Kerstin Schepanski

List of Publications by Year
in descending order

60	3,371	159358 30	161609 54
papers	citations	h-index	g-index

96	96	96	3346
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A new Saharan dust source activation frequency map derived from MSGâ€SEVIRI IRâ€channels. Geophysical Research Letters, 2007, 34, .	1.5	260
2	Meteorological processes forcing Saharan dust emission inferred from MSGâ€SEVIRI observations of subdaily dust source activation and numerical models. Journal of Geophysical Research, 2009, 114, .	3.3	218
3	The Saharan Aerosol Long-Range Transport and Aerosolâ€“Cloud-Interaction Experiment: Overview and Selected Highlights. Bulletin of the American Meteorological Society, 2017, 98, 1427-1451.	1.7	173
4	Comparison of satellite based observations of Saharan dust source areas. Remote Sensing of Environment, 2012, 123, 90-97.	4.6	165
5	Saharan dust transport and deposition towards the tropical northern Atlantic. Atmospheric Chemistry and Physics, 2009, 9, 1173-1189.	1.9	141
6	The role of deep convection and nocturnal lowâ€level jets for dust emission in summertime West Africa: Estimates from convectionâ€permitting simulations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4385-4400.	1.2	139
7	Optical properties of long-range transported Saharan dust over Barbados as measured by dual-wavelength depolarization Raman lidar measurements. Atmospheric Chemistry and Physics, 2015, 15, 11067-11080.	1.9	123
8	Transport of Mineral Dust and Its Impact on Climate. Geosciences (Switzerland), 2018, 8, 151.	1.0	123
9	Climatology of nocturnal lowâ€level jets over North Africa and implications for modeling mineral dust emission. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6100-6121.	1.2	115
10	Overview of the Chemistry-Aerosol Mediterranean Experiment/Aerosol Direct Radiative Forcing on the Mediterranean Climate (ChArMEx/ADRIMED) summer 2013 campaign. Atmospheric Chemistry and Physics, 2016, 16, 455-504.	1.9	110
11	Multiple dust sources in the Sahara Desert: The importance of sand dunes. Geophysical Research Letters, 2012, 39, .	1.5	86
12	A case of extreme particulate matter concentrations over Central Europe caused by dust emitted over the southern Ukraine. Atmospheric Chemistry and Physics, 2008, 8, 997-1016.	1.9	85
13	Dust radiative feedback on Saharan boundary layer dynamics and dust mobilization. Geophysical Research Letters, 2008, 35, .	1.5	82
14	Dust as a tipping element: The BodÃ©lÃ© Depression, Chad. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20564-20571.	3.3	82
15	Dust mobilization and transport in the northern Sahara during SAMUM 2006 â€“ a meteorological overview. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 12.	0.8	79
16	Comparing two years of Saharan dust source activation obtained by regional modelling and satellite observations. Atmospheric Chemistry and Physics, 2013, 13, 2381-2390.	1.9	64
17	Derivation of an observation-based map of North African dust emission. Aeolian Research, 2015, 16, 153-162.	1.1	60
18	The Aerosols, Radiation and Clouds in Southern Africa Field Campaign in Namibia: Overview, Illustrative Observations, and Way Forward. Bulletin of the American Meteorological Society, 2019, 100, 1277-1298.	1.7	59

#	Article	IF	Citations
19	How important are atmospheric depressions and mobile cyclones for emitting mineral dust aerosol in North Africa?. Atmospheric Chemistry and Physics, 2014, 14, 8983-9000.	1.9	57
20	Advances in understanding mineral dust and boundary layer processes over the Sahara from Fennec aircraft observations. Atmospheric Chemistry and Physics, 2015, 15, 8479-8520.	1.9	57
21	Dust: Smallâ€scale processes with global consequences. Eos, 2011, 92, 241-242.	0.1	56
22	Millennial-scale fluctuations in Saharan dust supply across the decline of the African Humid Period. Quaternary Science Reviews, 2017, 171, 119-135.	1.4	53
23	The global distribution of mineral dust. IOP Conference Series: Earth and Environmental Science, 2009, 7, 012001.	0.2	50
24	Regional Saharan dust modelling during the SAMUM 2006 campaign. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 307.	0.8	48
25	Earth, Wind, Fire, and Pollution: Aerosol Nutrient Sources and Impacts on Ocean Biogeochemistry. Annual Review of Marine Science, 2022, 14, 303-330.	5.1	48
26	Regional modelling of Saharan dust and biomass-burning smoke: Part 1: Model description and evaluation. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 781.	0.8	47
27	Harmattan, Saharan heat low, and West African monsoon circulation: modulations on the Saharan dust outflow towards the North Atlantic. Atmospheric Chemistry and Physics, 2017, 17, 10223-10243.	1.9	43
28	North African dust transport toward the western Mediterranean basin: atmospheric controls on dust source activation and transport pathways during Juneâ€“JulyÂ2013. Atmospheric Chemistry and Physics, 2016, 16, 14147-14168.	1.9	39
29	Wildfires as a source of airborne mineral dust â€“ revisiting a conceptual model using large-eddy simulation (LES). Atmospheric Chemistry and Physics, 2018, 18, 11863-11884.	1.9	39
30	Remote sensing of mineral dust over land with MSG infrared channels: A new Bitemporal Mineral Dust Index. Remote Sensing of Environment, 2009, 113, 1853-1867.	4.6	38
31	Simulations of convectivelyâ€driven density currents in the Atlas region using a regional model: Impacts on dust emission and sensitivity to horizontal resolution and convection schemes. Journal of Geophysical Research, 2009, 114, .	3.3	38
32	Satellite retrievals of dust aerosol over the Red Sea and the Persian Gulf (2005â€“2015). Atmospheric Chemistry and Physics, 2017, 17, 3987-4003.	1.9	34
33	A model study of Saharan dust emissions and distributions during the SAMUMâ€1 campaign. Journal of Geophysical Research, 2010, 115, .	3.3	33
34	Numerical model simulation of the Saharan dust event of 6â€“11 March 2006 using the Regional Climate Model version 3 (RegCM3). Journal of Geophysical Research, 2009, 114, .	3.3	32
35	Climate Feedback on Aerosol Emission and Atmospheric Concentrations. Current Climate Change Reports, 2018, 4, 1-10.	2.8	32
36	Assessment of the Met Office dust forecast model using observations from the GERBILS campaign. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 1131-1148.	1.0	31

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37	Soudanoâ€Saharan depressions and their importance for precipitation and dust: a new perspective on a classical synoptic concept. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 1431-1445.	1.0	28
38	Profiling of aerosol microphysical properties at several EARLINET/AERONET sites during the JulyÂ2012 ChArMEx/EMEP campaign. Atmospheric Chemistry and Physics, 2016, 16, 7043-7066.	1.9	26
39	Characterization of dust emission from alluvial sources using aircraft observations and highâ€resolution modeling. Journal of Geophysical Research D: Atmospheres, 2013, 118, 7237-7259.	1.2	24
40	The sensitivity of nocturnal lowâ€level jets and nearâ€surface winds over the Sahel to model resolution, initial conditions and boundaryâ€layer setâ€up. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1442-1456.	1.0	23
41	A process-based evaluation of dust-emitting winds in the CMIP5 simulation of HadGEM2-ES. Climate Dynamics, 2016, 46, 1107-1130.	1.7	23
42	Identification of Dust Sources in a Saharan Dust Hot-Spot and Their Implementation in a Dust-Emission Model. Remote Sensing, 2019, 11, 4.	1.8	23
43	Mass deposition fluxes of Saharan mineral dust to the tropical northeast Atlantic Ocean: an intercomparison of methods. Atmospheric Chemistry and Physics, 2014, 14, 2245-2266.	1.9	22
44	New developments in the representation of Saharan dust sources in the aerosolâ€“climate model ECHAM6-HAM2. Geoscientific Model Development, 2016, 9, 765-777.	1.3	22
45	Evidence for flash floods over deserts from loss of coherence in InSAR imagery. Journal of Geophysical Research, 2012, 117, .	3.3	21
46	Fennec dust forecast intercomparison over the Sahara in June 2011. Atmospheric Chemistry and Physics, 2016, 16, 6977-6995.	1.9	21
47	The sensitivity of the colour of dust in MSG-SEVIRI Desert Dust infrared composite imagery to surface and atmospheric conditions. Atmospheric Chemistry and Physics, 2019, 19, 6893-6911.	1.9	21
48	Interannual variability in the Saharan dust source activationâ€”Toward understanding the differences between 2007 and 2008. Journal of Geophysical Research D: Atmospheres, 2016, 121, 4538-4562.	1.2	18
49	The influence of dust optical properties on the colour of simulated MSG-SEVIRI Desert Dust infrared imagery. Atmospheric Chemistry and Physics, 2018, 18, 9681-9703.	1.9	18
50	Airborne bacterial emission fluxes from manureâ€fertilized agricultural soil. Microbial Biotechnology, 2020, 13, 1631-1647.	2.0	17
51	Agricultural fertilization with poultry manure results in persistent environmental contamination with the pathogen Clostridioides difficile. Environmental Microbiology, 2021, 23, 7591-7602.	1.8	15
52	Spatial and temporal correlation length as a measure for the stationarity of atmospheric dust aerosol distribution. Atmospheric Environment, 2015, 122, 10-21.	1.9	13
53	Differences in the sediment composition of wind eroded sandy soils before and after fertilization with poultry manure. Soil and Tillage Research, 2022, 215, 105205.	2.6	9
54	Enhanced tenacity of mycobacterial aerosols from necrotic neutrophils. Scientific Reports, 2020, 10, 9159.	1.6	7

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55	North African mineral dust sources: new insights from a combined analysis based on 3D dust aerosol distributions, surface winds and ancillary soil parameters. Atmospheric Chemistry and Physics, 2020, 20, 15127-15146.	1.9	7
56	Investigation of atmospheric conditions fostering the spreading of legionnairesâ€™ disease in outbreaks related to cooling towers. International Journal of Biometeorology, 2019, 63, 1347-1356.	1.3	6
57	The Dust Emission Potential of Agriculturalâ€Like Firesâ€”Theoretical Estimates From Two Conceptually Different Dust Emission Parameterizations. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034355.	1.2	6
58	Modelling mineral dust emissions. IOP Conference Series: Earth and Environmental Science, 2009, 7, 012006.	0.2	5
59	A new Lagrangian in-time particle simulation module (ltpas v1) for atmospheric particle dispersion. Geoscientific Model Development, 2021, 14, 2205-2220.	1.3	4
60	Extensive Comparison Between a Set of European Dust Regional Models and Observations in the Western Mediterranean for the Summer 2012 Pre-ChArMEx/TRAQA Campaign. Springer Proceedings in Complexity, 2016, , 79-83.	0.2	4