy & Fuels, 2020, 34, 3941-3951.	5.1	9
39	Study on Soot Emission Characteristics of Methane/Oxygen Inverse Diffusion Flame. ACS Omega, 2021, 6, 23191-23202.	3.5	7
40	Investigation on co-gasification of N-rich fiberboard and glucose: Nitrogen evolution and changes in char properties. Journal of the Energy Institute, 2022, 101, 87-95.	5.3	7
41	Numerical simulation of radiant syngas cooler with different connection to entrained-flow gasifier. Applied Thermal Engineering, 2022, 201, 117804.	6.0	5
42	A study on highâ€temperature coâ€gasification reactivity characteristics and kinetics analysis of Hami coal and its liquefaction residue. Asia-Pacific Journal of Chemical Engineering, 2020, 15, e2376.	1.5	3
43	Highâ€temperature char gasification of anthracite/petroleum coke: using biomass leachate as cheapâ€effective additive. Asia-Pacific Journal of Chemical Engineering, 2020, 15, e2454.	1.5	3
44	Crystallization and viscosity-temperature characteristics during co-gasification of industrial sludge and coal. Frontiers in Energy, 2022, 16, 1037-1047.	2.3	2
45	Investigation on gas release characteristics of catalytic coal pyrolysis using thermogravimetric analyzer-mass spectrometry. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, , 1-13.	2.3	1
46	Analysis of the Single Coal Particle Combustion Process under O₂/CO₂ Atmosphere Based on Spectral Diagnostics Technology: Combination of Spectroscopic Characteristics and Flame Temperature. Energy & Fuels, 2022, 36, 1697-1706.	5.1	1
47	Influence of CaO on in-situ tar formation during the co-pyrolysis of coal and cow dung in a Py-GCMS. Biofuels, 0, , 1-6.	2.4	0