Ling Tao

List of Publications by Year
in descending order

65 papers	5,726 citations	126907 33 h-index	110387 64 g-index
74 all docs	74 docs citations	74 times ranked	6608 citing authors

#	Article	IF	Citations
1	What Should We Make with CO2 and How Can We Make It?. Joule, 2018, 2, 825-832.	24.0	975
2	Optimal design of sustainable cellulosic biofuel supply chains: Multiobjective optimization coupled with life cycle assessment and inputâ€“output analysis. AIChE Journal, 2012, 58, 1157-1180.	3.6	547
3	Bio-jet fuel conversion technologies. Renewable and Sustainable Energy Reviews, 2016, 53, 801-822.	16.4	354
4	Transforming the carbon economy: challenges and opportunities in the convergence of low-cost electricity and reductive CO₂ utilization. Energy and Environmental Science, 2020, 13, 472-494.	30.8	290
5	Process and technoeconomic analysis of leading pretreatment technologies for lignocellulosic ethanol production using switchgrass. Bioresource Technology, 2011, 102, 11105-11114.	9.6	274
6	Bioconversion of natural gas to liquid fuel: Opportunities and challenges. Biotechnology Advances, 2014, 32, 596-614.	11.7	255
7	Sustained photosynthetic conversion of CO2 to ethylene in recombinant cyanobacterium Synechocystis 6803. Energy and Environmental Science, 2012, 5, 8998.	30.8	214
8	Technoâ€economic analysis and lifeâ€cycle assessment of cellulosic isobutanol and comparison with cellulosic ethanol and nâ€butanol. Biofuels, Bioproducts and Biorefining, 2014, 8, 30-48.	3.7	185
9	Techno-economic, life-cycle, and socioeconomic impact analysis of enzymatic recycling of poly(ethylene terephthalate). Joule, 2021, 5, 2479-2503.	24.0	160
10	DMR (deacetylation and mechanical refining) processing of corn stover achieves high monomeric sugar concentrations (230 g L^{âˆ’1}) during enzymatic hydrolysis and high ethanol concentrations (>10% v/v) during fermentation without hydrolysate purification or concentration. Energy and Environmental Science, 2016, 9, 1237-1245.	30.8	157
11	A techno-economic evaluation of the effects of centralized cellulosic ethanol and co-products refinery options with sugarcane mill clustering. Biomass and Bioenergy, 2010, 34, 1065-1078.	5.7	129
12	The economics of current and future biofuels. In Vitro Cellular and Developmental Biology - Plant, 2009, 45, 199-217.	2.1	123
13	The Techno-Economic Basis for Coproduct Manufacturing To Enable Hydrocarbon Fuel Production from Lignocellulosic Biomass. ACS Sustainable Chemistry and Engineering, 2016, 4, 3196-3211.	6.7	121
14	Strengths, challenges, and opportunities for hydrothermal pretreatment in lignocellulosic biorefineries. Biofuels, Bioproducts and Biorefining, 2018, 12, 125-138.	3.7	111
15	Ethylene-forming enzyme and bioethylene production. Biotechnology for Biofuels, 2014, 7, 33.	6.2	90
16	Techno-economic and resource analysis of hydroprocessed renewable jet fuel. Biotechnology for Biofuels, 2017, 10, 261.	6.2	82
17	Comparative technoâ€economic analysis and reviews of nâ€butanol production from corn grain and corn stover. Biofuels, Bioproducts and Biorefining, 2014, 8, 342-361.	3.7	80
18	A highly efficient dilute alkali deacetylation and mechanical (disc) refining process for the conversion of renewable biomass to lower cost sugars. Biotechnology for Biofuels, 2014, 7, 98.	6.2	78

#	ARTICLE	IF	CITATIONS
19	Economic Perspectives of Biogas Production via Anaerobic Digestion. Bioengineering, 2020, 7, 74.	3.5	77
20	Techno-economic analysis for upgrading the biomass-derived ethanol-to-jet blendstocks. Green Chemistry, 2017, 19, 1082-1101.	9.0	73
21	Comparison of different mechanical refining technologies on the enzymatic digestibility of low severity acid pretreated corn stover. Bioresource Technology, 2013, 147, 401-408.	9.6	70
22	Technoâ€economic analysis of jetâ€fuel production from biorefinery waste lignin. Biofuels, Bioproducts and Biorefining, 2019, 13, 486-501.	3.7	67
23	Toward net-zero sustainable aviation fuel with wet wasteâ€“derived volatile fatty acids. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	63
24	Improved ethanol yield and reduced Minimum Ethanol Selling Price (MESP) by modifying low severity for Biofuels, 2012, 5, 60.	6.2	60
25	The economic outlook for converting CO₂ and electrons to molecules. Energy and Environmental Science, 2021, 14, 3664-3678.	30.8	60
26	Modeling of rotating drum bioreactor for anaerobic solid-state fermentation. Applied Energy, 2010, 87, 2839-2845.	10.1	55
27	Value Proposition of Untapped Wet Wastes: Carboxylic Acid Production through Anaerobic Digestion. IScience, 2020, 23, 101221.	4.1	51
28	A comparative techno-economic analysis of renewable methanol synthesis from biomass and CO2: Opportunities and barriers to commercialization. Applied Energy, 2021, 303, 117637.	10.1	48
29	Improved ethanol yield and reduced minimum ethanol selling price (MESP) by modifying low severity Biotechnology for Biofuels, 2012, 5, 69.	6.2	42
30	Improving Sugar Yields and Reducing Enzyme Loadings in the Deacetylation and Mechanical Refining (DMR) Process through Multistage Disk and Szego Refining and Corresponding Techno-Economic Analysis. ACS Sustainable Chemistry and Engineering, 2016, 4, 324-333.	6.7	40
31	Comparative technoâ€economic analysis and process design for indirect liquefaction pathways to distillateâ€range fuels via biomassâ€derived oxygenated intermediates upgrading. Biofuels, Bioproducts and Biorefining, 2017, 11, 41-66.	3.7	39
32	Well-to-wake analysis of ethanol-to-jet and sugar-to-jet pathways. Biotechnology for Biofuels, 2017, 10, 21.	6.2	38
33	Biofuel Options for Marine Applications: Technoeconomic and Life-Cycle Analyses. Environmental Science & Technology, 2021, 55, 7561-7570.	10.0	38
34	Techno-economic analysis of the deacetylation and disk refining process: characterizing the effect of refining energy and enzyme usage on minimum sugar selling price and minimum ethanol selling price. Biotechnology for Biofuels, 2015, 8, 173.	6.2	32
35	Intermediate species measurement during iso-butanol auto-ignition. Combustion and Flame, 2015, 162, 3541-3553.	5.2	32
36	The Need for and Path to Harmonized Life Cycle Assessment and Technoâ€Economic Assessment for Carbon Dioxide Capture and Utilization. Energy Technology, 2020, 8, 1901034.	3.8	29

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37	Techno-economic analysis of a conceptual biofuel production process from bioethylene produced by photosynthetic recombinant cyanobacteria. Green Chemistry, 2016, 18, 6266-6281.	9.0	28
38	Environmental, Economic, and Scalability Considerations and Trends of Selected Fuel Economy-Enhancing Biomass-Derived Blendstocks. ACS Sustainable Chemistry and Engineering, 2018, 6, 561-569.	6.7	28
39	Techno-economic Analysis and Life-Cycle Analysis of Renewable Diesel Fuels Produced with Waste Feedstocks. ACS Sustainable Chemistry and Engineering, 2022, 10, 382-393.	6.7	28
40	Technoeconomic and life-cycle analysis of single-step catalytic conversion of wet ethanol into fungible fuel blendstocks. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12576-12583.	7.1	27
41	Economic and environmental potentials for natural gas to enhance biomass-to-liquid fuels technologies. Green Chemistry, 2018, 20, 5358-5373.	9.0	26
42	Biological valorization of natural gas for the production of lactic acid: Techno-economic analysis and life cycle assessment. Biochemical Engineering Journal, 2020, 158, 107500.	3.6	25
43	Using waste CO2 to increase ethanol production from corn ethanol biorefineries: Techno-economic analysis. Applied Energy, 2020, 280, 115964.	10.1	24
44	A hybrid pathway to biojet fuel <i>via</i> 2,3-butanediol. Sustainable Energy and Fuels, 2020, 4, 3904-3914.	4.9	22
45	Life cycle analysis of renewable natural gas and lactic acid production from waste feedstocks. Journal of Cleaner Production, 2021, 311, 127653.	9.3	22
46	Effect of corn stover compositional variability on minimum ethanol selling price (MESP). Bioresource Technology, 2013, 140, 426-430.	9.6	20
47	Performance and techno-economic assessment of several solidâ€“liquid separation technologies for processing dilute-acid pretreated corn stover. Bioresource Technology, 2014, 167, 291-296.	9.6	20
48	Synthesis of Azeotropic Distillation Systems with Recycles. Industrial & Engineering Chemistry Research, 2003, 42, 1783-1794.	3.7	19
49	Techno-Economic Analysis and Life-Cycle Analysis of Two Light-Duty Bioblendstocks: Isobutanol and Aromatic-Rich Hydrocarbons. ACS Sustainable Chemistry and Engineering, 2018, 6, 8790-8800.	6.7	18
50	Visualization of the Mode Shapes of Pressure Oscillation in a Cylindrical Cavity. Combustion Science and Technology, 2015, 187, 1610-1619.	2.3	15
51	Recycling of Dilute Deacetylation Black Liquor to Enable Efficient Recovery and Reuse of Spent Chemicals and Biomass Pretreatment Waste. Frontiers in Energy Research, 2018, 6, .	2.3	15
52	Kinetics and Rheological Behavior of Higher Solid (Solids >20%) Enzymatic Hydrolysis Reactions Using Dilute Acid Pretreated, Deacetylation and Disk Refined, and Deacetylation and Mechanical Refined (DMR) Corn Stover Slurries. ACS Sustainable Chemistry and Engineering, 2019, 7, 1633-1641.	6.7	14
53	Using waste <scp>CO₂</scp> from corn ethanol biorefineries for additional ethanol production: lifeâ€cycle analysis. Biofuels, Bioproducts and Biorefining, 2021, 15, 468-480.	3.7	13
54	Environmental, Economic, and Scalability Considerations of Selected Bio-Derived Blendstocks for Mixing-Controlled Compression Ignition Engines. ACS Sustainable Chemistry and Engineering, 2022, 10, 6699-6712.	6.7	13

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55	Towards cost-competitive middle distillate fuels from ethanol within a market-flexible biorefinery concept. Green Chemistry, 2021, 23, 9534-9548.	9.0	12
56	High temperature pre-digestion of corn stover biomass for improved product yields. Biotechnology for Biofuels, 2014, 7, 170.	6.2	11
57	Understanding the role of Fischerâ€"Tropsch reaction kinetics in technoâ€economic analysis for coâ€conversion of natural gas and biomass to liquid transportation fuels. Biofuels, Bioproducts and Biorefining, 2019, 13, 1306-1320.	3.7	11
58	An economic analysis of the role of materials, system engineering, and performance in electrochemical carbon dioxide conversion to formate. Journal of Cleaner Production, 2022, 351, 131564.	9.3	7
59	Effect of Feedstock Variability, Feedstock Blends, and Pretreatment Conditions on Sugar Yield and Production Costs. Frontiers in Energy Research, 2022, 9, .	2.3	4
60	Technical Performance and Economic Evaluation of Evaporative and Membrane-Based Concentration for Biomass-Derived Sugars. Industrial & Engineering Chemistry Research, 2017, 56, 11584-11592.	3.7	3
61	Developing reactors for electrifying bio-methanation: a perspective from bio-electrochemistry. Sustainable Energy and Fuels, 2022, 6, 1249-1263.	4.9	3
62	Perspectives on Process Analysis for Advanced Biofuel Production. , 2015, , 33-60.		2
63	Biorefinery ethanol upgrading: Opportunities and challenges. Joule, 2021, 5, 524-526.	24.0	2
64	Long-term variability in sugarcane bagasse feedstock compositional methods: sources and magnitude of analytical variability. Biotechnology for Biofuels, 2016, 9, 223.	6.2	1
65	(Invited) Techno-Economic Analysis of Utilizing Electricity to Produce Intermediates from CO2. ECS Meeting Abstracts, 2021, MA2021-02, 1362-1362.	0.0	0