Christopher K Russell

List of Publications by Year
in descending order

48	1,992	304368 22	253896 43
papers	citations	h-index	g-index

48	48	48	2100
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The newly-assisted catalytic mechanism of surface hydroxyl species performed as the promoter in syngas-to-C2 species on the Cu-based bimetallic catalysts. Green Energy and Environment, 2023, 8, 487-498.	4.7	2
2	The crucial role of deoxygenation in syngas refinement and carbon dioxide utilization during chemical looping-based biomass gasification. Chemical Engineering Journal, 2022, 428, 132068.	6.6	40
3	Enhanced Fe₂O₃/Al₂O₃ Oxygen Carriers for Chemical Looping Steam Reforming of Methane with Different Mg Ratios. Industrial & Engineering Chemistry Research, 2022, 61, 1022-1031.	1.8	8
4	Modification of Metal (Fe, Al) Doping on Reaction Properties of a NiO Oxygen Carrier with CO during Chemical Looping Combustion. ACS Omega, 2022, 7, 4381-4388.	1.6	5
5	Tailoring lattice oxygen triggered NiO/Ca9Co12O28 catalysts for sorption-enhanced renewable hydrogen production. Applied Catalysis B: Environmental, 2022, 316, 121642.	10.8	14
6	Chemometric modelling on element compositions and product distributions of cellulose and lignin. Biomass Conversion and Biorefinery, 2021, 11, 2233-2246.	2.9	4
7	Effect of calcium ferrites on carbon dioxide gasification reactivity and kinetics of pine wood derived char. Renewable Energy, 2021, 163, 445-452.	4.3	19
8	Application of incremental support vector regression based on optimal training subset and improved particle swarm optimization algorithm in real-time sensor fault diagnosis. Applied Intelligence, 2021, 51, 3323-3338.	3.3	9
9	Structural Interconversion between Agglomerated Palladium Domains and Mononuclear Pd(II) Cations in Chabazite Zeolites. Chemistry of Materials, 2021, 33, 1698-1713.	3.2	42
10	Classification and prediction of gas turbine gas path degradation based on deep neural networks. International Journal of Energy Research, 2021, 45, 10513-10526.	2.2	8
11	Evolution of Smâ€Doped Fe₂O₃/CeO₂ Oxygen Carriers in Chemical Looping Hydrogen Generation. Energy Technology, 2021, 9, 2100535.	1.8	2
12	Boosting the surface oxygen activity for high performance Iron-based perovskite oxide. Science of the Total Environment, 2021, 795, 148904.	3.9	11
13	Thermocatalytic formic acid dehydrogenation: recent advances and emerging trends. Journal of Materials Chemistry A, 2021, 9, 24241-24260.	5.2	39
14	Double-shelled ZnSnO3 hollow cubes for efficient photocatalytic degradation of antibiotic wastewater. Chemical Engineering Journal, 2020, 384, 123279.	6.6	179
15	Multi-objective economic emission dispatch of thermal power plants based on grey relational analysis and analytic hierarchy process. Energy and Environment, 2020, 31, 785-812.	2.7	5
16	Synergistic Effects of the Zr and Sm Co-doped Fe₂O₃/CeO₂ Oxygen Carrier for Chemical Looping Hydrogen Generation. Energy & Fuels, 2020, 34, 10256-10267.	2.5	21
17	Chemical looping oxidative steam reforming of methanol: A new pathway for auto-thermal conversion. Applied Catalysis B: Environmental, 2020, 269, 118758.	10.8	57
18	Highly efficient methane decomposition to H2 and CO2 reduction to CO via redox looping of Ca2FexAl2-xO5 supported NiyFe3-yO4 nanoparticles. Applied Catalysis B: Environmental, 2020, 271, 118938.	10.8	24

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19	Thermodynamics of NaHCO3 decomposition during Na2CO3-based CO2 capture. Journal of Environmental Sciences, 2019, 78, 74-80.	3.2	15
20	Understanding the catalytic mechanisms of CO2 hydrogenation to methanol on unsupported and supported Ga-Ni clusters. Applied Energy, 2019, 253, 113623.	5.1	34
21	Synergistic enhancement of chemical looping-based CO₂ splitting with biomass cascade utilization using cyclic stabilized Ca₂Fe₂O₅ aerogel. Journal of Materials Chemistry A, 2019, 7, 1216-1226.	5.2	43
22	A new and different insight into the promotion mechanisms of Ga for the hydrogenation of carbon dioxide to methanol over a Ga-doped Ni(211) bimetallic catalyst. Nanoscale, 2019, 11, 9969-9979.	2.8	10
23	Investigation of synergistic effects and high performance of La-Co composite oxides for toluene catalytic oxidation at low temperature. Environmental Science and Pollution Research, 2019, 26, 12123-12135.	2.7	36
24	CO2 hydrogenation to high-value products via heterogeneous catalysis. Nature Communications, 2019, 10, 5698.	5.8	571
25	Solarâ€“Windâ€“Bio Ecosystem for Biomass Cascade Utilization with Multigeneration of Formic Acid, Hydrogen, and Graphene. ACS Sustainable Chemistry and Engineering, 2019, 7, 2558-2568.	3.2	19
26	Costâ€Effective Palladiumâ€Doped Cu Bimetallic Materials to Tune Selectivity and Activity by using Doped Atom Ensembles as Active Sites for Efficient Removal of Acetylene from Ethylene. ChemCatChem, 2018, 10, 2424-2432.	1.8	27
27	Thermodynamic and Kinetic Study on Carbon Dioxide Hydrogenation to Methanol over a Ga₃Ni₅(111) Surface: The Effects of Step Edge. Journal of Physical Chemistry C, 2018, 122, 315-330.	1.5	26
28	Improvement of H2-rich gas production with tar abatement from pine wood conversion over bi-functional Ca2Fe2O5 catalyst: Investigation of inner-looping redox reaction and promoting mechanisms. Applied Energy, 2018, 212, 931-943.	5.1	89
29	Development of a simplified method for the determination of ampere-hour capacity of leadâ€“acid battery. Energy and Environment, 2018, 29, 147-161.	2.7	4
30	Ca2Fe2O5: A promising oxygen carrier for CO/CH4 conversion and almost-pure H2 production with inherent CO2 capture over a two-step chemical looping hydrogen generation process. Applied Energy, 2018, 211, 431-442.	5.1	119
31	Enhanced Hydrogen Generation for Fe₂O₃/CeO₂ Oxygen Carrier via Rare-Earth (Y, Sm, and La) Doping in Chemical Looping Process. Energy & Fuels, 2018, 32, 11362-11374.	2.5	22
32	TiO(OH)₂ can exceed the critical limit of conventional CO₂ sorbents: modification needed for high capacity and selectivity. Chemical Communications, 2018, 54, 8395-8398.	2.2	4
33	Application of chemical looping air separation for MILD oxyâ€combustion in the supercritical power plant with CO₂ capture. Energy Science and Engineering, 2018, 6, 490-505.	1.9	6
34	Recent progress in improving the stability of copper-based catalysts for hydrogenation of carbonâ€“oxygen bonds. Catalysis Science and Technology, 2018, 8, 3428-3449.	2.1	89
35	Biomass pyrolysis-gasification over Zr promoted CaO-HZSM-5 catalysts for hydrogen and bio-oil co-production with CO2 capture. International Journal of Hydrogen Energy, 2017, 42, 16031-16044.	3.8	33
36	Thermogravimetric and kinetics investigation of pine wood pyrolysis catalyzed with alkali-treated CaO/ZSM-5. Energy Conversion and Management, 2017, 146, 182-194.	4.4	57

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37	Recovery of rare earth elements with ionic liquids. Green Chemistry, 2017, 19, 4469-4493.	4.6	126
38	Effects of CeO₂, ZrO₂, and Al₂O₃ Supports on Iron Oxygen Carrier for Chemical Looping Hydrogen Generation. Energy & Fuels, 2017, 31, 8001-8013.	2.5	63
39	DE Algorithm Fuzzy Control of Super-Heated Steam Temperature. , 2016, , .		1
40	Sorption enhanced coal gasification for hydrogen production using a synthesized CaOMgO-molecular sieve sorbent. International Journal of Hydrogen Energy, 2016, 41, 17323-17333.	3.8	23
41	Performance improvement of a 330MWe power plant by flue gas heat recovery system. Thermal Science, 2016, 20, 303-314.	0.5	4
42	Dynamic Model Identification of the Super-Heated Steam Temperature for 300MW Circulating Fluidized Bed Boiler (CFBB). , 2015, , .		0
43	Nonlinear system identification with modified differential evolution and RBF networks. , 2012, , .		3
44	A new neuro-fuzzy approach for nonlinear system identification based on differential evolution. , 2012, , .		0
45	Investigation of coal fueled chemical looping combustion using Fe3O4 as oxygen carrier: Influence of variables. Journal of Thermal Science, 2010, 19, 266-275.	0.9	15
46	Investigation of Gasification Chemical Looping Combustion Combined Cycle Performance. Energy & Fuels, 2008, 22, 961-966.	2.5	35
47	Performance improvement of combined cycle power plant based on the optimization of the bottom cycle and heat recuperation. Journal of Thermal Science, 2007, 16, 84-89.	0.9	27
48	Thermodynamic Analysis and Optimization of an Oxyfuel Fluidized Bed Combustion Power Plant for CO₂ Capture. Industrial & Engineering Chemistry Research, 0, , .	1.8	2