Carol Sze Ki Lin

List of Publications by Year
in descending order

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138 papers	8,815 citations	36303 51 h-index	46799 89 g-index
149 all docs	149 docs citations	149 times ranked	8580 citing authors

#	Article	IF	Citations
1	Food waste as a valuable resource for the production of chemicals, materials and fuels. Current situation and global perspective. Energy and Environmental Science, 2013, 6, 426.	30.8	874
2	Valorization of industrial waste and by-product streams via fermentation for the production of chemicals and biopolymers. Chemical Society Reviews, 2014, 43, 2587.	38.1	437
3	A critical review on preparation, characterization and utilization of sludge-derived activated carbons for wastewater treatment. Chemical Engineering Journal, 2015, 260, 895-906.	12.7	335
4	Food waste as nutrient source in heterotrophic microalgae cultivation. Bioresource Technology, 2013, 137, 139-146.	9.6	279
5	Waste printed circuit board recycling techniques and product utilization. Journal of Hazardous Materials, 2015, 283, 234-243.	12.4	268
6	Aqueous mercury adsorption by activated carbons. Water Research, 2015, 73, 37-55.	11.3	235
7	Utilisation of waste bread for fermentative succinic acid production. Biochemical Engineering Journal, 2012, 65, 10-15.	3.6	213
8	Advances on waste valorization: new horizons for a more sustainable society. Energy Science and Engineering, 2013, 1, 53-71.	4.0	200
9	Valorisation of bakery waste for succinic acid production. Green Chemistry, 2013, 15, 690.	9.0	157
10	Current and future trends in food waste valorization for the production of chemicals, materials and fuels: a global perspective. Biofuels, Bioproducts and Biorefining, 2014, 8, 686-715.	3.7	148
11	Trends in food waste valorization for the production of chemicals, materials and fuels: Case study South and Southeast Asia. Bioresource Technology, 2018, 248, 100-112.	9.6	132
12	Robust succinic acid production from crude glycerol using engineered Yarrowia lipolytica. Biotechnology for Biofuels, 2016, 9, 179.	6.2	131
13	Techno-economic analysis of a food waste valorisation process for lactic acid, lactide and poly(lactic) Tj ETQq1 1 0.784314 rgBT /Over	9.3	126
14	Fungal hydrolysis in submerged fermentation for food waste treatment and fermentation feedstock preparation. Bioresource Technology, 2014, 158, 48-54.	9.6	124
15	Engineering of unconventional yeast Yarrowia lipolytica for efficient succinic acid production from glycerol at low pH. Metabolic Engineering, 2017, 42, 126-133.	7.0	119
16	Techno-economic analysis of a food waste valorization process via microalgae cultivation and co-production of plasticizer, lactic acid and animal feed from algal biomass and food waste. Bioresource Technology, 2015, 198, 292-299.	9.6	117
17	Newly Developed Techniques on Polycondensation, Ring-Opening Polymerization and Polymer Modification: Focus on Poly(Lactic Acid). Materials, 2016, 9, 133.	2.9	114
18	Conversion of lipid from food waste to biodiesel. Waste Management, 2015, 41, 169-173.	7.4	109

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19	Techno-Economic Evaluation of Biodiesel Production from Waste Cooking Oilâ€"A Case Study of Hong Kong. International Journal of Molecular Sciences, 2015, 16, 4362-4371.	4.1	108
20	Valorisation of food waste via fungal hydrolysis and lactic acid fermentation with Lactobacillus casei Shirota. Bioresource Technology, 2016, 217, 129-136.	9.6	101
21	Recent Trends in Green and Sustainable Chemistry & Waste Valorisation: Rethinking Plastics in a circular economy. Current Opinion in Green and Sustainable Chemistry, 2018, 9, 30-39.	5.9	101
22	Recent Trends in Sustainable Textile Waste Recycling Methods: Current Situation and Future Prospects. Topics in Current Chemistry, 2017, 375, 76.	5.8	100
23	Mechanistic study of atenolol, acebutolol and carbamazepine adsorption on waste biomass derived activated carbon. Journal of Molecular Liquids, 2017, 241, 386-398.	4.9	98
24	Sustainability metrics of pretreatment processes in a waste derived lignocellulosic biomass biorefinery. Bioresource Technology, 2020, 298, 122558.	9.6	98
25	Valorisation of textile waste by fungal solid state fermentation: An example of circular waste-based biorefinery. Resources, Conservation and Recycling, 2018, 129, 27-35.	10.8	91
26	Waste Printed Circuit Board (PCB) Recycling Techniques. Topics in Current Chemistry, 2017, 375, 43.	5.8	87
27	Economic feasibility of a pilot-scale fermentative succinic acid production from bakery wastes. Food and Bioproducts Processing, 2014, 92, 282-290.	3.6	84
28	Valorization of organic residues for the production of added value chemicals: A contribution to the bio-based economy. Biochemical Engineering Journal, 2016, 116, 3-16.	3.6	84
29	Valorisation of food waste in biotechnological processes. Sustainable Chemical Processes, 2013, 1, .	2.3	79
30	Stepwise optimisation of enzyme production in solid state fermentation of waste bread pieces. Food and Bioproducts Processing, 2013, 91, 638-646.	3.6	77
31	Environmental life cycle assessment of textile bio-recycling â€“ valorizing cotton-polyester textile waste to pet fiber and glucose syrup. Resources, Conservation and Recycling, 2020, 161, 104989.	10.8	77
32	Efficient sophorolipids production using food waste. Journal of Cleaner Production, 2019, 232, 1-11.	9.3	75
33	Recycling of food waste as nutrients in Chlorella vulgaris cultivation. Bioresource Technology, 2014, 170, 144-151.	9.6	74
34	Green and sustainable succinic acid production from crude glycerol by engineered Yarrowia lipolytica via agricultural residue based in situ fibrous bed bioreactor. Bioresource Technology, 2018, 249, 612-619.	9.6	74
35	Mixed Food Waste as Renewable Feedstock in Succinic Acid Fermentation. Applied Biochemistry and Biotechnology, 2014, 174, 1822-1833.	2.9	73
36	Valorisation of food waste to biofuel: current trends and technological challenges. Sustainable Chemical Processes, 2014, 2, .	2.3	72

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37	Toward environmentally-benign utilization of nonmetallic fraction of waste printed circuit boards as modifier and precursor. Waste Management, 2015, 35, 236-246.	7.4	71
38	Co-fermentation of glucose and xylose from sugarcane bagasse into succinic acid by Yarrowia lipolytica. Biochemical Engineering Journal, 2019, 148, 108-115.	3.6	71
39	High efficiency succinic acid production from glycerol via in situ fibrous bed bioreactor with an engineered Yarrowia lipolytica. Bioresource Technology, 2017, 225, 9-16.	9.6	69
40	Sustainable lipid and lutein production from Chlorella mixotrophic fermentation by food waste hydrolysate. Journal of Hazardous Materials, 2020, 400, 123258.	12.4	67
41	Kinetic studies on the multi-enzyme solution produced via solid state fermentation of waste bread by Aspergillus awamori. Biochemical Engineering Journal, 2013, 80, 76-82.	3.6	63
42	A review on high catalytic efficiency of solid acid catalysts for lignin valorization. Bioresource Technology, 2020, 298, 122432.	9.6	63
43	To be or not to be metal-free: trends and advances in coupling chemistries. Organic and Biomolecular Chemistry, 2014, 12, 10-35.	2.8	62
44	Valorization of bakery waste for biocolorant and enzyme production by Monascus purpureus. Journal of Biotechnology, 2016, 231, 55-64.	3.8	62
45	Hydrolysis of fruit and vegetable waste for efficient succinic acid production with engineered Yarrowia lipolytica. Journal of Cleaner Production, 2018, 179, 151-159.	9.3	60
46	Starmerella bombicola: recent advances on sophorolipid production and prospects of waste stream utilization. Journal of Chemical Technology and Biotechnology, 2019, 94, 999-1007.	3.2	58
47	Fatty acid feedstock preparation and lactic acid production as integrated processes in mixed restaurant food and bakery wastes treatment. Food Research International, 2015, 73, 52-61.	6.2	57
48	Recent advancement in lignin biorefinery: With special focus on enzymatic degradation and valorization. Bioresource Technology, 2019, 291, 121898.	9.6	57
49	Techno-economic evaluation of a biorefinery applying food waste for sophorolipid production â€“ A case study for Hong Kong. Bioresource Technology, 2020, 303, 122852.	9.6	54
50	Sugar Alcohols and Organic Acids Synthesis in Yarrowia lipolytica: Where Are We?. Microorganisms, 2020, 8, 574.	3.6	54
51	Solid state fermentation of waste bread pieces by Aspergillus awamori: Analysing the effects of airflow rate on enzyme production in packed bed bioreactors. Food and Bioproducts Processing, 2015, 95, 63-75.	3.6	51
52	Restoring of Glucose Metabolism of Engineered Yarrowia lipolytica for Succinic Acid Production via a Simple and Efficient Adaptive Evolution Strategy. Journal of Agricultural and Food Chemistry, 2017, 65, 4133-4139.	5.2	51
53	Sustainability-inspired upcycling of waste polyethylene terephthalate plastic into porous carbon for CO₂ capture. Green Chemistry, 2022, 24, 1494-1504.	9.0	51
54	Kinetic Analysis of a Crude Enzyme Extract Produced via Solid State Fermentation of Bakery Waste. ACS Sustainable Chemistry and Engineering, 2015, 3, 2043-2048.	6.7	49

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55	Utilization of food waste in continuous flow cultures of the heterotrophic microalga Chlorella pyrenoidosa for saturated and unsaturated fatty acids production. Journal of Cleaner Production, 2017, 142, 1417-1424.	9.3	49
56	Textile waste valorization using submerged filamentous fungal fermentation. Chemical Engineering Research and Design, 2018, 118, 143-151.	5.6	49
57	Promising advancement in fermentative succinic acid production by yeast hosts. Journal of Hazardous Materials, 2021, 401, 123414.	12.4	48
58	Chemical transformation of food and beverage waste-derived fructose to hydroxymethylfurfural as a value-added product. Catalysis Today, 2018, 314, 70-77.	4.4	47
59	Cultivation of oleaginous microalga Scenedesmus obliquus coupled with wastewater treatment for enhanced biomass and lipid production. Biochemical Engineering Journal, 2019, 148, 162-169.	3.6	47
60	Valorisation of food and beverage waste via saccharification for sugars recovery. Bioresource Technology, 2018, 255, 67-75.	9.6	46
61	Ultrasonic pretreatment of food waste to accelerate enzymatic hydrolysis for glucose production. Ultrasonics Sonochemistry, 2019, 53, 77-82.	8.2	46
62	Emerging waste valorisation techniques to moderate the hazardous impacts, and their path towards sustainability. Journal of Hazardous Materials, 2022, 423, 127023.	12.4	46
63	Lipids from food waste as feedstock for biodiesel production: Case Hong Kong. Lipid Technology, 2014, 26, 206-209.	0.3	44
64	Continuous ultrasonic-mediated solvent extraction of lactic acid from fermentation broths. Journal of Cleaner Production, 2017, 145, 142-150.	9.3	44
65	Radiative Cooling Nanofabric for Personal Thermal Management. ACS Applied Materials & Interfaces, 2022, 14, 23577-23587.	8.0	44
66	Optimisation of fungal cellulase production from textile waste using experimental design. Chemical Engineering Research and Design, 2018, 118, 133-142.	5.6	43
67	Bioproduction of succinic acid from xylose by engineered Yarrowia lipolytica without pH control. Biotechnology for Biofuels, 2020, 13, 113.	6.2	43
68	Exploring medium-chain-length polyhydroxyalkanoates production in the engineered yeast Yarrowia lipolytica. Journal of Industrial Microbiology and Biotechnology, 2015, 42, 1255-1262.	3.0	42
69	Plasticizer and Surfactant Formation from Foodâ€Wasteâ€and Algal Biomassâ€Derived Lipids. ChemSusChem, 2015, 8, 1686-1691.	6.8	42
70	Recent trends in green and sustainable chemistry: rethinking textile waste in a circular economy. Current Opinion in Green and Sustainable Chemistry, 2019, 20, 1-10.	5.9	42
71	Efficient ZnO aqueous nanoparticle catalysed lactide synthesis for poly(lactic acid) fibre production from food waste. Journal of Cleaner Production, 2017, 165, 157-167.	9.3	40
72	Bio-refinery of waste streams for green and efficient succinic acid production by engineered Yarrowia lipolytica without pH control. Chemical Engineering Journal, 2019, 371, 804-812.	12.7	40

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73	Enhanced polyunsaturated fatty acid production using food wastes and biofuels byproducts by an evolved strain of Phaeodactylum tricornutum. Bioresource Technology, 2020, 296, 122351.	9.6	40
74	Production of Fungal Glucoamylase for Glucose Production from Food Waste. Biomolecules, 2013, 3, 651-661.	4.0	39
75	Recovery of Glucose and Polyester from Textile Waste by Enzymatic Hydrolysis. Waste and Biomass Valorization, 2019, 10, 3763-3772.	3.4	39
76	Iron oxide functionalised MIL-101 materials in aqueous phase selective oxidations. Applied Catalysis A: General, 2013, 455, 261-266.	4.3	38
77	Fermentative Polyhydroxybutyrate Production from a Novel Feedstock Derived from Bakery Waste. BioMed Research International, 2014, 2014, 1-8.	1.9	38
78	Valorisation of mixed bakery waste in non-sterilized fermentation for l -lactic acid production by an evolved Thermoanaerobacterium sp. strain. Bioresource Technology, 2015, 198, 47-54.	9.6	37
79	Life cycle analysis of fermentative production of succinic acid from bread waste. Waste Management, 2021, 126, 861-871.	7.4	35
80	Efficient succinic acid production using a biochar-treated textile waste hydrolysate in an in situ fibrous bed bioreactor. Biochemical Engineering Journal, 2019, 149, 107249.	3.6	34
81	Biotechnology of Plastic Waste Degradation, Recycling, and Valorization: Current Advances and Future Perspectives. ChemSusChem, 2021, 14, 4103-4114.	6.8	34
82	TAG pathway engineering via GPAT2 concurrently potentiates abiotic stress tolerance and oleaginicity in Phaeodactylum tricornutum. Biotechnology for Biofuels, 2020, 13, 160.	6.2	33
83	Recent advances on the catalytic conversion of waste cooking oil. Molecular Catalysis, 2020, 494, 111128.	2.0	33
84	Efficient in-situ separation design for long-term sophorolipids fermentation with high productivity. Journal of Cleaner Production, 2020, 246, 118995.	9.3	32
85	Sustainable and stepwise waste-based utilisation strategy for the production of biomass and biofuels by engineered microalgae. Environmental Pollution, 2020, 265, 114854.	7.5	31
86	Efficient metabolic evolution of engineered Yarrowia lipolytica for succinic acid production using a glucose-based medium in an in situ fibrous bioreactor under low-pH condition. Biotechnology for Biofuels, 2018, 11, 236.	6.2	29
87	Fermentative production of 2,3-Butanediol using bread waste â€“ A green approach for sustainable management of food waste. Bioresource Technology, 2022, 358, 127381.	9.6	28
88	Bioconversion of beverage waste to high fructose syrup as a value-added product. Food and Bioproducts Processing, 2017, 105, 179-187.	3.6	27
89	Recent Trends in Sustainable Textile Waste Recycling Methods: Current Situation and Future Prospects. Topics in Current Chemistry Collections, 2017, , 189-228.	0.5	27
90	Bioprocess development using organic biowaste and sustainability assessment of succinic acid production with engineered Yarrowia lipolytica strain. Biochemical Engineering Journal, 2021, 174, 108099.	3.6	27

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91	Natural porous agar materials from macroalgae. Carbohydrate Polymers, 2013, 92, 1555-1560.	10.2	26
92	Lactic acid fermentation modelling of Streptococcus thermophilus YI-B1 and Lactobacillus casei Shirota using food waste derived media. Biochemical Engineering Journal, 2017, 127, 97-109.	3.6	26
93	Conversion of an aluminosilicate-based waste material to high-value efficient adsorbent. Chemical Engineering Journal, 2014, 256, 415-420.	12.7	25
94	Waste-to-resources: Opportunities and challenges. Bioresource Technology, 2020, 317, 123987.	9.6	25
95	Synergistic bioconversion of lipids and carotenoids from food waste by Dunaliella salina with fulvic acid via a two-stage cultivation strategy. Energy Conversion and Management, 2021, 234, 113908.	9.2	24
96	An overview of cotton and polyester, and their blended waste textile valorisation to value-added products: A circular economy approach â€“ research trends, opportunities and challenges. Critical Reviews in Environmental Science and Technology, 2022, 52, 3921-3942.	12.8	24
97	Biorefinery of food and beverage waste valorisation for sugar syrups production: Techno-economic assessment. Chemical Engineering Research and Design, 2019, 121, 194-208.	5.6	23
98	Optimization of Fermentation Medium for Extracellular Lipase Production fromAspergillus nigerUsing Response Surface Methodology. BioMed Research International, 2015, 2015, 1-8.	1.9	22
99	Substrate-Related Factors Affecting Cellulosome-Induced Hydrolysis for Lignocellulose Valorization. International Journal of Molecular Sciences, 2019, 20, 3354.	4.1	22
100	Bioconversion of Food Waste to produce Industrial-scale Sophorolipid Syrup and Crystals: dynamic Life Cycle Assessment (dLCA) of Emerging Biotechnologies. Bioresource Technology, 2021, 337, 125474.	9.6	22
101	A waste upcycling loop: Two-factor adaptive evolution of microalgae to increase polyunsaturated fatty acid production using food waste. Journal of Cleaner Production, 2022, 331, 130018.	9.3	22
102	Nanoparticle tracking analysis of gold nanomaterials stabilized by various capping agents. RSC Advances, 2014, 4, 17114.	3.6	19
103	Guiding environmental sustainability of emerging bioconversion technology for waste-derived sophorolipid production by adopting a dynamic life cycle assessment (dLCA) approach. Environmental Pollution, 2021, 269, 116101.	7.5	19
104	Perspective on Constructing Cellulose-Hydrogel-Based Gut-Like Bioreactors for Growth and Delivery of Multiple-Strain Probiotic Bacteria. Journal of Agricultural and Food Chemistry, 2021, 69, 4946-4959.	5.2	19
105	Study of quench effect on heavy metal uptake efficiency by an aluminosilicate-based material. Chemical Engineering Journal, 2017, 311, 37-45.	12.7	18
106	Bioconversion of food and lignocellulosic wastes employing sugar platform: A review of enzymatic hydrolysis and kinetics. Bioresource Technology, 2022, 352, 127083.	9.6	18
107	Enhancing succinic acid productivity in the yeast Yarrowia lipolytica with improved glycerol uptake rate. Science of the Total Environment, 2020, 702, 134911.	8.0	17
108	Biotechnological Production of Organic Acids from Renewable Resources. Advances in Biochemical Engineering/Biotechnology, 2017, 166, 373-410.	1.1	16

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109	Succinic acid production using a glycerol-based medium by an engineered strain of Yarrowia lipolytica: Statistical optimization and preliminary economic feasibility study. Biochemical Engineering Journal, 2018, 137, 305-313.	3.6	16
110	Supplementation with rac-GR24 Facilitates the Accumulation of Biomass and Astaxanthin in Two Successive Stages of Haematococcus pluvialis Cultivation. Journal of Agricultural and Food Chemistry, 2022, 70, 4677-4689.	5.2	13
111	Valorization of an Electronic Waste-Derived Aluminosilicate: Surface Functionalization and Porous Structure Tuning. ACS Sustainable Chemistry and Engineering, 2016, 4, 2980-2989.	6.7	12
112	New Technologies are Needed to Improve the Recycling and Upcycling of Waste Plastics. ChemSusChem, 2021, 14, 3982-3984.	6.8	12
113	Advancements and current challenges in the sustainable downstream processing of bacterial polyhydroxyalkanoates. Current Opinion in Green and Sustainable Chemistry, 2022, 36, 100631.	5.9	12
114	High fructose syrup production from mixed food and beverage waste hydrolysate at laboratory and pilot scales. Food and Bioproducts Processing, 2018, 111, 141-152.	3.6	11
115	Microwave-Assisted Homogeneous Acid Catalysis and Chemoenzymatic Synthesis of Dialkyl Succinate in a Flow Reactor. Catalysts, 2019, 9, 272.	3.5	11
116	Enhancing the recombinant protein productivity of Yarrowia lipolytica using insitu fibrous bed bioreactor. Bioresource Technology, 2021, 340, 125672.	9.6	11
117	Restructuring the sunflower-based biodiesel industry into a circular bio-economy business model converting sunflower meal and crude glycerol into succinic acid and value-added co-products. Biomass and Bioenergy, 2021, 155, 106265.	5.7	11
118	An auxin-like supermolecule to simultaneously enhance growth and cumulative eicosapentaenoic acid production in Phaeodactylum tricornutum. Bioresource Technology, 2022, 345, 126564.	9.6	11
119	Enhanced Purification Efficiency and Thermal Tolerance of Thermoanaerobacterium aotearoense Î²-Xylosidase through Aggregation Triggered by Short Peptides. Journal of Agricultural and Food Chemistry, 2018, 66, 4182-4188.	5.2	9
120	Methodological advances and challenges in probiotic bacteria production: Ongoing strategies and future perspectives. Biochemical Engineering Journal, 2021, 176, 108199.	3.6	9
121	Conversion of food waste-derived lipid to bio-based polyurethane foam. Case Studies in Chemical and Environmental Engineering, 2021, 4, 100131.	6.1	9
122	Characterization and evaluation of a natural derived bacterial consortium for efficient lignocellulosic biomass valorization. Bioresource Technology, 2021, 329, 124909.	9.6	8
123	Biotechnology of Plastic Waste Degradation, Recycling, and Valorization: Current Advances and Future Perspectives. ChemSusChem, 2021, 14, 3981-3981.	6.8	8
124	Biorefinery potential of chemically enhanced primary treatment sewage sludge to representative value-added chemicals - A de novo angle for wastewater treatment. Bioresource Technology, 2021, 339, 125583.	9.6	8
125	Domesticating a bacterial consortium for efficient lignocellulosic biomass conversion. Renewable Energy, 2022, 189, 359-368.	8.9	8
126	3-Oxoacyl acyl carrier protein reductase overexpression reveals its unprecedented roles in biofuel production and high-temperature tolerance in diatom. Fuel, 2022, 325, 124844.	6.4	8

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127	Impact of nitrogen deficiency on succinic acid production by engineered strains of Yarrowia lipolytica. Journal of Biotechnology, 2021, 336, 30-40.	3.8	6
128	Inhibition kinetics of bio-based succinic acid production by the yeast Yarrowia lipolytica. Chemical Engineering Journal, 2022, 442, 136273.	12.7	6
129	Techno-Economic Study and Environmental Assessment of Food Waste Based Biorefinery. , 2017, , 121-146.		5
130	Advances on Waste Valorization: New Horizons for a More Sustainable Society. , 2017, , 23-66.		4
131	Fermentation of fruit and vegetable wastes for biobased products. , 2020, , 255-273.		3
132	Food Waste and Manure. , 2020, , 899-938.		2
133	Food Waste Valorisation for High Value Chemicals and Energy Production. ACS Symposium Series, 2014, , 187-202.	0.5	1
134	Metabolic profiling identified phosphatidylcholin as potential biomarker in boosting lipid accumulation in multiple microalgae. Biochemical Engineering Journal, 2021, 174, 108130.	3.6	1
135	Bio-Feedstocks. , 2019, , 167-173.		1
136	Synthesis of Polyols and Organic Acids by Wild-Type and Metabolically Engineered Yarrowia lipolytica Strains. , 2022, , 227-250.		1
137	Sustainable conversion of food waste into high-value products through microalgae-based biorefinery. , 2022, , 125-152.		0
138	Infection control measures for public transportation derived from the flow dynamics of obstructed cough jet. Journal of Aerosol Science, 2022, 163, 105995.	3.8	0