Steffen DÃ¶rner

List of Publications by Year
in descending order

34 papers	1,091 citations	516561 16 h-index	414303 32 g-index
95 all docs	95 docs citations	95 times ranked	1311 citing authors

#	Article	IF	Citations
1	NO_{<i>x</i>} lifetimes and emissions of cities and power plants in polluted background estimated by satellite observations. Atmospheric Chemistry and Physics, 2016, 16, 5283-5298.	1.9	168
2	Structural uncertainty in air mass factor calculation for NO₂ and HCHO satellite retrievals. Atmospheric Measurement Techniques, 2017, 10, 759-782.	1.2	133
3	Pinpointing nitrogen oxide emissions from space. Science Advances, 2019, 5, eaax9800.	4.7	100
4	EUREC⁴A. Earth System Science Data, 2021, 13, 4067-4119.	3.7	88
5	Estimating the volcanic emission rate and atmospheric lifetime of SO₂ from space: a case study for KÄ«lauea volcano, Hawaiʽi. Atmospheric Chemistry and Physics, 2014, 14, 8309-8322.	1.9	87
6	Vertical profiles of NO₂, SO₂, HONO, HCHO, CHOCHO and aerosols derived from MAX-DOAS measurements at a rural site in the central western North China Plain and their relation to emission sources and effects of regional transport. Atmospheric Chemistry and Physics, 2019, 19, 5417-5449.	1.9	66
7	Cloud detection and classification based on MAX-DOAS observations. Atmospheric Measurement Techniques, 2014, 7, 1289-1320.	1.2	63
8	Tropospheric BrO column densities in the Arctic derived from satellite: retrieval and comparison to ground-based measurements. Atmospheric Measurement Techniques, 2012, 5, 2779-2807.	1.2	43
9	Catalog of NO_{<i>x</i>} emissions from point sources as derived from the divergence of the NO₂ flux for TROPOMI. Earth System Science Data, 2021, 13, 2995-3012.	3.7	37
10	Cloud and aerosol classification for 2.5 years of MAX-DOAS observations in Wuxi (China) and comparison to independent data sets. Atmospheric Measurement Techniques, 2015, 8, 5133-5156.	1.2	31
11	Long-term MAX-DOAS measurements of NO₂, HCHO, and aerosols and evaluation of corresponding satellite data products over Mohali in the Indo-Gangetic Plain. Atmospheric Chemistry and Physics, 2020, 20, 14183-14235.	1.9	28
12	The Mainz profile algorithm (MAPA). Atmospheric Measurement Techniques, 2019, 12, 1785-1806.	1.2	27
13	MAX-DOAS observations of the total atmospheric water vapour column and comparison with independent observations. Atmospheric Measurement Techniques, 2013, 6, 131-149.	1.2	23
14	Is a scaling factor required to obtain closure between measured and modelled atmospheric O₄ absorptions? An assessment of uncertainties of measurements and radiative transfer simulations for 2 selected days during the MAD-CAT campaign. Atmospheric Measurement Techniques, 2019, 12, 2745-2817.	1.2	22
15	Total column water vapour retrieval from S-5P/TROPOMI in the visible blue spectral range. Atmospheric Measurement Techniques, 2020, 13, 2751-2783.	1.2	22
16	MAX-DOAS measurements of NO₂, SO₂, HCHO, and BrO at the Mt. Waliguan WMO GAW global baseline station in the Tibetan Plateau. Atmospheric Chemistry and Physics, 2020, 20, 6973-6990.	1.9	18
17	The ESA GOME-Evolution â€œClimateâ€• water vapor product: a homogenized time series of H₂O columns from GOME, SCIAMACHY, and GOME-2. Earth System Science Data, 2018, 10, 449-468.	3.7	16
18	An improved TROPOMI tropospheric NO₂ research product over Europe. Atmospheric Measurement Techniques, 2021, 14, 7297-7327.	1.2	16

#	Article	IF	Citations
19	The effect of horizontal gradients and spatial measurement resolution on the retrieval of global vertical NO₂ distributions from SCIAMACHY measurements in limb only mode. Atmospheric Measurement Techniques, 2010, 3, 1155-1174.	1.2	13
20	Characterisation of a stratospheric sulfate plume from the Nabro volcano using a combination of passive satellite measurements in nadir and limb geometry. Atmospheric Chemistry and Physics, 2014, 14, 8149-8163.	1.9	13
21	Evaluating different methods for elevation calibration of MAX-DOAS (Multi AXis Differential Optical) Tj ETQq1 1 0.784314 rgBT /Overlo Techniques, 2020, 13, 685-712.	1.2	11
22	SO₂ and BrO emissions of Masaya volcano fromÂ2014 to 2020. Atmospheric Chemistry and Physics, 2021, 21, 9367-9404.	1.9	10
23	Satellite validation strategy assessments based on the AROMAT campaigns. Atmospheric Measurement Techniques, 2020, 13, 5513-5535.	1.2	6
24	A new method for the absolute radiance calibration for UVâ€“vis measurements of scattered sunlight. Atmospheric Measurement Techniques, 2015, 8, 4265-4280.	1.2	6
25	Technical note: Evaluation of profile retrievals of aerosols and trace gases for MAX-DOAS measurements under different aerosol scenarios based on radiative transfer simulations. Atmospheric Chemistry and Physics, 2021, 21, 12867-12894.	1.9	5
26	Identification of atmospheric and oceanic teleconnection patterns in a 20-year global data set of the atmospheric water vapour column measured from satellites in the visible spectral range. Atmospheric Chemistry and Physics, 2021, 21, 5315-5353.	1.9	4
27	Quantitative comparison of measured and simulated O₄ absorptions for one day with extremely low aerosol load over the tropical Atlantic. Atmospheric Measurement Techniques, 2021, 14, 3871-3893.	1.2	4
28	Retrieval of O3, NO2, BrO and OClO Columns from Ground-Based Zenith Scattered Light DOAS Measurements in Summer and Autumn over the Northern Tibetan Plateau. Remote Sensing, 2021, 13, 4242.	1.8	3
29	MICRU: an effective cloud fraction algorithm designed for UVâ€“vis satellite instruments with large viewing angles. Atmospheric Measurement Techniques, 2021, 14, 3989-4031.	1.2	2
30	Retrieval algorithm for OClO from TROPOMI (TROPOspheric Monitoring Instrument) by differential optical absorption spectroscopy. Atmospheric Measurement Techniques, 2021, 14, 7595-7625.	1.2	2
31	Estimating real driving emissions from multi-axis differential optical absorption spectroscopy (MAX-DOAS) measurements at the A60 motorway near Mainz, Germany. Atmospheric Measurement Techniques, 2021, 14, 769-783.	1.2	1
32	OClO as observed by TROPOMI: a comparison with meteorological parameters and polar stratospheric cloud observations. Atmospheric Chemistry and Physics, 2022, 22, 245-272.	1.9	1
33	Mapping the spatial distribution of NO₂ with in situ and remote sensing instruments during the Munich NO₂ imaging campaign. Atmospheric Measurement Techniques, 2022, 15, 1609-1629.	1.2	1
34	Calculating the vertical column density of O₄ during daytime from surface values of pressure, temperature, and relative humidity. Atmospheric Measurement Techniques, 2022, 15, 987-1006.	1.2	0