Laurent Drouet

List of Publications by Year
in descending order

62 papers	7,977 citations	172457 29 h-index	155660 55 g-index
71 all docs	71 docs citations	71 times ranked	8089 citing authors

#	Article	IF	Citations
1	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
2	Scenarios towards limiting global mean temperature increase below 1.5 Â°C. Nature Climate Change, 2018, 8, 325-332.	18.8	795
3	Country-level social cost of carbon. Nature Climate Change, 2018, 8, 895-900.	18.8	479
4	Residual fossil CO2 emissions in 1.5â€“2â€‰Â°C pathways. Nature Climate Change, 2018, 8, 626-633.	18.8	380
5	Energy investment needs for fulfilling the Paris Agreement and achieving the Sustainable Development Goals. Nature Energy, 2018, 3, 589-599.	39.5	377
6	Contribution of the land sector to a 1.5 Â°C world. Nature Climate Change, 2019, 9, 817-828.	18.8	301
7	Future air pollution in the Shared Socio-economic Pathways. Global Environmental Change, 2017, 42, 346-358.	7.8	277
8	An inter-model assessment of the role of direct air capture in deep mitigation pathways. Nature Communications, 2019, 10, 3277.	12.8	267
9	Shared Socio-Economic Pathways of the Energy Sector â€“ Quantifying the Narratives. Global Environmental Change, 2017, 42, 316-330.	7.8	247
10	Taking stock of national climate policies to evaluate implementation of the Paris Agreement. Nature Communications, 2020, 11, 2096.	12.8	241
11	A multi-model assessment of food security implications of climate change mitigation. Nature Sustainability, 2019, 2, 386-396.	23.7	152
12	Implications of various effort-sharing approaches for national carbon budgets and emission pathways. Climatic Change, 2020, 162, 1805-1822.	3.6	131
13	Looking under the hood: A comparison of techno-economic assumptions across national and global integrated assessment models. Energy, 2019, 172, 1254-1267.	8.8	107
14	Cost and attainability of meeting stringent climate targets without overshoot. Nature Climate Change, 2021, 11, 1063-1069.	18.8	102
15	Combination of equilibrium models and hybrid life cycle - inputâ€“output analysis to predict the environmental impacts of energy policy scenarios. Applied Energy, 2015, 145, 234-245.	10.1	95
16	The role of the discount rate for emission pathways and negative emissions. Environmental Research Letters, 2019, 14, 104008.	5.2	80
17	A multi-model assessment of the co-benefits of climate mitigation for global air quality. Environmental Research Letters, 2016, 11, 124013.	5.2	72
18	Selection of climate policies under the uncertainties in the Fifth Assessment Report of the IPCC. Nature Climate Change, 2015, 5, 937-940.	18.8	67

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19	Enhancing global climate policy ambition towards a 1.5â€‰Â°C stabilization: a short-term multi-model assessment. Environmental Research Letters, 2018, 13, 044039.	5.2	60
20	Assessing the Feasibility of Global Long-Term Mitigation Scenarios. Energies, 2017, 10, 89.	3.1	51
21	Meeting well-below 2Â°C target would increase energy sector jobs globally. One Earth, 2021, 4, 1026-1036.	6.8	44
22	Low-emission pathways in 11 major economies: comparison of cost-optimal pathways and Paris climate proposals. Climatic Change, 2017, 142, 491-504.	3.6	41
23	Energy system developments and investments in the decisive decade for the Paris Agreement goals. Environmental Research Letters, 2021, 16, 074020.	5.2	41
24	The role of methane in future climate strategies: mitigation potentials and climate impacts. Climatic Change, 2020, 163, 1409-1425.	3.6	39
25	Net zero-emission pathways reduce the physical and economic risks of climate change. Nature Climate Change, 2021, 11, 1070-1076.	18.8	39
26	The WITCH 2016 Model - Documentation and Implementation of the Shared Socioeconomic Pathways. SSRN Electronic Journal, 0, , .	0.4	37
27	Global roll-out of comprehensive policy measures may aid in bridging emissions gap. Nature Communications, 2021, 12, 6419.	12.8	37
28	Integrated assessment model diagnostics: key indicators and model evolution. Environmental Research Letters, 2021, 16, 054046.	5.2	36
29	Internalising health-economic impacts of air pollution into climate policy: a global modelling study. Lancet Planetary Health, The, 2022, 6, e40-e48.	11.4	35
30	Integrated perspective on translating biophysical to economic impacts of climate change. Nature Climate Change, 2021, 11, 563-572.	18.8	34
31	An oracle based method to compute a coupled equilibrium in a model of international climate policy. Computational Management Science, 2008, 5, 119-140.	1.3	28
32	Economy-wide effects of coastal flooding due to sea level rise: a multi-model simultaneous treatment of mitigation, adaptation, and residual impacts. Environmental Research Communications, 2020, 2, 015002.	2.3	28
33	Land-based implications of early climate actions without global net-negative emissions. Nature Sustainability, 2021, 4, 1052-1059.	23.7	27
34	Air quality and health implications of 1.5 Â°Câ€“2 Â°C climate pathways under considerations of ageing population: a multi-model scenario analysis. Environmental Research Letters, 2021, 16, 045005.	5.2	19
35	Future Global Air Quality Indices under Different Socioeconomic and Climate Assumptions. Sustainability, 2018, 10, 3645.	3.2	17
36	A Coupled Bottom-Up/Top-Down Model for GHG Abatement Scenarios in the Swiss Housing Sector. , 2005, , 27-61.		16

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37	The coupling of optimal economic growth and climate dynamics. Climatic Change, 2006, 79, 103-119.	3.6	16
38	Water demand for electricity in deep decarbonisation scenarios: a multi-model assessment. Climatic Change, 2018, 147, 91-106.	3.6	16
39	Taking some heat off the NDCs? The limited potential of additional short-lived climate forcersâ€™ mitigation. Climatic Change, 2020, 163, 1443-1461.	3.6	16
40	Impact of methane and black carbon mitigation on forcing and temperature: a multi-model scenario analysis. Climatic Change, 2020, 163, 1427-1442.	3.6	15
41	Trade-offs and performances of a range of alternative global climate architectures for post-2012. Environmental Science and Policy, 2010, 13, 63-71.	4.9	14
42	Reply to â€œHigh energy and materials requirement for direct air capture calls for further analysis and R&Dâ€• Nature Communications, 2020, 11, 3286.	12.8	13
43	Trade-offs between energy cost and health impact in a regional coupled energyâ€"air quality model: the LEAQ model. Environmental Research Letters, 2011, 6, 024021.	5.2	12
44	Setting the System Boundaries of â€œEnergy for Waterâ€•for Integrated Modeling. Environmental Science & Technology, 2016, 50, 8930-8931.	10.0	12
45	Coupling climate and economic models in a cost-benefit framework: A convex optimisation approach. Environmental Modeling and Assessment, 2006, 11, 101-114.	2.2	11
46	Delineating spring recharge areas in a fractured sandstone aquifer (Luxembourg) based on pesticide mass balance. Hydrogeology Journal, 2013, 21, 799-812.	2.1	10
47	Climate policy under socio-economic scenario uncertainty. Environmental Modelling and Software, 2016, 79, 334-342.	4.5	9
48	Assessment of the Effectiveness of Global Climate Policies Using Coupled Bottom-Up and Top-Down Models. SSRN Electronic Journal, 0, , .	0.4	8
49	Integrated environmental assessment of future energy scenarios based on economic equilibrium models. Metallurgical Research and Technology, 2014, 111, 179-189.	0.7	6
50	Accounting for Uncertainty Affecting Technical Change in an Economic-Climate Model. SSRN Electronic Journal, 0, , .	0.4	6
51	NeatWork: A Tool for the Design of Gravity-Driven Water Distribution Systems for Poor Rural Communities. Interfaces, 2019, 49, 129-136.	1.5	4
52	The Energy Modeling Forum (EMF)-30 study on short-lived climate forcers: introduction and overview. Climatic Change, 2020, 163, 1399-1408.	3.6	4
53	Challenges and Opportunities for Integrated Modeling of Climate Engineering. SSRN Electronic Journal, 0, , .	0.4	4
54	Integrated Environmental Assessment of Future Energy Scenarios Based on Economic Equilibrium Models. SSRN Electronic Journal, 0, , .	0.4	3

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55	Integrated Assessment of Swiss GHG Mitigation Policies After 2012. Environmental Modeling and Assessment, 2012, 17, 193-207.	2.2	2
56	A Satisficing Framework for Environmental Policy Under Model Uncertainty. Environmental Modeling and Assessment, 2021, 26, 433-445.	2.2	2
57	Cheap oil slows climate mitigation. Nature Climate Change, 2016, 6, 660-661.	18.8	1
58	Building Risk into the Mitigation/Adaptation Decisions simulated by Integrated Assessment Models. Environmental and Resource Economics, 2019, 74, 1687-1721.	3.2	1
59	Regional Low-Emission Pathways from Global Models. SSRN Electronic Journal, 0, , .	0.4	1
60	Net economic benefits of well-below 2Â°C scenarios and associated uncertainties. Oxford Open Climate Change, 2022, 2, .	1.3	1
61	Building Uncertainty into the Adaptation Cost Estimation in Integrated Assessment Models. SSRN Electronic Journal, 2016, , .	0.4	0
62	Combination of Equilibrium Models and Hybrid Life Cycle Input-Output Analysis to Predict the Environmental Impacts of Energy Policy Scenarios. SSRN Electronic Journal, 0, , .	0.4	0