

Detlef P. van Vuuren

List of Publications by Year in descending order

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Version: 2024-02-01

406
papers

67,265
citations

1238

110
h-index

893

242
g-index

437
all docs

437
docs citations

437
times ranked

46698
citing authors

#	ARTICLE	IF	CITATIONS
1	The representative concentration pathways: an overview. <i>Climatic Change</i> , 2011, 109, 5-31.	3.6	5,871
2	The next generation of scenarios for climate change research and assessment. <i>Nature</i> , 2010, 463, 747-756.	27.8	5,299
3	The Shared Socioeconomic Pathways and their energy, land use, and greenhouse gas emissions implications: An overview. <i>Global Environmental Change</i> , 2017, 42, 153-168.	7.8	2,966
4	The RCP greenhouse gas concentrations and their extensions from 1765 to 2300. <i>Climatic Change</i> , 2011, 109, 213-241.	3.6	2,948
5	The Scenario Model Intercomparison Project (ScenarioMIP) for CMIP6. <i>Geoscientific Model Development</i> , 2016, 9, 3461-3482.	3.6	2,084
6	Historical (1850–2000) gridded anthropogenic and biomass burning emissions of reactive gases and aerosols: methodology and application. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 7017-7039.	4.9	2,020
7	A new scenario framework for climate change research: the concept of shared socioeconomic pathways. <i>Climatic Change</i> , 2014, 122, 387-400.	3.6	1,698
8	The roads ahead: Narratives for shared socioeconomic pathways describing world futures in the 21st century. <i>Global Environmental Change</i> , 2017, 42, 169-180.	7.8	1,656
9	Harmonization of land-use scenarios for the period 1500–2100: 600 years of global gridded annual land-use transitions, wood harvest, and resulting secondary lands. <i>Climatic Change</i> , 2011, 109, 117-161.	3.6	1,080
10	Biophysical and economic limits to negative CO ₂ emissions. <i>Nature Climate Change</i> , 2016, 6, 42-50.	18.8	973
11	Modeling global residential sector energy demand for heating and air conditioning in the context of climate change. <i>Energy Policy</i> , 2009, 37, 507-521.	8.8	843
12	Scenarios towards limiting global mean temperature increase below 1.5 °C. <i>Nature Climate Change</i> , 2018, 8, 325-332.	18.8	795
13	RCP2.6: exploring the possibility to keep global mean temperature increase below 2 °C. <i>Climatic Change</i> , 2011, 109, 95-116.	3.6	759
14	Exploring global changes in nitrogen and phosphorus cycles in agriculture induced by livestock production over the 1900–2050 period. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 20882-20887.	7.1	742
15	Evolution of anthropogenic and biomass burning emissions of air pollutants at global and regional scales during the 1980–2010 period. <i>Climatic Change</i> , 2011, 109, 163-190.	3.6	740
16	Indicators for energy security. <i>Energy Policy</i> , 2009, 37, 2166-2181.	8.8	708
17	Global drivers of future river flood risk. <i>Nature Climate Change</i> , 2016, 6, 381-385.	18.8	661
18	Stabilizing greenhouse gas concentrations at low levels: an assessment of reduction strategies and costs. <i>Climatic Change</i> , 2007, 81, 119-159.	3.6	658

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19	Land-use futures in the shared socio-economic pathways. <i>Global Environmental Change</i> , 2017, 42, 331-345.	7.8	645
20	Climate benefits of changing diet. <i>Climatic Change</i> , 2009, 95, 83-102.	3.6	640
21	Persistent growth of CO2 emissions and implications for reaching climate targets. <i>Nature Geoscience</i> , 2014, 7, 709-715.	12.9	615
22	Phosphorus demand for the 1970–2100 period: A scenario analysis of resource depletion. <i>Global Environmental Change</i> , 2010, 20, 428-439.	7.8	533
23	Energy, land-use and greenhouse gas emissions trajectories under a green growth paradigm. <i>Global Environmental Change</i> , 2017, 42, 237-250.	7.8	523
24	A new scenario framework for Climate Change Research: scenario matrix architecture. <i>Climatic Change</i> , 2014, 122, 373-386.	3.6	510
25	Global emissions pathways under different socioeconomic scenarios for use in CMIP6: a dataset of harmonized emissions trajectories through the end of the century. <i>Geoscientific Model Development</i> , 2019, 12, 1443-1475.	3.6	496
26	Alternative pathways to the 1.5°C target reduce the need for negative emission technologies. <i>Nature Climate Change</i> , 2018, 8, 391-397.	18.8	455
27	Bending the curve of terrestrial biodiversity needs an integrated strategy. <i>Nature</i> , 2020, 585, 551-556.	27.8	413
28	Harmonization of global land use change and management for the period 850–2100 (LUH2) for CMIP6. <i>Geoscientific Model Development</i> , 2020, 13, 5425-5464.	3.6	408
29	Scenarios of freshwater fish extinctions from climate change and water withdrawal. <i>Global Change Biology</i> , 2005, 11, 1557-1564.	9.5	394
30	Social tipping dynamics for stabilizing Earth's climate by 2050. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 2354-2365.	7.1	394
31	Global and regional evolution of short-lived radiatively-active gases and aerosols in the Representative Concentration Pathways. <i>Climatic Change</i> , 2011, 109, 191-212.	3.6	393
32	Residual fossil CO2 emissions in 1.5–2°C pathways. <i>Nature Climate Change</i> , 2018, 8, 626-633.	18.8	380
33	Energy investment needs for fulfilling the Paris Agreement and achieving the Sustainable Development Goals. <i>Nature Energy</i> , 2018, 3, 589-599.	39.5	377
34	Renewable energy sources: Their global potential for the first-half of the 21st century at a global level: An integrated approach. <i>Energy Policy</i> , 2007, 35, 2590-2610.	8.8	373
35	Evaluating sustainability transitions pathways: Bridging analytical approaches to address governance challenges. <i>Global Environmental Change</i> , 2015, 35, 239-253.	7.8	373
36	Competition for land. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2010, 365, 2941-2957.	4.0	365

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37	The role of technology for achieving climate policy objectives: overview of the EMF 27 study on global technology and climate policy strategies. <i>Climatic Change</i> , 2014, 123, 353-367.	3.6	348
38	A Global Analysis of Acidification and Eutrophication of Terrestrial Ecosystems. <i>Water, Air, and Soil Pollution</i> , 2002, 141, 349-382.	2.4	320
39	Transport: A roadblock to climate change mitigation?. <i>Science</i> , 2015, 350, 911-912.	12.6	307
40	Drivers of declining CO2 emissions in 18 developed economies. <i>Nature Climate Change</i> , 2019, 9, 213-217.	18.8	307
41	Sharing a quota on cumulative carbon emissions. <i>Nature Climate Change</i> , 2014, 4, 873-879.	18.8	295
42	Bridging analytical approaches for low-carbon transitions. <i>Nature Climate Change</i> , 2016, 6, 576-583.	18.8	294
43	Future air pollution in the Shared Socio-economic Pathways. <i>Global Environmental Change</i> , 2017, 42, 346-358.	7.8	277
44	Locked into Copenhagen pledges â€” Implications of short-term emission targets for the cost and feasibility of long-term climate goals. <i>Technological Forecasting and Social Change</i> , 2015, 90, 8-23.	11.6	270
45	Reducing emissions from agriculture to meet the 2Â°Â°C target. <i>Global Change Biology</i> , 2016, 22, 3859-3864.	9.5	267
46	Assessing Chinaâ€™s efforts to pursue the 1.5Â°C warming limit. <i>Science</i> , 2021, 372, 378-385.	12.6	267
47	A new scenario framework for climate change research: the concept of shared climate policy assumptions. <i>Climatic Change</i> , 2014, 122, 401-414.	3.6	266
48	Emission pathways consistent with a 2â€‰%Â°C global temperature limit. <i>Nature Climate Change</i> , 2011, 1, 413-418.	18.8	262
49	The feasibility of low CO2 concentration targets and the role of bio-energy with carbon capture and storage (BECCS). <i>Climatic Change</i> , 2010, 100, 195-202.	3.6	251
50	Shared Socio-Economic Pathways of the Energy Sector â€” Quantifying the Narratives. <i>Global Environmental Change</i> , 2017, 42, 316-330.	7.8	247
51	Achievements and needs for the climate change scenario framework. <i>Nature Climate Change</i> , 2020, 10, 1074-1084.	18.8	245
52	Taking stock of national climate policies to evaluate implementation of the Paris Agreement. <i>Nature Communications</i> , 2020, 11, 2096.	12.8	241
53	Resource nexus perspectives towards the United Nations Sustainable Development Goals. <i>Nature Sustainability</i> , 2018, 1, 737-743.	23.7	236
54	Climate model projections from the Scenario Model Intercomparison Project (ScenarioMIP) of CMIP6. <i>Earth System Dynamics</i> , 2021, 12, 253-293.	7.1	236

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55	Bioenergy revisited: Key factors in global potentials of bioenergy. Energy and Environmental Science, 2010, 3, 258.	30.8	234
56	Net-zero emission targets for major emitting countries consistent with the Paris Agreement. Nature Communications, 2021, 12, 2140.	12.8	233
57	A proposal for a new scenario framework to support research and assessment in different climate research communities. Global Environmental Change, 2012, 22, 21-35.	7.8	228
58	Differences between carbon budget estimates unravelled. Nature Climate Change, 2016, 6, 245-252.	18.8	228
59	Scenarios in Global Environmental Assessments: Key characteristics and lessons for future use. Global Environmental Change, 2012, 22, 884-895.	7.8	225
60	Climate and socio-economic scenarios for climate change research and assessment: reconciling the new with the old. Climatic Change, 2014, 122, 415-429.	3.6	225
61	Climate change impacts on renewable energy supply. Nature Climate Change, 2021, 11, 119-125.	18.8	218
62	From Planetary Boundaries to national fair shares of the global safe operating space â€” How can the scales be bridged?. Global Environmental Change, 2016, 40, 60-72.	7.8	213
63	Exploring SSP land-use dynamics using the IMAGE model: Regional and gridded scenarios of land-use change and land-based climate change mitigation. Global Environmental Change, 2018, 48, 119-135.	7.8	202
64	Downscaling drivers of global environmental change: Enabling use of global SRES scenarios at the national and grid levels. Global Environmental Change, 2007, 17, 114-130.	7.8	201
65	Model projections for household energy use in developing countries. Energy, 2012, 37, 601-615.	8.8	199
66	Long-term model-based projections of energy use and CO2 emissions from the global steel and cement industries. Resources, Conservation and Recycling, 2016, 112, 15-36.	10.8	196
67	Land-use emissions play a critical role in land-based mitigation for Paris climate targets. Nature Communications, 2018, 9, 2938.	12.8	194
68	A special issue on the RCPs. Climatic Change, 2011, 109, 1-4.	3.6	192
69	Environmental co-benefits and adverse side-effects of alternative power sector decarbonization strategies. Nature Communications, 2019, 10, 5229.	12.8	188
70	High-resolution assessment of global technical and economic hydropower potential. Nature Energy, 2017, 2, 821-828.	39.5	186
71	Projecting Global Biodiversity Indicators under Future Development Scenarios. Conservation Letters, 2016, 9, 5-13.	5.7	182
72	Impacts of climate change on energy systems in global and regional scenarios. Nature Energy, 2020, 5, 794-802.	39.5	180

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73	The Economics of Low Stabilization: Model Comparison of Mitigation Strategies and Costs. <i>Energy Journal</i> , 2010, 31, 11-48.	1.7	179
74	A new scenario framework for climate change research: background, process, and future directions. <i>Climatic Change</i> , 2014, 122, 363-372.	3.6	169
75	Comparison of top-down and bottom-up estimates of sectoral and regional greenhouse gas emission reduction potentials. <i>Energy Policy</i> , 2009, 37, 5125-5139.	8.8	163
76	Assessing the land resourceâ€“food price nexus of the Sustainable Development Goals. <i>Science Advances</i> , 2016, 2, e1501499.	10.3	162
77	Afforestation for climate change mitigation: Potentials, risks and tradeâ€“offs. <i>Global Change Biology</i> , 2020, 26, 1576-1591.	9.5	162
78	The role of negative CO ₂ emissions for reaching 2Â° insights from integrated assessment modelling. <i>Climatic Change</i> , 2013, 118, 15-27.	3.6	159
79	Post-2020 climate agreements in the major economies assessed in the light of global models. <i>Nature Climate Change</i> , 2015, 5, 119-126.	18.8	158
80	Contribution of N ₂ O to the greenhouse gas balance of firstâ€“generation biofuels. <i>Global Change Biology</i> , 2009, 15, 1-23.	9.5	157
81	Indirect land use change: review of existing models and strategies for mitigation. <i>Biofuels</i> , 2012, 3, 87-100.	2.4	155
82	Bioenergy in energy transformation and climate management. <i>Climatic Change</i> , 2014, 123, 477-493.	3.6	154
83	The implications of climate policy for the impacts of climate change on global water resources. <i>Global Environmental Change</i> , 2011, 21, 592-603.	7.8	152
84	A multi-model assessment of food security implications of climate change mitigation. <i>Nature Sustainability</i> , 2019, 2, 386-396.	23.7	152
85	Integrated assessment of biomass supply and demand in climate change mitigation scenarios. <i>Global Environmental Change</i> , 2019, 54, 88-101.	7.8	151
86	The climate change mitigation potential of bioenergy with carbon capture and storage. <i>Nature Climate Change</i> , 2020, 10, 1023-1029.	18.8	149
87	Impacts of future land cover changes on atmospheric CO ₂ and climate. <i>Global Biogeochemical Cycles</i> , 2005, 19, n/a-n/a.	4.9	148
88	Future bio-energy potential under various natural constraints. <i>Energy Policy</i> , 2009, 37, 4220-4230.	8.8	147
89	Ecological footprints of Benin, Bhutan, Costa Rica and the Netherlands. <i>Ecological Economics</i> , 2000, 34, 115-130.	5.7	141
90	Climate policy through changing consumption choices: Options and obstacles for reducing greenhouse gas emissions. <i>Global Environmental Change</i> , 2014, 25, 5-15.	7.8	141

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91	Pathways to achieve a set of ambitious global sustainability objectives by 2050: Explorations using the IMAGE integrated assessment model. <i>Technological Forecasting and Social Change</i> , 2015, 98, 303-323.	11.6	141
92	Land-use transition for bioenergy and climate stabilization: model comparison of drivers, impacts and interactions with other land use based mitigation options. <i>Climatic Change</i> , 2014, 123, 495-509.	3.6	140
93	Temperature increase of 21st century mitigation scenarios. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 15258-15262.	7.1	139
94	Changes in Nature's Balance Sheet: Model-based Estimates of Future Worldwide Ecosystem Services. <i>Ecology and Society</i> , 2005, 10, .	2.3	138
95	Research priorities for negative emissions. <i>Environmental Research Letters</i> , 2016, 11, 115007.	5.2	138
96	Scenarios for Demand Growth of Metals in Electricity Generation Technologies, Cars, and Electronic Appliances. <i>Environmental Science & Technology</i> , 2018, 52, 4950-4959.	10.0	137
97	When the Background Matters: Using Scenarios from Integrated Assessment Models in Prospective Life Cycle Assessment. <i>Journal of Industrial Ecology</i> , 2020, 24, 64-79.	5.5	134
98	Making or breaking climate targets: The AMPERE study on staged accession scenarios for climate policy. <i>Technological Forecasting and Social Change</i> , 2015, 90, 24-44.	11.6	132
99	Multiscale scenarios for nature futures. <i>Nature Ecology and Evolution</i> , 2017, 1, 1416-1419.	7.8	131
100	Implications of various effort-sharing approaches for national carbon budgets and emission pathways. <i>Climatic Change</i> , 2020, 162, 1805-1822.	3.6	131
101	Long-term reduction potential of non-CO2 greenhouse gases. <i>Environmental Science and Policy</i> , 2007, 10, 85-103.	4.9	130
102	How well do integrated assessment models simulate climate change?. <i>Climatic Change</i> , 2011, 104, 255-285.	3.6	127
103	Projections of the availability and cost of residues from agriculture and forestry. <i>GCB Bioenergy</i> , 2016, 8, 456-470.	5.6	127
104	Developing multiscale and integrative natureâ€“people scenarios using the Nature Futures Framework. <i>People and Nature</i> , 2020, 2, 1172-1195.	3.7	127
105	Analysing interactions among Sustainable Development Goals with Integrated Assessment Models. <i>Global Transitions</i> , 2019, 1, 210-225.	4.1	126
106	Limited emission reductions from fuel subsidy removal except in energy-exporting regions. <i>Nature</i> , 2018, 554, 229-233.	27.8	125
107	Exploring the ancillary benefits of the Kyoto Protocol for air pollution in Europe. <i>Energy Policy</i> , 2006, 34, 444-460.	8.8	124
108	Pathways for balancing CO2 emissions and sinks. <i>Nature Communications</i> , 2017, 8, 14856.	12.8	122

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109	Interaction of consumer preferences and climate policies in the global transition to low-carbon vehicles. <i>Nature Energy</i> , 2018, 3, 664-673.	39.5	122
110	Global resource potential of seasonal pumped hydropower storage for energy and water storage. <i>Nature Communications</i> , 2020, 11, 947.	12.8	121
111	Scientific evidence on the political impact of the Sustainable Development Goals. <i>Nature Sustainability</i> , 2022, 5, 795-800.	23.7	121
112	Model projections for household energy use in India. <i>Energy Policy</i> , 2011, 39, 7747-7761.	8.8	120
113	Uncertain Environmental Footprint of Current and Future Battery Electric Vehicles. <i>Environmental Science & Technology</i> , 2018, 52, 4989-4995.	10.0	117
114	Long-term perspectives on world metal use—a system-dynamics model. <i>Resources Policy</i> , 1999, 25, 239-255.	9.6	116
115	Pathways to achieve universal household access to modern energy by 2030. <i>Environmental Research Letters</i> , 2013, 8, 024015.	5.2	114
116	Life cycle environmental and cost comparison of current and future passenger cars under different energy scenarios. <i>Applied Energy</i> , 2020, 269, 115021.	10.1	114
117	Societal Transformations in Models for Energy and Climate Policy: The Ambitious Next Step. <i>One Earth</i> , 2019, 1, 423-433.	6.8	113
118	Global energy sector emission reductions and bioenergy use: overview of the bioenergy demand phase of the EMF-33 model comparison. <i>Climatic Change</i> , 2020, 163, 1553-1568.	3.6	112
119	The Future of Vascular Plant Diversity Under Four Global Scenarios. <i>Ecology and Society</i> , 2006, 11, .	2.3	111
120	Modeling Energy and Development: An Evaluation of Models and Concepts. <i>World Development</i> , 2008, 36, 2801-2821.	4.9	110
121	Looking under the hood: A comparison of techno-economic assumptions across national and global integrated assessment models. <i>Energy</i> , 2019, 172, 1254-1267.	8.8	107
122	Diagnostic indicators for integrated assessment models of climate policy. <i>Technological Forecasting and Social Change</i> , 2015, 90, 45-61.	11.6	104
123	Multi-gas scenarios to stabilize radiative forcing. <i>Energy Economics</i> , 2006, 28, 102-120.	12.1	103
124	WHAT DOES THE 2°C TARGET IMPLY FOR A GLOBAL CLIMATE AGREEMENT IN 2020? THE LIMITS STUDY ON DURBAN PLATFORM SCENARIOS. <i>Climate Change Economics</i> , 2013, 04, 1340008.	5.0	103
125	Cost and attainability of meeting stringent climate targets without overshoot. <i>Nature Climate Change</i> , 2021, 11, 1063-1069.	18.8	102
126	Oil and natural gas prices and greenhouse gas emission mitigation. <i>Energy Policy</i> , 2009, 37, 4797-4808.	8.8	100

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127	The Copenhagen Accord: abatement costs and carbon prices resulting from the submissions. <i>Environmental Science and Policy</i> , 2011, 14, 28-39.	4.9	100
128	Impact of future land use and land cover changes on atmospheric chemistry–climate interactions. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	99
129	Anticipating futures through models: the rise of Integrated Assessment Modelling in the climate science-policy interface since 1970. <i>Global Environmental Change</i> , 2020, 65, 102191.	7.8	99
130	Assessing current and future techno-economic potential of concentrated solar power and photovoltaic electricity generation. <i>Energy</i> , 2015, 89, 739-756.	8.8	98
131	Simulating the Earth system response to negative emissions. <i>Environmental Research Letters</i> , 2016, 11, 095012.	5.2	98
132	Modelling global material stocks and flows for residential and service sector buildings towards 2050. <i>Journal of Cleaner Production</i> , 2020, 245, 118658.	9.3	98
133	An evaluation of the global potential of bioenergy production on degraded lands. <i>GCB Bioenergy</i> , 2012, 4, 130-147.	5.6	96
134	Global and regional abatement costs of Nationally Determined Contributions (NDCs) and of enhanced action to levels well below 2 Å°C and 1.5 Å°C. <i>Environmental Science and Policy</i> , 2017, 71, 30-40.	4.9	96
135	Multi-gas Emissions Pathways to Meet Climate Targets. <i>Climatic Change</i> , 2006, 75, 151-194.	3.6	95
136	Open discussion of negative emissions is urgently needed. <i>Nature Energy</i> , 2017, 2, 902-904.	39.5	94
137	Projecting terrestrial biodiversity intactness with GLOBIO 4. <i>Global Change Biology</i> , 2020, 26, 760-771.	9.5	94
138	Uncertainty in Carbon Capture and Storage (CCS) deployment projections: a cross-model comparison exercise. <i>Climatic Change</i> , 2014, 123, 461-476.	3.6	93
139	The use of scenarios as the basis for combined assessment of climate change mitigation and adaptation. <i>Global Environmental Change</i> , 2011, 21, 575-591.	7.8	91
140	Scenarios of biodiversity loss in southern Africa in the 21st century. <i>Global Environmental Change</i> , 2008, 18, 296-309.	7.8	90
141	Aligning corporate greenhouse-gas emissions targets with climate goals. <i>Nature Climate Change</i> , 2015, 5, 1057-1060.	18.8	90
142	Exploring past and future changes in the ecological footprint for world regions. <i>Ecological Economics</i> , 2005, 52, 43-62.	5.7	88
143	Sensitivity of projected long-term CO ₂ emissions across the Shared Socioeconomic Pathways. <i>Nature Climate Change</i> , 2017, 7, 113-117.	18.8	85
144	Adaptation in integrated assessment modeling: where do we stand?. <i>Climatic Change</i> , 2010, 99, 383-402.	3.6	84

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145	Pathways limiting warming to 1.5°C: a tale of turning around in no time?. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20160457.	3.4	84
146	Identifying a Safe and Just Corridor for People and the Planet. Earth's Future, 2021, 9, e2020EF001866.	6.3	84
147	Research priorities in land use and land cover change for the Earth system and integrated assessment modelling. International Journal of Climatology, 2010, 30, 2118-2128.	3.5	83
148	The relationship between short-term emissions and long-term concentration targets. Climatic Change, 2011, 104, 793-801.	3.6	83
149	Land-based mitigation in climate stabilization. Energy Economics, 2012, 34, 365-380.	12.1	83
150	Model-based scenarios for rural electrification in developing countries. Energy, 2012, 38, 386-397.	8.8	83
151	Integrating Global Climate Change Mitigation Goals with Other Sustainability Objectives: A Synthesis. Annual Review of Environment and Resources, 2015, 40, 363-394.	13.4	83
152	Energy and emission scenarios for China in the 21st century—exploration of baseline development and mitigation options. Energy Policy, 2003, 31, 369-387.	8.8	82
153	Evaluating the use of biomass energy with carbon capture and storage in low emission scenarios. Environmental Research Letters, 2018, 13, 044014.	5.2	81
154	The role of the discount rate for emission pathways and negative emissions. Environmental Research Letters, 2019, 14, 104008.	5.2	80
155	Integrated scenarios to support analysis of the food–energy–water nexus. Nature Sustainability, 2019, 2, 1132-1141.	23.7	79
156	Climate change under aggressive mitigation: the ENSEMBLES multi-model experiment. Climate Dynamics, 2011, 37, 1975-2003.	3.8	75
157	An energy vision: the transformation towards sustainability—interconnected challenges and solutions. Current Opinion in Environmental Sustainability, 2012, 4, 18-34.	6.3	75
158	Understanding the contribution of non-carbon dioxide gases in deep mitigation scenarios. Global Environmental Change, 2015, 33, 142-153.	7.8	75
159	Mapping the climate change challenge. Nature Climate Change, 2016, 6, 663-668.	18.8	75
160	A comprehensive view on climate change: coupling of earth system and integrated assessment models. Environmental Research Letters, 2012, 7, 024012.	5.2	74
161	Global travel within the 2°C climate target. Energy Policy, 2012, 45, 152-166.	8.8	74
162	CO2 emission mitigation and fossil fuel markets: Dynamic and international aspects of climate policies. Technological Forecasting and Social Change, 2015, 90, 243-256.	11.6	74

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163	The role of decentralized systems in providing universal electricity access in Sub-Saharan Africa – A model-based approach. <i>Energy</i> , 2017, 139, 184-195.	8.8	74
164	Abatement costs of post-Kyoto climate regimes. <i>Energy Policy</i> , 2005, 33, 2138-2151.	8.8	73
165	Global impacts of surface ozone changes on crop yields and land use. <i>Atmospheric Environment</i> , 2015, 106, 11-23.	4.1	73
166	Multi-gas emission envelopes to meet greenhouse gas concentration targets: Costs versus certainty of limiting temperature increase. <i>Global Environmental Change</i> , 2007, 17, 260-280.	7.8	72
167	A multi-model assessment of the co-benefits of climate mitigation for global air quality. <i>Environmental Research Letters</i> , 2016, 11, 124013.	5.2	72
168	Exploring the implications of lifestyle change in 2 °C mitigation scenarios using the IMAGE integrated assessment model. <i>Technological Forecasting and Social Change</i> , 2016, 102, 309-319.	11.6	72
169	Pathways for agriculture and forestry to contribute to terrestrial biodiversity conservation: A global scenario-study. <i>Biological Conservation</i> , 2018, 221, 137-150.	4.1	72
170	Decarbonising the critical sectors of aviation, shipping, road freight and industry to limit warming to 1.5 °C. <i>Climate Policy</i> , 2021, 21, 455-474.	5.1	72
171	The Consistency of IPCC's SRES Scenarios to 1990–2000 Trends and Recent Projections. <i>Climatic Change</i> , 2006, 75, 9-46.	3.6	71
172	Regional abatement action and costs under allocation schemes for emission allowances for achieving low CO ₂ -equivalent concentrations. <i>Climatic Change</i> , 2008, 90, 243-268.	3.6	67
173	BEYOND 2020 – STRATEGIES AND COSTS FOR TRANSFORMING THE EUROPEAN ENERGY SYSTEM. <i>Climate Change Economics</i> , 2013, 04, 1340001.	5.0	67
174	Unpacking the nexus: Different spatial scales for water, food and energy. <i>Global Environmental Change</i> , 2018, 48, 22-31.	7.8	67
175	Will climate change affect ectoparasite species ranges?. <i>Global Ecology and Biogeography</i> , 2006, 15, 486-497.	5.8	66
176	Misrepresentation of the IPCC CO ₂ emission scenarios. <i>Nature Geoscience</i> , 2010, 3, 376-377.	12.9	66
177	The potential role of hydrogen in energy systems with and without climate policy. <i>International Journal of Hydrogen Energy</i> , 2007, 32, 1655-1672.	7.1	65
178	Downscaling socioeconomic and emissions scenarios for global environmental change research: a review. <i>Wiley Interdisciplinary Reviews: Climate Change</i> , 2010, 1, 393-404.	8.1	64
179	The effects of adaptation and mitigation on coastal flood impacts during the 21st century. An application of the DIVA and IMAGE models. <i>Climatic Change</i> , 2013, 117, 783-794.	3.6	64
180	The impact of near-term climate policy choices on technology and emission transition pathways. <i>Technological Forecasting and Social Change</i> , 2015, 90, 73-88.	11.6	64

#	ARTICLE	IF	CITATIONS
181	Allocating planetary boundaries to large economies: Distributional consequences of alternative perspectives on distributive fairness. <i>Global Environmental Change</i> , 2020, 60, 102017.	7.8	64
182	Global projections for anthropogenic reactive nitrogen emissions to the atmosphere: an assessment of scenarios in the scientific literature. <i>Current Opinion in Environmental Sustainability</i> , 2011, 3, 359-369.	6.3	63
183	Long-term water demand for electricity, industry and households. <i>Environmental Science and Policy</i> , 2016, 55, 75-86.	4.9	63
184	Exploring IMAGE model scenarios that keep greenhouse gas radiative forcing below 3W/m ² in 2100. <i>Energy Economics</i> , 2010, 32, 1105-1120.	12.1	62
185	Energy demand and emissions of the non-energy sector. <i>Energy and Environmental Science</i> , 2014, 7, 482-498.	30.8	62
186	A protocol for an intercomparison of biodiversity and ecosystem services models using harmonized land-use and climate scenarios. <i>Geoscientific Model Development</i> , 2018, 11, 4537-4562.	3.6	61
187	Moving toward Net-Zero Emissions Requires New Alliances for Carbon Dioxide Removal. <i>One Earth</i> , 2020, 3, 145-149.	6.8	61
188	Critical adjustment of land mitigation pathways for assessing countries' climate progress. <i>Nature Climate Change</i> , 2021, 11, 425-434.	18.8	61
189	Enhancing global climate policy ambition towards a 1.5°C stabilization: a short-term multi-model assessment. <i>Environmental Research Letters</i> , 2018, 13, 044039.	5.2	60
190	THE DISTRIBUTION OF THE MAJOR ECONOMIES' EFFORT IN THE DURBAN PLATFORM SCENARIOS. <i>Climate Change Economics</i> , 2013, 04, 1340009.	5.0	59
191	A physically-based model of long-term food demand. <i>Global Environmental Change</i> , 2017, 45, 47-62.	7.8	59
192	Towards an equitable global climate change regime: compatibility with Article 2 of the Climate Change Convention and the link with sustainable development. <i>Climate Policy</i> , 2002, 2, 211-230.	5.1	58
193	Comparison and interactions between the long-term pursuit of energy independence and climate policies. <i>Nature Energy</i> , 2016, 1, .	39.5	58
194	Peaking profiles for achieving long-term temperature targets with more likelihood at lower costs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 17931-17936.	7.1	57
195	Greenhouse gas emission curves for advanced biofuel supply chains. <i>Nature Climate Change</i> , 2017, 7, 920-924.	18.8	57
196	Trade-offs and synergies between universal electricity access and climate change mitigation in Sub-Saharan Africa. <i>Energy Policy</i> , 2018, 114, 355-366.	8.8	56
197	The scope for better industry representation in long-term energy models: Modeling the cement industry. <i>Applied Energy</i> , 2019, 240, 964-985.	10.1	56
198	Exploring the impact on cost and electricity production of high penetration levels of intermittent electricity in OECD Europe and the USA, results for wind energy. <i>Energy</i> , 2007, 32, 1381-1402.	8.8	55

#	ARTICLE	IF	CITATIONS
199	Conditional probabilistic estimates of 21st century greenhouse gas emissions based on the storylines of the IPCC-SRES scenarios. <i>Global Environmental Change</i> , 2008, 18, 635-654.	7.8	54
200	Model collaboration for the improved assessment of biomass supply, demand, and impacts. <i>GCB Bioenergy</i> , 2015, 7, 422-437.	5.6	54
201	Defining a sustainable development target space for 2030 and 2050. <i>One Earth</i> , 2022, 5, 142-156.	6.8	54
202	Uncertainty in the deployment of Carbon Capture and Storage (CCS): A sensitivity analysis to techno-economic parameter uncertainty. <i>International Journal of Greenhouse Gas Control</i> , 2014, 27, 81-102.	4.6	53
203	Carbon budgets and energy transition pathways. <i>Environmental Research Letters</i> , 2016, 11, 075002.	5.2	53
204	Copenhagen Accord Pledges imply higher costs for staying below 2°C warming. <i>Climatic Change</i> , 2012, 113, 551-561.	3.6	52
205	CO ₂ and albedo climate impacts of extratropical carbon and biomass plantations. <i>Global Biogeochemical Cycles</i> , 2006, 20, n/a-n/a.	4.9	50
206	Meeting radiative forcing targets under delayed participation. <i>Energy Economics</i> , 2009, 31, S152-S162.	12.1	50
207	Competing uses of biomass for energy and chemicals: implications for long-term global CO ₂ mitigation potential. <i>GCB Bioenergy</i> , 2015, 7, 1321-1334.	5.6	50
208	The role of residential rooftop photovoltaic in long-term energy and climate scenarios. <i>Applied Energy</i> , 2020, 279, 115705.	10.1	50
209	Analysing the costs and benefits of climate policy: Value judgements and scientific uncertainties. <i>Global Environmental Change</i> , 2008, 18, 412-424.	7.8	49
210	Assessing inter-sectoral climate change risks: the role of ISIMIP. <i>Environmental Research Letters</i> , 2017, 12, 010301.	5.2	49
211	Climate impact of transportation A model comparison. <i>Climatic Change</i> , 2013, 118, 595-608.	3.6	48
212	Improving Climate Change Mitigation Analysis: A Framework for Examining Feasibility. <i>One Earth</i> , 2020, 3, 325-336.	6.8	48
213	The costs of achieving climate targets and the sources of uncertainty. <i>Nature Climate Change</i> , 2020, 10, 329-334.	18.8	48
214	A global model for residential energy use: Uncertainty in calibration to regional data. <i>Energy</i> , 2010, 35, 269-282.	8.8	46
215	Climate extremes, land-climate feedbacks and land-use forcing at 1.5°C. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2018, 376, 20160450.	3.4	46
216	IPCC Sres Revisited: A Response. <i>Energy and Environment</i> , 2003, 14, 187-214.	4.6	45

#	ARTICLE	IF	CITATIONS
217	Exploring synergies between climate and air quality policies using long-term global and regional emission scenarios. <i>Atmospheric Environment</i> , 2016, 140, 577-591.	4.1	45
218	Interactions between climate change mitigation and adaptation: The case of hydropower in Brazil. <i>Energy</i> , 2018, 164, 1161-1177.	8.8	45
219	Aligning integrated assessment modelling with socio-technical transition insights: An application to low-carbon energy scenario analysis in Europe. <i>Technological Forecasting and Social Change</i> , 2020, 151, 119177.	11.6	45
220	Do recent emission trends imply higher emissions forever?. <i>Climatic Change</i> , 2008, 91, 237-248.	3.6	44
221	Postponing emission reductions from 2020 to 2030 increases climate risks and long-term costs. <i>Climatic Change</i> , 2010, 99, 313-320.	3.6	44
222	Comparing future patterns of energy system change in 2 °C scenarios with historically observed rates of change. <i>Global Environmental Change</i> , 2015, 35, 436-449.	7.8	42
223	A Global Analysis of Future Water Deficit Based On Different Allocation Mechanisms. <i>Water Resources Research</i> , 2018, 54, 5803-5824.	4.2	42
224	Shared socio-economic pathways extended for the Baltic Sea: exploring long-term environmental problems. <i>Regional Environmental Change</i> , 2019, 19, 1073-1086.	2.9	42
225	An assessment of the performance of scenarios against historical global emissions for IPCC reports. <i>Global Environmental Change</i> , 2021, 66, 102199.	7.8	42
226	Environmental effectiveness and economic consequences of fragmented versus universal regimes: what can we learn from model studies?. <i>International Environmental Agreements: Politics, Law and Economics</i> , 2009, 9, 39-62.	2.9	41
227	Representation of variable renewable energy sources in TIMER, an aggregated energy system simulation model. <i>Energy Economics</i> , 2017, 64, 600-611.	12.1	41
228	Low-emission pathways in 11 major economies: comparison of cost-optimal pathways and Paris climate proposals. <i>Climatic Change</i> , 2017, 142, 491-504.	3.6	41
229	Improved modelling of lifestyle changes in Integrated Assessment Models: Cross-disciplinary insights from methodologies and theories. <i>Energy Strategy Reviews</i> , 2019, 26, 100420.	7.3	41
230	Energy system developments and investments in the decisive decade for the Paris Agreement goals. <i>Environmental Research Letters</i> , 2021, 16, 074020.	5.2	41
231	Emission scenarios for a global hydrogen economy and the consequences for global air pollution. <i>Global Environmental Change</i> , 2011, 21, 983-994.	7.8	40
232	Long-term marginal abatement cost curves of non-CO2 greenhouse gases. <i>Environmental Science and Policy</i> , 2019, 99, 136-149.	4.9	40
233	Guidelines for Modeling and Reporting Health Effects of Climate Change Mitigation Actions. <i>Environmental Health Perspectives</i> , 2020, 128, 115001.	6.0	40
234	Following Sustainable Development in Relation to the North-South Dialogue: Ecosystem Health and Sustainability Indicators. <i>Ecotoxicology and Environmental Safety</i> , 1998, 40, 4-14.	6.0	39

#	ARTICLE	IF	CITATIONS
235	Implications of the international reduction pledges on long-term energy system changes and costs in China and India. <i>Energy Policy</i> , 2013, 63, 1032-1041.	8.8	39
236	Mid- and long-term climate projections for fragmented and delayed-action scenarios. <i>Technological Forecasting and Social Change</i> , 2015, 90, 257-268.	11.6	39
237	Multi-model comparison of the economic and energy implications for China and India in an international climate regime. <i>Mitigation and Adaptation Strategies for Global Change</i> , 2015, 20, 1335-1359.	2.1	39
238	The role of methane in future climate strategies: mitigation potentials and climate impacts. <i>Climatic Change</i> , 2020, 163, 1409-1425.	3.6	39
239	Net zero-emission pathways reduce the physical and economic risks of climate change. <i>Nature Climate Change</i> , 2021, 11, 1070-1076.	18.8	39
240	Emission allowances and mitigation costs of China and India resulting from different effort-sharing approaches. <i>Energy Policy</i> , 2012, 46, 116-134.	8.8	38
241	Biomass residues as twenty-first century bioenergy feedstock—a comparison of eight integrated assessment models. <i>Climatic Change</i> , 2020, 163, 1569-1586.	3.6	38
242	Scenario analysis for promoting clean cooking in Sub-Saharan Africa: Costs and benefits. <i>Energy</i> , 2020, 192, 116641.	8.8	38
243	Responses to technology and taxes in a simulated world. <i>Energy Economics</i> , 2004, 26, 579-601.	12.1	37
244	Global roll-out of comprehensive policy measures may aid in bridging emissions gap. <i>Nature Communications</i> , 2021, 12, 6419.	12.8	37
245	Influence of travel behavior on global CO ₂ emissions. <i>Transportation Research, Part A: Policy and Practice</i> , 2013, 50, 183-197.	4.2	36
246	Integrated assessment of international climate mitigation commitments outside the UNFCCC. <i>Global Environmental Change</i> , 2018, 48, 67-75.	7.8	36
247	Reconciling global sustainability targets and local action for food production and climate change mitigation. <i>Global Environmental Change</i> , 2019, 59, 101983.	7.8	36
248	Co-designing global target-seeking scenarios: A cross-scale participatory process for capturing multiple perspectives on pathways to sustainability. <i>Global Environmental Change</i> , 2020, 65, 102198.	7.8	36
249	Integrated assessment model diagnostics: key indicators and model evolution. <i>Environmental Research Letters</i> , 2021, 16, 054046.	5.2	36
250	Navigating the political: An analysis of political calibration of integrated assessment modelling in light of the 1.5°C goal. <i>Environmental Science and Policy</i> , 2022, 133, 193-202.	4.9	35
251	Long-term reductions in costs of controlling regional air pollution in Europe due to climate policy. <i>Environmental Science and Policy</i> , 2002, 5, 349-365.	4.9	34
252	Future impacts of environmental factors on achieving the SDG target on child mortality—a synergistic assessment. <i>Global Environmental Change</i> , 2019, 57, 101925.	7.8	34

#	ARTICLE	IF	CITATIONS
253	ENERGY SECURITY OF CHINA, INDIA, THE E.U. AND THE U.S. UNDER LONG-TERM SCENARIOS: RESULTS FROM SIX IAMs. <i>Climate Change Economics</i> , 2013, 04, 1340011.	5.0	33
254	Possible energy futures for Brazil and Latin America in conservative and stringent mitigation pathways up to 2050. <i>Technological Forecasting and Social Change</i> , 2015, 98, 186-210.	11.6	33
255	Progress and barriers in understanding and preventing indirect land-use change. <i>Biofuels, Bioproducts and Biorefining</i> , 2020, 14, 924-934.	3.7	33
256	Evaluating process-based integrated assessment models of climate change mitigation. <i>Climatic Change</i> , 2021, 166, 1.	3.6	33
257	Assessing uncertainties in global cropland futures using a conditional probabilistic modelling framework. <i>Earth System Dynamics</i> , 2016, 7, 893-915.	7.1	33
258	A methodology and implementation of automated emissions harmonization for use in Integrated Assessment Models. <i>Environmental Modelling and Software</i> , 2018, 105, 187-200.	4.5	32
259	Implications of climate change mitigation strategies on international bioenergy trade. <i>Climatic Change</i> , 2020, 163, 1639-1658.	3.6	32
260	Future energy system challenges for Africa: Insights from Integrated Assessment Models. <i>Energy Policy</i> , 2015, 86, 705-717.	8.8	31
261	Biogeophysical Impacts of Land-Use Change on Climate Extremes in Low-Emission Scenarios: Results From HAPPI-Land. <i>Earth's Future</i> , 2018, 6, 396-409.	6.3	31
262	Bioenergy technologies in long-run climate change mitigation: results from the EMF-33 study. <i>Climatic Change</i> , 2020, 163, 1603-1620.	3.6	31
263	Global climate targets and future consumption level: an evaluation of the required GHG intensity. <i>Environmental Research Letters</i> , 2013, 8, 014016.	5.2	30
264	Baseline projections for Latin America: base-year assumptions, key drivers and greenhouse emissions. <i>Energy Economics</i> , 2016, 56, 499-512.	12.1	30
265	Not all carbon dioxide emission scenarios are equally likely: a subjective expert assessment. <i>Climatic Change</i> , 2019, 155, 545-561.	3.6	30
266	EMF-33 insights on bioenergy with carbon capture and storage (BECCS). <i>Climatic Change</i> , 2020, 163, 1621-1637.	3.6	30
267	Energy Pathways for Sustainable Development. , 0, , 1205-1306.		29
268	The benefits of climate change mitigation in integrated assessment models: the role of the carbon cycle and climate component. <i>Climatic Change</i> , 2012, 113, 897-917.	3.6	29
269	A framework for modelling the complexities of food and water security under globalisation. <i>Earth System Dynamics</i> , 2018, 9, 103-118.	7.1	29
270	Advancing a toolkit of diverse futures approaches for global environmental assessments. <i>Ecosystems and People</i> , 2021, 17, 191-204.	3.2	29

#	ARTICLE	IF	CITATIONS
271	A framework for national scenarios with varying emission reductions. <i>Nature Climate Change</i> , 2021, 11, 472-480.	18.8	29
272	Managing the Low-Carbon Transition - From Model Results to Policies. <i>Energy Journal</i> , 2010, 31, 223-245.	1.7	29
273	Global long-term cost dynamics of offshore wind electricity generation. <i>Energy</i> , 2014, 76, 663-672.	8.8	28
274	Impact of the choice of emission metric on greenhouse gas abatement and costs. <i>Environmental Research Letters</i> , 2015, 10, 024001.	5.2	28
275	Economy-wide effects of coastal flooding due to sea level rise: a multi-model simultaneous treatment of mitigation, adaptation, and residual impacts. <i>Environmental Research Communications</i> , 2020, 2, 015002.	2.3	28
276	Using large ensembles of climate change mitigation scenarios for robust insights. <i>Nature Climate Change</i> , 2022, 12, 428-435.	18.8	28
277	Comparison of different climate regimes: the impact of broadening participation. <i>Energy Policy</i> , 2009, 37, 5351-5362.	8.8	27
278	Early action on Paris Agreement allows for more time to change energy systems. <i>Climatic Change</i> , 2017, 144, 165-179.	3.6	27
279	Interactions between social learning and technological learning in electric vehicle futures. <i>Environmental Research Letters</i> , 2018, 13, 124004.	5.2	27
280	Transport electrification: the effect of recent battery cost reduction on future emission scenarios. <i>Climatic Change</i> , 2018, 151, 95-108.	3.6	27
281	First forcing estimates from the future CMIP6 scenarios of anthropogenic aerosol optical properties and an associated Twomey effect. <i>Geoscientific Model Development</i> , 2019, 12, 989-1007.	3.6	27
282	Comparing transformation pathways across major economies. <i>Climatic Change</i> , 2020, 162, 1787-1803.	3.6	27
283	Land-based implications of early climate actions without global net-negative emissions. <i>Nature Sustainability</i> , 2021, 4, 1052-1059.	23.7	27
284	Long-term, consistent scenarios of emissions, deposition, and climate change in Europe. <i>Environmental Science and Policy</i> , 2002, 5, 273-305.	4.9	26
285	The potential role of hydrogen energy in India and Western Europe. <i>Energy Policy</i> , 2008, 36, 1649-1665.	8.8	26
286	The effect of different mitigation strategies on international financing of adaptation. <i>Environmental Science and Policy</i> , 2009, 12, 832-843.	4.9	26
287	Implications of greenhouse gas emission mitigation scenarios for the main Asian regions. <i>Energy Economics</i> , 2012, 34, S459-S469.	12.1	26
288	The impact of technology availability on the timing and costs of emission reductions for achieving long-term climate targets. <i>Climatic Change</i> , 2014, 123, 559-569.	3.6	26

#	ARTICLE	IF	CITATIONS
289	Actors, decision-making, and institutions in quantitative system modelling. <i>Technological Forecasting and Social Change</i> , 2020, 151, 119480.	11.6	26
290	Mapping the yields of lignocellulosic bioenergy crops from observations at the global scale. <i>Earth System Science Data</i> , 2020, 12, 789-804.	9.9	26
291	Comparing future patterns of energy system change in 2°C scenarios to expert projections. <i>Global Environmental Change</i> , 2018, 50, 201-211.	7.8	25
292	Understanding transition pathways by bridging modelling, transition and practice-based studies: Editorial introduction to the special issue. <i>Technological Forecasting and Social Change</i> , 2020, 151, 119665.	11.6	25
293	New Study For Climate Modeling, Analyses, and Scenarios. <i>Eos</i> , 2009, 90, 181-182.	0.1	24
294	Deep greenhouse gas emission reductions in Europe: Exploring different options. <i>Energy Policy</i> , 2013, 55, 152-164.	8.8	24
295	A New Toolkit for Developing Scenarios for Climate Change Research and Policy Analysis. <i>Environment</i> , 2014, 56, 6-16.	1.4	24
296	Integrated Solutions for the Water-Energy-Land Nexus: Are Global Models Rising to the Challenge?. <i>Water (Switzerland)</i> , 2019, 11, 2223.	2.7	24
297	A race to zero - Assessing the position of heavy industry in a global net-zero CO2 emissions context. <i>Energy and Climate Change</i> , 2021, 2, 100051.	4.4	24
298	The Belt and Road Initiative (BRI): What Will it Look Like in the Future?. <i>Technological Forecasting and Social Change</i> , 2022, 175, 121306.	11.6	24
299	Including adaptation costs and climate change damages in evaluating post-2012 burden-sharing regimes. <i>Mitigation and Adaptation Strategies for Global Change</i> , 2010, 15, 19-40.	2.1	23
300	Uncertainty from Model Calibration: Applying a New Method to Transport Energy Demand Modelling. <i>Environmental Modeling and Assessment</i> , 2010, 15, 175-188.	2.2	23
301	National contributions to climate change mitigation from agriculture: allocating a global target. <i>Climate Policy</i> , 2018, 18, 1271-1285.	5.1	23
302	Actors and governance in the transition toward universal electricity access in Sub-Saharan Africa. <i>Energy Policy</i> , 2020, 143, 111572.	8.8	23
303	Mitigation scenarios in a world oriented at sustainable development: the role of technology, efficiency and timing. <i>Climate Policy</i> , 2001, 1, 189-210.	5.1	22
304	Reducing global GHG emissions by replicating successful sector examples: the "good practice policies" scenario. <i>Climate Policy</i> , 2018, 18, 1103-1113.	5.1	22
305	Modeling forest plantations for carbon uptake with the LPJmL dynamic global vegetation model. <i>Earth System Dynamics</i> , 2019, 10, 617-630.	7.1	22
306	Co-benefits of black carbon mitigation for climate and air quality. <i>Climatic Change</i> , 2020, 163, 1519-1538.	3.6	22

#	ARTICLE	IF	CITATIONS
307	Global futures of trade impacting the challenge to decarbonize the international shipping sector. Energy, 2021, 237, 121547.	8.8	22
308	Bio-Energy Use and Low Stabilization Scenarios. Energy Journal, 2010, 31, 193-222.	1.7	22
309	Socio-economic impacts of low-carbon power generation portfolios: Strategies with and without CCS for the Netherlands. Applied Energy, 2016, 183, 257-277.	10.1	21
310	Transformative pathways – Using integrated assessment models more effectively to open up plausible and desirable low-carbon futures. Energy Research and Social Science, 2021, 80, 102220.	6.4	21
311	What do near-term observations tell us about long-term developments in greenhouse gas emissions?. Climatic Change, 2010, 103, 635-642.	3.6	20
312	Implications of alternative assumptions regarding future air pollution control in scenarios similar to the Representative Concentration Pathways. Atmospheric Environment, 2013, 79, 787-801.	4.1	20
313	Correction for Bouwman et al., Exploring global changes in nitrogen and phosphorus cycles in agriculture induced by livestock production over the 1900-2050 period. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 21195-21195.	7.1	20
314	IPCC emission scenarios: How did critiques affect their quality and relevance 1990–2022?. Global Environmental Change, 2022, 75, 102538.	7.8	20
315	Future global electricity demand load curves. Energy, 2022, 258, 124741.	8.8	20
316	If climate action becomes urgent: the importance of response times for various climate strategies. Climatic Change, 2013, 121, 473-486.	3.6	19
317	INTRODUCTION TO THE EMF28 STUDY ON SCENARIOS FOR TRANSFORMING THE EUROPEAN ENERGY SYSTEM. Climate Change Economics, 2013, 04, 1302001.	5.0	19
318	Strong time dependence of ocean acidification mitigation by atmospheric carbon dioxide removal. Nature Communications, 2019, 10, 5592.	12.8	19
319	Variability in historical emissions trends suggests a need for a wide range of global scenarios and regional analyses. Communications Earth & Environment, 2020, 1, .	6.8	19
320	Air quality and health implications of 1.5 °C–2 °C climate pathways under considerations of ageing population: a multi-model scenario analysis. Environmental Research Letters, 2021, 16, 045005.	5.2	19
321	Towards an equitable global climate change regime: compatibility with Article 2 of the Climate Change Convention and the link with sustainable development. Climate Policy, 2002, 2, 211-230.	5.1	18
322	A quantitative minimax regret approach to climate change: Does discounting still matter?. Ecological Economics, 2010, 70, 43-51.	5.7	18
323	Impact of fragmented emission reduction regimes on the energy market and on CO2 emissions related to land use: A case study with China and the European Union as first movers. Technological Forecasting and Social Change, 2015, 90, 220-229.	11.6	18
324	Global implications of crop-based bioenergy with carbon capture and storage for terrestrial vertebrate biodiversity. GCB Bioenergy, 2022, 14, 307-321.	5.6	18

#	ARTICLE	IF	CITATIONS
325	Efficiency improvement and technology choice for energy and emission reductions of the residential sector. <i>Energy</i> , 2022, 243, 122994.	8.8	18
326	Good practice policies to bridge the emissions gap in key countries. <i>Global Environmental Change</i> , 2022, 73, 102472.	7.8	18
327	Uncertainty and risk in climate projections for the 21st century: comparing mitigation to non-intervention scenarios. <i>Climatic Change</i> , 2010, 103, 399-422.	3.6	17
328	A MULTI-MODEL ANALYSIS OF POST-2020 MITIGATION EFFORTS OF FIVE MAJOR ECONOMIES. <i>Climate Change Economics</i> , 2013, 04, 1340012.	5.0	17
329	How well do integrated assessment models represent non-CO ₂ radiative forcing?. <i>Climatic Change</i> , 2015, 133, 565-582.	3.6	17
330	Alleviating inequality in climate policy costs: an integrated perspective on mitigation, damage and adaptation. <i>Environmental Research Letters</i> , 2016, 11, 074015.	5.2	17
331	Challenges in producing policy-relevant global scenarios of biodiversity and ecosystem services. <i>Global Ecology and Conservation</i> , 2020, 22, e00886.	2.1	17
332	Assessment of Sectoral Greenhouse Gas Emission Reduction Potentials for 2030. <i>Energies</i> , 2020, 13, 943.	3.1	17
333	Ten new insights in climate science 2020 – a horizon scan. <i>Global Sustainability</i> , 2021, 4, .	3.3	17
334	A MULTI-MODEL ANALYSIS OF THE REGIONAL AND SECTORAL ROLES OF BIOENERGY IN NEAR- AND LONG-TERM CO ₂ EMISSIONS REDUCTION. <i>Climate Change Economics</i> , 2013, 04, 1340014.	5.0	16
335	Non-Kyoto radiative forcing in long-run greenhouse gas emissions and climate change scenarios. <i>Climatic Change</i> , 2014, 123, 511-525.	3.6	16
336	Exploring resource efficiency for energy, land and phosphorus use: Implications for resource scarcity and the global environment. <i>Global Environmental Change</i> , 2016, 36, 21-34.	7.8	16
337	Taking some heat off the NDCs? The limited potential of additional short-lived climate forcers™ mitigation. <i>Climatic Change</i> , 2020, 163, 1443-1461.	3.6	16
338	Integrated Climate-Change Assessment Scenarios and Carbon Dioxide Removal. <i>One Earth</i> , 2020, 3, 166-172.	6.8	16
339	Global and regional aggregate damages associated with global warming of 1.5 to 4°C above pre-industrial levels. <i>Climatic Change</i> , 2021, 168, 1.	3.6	16
340	Deep CO ₂ emission reductions in a global bottom-up model approach. <i>Climate Policy</i> , 2015, 15, 253-271.	5.1	15
341	Low-carbon strategies towards 2050: Comparing ex-ante policy evaluation studies and national planning processes in Europe. <i>Environmental Science and Policy</i> , 2017, 78, 89-96.	4.9	15
342	Modeling the Effects of Future Growing Demand for Charcoal in the Tropics. <i>Frontiers in Environmental Science</i> , 2017, 5, .	3.3	15

#	ARTICLE	IF	CITATIONS
343	Impact of methane and black carbon mitigation on forcing and temperature: a multi-model scenario analysis. <i>Climatic Change</i> , 2020, 163, 1427-1442.	3.6	15
344	PPP Versus Mer: Searching for Answers in a Multi-Dimensional Debate. <i>Climatic Change</i> , 2006, 75, 47-57.	3.6	14
345	Near-linear cost increase to reduce climate-change risk. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 20621-20626.	7.1	14
346	On the optimality of 2°C targets and a decomposition of uncertainty. <i>Nature Communications</i> , 2021, 12, 2575.	12.8	14
347	Long history of IAM comparisons. <i>Nature Climate Change</i> , 2015, 5, 391-391.	18.8	13
348	Socio-economic impacts of future electricity generation scenarios in Europe: Potential costs and benefits of using CO ₂ Capture and Storage (CCS). <i>International Journal of Greenhouse Gas Control</i> , 2015, 42, 471-484.	4.6	13
349	Global and regional climate impacts of future aerosol mitigation in an RCP6.0-like scenario in EC-Earth. <i>Climatic Change</i> , 2016, 134, 1-14.	3.6	13
350	Integrated assessment of the role of bioenergy within the EU energy transition targets to 2050. <i>GCB Bioenergy</i> , 2022, 14, 157-172.	5.6	13
351	TRANSFORMING THE EUROPEAN ENERGY SYSTEM: MEMBER STATES' PROSPECTS WITHIN THE EU FRAMEWORK. <i>Climate Change Economics</i> , 2013, 04, 1340005.	5.0	12
352	The implications of carbon dioxide and methane exchange for the heavy mitigation RCP2.6 scenario under two metrics. <i>Environmental Science and Policy</i> , 2015, 51, 77-87.	4.9	12
353	Quantifying biodiversity impacts of climate change and bioenergy: the role of integrated global scenarios. <i>Regional Environmental Change</i> , 2015, 15, 961-971.	2.9	12
354	From global to national scenarios: Bridging different models to explore power generation decarbonisation based on insights from socio-technical transition case studies. <i>Technological Forecasting and Social Change</i> , 2020, 151, 119882.	11.6	12
355	Mitigation scenarios in a world oriented at sustainable development: the role of technology, efficiency and timing. <i>Climate Policy</i> , 2001, 1, 189-210.	5.1	11
356	A short note on integrated assessment modeling approaches: Rejoinder to the review of "Making or breaking climate targets" The AMPERE study on staged accession scenarios for climate policy. <i>Technological Forecasting and Social Change</i> , 2015, 99, 273-276.	11.6	11
357	Decomposition analysis of per capita emissions: a tool for assessing consumption changes and technology changes within scenarios. <i>Environmental Research Communications</i> , 2021, 3, 015004.	2.3	11
358	Quantifying synergies and trade-offs in the global water-land-food-climate nexus using a multi-model scenario approach. <i>Environmental Research Letters</i> , 2022, 17, 045004.	5.2	11
359	Targeted Green Recovery Measures in a Post-COVID-19 World Enable the Energy Transition. <i>Frontiers in Climate</i> , 0, 4, .	2.8	11
360	Quantifying risks avoided by limiting global warming to 1.5 or 2°C above pre-industrial levels. <i>Climatic Change</i> , 2022, 172, .	3.6	11

#	ARTICLE	IF	CITATIONS
361	Ecological footprints: reply to A.R.B Ferguson. Ecological Economics, 2001, 37, 2-3.	5.7	10
362	INTRODUCING THE LIMITS SPECIAL ISSUE. Climate Change Economics, 2013, 04, 1302002.	5.0	10
363	Costs and benefits of differences in the timing of greenhouse gas emission reductions. Mitigation and Adaptation Strategies for Global Change, 2016, 21, 1165-1179.	2.1	10
364	Integrating energy access, efficiency and renewable energy policies in sub-Saharan Africa: a model-based analysis. Environmental Research Letters, 2020, 15, 125010.	5.2	10
365	Developing scenarios in the context of the Paris Agreement and application in the integrated assessment model IMAGE: A framework for bridging the policy-modelling divide. Environmental Science and Policy, 2022, 135, 104-116.	4.9	10
366	Sharing developed countries' post-2012 greenhouse gas emission reductions based on comparable efforts. Mitigation and Adaptation Strategies for Global Change, 2010, 15, 433-465.	2.1	9
367	How climate metrics affect global mitigation strategies and costs: a multi-model study. Climatic Change, 2016, 136, 203-216.	3.6	9
368	Improving material projections in Integrated Assessment Models: The use of a stock-based versus a flow-based approach for the iron and steel industry. Energy, 2022, 239, 122434.	8.8	8
369	Using Decomposition Analysis to Determine the Main Contributing Factors to Carbon Neutrality across Sectors. Energies, 2022, 15, 132.	3.1	8
370	Global biomass supply modeling for long-run management of the climate system. Climatic Change, 2022, 172, .	3.6	8
371	Investment needs to achieve SDGs: An overview. , 2022, 1, e0000020.		8
372	An evaluation of the level of ambition and implications of the Bush Climate Change Initiative. Climate Policy, 2002, 2, 293-301.	5.1	7
373	Signal detection in global mean temperatures after 'Paris': an uncertainty and sensitivity analysis. Climate of the Past, 2018, 14, 139-155.	3.4	7
374	Can global models provide insights into regional mitigation strategies? A diagnostic model comparison study of bioenergy in Brazil. Climatic Change, 2022, 170, 1.	3.6	7
375	Translating Global Integrated Assessment Model Output into Lifestyle Change Pathways at the Country and Household Level. Energies, 2022, 15, 1650.	3.1	7
376	Integration of future water scarcity and electricity supply into prospective LCA: Application to the assessment of water desalination for the steel industry. Journal of Industrial Ecology, 2022, 26, 1182-1194.	5.5	7
377	Regional differences in mitigation strategies: an example for passenger transport. Regional Environmental Change, 2015, 15, 987-995.	2.9	6
378	Future aerosol emissions: a multi-model comparison. Climatic Change, 2016, 138, 13-24.	3.6	6

#	ARTICLE	IF	CITATIONS
379	Data for long-term marginal abatement cost curves of non-CO2 greenhouse gases. Data in Brief, 2019, 25, 104334.	1.0	6
380	Regional variation in the effectiveness of methane-based and land-based climate mitigation options. Earth System Dynamics, 2021, 12, 513-544.	7.1	6
381	A Sensitivity Analysis of the Global Deployment of CCS to the Cost of Storage and Storage Capacity Estimates. Energy Procedia, 2013, 37, 7537-7544.	1.8	5
382	An overview of the Energy Modeling Forum 33rd study: assessing large-scale global bioenergy deployment for managing climate change. Climatic Change, 2020, 163, 1539-1551.	3.6	5
383	Trade-offs between water needs for food, utilities, and the environmentâ€™a nexus quantification at different scales. Environmental Research Letters, 2021, 16, 115003.	5.2	5
384	Development of chemical emission scenarios using the Shared Socio-economic Pathways. Science of the Total Environment, 2022, 836, 155530.	8.0	5
385	Disentangling the ranges: climate policy scenarios for China and India. Regional Environmental Change, 2015, 15, 1025-1033.	2.9	4
386	The Energy Modeling Forum (EMF)-30 study on short-lived climate forcers: introduction and overview. Climatic Change, 2020, 163, 1399-1408.	3.6	4
387	The contribution of bioenergy to the decarbonization of transport: a multi-model assessment. Climatic Change, 2022, 170, 1.	3.6	4
388	Avoiding hazards of best-guess climate scenarios. Nature, 2006, 440, 740-740.	27.8	3
389	Contribution of N2O to the greenhouse gas balance of first-generation biofuels. Global Change Biology, 2009, 15, 780-780.	9.5	3
390	Costs of avoiding net negative emissions under a carbon budget. Environmental Research Letters, 2021, 16, 064071.	5.2	3
391	Reply to: Why fossil fuel producer subsidies matter. Nature, 2020, 578, E5-E7.	27.8	3
392	Climate change impacts on the energy system: a model comparison. Environmental Research Letters, 2022, 17, 034036.	5.2	3
393	Exploring the bargaining space within international climate negotiations based on political, economic and environmental considerations. Energy Policy, 2011, 39, 7361-7371.	8.8	2
394	Indicators for Energy Security. , 0, , .		1
395	Environmental effectiveness and economic consequences of fragmented versus universal regimes. , 0, , 35-59.		1
396	Costs, benefits and interlinkages between adaptation and mitigation. , 0, , 235-254.		1

#	ARTICLE	IF	CITATIONS
397	Regional Carbon Budgets: Do They Matter for Climate Policy?. SSRN Electronic Journal, 0, , .	0.4	1
398	Regional Low-Emission Pathways from Global Models. SSRN Electronic Journal, 0, , .	0.4	1
399	The Impact of Socio-Economic Inertia and Restrictions on Net-Negative Emissions on Cost-Effective Carbon Price Pathways. Frontiers in Climate, 2021, 3, .	2.8	1
400	The albedo climate impacts of biomass and carbon plantations compared with the CO2 impact. , 0, , 72-83.		0
401	The contribution of N2O to the greenhouse gas balance of first-generation biofuels. Global Change Biology, 2009, 16, 2400-2400.	9.5	0
402	Temperature increase of 21st century mitigation scenarios. IOP Conference Series: Earth and Environmental Science, 2009, 6, 492012.	0.3	0
403	Application of experience curves and learning to other fields. , 2020, , 49-62.		0
404	The Ecological Footprint as Indicator for Sustainable Development – Results of an International Case Study. , 2002, , .		0
405	Impact of the Choice of Emission Metric on Greenhouse Gas Abatement and Costs. , 2016, , 221-241.		0
406	Actors, Decision-Making, and Institutions in Quantitative System Modelling. SSRN Electronic Journal, 0, , .	0.4	0