Patrick JÃ¶ckel

List of Publications by Year
in descending order

192 papers	10,342 citations	53660 45 h-index	54797 84 g-index
403 all docs	403 docs citations	403 times ranked	7013 citing authors

#	Article	IF	Citations
1	A parameterization of long-continuing-current (LCC) lightning in the lightning submodel LNOX (version 3.0) of the Modular Earth Submodel System (MESSy, version 2.54). Geoscientific Model Development, 2022, 15, 1545-1565.	1.3	7
2	Simulation of organics in the atmosphere: evaluation of EMACv2.54 with the Mainz Organic Mechanism (MOM) coupled to the ORACLE (v1.0) submodel. Geoscientific Model Development, 2022, 15, 2673-2710.	1.3	13
3	Case Study for Testing the Validity of NOx-Ozone Algorithmic Climate Change Functions for Optimising Flight Trajectories. Aerospace, 2022, 9, 231.	1.1	4
4	Overview: On the transport and transformation of pollutants in the outflow of major population centres â€" observational data from the EMeRGe European intensive operational period in summer 2017. Atmospheric Chemistry and Physics, 2022, 22, 5877-5924.	1.9	16
5	Quantification of lightning-produced NO_{<i>x</i>} over the Pyrenees and the Ebro Valley by using different TROPOMI-NO₂ and cloud research products. Atmospheric Measurement Techniques, 2022, 15, 3329-3351.	1.2	6
6	Analysis of Aircraft Routing Strategies for North Atlantic Flights by Using AirTraf 2.0. Aerospace, 2021, 8, 33.	1.1	7
7	The response of mesospheric H₂O and CO to solar irradiance variability in models and observations. Atmospheric Chemistry and Physics, 2021, 21, 201-216.	1.9	6
8	Slow feedbacks resulting from strongly enhanced atmospheric methane mixing ratios in a chemistryâ€"climate model with mixed-layer ocean. Atmospheric Chemistry and Physics, 2021, 21, 731-754.	1.9	2
9	Model estimations of geophysical variability between satellite measurements of ozone profiles. Atmospheric Measurement Techniques, 2021, 14, 1425-1438.	1.2	4
10	Methane chemistry in a nutshell â€" the new submodels CH4 (v1.0) and TRSYNC (v1.0) in MESSy (v2.54.0). Geoscientific Model Development, 2021, 14, 661-674.	1.3	4
11	Influence of the El NiÃ±oâ€"Southern Oscillation on entry stratospheric water vapor in coupled chemistryâ€"ocean CCMI and CMIP6 models. Atmospheric Chemistry and Physics, 2021, 21, 3725-3740.	1.9	8
12	COVID-19 induced lower-tropospheric ozone changes. Environmental Research Letters, 2021, 16, 064005.	2.2	15
13	Influence of weather situation on non-CO₂ aviation climate effects: the REACT4C climate change functions. Atmospheric Chemistry and Physics, 2021, 21, 9151-9172.	1.9	14
14	A machine learning examination of hydroxyl radical differences among model simulations for CCMI-1. Atmospheric Chemistry and Physics, 2020, 20, 1341-1361.	1.9	24
15	Attribution of Chemistry-Climate Model Initiative (CCMI) ozone radiative flux bias from satellites. Atmospheric Chemistry and Physics, 2020, 20, 281-301.	1.9	6
16	Description and Evaluation of the specified-dynamics experiment in the Chemistry-Climate Model Initiative. Atmospheric Chemistry and Physics, 2020, 20, 3809-3840.	1.9	16
17	Bromine from short-lived source gases in the extratropical northern hemispheric upper troposphere and lower stratosphere (UTLS). Atmospheric Chemistry and Physics, 2020, 20, 4105-4132.	1.9	19
18	Possible Effects of Greenhouse Gases to Ozone Profiles and DNA Active UV-B Irradiance at Ground Level. Atmosphere, 2020, 11, 228.	1.0	20

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19	Future trends in stratosphere-to-troposphere transport in CCMI models. Atmospheric Chemistry and Physics, 2020, 20, 6883-6901.	1.9	25
20	Attributing ozone and its precursors to land transport emissions in Europe and Germany. Atmospheric Chemistry and Physics, 2020, 20, 7843-7873.	1.9	15
21	Are contributions of emissions to ozone a matter of scale? â€“ a study using MECO(n) (MESSy v2.50). Geoscientific Model Development, 2020, 13, 363-383.	1.3	6
22	Tropospheric Ozone Assessment Report. Elementa, 2020, 8, .	1.1	52
23	Urban greenhouse gas emissions from the Berlin area: A case study using airborne CO2 and CH4 in situ observations in summer 2018. Elementa, 2020, 8, .	1.1	18
24	Impact of the eruption of Mt Pinatubo on the chemical composition of the stratosphere. Atmospheric Chemistry and Physics, 2020, 20, 11697-11715.	1.9	14
25	Estimating CH₄, CO₂ and CO emissions from coal mining and industrial activities in the Upper Silesian Coal Basin using an aircraft-based mass balance approach. Atmospheric Chemistry and Physics, 2020, 20, 12675-12695.	1.9	36
26	On the role of trend and variability in the hydroxyl radical (OH) in the global methane budget. Atmospheric Chemistry and Physics, 2020, 20, 13011-13022.	1.9	18
27	Impact of Lagrangian transport on lower-stratospheric transport timescales in a climate model. Atmospheric Chemistry and Physics, 2020, 20, 15227-15245.	1.9	4
28	Projecting ozone hole recovery using an ensemble of chemistryâ€“climate models weighted by model performance and independence. Atmospheric Chemistry and Physics, 2020, 20, 9961-9977.	1.9	16
29	Hindcasting and forecasting of regional methane from coal mine emissions in the Upper Silesian Coal Basin using the online nested global regional chemistryâ€“climate model MECO(n) (MESSy v2.53). Geoscientific Model Development, 2020, 13, 1925-1943.	1.3	14
30	Newly developed aircraft routing options for air traffic simulation in the chemistryâ€“climate model EMAC 2.53: AirTraf 2.0. Geoscientific Model Development, 2020, 13, 4869-4890.	1.3	17
31	Model simulations of atmospheric methane (1997â€“2016) and their evaluation using NOAA and AGAGE surface and IAGOS-CARIBIC aircraft observations. Atmospheric Chemistry and Physics, 2020, 20, 5787-5809.	1.9	5
32	CH4 and CO2 IPDA Lidar Measurements During the Comet 2018 Airborne Field Campaign. EPJ Web of Conferences, 2020, 237, 03005.	0.1	1
33	Ultraviolet Radiation modelling using output from the Chemistry Climate Model Initiative. , 2019, 19, 10087-10110.		5
34	Influence of Arctic stratospheric ozone on surface climate in CCMI models. Atmospheric Chemistry and Physics, 2019, 19, 9253-9268.	1.9	15
35	Extratropical age of air trends and causative factors in climate projection simulations. Atmospheric Chemistry and Physics, 2019, 19, 7627-7647.	1.9	10
36	Evaluating the Relationship between Interannual Variations in the Antarctic Ozone Hole and Southern Hemisphere Surface Climate in Chemistryâ€“Climate Models. Journal of Climate, 2019, 32, 3131-3151.	1.2	13

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37	Clear-sky ultraviolet radiation modelling using output from the Chemistry Climate Model Initiative. Atmospheric Chemistry and Physics, 2019, 19, 10087-10110.	1.9	22
38	Evaluating Simulations of Interhemispheric Transport: Interhemispheric Exchange Time Versus SF₆ Age. Geophysical Research Letters, 2019, 46, 1113-1120.	1.5	12
39	Large-scale transport into the Arctic: the roles of the midlatitude jet and the Hadley Cell. Atmospheric Chemistry and Physics, 2019, 19, 5511-5528.	1.9	8
40	Implication of strongly increased atmospheric methane concentrations for chemistryâ€“climate connections. Atmospheric Chemistry and Physics, 2019, 19, 7151-7163.	1.9	19
41	The influence of mixing on the stratospheric age of air changes in the 21st century. Atmospheric Chemistry and Physics, 2019, 19, 921-940.	1.9	29
42	The community atmospheric chemistry box model CAABA/MECCA-4.0. Geoscientific Model Development, 2019, 12, 1365-1385.	1.3	54
43	ATTILA 4.0: Lagrangian advective and convective transport of passive tracers within the ECHAM5/MESSy (2.53.0) chemistryâ€“climate model. Geoscientific Model Development, 2019, 12, 1991-2008.	1.3	13
44	Large Impacts, Past and Future, of Ozoneâ€Depleting Substances on Brewerâ€Dobson Circulation Trends: A Multimodel Assessment. Journal of Geophysical Research D: Atmospheres, 2019, 124, 6669-6680.	1.2	28
45	Characterising the seasonal and geographical variability in tropospheric ozone, stratospheric influence and recent changes. Atmospheric Chemistry and Physics, 2019, 19, 3589-3620.	1.9	19
46	Global aerosol modeling with MADE3 (v3.0) in EMAC (based on v2.53): model description and evaluation. Geoscientific Model Development, 2019, 12, 541-579.	1.3	17
47	Ozoneâ€"climate interactions and effects on solar ultraviolet radiation. Photochemical and Photobiological Sciences, 2019, 18, 602-640.	1.6	126
48	Inter-model comparison of global hydroxyl radical (OH) distributions and their impact on atmospheric methane over the 2000â€“2016 period. Atmospheric Chemistry and Physics, 2019, 19, 13701-13723.	1.9	52
49	The effect of atmospheric nudging on the stratospheric residual circulation in chemistryâ€“climate models. Atmospheric Chemistry and Physics, 2019, 19, 11559-11586.	1.9	27
50	Possible implications of enhanced chlorofluorocarbon-11 concentrations on ozone. Atmospheric Chemistry and Physics, 2019, 19, 13759-13771.	1.9	10
51	Quantifying CH₄ emissions from hard coal mines using mobile sun-viewing Fourier transform spectrometry. Atmospheric Measurement Techniques, 2019, 12, 5217-5230.	1.2	38
52	Stratospheric ozone loss over the Eurasian continent induced by the polar vortex shift. Nature Communications, 2018, 9, 206.	5.8	69
53	A refined method for calculating equivalent effective stratospheric chlorine. Atmospheric Chemistry and Physics, 2018, 18, 601-619.	1.9	22
54	Trend differences in lower stratospheric water vapour between Boulder and the zonal mean and their role in understanding fundamental observational discrepancies. Atmospheric Chemistry and Physics, 2018, 18, 8331-8351.	1.9	14

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55	A very limited role of tropospheric chlorine as a sink of the greenhouse gas methane. Atmospheric Chemistry and Physics, 2018, 18, 9831-9843.	1.9	32
56	Tropospheric ozone in CCMI models and Gaussian process emulation to understand biases in the SOCOLv3 chemistryâ€“climate model. Atmospheric Chemistry and Physics, 2018, 18, 16155-16172.	1.9	27
57	Investigating the yield of H₂O and H₂ from methane oxidation in the stratosphere. Atmospheric Chemistry and Physics, 2018, 18, 9955-9973.	1.9	14
58	Large-scale tropospheric transport in the Chemistryâ€“Climate Model Initiative (CCMI) simulations. Atmospheric Chemistry and Physics, 2018, 18, 7217-7235.	1.9	32
59	No robust evidence of future changes in major stratospheric sudden warmings: a multi-model assessment from CCMI. Atmospheric Chemistry and Physics, 2018, 18, 11277-11287.	1.9	41
60	Stratospheric Injection of Brominated Very Shortâ€Lived Substances: Aircraft Observations in the Western Pacific and Representation in Global Models. Journal of Geophysical Research D: Atmospheres, 2018, 123, 5690-5719.	1.2	36
61	Future changes in the stratosphere-to-troposphere ozone mass flux and the contribution from climate change and ozone recovery. Atmospheric Chemistry and Physics, 2018, 18, 7721-7738.	1.9	42
62	The on-line coupled atmospheric chemistry model system MECO(n) â€“ Part 5: Expanding the Multi-Model-Driver (MMD v2.0) for 2-way data exchange including data interpolation via GRID (v1.0). Geoscientific Model Development, 2018, 11, 1059-1076.	1.3	6
63	Tropospheric jet response to Antarctic ozone depletion: An update with Chemistry-Climate Model Initiative (CCMI) models. Environmental Research Letters, 2018, 13, 054024.	2.2	38
64	The representation of solar cycle signals in stratospheric ozone â€“ PartÂ2: Analysis of global models. Atmospheric Chemistry and Physics, 2018, 18, 11323-11343.	1.9	18
65	Estimates of ozone return dates from Chemistry-Climate Model Initiative simulations. Atmospheric Chemistry and Physics, 2018, 18, 8409-8438.	1.9	128
66	Quantifying the effect of mixing on the mean age of air in CCMVal-2 and CCMI-1 models. Atmospheric Chemistry and Physics, 2018, 18, 6699-6720.	1.9	32
67	Revisiting the Mystery of Recent Stratospheric Temperature Trends. Geophysical Research Letters, 2018, 45, 9919-9933.	1.5	51
68	Revisiting the contribution of land transport and shipping emissions to tropospheric ozone. Atmospheric Chemistry and Physics, 2018, 18, 5567-5588.	1.9	26
69	Dynamics and composition of the Asian summer monsoon anticyclone. Atmospheric Chemistry and Physics, 2018, 18, 5655-5675.	1.9	20
70	Feasibility of climate-optimized air traffic routing for trans-Atlantic flights. Environmental Research Letters, 2017, 12, 034003.	2.2	39
71	Formaldehyde in the Tropical Western Pacific: Chemical Sources and Sinks, Convective Transport, and Representation in CAMâ€Chem and the CCMI Models. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11201-11226.	1.2	32
72	Brominated VSLS and their influence on ozone under aÂchanging climate. Atmospheric Chemistry and Physics, 2017, 17, 11313-11329.	1.9	20

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73	Trace gas composition in the Asian summer monsoon anticyclone: a case study based on aircraft observations and model simulations. Atmospheric Chemistry and Physics, 2017, 17, 6091-6111.	1.9	12
74	Uncertainties of fluxes and ¹³Câ€¯âˆ•â€¯¹²C ratios of atmospheric reactive-gas emissions. Atmospheric Chemistry and Physics, 2017, 17, 8525-8552.	1.9	7
75	An â€œislandâ€•in the stratosphere â€“ on the enhanced annual variation of water vapour in the middle and upper stratosphere in the southern tropics and subtropics. Atmospheric Chemistry and Physics, 2017, 17, 11521-11539.	1.9	3
76	A new time-independent formulation of fractional release. Atmospheric Chemistry and Physics, 2017, 17, 3785-3797.	1.9	9
77	Effects of mixing on resolved and unresolved scales on stratospheric age of air. Atmospheric Chemistry and Physics, 2017, 17, 7703-7719.	1.9	29
78	Review of the global models used within phase 1 of the Chemistryâ€“Climate Model Initiative (CCMI). Geoscientific Model Development, 2017, 10, 639-671.	1.3	277
79	MERLIN: A French-German Space Lidar Mission Dedicated to Atmospheric Methane. Remote Sensing, 2017, 9, 1052.	1.8	88
80	Mitigating the Climate Impact from Aviation: Achievements and Results of the DLR WeCare Project. Aerospace, 2017, 4, 34.	1.1	59
81	Contribution of emissions to concentrations: the TAGGING 1.0 submodel based on the Modular Earth Submodel System (MESSy 2.52). Geoscientific Model Development, 2017, 10, 2615-2633.	1.3	26
82	The novel HALO mini-DOAS instrument: inferring trace gas concentrations from airborne UV/visible limb spectroscopy under all skies using the scaling method. Atmospheric Measurement Techniques, 2017, 10, 4209-4234.	1.2	13
83	The STRatospheric Estimation Algorithm from Mainz (STREAM): estimating stratospheric NO₂ from nadir-viewing satellites by weighted convolution. Atmospheric Measurement Techniques, 2016, 9, 2753-2779.	1.2	27
84	The 1-way on-line coupled model system MECO(n) â€“ PartÂ 4: Chemical evaluation (based on MESSyÂ v2.52). Geoscientific Model Development, 2016, 9, 3545-3567.	1.3	14
85	A diagnostic interface for the ICOsahedral Non-hydrostatic (ICON) modelling framework based on the Modular Earth Submodel System (MESSy v2.50). Geoscientific Model Development, 2016, 9, 3639-3654.	1.3	2
86	Implementation of the Community Earth System Model (CESM) version 1.2.1 as a new base model into version 2.50 of the MESSy framework. Geoscientific Model Development, 2016, 9, 125-135.	1.3	11
87	Earth System Chemistry integrated Modelling (ESCiMo) with the Modular Earth Submodel System (MESSy) versionÂ 2.51. Geoscientific Model Development, 2016, 9, 1153-1200.	1.3	208
88	Air traffic simulation in chemistry-climate model EMAC 2.41: AirTraf 1.0. Geoscientific Model Development, 2016, 9, 3363-3392.	1.3	11
89	The millennium water vapour drop in chemistryâ€“climate model simulations. Atmospheric Chemistry and Physics, 2016, 16, 8125-8140.	1.9	27
90	Impact of major volcanic eruptions on stratospheric water vapour. Atmospheric Chemistry and Physics, 2016, 16, 6547-6562.	1.9	29

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91	A new radiation infrastructure for the Modular Earth Submodel System (MESSy, based on version) Tj ETQq1 1 0.784314 rgBT /Overlock	1.3	51
92	Simulation of the isotopic composition of stratospheric water vapour â€“ Part 1: Description and evaluation of the EMAC model. Atmospheric Chemistry and Physics, 2015, 15, 5537-5555.	1.9	13
93	Hydrogen peroxide in the marine boundary layer over the South Atlantic during the OOMPH cruise in March 2007. Atmospheric Chemistry and Physics, 2015, 15, 6971-6980.	1.9	17
94	Simulation of the isotopic composition of stratospheric water vapour â€“ Part 2: Investigation of HDO / H₂O variations. Atmospheric Chemistry and Physics, 2015, 15, 7003-7015.	1.9	13
95	Quantitative evaluation of ozone and selected climate parameters in a set of EMAC simulations. Geoscientific Model Development, 2015, 8, 733-768.	1.3	24
96	Tropical tropospheric ozone column retrieval for GOME-2. Atmospheric Measurement Techniques, 2014, 7, 2513-2530.	1.2	25
97	The photolysis module JVAL-14, compatible with the MESSy standard, and the JVal PreProcessor (JVPP). Geoscientific Model Development, 2014, 7, 2653-2662.	1.3	55
98	Aircraft routing with minimal climate impact: the REACT4C climate cost function modelling approach (V1.0). Geoscientific Model Development, 2014, 7, 175-201.	1.3	51
99	The implementation of the CLaMS Lagrangian transport core into the chemistry climate model EMAC 2.40.1: application on age of air and transport of long-lived trace species. Geoscientific Model Development, 2014, 7, 2639-2651.	1.3	30
100	The generic MESSy submodel TENDENCY (v1.0) for process-based analyses in Earth system models. Geoscientific Model Development, 2014, 7, 1573-1582.	1.3	2
101	Profile information on CO from SCIAMACHY observations using cloud slicing and comparison with model simulations. Atmospheric Chemistry and Physics, 2014, 14, 1717-1732.	1.9	9
102	Chemical contribution to future tropical ozone change in the lower stratosphere. Atmospheric Chemistry and Physics, 2014, 14, 2959-2971.	1.9	41
103	On the theory of mass conserving transformations for Lagrangian methods in 3DÂatmosphere-chemistry models. Meteorologische Zeitschrift, 2014, 23, 441-447.	0.5	5
104	HO_x measurements in the summertime upper troposphere over Europe: a comparison of observations to a box model and a 3-D model. Atmospheric Chemistry and Physics, 2013, 13, 10703-10720.	1.9	19
105	Global sensitivity of aviation NO_x effects to the HNO₃-forming channel of the HO₂ + NO reaction. Atmospheric Chemistry and Physics, 2013, 13, 3003-3025.	1.9	18
106	Numerical Modeling of Climate-Chemistry Connections: Recent Developments and Future Challenges. Atmosphere, 2013, 4, 132-156.	1.0	7
107	Simulation of Particle Precipitation Effects on the Atmosphere with the MESSy Model System. Springer Atmospheric Sciences, 2013, , 301-316.	0.4	9
108	The 1-way on-line coupled atmospheric chemistry model system MECO(n) â€“ Part 2: On-line coupling with the Multi-Model-Driver (MMD). Geoscientific Model Development, 2012, 5, 111-128.	1.3	30

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109	The 1-way on-line coupled atmospheric chemistry model system MECO(n) â€“ Part 3: Meteorological evaluation of the on-line coupled system. Geoscientific Model Development, 2012, 5, 129-147.	1.3	16
110	Atmospheric Composition Change. , 2012, , 309-365.		2
111	Urban emission hot spots as sources for remote aerosol deposition. Geophysical Research Letters, 2012, 39, .	1.5	23
112	The 1-way on-line coupled atmospheric chemistry model system MECO(n) â€“ Part 1: Description of the limited-area atmospheric chemistry model COSMO/MESSy. Geoscientific Model Development, 2012, 5, 87-110.	1.3	42
113	Earth System Modeling. Research Topics in Aerospace, 2012, , 577-590.	0.6	1
114	Multimodel climate and variability of the stratosphere. Journal of Geophysical Research, 2011, 116, .	3.3	139
115	Application of SCIAMACHY and MOPITT CO total column measurements to evaluate model results over biomass burning regions and Eastern China. Atmospheric Chemistry and Physics, 2011, 11, 6083-6114.	1.9	37
116	Distribution of hydrogen peroxide and formaldehyde over Central Europe during the HOOVER project. Atmospheric Chemistry and Physics, 2011, 11, 4391-4410.	1.9	55
117	Geomagnetic activity related NO_x enhancements and polar surface air temperature variability in a chemistry climate model: modulation of the NAM index. Atmospheric Chemistry and Physics, 2011, 11, 4521-4531.	1.9	118
118	Corrigendum to "Geomagnetic activity related NO_x enhancements and polar surface air temperature variability in a chemistry climate model: modulation of the NAM index" published in Atmos. Chem. Phys., 11, 4521â€“4531, 2011. Atmospheric Chemistry and Physics, 2011, 11, 4687-4687.	1.9	1
119	Projections of UV radiation changes in the 21st century: impact of ozone recovery and cloud effects. Atmospheric Chemistry and Physics, 2011, 11, 7533-7545.	1.9	75
120	Small Interannual Variability of Global Atmospheric Hydroxyl. Science, 2011, 331, 67-69.	6.0	306
121	A quasi chemistry-transport model mode for EMAC. Geoscientific Model Development, 2011, 4, 195-206.	1.3	47
122	The atmospheric chemistry box model CAABA/MECCA-3.0. Geoscientific Model Development, 2011, 4, 373-380.	1.3	161
123	Simulation of polar stratospheric clouds in the chemistry-climate-model EMAC via the submodel PSC. Geoscientific Model Development, 2011, 4, 169-182.	1.3	53
124	The Atmosphere-Ocean General Circulation Model EMAC-MPIOM. Geoscientific Model Development, 2011, 4, 771-784.	1.3	22
125	Assessing the effect of marine isoprene and ship emissions on ozone, using modelling and measurements from the South Atlantic Ocean. Environmental Chemistry, 2010, 7, 171.	0.7	26
126	Uncertainties in atmospheric chemistry modelling due to convection parameterisations and subsequent scavenging. Atmospheric Chemistry and Physics, 2010, 10, 1931-1951.	1.9	113

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127	Will climate change increase ozone depletion from low-energy-electron precipitation?. Atmospheric Chemistry and Physics, 2010, 10, 9647-9656.	1.9	10
128	Energetic particle precipitation in ECHAM5/MESSy â€“ Part 2: Solar proton events. Atmospheric Chemistry and Physics, 2010, 10, 7285-7302.	1.9	23
129	Observed and simulated global distribution and budget of atmospheric C₂-C₅ alkanes. Atmospheric Chemistry and Physics, 2010, 10, 4403-4422.	1.9	104
130	Development cycle 2 of the Modular Earth Submodel System (MESSy2). Geoscientific Model Development, 2010, 3, 717-752.	1.3	398
131	A fast stratospheric chemistry solver: the E4CHEM submodel for the atmospheric chemistry global circulation model EMAC. Geoscientific Model Development, 2010, 3, 321-328.	1.3	2
132	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
133	A kinetic chemistry tagging technique and its application to modelling the stable isotopic composition of atmospheric trace gases. Geoscientific Model Development, 2010, 3, 337-364.	1.3	41
134	Chemistryâ€climate model simulations of spring Antarctic ozone. Journal of Geophysical Research, 2010, 115, .	3.3	51
135	Multimodel assessment of the upper troposphere and lower stratosphere: Tropics and global trends. Journal of Geophysical Research, 2010, 115, .	3.3	171
136	Review of the formulation of presentâ€generation stratospheric chemistryâ€climate models and associated external forcings. Journal of Geophysical Research, 2010, 115, .	3.3	150
137	Multimodel assessment of the upper troposphere and lower stratosphere: Extratropics. Journal of Geophysical Research, 2010, 115, .	3.3	67
138	Impact of stratospheric ozone on Southern Hemisphere circulation change: A multimodel assessment. Journal of Geophysical Research, 2010, 115, .	3.3	280
139	Quantifying atmospheric transport, chemistry, and mixing using a new trajectory-box model and a global atmospheric-chemistry GCM. Geoscientific Model Development, 2009, 2, 267-280.	1.3	7
140	Atmospheric composition change: Climateâ€“Chemistry interactions. Atmospheric Environment, 2009, 43, 5138-5192.	1.9	243
141	Severe ozone air pollution in the Persian Gulf region. Atmospheric Chemistry and Physics, 2009, 9, 1393-1406.	1.9	105
142	Energetic particle precipitation in ECHAM5/MESSy1 â€“ Part 1: Downward transport of upper atmospheric NO_x produced by low energy electrons. Atmospheric Chemistry and Physics, 2009, 9, 2729-2740.	1.9	51
143	The impact of traffic emissions on atmospheric ozone and OH: results from QUANTIFY. Atmospheric Chemistry and Physics, 2009, 9, 3113-3136.	1.9	143
144	Bacteria in the global atmosphere â€“ Part 2: Modeling of emissions and transport between different ecosystems. Atmospheric Chemistry and Physics, 2009, 9, 9281-9297.	1.9	284

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145	Corrigendum to "Technical Note: An implementation of the dry removal processes DRY DEPosition and SEDImentation in the Modular Earth Submodel System (MESSy)" published in Atmos. Chem. Phys., 6, 4617â€“4632, 2006. Atmospheric Chemistry and Physics, 2009, 9, 9569-9569.	1.9	6
146	Evaluation of CLaMS, KASIMA and ECHAM5/MESSy1 simulations in the lower stratosphere using observations of Odin/SMR and ILAS/ILAS-II. Atmospheric Chemistry and Physics, 2009, 9, 5759-5783.	1.9	7
147	Ship emitted NO₂ in the Indian Ocean: comparison of model results with satellite data. Atmospheric Chemistry and Physics, 2009, 9, 7289-7301.	1.9	47
148	The influence of the vertical distribution of emissions on tropospheric chemistry. Atmospheric Chemistry and Physics, 2009, 9, 9417-9432.	1.9	59
149	Consistent simulation of bromine chemistry from the marine boundary layer to the stratosphere â€“ Part 1: Model description, sea salt aerosols and pH. Atmospheric Chemistry and Physics, 2008, 8, 5899-5917.	1.9	30
150	What can ¹⁴CO measurements tell us about OH?. Atmospheric Chemistry and Physics, 2008, 8, 5033-5044.	1.9	40
151	Technical Note: Coupling of chemical processes with the Modular Earth Submodel System (MESSy) submodel TRACER. Atmospheric Chemistry and Physics, 2008, 8, 1677-1687.	1.9	65
152	Consistent simulation of bromine chemistry from the marine boundary layer to the stratosphere â€“ Part 2: Bromocarbons. Atmospheric Chemistry and Physics, 2008, 8, 5919-5939.	1.9	49
153	Stratospheric dryness: model simulations and satellite observations. Atmospheric Chemistry and Physics, 2007, 7, 1313-1332.	1.9	109
154	Technical Note: Simulation of detailed aerosol chemistry on the global scale using MECCA-AERO. Atmospheric Chemistry and Physics, 2007, 7, 2973-2985.	1.9	37
155	Lightning and convection parameterisations â€“ uncertainties in global modelling. Atmospheric Chemistry and Physics, 2007, 7, 4553-4568.	1.9	163
156	Nitrogen compounds and ozone in the stratosphere: comparison of MIPAS satellite data with the chemistry climate model ECHAM5/MESSy1. Atmospheric Chemistry and Physics, 2007, 7, 5585-5598.	1.9	34
157	Simulating organic species with the global atmospheric chemistry general circulation model ECHAM5/MESSy1: a comparison of model results with observations. Atmospheric Chemistry and Physics, 2007, 7, 2527-2550.	1.9	95
158	Global cloud and precipitation chemistry and wet deposition: tropospheric model simulations with ECHAM5/MESSy1. Atmospheric Chemistry and Physics, 2007, 7, 2733-2757.	1.9	104
159	Evidence for a CO increase in the SH during the 20th century based on firn air samples from Berkner Island, Antarctica. Atmospheric Chemistry and Physics, 2007, 7, 295-308.	1.9	32
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