Sai Liang

List of Publications by Year
in descending order

129 papers	6,911 citations	44042 48 h-index	71651 76 g-index
132 all docs	132 docs citations	132 times ranked	4437 citing authors

#	Article	IF	Citations
1	Spatial disparity of life-cycle greenhouse gas emissions from corn straw-based bioenergy production in China. Applied Energy, 2022, 305, 117854.	5.1	16
2	Inequality of household consumption and PM_{2.5} footprint across socioeconomic groups in China. Environmental Research Letters, 2022, 17, 044019.	2.2	1
3	Looping Mercury Cycle in Global Environmentalâ€"Economic System Modeling. Environmental Science & Technology, 2022, 56, 2861-2879.	4.6	19
4	Role of Trade in Indiaâ€™s Rising Atmospheric Mercury Emissions. Environmental Science & Technology, 2022, 56, 790-803.	4.6	8
5	Sustainability performance of global chemical industry based on green total factor productivity. Science of the Total Environment, 2022, 830, 154787.	3.9	11
6	Global Supply Chain Drivers of Agricultural Antibiotic Emissions in China. Environmental Science & Technology, 2022, 56, 5860-5873.	4.6	24
7	The distributed environmental benefits from driving electrical vehiclesâ€" evidence from China. Resources, Conservation and Recycling, 2022, 182, 106338.	5.3	1
8	Critical transmission sectors for provincial food-water nexus in China. Journal of Cleaner Production, 2021, 279, 123886.	4.6	11
9	Multi-pollutant based grey water footprint of Chinese regions. Resources, Conservation and Recycling, 2021, 164, 105202.	5.3	32
10	Understanding the industrial NOx and SO2 pollutant emissions in China from sector linkage perspective. Science of the Total Environment, 2021, 770, 145242.	3.9	28
11	Effects of economic structural transition on PM2.5-Related Human Health Impacts in China. Journal of Cleaner Production, 2021, 298, 126793.	4.6	5
12	Global Economic Structure Transition Boosts Atmospheric Mercury Emissions in China. Earth's Future, 2021, 9, e2021EF002076.	2.4	10
13	Critical transmission sectors in embodied atmospheric mercury emission network in China. Journal of Industrial Ecology, 2021, 25, 1644-1656.	2.8	12
14	Identifying sectoral impacts on global scarce water uses from multiple perspectives. Journal of Industrial Ecology, 2021, 25, 1503-1517.	2.8	12
15	Chinese environmentally extended input-output database for 2017 and 2018. Scientific Data, 2021, 8, 256.	2.4	14
16	Mapping spatial supply chain paths for embodied water flows driven by food demand in China. Science of the Total Environment, 2021, 786, 147480.	3.9	8
17	Socioeconomic determinants for the changing food-related scarce water uses in Chinese regions. Journal of Cleaner Production, 2021, 316, 128190.	4.6	5
18	Spatially explicit carbon emissions at the county scale. Resources, Conservation and Recycling, 2021, 173, 105706.	5.3	41

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19	An integrated assessment system for the carrying capacity of the water environment based on system dynamics. Journal of Environmental Management, 2021, 295, 113045.	3.8	36
20	Trade-related water scarcity risk under the Belt and Road Initiative. Science of the Total Environment, 2021, 801, 149781.	3.9	13
21	Potential Role of Fiscal Decentralization on Interprovincial Differences in CO₂ Emissions in China. Environmental Science & Technology, 2021, 55, 813-822.	4.6	49
22	Cascading costs of snow cover reduction trend in northern hemisphere. Science of the Total Environment, 2021, 806, 150970.	3.9	1
23	Planetary Boundaries for Forests and Their National Exceedance. Environmental Science & Technology, 2021, 55, 15423-15434.	4.6	7
24	The evolution of virtual water flows in China's electricity transmission network and its driving forces. Journal of Cleaner Production, 2020, 242, 118336.	4.6	29
25	Virtual scarce water flows and economic benefits of the Belt and Road Initiative. Journal of Cleaner Production, 2020, 253, 119936.	4.6	37
26	Socioeconomic drivers of water use in China during 2002â€“2017. Resources, Conservation and Recycling, 2020, 154, 104636.	5.3	31
27	Scarcity-weighted fossil fuel footprint of China at the provincial level. Applied Energy, 2020, 258, 114081.	5.1	95
28	Global timber harvest footprints of nations and virtual timber trade flows. Journal of Cleaner Production, 2020, 250, 119503.	4.6	30
29	Quantifying Direct and Indirect Spatial Foodâ€“Energyâ€“Water (FEW) Nexus in China. Environmental Science & Technology, 2020, 54, 9791-9803.	4.6	46
30	Evaluating the synergy strength among environmental pressures at the sectoral level of China from the producer, consumer and supplier perspectives. Journal of Cleaner Production, 2020, 275, 124199.	4.6	3
31	China's retrofitting measures in coal-fired power plants bring significant mercury-related health benefits. One Earth, 2020, 3, 777-787.	3.6	37
32	Toward low-carbon development: Assessing emissions-reduction pressure among Chinese cities. Journal of Environmental Management, 2020, 271, 111036.	3.8	59
33	Rapid Increase in Cement-Related Mercury Emissions and Deposition in China during 2005â€“2015. Environmental Science & Technology, 2020, 54, 14204-14214.	4.6	11
34	CO₂ Emissions Embodied in International Migration from 1995 to 2015. Environmental Science & Technology, 2020, 54, 12530-12538.	4.6	34
35	Spatially Explicit Global Hotspots Driving Chinaâ€™s Mercury Related Health Impacts. Environmental Science & Technology, 2020, 54, 14547-14557.	4.6	19
36	Mapping global carbon footprint in China. Nature Communications, 2020, 11, 2237.	5.8	92

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37	Network resilience of phosphorus cycling in China has shifted by natural flows, fertilizer use and dietary transitions between 1600 and 2012. Nature Food, 2020, 1, 365-375.	6.2	22
38	Socioeconomic drivers of water withdrawals driven by provincial energy demand in China. Journal of Cleaner Production, 2020, 258, 120971.	4.6	11
39	Economic development and converging household carbon footprints in China. Nature Sustainability, 2020, 3, 529-537.	11.5	224
40	Saving less in China facilitates global CO2 mitigation. Nature Communications, 2020, 11, 1358.	5.8	24
41	Co-benefits and trade-offs of environmental pressures: A case study of Zhejiangâ€™s socio-economic evolution. Journal of Cleaner Production, 2020, 255, 120365.	4.6	7
42	Virtual water scarcity risk in China. Resources, Conservation and Recycling, 2020, 160, 104886.	5.3	50
43	Spatial-temporal analysis of selected industrial aquatic heavy metal pollution in China. Journal of Cleaner Production, 2019, 238, 117944.	4.6	36
44	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
45	Urban food-energy-water nexus indicators: A review. Resources, Conservation and Recycling, 2019, 151, 104481.	5.3	66
46	Mapping economic drivers of China's NOx emissions due to energy consumption. Journal of Cleaner Production, 2019, 241, 118130.	4.6	28
47	Scale, distribution and variations of global greenhouse gas emissions driven by U.S. households. Environment International, 2019, 133, 105137.	4.8	46
48	Understanding the tele-coupling mechanism of urban food-energy-water nexus: Critical sources, nodes, and supply chains. Journal of Cleaner Production, 2019, 235, 297-307.	4.6	34
49	Inputâ€"output networks offer new insights of economic structure. Physica A: Statistical Mechanics and Its Applications, 2019, 527, 121178.	1.2	33
50	Virtual water scarcity risk to global trade under climate change. Journal of Cleaner Production, 2019, 230, 1013-1026.	4.6	56
51	Regional water footprints and interregional virtual water transfers in China. Journal of Cleaner Production, 2019, 228, 1401-1412.	4.6	47
52	Trans-provincial health impacts of atmospheric mercury emissions in China. Nature Communications, 2019, 10, 1484.	5.8	126
53	Supply chain sustainability risk and assessment. Journal of Cleaner Production, 2019, 225, 857-867.	4.6	113
54	Dynamic Carbon Emission Linkages Across Boundaries. Earth's Future, 2019, 7, 197-209.	2.4	29

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55	Primary Suppliers Driving Atmospheric Mercury Emissions through Global Supply Chains. One Earth, 2019, 1, 254-266.	3.6	50
56	Food-energy-water (FEW) nexus for urban sustainability: A comprehensive review. Resources, Conservation and Recycling, 2019, 142, 215-224.	5.3	210
57	Critical review of the energy-water-carbon nexus in cities. Energy, 2019, 171, 1017-1032.	4.5	107
58	Determinants of Greenhouse Gas Emissions from Interconnected Grids in China. Environmental Science & Technology, 2019, 53, 1432-1440.	4.6	16
59	A two-tiered attribution structural decomposition analysis to reveal drivers at both sub-regional and sectoral levels: A case study of energy consumption in the Jing-Jin-Ji region. Journal of Cleaner Production, 2019, 213, 165-175.	4.6	27
60	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
61	Quantifying the Urban Foodâ€“Energyâ€“Water Nexus: The Case of the Detroit Metropolitan Area. Environmental Science & Technology, 2019, 53, 779-788.	4.6	56
62	Trade-Induced Atmospheric Mercury Deposition over China and Implications for Demand-Side Controls. Environmental Science & Technology, 2018, 52, 2036-2045.	4.6	45
63	How real time pricing modifies Chinese householdsâ€™ electricity consumption. Journal of Cleaner Production, 2018, 178, 776-790.	4.6	34
64	Final production-based emissions of regions in China. Economic Systems Research, 2018, 30, 18-36.	1.2	28
65	Virtual Water Scarcity Risk to the Global Trade System. Environmental Science & Technology, 2018, 52, 673-683.	4.6	86
66	Resource impacts of municipal solid waste treatment systems in Chinese cities based on hybrid life cycle assessment. Resources, Conservation and Recycling, 2018, 130, 215-225.	5.3	25
67	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
68	Atmospheric Mercury Outflow from China and Interprovincial Trade. Environmental Science & Technology, 2018, 52, 13792-13800.	4.6	16
69	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
70	Virtual CO₂ Emission Flows in the Global Electricity Trade Network. Environmental Science & Technology, 2018, 52, 6666-6675.	4.6	43
71	Resource footprints of humanity. Resources, Conservation and Recycling, 2018, 132, 267-268.	5.3	1
72	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

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73	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
74	Structural analysis of material flows in China based on physical and monetary input-output models. Journal of Cleaner Production, 2017, 158, 209-217.	4.6	46
75	Mercury Flows in China and Global Drivers. Environmental Science & Technology, 2017, 51, 222-231.	4.6	121
76	Virtual scarce water embodied in inter-provincial electricity transmission in China. Applied Energy, 2017, 187, 438-448.	5.1	119
77	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
78	Income-Based Greenhouse Gas Emissions of Nations. Environmental Science & Technology, 2017, 51, 346-355.	4.6	107
79	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
80	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
81	CO₂ Emissions Embodied in Interprovincial Electricity Transmissions in China. Environmental Science & Technology, 2017, 51, 10893-10902.	4.6	96
82	Virtual Special Issue on Resource Footprints of Humanity: Call for Papers. Resources, Conservation and Recycling, 2017, 126, A2-A3.	5.3	1
83	Developing the Chinese Environmentally Extended Inputâ€Output (CEEIO) Database. Journal of Industrial Ecology, 2017, 21, 953-965.	2.8	65
84	Emergy Perspectives on the Environmental Performance and Sustainability of Small-Scale Gold Production Systems in Ghana. Sustainability, 2017, 9, 2034.	1.6	15
85	Forecast Modelling via Variations in Binary Image-Encoded Information Exploited by Deep Learning Neural Networks. PLoS ONE, 2016, 11, e0157028.	1.1	1
86	Global Drivers of Russian Timber Harvest. Journal of Industrial Ecology, 2016, 20, 515-525.	2.8	42
87	Scaling of global inputâ€“output networks. Physica A: Statistical Mechanics and Its Applications, 2016, 452, 311-319.	1.2	22
88	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
89	Temporal Trend and Spatial Distribution of Speciated Atmospheric Mercury Emissions in China During 1978â€“2014. Environmental Science & Technology, 2016, 50, 13428-13435.	4.6	255
90	Socioeconomic Drivers of Greenhouse Gas Emissions in the United States. Environmental Science & Technology, 2016, 50, 7535-7545.	4.6	96

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91	Betweenness-Based Method to Identify Critical Transmission Sectors for Supply Chain Environmental Pressure Mitigation. Environmental Science & Technology, 2016, 50, 1330-1337.	4.6	125
92	Targeted opportunities to address the climateâ€“trade dilemma in China. Nature Climate Change, 2016, 6, 201-206.	8.1	206
93	Greenhouse gas emission factors of purchased electricity from interconnected grids. Applied Energy, 2016, 184, 751-758.	5.1	51
94	Atmospheric Mercury Footprints of Nations. Environmental Science & Technology, 2015, 49, 3566-3574.	4.6	105
95	A dual strategy for controlling energy consumption and air pollution in China's metropolis of Beijing. Energy, 2015, 81, 294-303.	4.5	36
96	Four system boundaries for carbon accounts. Ecological Modelling, 2015, 318, 118-125.	1.2	62
97	Big Data and Industrial Ecology. Journal of Industrial Ecology, 2015, 19, 205-210.	2.8	50
98	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
99	Life cycle assessment of High Speed Rail in China. Transportation Research, Part D: Transport and Environment, 2015, 41, 367-376.	3.2	76
100	Revisiting drivers of energy intensity in China during 1997â€“2007: A structural decomposition analysis. Energy Policy, 2014, 67, 640-647.	4.2	157
101	Decoupling Analysis and Socioeconomic Drivers of Environmental Pressure in China. Environmental Science & Technology, 2014, 48, 1103-1113.	4.6	122
102	Virtual Atmospheric Mercury Emission Network in China. Environmental Science & Technology, 2014, 48, 2807-2815.	4.6	99
103	Temporal and spatial variations in consumption-based carbon dioxide emissions in China. Renewable and Sustainable Energy Reviews, 2014, 40, 60-68.	8.2	68
104	Lifting Chinaâ€™s Water Spell. Environmental Science & Technology, 2014, 48, 11048-11056.	4.6	105
105	Investigating Reasons for Differences in the Results of Environmental, Physical, and Hybrid Inputâ€Output Models. Journal of Industrial Ecology, 2013, 17, 432-439.	2.8	37
106	Reutilisation-extended material flows and circular economy in China. Waste Management, 2013, 33, 1552-1560.	3.7	28
107	Waste management of urban agglomeration on a life cycle basis. Resources, Conservation and Recycling, 2013, 78, 47-53.	5.3	16
108	Carbon dioxide mitigation target of China in 2020 and key economic sectors. Energy Policy, 2013, 58, 90-96.	4.2	55

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109	Life cycle assessment of biodiesel production in China. Bioresource Technology, 2013, 129, 72-77.	4.8	101
110	Carbon dioxide emission drivers for a typical metropolis using inputâ€“output structural decomposition analysis. Energy Policy, 2013, 58, 312-318.	4.2	170
111	Clustering economic sectors in China on a life cycle basis to achieve environmental sustainability. Frontiers of Environmental Science and Engineering, 2013, 7, 97-108.	3.3	23
112	Waste oil derived biofuels in China bring brightness for global GHG mitigation. Bioresource Technology, 2013, 131, 139-145.	4.8	55
113	Socioeconomic Drivers of Mercury Emissions in China from 1992 to 2007. Environmental Science & Technology, 2013, 47, 3234-3240.	4.6	101
114	Unintended Environmental Consequences and Co-benefits of Economic Restructuring. Environmental Science & Technology, 2013, 47, 12894-12902.	4.6	36
115	How to Deal with Resource Productivity. Journal of Industrial Ecology, 2013, 17, 440-451.	2.8	36
116	Sustainable Urban Solid Waste Management from both Life Cycle and Urban Metabolism Perspectives. , 2012, , .		1
117	Comparing urban solid waste recycling from the viewpoint of urban metabolism based on physical inputâ€“output model: A case of Suzhou in China. Waste Management, 2012, 32, 220-225.	3.7	66
118	Comparisons of four categories of waste recycling in Chinaâ€™s paper industry based on physical inputâ€“output life-cycle assessment model. Waste Management, 2012, 32, 603-612.	3.7	63
119	Unintended consequences of bioethanol feedstock choice in China. Bioresource Technology, 2012, 125, 312-317.	4.8	48
120	Features, trajectories and driving forces for energy-related GHG emissions from Chinese mega cites: The case of Beijing, Tianjin, Shanghai and Chongqing. Energy, 2012, 37, 245-254.	4.5	185
121	Sustainable urban materials management for air pollutants mitigation based onÂurban physical inputâ€“output model. Energy, 2012, 42, 387-392.	4.5	25
122	Urban Metabolism in China Achieving Dematerialization and Decarbonization in Suzhou. Journal of Industrial Ecology, 2011, 15, 420-434.	2.8	55
123	Achieving Dewaterization in Industrial Parks. Journal of Industrial Ecology, 2011, 15, 597-613.	2.8	24
124	Data Acquisition for Applying Physical Input-Output Tables in Chinese Cities. Journal of Industrial Ecology, 2011, 15, 825-835.	2.8	25
125	Interactions of energy technology development and new energy exploitation with water technology development in China. Energy, 2011, 36, 6960-6966.	4.5	42
126	What is driving CO2 emissions in a typical manufacturing center of South China? The case of Jiangsu Province. Energy Policy, 2011, 39, 7078-7083.	4.2	75

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127	Three-dimensional hybrid enterprise inputâ€“output model for material metabolism analysis: a case study of coal mines in China. Clean Technologies and Environmental Policy, 2011, 13, 71-85.	2.1	13
128	Managing urban energy system: A case of Suzhou in China. Energy Policy, 2011, 39, 2910-2918.	4.2	36
129	An improved inputâ€“output model for energy analysis: A case study of Suzhou. Ecological Economics, 2010, 69, 1805-1813.	2.9	63