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List of Publications by Year
in descending order

Version: 2024-02-01

123 papers	14,290 citations	31976 53 h-index	21540 114 g-index
128 all docs	128 docs citations	128 times ranked	13741 citing authors

#	Article	IF	Citations
1	Temporary reduction in daily global CO2 emissions during the COVID-19 forced confinement. Nature Climate Change, 2020, 10, 647-653.	18.8	1,408
2	Biophysical and economic limits to negative CO2 emissions. Nature Climate Change, 2016, 6, 42-50.	18.8	973
3	Negative emissionsâ€”Part 2: Costs, potentials and side effects. Environmental Research Letters, 2018, 13, 063002.	5.2	823
4	Future urban land expansion and implications for global croplands. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8939-8944.	7.1	757
5	The underestimated potential of solar energy to mitigate climate change. Nature Energy, 2017, 2, .	39.5	563
6	Negative emissionsâ€”Part 1: Research landscape and synthesis. Environmental Research Letters, 2018, 13, 063001.	5.2	498
7	Towards demand-side solutions for mitigating climate change. Nature Climate Change, 2018, 8, 260-263.	18.8	496
8	Bioenergy and climate change mitigation: an assessment. GCB Bioenergy, 2015, 7, 916-944.	5.6	494
9	Changing the resilience paradigm. Nature Climate Change, 2014, 4, 407-409.	18.8	487
10	Global typology of urban energy use and potentials for an urbanization mitigation wedge. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6283-6288.	7.1	388
11	A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, part II: synthesizing the insights. Environmental Research Letters, 2020, 15, 065003.	5.2	357
12	Carbon footprints of cities and other human settlements in the UK. Environmental Research Letters, 2013, 8, 035039.	5.2	355
13	Transport: A roadblock to climate change mitigation?. Science, 2015, 350, 911-912.	12.6	307
14	Using Attributional Life Cycle Assessment to Estimate Climateâ€Change Mitigation Benefits Misleads Policy Makers. Journal of Industrial Ecology, 2014, 18, 73-83.	5.5	303
15	Quantifying the potential for climate change mitigation of consumption options. Environmental Research Letters, 2020, 15, 093001.	5.2	260
16	Negative emissionsâ€”Part 3: Innovation and upscaling. Environmental Research Letters, 2018, 13, 063003.	5.2	224
17	Beyond Technology: Demand-Side Solutions for Climate Change Mitigation. Annual Review of Environment and Resources, 2016, 41, 173-198.	13.4	204
18	Discourses of climate delay. Global Sustainability, 2020, 3, .	3.3	201

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19	Climate change mitigation and co-benefits of feasible transport demand policies in Beijing. Transportation Research, Part D: Transport and Environment, 2009, 14, 120-131.	6.8	156
20	Climate change, equity and the Sustainable Development Goals: an urban perspective. Environment and Urbanization, 2017, 29, 159-182.	2.6	152
21	Urban infrastructure choices structure climate solutions. Nature Climate Change, 2016, 6, 1054-1056.	18.8	144
22	Direct Air Capture of CO2: A Key Technology for Ambitious Climate Change Mitigation. Joule, 2019, 3, 2053-2057.	24.0	136
23	The mutual dependence of negative emission technologies and energy systems. Energy and Environmental Science, 2019, 12, 1805-1817.	30.8	135
24	Demand-side solutions to climate change mitigation consistent with high levels of well-being. Nature Climate Change, 2022, 12, 36-46.	18.8	133
25	Reconciling top-down and bottom-up modelling on future bioenergy deployment. Nature Climate Change, 2012, 2, 320-327.	18.8	120
26	Decarbonizing urban transport in European cities: four cases show possibly high co-benefits. Environmental Research Letters, 2012, 7, 044042.	5.2	110
27	The role of high-socioeconomic-status people in locking in or rapidly reducing energy-driven greenhouse gas emissions. Nature Energy, 2021, 6, 1011-1016.	39.5	109
28	Learning about urban climate solutions from case studies. Nature Climate Change, 2019, 9, 279-287.	18.8	105
29	Carbon Lock-Out: Advancing Renewable Energy Policy in Europe. Energies, 2012, 5, 323-354.	3.1	103
30	Catching two European birds with one renewable stone: Mitigating climate change and Eurozone crisis by an energy transition. Renewable and Sustainable Energy Reviews, 2014, 38, 1015-1028.	16.4	101
31	The role of electric vehicles in near-term mitigation pathways and achieving the UKâ€™s carbon budget. Applied Energy, 2019, 251, 113111.	10.1	98
32	Teleconnected food supply shocks. Environmental Research Letters, 2016, 11, 035007.	5.2	96
33	A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions, part I: bibliometric and conceptual mapping. Environmental Research Letters, 2020, 15, 063002.	5.2	93
34	COVID-19-induced low power demand and market forces starkly reduce CO2 emissions. Nature Climate Change, 2021, 11, 193-196.	18.8	93
35	Climate policies for road transport revisited (II): Closing the policy gap with cap-and-trade. Energy Policy, 2011, 39, 2100-2110.	8.8	87
36	Evolving Narratives of Low-Carbon Futures in Transportation. Transport Reviews, 2016, 36, 341-360.	8.8	87

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37	A spatial typology of human settlements and their CO2 emissions in England. Global Environmental Change, 2015, 34, 13-21.	7.8	84
38	Understanding environmental trade-offs and resource demand of direct air capture technologies through comparative life-cycle assessment. Nature Energy, 2021, 6, 1035-1044.	39.5	81
39	Avoiding carbon lock-in: Policy options for advancing structural change. Economic Modelling, 2015, 50, 49-63.	3.8	77
40	Livelihood impacts of biofuel crop production: Implications for governance. Geoforum, 2014, 54, 248-260.	2.5	76
41	Climate policies for road transport revisited (I): Evaluation of the current framework. Energy Policy, 2011, 39, 2396-2406.	8.8	73
42	Upscaling urban data science for global climate solutions. Global Sustainability, 2019, 2, .	3.3	73
43	Closing the emission price gap. Global Environmental Change, 2015, 31, 132-143.	7.8	72
44	Aligning artificial intelligence with climate change mitigation. Nature Climate Change, 2022, 12, 518-527.	18.8	69
45	Determinants of low-carbon transport mode adoption: systematic review of reviews. Environmental Research Letters, 2020, 15, 103002.	5.2	68
46	CO₂ Emissions from Direct Energy Use of Urban Households in India. Environmental Science & Technology, 2015, 49, 11312-11320.	10.0	66
47	Bioenergy production and sustainable development: science base for policymaking remains limited. GCB Bioenergy, 2017, 9, 541-556.	5.6	66
48	A multi-country meta-analysis on the role of behavioural change in reducing energy consumption and CO2 emissions in residential buildings. Nature Energy, 2021, 6, 925-932.	39.5	66
49	A global dataset of CO2 emissions and ancillary data related to emissions for 343 cities. Scientific Data, 2019, 6, 180280.	5.3	65
50	Machine learning for geographically differentiated climate change mitigation in urban areas. Sustainable Cities and Society, 2021, 64, 102526.	10.4	65
51	On the Sustainability of Renewable Energy Sources. Annual Review of Environment and Resources, 2013, 38, 169-200.	13.4	62
52	Reducing urban heat wave risk in the 21st century. Current Opinion in Environmental Sustainability, 2015, 14, 221-231.	6.3	61
53	A conceptual framework for an urban areas typology to integrate climate change mitigation and adaptation. Urban Climate, 2015, 14, 116-137.	5.7	60
54	Assessing human and environmental pressures of global land-use change 2000â€“2010. Global Sustainability, 2019, 2, .	3.3	60

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55	Considering sustainability thresholds for BECCS in IPCC and biodiversity assessments. GCB Bioenergy, 2021, 13, 510-515.	5.6	60
56	Renewable Energy in the Context of Sustainable Development. , 2011, , 707-790.		59
57	The concerns of the young protesters are justified: A statement byScientists for Futureconcerning the protests for more climate protection. Gaia, 2019, 28, 79-87.	0.7	56
58	On-demand motorcycle taxis improve mobility, not sustainability. Case Studies on Transport Policy, 2019, 7, 218-229.	2.5	55
59	How fuel prices determine public transport infrastructure, modal shares and urban form. Urban Climate, 2014, 10, 63-76.	5.7	53
60	Economic and ecological views on climate change mitigation with bioenergy and negative emissions. GCB Bioenergy, 2016, 8, 4-10.	5.6	51
61	Saving resources and the climate? A systematic review of the circular economy and its mitigation potential. Environmental Research Letters, 2020, 15, 123001.	5.2	51
62	Fair street space allocation: ethical principles and empirical insights. Transport Reviews, 2020, 40, 711-733.	8.8	48
63	COVID-19 and pathways to low-carbon air transport until 2050. Environmental Research Letters, 2021, 16, 034063.	5.2	45
64	Predictive Coding and the Slowness Principle: An Information-Theoretic Approach. Neural Computation, 2008, 20, 1026-1041.	2.2	44
65	Integrating place-specific livelihood and equity outcomes into global assessments of bioenergy deployment. Environmental Research Letters, 2013, 8, 035047.	5.2	44
66	A â€˜sustainability windowâ€™ of urban form. Transportation Research, Part D: Transport and Environment, 2016, 45, 96-111.	6.8	44
67	Environmental and economic impacts of trade barriers: The example of Chinaâ€“US trade friction. Resources and Energy Economics, 2020, 59, 101144.	2.5	44
68	Lifestyle, psychological, socioeconomic and environmental factors and their impact on hypertension during the coronavirus disease 2019 pandemic. Journal of Hypertension, 2021, 39, 1077-1089.	0.5	44
69	Municipal policies accelerated urban sprawl and public debts in Spain. Land Use Policy, 2016, 54, 103-115.	5.6	42
70	Climate change mitigation in cities: a systematic scoping of case studies. Environmental Research Letters, 2020, 15, 093008.	5.2	42
71	Past-future information bottleneck in dynamical systems. Physical Review E, 2009, 79, 041925.	2.1	41
72	Urban Climate Change Mitigation in Europe: Looking at and beyond the Role of Population Density. Journal of the Urban Planning and Development Division, ASCE, 2014, 140, .	1.7	41

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73	We need biosphere stewardship that protects carbon sinks and builds resilience. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	41
74	Coal transitionsâ€”part 1: a systematic map and review of case study learnings from regional, national, and local coal phase-out experiences. Environmental Research Letters, 2021, 16, 113003.	5.2	40
75	Happy or liberal? Making sense of behavior in transport policy design. Transportation Research, Part D: Transport and Environment, 2016, 45, 64-83.	6.8	39
76	Economic and environmental evaluation of compressed-air cars. Environmental Research Letters, 2009, 4, 044011.	5.2	37
77	Adjust urban and rural road pricing for fair mobility. Nature Climate Change, 2020, 10, 591-594.	18.8	37
78	Govern land as a global commons. Nature, 2017, 546, 28-29.	27.8	36
79	Reviewing the scope and thematic focus of 100â€‰000 publications on energy consumption, services and social aspects of climate change: a big data approach to demand-side mitigation [*]. Environmental Research Letters, 2021, 16, 033001.	5.2	34
80	Learning from urban form to predict building heights. PLoS ONE, 2020, 15, e0242010.	2.5	34
81	A systematic review on shared mobility in China. International Journal of Sustainable Transportation, 2022, 16, 374-389.	4.1	33
82	Leveraging digitalization for sustainability in urban transport. Global Sustainability, 2019, 2, .	3.3	32
83	Systematic map of the literature on carbon lock-in induced by long-lived capital. Environmental Research Letters, 2021, 16, 053004.	5.2	32
84	Urbanization, processed foods, and eating out in India. Global Food Security, 2020, 25, 100361.	8.1	31
85	The literature landscape on 1.5 Â°C climate change and cities. Current Opinion in Environmental Sustainability, 2018, 30, 26-34.	6.3	30
86	Timescale-Invariant Representation of Acoustic Communication Signals by a Bursting Neuron. Journal of Neuroscience, 2009, 29, 2575-2580.	3.6	29
87	Compressed Air Vehicles. Transportation Research Record, 2010, 2191, 67-74.	1.9	29
88	Low-Carbon Land Transport. , 0, , .		29
89	Energy End-Use: Transport. , 0, , 575-648.		27
90	Lifting peripheral fortunes: Upgrading transit improves spatial, income and gender equity in Medellin. Cities, 2017, 70, 122-134.	5.6	27

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91	Can land taxes foster sustainable development? An assessment of fiscal, distributional and implementation issues. Land Use Policy, 2018, 78, 338-352.	5.6	27
92	Can Bioenergy Assessments Deliver?. Economics of Energy and Environmental Policy, 2012, 1, .	1.4	24
93	Policy, Financing and Implementation. , 2011, , 865-950.		23
94	Star-shaped cities alleviate trade-off between climate change mitigation and adaptation. Environmental Research Letters, 2019, 14, 085011.	5.2	21
95	Keeping up with the Patels: Conspicuous consumption drives the adoption of cars and appliances in India. Energy Research and Social Science, 2020, 70, 101742.	6.4	21
96	Engage, donâ€™t preach: Active learning triggers climate action. Energy Research and Social Science, 2020, 70, 101779.	6.4	21
97	Leverage points for accelerating adoption of shared electric cars: Perceived benefits and environmental impact of NEVs. Energy Policy, 2021, 155, 112349.	8.8	21
98	Fuel crisis: slash demand in three sectors to protect economies and climate. Nature, 2022, 606, 460-462.	27.8	21
99	Synergies and trade-offs between energy-efficient urbanization and health. Environmental Research Letters, 2017, 12, 114017.	5.2	20
100	Unique Opportunities of Island States to Transition to a Low-Carbon Mobility System. Sustainability, 2020, 12, 1435.	3.2	19
101	Timescale-Invariant Pattern Recognition by Feedforward Inhibition and Parallel Signal Processing. Neural Computation, 2010, 22, 1493-1510.	2.2	18
102	Response to Comments on â€œUsing Attributional Life Cycle Assessment to Estimate Climateâ€€Change Mitigation â€¦â€• Journal of Industrial Ecology, 2014, 18, 468-470.	5.5	18
103	A systematic framework of location value taxes reveals dismal policy design in most European countries. Land Use Policy, 2016, 51, 335-349.	5.6	18
104	Equity, Environmental Justice, and Urban Climate Change. , 0, , 173-224.		17
105	Spatially contextualized analysis of energy use for commuting in India. Environmental Research Letters, 2019, 14, 045007.	5.2	13
106	COVID-19 recovery and the global urban poor. Npj Urban Sustainability, 2021, 1, .	8.0	13
107	Challenging the European Climate Debate: Can Universal Climate Justice and Economics be Reconciled with Particularistic Politics?. Global Policy, 2014, 5, 6-14.	1.7	11
108	Response to â€œOn the uncanny capabilities of consequential LCAâ€•by Sangwon Suh and Yi Yang (Int J Life) Tj ETQq0 0 0 rgBT /Overlo 1559-1560.	4.7	11

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109	The Mitigation Trinity: Coordinating Policies to Escalate Climate Mitigation. One Earth, 2019, 1, 76-85.	6.8	11
110	Limits to Liberalism: Considerations for the Anthropocene. Ecological Economics, 2020, 177, 106763.	5.7	11
111	Combining economic recovery with climate change mitigation: A global evaluation of financial instruments. Economic Analysis and Policy, 2021, 72, 438-453.	6.6	11
112	Towards typologies of urban climate and global environmental change. Environmental Research Letters, 2015, 10, 101001.	5.2	10
113	Systematizing and upscaling urban climate change mitigation. Environmental Research Letters, 2020, 15, 100202.	5.2	8
114	Status consciousness in energy consumption: a systematic review. Environmental Research Letters, 2021, 16, 053010.	5.2	6
115	From Targets to Action: Rolling up our Sleeves after Paris. Global Challenges, 2017, 1, 1600007.	3.6	5
116	From smart city to digital urban commons: Institutional considerations for governing shared mobility data. Environmental Research: Infrastructure and Sustainability, 2021, 1, 025004.	2.3	5
117	A comparison of the health and environmental impacts of increasing urban density against increasing propensity to walk and cycle in Nashville, USA. Cities and Health, 2020, 4, 55-65.	2.6	4
118	Bangkokâ€™s locked-in traffic jam: Price congestion or regulate parking?. Case Studies on Transport Policy, 2022, 10, 365-378.	2.5	4
119	Sweet spots are in the food system: Structural adjustments to co-control regional pollutants and national GHG emissions in China. Ecological Economics, 2020, 171, 106590.	5.7	3
120	Financing Public Capital When Rents Are Back: A Macroeconomic Henry George Theorem. FinanzArchiv, 2018, 74, 340.	0.6	3
121	Electricity end-use and construction activity are key leverage points for co-controlling greenhouse gases and local pollution in China. Climatic Change, 2021, 167, 1.	3.6	2
122	Climate action for health and wellbeing in cities: a protocol for the systematic development of a database of peer-reviewed studies using machine learning methods. Wellcome Open Research, 2021, 6, 50.	1.8	1
123	Research for city practice. Cities and Health, 2020, 4, 2-12.	2.6	0