Christopher J Chuck

List of Publications by Year
in descending order

84 papers	2,605 citations	159585 30 h-index	214800 47 g-index
89 all docs	89 docs citations	89 times ranked	3224 citing authors

#	Article	IF	Citations
1	The compatibility of potential bioderived fuels with Jet A-1 aviation kerosene. Applied Energy, 2014, 118, 83-91.	10.1	218
2	Low-cost lipid production by an oleaginous yeast cultured in non-sterile conditions using model waste resources. Biotechnology for Biofuels, 2014, 7, 34.	6.2	127
3	Effect of the Type of Bean, Processing, and Geographical Location on the Biodiesel Produced from Waste Coffee Grounds. Energy & Fuels, 2014, 28, 1166-1174.	5.1	114
4	Potential renewable oxygenated biofuels for the aviation and road transport sectors. Fuel, 2013, 103, 593-599.	6.4	104
5	Air-Stable Titanium Alkoxide Based Metalâˆ’Organic Framework as an Initiator for Ring-Opening Polymerization of Cyclic Esters. Inorganic Chemistry, 2006, 45, 6595-6597.	4.0	78
6	Assessing hydrothermal liquefaction for the production of bio-oil and enhanced metal recovery from microalgae cultivated on acid mine drainage. Fuel Processing Technology, 2016, 142, 219-227.	7.2	68
7	The history, state of the art and future prospects for oleaginous yeast research. Microbial Cell Factories, 2021, 20, 221.	4.0	60
8	Conceptualization of a spent coffee grounds biorefinery: A review of existing valorisation approaches. Food and Bioproducts Processing, 2019, 118, 149-166.	3.6	59
9	Co-processing of common plastics with pistachio hulls via hydrothermal liquefaction. Waste Management, 2020, 102, 351-361.	7.4	58
10	The viability and desirability of replacing palm oil. Nature Sustainability, 2020, 3, 412-418.	23.7	54
11	Co-production of bio-oil and propylene through the hydrothermal liquefaction of polyhydroxybutyrate producing cyanobacteria. Bioresource Technology, 2016, 207, 166-174.	9.6	52
12	The Microalgae Biorefinery: A Perspective on the Current Status and Future Opportunities Using Genetic Modification. Applied Sciences (Switzerland), 2019, 9, 4793.	2.5	52
13	Coproducts of algae and yeast-derived single cell oils: A critical review of their role in improving biorefinery sustainability. Bioresource Technology, 2020, 303, 122862.	9.6	51
14	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.	12.8	50
15	The Effect of Functional Groups in Bioâ€Derived Fuel Candidates. ChemSusChem, 2016, 9, 922-931.	6.8	47
16	Multifunctional Role of Magnetic Nanoparticles in Efficient Microalgae Separation and Catalytic Hydrothermal Liquefaction. ACS Sustainable Chemistry and Engineering, 2018, 6, 991-999.	6.7	47
17	Technoâ€economic analysis (TEA) of microbial oil production from waste resources as part of a biorefinery concept: assessment at multiple scales under uncertainty. Journal of Chemical Technology and Biotechnology, 2019, 94, 701-711.	3.2	47
18	The storage stability of biocrude obtained by the hydrothermal liquefaction of microalgae. Renewable Energy, 2020, 145, 1720-1729.	8.9	46

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19	Towards a marine biorefinery through the hydrothermal liquefaction of macroalgae native to the United Kingdom. Biomass and Bioenergy, 2017, 107, 244-253.	5.7	42
20	A synergistic use of microalgae and macroalgae for heavy metal bioremediation and bioenergy production through hydrothermal liquefaction. Sustainable Energy and Fuels, 2019, 3, 292-301.	4.9	41
21	Co-liquefaction of Macroalgae with Common Marine Plastic Pollutants. ACS Sustainable Chemistry and Engineering, 2019, 7, 6769-6781.	6.7	41
22	A comparison of analytical techniques and the products formed during the decomposition of biodiesel under accelerated conditions. Fuel, 2012, 96, 426-433.	6.4	39
23	Toward a microbial palm oil substitute: oleaginous yeasts cultured on lignocellulose. Biofuels, Bioproducts and Biorefining, 2016, 10, 316-334.	3.7	37
24	Improving electrocoagulation floatation for harvesting microalgae. Algal Research, 2019, 39, 101446.	4.6	37
25	Design and operation of an inexpensive, laboratory-scale, continuous hydrothermal liquefaction reactor for the conversion of microalgae produced during wastewater treatment. Fuel Processing Technology, 2017, 165, 102-111.	7.2	36
26	Fast microwave-assisted acidolysis: a new biorefinery approach for the zero-waste utilisation of lignocellulosic biomass to produce high quality lignin and fermentable saccharides. Faraday Discussions, 2017, 202, 351-370.	3.2	35
27	Elevated production of the aromatic fragrance molecule, 2â€phenylethanol, using <scp><i>Metschnikowia pulcherrima</i></scp> through both <i>de novo</i> and <i>ex novo</i> conversion in batch and continuous modes. Journal of Chemical Technology and Biotechnology, 2018, 93, 2118-2130.	3.2	35
28	Polymers from sugars and unsaturated fatty acids: ADMET polymerisation of monomers derived from <scp>d</scp>-xylose, <scp>d</scp>-mannose and castor oil. Polymer Chemistry, 2020, 11, 2681-2691.	3.9	35
29	The additive free microwave hydrolysis of lignocellulosic biomass for fermentation to high value products. Journal of Cleaner Production, 2018, 198, 776-784.	9.3	34
30	Cross-Metathesis of Microbial Oils for the Production of Advanced Biofuels and Chemicals. ACS Sustainable Chemistry and Engineering, 2015, 3, 1526-1535.	6.7	32
31	Predictive Model To Assess the Molecular Structure of Biodiesel Fuel. Energy & Fuels, 2009, 23, 2290-2294.	5.1	31
32	Lipid production through the single-step microwave hydrolysis of macroalgae using the oleaginous yeast Metschnikowia pulcherrima. Algal Research, 2019, 38, 101411.	4.6	31
33	Simultaneous microwave extraction and synthesis of fatty acid methyl ester from the oleaginous yeast Rhodotorula glutinis. Energy, 2014, 69, 446-454.	8.8	30
34	Synthesis and Structural Characterization of Group 4 Metal Alkoxide Complexes of <i>N</i>,<i>N</i>,<i>N</i>â€²<i>,N</i>â€²-Tetrakis(2-hydroxyethyl)ethylenediamine and Their Use As Initiators in the Ring-Opening Polymerization (ROP) of <i>rac</i>-Lactide under Industrially Relevant Conditions. Inorganic Chemistry, 2013, 52, 10804-10811.	4.0	29
35	Renewable biofuel additives from the ozonolysis of lignin. Bioresource Technology, 2013, 143, 549-554.	9.6	29
36	Production of fermentable species by microwave-assisted hydrothermal treatment of biomass carbohydrates: reactivity and fermentability assessments. Green Chemistry, 2018, 20, 4507-4520.	9.0	29

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37	Spectroscopic sensor techniques applicable to real-time biodiesel determination. Fuel, 2010, 89, 457-461.	6.4	27
38	Upgrading biogenic furans: blended C10â€“C12 platform chemicals via lyase-catalyzed carboligations and formation of novel C12 â€“ choline chloride-based deep-eutectic-solvents. Green Chemistry, 2015, 17, 2714-2718.	9.0	27
39	Making light work of heavy metal contamination: the potential for coupling bioremediation with bioenergy production. Journal of Chemical Technology and Biotechnology, 2019, 94, 3064-3072.	3.2	27
40	Hydrothermal liquefaction of macroalgae for the production of renewable biofuels. Biofuels, Bioproducts and Biorefining, 2019, 13, 1483-1504.	3.7	27
41	Sustainability and life cycle assessment (LCA) of macroalgae-derived single cell oils. Journal of Cleaner Production, 2019, 232, 1272-1281.	9.3	27
42	Microbial lipids: Progress in life cycle assessment (LCA) and future outlook of heterotrophic algae and yeast-derived oils. Journal of Cleaner Production, 2018, 172, 661-672.	9.3	26
43	Toward Renewable-Based, Food-Applicable Prebiotics from Biomass: A One-Step, Additive-Free, Microwave-Assisted Hydrothermal Process for the Production of High Purity Xylo-oligosaccharides from Beech Wood Hemicellulose. ACS Sustainable Chemistry and Engineering, 2019, 7, 16160-16172.	6.7	25
44	Poly(dimethylsiloxane)-Derived Phosphine and Phosphinite Ligands:Â Synthesis, Characterization, Solubility in Supercritical Carbon Dioxide, and Sequestration on Silica. Organometallics, 2004, 23, 5176-5181.	2.3	24
45	Design and preliminary results of an NMR tube reactor to study the oxidative degradation of fatty acid methyl ester. Biomass and Bioenergy, 2012, 47, 188-194.	5.7	23
46	Degradation of Î²-O-4 model lignin species by vanadium Schiff-base catalysts: Influence of catalyst structure and reaction conditions on activity and selectivity. Catalysis Today, 2016, 269, 40-47.	4.4	23
47	Oxidative stability of biodiesel: recent insights. Biofuels, Bioproducts and Biorefining, 2022, 16, 265-289.	3.7	22
48	Valorizing Plastic-Contaminated Waste Streams through the Catalytic Hydrothermal Processing of Polypropylene with Lignocellulose. ACS Omega, 2020, 5, 20586-20598.	3.5	21
49	Achieving a highâ€density oleaginous yeast culture: Comparison of four processing strategies using <i>Metschnikowia pulcherrima</i>. Biotechnology and Bioengineering, 2019, 116, 3200-3214.	3.3	19
50	Optimizing the lipid profile, to produce either a palm oil or biodiesel substitute, by manipulation of the culture conditions for<i>Rhodotorula glutinis</i>. Biofuels, 2014, 5, 33-43.	2.4	18
51	Zeolite Y supported nickel phosphide catalysts for the hydrodenitrogenation of quinoline as a proxy for crude bio-oils from hydrothermal liquefaction of microalgae. Dalton Transactions, 2018, 47, 1189-1201.	3.3	16
52	Using techno-economic modelling to determine the minimum cost possible for a microbial palm oil substitute. Biotechnology for Biofuels, 2021, 14, 57.	6.2	16
53	Showcasing Chemical Engineering Principles through the Production of Biodiesel from Spent Coffee Grounds. Journal of Chemical Education, 2015, 92, 683-687.	2.3	15
54	Production of Biodiesel from Vietnamese Waste Coffee Beans: Biofuel Yield, Saturation and Stability are All Elevated Compared with Conventional Coffee Biodiesel. Waste and Biomass Valorization, 2017, 8, 1237-1245.	3.4	15

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55	Assessing the Conversion of Various Nylon Polymers in the Hydrothermal Liquefaction of Macroalgae. Environments - MDPI, 2021, 8, 34.	3.3	14
56	Analysis of Seaweeds from South West England as a Biorefinery Feedstock. Applied Sciences (Switzerland), 2019, 9, 4456.	2.5	13
57	Comparison of Nile Red and Cell Size Analysis for Highâ€Throughput Lipid Estimation Within Oleaginous Yeast. European Journal of Lipid Science and Technology, 2019, 121, 1800355.	1.5	12
58	Enhanced Hydrothermal Carbonization of Spent Coffee Grounds for the Efficient Production of Solid Fuel with Lower Nitrogen Content. Energy & Fuels, 2021, 35, 9462-9473.	5.1	12
59	The role of temperature, pH and nutrition in process development of the unique oleaginous yeast <scp><i>Metschnikowia pulcherrima</i></scp>. Journal of Chemical Technology and Biotechnology, 2020, 95, 1163-1172.	3.2	11
60	Saltwater based fractionation and valorisation of macroalgae. Journal of Chemical Technology and Biotechnology, 2020, 95, 2098-2109.	3.2	11
61	An integrated biorefinery to produce 5-(hydroxymethyl)furfural and alternative fuel precursors from macroalgae and spent coffee grounds. Sustainable Energy and Fuels, 2021, 5, 6189-6196.	4.9	11
62	Branched Ketone Biofuels as Blending Agents for Jet-A1 Aviation Kerosene. Energy & Fuels, 2016, 30, 294-301.	5.1	10
63	Production of lipid from depolymerised lignocellulose using the biocontrol yeast, <i>Rhodotorula minuta</i>: The fatty acid profile remains stable irrespective of environmental conditions. European Journal of Lipid Science and Technology, 2016, 118, 777-787.	1.5	10
64	An alternative biorefinery approach to address microalgal seasonality: blending with spent coffee grounds. Sustainable Energy and Fuels, 2020, 4, 3400-3408.	4.9	10
65	Developing a biorefinery from spent coffee grounds using subcritical water and hydrothermal carbonisation. Biomass Conversion and Biorefinery, 2023, 13, 1279-1295.	4.6	10
66	Hydrothermal Conversion of Lipid-Extracted Microalgae Hydrolysate in the Presence of Isopropanol and Steel Furnace Residues. Waste and Biomass Valorization, 2018, 9, 1867-1879.	3.4	9
67	Microbial oil produced from the fermentation of microwave-depolymerised rapeseed meal. Bioresource Technology Reports, 2018, 4, 159-165.	2.7	9
68	Liquid transport fuels from microbial yeasts â€“ current and future perspectives. Biofuels, 2014, 5, 293-311.	2.4	8
69	Catalytic cracking of sterol-rich yeast lipid. Fuel, 2014, 130, 315-323.	6.4	8
70	Effect of Geographical Location on the Variation in Products Formed from the Hydrothermal Liquefaction of <i>Ulva intestinalis</i>. Energy & Fuels, 2020, 34, 368-378.	5.1	8
71	Effects of geographical location on potentially valuable components in <i>Ulva intestinalis</i> sampled along the Swedish coast. Applied Phycology, 2020, 1, 80-92.	1.3	8
72	Dual Action Additives for Jet A-1: Fuel Dehydrating Icing Inhibitors. Energy & Fuels, 2016, 30, 9080-9088.	5.1	7

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73	Variation among Metschnikowia pulcherrima Isolates for Genetic Modification and Homologous Recombination. Microorganisms, 2021, 9, 290.	3.6	7
74	The Oleaginous Yeast Metschnikowia pulcherrima Displays Killer Activity against Avian-Derived Pathogenic Bacteria. Biology, 2021, 10, 1227.	2.8	7
75	Semi-continuous pilot-scale microbial oil production with Metschnikowia pulcherrima on starch hydrolysate. Biotechnology for Biofuels, 2020, 13, 127.	6.2	6
76	The Optimized Production of 5-(Hydroxymethyl)furfural and Related Products from Spent Coffee Grounds. Applied Sciences (Switzerland), 2019, 9, 3369.	2.5	5
77	Towards an Aviation Fuel Through the Hydrothermal Liquefaction of Algae. , 2016, , 217-239.		4
78	Soil Amendments and Biostimulants from the Hydrothermal Processing of Spent Coffee Grounds. Waste and Biomass Valorization, 2022, 13, 2889-2904.	3.4	4
79	Factors affecting diesel fuel degradation using a bespoke high-pressure fuel system rig. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2018, 232, 106-117.	1.9	3
80	The impact of biodiesel and alternative diesel fuel components on filter blocking through accelerated testing on a novel high pressure common rail non-firing rig. Fuel, 2020, 282, 118850.	6.4	3
81	Valorisation of sawdust through the combined microwave-assisted hydrothermal pre-treatment and fermentation using an oleaginous yeast. Biomass Conversion and Biorefinery, 2020, , 1.	4.6	3
82	The emissions and the performance of diethyl succinate in a diesel fuel blend. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2017, 231, 1889-1899.	1.9	2
83	Scaled-Up Microwave-Assisted Pretreatment and Continuous Fermentation to Produce Yeast Lipids from Brewery Wastes. Industrial & Engineering Chemistry Research, 2020, 59, 19803-19816.	3.7	2
84	Fermentable Liquid Energy Carriers by Microwave-Assisted Hydrothermal Depolymerisation of Several Biomass Carbohydrates. Innovative Renewable Energy, 2020, , 909-920.	0.4	1