Jae Edmonds

List of Publications by Year
in descending order

66 papers	17,199 citations	101384 36 h-index	114278 63 g-index
67 all docs	67 docs citations	67 times ranked	18194 citing authors

#	Article	IF	Citations
1	IPCC emission scenarios: How did critiques affect their quality and relevance 1990â€“2022?. Global Environmental Change, 2022, 75, 102538.	3.6	20
2	Evaluating the economic impact of water scarcity in a changing world. Nature Communications, 2021, 12, 1915.	5.8	174
3	Fossil energy deployment through midcentury consistent with 2Â°C climate stabilization. Energy and Climate Change, 2021, 2, 100034.	2.2	7
4	The role of carbon dioxide removal in net-zero emissions pledges. Energy and Climate Change, 2021, 2, 100043.	2.2	28
5	Deep mitigation of CO2 and non-CO2 greenhouse gases toward 1.5â€‰Â°C and 2â€‰Â°C futures. Nature Communications, 2021, 12, 6245.	5.8	78
6	Taking stock of national climate policies to evaluate implementation of the Paris Agreement. Nature Communications, 2020, 11, 2096.	5.8	241
7	Integrated energy-water-land nexus planning to guide national policy: an example from Uruguay. Environmental Research Letters, 2020, 15, 094014.	2.2	24
8	GLOBAL MARKET AND ECONOMIC WELFARE IMPLICATIONS OF CHANGES IN AGRICULTURAL YIELDS DUE TO CLIMATE CHANGE. Climate Change Economics, 2020, 11, 2050005.	2.9	12
9	Negative emissions and international climate goalsâ€"learning from and about mitigation scenarios. Climatic Change, 2019, 157, 189-219.	1.7	74
10	Climate and carbon budget implications of linked future changes in CO ₂ and non-CO ₂ forcing. Environmental Research Letters, 2019, 14, 044007.	2.2	23
11	GCAM v5.1: representing the linkages between energy, water, land, climate, and economic systems. Geoscientific Model Development, 2019, 12, 677-698.	1.3	211
12	Scenarios towards limiting global mean temperature increase below 1.5 Â°C. Nature Climate Change, 2018, 8, 325-332.	8.1	795
13	Mitigation scenarios must cater to new users. Nature Climate Change, 2018, 8, 845-848.	8.1	27
14	Net-zero emissions energy systems. Science, 2018, 360, .	6.0	1,165
15	Data on fossil fuel availability for Shared Socioeconomic Pathways. Data in Brief, 2017, 10, 44-46.	0.5	7
16	Cost of power or power of cost: A U.S. modeling perspective. Renewable and Sustainable Energy Reviews, 2017, 77, 861-874.	8.2	34
17	Biospheric feedback effects in a synchronously coupled model of human and Earth systems. Nature Climate Change, 2017, 7, 496-500.	8.1	46
18	Carbon capture and storage across fuels and sectors in energy system transformation pathways. International Journal of Greenhouse Gas Control, 2017, 57, 34-41.	2.3	68

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19	Climate impacts on hydropower and consequences for global electricity supply investment needs. Energy, 2017, 141, 2081-2090.	4.5	108
20	The Shared Socioeconomic Pathways and their energy, land use, and greenhouse gas emissions implications: An overview. Global Environmental Change, 2017, 42, 153-168.	3.6	2,966
21	Implications of uncertain future fossil energy resources on bioenergy use and terrestrial carbon emissions. Climatic Change, 2016, 136, 57-68.	1.7	14
22	Will economic growth and fossil fuel scarcity help or hinder climate stabilization?. Climatic Change, 2016, 136, 7-22.	1.7	25
23	Global economic consequences of deploying bioenergy with carbon capture and storage (BECCS). Environmental Research Letters, 2016, 11, 095004.	2.2	97
24	Balancing global water availability and use at basin scale in an integrated assessment model. Climatic Change, 2016, 136, 217-231.	1.7	79
25	Introduction to the RoSE special issue on the impact of economic growth and fossil fuel availability on climate protection. Climatic Change, 2016, 136, 1-6.	1.7	19
26	Assessing global fossil fuel availability in a scenario framework. Energy, 2016, 111, 580-592.	4.5	54
27	Biophysical and economic limits to negative CO2 emissions. Nature Climate Change, 2016, 6, 42-50.	8.1	973
28	A review of water and greenhouse gas impacts of unconventional natural gas development in the United States. MRS Energy & Sustainability, 2015, 2, 1.	1.3	8
29	Global climate, energy, and economic implications of international energy offsets programs. Climatic Change, 2015, 133, 583-596.	1.7	6
30	A short note on integrated assessment modeling approaches: Rejoinder to the review of â€œMaking or breaking climate targets â€" The AMPERE study on staged accession scenarios for climate policyâ€. Technological Forecasting and Social Change, 2015, 99, 273-276.	6.2	11
31	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.	6.2	270
32	The impact of near-term climate policy choices on technology and emission transition pathways. Technological Forecasting and Social Change, 2015, 90, 73-88.	6.2	64
33	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.	2.9	80
34	EU 20-20-20 energy policy as a model for global climate mitigation. Climate Policy, 2014, 14, 581-598.	2.6	14
35	A new scenario framework for Climate Change Research: scenario matrix architecture. Climatic Change, 2014, 122, 373-386.	1.7	510
36	A new scenario framework for climate change research: background, process, and future directions. Climatic Change, 2014, 122, 363-372.	1.7	169

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37	A new scenario framework for climate change research: the concept of shared climate policy assumptions. Climatic Change, 2014, 122, 401-414.	1.7	266
38	Limited impact on decadal-scale climate change from increased use of natural gas. Nature, 2014, 514, 482-485.	13.7	194
39	Trade-offs of different land and bioenergy policies on the path to achieving climate targets. Climatic Change, 2014, 123, 691-704.	1.7	98
40	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.	1.7	348
41	Sensitivity of multi-gas climate policy to emission metrics. Climatic Change, 2013, 117, 663-675.	1.7	24
42	Implications of simultaneously mitigating and adapting to climate change: initial experiments using GCAM. Climatic Change, 2013, 117, 545-560.	1.7	36
43	Scenarios of Future Socio-Economics, Energy, Land Use, and Radiative Forcing. , 2013, , 81-138.		0
44	Exploring the future role of Asia utilizing a Scenario Matrix Architecture and Shared Socio-economic Pathways. Energy Economics, 2012, 34, S325-S338.	5.6	12
45	A proposal for a new scenario framework to support research and assessment in different climate research communities. Global Environmental Change, 2012, 22, 21-35.	3.6	228
46	The representative concentration pathways: an overview. Climatic Change, 2011, 109, 5-31.	1.7	5,871
47	What do near-term observations tell us about long-term developments in greenhouse gas emissions?. Climatic Change, 2010, 103, 635-642.	1.7	20
48	The distribution and magnitude of emissions mitigation costs in climate stabilization under less than perfect international cooperation: SGM results. Energy Economics, 2009, 31, S187-S197.	5.6	40
49	International climate policy architectures: Overview of the EMF 22 International Scenarios. Energy Economics, 2009, 31, S64-S81.	5.6	397
50	Implications for the USA of stabilization of radiative forcing at 3.4 W/m². Climate Policy, 2008, 8, S76-S92.	2.6	3
51	Electrification of the economy and CO2 emissions mitigation. Environmental Economics and Policy Studies, 2006, 7, 175-203.	0.8	46
52	The ObjECTS Framework for Integrated Assessment: Hybrid Modeling of Transportation. Energy Journal, 2006, 27, 63-91.	0.9	98
53	Stabilization of CO2 in a B2 world: insights on the roles of carbon capture and disposal, hydrogen, and transportation technologies. Energy Economics, 2004, 26, 517-537.	5.6	88
54	Solar energy technologies and stabilizing atmospheric CO2 concentrations. Progress in Photovoltaics: Research and Applications, 2000, 8, 3-15.	4.4	10

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55	CLIMATE: A New Route Toward Limiting Climate Change?. Science, 2000, 290, 1109-1110.	6.0	13
56	Uncertainty in integrated assessment models: modeling with MiniCAM 1.0. Energy Policy, 1999, 27, 855-879.	4.2	31
57	The Berlin Mandate: The Design of Cost-Effective Mitigation Strategies. Profiles in Operations Research, 1999, , 67-83.	0.3	16
58	Exploring a technology strategy for stabilizing atmospheric CO2. , 1999, , 131-154.		17
59	International Equity and Differentiation in Global Warming Policy. Environmental and Resource Economics, 1998, 12, 25-51.	1.5	322
60	The value of advanced energy technologies in stabilizing atmospheric CO2. , 1998, , 87-104.		2
61	An integrated assessment of climate change and the accelerated introduction of advanced energy technologies. Mitigation and Adaptation Strategies for Global Change, 1997, 1, 311-339.	1.0	67
62	Carbon coalitions. Energy Policy, 1995, 23, 309-335.	4.2	74
63	An Integrated Assessment of Climate Change and the Accelerated Introduction of Advanced Energy Technologies - An Application of MiniCAM 1.0. Mitigation and Adaptation Strategies for Global Change, 1995, 1, 311-339.	1.0	27
64	The Costs of Limiting Fossil-Fuel CO2 Emissions: A Survey and Analysis. Annual Review of Environment and Resources, 1993, 18, 397-478.	1.2	175
65	Global energy production and use to the year 2050. Energy, 1983, 8, 419-432.	4.5	34
66	A long-term global energy- economic model of carbon dioxide release from fossil fuel use. Energy Economics, 1983, 5, 74-88.	5.6	141