Xi Lu

List of Publications by Year
in descending order

57 papers	3,736 citations	136950 32 h-index	175258 52 g-index
59 all docs	59 docs citations	59 times ranked	3753 citing authors

#	Article	IF	Citations
1	Global potential for wind-generated electricity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10933-10938.	7.1	410
2	Change in household fuels dominates the decrease in PM _{2.5} exposure and premature mortality in China in 2005â€“2015. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12401-12406.	7.1	262
3	Progress of Air Pollution Control in China and Its Challenges and Opportunities in the Ecological Civilization Era. Engineering, 2020, 6, 1423-1431.	6.7	222
4	Chinaâ€™s CO2 peak before 2030 implied from characteristics and growth of cities. Nature Sustainability, 2019, 2, 748-754.	23.7	210
5	Reducing curtailment of wind electricity in China by employing electric boilers for heat and pumped hydro for energy storage. Applied Energy, 2016, 184, 987-994.	10.1	186
6	Potential for Wind-Generated Electricity in China. Science, 2009, 325, 1378-1380.	12.6	163
7	Challenges faced by China compared with the US in developing wind power. Nature Energy, 2016, 1, .	39.5	153
8	Prospective contributions of biomass pyrolysis to Chinaâ€™s 2050 carbon reduction and renewable energy goals. Nature Communications, 2021, 12, 1698.	12.8	146
9	Long-term trend and spatial pattern of PM2.5 induced premature mortality in China. Environment International, 2016, 97, 180-186.	10.0	133
10	Trade-driven relocation of air pollution and health impacts in China. Nature Communications, 2017, 8, 738.	12.8	129
11	Cost increase in the electricity supply to achieve carbon neutrality in China. Nature Communications, 2022, 13, .	12.8	111
12	Potential co-benefits of electrification for air quality, health, and CO2 mitigation in 2030 China. Applied Energy, 2018, 218, 511-519.	10.1	100
13	The quest for improved air quality may push China to continue its CO ₂ reduction beyond the Paris Commitment. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29535-29542.	7.1	93
14	A state-of-the-art techno-economic review of distributed and embedded energy storage for energy systems. Energy, 2021, 229, 120461.	8.8	93
15	Gasification of coal and biomass as a net carbon-negative power source for environment-friendly electricity generation in China. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8206-8213.	7.1	78
16	Prospects for shale gas production in China: Implications for water demand. Renewable and Sustainable Energy Reviews, 2016, 66, 742-750.	16.4	75
17	Decomposing driving factors for wind curtailment under economic new normal in China. Applied Energy, 2018, 217, 178-188.	10.1	73
18	Combined solar power and storage as cost-competitive and grid-compatible supply for Chinaâ€™s future carbon-neutral electricity system. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	70

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19	Hybrid life-cycle assessment for energy consumption and greenhouse gas emissions of a typical biomass gasification power plant in China. Journal of Cleaner Production, 2018, 205, 661-671.	9.3	67
20	The Potential of Photovoltaics to Power the Belt and Road Initiative. Joule, 2019, 3, 1895-1912.	24.0	66
21	Indiaâ€™s potential for integrating solar and on- and offshore wind power into its energy system. Nature Communications, 2020, 11, 4750.	12.8	63
22	The role of feed-in tariff in the curtailment of wind power in China. Energy Economics, 2020, 86, 104661.	12.1	54
23	Chinaâ€™s clean power transition: Current status and future prospect. Resources, Conservation and Recycling, 2017, 121, 3-10.	10.8	53
24	Understanding China×³s carbon dioxide emissions from both production and consumption perspectives. Renewable and Sustainable Energy Reviews, 2015, 52, 189-200.	16.4	52
25	Implications of the Recent Reductions in Natural Gas Prices for Emissions of CO2 from the US Power Sector. Environmental Science & Technology, 2012, 46, 3014-3021.	10.0	48
26	Emissions of non-CO2 greenhouse gases from livestock in China during 2000â€“2015: Magnitude, trends and spatiotemporal patterns. Journal of Environmental Management, 2019, 242, 40-45.	7.8	45
27	Chinaâ€™s greenhouse gas emissions for cropping systems from 1978â€“2016. Scientific Data, 2021, 8, 171.	5.3	40
28	Economic and Climate Benefits of Electric Vehicles in China, the United States, and Germany. Environmental Science & Technology, 2019, 53, 11013-11022.	10.0	38
29	Air Pollutant Emissions Induced by Population Migration in China. Environmental Science & Technology, 2020, 54, 6308-6318.	10.0	37
30	The impact of Production Tax Credits on the profitable production of electricity from wind in the U.S.. Energy Policy, 2011, 39, 4207-4214.	8.8	36
31	A dynamic programming model of China's strategic petroleum reserve: General strategy and the effect of emergencies. Energy Economics, 2012, 34, 1234-1243.	12.1	34
32	Optimal integration of offshore wind power for a steadier, environmentally friendlier, supply of electricity in China. Energy Policy, 2013, 62, 131-138.	8.8	33
33	Assessment of import risks for natural gas and its implication for optimal importing strategies: A case study of China. Energy Policy, 2019, 127, 11-18.	8.8	32
34	Additionality of wind energy investments in the U.S. voluntary green power market. Renewable Energy, 2014, 63, 452-457.	8.9	31
35	Spatial pattern and its evolution of Chinese provincial population: Methods and empirical study. Journal of Chinese Geography, 2015, 25, 1507-1520.	3.9	31
36	Optimal allocation of onshore wind power in China based on cluster analysis. Applied Energy, 2021, 285, 116482.	10.1	29

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37	Synergies of Wind Power and Electrified Space Heating: Case Study for Beijing. Environmental Science & Technology, 2014, 48, 2016-2024.	10.0	27
38	Meteorologically defined limits to reduction in the variability of outputs from a coupled wind farm system in the Central US. Renewable Energy, 2014, 62, 331-340.	8.9	25
39	Quantifying regional consumption-based health impacts attributable to ambient air pollution in China. Environment International, 2018, 112, 100-106.	10.0	24
40	Accelerated Reduction in SO2 Emissions from the U.S. Power Sector Triggered by Changing Prices of Natural Gas. Environmental Science & Technology, 2012, 46, 7882-7889.	10.0	20
41	Sustained methane emissions from China after 2012 despite declining coal production and rice-cultivated area. Environmental Research Letters, 2021, 16, 104018.	5.2	19
42	Costs for Integrating Wind into the Future ERCOT System with Related Costs for Savings in CO₂ Emissions. Environmental Science & Technology, 2011, 45, 3160-3166.	10.0	18
43	Improved air quality in China can enhance solar-power performance and accelerate carbon-neutrality targets. One Earth, 2022, 5, 550-562.	6.8	17
44	Opportunity for Offshore Wind to Reduce Future Demand for Coal-Fired Power Plants in China with Consequent Savings in Emissions of CO₂. Environmental Science & Technology, 2014, 48, 14764-14771.	10.0	16
45	Global Potential for Wind-Generated Electricity. , 2017, , 51-73.		15
46	Opportunities for household energy on the Qinghai-Tibet Plateau in line with United Nationsâ€™ Sustainable Development Goals. Renewable and Sustainable Energy Reviews, 2021, 144, 110982.	16.4	14
47	Air pollutant emissions induced by rural-to-urban migration during China's urbanization (2005â€“2015). Environmental Science and Ecotechnology, 2022, 10, 100166.	13.5	10
48	Deep decarbonization of the Indian economy: 2050 prospects for wind, solar, and green hydrogen. IScience, 2022, 25, 104399.	4.1	9
49	Planning district multiple energy systems considering year-round operation. Energy, 2020, 213, 118829.	8.8	8
50	Shale gas development in China: Implications for indoor and outdoor air quality and greenhouse gas emissions. Environment International, 2020, 141, 105727.	10.0	8
51	Reflection on opportunities for high penetration of renewable energy in China. Wiley Interdisciplinary Reviews: Energy and Environment, 2019, 8, e344.	4.1	3
52	Impacts of large-scale deployment of mountainous wind farms on wintertime regional air quality in the Beijing-Tian-Hebei area. Atmospheric Environment, 2022, 278, 119074.	4.1	3
53	Energy return on investment, energy payback time, and greenhouse gas emissions of coal seam gas (CSG) production in China: a case of the Fanzhuang CSG project. Petroleum Science, 2018, 15, 185-199.	4.9	2
54	Cover Image, Volume 8, Issue 3. Wiley Interdisciplinary Reviews: Energy and Environment, 2019, 8, e347.	4.1	0

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55	Chinese Academy of Engineering released Global Engineering Fronts. Frontiers of Environmental Science and Engineering, 2020, 14, 1.	6.0	0
56	Climate and Environmental Benefit Study of PV Resource Development: Case Study of Angola. Advances in Transdisciplinary Engineering, 2021, , .	0.1	0
57	The Increasing Role of Synergistic Effects in Carbon Mitigation and Air Quality Improvement, and Its Associated Health Benefits in China. Engineering, 2023, 20, 103-111.	6.7	0