Markus Hermann

List of Publications by Year
in descending order

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33 papers	1,512 citations	394421 19 h-index	395702 33 g-index
39 all docs	39 docs citations	39 times ranked	2498 citing authors

#	Article	IF	Citations
1	Civil Aircraft for the regular investigation of the atmosphere based on an instrumented container: The new CARIBIC system. Atmospheric Chemistry and Physics, 2007, 7, 4953-4976.	4.9	289
2	Stratospheric aerosol-Observations, processes, and impact on climate. Reviews of Geophysics, 2016, 54, 278-335.	23.0	265
3	Global-scale atmosphere monitoring by in-service aircraft â€“ current achievements and future prospects of the European Research Infrastructure IAGOS. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 28452.	1.6	118
4	Strong impact of wildfires on the abundance and aging of black carbon in the lowermost stratosphere. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11595-E11603.	7.1	89
5	ALADINA â€“ an unmanned research aircraft for observing vertical and horizontal distributions of ultrafine particles within the atmospheric boundary layer. Atmospheric Measurement Techniques, 2015, 8, 1627-1639.	3.1	84
6	Significant radiative impact of volcanic aerosol in the lowermost stratosphere. Nature Communications, 2015, 6, 7692.	12.8	74
7	An Observational Case Study on the Influence of Atmospheric Boundary-Layer Dynamics on New Particle Formation. Boundary-Layer Meteorology, 2016, 158, 67-92.	2.3	66
8	Gaseous mercury distribution in the upper troposphere and lower stratosphere observed onboard the CARIBIC passenger aircraft. Atmospheric Chemistry and Physics, 2009, 9, 1957-1969.	4.9	57
9	Composition and evolution of volcanic aerosol from eruptions of Kasatochi, Sarychev and EyjafjallajÃ¶kull in 2008â€“2010 based on CARIBIC observations. Atmospheric Chemistry and Physics, 2013, 13, 1781-1796.	4.9	38
10	Atmospheric mercury measurements onboard the CARIBIC passenger aircraft. Atmospheric Measurement Techniques, 2016, 9, 2291-2302.	3.1	33
11	Decreasing trends of particle number and black carbon mass concentrations at 16 observational sites in Germany from 2009 to 2018. Atmospheric Chemistry and Physics, 2020, 20, 7049-7068.	4.9	28
12	Characteristics and origin of lowermost stratospheric aerosol at northern midlatitudes under volcanically quiescent conditions based on CARIBIC observations. Journal of Geophysical Research, 2005, 110, .	3.3	26
13	Pollution events observed during CARIBIC flights in the upper troposphere between South China and the Philippines. Atmospheric Chemistry and Physics, 2010, 10, 1649-1660.	4.9	26
14	Particle Penetration Through a 300 m Inlet Pipe for Sampling Atmospheric Aerosols from a Tall Meteorological Tower. Aerosol Science and Technology, 2007, 41, 811-817.	3.1	25
15	CARIBIC aircraft measurements of EyjafjallajÃ¶kull volcanic clouds in April/May 2010. Atmospheric Chemistry and Physics, 2012, 12, 879-902.	4.9	25
16	Aerosol elemental concentrations in the tropopause region from intercontinental flights with the Civil Aircraft for Regular Investigation of the Atmosphere Based on an Instrument Container (CARIBIC) platform. Journal of Geophysical Research, 2002, 107, AAC 3-1-AAC 3-14.	3.3	24
17	Mercury Plumes in the Global Upper Troposphere Observed during Flights with the CARIBIC Observatory from May 2005 until June 2013. Atmosphere, 2014, 5, 342-369.	2.3	24
18	Mercury distribution in the upper troposphere and lowermost stratosphere according to measurements by the IAGOS-CARIBIC observatory: 2014â€“2016. Atmospheric Chemistry and Physics, 2018, 18, 12329-12343.	4.9	23

#	Article	IF	Citations
19	Comparison between CARIBIC Aerosol Samples Analysed by Accelerator-Based Methods and Optical Particle Counter Measurements. Atmospheric Measurement Techniques, 2014, 7, 2581-2596.	3.1	22
20	Airborne observations of newly formed boundary layer aerosol particles under cloudy conditions. Atmospheric Chemistry and Physics, 2018, 18, 8249-8264.	4.9	21
21	Formation and composition of the UTLS aerosol. Npj Climate and Atmospheric Science, 2019, 2, .	6.8	21
22	Fine mode participate sulphur in the tropopause region measured from intercontinental flights (CARIBIC). Geophysical Research Letters, 2001, 28, 1175-1178.	4.0	20
23	Sources of increase in lowermost stratospheric sulphurous and carbonaceous aerosol background concentrations during 1999â€“2008 derived from CARIBIC flights. Tellus, Series B: Chemical and Physical Meteorology, 2022, 66, 23428.	1.6	17
24	Origin of aerosol particles in the mid-latitude and subtropical upper troposphere and lowermost stratosphere from cluster analysis of CARIBIC data. Atmospheric Chemistry and Physics, 2009, 9, 8413-8430.	4.9	15
25	Near-global aerosol mapping in the upper troposphere and lowermost stratosphere with data from the CARIBIC project. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 875.	1.6	15
26	An optical particle size spectrometer for aircraft-borne measurements in IAGOS-CARIBIC. Atmospheric Measurement Techniques, 2016, 9, 2179-2194.	3.1	14
27	Long-term trends of black carbon and particle number concentration in the lower free troposphere in Central Europe. Environmental Sciences Europe, 2021, 33, .	5.5	12
28	Influence of volcanic eruptions on midlatitude upper tropospheric aerosol and consequences for cirrus clouds. Earth and Space Science, 2015, 2, 285-300.	2.6	10
29	Particulate sulfur in the upper troposphere and lowermost stratosphere â€“ sources and climate forcing. Atmospheric Chemistry and Physics, 2017, 17, 10937-10953.	4.9	9
30	Subâ€micrometer aerosol particles in the upper troposphere/lowermost stratosphere as measured by CARIBIC and modeled using the MITâ€CAM3 global climate model. Journal of Geophysical Research, 2012, 117, .	3.3	8
31	Number and sulfur derived 3-parameter aerosol size distributions in the tropopause region from CARIBIC flights between Germany and the Indic. Journal of Aerosol Science, 2002, 33, 595-608.	3.8	6
32	Intercomparison of in-situ aircraft and satellite aerosol measurements in the stratosphere. Scientific Reports, 2019, 9, 15576.	3.3	6
33	Corrigendum to "Comparison between CARIBIC Aerosol Samples Analysed by Accelerator-Based Methods and Optical Particle Counter Measurements" published in Atmos. Meas. Tech., 7, 2581â€“2596, 2014. Atmospheric Measurement Techniques, 2015, 8, 367-367.	3.1	1