Iris K M Yu

List of Publications by Year
in descending order

64 papers	5,750 citations	81839 39 h-index	123376 61 g-index
65 all docs	65 docs citations	65 times ranked	5530 citing authors

#	Article	IF	Citations
1	Conversion of biomass to hydroxymethylfurfural: A review of catalytic systems and underlying mechanisms. Bioresource Technology, 2017, 238, 716-732.	4.8	400
2	A review of biochar-based catalysts for chemical synthesis, biofuel production, and pollution control. Bioresource Technology, 2017, 246, 254-270.	4.8	398
3	Multifunctional iron-biochar composites for the removal of potentially toxic elements, inherent cations, and hetero-chloride from hydraulic fracturing wastewater. Environment International, 2019, 124, 521-532.	4.8	384
4	Lignin valorization for the production of renewable chemicals: State-of-the-art review and future prospects. Bioresource Technology, 2018, 269, 465-475.	4.8	298
5	Biorenewable hydrogen production through biomass gasification: A review and future prospects. Environmental Research, 2020, 186, 109547.	3.7	280
6	Green synthesis of gamma-valerolactone (GVL) through hydrogenation of biomass-derived levulinic acid using non-noble metal catalysts: A critical review. Chemical Engineering Journal, 2019, 372, 992-1006.	6.6	259
7	Sustainable food waste management towards circular bioeconomy: Policy review, limitations and opportunities. Bioresource Technology, 2020, 297, 122497.	4.8	225
8	Value-added chemicals from food supply chain wastes: State-of-the-art review and future prospects. Chemical Engineering Journal, 2019, 375, 121983.	6.6	218
9	A sustainable biochar catalyst synergized with copper heteroatoms and CO₂ for singlet oxygenation and electron transfer routes. Green Chemistry, 2019, 21, 4800-4814.	4.6	188
10	Plenty of room for carbon on the ground: Potential applications of biochar for stormwater treatment. Science of the Total Environment, 2018, 625, 1644-1658.	3.9	165
11	Aluminium-biochar composites as sustainable heterogeneous catalysts for glucose isomerisation in a biorefinery. Green Chemistry, 2019, 21, 1267-1281.	4.6	157
12	Microwave-assisted low-temperature hydrothermal treatment of red seaweed (Gracilaria) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Td (l 273, 251-258.	4.8	146
13	Production of 5-hydroxymethylfurfural from starch-rich food waste catalyzed by sulfonated biochar. Bioresource Technology, 2018, 252, 76-82.	4.8	132
14	Catalytic valorization of starch-rich food waste into hydroxymethylfurfural (HMF): Controlling relative kinetics for high productivity. Bioresource Technology, 2017, 237, 222-230.	4.8	121
15	Extended theory of planned behaviour for promoting construction waste recycling in Hong Kong. Waste Management, 2019, 83, 161-170.	3.7	118
16	Phosphoric acid-activated wood biochar for catalytic conversion of starch-rich food waste into glucose and 5-hydroxymethylfurfural. Bioresource Technology, 2018, 267, 242-248.	4.8	114
17	Valorization of cellulosic food waste into levulinic acid catalyzed by heterogeneous BrÃ¸nsted acids: Temperature and solvent effects. Chemical Engineering Journal, 2017, 327, 328-335.	6.6	99
18	Valorization of food waste into hydroxymethylfurfural: Dual role of metal ions in successive conversion steps. Bioresource Technology, 2016, 219, 338-347.	4.8	98

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19	Tailored design of graphitic biochar for high-efficiency and chemical-free microwave-assisted removal of refractory organic contaminants. Chemical Engineering Journal, 2020, 398, 125505.	6.6	96
20	Critical Review on Biocharâ€Supported Catalysts for Pollutant Degradation and Sustainable Biorefinery. Advanced Sustainable Systems, 2020, 4, 1900149.	2.7	93
21	Sulfonated biochar as acid catalyst for sugar hydrolysis and dehydration. Catalysis Today, 2018, 314, 52-61.	2.2	92
22	Selective Glucose Isomerization to Fructose via a Nitrogen-doped Solid Base Catalyst Derived from Spent Coffee Grounds. ACS Sustainable Chemistry and Engineering, 2018, 6, 16113-16120.	3.2	86
23	Propylene carbonate and Î³-valerolactone as green solvents enhance Sn(<scp>iv</scp>)-catalysed hydroxymethylfurfural (HMF) production from bread waste. Green Chemistry, 2018, 20, 2064-2074.	4.6	85
24	Graphite oxide- and graphene oxide-supported catalysts for microwave-assisted glucose isomerisation in water. Green Chemistry, 2019, 21, 4341-4353.	4.6	80
25	Potentially toxic elements in solid waste streams: Fate and management approaches. Environmental Pollution, 2019, 253, 680-707.	3.7	79
26	Upcycling wood waste into fibre-reinforced magnesium phosphate cement particleboards. Construction and Building Materials, 2018, 159, 54-63.	3.2	77
27	Transforming wood waste into water-resistant magnesia-phosphate cement particleboard modified by alumina and red mud. Journal of Cleaner Production, 2017, 168, 452-462.	4.6	74
28	Polar aprotic solvent-water mixture as the medium for catalytic production of hydroxymethylfurfural (HMF) from bread waste. Bioresource Technology, 2017, 245, 456-462.	4.8	71
29	Life-cycle assessment on food waste valorisation to value-added products. Journal of Cleaner Production, 2018, 199, 840-848.	4.6	71
30	Life-cycle cost-benefit analysis on sustainable food waste management: The case of Hong Kong International Airport. Journal of Cleaner Production, 2018, 187, 751-762.	4.6	69
31	Influence of green solvent on levulinic acid production from lignocellulosic paper waste. Bioresource Technology, 2020, 298, 122544.	4.8	66
32	Environmental and technical feasibility study of upcycling wood waste into cement-bonded particleboard. Construction and Building Materials, 2018, 173, 474-480.	3.2	59
33	Tin-Functionalized Wood Biochar as a Sustainable Solid Catalyst for Glucose Isomerization in Biorefinery. ACS Sustainable Chemistry and Engineering, 2019, 7, 4851-4860.	3.2	59
34	Valorization of starchy, cellulosic, and sugary food waste into hydroxymethylfurfural by one-pot catalysis. Chemosphere, 2017, 184, 1099-1107.	4.2	58
35	Promoting food waste recycling in the commercial and industrial sector by extending the Theory of Planned Behaviour: A Hong Kong case study. Journal of Cleaner Production, 2018, 204, 1034-1043.	4.6	56
36	Valorization of lignocellulosic fibres of paper waste into levulinic acid using solid and aqueous BrÃ¸nsted acid. Bioresource Technology, 2018, 247, 387-394.	4.8	55

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37	Exfoliated Ni-Al LDH 2D nanosheets for intermediate temperature CO2 capture. Journal of Hazardous Materials, 2019, 374, 365-371.	6.5	55
38	Chemicals from lignocellulosic biomass: A critical comparison between biochemical, microwave and thermochemical conversion methods. Critical Reviews in Environmental Science and Technology, 2021, 51, 1479-1532.	6.6	50
39	Sustainable production of high-value gluconic acid and glucaric acid through oxidation of biomass-derived glucose: A critical review. Journal of Cleaner Production, 2021, 312, 127745.	4.6	49
40	Chemical transformation of food and beverage waste-derived fructose to hydroxymethylfurfural as a value-added product. Catalysis Today, 2018, 314, 70-77.	2.2	47
41	Novel M (Mg/Ni/Cu)-Al-CO3 layered double hydroxides synthesized by aqueous miscible organic solvent treatment (AMOST) method for CO2 capture. Journal of Hazardous Materials, 2019, 373, 285-293.	6.5	38
42	Functionalized zeolite-solvent catalytic systems for microwave-assisted dehydration of fructose to 5-hydroxymethylfurfural. Microporous and Mesoporous Materials, 2019, 284, 43-52.	2.2	32
43	Valorization of humins from food waste biorefinery for synthesis of biochar-supported Lewis acid catalysts. Science of the Total Environment, 2021, 775, 145851.	3.9	30
44	Critical factors for levulinic acid production from starch-rich food waste: solvent effects, reaction pressure, and phase separation. Green Chemistry, 2022, 24, 163-175.	4.6	29
45	Contrasting Roles of Maleic Acid in Controlling Kinetics and Selectivity of Sn(IV)- and Cr(III)-Catalyzed Hydroxymethylfurfural Synthesis. ACS Sustainable Chemistry and Engineering, 2018, 6, 14264-14274.	3.2	28
46	Organic Acid-Regulated Lewis Acidity for Selective Catalytic Hydroxymethylfurfural Production from Rice Waste: An Experimentalâ€“Computational Study. ACS Sustainable Chemistry and Engineering, 2019, 7, 1437-1446.	3.2	28
47	Tuneable functionalities in layered double hydroxide catalysts for thermochemical conversion of biomass-derived glucose to fructose. Chemical Engineering Journal, 2020, 383, 122914.	6.6	28
48	Mixture Design and Reaction Sequence for Recycling Construction Wood Waste into Rapid-Shaping Magnesiaâ€“Phosphate Cement Particleboard. Industrial & Engineering Chemistry Research, 2017, 56, 6645-6654.	1.8	26
49	Supercritical Carbon Dioxide Extraction of Value-Added Products and Thermochemical Synthesis of Platform Chemicals from Food Waste. ACS Sustainable Chemistry and Engineering, 2019, 7, 2821-2829.	3.2	23
50	Ball-milled, solvent-free Sn-functionalisation of wood waste biochar for sugar conversion in food waste valorisation. Journal of Cleaner Production, 2020, 268, 122300.	4.6	20
51	NaCl-promoted phase transition and glycosidic bond cleavage under microwave heating for energy-efficient biorefinery of rice starch. Green Chemistry, 2020, 22, 7355-7365.	4.6	18
52	Efficient Depolymerization of Cellulosic Paper Towel Waste Using Organic Carbonate Solvents. ACS Sustainable Chemistry and Engineering, 2020, 8, 13100-13110.	3.2	18
53	Photo-Fenton abatement of aqueous organics using metal-organic frameworks: An advancement from benchmark zeolite. Science of the Total Environment, 2018, 644, 389-397.	3.9	17
54	Evidences of starchâ€“microwave interactions under hydrolytic and pyrolytic conditions. Green Chemistry, 2020, 22, 7109-7118.	4.6	14

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55	Study of glucose isomerisation to fructose over three heterogeneous carbon-based aluminium-impregnated catalysts. Journal of Cleaner Production, 2020, 268, 122378.	4.6	14
56	Tailoring acidity and porosity of alumina catalysts via transition metal doping for glucose conversion in biorefinery. Science of the Total Environment, 2020, 704, 135414.	3.9	13
57	Size-activity threshold of titanium dioxide-supported Cu cluster in CO oxidation. Environmental Pollution, 2021, 279, 116899.	3.7	12
58	A cross-region analysis of commercial food waste recycling behaviour. Chemosphere, 2021, 274, 129750.	4.2	11
59	Mechanistic understanding of the catalytic hydrogenation of bio-derived aromatics. Green Chemistry, 2021, 23, 9239-9253.	4.6	7
60	Novel Application of Biochar in Stormwater Harvesting. , 2019, , 319-347.		4
61	Biorefinery-assisted soil management for enhancing food security. Journal of Soils and Sediments, 2020, 20, 4007-4010.	1.5	3
62	Theory of planned behavior on food waste recycling. , 2020, , 221-239.		2
63	Life-cycle assessment of food waste recycling. , 2020, , 481-513.		2
64	Sustainable carbohydrate-derived building materials. , 2020, , 285-304.		0