Yuan Yao

List of Publications by Year in Descending Order

33 papers	666 citations	13 h-index	25 g-index
39 ext. papers	1,098 ext. citations	7.7 avg, IF	4.73 L-index

#	Paper	IF	Citations
33	Equally green? Understanding the distribution of urban green infrastructure across student demographics in four public school districts in North Carolina, USA. *Urban Forestry and Urban Greening*, **2022**, 67, 127434	5.4	2
32	Sustainable high-strength macrofibres extracted from natural bamboo. *Nature Sustainability*, **2022**, 5, 235-244	22.1	10
31	Lightweight, strong, moldable wood via cell wall engineering as a sustainable structural material. *Science*, **2021**, 374, 465-471	33.3	18
30	A strong, biodegradable and recyclable lignocellulosic bioplastic. *Nature Sustainability*, **2021**, 4, 627-635	22.1	74
29	A general Life Cycle Assessment framework for sustainable bleaching: A case study of peracetic acid bleaching of wood pulp. *Journal of Cleaner Production*, **2021**, 290, 125854	10.3	0
28	Applications of artificial intelligence-based modeling for bioenergy systems: A review. *GCB Bioenergy*, **2021**, 13, 774-802	5.6	13
27	Techno-Economic Analysis of decentralized preprocessing systems for fast pyrolysis biorefineries with blended feedstocks in the southeastern United States. *Renewable and Sustainable Energy Reviews*, **2021**, 143, 110881	16.2	8
26	An integrated techno-sustainability assessment (TSA) framework for emerging technologies. *Green Chemistry*, **2021**, 23, 1700-1715	10	3
25	Dynamic life-cycle carbon analysis for fast pyrolysis biofuel produced from pine residues: implications of carbon temporal effects. *Biotechnology for Biofuels*, **2021**, 14, 191	7.8	1
24	Life cycle carbon footprint analysis of pulp and paper grades in the United States using production-line-based data and integration. *BioResources*, **2020**, 15, 3899-3914	1.3	2
23	Dynamic life cycle carbon and energy analysis for cross-laminated timber in the Southeastern United States. *Environmental Research Letters*, **2020**, 15, 124036	6.2	8
22	Generating Energy and Greenhouse Gas Inventory Data of Activated Carbon Production Using Machine Learning and Kinetic Based Process Simulation. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 1252-1261	8.3	16
21	Impacts of uncertain feedstock quality on the economic feasibility of fast pyrolysis biorefineries with blended feedstocks and decentralized preprocessing sites in the Southeastern United States. *GCB Bioenergy*, **2020**, 12, 1014-1029	5.6	8
20	Supply Chain of Waste Cotton Recycling and Reuse: A Review. *AATCC Journal of Research*, **2020**, 7, 19-31	1	12
19	Key issue, challenges, and status quo of models for biofuel supply chain design **2020**, 273-315		1
18	Life Cycle Analysis of Decentralized Preprocessing Systems for Fast Pyrolysis Biorefineries with Blended Feedstocks in the Southeastern United States. *Energy Technology*, **2020**, 8, 1900850	3.5	11
17	Using a Data-Driven Approach to Unveil Greenhouse Gas Emission Intensities of Different Pulp and Paper Products. *Procedia CIRP*, **2019**, 80, 689-692	1.8	4

List of Publications

16	A Parametric Life Cycle Modeling Framework for Identifying Research Development Priorities of Emerging Technologies: A Case Study of Additive Manufacturing. *Procedia CIRP*, **2019**, 80, 370-375	1.8	2
15	Artificial neural network based modeling for the prediction of yield and surface area of activated carbon from biomass. *Biofuels, Bioproducts and Biorefining*, **2019**, 13, 1015-1027	5.3	20
14	Integrating Life Cycle Assessment and Agent-Based Modeling: A Dynamic Modeling Framework for Sustainable Agricultural Systems. *Journal of Cleaner Production*, **2019**, 238, 117853	10.3	19
13	Environmental implications of the methanol economy in China: well-to-wheel comparison of energy and environmental emissions for different methanol fuel production pathways. *Journal of Cleaner Production*, **2018**, 172, 1381-1390	10.3	25
12	Life-cycle modeling framework for generating energy and greenhouse gas emissions inventory of emerging technologies in the chemical industry. *Journal of Cleaner Production*, **2018**, 172, 768-777	10.3	21
11	Quantifying carbon capture potential and cost of carbon capture technology application in the U.S. refining industry. *International Journal of Greenhouse Gas Control*, **2018**, 74, 87-98	4.2	8
10	Prospective Energy Analysis of Emerging Technology Options for the United States Ethylene Industry. *Industrial & Engineering Chemistry Research*, **2016**, 55, 3493-3505	3.9	16
9	Quantifying the Water-Energy-Food Nexus: Current Status and Trends. *Energies*, **2016**, 9, 65	3.1	117
8	Understanding Variability To Reduce the Energy and GHG Footprints of U.S. Ethylene Production. *Environmental Science & Technology*, **2015**, 49, 14704-16	10.3	17
7	Greener pathways for energy-intensive commodity chemicals: opportunities and challenges. *Current Opinion in Chemical Engineering*, **2014**, 6, 90-98	5.4	8
6	Reflections on a massive open online life cycle assessment course. *International Journal of Life Cycle Assessment*, **2014**, 19, 1901-1907	4.6	7
5	A hybrid life-cycle inventory for multi-crystalline silicon PV module manufacturing in China. *Environmental Research Letters*, **2014**, 9, 114001	6.2	24
4	Life Cycle Energy, Environmental and Economic Comparative Analysis of CdTe Thin-film Photovoltaics Domestic and Overseas Manufacturing Scenarios. *Computer Aided Chemical Engineering*, **2013**, 32, 733-738	0.6	3
3	Design under uncertainty of hydrocarbon biorefinery supply chains: Multiobjective stochastic programming models, decomposition algorithm, and a Comparison between CVaR and downside risk. *AICHE Journal*, **2012**, 58, 2155-2179	3.6	180
2	Multiobjective optimization of hydrocarbon biorefinery supply chain designs under uncertainty **2012**,		4
1	Sustainability implications of artificial intelligence in the chemical industry: A conceptual framework. *Journal of Industrial Ecology*,	7.2	2