Ina Tegen

List of Publications by Year
in descending order

133	20,250	25014 57	14736 127
papers	citations	h-index	g-index

184	184	184	12029
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	Regional Saharan dust modelling during the SAMUM 2006 campaign. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 307.	0.8	48
3	Properties of dust aerosol particles transported to Portugal from the Sahara desert. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 297.	0.8	75
4	EARLINET observations of the 14â€“22-May long-range dust transport event during SAMUM 2006: validation of results from dust transport modelling. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 325.	0.8	47
5	Saharan Mineral Dust Experiments SAMUMâ€“1 and SAMUMâ€“2: what have we learned?. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 403.	0.8	187
6	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
7	Regional modelling of Saharan dust and biomass-burning smoke: Part 2: Direct radiative forcing and atmospheric dynamic response. Tellus, Series B: Chemical and Physical Meteorology, 2022, 63, 800.	0.8	19
8	The Global Atmosphereâ€aerosol Model ICONâ€Aâ€HAM2.3â€“Initial Model Evaluation and Effects of Radiation Balance Tuning on Aerosol Optical Thickness. Journal of Advances in Modeling Earth Systems, 2022, 14, .	1.3	6
9	Global cycling and climate effects of aeolian dust controlled by biological soil crusts. Nature Geoscience, 2022, 15, 458-463.	5.4	36
10	Hemispheric and Seasonal Contrast in Cloud Thermodynamic Phase From Aâ€Train Spaceborne Instruments. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034322.	1.2	10
11	Constraining the Impact of Dustâ€Driven Droplet Freezing on Climate Using Cloudâ€Topâ€Phase Observations. Geophysical Research Letters, 2021, 48, e2021GL092687.	1.5	8
12	The Importance of the Representation of DMS Oxidation in Global Chemistryâ€Climate Simulations. Geophysical Research Letters, 2021, 48, e2021GL094068.	1.5	14
13	Absorbing aerosol decreases cloud cover in cloudâ€resolving simulations over Germany. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 4083-4100.	1.0	3
14	Atmospheric Dynamics and Numerical Simulations of Six Frontal Dust Storms in the Middle East Region. Atmosphere, 2021, 12, 125.	1.0	40
15	The day-to-day co-variability between mineral dust and cloud glaciation: a proxy for heterogeneous freezing. Atmospheric Chemistry and Physics, 2020, 20, 2177-2199.	1.9	14
16	Natural sea-salt emissions moderate the climate forcing of anthropogenic nitrate. Atmospheric Chemistry and Physics, 2020, 20, 771-786.	1.9	12
17	Coupling aerosols to (cirrus) clouds in the global EMAC-MADE3 aerosolâ€“climate model. Geoscientific Model Development, 2020, 13, 1635-1661.	1.3	19
18	Detection and attribution of aerosolâ€“cloud interactions in large-domain large-eddy simulations with the ICOsahedral Non-hydrostatic model. Atmospheric Chemistry and Physics, 2020, 20, 5657-5678.	1.9	20

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19	Characterization of organic aerosol across the global remote troposphere: a comparison of ATom measurements and global chemistry models. Atmospheric Chemistry and Physics, 2020, 20, 4607-4635.	1.9	66
20	Estimation of cloud condensation nuclei number concentrations and comparison to inÂsitu and lidar observations during the HOPE experiments. Atmospheric Chemistry and Physics, 2020, 20, 8787-8806.	1.9	12
21	Climate and air quality impacts due to mitigation of non-methane near-term climate forcers. Atmospheric Chemistry and Physics, 2020, 20, 9641-9663.	1.9	30
22	Modelling mineral dust emissions and atmospheric dispersion with MADE3 in EMAC v2.54. Geoscientific Model Development, 2020, 13, 4287-4303.	1.3	10
23	The global aerosolâ€“climate model ECHAM6.3â€“HAM2.3 â€“ Part 2: Cloud evaluation, aerosol radiative forcing, and climate sensitivity. Geoscientific Model Development, 2019, 12, 3609-3639.	1.3	44
24	Modelling mineral dust in the Central Asian region. E3S Web of Conferences, 2019, 99, 02012.	0.2	1
25	Dust impacts on radiative effects of black carbon aerosol in Central Asia. E3S Web of Conferences, 2019, 99, 04005.	0.2	0
26	The importance of the representation of air pollution emissions for the modeled distribution and radiative effects of black carbon in the Arctic. Atmospheric Chemistry and Physics, 2019, 19, 11159-11183.	1.9	30
27	Do new sea spray aerosol source functions improve the results of a regional aerosol model?. Atmospheric Environment, 2019, 198, 265-278.	1.9	19
28	The global aerosolâ€“climate model ECHAM6.3â€“HAM2.3 â€“ Part 1: Aerosol evaluation. Geoscientific Model Development, 2019, 12, 1643-1677.	1.3	103
29	A parameterization of the heterogeneous hydrolysis of N₂O₅ for mass-based aerosol models: improvement of particulate nitrate prediction. Atmospheric Chemistry and Physics, 2018, 18, 673-689.	1.9	35
30	Climate Feedback on Aerosol Emission and Atmospheric Concentrations. Current Climate Change Reports, 2018, 4, 1-10.	2.8	32
31	Large-Scale Modeling of Absorbing Aerosols and Their Semi-Direct Effects. Atmosphere, 2018, 9, 380.	1.0	14
32	The impact of mineral dust on cloud formation during the Saharan dust event in AprilÂ2014 over Europe. Atmospheric Chemistry and Physics, 2018, 18, 17545-17572.	1.9	19
33	SALSA2.0: The sectional aerosol module of the aerosolâ€“chemistryâ€“climate model ECHAM6.3.0-HAM2.3-MOZ1.0. Geoscientific Model Development, 2018, 11, 3833-3863.	1.3	52
34	Global relevance of marine organic aerosol as ice nucleating particles. Atmospheric Chemistry and Physics, 2018, 18, 11423-11445.	1.9	29
35	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
36	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

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37	Implementation of aerosolâ€“cloud interactions in the regional atmosphereâ€“aerosol model COSMO-MUSCAT(5.0) and evaluation using satellite data. Geoscientific Model Development, 2017, 10, 2231-2246.	1.3	10
38	Understanding Causes and Effects of Rapid Warming in the Arctic. Eos, 2017, , .	0.1	76
39	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
40	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
41	Parameterizing cloud condensation nuclei concentrations during HOPE. Atmospheric Chemistry and Physics, 2016, 16, 12059-12079.	1.9	33
42	A process-based evaluation of dust-emitting winds in the CMIP5 simulation of HadGEM2-ES. Climate Dynamics, 2016, 46, 1107-1130.	1.7	23
43	Seasonal variability of Saharan desert dust and ice nucleating particles over Europe. Atmospheric Chemistry and Physics, 2015, 15, 4389-4397.	1.9	47
44	Ice phase in altocumulus clouds over Leipzig: remote sensing observations and detailed modeling. Atmospheric Chemistry and Physics, 2015, 15, 10453-10470.	1.9	18
45	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
46	Anthropogenically induced changes in twentieth century mineral dust burden and the associated impact on radiative forcing. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,526.	1.2	69
47	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
48	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
49	Impact of Dust Radiative Forcing upon Climate. , 2014, , 327-357.		61
50	Numerical Dust Models. , 2014, , 201-222.		7
51	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
52	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
53	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
54	GLACIAL CLIMATES | Effects of Atmospheric Dust. , 2013, , 729-736.		1

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55	Comparison of satellite based observations of Saharan dust source areas. Remote Sensing of Environment, 2012, 123, 90-97.	4.6	165
56	On the visibility of airborne volcanic ash and mineral dust from the pilotâ€™s perspective in flight. Physics and Chemistry of the Earth, 2012, 45-46, 87-102.	1.2	56
57	Direct and semiâ€direct radiative effects of absorbing aerosols in Europe: Results from a regional model. Geophysical Research Letters, 2012, 39, .	1.5	23
58	Atmospheric Transport and Deposition of Mineral Dust to the Ocean: Implications for Research Needs. Environmental Science & Technology, 2012, 46, 10390-10404.	4.6	187
59	Simulations of the 2010 EyjafjallajÃ¶kull volcanic ash dispersal over Europe using COSMOâ€“MUSCAT. Atmospheric Environment, 2012, 48, 195-204.	1.9	27
60	A regional model of European aerosol transport: Evaluation with sun photometer, lidar and air quality data. Atmospheric Environment, 2012, 47, 519-532.	1.9	15
61	Impacts of atmospheric nutrient deposition on marine productivity: Roles of nitrogen, phosphorus, and iron. Global Biogeochemical Cycles, 2011, 25, n/a-n/a.	1.9	177
62	Seasonal characteristics of tropical marine boundary layer air measured at the Cape Verde Atmospheric Observatory. Journal of Atmospheric Chemistry, 2010, 67, 87-140.	1.4	97
63	A model study of Saharan dust emissions and distributions during the SAMUMâ€1 campaign. Journal of Geophysical Research, 2010, 115, .	3.3	33
64	Effect of measured surface albedo on modeled Saharan dust solar radiative forcing. Journal of Geophysical Research, 2010, 115, .	3.3	15
65	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
66	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
67	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
68	The global distribution of mineral dust. IOP Conference Series: Earth and Environmental Science, 2009, 7, 012001.	0.2	50
69	Modelling mineral dust emissions. IOP Conference Series: Earth and Environmental Science, 2009, 7, 012006.	0.2	5
70	Saharan dust transport and deposition towards the tropical northern Atlantic. Atmospheric Chemistry and Physics, 2009, 9, 1173-1189.	1.9	141
71	Surface wind accuracy for modeling mineral dust emissions: Comparing two regional models in a BodÃ©lÃ© case study. Geophysical Research Letters, 2008, 35, .	1.5	12
72	Dust radiative feedback on Saharan boundary layer dynamics and dust mobilization. Geophysical Research Letters, 2008, 35, .	1.5	82

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73	Quantifying uncertainty in estimates of mineral dust flux: An intercomparison of model performance over the BodÃ©lÃ© Depression, northern Chad. Journal of Geophysical Research, 2008, 113, .	3.3	144
74	The global influence of dust mineralogical composition on heterogeneous ice nucleation in mixed-phase clouds. Environmental Research Letters, 2008, 3, 025003.	2.2	149
75	An improvement on the dust emission scheme in the global aerosol-climate model ECHAM5-HAM. Atmospheric Chemistry and Physics, 2008, 8, 1105-1117.	1.9	63
76	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
77	Chapter 5.5 Modeling of Saharan dust events within SAMUM: Implications for regional radiation balance and mesoscale circulation. Developments in Environmental Science, 2007, , 523-533.	0.5	2
78	Poster 27 Modeling of Saharan dust events within SAMUM: On the description of the Saharan dust cycle using LM-MUSCAT. Developments in Environmental Science, 2007, , 817-819.	0.5	0
79	Record of Mineral Aerosols and Their Role in the Earth System. , 2007, , 1-26.		19
80	Regional modeling of Saharan dust events using LM-MUSCAT: Model description and case studies. Journal of Geophysical Research, 2007, 112, .	3.3	85
81	On the direct and semidirect effects of Saharan dust over Europe: A modeling study. Journal of Geophysical Research, 2007, 112, .	3.3	82
82	A new Saharan dust source activation frequency map derived from MSGâ€SEVIRI IRâ€channels. Geophysical Research Letters, 2007, 34, .	1.5	260
83	GLACIAL CLIMATES | Effects of Atmospheric Dust. , 2007, , 729-739.		0
84	Constraining the magnitude of the global dust cycle by minimizing the difference between a model and observations. Journal of Geophysical Research, 2006, 111, .	3.3	171
85	Mineral dust aerosols in the NASA Goddard Institute for Space Sciences ModelE atmospheric general circulation model. Journal of Geophysical Research, 2006, 111, .	3.3	187
86	Modelling soil dust aerosol in the BodÃ©lÃ© depression during the BoDEx campaign. Atmospheric Chemistry and Physics, 2006, 6, 4345-4359.	1.9	79
87	Links between topography, wind, deflation, lakes and dust: The case of the BodÃ©lÃ© Depression, Chad. Geophysical Research Letters, 2006, 33, .	1.5	176
88	North African dust emissions and transport. Earth-Science Reviews, 2006, 79, 73-100.	4.0	551
89	The aerosol-climate model ECHAM5-HAM. Atmospheric Chemistry and Physics, 2005, 5, 1125-1156.	1.9	990
90	Global Iron Connections Between Desert Dust, Ocean Biogeochemistry, and Climate. Science, 2005, 308, 67-71.	6.0	2,365

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91	Atmospheric global dust cycle and iron inputs to the ocean. Global Biogeochemical Cycles, 2005, 19, n/a-n/a.	1.9	930
92	Estimation of the aerodynamic roughness length in arid and semi-arid regions over the globe with the ERS scatterometer. Journal of Geophysical Research, 2005, 110, .	3.3	86
93	Relative importance of climate and land use in determining present and future global soil dust emission. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	325
94	Surface radiative forcing by soil dust aerosols and the hydrologic cycle. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	321
95	Quantifying mineral dust mass budgets:Terminology, constraints, and current estimates. Eos, 2004, 85, 509-512.	0.1	293
96	Modeling Arabian dust mobilization during the Asian summer monsoon: The effect of prescribed versus calculated SST. Geophysical Research Letters, 2004, 31, .	1.5	32
97	Reply to comment by N. M. Mahowald et al. on â€œRelative importance of climate and land use in determining present and future global soil dust emissionâ€• Geophysical Research Letters, 2004, 31, .	1.5	11
98	Feedback upon dust emission by dust radiative forcing through the planetary boundary layer. Journal of Geophysical Research, 2004, 109, .	3.3	108
99	Radiative forcing of climate by ice-age atmospheric dust. Climate Dynamics, 2003, 20, 193-202.	1.7	142
100	Monthly averages of aerosol properties: A global comparison among models, satellite data, and AERONET ground data. Journal of Geophysical Research, 2003, 108, .	3.3	258
101	Controls of dust emissions by vegetation and topographic depressions: An evaluation using dust storm frequency data. Geophysical Research Letters, 2003, 30, .	1.5	123
102	Modeling the mineral dust aerosol cycle in the climate system. Quaternary Science Reviews, 2003, 22, 1821-1834.	1.4	242
103	A Comparison of Model- and Satellite-Derived Aerosol Optical Depth and Reflectivity. Journals of the Atmospheric Sciences, 2002, 59, 441-460.	0.6	96
104	Multidecadal solar radiation trends in the United States and Germany and direct tropospheric aerosol forcing. Journal of Geophysical Research, 2002, 107, AAC 7-1.	3.3	56
105	Impact of vegetation and preferential source areas on global dust aerosol: Results from a model study. Journal of Geophysical Research, 2002, 107, AAC 14-1-AAC 14-27.	3.3	453
106	Climate forcings in Goddard Institute for Space Studies SI2000 simulations. Journal of Geophysical Research, 2002, 107, ACL 2-1.	3.3	302
107	Seasonal and interannual variability of the mineral dust cycle under present and glacial climate conditions. Journal of Geophysical Research, 2002, 107, AAC 2-1.	3.3	138
108	Antarctic circumpolar wave impact on marine biology: A natural laboratory for climate change study. Geophysical Research Letters, 2002, 29, 45-1-45-4.	1.5	25

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109	How well do aerosol retrievals from satellites and representation in global circulation models match ground-based AERONET aerosol statistics?. Advances in Global Change Research, 2001, , 103-158.	1.6	10
110	Sources and distributions of dust aerosols simulated with the GOCART model. Journal of Geophysical Research, 2001, 106, 20255-20273.	3.3	1,620
111	Hypothesized climate forcing time series for the last 500 years. Journal of Geophysical Research, 2001, 106, 14783-14803.	3.3	166
112	A comparison of seasonal and interannual variability of soil dust aerosols over the Atlantic Ocean as inferred by the TOMS AI and AVHRR AOT retrievals. Journal of Geophysical Research, 2001, 106, 18287-18303.	3.3	51
113	Interactive soil dust aerosol model in the GISS GCM: 1. Sensitivity of the soil dust cycle to radiative properties of soil dust aerosols. Journal of Geophysical Research, 2001, 106, 18167-18192.	3.3	125
114	Climate Modeling in the Global Warming Debate. International Geophysics, 2000, 70, 127-164.	0.6	13
115	Trends in tropospheric aerosol loads and corresponding impact on direct radiative forcing between 1950 and 1990: A model study. Journal of Geophysical Research, 2000, 105, 26971-26989.	3.3	93
116	Iron supply and demand in the upper ocean. Global Biogeochemical Cycles, 2000, 14, 281-295.	1.9	472
117	Influence of the latitudinal temperature gradient on soil dust concentration and deposition in Greenland. Journal of Geophysical Research, 2000, 105, 7199-7212.	3.3	21
118	Modelling base cations in Europeâ€"sources, transport and deposition of calcium. Atmospheric Environment, 1999, 33, 2241-2256.	1.9	30
119	Reply [to â€œComment on â€˜Contribution of different aerosol species to the global aerosol extinction optical thickness: Estimates from model resultsâ€™ by Tegen et al.â€]. Journal of Geophysical Research, 1999, 104, 4249-4250.	3.3	1
120	Tropospheric sulfur simulation and sulfate direct radiative forcing in the Goddard Institute for Space Studies general circulation model. Journal of Geophysical Research, 1999, 104, 23799-23822.	3.3	231
121	Radiative Forcing of a Tropical Direct Circulation by Soil Dust Aerosols. Journals of the Atmospheric Sciences, 1999, 56, 2403-2433.	0.6	55
122	Climate effect of soil dust aerosols. Journal of Aerosol Science, 1998, 29, S1013-S1014.	1.8	2
123	A general circulation model study on the interannual variability of soil dust aerosol. Journal of Geophysical Research, 1998, 103, 25975-25995.	3.3	102
124	Climate forcings in the Industrial era. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 12753-12758.	3.3	344
125	Climate Response to Soil Dust Aerosols. Journal of Climate, 1998, 11, 3247-3267.	1.2	471
126	Forcings and chaos in interannual to decadal climate change. Journal of Geophysical Research, 1997, 102, 25679-25720.	3.3	164

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127	Contribution of different aerosol species to the global aerosol extinction optical thickness: Estimates from model results. Journal of Geophysical Research, 1997, 102, 23895-23915.	3.3	522
128	Modeling of particle size distribution and its influence on the radiative properties of mineral dust aerosol. Journal of Geophysical Research, 1996, 101, 19237-19244.	3.3	534
129	The influence on climate forcing of mineral aerosols from disturbed soils. Nature, 1996, 380, 419-422.	13.7	909
130	Mobilization of cesium in organic rich soils: Correlation with production of dissolved organic carbon. Water, Air, and Soil Pollution, 1996, 88, 133-144.	1.1	49
131	Contribution to the atmospheric mineral aerosol load from land surface modification. Journal of Geophysical Research, 1995, 100, 18707.	3.3	502
132	Modeling of mineral dust in the atmosphere: Sources, transport, and optical thickness. Journal of Geophysical Research, 1994, 99, 22897.	3.3	724
133	Laboratory experiments to investigate the influence of microbial activity on the migration of cesium in a forest soil. Water, Air, and Soil Pollution, 1991, 57-58, 441-447.	1.1	25