Miao Guo

List of Publications by Year
in descending order

84 papers	2,697 citations	236833 25 h-index	189801 50 g-index
87 all docs	87 docs citations	87 times ranked	3764 citing authors

#	Article	IF	Citations
1	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.	15.8	316
2	Energy Demand Side Management within micro-grid networks enhanced by blockchain. Applied Energy, 2018, 228, 1385-1398.	5.1	308
3	LCA data quality: Sensitivity and uncertainty analysis. Science of the Total Environment, 2012, 435-436, 230-243.	3.9	192
4	Multi-product biorefineries from lignocelluloses: a pathway to revitalisation of the sugar industry?. Biotechnology for Biofuels, 2017, 10, 87.	6.2	151
5	Multifunctional superparamagnetic nanocarriers with folate-mediated and pH-responsive targeting properties for anticancer drug delivery. Biomaterials, 2011, 32, 185-194.	5.7	134
6	A review on hydrothermal pre-treatment technologies and environmental profiles of algal biomass processing. Bioresource Technology, 2016, 199, 288-299.	4.8	117
7	Magnetic and pH-responsive nanocarriers with multilayer coreâ€"shell architecture for anticancer drug delivery. Journal of Materials Chemistry, 2008, 18, 5104.	6.7	111
8	Economic and environmental evaluation of nitrogen removal and recovery methods from wastewater. Bioresource Technology, 2016, 215, 227-238.	4.8	80
9	Biogas productivity of anaerobic digestion process is governed by a core bacterial microbiota. Chemical Engineering Journal, 2020, 380, 122425.	6.6	73
10	Blockchain-based smart contract for energy demand management. Energy Procedia, 2019, 158, 2719-2724.	1.8	59
11	A Nexus Approach for Sustainable Urban Energy-Water-Waste Systems Planning and Operation. Environmental Science & Technology, 2018, 52, 3257-3266.	4.6	55
12	Phytoremediation: Climate change resilience and sustainability assessment at a coastal brownfield redevelopment. Environment International, 2019, 130, 104945.	4.8	54
13	An overview to process design, simulation and sustainability evaluation of biodiesel production. Biotechnology for Biofuels, 2021, 14, 129.	6.2	54
14	The environmental profile of bioethanol produced from current and potential future poplar feedstocks in the EU. Green Chemistry, 2014, 16, 4680-4695.	4.6	45
15	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.	3.2	45
16	Protein from renewable resources: mycoprotein production from agricultural residues. Green Chemistry, 2021, 23, 5150-5165.	4.6	42
17	Preparation of narrow or mono-disperse crosslinked poly((meth)acrylic acid)/iron oxide magnetic microspheres. Journal of Materials Chemistry, 2006, 16, 4535.	6.7	37
18	Hydrothermal upgrading of algae paste: Inorganics and recycling potential in the aqueous phase. Science of the Total Environment, 2016, 568, 489-497.	3.9	34

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19	Anaerobic digestion of starchâ€“polyvinyl alcohol biopolymer packaging: Biodegradability and environmental impact assessment. Bioresource Technology, 2011, 102, 11137-11146.	4.8	32
20	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.	4.6	30
21	Bioethanol from poplar: a commercially viable alternative to fossil fuel in the European Union. Biotechnology for Biofuels, 2014, 7, 113.	6.2	30
22	Implementing land-use and ecosystem service effects into an integrated bioenergy value chain optimisation framework. Computers and Chemical Engineering, 2016, 91, 392-406.	2.0	30
23	Industrial production of microbial protein products. Current Opinion in Biotechnology, 2022, 75, 102707.	3.3	29
24	A holistic resilience framework development for rural power systems in emerging economies. Applied Energy, 2019, 235, 219-232.	5.1	28
25	Multi-level system modelling of the resource-food-bioenergy nexus in the global south. Energy, 2020, 197, 117196.	4.5	26
26	Emerging supply chain of utilising electrical vehicle retired batteries in distributed energy systems. Advances in Applied Energy, 2021, 1, 100002.	6.6	26
27	Scaleâ€up and Sustainability Evaluation of Biopolymer Production from Citrus Waste Offering Carbon Capture and Utilisation Pathway. ChemistryOpen, 2019, 8, 668-688.	0.9	24
28	Sustainable Design of Urban Rooftop Food-Energy-Land Nexus. IScience, 2020, 23, 101743.	1.9	23
29	Towards greater sustainable development within current Mega-Methanol (MM) production. Green Chemistry, 2020, 22, 4279-4294.	4.6	23
30	Biodiesel production with enzymatic technology: progress and perspectives. Biofuels, Bioproducts and Biorefining, 2021, 15, 1526-1548.	1.9	22
31	Environmental profile of algal Hydrothermal Liquefaction â€” A country specific case study. Algal Research, 2016, 16, 127-140.	2.4	21
32	Development of a responsive optimisation framework for decision-making in precision agriculture. Computers and Chemical Engineering, 2019, 131, 106585.	2.0	21
33	Waste-to-Resource Transformation: Gradient Boosting Modeling for Organic Fraction Municipal Solid Waste Projection. ACS Sustainable Chemistry and Engineering, 2019, 7, 10460-10466.	3.2	21
34	Influence of Agro-Ecosystem Modeling Approach on the Greenhouse Gas Profiles of Wheat-Derived Biopolymer Products. Environmental Science & Technology, 2012, 46, 320-330.	4.6	20
35	Valorisation of algal biomass to value-added metabolites: emerging trends and opportunities. Phytochemistry Reviews, 2023, 22, 1015-1040.	3.1	20
36	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.	2.7	19

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37	Planning of Food-Energy-Water-Waste (FEW2) nexus for sustainable development. BMC Chemical Engineering, 2020, 2, .	3.4	19
38	Bioethanol from poplar clone Imola: an environmentally viable alternative to fossil fuel?. Biotechnology for Biofuels, 2015, 8, 134.	6.2	17
39	Waste-to-hydrogen: Recycling HCl to produce H2 and Cl2. Applied Energy, 2020, 259, 114184.	5.1	16
40	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.	3.9	16
41	Using system dynamics to assess the complexity of rural toilet retrofitting: Case study in eastern China. Journal of Environmental Management, 2021, 280, 111655.	3.8	16
42	Climate smart process design for current and future methanol production. Journal of CO2 Utilization, 2021, 44, 101399.	3.3	16
43	Assessment of technical and environmental performances of wheatâ€based foams in thermal packaging applications. Packaging Technology and Science, 2010, 23, 363-382.	1.3	15
44	Is There a Generic Environmental Advantage for Starchâ€"PVOH Biopolymers Over Petrochemical Polymers?. Journal of Polymers and the Environment, 2012, 20, 976-990.	2.4	15
45	Hydrogen Generation Performance from Taihu Algae and Food Waste by Anaerobic Codigestion. Energy & Fuels, 2019, 33, 1279-1289.	2.5	15
46	Optimising diets to reach absolute planetary environmental sustainability through consumers. Sustainable Production and Consumption, 2021, 28, 877-892.	5.7	15
47	Achieving absolute sustainability across integrated industrial networks â€" a case study on the ammonia process. Green Chemistry, 2020, 22, 6547-6559.	4.6	14
48	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, 2022, 817, 152695.	3.9	14
49	Wastewater To Resource: Design of a Sustainable Phosphorus Recovery System. ChemistryOpen, 2019, 8, 1109-1120.	0.9	11
50	What is required for resource-circular CO2 utilization within Mega-Methanol (MM) production?. Journal of CO2 Utilization, 2021, 45, 101451.	3.3	11
51	Multi-scale system modelling under circular bioeconomy. Computer Aided Chemical Engineering, 2018, , 833-838.	0.3	10
52	Optimisation of wastewater treatment strategies in eco-industrial parks: Technology, location and transport. Chemical Engineering Journal, 2020, 381, 122643.	6.6	10
53	End-of-life of starchâ€"polyvinyl alcohol biopolymers. Bioresource Technology, 2013, 127, 256-266.	4.8	9
54	Energy Demand Side Management with supply constraints: Game theoretic Approach. Energy Procedia, 2018, 145, 368-373.	1.8	9

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55	Optimisation of Wastewater Treatment and Recovery Solutions in Industrial Parks. Computer Aided Chemical Engineering, 2018, 43, 1407-1412.	0.3	9
56	Waste-to-Resource value chain optimisation: Combining spatial, chemical and technoeconomic aspects. Water Research, 2020, 178, 115842.	5.3	9
57	Coupling biogeochemical simulation and mathematical optimisation towards eco-industrial energy systems design. Applied Energy, 2021, 290, 116773.	5.1	9
58	Experimental Vortex Flow Patterns in the Primary and Secondary Pump Intakes of a Model Underground Pumping Station. Energies, 2020, 13, 1790.	1.6	7
59	Integrated multi-level bioenergy supply chain modelling applied to sugarcane biorefineries in South Africa. Computer Aided Chemical Engineering, 2016, 38, 2037-2042.	0.3	6
60	Optimisation of Integrated Bioenergy and Concentrated Solar Power Supply Chains in South Africa. Computer Aided Chemical Engineering, 2018, , 1463-1468.	0.3	6
61	Life Cycle Inventory and Assessment Datasets on the Operational Sustainability of the Ammonia Process. Data in Brief, 2020, 30, 105593.	0.5	6
62	Waste-Energy-Water systems in sustainable city development using the resilience.io platform. Computer Aided Chemical Engineering, 2017, , 2377-2382.	0.3	5
63	Phytoremediation value chains and modeling. , 2020, , 325-366.		5
64	Life Cycle Assessment (LCA) of Light-Weight Eco-composites. Springer Theses, 2012, , .	0.0	4
65	Protein from Renewable Resources: Mycoprotein Production from Agricultural Residues. Computer Aided Chemical Engineering, 2020, 48, 985-990.	0.3	4
66	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.	0.7	4
67	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.	0.8	3
68	Scaleâ€up and Sustainability Evaluation of Biopolymer Production from Citrus Waste Offering Carbon Capture and Utilisation Pathway. ChemistryOpen, 2019, 8, 659-659.	0.9	3
69	Supply Chain Optimisation of Nipa-based bioethanol industry in Thailand. Computer Aided Chemical Engineering, 2016, 38, 913-918.	0.3	2
70	High-solids fermentation of food wastes for biogas recovery by using horizontal anaerobic reactor. Journal of Renewable and Sustainable Energy, 2018, 10, 043106.	0.8	2
71	Model-based decision-support for waste-to-energy pathways in New South Wales, Australia. Computer Aided Chemical Engineering, 2019, , 1765-1770.	0.3	2
72	Geometric Optimization of an Extracorporeal Centrifugal Blood Pump with an Unshrouded Impeller Concerning Both Hydraulic Performance and Shear Stress. Processes, 2021, 9, 1211.	1.3	2

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73	Incorporating life cycle assessment indicators into optimal electric vehicle charging strategies: An integrated modelling approach. Computer Aided Chemical Engineering, 2016, 38, 241-246.	0.3	2
74	Comment on â€œSustainability Metrics: Life Cycle Assessment and Green Design in Polymersâ€• Environmental Science & Technology, 2011, 45, 5055-5056.	4.6	1
75	LCA Case Studies of Starch-Based Foam. Springer Theses, 2012, , 153-220.	0.0	1
76	Bringing Non-energy Systems into a Bioenergy Value Chain Optimization Framework. Computer Aided Chemical Engineering, 2015, 37, 2351-2356.	0.3	1
77	Optimal design of urban energy systems with demand side management and distributed generation. Computer Aided Chemical Engineering, 2017, , 2371-2376.	0.3	1
78	Stochastic optimisation of organic waste-to-resource value chain. Environmental Pollution, 2021, 273, 116435.	3.7	1
79	Linkage of community composition and function over short response time in anaerobic digestion systems with food fermentation wastewater. IScience, 2021, 24, 102958.	1.9	1
80	Carbon Arbitrage with Stationary Batteries in the City of London. Computer Aided Chemical Engineering, 2017, , 529-534.	0.3	1
81	LCA of WBF Products Over Whole Life Cycles. Springer Theses, 2012, , 265-319.	0.0	0
82	General Discussion and Conclusions. Springer Theses, 2012, , 345-356.	0.0	0
83	Process Systems Design Framework for Resource Recovery from Wastewater. Computer Aided Chemical Engineering, 2020, , 1039-1044.	0.3	0
84	Development of Systems Modelling Framework for Waste-to-Resource Transformation. Computer Aided Chemical Engineering, 2020, 48, 1597-1602.	0.3	0