Jan Fuglestvedt

List of Publications by Year
in descending order

91 papers	7,793 citations	53794 45 h-index	56724 83 g-index
105 all docs	105 docs citations	105 times ranked	7333 citing authors

#	Article	IF	Citations
1	Alternatives to the Global Warming Potential for Comparing Climate Impacts of Emissions of Greenhouse Gases. Climatic Change, 2005, 68, 281-302.	3.6	533
2	Carbon dioxide and climate impulse response functions for the computation of greenhouse gas metrics: a multi-model analysis. Atmospheric Chemistry and Physics, 2013, 13, 2793-2825.	4.9	517
3	Emission budgets and pathways consistent with limiting warming to 1.5â€‰Â°C. Nature Geoscience, 2017, 10, 741-747.	12.9	422
4	Global warming potentials and radiative efficiencies of halocarbons and related compounds: A comprehensive review. Reviews of Geophysics, 2013, 51, 300-378.	23.0	390
5	Evaluating the climate and air quality impacts of short-lived pollutants. Atmospheric Chemistry and Physics, 2015, 15, 10529-10566.	4.9	365
6	Climate forcing from the transport sectors. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 454-458.	7.1	269
7	Metrics of Climate Change: Assessing Radiative Forcing and Emission Indices. Climatic Change, 2003, 58, 267-331.	3.6	268
8	Achievements and needs for the climate change scenario framework. Nature Climate Change, 2020, 10, 1074-1084.	18.8	245
9	A solution to the misrepresentations of CO2-equivalent emissions of short-lived climate pollutants under ambitious mitigation. Npj Climate and Atmospheric Science, 2018, 1, .	6.8	230
10	How northern peatlands influence the Earth's radiative budget: Sustained methane emission versus sustained carbon sequestration. Journal of Geophysical Research, 2006, 111, .	3.3	196
11	Comparing the climate effect of emissions of short- and long-lived climate agents. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 1903-1914.	3.4	164
12	Improved calculation of warming-equivalent emissions for short-lived climate pollutants. Npj Climate and Atmospheric Science, 2019, 2, 29.	6.8	162
13	New use of global warming potentials to compare cumulative and short-lived climate pollutants. Nature Climate Change, 2016, 6, 773-776.	18.8	160
14	Climate Impacts From a Removal of Anthropogenic Aerosol Emissions. Geophysical Research Letters, 2018, 45, 1020-1029.	4.0	160
15	Future emissions from shipping and petroleum activities in the Arctic. Atmospheric Chemistry and Physics, 2011, 11, 5305-5320.	4.9	129
16	CurrentÂfossil fuel infrastructure does not yet commit us to 1.5â€‰Â°C warming. Nature Communications, 2019, 10, 101.	12.8	125
17	Global and regional temperature-change potentials for near-term climate forcers. Atmospheric Chemistry and Physics, 2013, 13, 2471-2485.	4.9	122
18	Shipping Emissions: From Cooling to Warming of Climateâ€"and Reducing Impacts on Health. Environmental Science & Technology, 2009, 43, 9057-9062.	10.0	111

#	Article	IF	Citations
19	Enhancing life cycle impact assessment from climate science: Review of recent findings and recommendations for application to LCA. Ecological Indicators, 2016, 71, 163-174.	6.3	108
20	Effects of anthropogenic emissions on tropospheric ozone and its radiative forcing. Journal of Geophysical Research, 1997, 102, 28101-28126.	3.3	104
21	Abatement of Greenhouse Gases: Does Location Matter?. Climatic Change, 2006, 74, 377-411.	3.6	103
22	Impact of Aviation on Climate: FAAâ€™s Aviation Climate Change Research Initiative (ACCRI) Phase II. Bulletin of the American Meteorological Society, 2016, 97, 561-583.	3.3	93
23	Response of climate to regional emissions of ozone precursors: sensitivities and warming potentials. Tellus, Series B: Chemical and Physical Meteorology, 2005, 57, 283-304.	1.6	88
24	Alternative â€œGlobal Warmingâ€•Metrics in Life Cycle Assessment: A Case Study with Existing Transportation Data. Environmental Science & Technology, 2011, 45, 8633-8641.	10.0	88
25	Response of climate to regional emissions of ozone precursors: sensitivities and warming potentials. Tellus, Series B: Chemical and Physical Meteorology, 2022, 57, 283.	1.6	85
26	Contributions of individual countriesâ€™ emissions to climate change and their uncertainty. Climatic Change, 2011, 106, 359-391.	3.6	85
27	Global temperature responses to current emissions from the transport sectors. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 19154-19159.	7.1	84
28	Estimates of indirect global warming potentials for CH4, CO and NOX. Climatic Change, 1996, 34, 405-437.	3.6	81
29	The integrated global temperature change potential (iGTP) and relationships between emission metrics. Environmental Research Letters, 2011, 6, 044021.	5.2	81
30	Global temperature change from the transport sectors: Historical development and future scenarios. Atmospheric Environment, 2009, 43, 6260-6270.	4.1	80
31	Analysing countriesâ€™ contribution to climate change: scientific and policy-related choices. Environmental Science and Policy, 2005, 8, 614-636.	4.9	77
32	Implications of possible interpretations of â€˜greenhouse gas balanceâ€™ in the Paris Agreement. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20160445.	3.4	72
33	Accounting for the climateâ€“carbon feedback in emission metrics. Earth System Dynamics, 2017, 8, 235-253.	7.1	71
34	Delayed emergence of a global temperature response after emission mitigation. Nature Communications, 2020, 11, 3261.	12.8	71
35	Bridging the gap between impact assessment methods and climate science. Environmental Science and Policy, 2016, 64, 129-140.	4.9	69
36	Policy Update: Multicomponent climate policy: why do emission metrics matter?. Carbon Management, 2010, 1, 191-197.	2.4	64

#	Article	IF	Citations
37	Short-lived climate forcers from current shipping and petroleum activities in the Arctic. Atmospheric Chemistry and Physics, 2012, 12, 1979-1993.	4.9	64
38	Tropospheric ozone and aerosols in climate agreements: scientific and political challenges. Environmental Science and Policy, 2005, 8, 29-43.	4.9	60
39	Updated Global Warming Potentials and Radiative Efficiencies of Halocarbons and Other Weak Atmospheric Absorbers. Reviews of Geophysics, 2020, 58, e2019RG000691.	23.0	60
40	Perspective has a strong effect on the calculation of historical contributions to global warming. Environmental Research Letters, 2017, 12, 024022.	5.2	57
41	Climate implications of GWP-based reductions in greenhouse gas emissions. Geophysical Research Letters, 2000, 27, 409-412.	4.0	55
42	A unifying framework for metrics for aggregating the climate effect of different emissions. Environmental Research Letters, 2012, 7, 044006.	5.2	55
43	Stable climate metrics for emissions of short and long-lived speciesâ€"combining steps and pulses. Environmental Research Letters, 2020, 15, 024018.	5.2	54
44	Simple emission metrics for climate impacts. Earth System Dynamics, 2013, 4, 145-170.	7.1	53
45	Scientific issues in the design of metrics for inclusion of oxides of nitrogen in global climate agreements. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 15768-15773.	7.1	52
46	Climate agreements based on responsibility for global warming: Periodic updating, policy choices, and regional costs. Global Environmental Change, 2006, 16, 182-194.	7.8	52
47	Local Arctic air pollution: Sources and impacts. Ambio, 2017, 46, 453-463.	5.5	52
48	Short- and long-term greenhouse gas and radiative forcing impacts of changing water management in Asian rice paddies. Global Change Biology, 2004, 10, 1180-1196.	9.5	51
49	Aircraft routing with minimal climate impact: the REACT4C climate cost function modelling approach (V1.0). Geoscientific Model Development, 2014, 7, 175-201.	3.6	51
50	Assigning historic responsibility for extreme weather events. Nature Climate Change, 2017, 7, 757-759.	18.8	49
51	The social cost of methane: theory and applications. Faraday Discussions, 2017, 200, 429-451.	3.2	47
52	Specific Climate Impact of Passenger and Freight Transport. Environmental Science & Technology, 2010, 44, 5700-5706.	10.0	44
53	Impacts of the Large Increase in International Ship Traffic 2000â^'2007 on Tropospheric Ozone and Methane. Environmental Science & Technology, 2010, 44, 2482-2489.	10.0	43
54	Short-lived uncertainty?. Nature Geoscience, 2010, 3, 587-588.	12.9	42

#	Article	IF	Citations
55	Limitations of single-basket trading: lessons from the Montreal Protocol for climate policy. Climatic Change, 2012, 111, 241-248.	3.6	40
56	Feasibility of climate-optimized air traffic routing for trans-Atlantic flights. Environmental Research Letters, 2017, 12, 034003.	5.2	39
57	Emission metrics under the 2ÂÂ°C climate stabilization target. Climatic Change, 2013, 117, 933-941.	3.6	37
58	Environmental impacts of shipping in 2030 with a particular focus on the Arctic region. Atmospheric Chemistry and Physics, 2013, 13, 1941-1955.	4.9	35
59	Emission metrics for quantifying regional climate impacts of aviation. Earth System Dynamics, 2017, 8, 547-563.	7.1	35
60	Regional emission metrics for short-lived climate forcers from multiple models. Atmospheric Chemistry and Physics, 2016, 16, 7451-7468.	4.9	34
61	Mode, Load, And Specific Climate Impact from Passenger Trips. Environmental Science & Technology, 2013, 47, 7608-7614.	10.0	29
62	Reducing CO₂ from shipping â€“ do non-CO₂ effects matter?. Atmospheric Chemistry and Physics, 2013, 13, 4183-4201.	4.9	29
63	Climate Penalty for Shifting Shipping to the Arctic. Environmental Science & Technology, 2014, 48, 13273-13279.	10.0	29
64	Climate Effects of Emission Standards: The Case for Gasoline and Diesel Cars. Environmental Science & Technology, 2012, 46, 5205-5213.	10.0	28
65	Global-Mean Temperature Change from Shipping toward 2050: Improved Representation of the Indirect Aerosol Effect in Simple Climate Models. Environmental Science & Technology, 2012, 46, 8868-8877.	10.0	27
66	How much information is lost by using global-mean climate metrics? an example using the transport sector. Climatic Change, 2012, 113, 949-963.	3.6	26
67	Climate and air quality-driven scenarios of ozone and aerosol precursor abatement. Environmental Science and Policy, 2009, 12, 855-869.	4.9	25
68	Tracking uncertainties in the causal chain from human activities to climate. Geophysical Research Letters, 2009, 36, .	4.0	25
69	Does black carbon abatement hamper CO 2 abatement?. Climatic Change, 2010, 103, 627-633.	3.6	25
70	Regional temperature change potentials for short-lived climate forcers based on radiative forcing from multiple models. Atmospheric Chemistry and Physics, 2017, 17, 10795-10809.	4.9	24
71	Attribution: How Is It Relevant for Loss and Damage Policy and Practice?. Climate Risk Management, Policy and Governance, 2019, , 113-154.	2.5	24
72	Costs Savings of a Flexible Multi-Gas Climate Policy. Energy Journal, 2006, 27, 485-502.	1.7	24

#	Article	IF	Citations
73	Testing 100-Year Global Warming Potentials: Impacts on Compliance Costs and Abatement Profile. Climatic Change, 2002, 52, 93-127.	3.6	23
74	Mitigation of short-lived heating components may lead to unwanted long-term consequences. Atmospheric Environment, 2011, 45, 6103-6106.	4.1	22
75	Climate Impacts of Short-Lived Climate Forcers versus CO₂ from Biodiesel: A Case of the EU on-Road Sector. Environmental Science & Technology, 2014, 48, 14445-14454.	10.0	21
76	Metrics for linking emissions of gases and aerosols to global precipitation changes. Earth System Dynamics, 2015, 6, 525-540.	7.1	21
77	Fair shares?. Nature Climate Change, 2016, 6, 19-20.	18.8	13
78	The adequacy of GWPs as indicators of damage costsincurred by global warming. Mitigation and Adaptation Strategies for Global Change, 2002, 7, 45-62.	2.1	12
79	Introducing population-adjusted historical contributions to global warming. Global Environmental Change, 2008, 18, 142-152.	7.8	12
80	Intercomparison of the capabilities of simplified climate models to project the effects of aviation CO2 on climate. Atmospheric Environment, 2013, 75, 321-328.	4.1	12
81	Emissions and emergence: a new index comparing relative contributions to climate change with relative climatic consequences. Environmental Research Letters, 2019, 14, 084009.	5.2	12
82	Chemicalâ€dynamical Modelling of the Atmosphere with Emphasis on the Methane Oxidation. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1992, 96, 241-251.	0.9	8
83	Reply to â€˜Interpretations of the Paris climate targetâ€™. Nature Geoscience, 2018, 11, 222-222.	12.9	8
84	Chemical and radiological risk factors associated with waste from energy production. Science of the Total Environment, 1992, 114, 87-97.	8.0	6
85	A future perspective of historical contributions to climate change. Climatic Change, 2021, 164, 1.	3.6	6
86	Counteracting the climate effects of volcanic eruptions using shortâ€lived greenhouse gases. Geophysical Research Letters, 2014, 41, 8627-8635.	4.0	5
87	Quality of geological CO2 storage to avoid jeopardizing climate targets. Climatic Change, 2012, 114, 245-260.	3.6	4
88	Earlier emergence of a temperature response to mitigation by filtering annual variability. Nature Communications, 2022, 13, 1578.	12.8	4
89	Introducing top-down methods in assessing compliance with the Kyoto Protocol. Climate Policy, 2005, 5, 393-405.	5.1	2
90	Times Matter!â€”Response to Wallington et al.. Environmental Science & Technology, 2011, 45, 3167-3168.	10.0	1

#	Article	IF	Citations
91	Reply to: Uncertainty in near-term temperature evolution must not obscure assessments of climate mitigation benefits. Nature Communications, 2022, 13, .	12.8	0