Miao Guo

List of Publications by Citations

84 papers	1,832 citations	21 h-index	41 g-index
87 ext. papers	2,312 ext. citations	6.3 avg, IF	5.39 L-index

#	Paper	IF	Citations
84	Energy Demand Side Management within micro-grid networks enhanced by blockchain. *Applied Energy*, **2018**, 228, 1385-1398	10.7	195
83	The multi-scale challenges of biomass fast pyrolysis and bio-oil upgrading: Review of the state of art and future research directions. *Progress in Energy and Combustion Science*, **2019**, 71, 1-80	33.6	184
82	LCA data quality: sensitivity and uncertainty analysis. *Science of the Total Environment*, **2012**, 435-436, 230-43	10.2	139
81	Multifunctional superparamagnetic nanocarriers with folate-mediated and pH-responsive targeting properties for anticancer drug delivery. *Biomaterials*, **2011**, 32, 185-94	15.6	127
80	Multi-product biorefineries from lignocelluloses: a pathway to revitalisation of the sugar industry?. *Biotechnology for Biofuels*, **2017**, 10, 87	7.8	112
79	Magnetic and pH-responsive nanocarriers with multilayer core–shell architecture for anticancer drug delivery. *Journal of Materials Chemistry*, **2008**, 18, 5104		105
78	A review on hydrothermal pre-treatment technologies and environmental profiles of algal biomass processing. *Bioresource Technology*, **2016**, 199, 288-299	11	103
77	Economic and environmental evaluation of nitrogen removal and recovery methods from wastewater. *Bioresource Technology*, **2016**, 215, 227-238	11	59
76	Biogas productivity of anaerobic digestion process is governed by a core bacterial microbiota. *Chemical Engineering Journal*, **2020**, 380, 122425	14.7	45
75	The environmental profile of bioethanol produced from current and potential future poplar feedstocks in the EU. *Green Chemistry*, **2014**, 16, 4680-4695	10	37
74	A Nexus Approach for Sustainable Urban Energy-Water-Waste Systems Planning and Operation. *Environmental Science & Technology*, **2018**, 52, 3257-3266	10.3	36
73	Blockchain-based smart contract for energy demand management. *Energy Procedia*, **2019**, 158, 2719-2724	4.3	33
72	Hydrothermal upgrading of algae paste: Inorganics and recycling potential in the aqueous phase. *Science of the Total Environment*, **2016**, 568, 489-497	10.2	31
71	Preparation of narrow or mono-disperse crosslinked poly((meth)acrylic acid)/iron oxide magnetic microspheres. *Journal of Materials Chemistry*, **2006**, 16, 4535		31
70	Phytoremediation: Climate change resilience and sustainability assessment at a coastal brownfield redevelopment. *Environment International*, **2019**, 130, 104945	12.9	29
69	Anaerobic digestion of starch-polyvinyl alcohol biopolymer packaging: biodegradability and environmental impact assessment. *Bioresource Technology*, **2011**, 102, 11137-46	11	27
68	Biomass Conversion into Fuels, Chemicals, or Electricity? A Network-Based Life Cycle Optimization Approach Applied to the European Union. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10570-10582	8.3	25

67	Is it possible to develop biopolymer production systems independent of fossil fuels? Case study in energy profiling of polyhydroxybutyrate-valerate (PHBV). *Green Chemistry*, **2013**, 15, 706	10	24
66	Implementing land-use and ecosystem service effects into an integrated bioenergy value chain optimisation framework. *Computers and Chemical Engineering*, **2016**, 91, 392-406	4	24
65	Bioethanol from poplar: a commercially viable alternative to fossil fuel in the European Union. *Biotechnology for Biofuels*, **2014**, 7, 113	7.8	23
64	Influence of agro-ecosystem modeling approach on the greenhouse gas profiles of wheat-derived biopolymer products. *Environmental Science & Technology*, **2012**, 46, 320-30	10.3	17
63	An overview to process design, simulation and sustainability evaluation of biodiesel production. *Biotechnology for Biofuels*, **2021**, 14, 129	7.8	17
62	Bioethanol from poplar clone Imola: an environmentally viable alternative to fossil fuel?. *Biotechnology for Biofuels*, **2015**, 8, 134	7.8	16
61	Environmental profile of algal Hydrothermal Liquefaction A country specific case study. *Algal Research*, **2016**, 16, 127-140	5	16
60	A holistic resilience framework development for rural power systems in emerging economies. *Applied Energy*, **2019**, 235, 219-232	10.7	16
59	Scale-up and Sustainability Evaluation of Biopolymer Production from Citrus Waste Offering Carbon Capture and Utilisation Pathway. *ChemistryOpen*, **2019**, 8, 668-688	2.3	15
58	The influence of raw material availability and utility power consumption on the sustainability of the ammonia process. *Chemical Engineering Research and Design*, **2020**, 158, 177-192	5.5	13
57	Multi-level system modelling of the resource-food-bioenergy nexus in the global south. *Energy*, **2020**, 197, 117196	7.9	13
56	Towards greater sustainable development within current Mega-Methanol (MM) production. *Green Chemistry*, **2020**, 22, 4279-4294	10	12
55	Waste-to-Resource Transformation: Gradient Boosting Modeling for Organic Fraction Municipal Solid Waste Projection. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 10460-10466	8.3	11
54	Planning of Food-Energy-Water-Waste (FEW2) nexus for sustainable development. *BMC Chemical Engineering*, **2020**, 2,	3.5	11
53	Assessment of technical and environmental performances of wheat-based foams in thermal packaging applications. *Packaging Technology and Science*, **2010**, 23, 363-382	2.3	11
52	Development of a responsive optimisation framework for decision-making in precision agriculture. *Computers and Chemical Engineering*, **2019**, 131, 106585	4	10
51	Is There a Generic Environmental Advantage for Starch PVOH Biopolymers Over Petrochemical Polymers?. *Journal of Polymers and the Environment*, **2012**, 20, 976-990	4.5	10
50	End-of-life of starch-polyvinyl alcohol biopolymers. *Bioresource Technology*, **2013**, 127, 256-66	11	9

49	Sustainable Design of Urban Rooftop Food-Energy-Land Nexus. *IScience*, **2020**, 23, 101743	6.1	9
48	Hydrogen Generation Performance from Taihu Algae and Food Waste by Anaerobic Codigestion. *Energy & Fuels*, **2019**, 33, 1279-1289	4.1	9
47	Global environmental and nutritional assessment of national food supply patterns: Insights from a data envelopment analysis approach. *Science of the Total Environment*, **2021**, 755, 142826	10.2	8
46	Emerging supply chain of utilising electrical vehicle retired batteries in distributed energy systems. *Advances in Applied Energy*, **2021**, 1, 100002		8
45	Wastewater To Resource: Design of a Sustainable Phosphorus Recovery System. *ChemistryOpen*, **2019**, 8, 1109-1120	2.3	7
44	Optimisation of Wastewater Treatment and Recovery Solutions in Industrial Parks. *Computer Aided Chemical Engineering*, **2018**, 43, 1407-1412	0.6	7
43	Waste-to-hydrogen: Recycling HCl to produce H2 and Cl2. *Applied Energy*, **2020**, 259, 114184	10.7	7
42	Protein from renewable resources: mycoprotein production from agricultural residues. *Green Chemistry*, **2021**, 23, 5150-5165	10	7
41	Energy Demand Side Management with supply constraints: Game theoretic Approach. *Energy Procedia*, **2018**, 145, 368-373	2.3	7
40	Multi-scale system modelling under circular bioeconomy. *Computer Aided Chemical Engineering*, **2018**, 833-838	0.6	7
39	Achieving absolute sustainability across integrated industrial networks □a case study on the ammonia process. *Green Chemistry*, **2020**, 22, 6547-6559	10	6
38	Optimisation of wastewater treatment strategies in eco-industrial parks: Technology, location and transport. *Chemical Engineering Journal*, **2020**, 381, 122643	14.7	6
37	Climate smart process design for current and future methanol production. *Journal of CO2 Utilization*, **2021**, 44, 101399	7.6	6
36	Waste-to-Resource value chain optimisation: Combining spatial, chemical and technoeconomic aspects. *Water Research*, **2020**, 178, 115842	12.5	5
35	Optimisation of Integrated Bioenergy and Concentrated Solar Power Supply Chains in South Africa. *Computer Aided Chemical Engineering*, **2018**, 1463-1468	0.6	5
34	Biodiesel production with enzymatic technology: progress and perspectives. *Biofuels, Bioproducts and Biorefining*, **2021**, 15, 1526-1548	5.3	5
33	Phytoremediation value chains and modeling **2020**, 325-366		4
32	Life Cycle Inventory and Assessment Datasets on the Operational Sustainability of the Ammonia Process. *Data in Brief*, **2020**, 30, 105593	1.2	4

31	Waste-Energy-Water systems in sustainable city development using the resilience.io platform. *Computer Aided Chemical Engineering*, **2017**, 2377-2382	0.6	4
30	Life Cycle Assessment (LCA) of Light-Weight Eco-composites. *Springer Theses*, **2012**,	0.1	4
29	What is required for resource-circular CO2 utilization within Mega-Methanol (MM) production?. *Journal of CO2 Utilization*, **2021**, 45, 101451	7.6	3
28	Coupling biogeochemical simulation and mathematical optimisation towards eco-industrial energy systems design. *Applied Energy*, **2021**, 290, 116773	10.7	3
27	Integrated multi-level bioenergy supply chain modelling applied to sugarcane biorefineries in South Africa. *Computer Aided Chemical Engineering*, **2016**, 38, 2037-2042	0.6	3
26	Using system dynamics to assess the complexity of rural toilet retrofitting: Case study in eastern China. *Journal of Environmental Management*, **2021**, 280, 111655	7.9	3
25	Valorisation of algal biomass to value-added metabolites: emerging trends and opportunities.. *Phytochemistry Reviews*, **2022**, 1-26	7.7	3
24	Experimental Vortex Flow Patterns in the Primary and Secondary Pump Intakes of a Model Underground Pumping Station. *Energies*, **2020**, 13, 1790	3.1	2
23	Scale-up and Sustainability Evaluation of Biopolymer Production from Citrus Waste Offering Carbon Capture and Utilisation Pathway. *ChemistryOpen*, **2019**, 8, 659	2.3	2
22	Incorporating life cycle assessment indicators into optimal electric vehicle charging strategies: An integrated modelling approach. *Computer Aided Chemical Engineering*, **2016**, 38, 241-246	0.6	2
21	Protein from Renewable Resources: Mycoprotein Production from Agricultural Residues. *Computer Aided Chemical Engineering*, **2020**, 48, 985-990	0.6	2
20	Supply Chain Optimisation of Nipa-based bioethanol industry in Thailand. *Computer Aided Chemical Engineering*, **2016**, 38, 913-918	0.6	2
19	Model-based decision-support for waste-to-energy pathways in New South Wales, Australia. *Computer Aided Chemical Engineering*, **2019**, 1765-1770	0.6	2
18	Hydrogen consumption capacity assessment and its inhibition in the dry anaerobic digestion process from food waste. *Journal of Renewable and Sustainable Energy*, **2018**, 10, 053104	2.5	2
17	Optimising diets to reach absolute planetary environmental sustainability through consumers. *Sustainable Production and Consumption*, **2021**, 28, 877-892	8.2	2
16	Industrial production of microbial protein products.. *Current Opinion in Biotechnology*, **2022**, 75, 102707	11.4	2
15	Optimal design of urban energy systems with demand side management and distributed generation. *Computer Aided Chemical Engineering*, **2017**, 2371-2376	0.6	1
14	Bringing Non-energy Systems into a Bioenergy Value Chain Optimization Framework. *Computer Aided Chemical Engineering*, **2015**, 37, 2351-2356	0.6	1

13	LCA Case Studies of Starch-Based Foam. *Springer Theses*, **2012**, 153-220	0.1	1
12	Comment on "Sustainability metrics: life cycle assessment and green design in polymers". *Environmental Science & Technology*, **2011**, 45, 5055-6; author reply 5058-9	10.3	1
11	Reducing indoor relative humidity can improve the circulation and cardiorespiratory health of older people in a cold environment: A field trial conducted in Chongqing, China.. *Science of the Total Environment*, **2021**, 817, 152695	10.2	1
10	Carbon Arbitrage with Stationary Batteries in the City of London. *Computer Aided Chemical Engineering*, **2017**, 529-534	0.6	1
9	Investigation on free-surface vortices within a closed pump intake under different pressure conditions using stereo PIV. *Journal of Nuclear Science and Technology*, **2021**, 58, 241-251	1	1
8	High-solids fermentation of food wastes for biogas recovery by using horizontal anaerobic reactor. *Journal of Renewable and Sustainable Energy*, **2018**, 10, 043106	2.5	1
7	Geometric Optimization of an Extracorporeal Centrifugal Blood Pump with an Unshrouded Impeller Concerning Both Hydraulic Performance and Shear Stress. *Processes*, **2021**, 9, 1211	2.9	1
6	Linkage of community composition and function over short response time in anaerobic digestion systems with food fermentation wastewater. *IScience*, **2021**, 24, 102958	6.1	1
5	Stochastic optimisation of organic waste-to-resource value chain. *Environmental Pollution*, **2021**, 273, 116435	9.3	0
4	LCA of WBF Products Over Whole Life Cycles. *Springer Theses*, **2012**, 265-319	0.1	
3	General Discussion and Conclusions. *Springer Theses*, **2012**, 345-356	0.1	
2	Process Systems Design Framework for Resource Recovery from Wastewater. *Computer Aided Chemical Engineering*, **2020**, 1039-1044	0.6	
1	Development of Systems Modelling Framework for Waste-to-Resource Transformation. *Computer Aided Chemical Engineering*, **2020**, 48, 1597-1602	0.6	