Guus J M Velders

List of Publications by Year
in descending order

52 papers	6,975 citations	186265 28 h-index	189892 50 g-index
67 all docs	67 docs citations	67 times ranked	9755 citing authors

#	Article	IF	Citations
1	Advances in air quality research â€“ current and emerging challenges. Atmospheric Chemistry and Physics, 2022, 22, 4615-4703.	4.9	63
2	Projections of hydrofluorocarbon (HFC) emissions and the resulting global warming based on recent trends in observed abundances and current policies. Atmospheric Chemistry and Physics, 2022, 22, 6087-6101.	4.9	29
3	Improvements in air quality in the Netherlands during the corona lockdown based on observations and model simulations. Atmospheric Environment, 2021, 247, 118158.	4.1	20
4	A review of bottom-up and top-down emission estimates of hydrofluorocarbons (HFCs) in different parts of the world. Chemosphere, 2021, 283, 131208.	8.2	32
5	A global observational analysis to understand changes in air quality during exceptionally low anthropogenic emission conditions. Environment International, 2021, 157, 106818.	10.0	126
6	Trifluoroacetic acid deposition from emissions of HFO-1234yf in India, China, and the Middle East. Atmospheric Chemistry and Physics, 2021, 21, 14833-14849.	4.9	12
7	The Precautionary Principle and the Environment: A Case Study of an Immediate Global Response to the Molina and Rowland Warning. ACS Earth and Space Chemistry, 2021, 5, 3036-3044.	2.7	3
8	Effects of European emission reductions on air quality in the Netherlands and the associated health effects. Atmospheric Environment, 2020, 221, 117109.	4.1	19
9	Quantifying contributions of chlorofluorocarbon banks to emissions and impacts on the ozone layer and climate. Nature Communications, 2020, 11, 1380.	12.8	72
10	The shared socio-economic pathway (SSP) greenhouse gas concentrations and their extensions to 2500. Geoscientific Model Development, 2020, 13, 3571-3605.	3.6	539
11	Changes in Emissions of Ozone-Depleting Substances from China Due to Implementation of the Montreal Protocol. Environmental Science & Technology, 2018, 52, 11359-11366.	10.0	54
12	Modelling Air Quality and Deposition at High Resolution in the Netherlands with Plume and Grid Models. Springer Proceedings in Complexity, 2018, , 245-248.	0.3	0
13	High-resolution modelling of air pollution and deposition over the Netherlands with plume, grid and hybrid modelling. Atmospheric Environment, 2017, 155, 140-153.	4.1	7
14	Deriving Global OH Abundance and Atmospheric Lifetimes for Longâ€Lived Gases: A Search for CH₃CCl₃ Alternatives. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,914.	3.3	26
15	Historical greenhouse gas concentrations for climate modelling (CMIP6). Geoscientific Model Development, 2017, 10, 2057-2116.	3.6	350
16	Sources, fates, toxicity, and risks of trifluoroacetic acid and its salts: Relevance to substances regulated under the Montreal and Kyoto Protocols. Journal of Toxicology and Environmental Health - Part B: Critical Reviews, 2016, 19, 289-304.	6.5	116
17	Hydrofluorocarbon (HFC) Emissions in China: An Inventory for 2005â€“2013 and Projections to 2050. Environmental Science & Technology, 2016, 50, 2027-2034.	10.0	42
18	Oceanic bromoform emissions weighted by their ozone depletion potential. Atmospheric Chemistry and Physics, 2015, 15, 13647-13663.	4.9	34

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19	Future atmospheric abundances and climate forcings from scenarios of global and regional hydrofluorocarbon (HFC) emissions. Atmospheric Environment, 2015, 123, 200-209.	4.1	105
20	Disentangling the effects of CO ₂ and short-lived climate forcer mitigation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16325-16330.	7.1	114
21	Can further mitigation of ammonia emissions reduce exceedances of particulate matter air quality standards?. Environmental Science and Policy, 2014, 44, 149-163.	4.9	50
22	Uncertainty analysis of projections of ozone-depleting substances: mixing ratios, EESC, ODPs, and GWPs. Atmospheric Chemistry and Physics, 2014, 14, 2757-2776.	4.9	44
23	Growth of climate change commitments from HFC banks and emissions. Atmospheric Chemistry and Physics, 2014, 14, 4563-4572.	4.9	22
24	Assessing interim objectives for acidification, eutrophication and ground-level ozone of the EU National Emission Ceilings Directive with 2001 and 2012 knowledge. Atmospheric Environment, 2013, 75, 129-140.	4.1	24
25	The role of HFCs in mitigating 21st century climate change. Atmospheric Chemistry and Physics, 2013, 13, 6083-6089.	4.9	94
26	Preserving Montreal Protocol Climate Benefits by Limiting HFCs. Science, 2012, 335, 922-923.	12.6	139
27	Higher than expected NOx emission from trucks may affect attainability of NO2 limit values in the Netherlands. Atmospheric Environment, 2011, 45, 3025-3033.	4.1	66
28	Recent decreases in observed atmospheric concentrations of SO2 in the Netherlands in line with emission reductions. Atmospheric Environment, 2011, 45, 5647-5651.	4.1	13
29	The RCP greenhouse gas concentrations and their extensions from 1765 to 2300. Climatic Change, 2011, 109, 213-241.	3.6	2,948
30	Options to accelerate ozone recovery: ozone and climate benefits. Atmospheric Chemistry and Physics, 2010, 10, 7697-7707.	4.9	27
31	Spatial- and Time-Explicit Human Damage Modeling of Ozone Depleting Substances in Life Cycle Impact Assessment. Environmental Science & Technology, 2010, 44, 204-209.	10.0	32
32	The large contribution of projected HFC emissions to future climate forcing. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10949-10954.	7.1	319
33	Likelihood of meeting the EU limit values for NO2 and PM10 concentrations in the Netherlands. Atmospheric Environment, 2009, 43, 3060-3069.	4.1	21
34	Meteorological variability in NO2 and PM10 concentrations in the Netherlands and its relation with EU limit values. Atmospheric Environment, 2009, 43, 3858-3866.	4.1	16
35	External drift kriging of NOx concentrations with dispersion model output in a reduced air quality monitoring network. Environmental and Ecological Statistics, 2009, 16, 321-339.	3.5	32
36	The LOTOS EUROS model: description, validation and latest developments. International Journal of Environment and Pollution, 2008, 32, 270.	0.2	216

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37	The importance of the Montreal Protocol in protecting climate. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 4814-4819.	7.1	417
38	A Hybrid Kalman Filter Algorithm for Large-Scale Atmospheric Chemistry Data Assimilation. Monthly Weather Review, 2007, 135, 140-151.	1.4	15
39	Uncertainty assessment of local NO2 concentrations derived from error-in-variable external drift kriging and its relationship to the 2010 air quality standard. Atmospheric Environment, 2006, 40, 2583-2595.	4.1	25
40	Model-based geostatistical interpolation of the annual number of ozone exceedance days in the Netherlands. Stochastic Environmental Research and Risk Assessment, 2005, 19, 173-183.	4.0	1
41	Ammonia concentrations in the Netherlands: spatially detailed measurements and model calculations. Atmospheric Environment, 2004, 38, 4045-4055.	4.1	35
42	Data assimilation of ground-level ozone in Europe with a Kalman filter and chemistry transport model. Journal of Geophysical Research, 2004, 109, .	3.3	63
43	Health risks. Journal of Photochemistry and Photobiology B: Biology, 1998, 46, 20-39.	3.8	176
44	Ozone depletion and skin cancer incidence: a source risk approach. Journal of Hazardous Materials, 1998, 61, 77-84.	12.4	30
45	Greenhouse gases: Interrelationship with stratospheric ozone depletion. Studies in Environmental Science, 1998, , 223-239.	0.0	0
46	Estimates of ozone depletion and skin cancer incidence to examine the Vienna Convention achievements. Nature, 1996, 384, 256-258.	27.8	260
47	The simulation of the transport of aircraft emissions by a three-dimensional global model. Annales Geophysicae, 1994, 12, 385-393.	1.6	21
48	Comparison of the Hartree-Fock, Mï¿½ller-Plesset, and Hartree-Fock-Slater method with respect to electrostatic properties of small molecules. Theoretica Chimica Acta, 1993, 86, 391-416.	0.8	10
49	Effect of electron correlation on the electron density distribution and (hyper)polarizability of molecules. The Journal of Physical Chemistry, 1992, 96, 10725-10735.	2.9	23
50	Structure and electron density distribution of the nitrate ion and urea molecule upon protonation. Theoretica Chimica Acta, 1992, 84, 195-215.	0.8	12
51	Electron density analysis of nonlinear optical materials: an ab initio study of different conformations of benzene derivatives. The Journal of Physical Chemistry, 1991, 95, 8601-8608.	2.9	24
52	Calculation of the electron density distribution in silicon by the density-functional method. Comparison with X-ray results. Acta Crystallographica Section B: Structural Science, 1989, 45, 359-364.	1.8	5