James A Edmonds

List of Publications by Year
in descending order

48 papers	18,671 citations	101543 36 h-index	214800 47 g-index
49 all docs	49 docs citations	49 times ranked	19205 citing authors

#	ARTICLE	IF	CITATIONS
1	The representative concentration pathways: an overview. Climatic Change, 2011, 109, 5-31.	3.6	5,871
2	The Shared Socioeconomic Pathways and their energy, land use, and greenhouse gas emissions implications: An overview. Global Environmental Change, 2017, 42, 153-168.	7.8	2,966
3	RCP4.5: a pathway for stabilization of radiative forcing by 2100. Climatic Change, 2011, 109, 77-94.	3.6	1,238
4	Net-zero emissions energy systems. Science, 2018, 360, .	12.6	1,165
5	Biophysical and economic limits to negative CO2 emissions. Nature Climate Change, 2016, 6, 42-50.	18.8	973
6	Scenarios towards limiting global mean temperature increase below 1.5 Â°C. Nature Climate Change, 2018, 8, 325-332.	18.8	795
7	Implications of Limiting CO ₂ Concentrations for Land Use and Energy. Science, 2009, 324, 1183-1186.	12.6	778
8	A new scenario framework for Climate Change Research: scenario matrix architecture. Climatic Change, 2014, 122, 373-386.	3.6	510
9	International climate policy architectures: Overview of the EMF 22 International Scenarios. Energy Economics, 2009, 31, S64-S81.	12.1	397
10	The role of technology for achieving climate policy objectives: overview of the EMF 27 study on global technology and climate policy strategies. Climatic Change, 2014, 123, 353-367.	3.6	348
11	Locked into Copenhagen pledges â€" Implications of short-term emission targets for the cost and feasibility of long-term climate goals. Technological Forecasting and Social Change, 2015, 90, 8-23.	11.6	270
12	Assessing Chinaâ€™s efforts to pursue the 1.5Â°C warming limit. Science, 2021, 372, 378-385.	12.6	267
13	A new scenario framework for climate change research: the concept of shared climate policy assumptions. Climatic Change, 2014, 122, 401-414.	3.6	266
14	The SSP4: A world of deepening inequality. Global Environmental Change, 2017, 42, 284-296.	7.8	265
15	Can Paris pledges avert severe climate change?. Science, 2015, 350, 1168-1169.	12.6	260
16	Taking stock of national climate policies to evaluate implementation of the Paris Agreement. Nature Communications, 2020, 11, 2096.	12.8	241
17	GCAM v5.1: representing the linkages between energy, water, land, climate, and economic systems. Geoscientific Model Development, 2019, 12, 677-698.	3.6	211
18	Evaluating the economic impact of water scarcity in a changing world. Nature Communications, 2021, 12, 1915.	12.8	174

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19	Long-term global water projections using six socioeconomic scenarios in an integrated assessment modeling framework. Technological Forecasting and Social Change, 2014, 81, 205-226.	11.6	159
20	A long-term global energy- economic model of carbon dioxide release from fossil fuel use. Energy Economics, 1983, 5, 74-88.	12.1	141
21	Economic tools to promote transparency and comparability in the Paris Agreement. Nature Climate Change, 2016, 6, 1000-1004.	18.8	122
22	Climate impacts on hydropower and consequences for global electricity supply investment needs. Energy, 2017, 141, 2081-2090.	8.8	108
23	2.6: Limiting climate change to 450Âppm CO2 equivalent in the 21st century. Energy Economics, 2009, 31, S107-S120.	12.1	106
24	Trade-offs of different land and bioenergy policies on the path to achieving climate targets. Climatic Change, 2014, 123, 691-704.	3.6	98
25	Climate policy models need to get real about people â€" hereâ€™s how. Nature, 2021, 594, 174-176.	27.8	81
26	ECONOMIC AND PHYSICAL MODELING OF LAND USE IN GCAM 3.0 AND AN APPLICATION TO AGRICULTURAL PRODUCTIVITY, LAND, AND TERRESTRIAL CARBON. Climate Change Economics, 2014, 05, 1450003.	5.0	80
27	Balancing global water availability and use at basin scale in an integrated assessment model. Climatic Change, 2016, 136, 217-231.	3.6	79
28	Deep mitigation of CO2 and non-CO2 greenhouse gases toward 1.5â€‰Â°C and 2â€‰Â°C futures. Nature Communications, 2021, 12, 6245.	12.8	78
29	Measuring progress from nationally determined contributions to mid-century strategies. Nature Climate Change, 2017, 7, 871-874.	18.8	73
30	Improved representation of investment decisions in assessments of CO2 mitigation. Nature Climate Change, 2015, 5, 436-440.	18.8	68
31	Carbon capture and storage across fuels and sectors in energy system transformation pathways. International Journal of Greenhouse Gas Control, 2017, 57, 34-41.	4.6	68
32	Climate mitigation policy implications for global irrigation water demand. Mitigation and Adaptation Strategies for Global Change, 2015, 20, 389-407.	2.1	63
33	Assessing global fossil fuel availability in a scenario framework. Energy, 2016, 111, 580-592.	8.8	54
34	Large Ensemble Analytic Framework for Consequenceâ€Driven Discovery of Climate Change Scenarios. Earth's Future, 2018, 6, 488-504.	6.3	54
35	Future changes in the trading of virtual water. Nature Communications, 2020, 11, 3632.	12.8	54
36	The role of direct air capture and negative emissions technologies in the shared socioeconomic pathways towards +1.5 Â°C and +2 Â°C futures. Environmental Research Letters, 2021, 16, 114012.	5.2	40

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37	The surprisingly inexpensive cost of state-driven emission control strategies. Nature Climate Change, 2021, 11, 738-745.	18.8	28
38	The role of carbon dioxide removal in net-zero emissions pledges. Energy and Climate Change, 2021, 2, 100043.	4.4	28
39	Will economic growth and fossil fuel scarcity help or hinder climate stabilization?. Climatic Change, 2016, 136, 7-22.	3.6	25
40	Climate and carbon budget implications of linked future changes in CO ₂ and non-CO ₂ forcing. Environmental Research Letters, 2019, 14, 044007.	5.2	23
41	HOW MUCH COULD ARTICLE 6 ENHANCE NATIONALLY DETERMINED CONTRIBUTION AMBITION TOWARD PARIS AGREEMENT GOALS THROUGH ECONOMIC EFFICIENCY?. Climate Change Economics, 2021, 12, .	5.0	19
42	A GLOBAL FOOD DEMAND MODEL FOR THE ASSESSMENT OF COMPLEX HUMAN-EARTH SYSTEMS. Climate Change Economics, 2017, 08, 1750012.	5.0	9
43	Fossil energy deployment through midcentury consistent with 2Â°C climate stabilization. Energy and Climate Change, 2021, 2, 100034.	4.4	7
44	Global climate, energy, and economic implications of international energy offsets programs. Climatic Change, 2015, 133, 583-596.	3.6	6
45	Geospatial assessment of the economic opportunity for reforestation in Maryland, USA. Environmental Research Letters, 2021, 16, 084012.	5.2	3
46	ambrosia: An R package for calculating and analyzing food demand that is responsive to changing incomes and prices. Journal of Open Source Software, 2021, 6, 2890.	4.6	1
47	To achieve deep cuts in US emissions, state-driven policy is only slightly more expensive than nationally uniform policy. Nature Climate Change, 2021, 11, 911-912.	18.8	1
48	Transparency crucial to Paris climate scenariosâ€”Response. Science, 2022, 375, 828-828.	12.6	0