Ming Xu

List of Publications by Year
in descending order

155 papers	8,429 citations	34016 52 h-index	53109 85 g-index
168 all docs	168 docs citations	168 times ranked	7328 citing authors

#	Article	IF	Citations
1	An infinite life cycle assessment model to re-evaluate resource efficiency and environmental impacts of circular economy systems. Waste Management, 2022, 145, 72-82.	3.7	12
2	Widespread range suitability and cost competitiveness of electric vehicles for ride-hailing drivers. Applied Energy, 2022, 319, 119246.	5.1	6
3	Quantifying the impacts of COVID-19 on Sustainable Development Goals using machine learning models. Fundamental Research, 2022, , .	1.6	12
4	Low-carbon pathways for the booming express delivery sector in China. Nature Communications, 2021, 12, 450.	5.8	36
5	Critical transmission sectors for CO2 emission mitigation in supply chains. Technological Forecasting and Social Change, 2021, 164, 120499.	6.2	15
6	Urban Air Pollution Mapping Using Fleet Vehicles as Mobile Monitors and Machine Learning. Environmental Science & Technology, 2021, 55, 5579-5588.	4.6	27
7	Critical review of global plastics stock and flow data. Journal of Industrial Ecology, 2021, 25, 1300-1317.	2.8	53
8	Estimation of Unit Process Data for Life Cycle Assessment Using a Decision Tree-Based Approach. Environmental Science & Technology, 2021, 55, 8439-8446.	4.6	27
9	U.S.â€“China Collaboration is Vital to Global Plans for a Healthy Environment and Sustainable Development. Environmental Science & Technology, 2021, 55, 9622-9626.	4.6	10
10	Reducing Greenhouse Gas Emissions from U.S. Light-Duty Transport in Line with the 2 Â°C Target. Environmental Science & Technology, 2021, 55, 9326-9338.	4.6	15
11	Identifying sectoral impacts on global scarce water uses from multiple perspectives. Journal of Industrial Ecology, 2021, 25, 1503-1517.	2.8	12
12	Production- and consumption-based energy use in the ASEAN: Lessons from the Tiger and the cubs. Journal of Cleaner Production, 2021, 304, 126986.	4.6	6
13	Gross economic-ecological product as an integrated measure for ecological service and economic products. Resources, Conservation and Recycling, 2021, 171, 105566.	5.3	13
14	Chinese environmentally extended input-output database for 2017 and 2018. Scientific Data, 2021, 8, 256.	2.4	14
15	Shared autonomous electric vehicle fleets with vehicle-to-grid capability: Economic viability and environmental co-benefits. Applied Energy, 2021, 302, 117500.	5.1	16
16	Trade-related water scarcity risk under the Belt and Road Initiative. Science of the Total Environment, 2021, 801, 149781.	3.9	13
17	Ecological civilization and government administrative system reform in China. Resources, Conservation and Recycling, 2020, 155, 104654.	5.3	64
18	Virtual scarce water flows and economic benefits of the Belt and Road Initiative. Journal of Cleaner Production, 2020, 253, 119936.	4.6	37

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19	Estimate ecotoxicity characterization factors for chemicals in life cycle assessment using machine learning models. Environment International, 2020, 135, 105393.	4.8	62
20	Socioeconomic drivers of water use in China during 2002â€“2017. Resources, Conservation and Recycling, 2020, 154, 104636.	5.3	31
21	System level impediments to achieving absolute sustainability using LCA. Procedia CIRP, 2020, 90, 399-404.	1.0	4
22	Rapid Prediction of Chemical Ecotoxicity Through Genetic Algorithm Optimized Neural Network Models. ACS Sustainable Chemistry and Engineering, 2020, 8, 12168-12176.	3.2	18
23	Mapping global carbon footprint in China. Nature Communications, 2020, 11, 2237.	5.8	92
24	Secondary resource curse's formation and transmission mechanism based on environmental externality theory. Resources, Conservation and Recycling, 2020, 161, 104958.	5.3	10
25	Supply chain-wide sectoral water use characteristics based on multi-perspective measurements. Journal of Cleaner Production, 2020, 268, 122345.	4.6	7
26	Assessment of Plastic Stocks and Flows in China: 1978-2017. Resources, Conservation and Recycling, 2020, 161, 104969.	5.3	62
27	Characterizing of water-energy-emission nexus of coal-fired power industry using entropy weighting method. Resources, Conservation and Recycling, 2020, 161, 104991.	5.3	21
28	Great Divergence Exists in Chinese Provincial Trade-Related CO₂ Emission Accounts. Environmental Science & Technology, 2020, 54, 8527-8538.	4.6	16
29	Copper-induced ripple effects by the expanding electric vehicle fleet: A crisis or an opportunity. Resources, Conservation and Recycling, 2020, 161, 104861.	5.3	13
30	Environmental performance analysis on resource multiple-life-cycle recycling system: Evidence from waste pet bottles in China. Resources, Conservation and Recycling, 2020, 158, 104821.	5.3	31
31	Overview of cold chain development in China and methods of studying its environmental impacts. Environmental Research Communications, 2020, 2, 122002.	0.9	18
32	Virtual water scarcity risk in China. Resources, Conservation and Recycling, 2020, 160, 104886.	5.3	50
33	Seven Approaches to Manage Complex Coupled Human and Natural Systems: A Sustainability Toolbox. Environmental Science & Technology, 2019, 53, 9341-9351.	4.6	17
34	Uncovering urban food-energy-water nexus based on physical input-output analysis: The case of the Detroit Metropolitan Area. Applied Energy, 2019, 252, 113422.	5.1	54
35	The scope and understanding of the waterâ€“electricity nexus. Resources, Conservation and Recycling, 2019, 150, 104453.	5.3	23
36	Potentials of GHG emission reductions from cold chain systems: Case studies of China and the United States. Journal of Cleaner Production, 2019, 239, 118053.	4.6	38

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37	Scale, distribution and variations of global greenhouse gas emissions driven by U.S. households. Environment International, 2019, 133, 105137.	4.8	46
38	Benefits of coupled green and grey infrastructure systems: Evidence based on analytic hierarchy process and life cycle costing. Resources, Conservation and Recycling, 2019, 151, 104478.	5.3	51
39	Measuring integrated environmental footprint transfers in China: A new perspective on spillover-feedback effects. Journal of Cleaner Production, 2019, 241, 118375.	4.6	13
40	Post-consumer packaging waste from express delivery in China. Resources, Conservation and Recycling, 2019, 144, 137-143.	5.3	97
41	Sensitivity of sectoral CO2 emissions to demand and supply pattern changes in China. Science of the Total Environment, 2019, 682, 572-582.	3.9	8
42	Inputâ€“output networks offer new insights of economic structure. Physica A: Statistical Mechanics and Its Applications, 2019, 527, 121178.	1.2	33
43	Virtual water scarcity risk to global trade under climate change. Journal of Cleaner Production, 2019, 230, 1013-1026.	4.6	56
44	Synergies of four emerging technologies for accelerated adoption of electric vehicles: Shared mobility, wireless charging, vehicle-to-grid, and vehicle automation. Journal of Cleaner Production, 2019, 230, 794-797.	4.6	59
45	Forecasting the Impact of Connected and Automated Vehicles on Energy Use: A Microeconomic Study of Induced Travel and Energy Rebound. Applied Energy, 2019, 247, 297-308.	5.1	52
46	Regional water footprints and interregional virtual water transfers in China. Journal of Cleaner Production, 2019, 228, 1401-1412.	4.6	47
47	Quantitative assessment of enterprise environmental risk mitigation in the context of Na-tech disasters. Environmental Monitoring and Assessment, 2019, 191, 210.	1.3	9
48	Key transmission sectors of energy-water-carbon nexus pressures in Shanghai, China. Journal of Cleaner Production, 2019, 225, 27-35.	4.6	31
49	Supply chain sustainability risk and assessment. Journal of Cleaner Production, 2019, 225, 857-867.	4.6	113
50	Environmental benefits of taxi ride sharing in Beijing. Energy, 2019, 174, 503-508.	4.5	53
51	Effects of urbanization on phosphorus metabolism in a typical agricultural area. Journal of Cleaner Production, 2019, 214, 803-815.	4.6	14
52	Implications of Chinaâ€™s foreign waste ban on the global circular economy. Resources, Conservation and Recycling, 2019, 144, 252-255.	5.3	147
53	Food-energy-water (FEW) nexus for urban sustainability: A comprehensive review. Resources, Conservation and Recycling, 2019, 142, 215-224.	5.3	210
54	Progress on environmental and economic evaluation of low-impact development type of best management practices through a life cycle perspective. Journal of Cleaner Production, 2019, 213, 1103-1114.	4.6	51

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55	Contribution of international photovoltaic trade to global greenhouse gas emission reduction: the example of China. Resources, Conservation and Recycling, 2019, 143, 114-118.	5.3	18
56	Determinants of Greenhouse Gas Emissions from Interconnected Grids in China. Environmental Science & Technology, 2019, 53, 1432-1440.	4.6	16
57	Identifying critical sectors and supply chain paths for the consumption of domestic resource extraction in China. Journal of Cleaner Production, 2019, 208, 1577-1586.	4.6	37
58	Quantifying the Urban Foodâ€“Energyâ€“Water Nexus: The Case of the Detroit Metropolitan Area. Environmental Science & Technology, 2019, 53, 779-788.	4.6	56
59	Development and application of an energy use and CO2 emissions reduction evaluation model for China's online car hailing services. Energy, 2018, 154, 298-307.	4.5	76
60	Estimating Missing Unit Process Data in Life Cycle Assessment Using a Similarity-Based Approach. Environmental Science & Technology, 2018, 52, 5259-5267.	4.6	30
61	â€œInternet +â€•recyclable resources: A new recycling mode in China. Resources, Conservation and Recycling, 2018, 134, 44-47.	5.3	88
62	Final production-based emissions of regions in China. Economic Systems Research, 2018, 30, 18-36.	1.2	28
63	Modeling electric taxis' charging behavior using real-world data. International Journal of Sustainable Transportation, 2018, 12, 452-460.	2.1	27
64	Packaging waste from food delivery in Chinaâ€™s mega cities. Resources, Conservation and Recycling, 2018, 130, 226-227.	5.3	73
65	Virtual Water Scarcity Risk to the Global Trade System. Environmental Science & Technology, 2018, 52, 673-683.	4.6	86
66	China high resolution emission database (CHRED) with point emission sources, gridded emission data, and supplementary socioeconomic data. Resources, Conservation and Recycling, 2018, 129, 232-239.	5.3	129
67	Sustainability implications of connected and autonomous vehicles for the food supply chain. Resources, Conservation and Recycling, 2018, 128, 22-24.	5.3	51
68	A Review on Energy, Environmental, and Sustainability Implications of Connected and Automated Vehicles. Environmental Science & Technology, 2018, 52, 11449-11465.	4.6	100
69	Examining the sustainability of Chinaâ€™s nickel supply: 1950â€“2050. Resources, Conservation and Recycling, 2018, 139, 188-193.	5.3	52
70	Research on Influential Factors of PM2.5 within the Beijing-Tianjin-Hebei Region in China. Discrete Dynamics in Nature and Society, 2018, 2018, 1-10.	0.5	5
71	Modeling domestic geographical transfers of toxic substances in WEEE: A case study of spent lead-acid batteries in China. Journal of Cleaner Production, 2018, 198, 1559-1566.	4.6	24
72	Deriving hazardous material flow networks: A case study of lead in China. Journal of Cleaner Production, 2018, 199, 391-399.	4.6	8

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73	Virtual CO₂ Emission Flows in the Global Electricity Trade Network. Environmental Science & Technology, 2018, 52, 6666-6675.	4.6	43
74	Multiagent Spatial Simulation of Autonomous Taxis for Urban Commute: Travel Economics and Environmental Impacts. Journal of the Urban Planning and Development Division, ASCE, 2018, 144, .	0.8	43
75	Life cycle assessment of end-of-life treatments for plastic film waste. Journal of Cleaner Production, 2018, 201, 1052-1060.	4.6	90
76	Infrastructure ecology: an evolving paradigm for sustainable urban development. Journal of Cleaner Production, 2017, 163, S19-S27.	4.6	76
77	Environmental impact and economic assessment of secondary lead production: Comparison of main spent lead-acid battery recycling processes in China. Journal of Cleaner Production, 2017, 144, 142-148.	4.6	120
78	Trade-off between carbon reduction benefits and ecological costs of biomass-based power plants with carbon capture and storage (CCS) in China. Journal of Cleaner Production, 2017, 144, 279-286.	4.6	36
79	Mercury Flows in China and Global Drivers. Environmental Science & Technology, 2017, 51, 222-231.	4.6	121
80	Virtual scarce water embodied in inter-provincial electricity transmission in China. Applied Energy, 2017, 187, 438-448.	5.1	119
81	A Quasi-Input-Output model to improve the estimation of emission factors for purchased electricity from interconnected grids. Applied Energy, 2017, 200, 249-259.	5.1	51
82	Income-Based Greenhouse Gas Emissions of Nations. Environmental Science & Technology, 2017, 51, 346-355.	4.6	107
83	Consumption-based human health impacts of primary PM2.5: The hidden burden of international trade. Journal of Cleaner Production, 2017, 167, 133-139.	4.6	48
84	Emerging challenges and opportunities for the foodâ€“energyâ€“water nexus in urban systems. Current Opinion in Chemical Engineering, 2017, 17, 48-53.	3.8	58
85	CO₂ Emissions Embodied in Interprovincial Electricity Transmissions in China. Environmental Science & Technology, 2017, 51, 10893-10902.	4.6	96
86	Location Design and Relocation of a Mixed Car-Sharing Fleet with a CO₂ Emission Constraint. Service Science, 2017, 9, 205-218.	0.9	30
87	Considerable environmental impact of the rapid development of China's express delivery industry. Resources, Conservation and Recycling, 2017, 126, 174-176.	5.3	60
88	To realize better extended producer responsibility: Redesign of WEEE fund mode in China. Journal of Cleaner Production, 2017, 164, 347-356.	4.6	74
89	Developing the Chinese Environmentally Extended Inputâ€Output (CEEIO) Database. Journal of Industrial Ecology, 2017, 21, 953-965.	2.8	65
90	Forecast Modelling via Variations in Binary Image-Encoded Information Exploited by Deep Learning Neural Networks. PLoS ONE, 2016, 11, e0157028.	1.1	1

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91	Global Drivers of Russian Timber Harvest. Journal of Industrial Ecology, 2016, 20, 515-525.	2.8	42
92	Waste electrical and electronic equipment (WEEE) recycling for a sustainable resource supply in the electronics industry in China. Journal of Cleaner Production, 2016, 127, 331-338.	4.6	103
93	Scaling of global inputâ€“output networks. Physica A: Statistical Mechanics and Its Applications, 2016, 452, 311-319.	1.2	22
94	Understanding taxi travel patterns. Physica A: Statistical Mechanics and Its Applications, 2016, 457, 590-597.	1.2	62
95	The disposal and willingness to pay for residentsâ¿¿ scrap fluorescent lamps in China: A case study of Beijing. Resources, Conservation and Recycling, 2016, 114, 103-111.	5.3	22
96	Socioeconomic Drivers of Greenhouse Gas Emissions in the United States. Environmental Science & Technology, 2016, 50, 7535-7545.	4.6	96
97	The stability and profitability of the informal WEEE collector in developing countries: A case study of China. Resources, Conservation and Recycling, 2016, 107, 18-26.	5.3	105
98	Betweenness-Based Method to Identify Critical Transmission Sectors for Supply Chain Environmental Pressure Mitigation. Environmental Science & Technology, 2016, 50, 1330-1337.	4.6	125
99	Greenhouse gas emission factors of purchased electricity from interconnected grids. Applied Energy, 2016, 184, 751-758.	5.1	51
100	Global Electricity Trade Network: Structures and Implications. PLoS ONE, 2016, 11, e0160869.	1.1	14
101	Environmental input-output analysis in industrial ecology. Acta Ecologica Sinica, 2016, 36, .	0.0	0
102	Assessing land-use impacts by clean vehicle systems. Resources, Conservation and Recycling, 2015, 95, 112-119.	5.3	10
103	A dual strategy for controlling energy consumption and air pollution in China's metropolis of Beijing. Energy, 2015, 81, 294-303.	4.5	36
104	Big Data and Industrial Ecology. Journal of Industrial Ecology, 2015, 19, 205-210.	2.8	50
105	Agent-based life cycle assessment for switchgrass-based bioenergy systems. Resources, Conservation and Recycling, 2015, 103, 171-178.	5.3	49
106	Optimal locations of electric public charging stations using real world vehicle travel patterns. Transportation Research, Part D: Transport and Environment, 2015, 41, 165-176.	3.2	205
107	Structure of the Global Virtual Carbon Network: Revealing Important Sectors and Communities for Emission Reduction. Journal of Industrial Ecology, 2015, 19, 307-320.	2.8	62
108	Complexity in Industrial Ecology: Models, Analysis, and Actions. Journal of Industrial Ecology, 2015, 19, 189-194.	2.8	13

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109	Life cycle assessment of High Speed Rail in China. Transportation Research, Part D: Transport and Environment, 2015, 41, 367-376.	3.2	76
110	An optimization model for regional micro-grid system management based on hybrid inexact stochastic-fuzzy chance-constrained programming. International Journal of Electrical Power and Energy Systems, 2015, 64, 1025-1039.	3.3	28
111	Revisiting drivers of energy intensity in China during 1997â€“2007: A structural decomposition analysis. Energy Policy, 2014, 67, 640-647.	4.2	157
112	Decoupling Analysis and Socioeconomic Drivers of Environmental Pressure in China. Environmental Science & Technology, 2014, 48, 1103-1113.	4.6	122
113	Virtual Atmospheric Mercury Emission Network in China. Environmental Science & Technology, 2014, 48, 2807-2815.	4.6	99
114	Temporal and spatial variations in consumption-based carbon dioxide emissions in China. Renewable and Sustainable Energy Reviews, 2014, 40, 60-68.	8.2	68
115	Siting public electric vehicle charging stations in Beijing using big-data informed travel patterns of the taxi fleet. Transportation Research, Part D: Transport and Environment, 2014, 33, 39-46.	3.2	208
116	China's 2020 clean energy target: Consistency, pathways and policy implications. Energy Policy, 2014, 65, 692-700.	4.2	88
117	Sustainability strategies for consumer products in cities. , 2014, , .		0
118	Greenhouse Gas Implications of Fleet Electrification Based on Big Data-Informed Individual Travel Patterns. Environmental Science & Technology, 2013, 47, 9035-9043.	4.6	58
119	Life cycle assessment of biodiesel production in China. Bioresource Technology, 2013, 129, 72-77.	4.8	101
120	Waste oil derived biofuels in China bring brightness for global GHG mitigation. Bioresource Technology, 2013, 131, 139-145.	4.8	55
121	Socioeconomic Drivers of Mercury Emissions in China from 1992 to 2007. Environmental Science & Technology, 2013, 47, 3234-3240.	4.6	101
122	Impact of emerging clean vehicle system on water stress. Applied Energy, 2013, 111, 644-651.	5.1	11
123	Unintended Environmental Consequences and Co-benefits of Economic Restructuring. Environmental Science & Technology, 2013, 47, 12894-12902.	4.6	36
124	Energy and Water Interdependence, and Their Implications for Urban Areas. , 2013, , 239-270.		2
125	Assessing clean vehicle systems under constraints of freshwater resource. , 2012, , .		0
126	Developing a Science of Infrastructure Ecology for Sustainable Urban Systems. Environmental Science & Technology, 2012, 46, 7928-7929.	4.6	42

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127	China's 2020 carbon intensity target: Consistency, implementations, and policy implications. Renewable and Sustainable Energy Reviews, 2012, 16, 4970-4981.	8.2	63
128	Unintended consequences of bioethanol feedstock choice in China. Bioresource Technology, 2012, 125, 312-317.	4.8	48
129	Managing electric power system transition in China. Renewable and Sustainable Energy Reviews, 2012, 16, 5660-5677.	8.2	24
130	Sustainable Infrastructure and Alternatives for Urban Growth. , 2012, , 141-172.		2
131	Water, energy, land use, transportation and socioeconomic nexus: A blue print for more sustainable urban systems. , 2011, , .		4
132	CO2 emissions embodied in China's exports from 2002 to 2008: A structural decomposition analysis. Energy Policy, 2011, 39, 7381-7388.	4.2	140
133	Life-cycle analysis on biodiesel production from microalgae: Water footprint and nutrients balance. Bioresource Technology, 2011, 102, 159-165.	4.8	684
134	An infrastructure ecology approach for urban infrastructure sustainability and resiliency. , 2011, , .		7
135	Dependence of wind energy on electric utility in the US. , 2011, , .		0
136	Dependence of wind energy on electric utility in the U.S.. , 2011, , .		2
137	INTERCONNECTEDNESS AND RESILIENCE OF THE U.S. ECONOMY. International Journal of Modeling, Simulation, and Scientific Computing, 2011, 14, 649-672.	0.9	44
138	Assessing Environmental Impacts Embodied in Manufacturing and Labor Input for the Chinaâ^'U.S. Trade. Environmental Science & Technology, 2010, 44, 567-573.	4.6	30
139	Gigaton Problems Need Gigaton Solutions. Environmental Science & Technology, 2010, 44, 4037-4041.	4.6	28
140	A Dynamic Agent-Based Analysis for the Environmental Impacts of Conventional and Novel Book Retailing. Environmental Science & Technology, 2009, 43, 2851-2857.	4.6	20
141	Designing and Assessing a Sustainable Networked Delivery (SND) System: Hybrid Business-to-Consumer Book Delivery Case Study. Environmental Science & Technology, 2009, 43, 181-187.	4.6	21
142	Energy and Air Emissions Embodied in Chinaâ^'U.S. Trade: Eastbound Assessment Using Adjusted Bilateral Trade Data. Environmental Science & Technology, 2009, 43, 3378-3384.	4.6	83
143	Environmental overhead of labor (EOL) embodied in trade: The case of 2002 China-U.S. trade. , 2009, , .		0
144	Exploring e-waste management systems in the United States. Resources, Conservation and Recycling, 2008, 52, 955-964.	5.3	307

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145	Societal metabolism in Northeast China: Case study of Liaoning Province. Resources, Conservation and Recycling, 2008, 52, 1082-1086.	5.3	16
146	Material Flows and Economic Growth in Developing China. Journal of Industrial Ecology, 2008, 11, 121-140.	2.8	48
147	Environmental, Social, and Economic Implications of Global Reuse and Recycling of Personal Computers. Environmental Science & Technology, 2008, 42, 6446-6454.	4.6	253
148	Proposal for an e-waste management system for the United States. , 2008, , .		3
149	Market dynamics and environmental impacts of e-commerce: A case study on book retailing. , 2008, , .		2
150	Sustainability review of the international reverse chain for reuse and recycling of computers. , 2008, , .		1
151	Design and assessment of a sustainable networked system in the U.S.; Case study of book delivery system. , 2008, , .		6
152	Energy and environmental flow model for a sustainable networked book delivery system in the United States. , 2008, , .		2
153	How Much Will China Weigh? Perspectives from Consumption Structure and Technology Development. Environmental Science & Technology, 2008, 42, 4022-4028.	4.6	34
154	E-Market for e-waste. , 2008, , .		5
155	A Conceptual Model for Sustainable Consumption. , 0, , .		0