Richard Engelen

List of Publications by Citations

37 papers	1,647 citations	17 h-index	40 g-index
72 ext. papers	2,103 ext. citations	7.2 avg, IF	3.73 L-index

#	Paper	IF	Citations
37	The MACC reanalysis: an 8 yr data set of atmospheric composition. *Atmospheric Chemistry and Physics*, **2013**, 13, 4073-4109	6.8	352
36	The CAMS reanalysis of atmospheric composition. *Atmospheric Chemistry and Physics*, **2019**, 19, 3515-3556	6.8	233
35	A regional air quality forecasting system over Europe: the MACC-II daily ensemble production. *Geoscientific Model Development*, **2015**, 8, 2777-2813	6.3	148
34	Tropospheric chemistry in the Integrated Forecasting System of ECMWF. *Geoscientific Model Development*, **2015**, 8, 975-1003	6.3	137
33	Current systematic carbon-cycle observations and the need for implementing a policy-relevant carbon observing system. *Biogeosciences*, **2014**, 11, 3547-3602	4.6	136
32	The CAMS interim Reanalysis of Carbon Monoxide, Ozone and Aerosol for 2003–2015. *Atmospheric Chemistry and Physics*, **2017**, 17, 1945-1983	6.8	90
31	Observational Evidence for the Mutual Regulation of the Tropical Hydrological Cycle and Tropical Sea Surface Temperatures. *Journal of Climate*, **2004**, 17, 2213-2224	4.4	84
30	Data assimilation of satellite-retrieved ozone, carbon monoxide and nitrogen dioxide with ECMWF's Composition-IFS. *Atmospheric Chemistry and Physics*, **2015**, 15, 5275-5303	6.8	82
29	Forecasting global atmospheric CO₂. *Atmospheric Chemistry and Physics*, **2014**, 14, 11959-11983	6.8	49
28	Two global data sets of daily fire emission injection heights since 2003. *Atmospheric Chemistry and Physics*, **2017**, 17, 2921-2942	6.8	42
27	Assimilation of atmospheric methane products into the MACC-II system: from SCIAMACHY to TANSO and IASI. *Atmospheric Chemistry and Physics*, **2014**, 14, 6139-6158	6.8	39
26	Validation of reactive gases and aerosols in the MACC global analysis and forecast system. *Geoscientific Model Development*, **2015**, 8, 3523-3543	6.3	38
25	Feedbacks of dust and boundary layer meteorology during a dust storm in the eastern Mediterranean. *Atmospheric Chemistry and Physics*, **2015**, 15, 12909-12933	6.8	32
24	Modelling CO₂ weather – why horizontal resolution matters. *Atmospheric Chemistry and Physics*, **2019**, 19, 7347-7376	6.8	31
23	Description and evaluation of the tropospheric aerosol scheme in the European Centre for Medium-Range Weather Forecasts (ECMWF) Integrated Forecasting System (IFS-AER, cycle 45R1). *Geoscientific Model Development*, **2019**, 12, 4627-4659	6.3	29
22	Estimating lockdown-induced European NO₂ changes using satellite and surface observations and air quality models. *Atmospheric Chemistry and Physics*, **2021**, 21, 7373-7394	6.8	19
21	COVID-19 Crisis Reduces Free Tropospheric Ozone Across the Northern Hemisphere. *Geophysical Research Letters*, **2021**, 48, e2020GL091987	4.9	19

20	Iconic CO2 time series at risk. *Science*, **2012**, 337, 1038-40	33.3	13
19	Representing model uncertainty for global atmospheric CO₂ flux inversions using ECMWF-IFS-46R1. *Geoscientific Model Development*, **2020**, 13, 2297-2313	6.3	11
18	Systematic detection of local CH₄ anomalies by combining satellite measurements with high-resolution forecasts. *Atmospheric Chemistry and Physics*, **2021**, 21, 5117-5136	6.8	10
17	Evaluation and intercomparison of wildfire smoke forecasts from multiple modeling systems for the 2019 Williams Flats fire. *Atmospheric Chemistry and Physics*, **2021**, 21, 14427-14469	6.8	9
16	Tropospheric chemistry in the integrated forecasting system of ECMWF		7
15	Estimating lockdown induced European NO₂ changes		6
14	Global anthropogenic CO₂ emissions and uncertainties as prior for Earth system modelling and data assimilation		4
13	The CO2 Human Emissions (CHE) Project: First Steps Towards a European Operational Capacity to Monitor Anthropogenic CO2 Emissions. *Frontiers in Remote Sensing*, **2021**, 2,	1	4
12	Global anthropogenic CO₂ emissions and uncertainties as a prior for Earth system modelling and data assimilation. *Earth System Science Data*, **2021**, 13, 5311-5335	10.5	3
11	The CAMS interim Reanalysis of Carbon Monoxide, Ozone and Aerosol for 2003–2015 **2016**,		2
10	The MACC reanalysis: an 8-yr data set of atmospheric composition		2
9	Forecasting global atmospheric CO₂		2
8	The CAMS reanalysis of atmospheric composition **2018**,		2
7	The Community Inversion Framework v1.0: a unified system for atmospheric inversion studies. *Geoscientific Model Development*, **2021**, 14, 5331-5354	6.3	2
6	Description and evaluation of the tropospheric aerosol scheme in the Integrated Forecasting System (IFS-AER, cycle 45R1) of ECMWF **2019**,		1
5	Data assimilation of satellite retrieved ozone, carbon monoxide and nitrogen dioxide with ECMWF's Composition-IFS		1
4	Assimilation of atmospheric methane products in the MACC-II system: from SCIAMACHY to TANSO and IASI		1
3	Global nature run data with realistic high-resolution carbon weather for the year of the Paris Agreement.. *Scientific Data*, **2022**, 9, 160	8.2	1

2	Quantification of methane emissions from hotspots and during COVID-19 using a global atmospheric inversion. *Atmospheric Chemistry and Physics*, **2022**, 22, 5961-5981	6.8	1
1	An algorithm to detect non-background signals in greenhouse gas time series from European tall tower and mountain stations. *Atmospheric Measurement Techniques*, **2021**, 14, 6119-6135	4	0