

Emergence of healing in the Antarctic ozone layer

Science

353, 269-274

DOI: [10.1126/science.aae0061](https://doi.org/10.1126/science.aae0061)

Citation Report

#	ARTICLE	IF	CITATIONS
2	Antarctic ozone hole is on the mend. <i>Nature</i> , 2016, , .	13.7	0
3	The Role of Eddy Diffusivity on a Poleward Jet Shift. <i>Journals of the Atmospheric Sciences</i> , 2016, 73, 4945-4958.	0.6	6
4	Coordination vs. voluntarism and enforcement in sustaining international environmental cooperation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 14515-14522.	3.3	51
5	Advection in polar and sub-polar environments: Impacts on high latitude marine ecosystems. <i>Progress in Oceanography</i> , 2016, 149, 40-81.	1.5	95
6	Ozone content over the Russian Federation in the third quarter of 2016. <i>Russian Meteorology and Hydrology</i> , 2016, 41, 828-831.	0.2	1
7	Environmental effects of ozone depletion and its interactions with climate change: Progress report, 2016. <i>Photochemical and Photobiological Sciences</i> , 2017, 16, 107-145.	1.6	62
8	Leveraging Natural Variance towards Enhanced Understanding of Phytochemical Sunscreens. <i>Trends in Plant Science</i> , 2017, 22, 308-315.	4.3	46
9	The influence of the Calbuco eruption on the 2015 Antarctic ozone hole in a fully coupled chemistry-climate model. <i>Geophysical Research Letters</i> , 2017, 44, 2556-2561.	1.5	53
10	Nonstationarity in Southern Hemisphere Climate Variability Associated with the Seasonal Breakdown of the Stratospheric Polar Vortex. <i>Journal of Climate</i> , 2017, 30, 7125-7139.	1.2	26
11	A hiatus in the tropopause layer change. <i>International Journal of Climatology</i> , 2017, 37, 4972-4980.	1.5	5
12	An intercomparison of multidecadal observational and reanalysis data sets for global total ozone trends and variability analysis. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 7119-7139.	1.2	9
13	Impact of volcanic aerosols on stratospheric ozone recovery. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 9515-9528.	1.2	6
14	Mirrored changes in Antarctic ozone and stratospheric temperature in the late 20th versus early 21st centuries. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 8940-8950.	1.2	35
15	The strength of the meridional overturning circulation of the stratosphere. <i>Nature Geoscience</i> , 2017, 10, 663-667.	5.4	27
16	Troposphere-Stratosphere Temperature Trends Derived From Satellite Data Compared With Ensemble Simulations From WACCM. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 9651-9667.	1.2	51
17	Detecting recovery of the stratospheric ozone layer. <i>Nature</i> , 2017, 549, 211-218.	13.7	182
18	Synchronous volcanic eruptions and abrupt climate change ~17.7 ka plausibly linked by stratospheric ozone depletion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 10035-10040.	3.3	58
19	Considerable contribution of the Montreal Protocol to declining greenhouse gas emissions from the United States. <i>Geophysical Research Letters</i> , 2017, 44, 8075-8083.	1.5	30

#	ARTICLE	IF	CITATIONS
20	Human Impacts. , 2017, , 26-67.		0
21	A Sub-Antarctic Peat Moss Metagenome Indicates Microbiome Resilience to Stress and Biogeochemical Functions of Early Paleozoic Terrestrial Ecosystems. <i>International Journal of Plant Sciences</i> , 2017, 178, 618-628.	0.6	15
22	Onset of Stratospheric Ozone Recovery in the Antarctic Ozone Hole in Assimilated Daily Total Ozone Columns. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 11,880.	1.2	14
23	Observing the Impact of Calbuco Volcanic Aerosols on South Polar Ozone Depletion in 2015. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 11,862.	1.2	32
24	Reconstructions of the southern annular mode (SAM) during the last millennium. <i>Progress in Physical Geography</i> , 2017, 41, 834-849.	1.4	17
25	The Climate Response to Stratospheric Aerosol Geoengineering Can Be Tailored Using Multiple Injection Locations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 12,574.	1.2	95
26	Radiative and Chemical Response to Interactive Stratospheric Sulfate Aerosols in Fully Coupled CESM1 (WACCM). <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 13,061.	1.2	128
27	The use of international agreements in transnational environmental protection. <i>Oxford Economic Papers</i> , 2017, 69, 333-344.	0.7	5
28	Southern Ocean Decadal Variability and Predictability. <i>Current Climate Change Reports</i> , 2017, 3, 163-173.	2.8	13
29	The increasing threat to stratospheric ozone from dichloromethane. <i>Nature Communications</i> , 2017, 8, 15962.	5.8	147
30	Ozone content over the Russian Federation in 2016. <i>Russian Meteorology and Hydrology</i> , 2017, 42, 135-140.	0.2	4
31	UV-B antagonises shade avoidance and increases levels of the flavonoid quercetin in coriander (<i>Coriandrum sativum</i>). <i>Scientific Reports</i> , 2017, 7, 17758.	1.6	31
32	Reconciling differences in stratospheric ozone composites. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 12269-12302.	1.9	35
33	Long-range transport of stratospheric aerosols in the Southern Hemisphere following the 2015 Calbuco eruption. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 15019-15036.	1.9	32
34	Two mechanisms of stratospheric ozone loss in the Northern Hemisphere, studied using data assimilation of Odin/SMR atmospheric observations. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 1791-1803.	1.9	8
35	Equatorward dispersion of a high-latitude volcanic plume and its relation to the Asian summer monsoon: a case study of the Sarychev eruption in 2009. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 13439-13455.	1.9	33
36	Impact of biogenic very short-lived bromine on the Antarctic ozone hole during the 21st century. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 1673-1688.	1.9	41
37	Evolution of the eastward shift in the quasi-stationary minimum of the Antarctic total ozone column. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 1741-1758.	1.9	15

#	ARTICLE	IF	CITATIONS
38	Impact of a moderate volcanic eruption on chemistry in the lower stratosphere: balloon-borne observations and model calculations. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 2229-2253.	1.9	25
39	Space-based observation of volcanic iodine monoxide. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 4857-4870.	1.9	21
40	Antioxidant Responses Induced by UVB Radiation in <i>Deschampsia antarctica</i> Desv.. <i>Frontiers in Plant Science</i> , 2017, 8, 921.	1.7	53
41	Southern Ocean Phytoplankton in a Changing Climate. <i>Frontiers in Marine Science</i> , 2017, 4, .	1.2	251
42	Contrasting Responses of Marine and Freshwater Photosynthetic Organisms to UVB Radiation: A Meta-Analysis. <i>Frontiers in Marine Science</i> , 2017, 4, .	1.2	12
43	Brewer's Dobson Circulation: Recent-Past and Near-Future Trends Simulated by Chemistry-Climate Models. <i>Advances in Meteorology</i> , 2017, 2017, 1-13.	0.6	8
44	The signs of Antarctic ozone hole recovery. <i>Scientific Reports</i> , 2017, 7, 585.	1.6	72
46	Ideal-Type Narratives for Engineering a Human Niche. <i>Geosciences (Switzerland)</i> , 2017, 7, 18.	1.0	8
50	Multi-proxy dating of Iceland's major pre-settlement Katla eruption to 822-823 CE. <i>Geology</i> , 2017, 45, 783-786.	2.0	22
51	Intercomparison of total column ozone data from the Pandora spectrophotometer with Dobson, Brewer, and OMI measurements over Seoul, Korea. <i>Atmospheric Measurement Techniques</i> , 2017, 10, 3661-3676.	1.2	10
53	Validation of Atmospheric Profile Retrievals from the SNPP NOAA-Unique Combined Atmospheric Processing System. Part 2: Ozone. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2018, 56, 598-607.	2.7	21
54	Correlated Molecular Structural Motions for Photoprotection after Deep-UV Irradiation. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2311-2319.	2.1	18
55	Detectability of the impacts of ozone-depleting substances and greenhouse gases upon stratospheric ozone accounting for nonlinearities in historical forcings. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 143-166.	1.9	10
56	Continued increase of CFC-113a (CCl ₃ CF ₃) mixing ratios in the global atmosphere: emissions, occurrence and potential sources. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 4737-4751.	1.9	18
57	Embodied carbon as a proxy for the environmental impact of earthquake damage repair. <i>Energy and Buildings</i> , 2018, 164, 131-139.	3.1	21
58	Environmental effects of ozone depletion, UV radiation and interactions with climate change: UNEP Environmental Effects Assessment Panel, update 2017. <i>Photochemical and Photobiological Sciences</i> , 2018, 17, 127-179.	1.6	177
59	Stratospheric ozone loss over the Eurasian continent induced by the polar vortex shift. <i>Nature Communications</i> , 2018, 9, 206.	5.8	69
60	Assessment of Eco-friendly Gases for Electrical Insulation to Replace the Most Potent Industrial Greenhouse Gas SF ₆ . <i>Environmental Science & Technology</i> , 2018, 52, 369-380.	4.6	222

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61	Decline in Antarctic Ozone Depletion and Lower Stratospheric Chlorine Determined From Aura Microwave Limb Sounder Observations. <i>Geophysical Research Letters</i> , 2018, 45, 382-390.	1.5	79
62	Ozone sensitivity to varying greenhouse gases and ozone-depleting substances in CCM1-1 simulations. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 1091-1114.	1.9	56
63	Evidence for a continuous decline in lower stratospheric ozone offsetting ozone layer recovery. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 1379-1394.	1.9	214
64	Total ozone trends from 1979 to 2016 derived from five merged observational datasets – the emergence into ozone recovery. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 2097-2117.	1.9	118
65	Effects of Temperature and Photorepair Radiation on a Marine Ciliate Exposed to UVB Radiation. <i>Journal of Eukaryotic Microbiology</i> , 2018, 65, 458-467.	0.8	5
66	The maintenance of elevated active chlorine levels in the Antarctic lower stratosphere through HCl null cycles. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 2985-2997.	1.9	18
67	Ultraviolet radiation in the Atacama Desert. <i>Antonie Van Leeuwenhoek</i> , 2018, 111, 1301-1313.	0.7	48
68	Accuracy of satellite total column ozone measurements in polar vortex conditions: Comparison with ground-based observations in 1979–2013. <i>Remote Sensing of Environment</i> , 2018, 209, 648-659.	4.6	15
69	Influence of low ozone episodes on erythemal UV-B radiation in Austria. <i>Theoretical and Applied Climatology</i> , 2018, 133, 319-329.	1.3	11
70	On the natural diversity of phenylacylated-flavonoid and their in planta function under conditions of stress. <i>Phytochemistry Reviews</i> , 2018, 17, 279-290.	3.1	48
71	Intrinsic and extrinsic benefits as promoters of pro-environmental behaviour / <i>Beneficios intrínsecos y extrínsecos como promotores de la conducta proambiental</i> . <i>Psycology</i> , 2018, 9, 33-54.	1.1	3
72	Individual and interactive effects of ocean acidification, global warming, and UV radiation on phytoplankton. <i>Journal of Applied Phycology</i> , 2018, 30, 743-759.	1.5	37
73	Physiological responses and toxin production of <i>Microcystis aeruginosa</i> in short-term exposure to solar UV radiation. <i>Photochemical and Photobiological Sciences</i> , 2018, 17, 69-80.	1.6	14
74	Ulrich Beck: exploring and contesting risk. <i>Journal of Risk Research</i> , 2018, 21, 6-16.	1.4	18
75	Study of the Possible Impact of the Calbuco Volcano Eruption on the Abnormal Destruction of Stratospheric Ozone over the Antarctic in Spring 2015. <i>Atmospheric and Oceanic Optics</i> , 2018, 31, 665-669.	0.6	6
76	Linking uncertainty in simulated Arctic ozone loss to uncertainties in modelled tropical stratospheric water vapour. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 15047-15067.	1.9	1
77	Bifurcation of potential vorticity gradients across the Southern Hemisphere stratospheric polar vortex. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 8065-8077.	1.9	6
78	Evaluating simplified chemical mechanisms within present-day simulations of the Community Earth System Model version 1.2 with CAM4 (CESM1.2 CAM-chem): MOZART-4 vs. Reduced Hydrocarbon vs. Super-Fast chemistry. <i>Geoscientific Model Development</i> , 2018, 11, 4155-4174.	1.3	9

#	ARTICLE	IF	CITATIONS
79	Anticipating future Volcanic Explosivity Index (VEI) 7 eruptions and their chilling impacts. , 2018, 14, 572-603.		75
80	Ultraviolet Radiation modelling using output from the Chemistry Climate Model Initiative. , 2019, 19, 10087-10110.		5
81	Long-Term Wintertime Trend of Zonally Asymmetric Ozone in Boreal Extratropics During 1979â€“2016. Atmosphere, 2018, 9, 468.	1.0	0
82	Representativeness of single lidar stations for zonally averaged ozone profiles, their trends and attribution to proxies. Atmospheric Chemistry and Physics, 2018, 18, 6427-6440.	1.9	16
83	The Interactive Stratospheric Aerosol Model Intercomparison Project (ISA-MIP): motivation and experimental design. Geoscientific Model Development, 2018, 11, 2581-2608.	1.3	57
84	Environmental art: A path to civic progress in a time of policy retreat in the United States. Cogent Arts and Humanities, 2018, 5, .	0.5	7
86	Variability of the Southern Hemisphere Subtropical Jet Stream in the Second Half of the 20th Century and Early 21st Century. Izvestiya - Atmospheric and Oceanic Physics, 2018, 54, 430-438.	0.2	6
88	UV measurements at Marambio and Ushuaia during 2000â€“2010. Atmospheric Chemistry and Physics, 2018, 18, 16019-16031.	1.9	8
89	Long-range transport of volcanic aerosol from the 2010 Merapi tropical eruption to Antarctica. Atmospheric Chemistry and Physics, 2018, 18, 15859-15877.	1.9	14
90	Seasonal Evolution of Stratosphereâ€“Troposphere Coupling in the Southern Hemisphere and Implications for the Predictability of Surface Climate. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,002.	1.2	53
91	Emergence of ozone recovery evidenced by reduction in the occurrence of Antarctic ozone loss saturation. Npj Climate and Atmospheric Science, 2018, 1, .	2.6	34
92	Effects of Different Stratospheric SO ₂ Injection Altitudes on Stratospheric Chemistry and Dynamics. Journal of Geophysical Research D: Atmospheres, 2018, 123, 4654-4673.	1.2	58
93	Ozone and climate governance: An implausible path dependence. Comptes Rendus - Geoscience, 2018, 350, 435-441.	0.4	9
94	Total ozone characteristics associated with regional meteorology in West Antarctica. Atmospheric Environment, 2018, 195, 78-88.	1.9	3
95	Using machine learning to build temperature-based ozone parameterizations for climate sensitivity simulations. Environmental Research Letters, 2018, 13, 104016.	2.2	48
96	Stratospheric Aerosols, Polar Stratospheric Clouds, and Polar Ozone Depletion After the Mount Calbuco Eruption in 2015. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12,308.	1.2	31
97	Recent Arctic ozone depletion: Is there an impact of climate change?. Comptes Rendus - Geoscience, 2018, 350, 347-353.	0.4	22
98	Volcanic Radiative Forcing From 1979 to 2015. Journal of Geophysical Research D: Atmospheres, 2018, 123, 12491-12508.	1.2	87

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99	Changes in water vapor and aerosols and their relation to stratospheric ozone. <i>Comptes Rendus - Geoscience</i> , 2018, 350, 376-383.	0.4	5
100	The role and performance of ground-based networks in tracking the evolution of the ozone layer. <i>Comptes Rendus - Geoscience</i> , 2018, 350, 354-367.	0.4	7
101	Is global ozone recovering?. <i>Comptes Rendus - Geoscience</i> , 2018, 350, 368-375.	0.4	26
102	On the Cause of Recent Variations in Lower Stratospheric Ozone. <i>Geophysical Research Letters</i> , 2018, 45, 5718-5726.	1.5	87
103	Surface Temperature in Twentieth Century at the Styx Glacier, Northern Victoria Land, Antarctica, From Borehole Thermometry. <i>Geophysical Research Letters</i> , 2018, 45, 9834-9842.	1.5	14
104	On ozone trend detection: using coupled chemistry-climate simulations to investigate early signs of total column ozone recovery. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 7625-7637.	1.9	18
105	Increased CO ₂ exacerbates the stress of ultraviolet radiation on photosystem II function in the diatom <i>Thalassiosira weissflogii</i> . <i>Environmental and Experimental Botany</i> , 2018, 156, 96-105.	2.0	30
107	The molecular products and biogeochemical significance of lipid photooxidation in West Antarctic surface waters. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 232, 244-264.	1.6	11
108	Managing Global Environmental Change. , 2018, , 223-264.		0
109	Retrieval of ozone profiles from OMPS limb scattering observations. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 2135-2149.	1.2	31
110	Inadvertent Weather Modification - , 2018, , .		0
111	On the Role of Heterogeneous Chemistry in Ozone Depletion and Recovery. <i>Geophysical Research Letters</i> , 2018, 45, 7835-7842.	1.5	11
113	Human influence on the seasonal cycle of tropospheric temperature. <i>Science</i> , 2018, 361, .	6.0	103
114	SO ₂ emissions, plume heights and magmatic processes inferred from satellite data: The 2015 Calbuco eruptions. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 361, 12-24.	0.8	24
115	The Antarctic Treaty System and the Anthropocene. <i>Polar Journal</i> , 2018, 8, 29-43.	0.4	14
116	Estimates of ozone return dates from Chemistry-Climate Model Initiative simulations. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 8409-8438.	1.9	128
118	The recent signs of total column ozone recovery over mid-latitudes: The effects of the Montreal Protocol mandate. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2018, 178, 32-46.	0.6	5
119	Revisiting the Mystery of Recent Stratospheric Temperature Trends. <i>Geophysical Research Letters</i> , 2018, 45, 9919-9933.	1.5	51

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120	Multiple symptoms of total ozone recovery inside the Antarctic vortex during austral spring. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 7557-7572.	1.9	29
121	Stratospheric Ozone Depletion and Recovery. , 2018, , 177-209.		9
122	Decadal changes in the central tropical Pacific teleconnection to the Southern Hemisphere extratropics. <i>Climate Dynamics</i> , 2019, 52, 4027-4055.	1.7	10
123	Meteorology and Climate Influences on Tropospheric Ozone: a Review of Natural Sources, Chemistry, and Transport Patterns. <i>Current Pollution Reports</i> , 2019, 5, 238-260.	3.1	140
124	Why Do Antarctic Ozone Recovery Trends Vary?. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 8837-8850.	1.2	12
125	Challenges for the recovery of the ozone layer. <i>Nature Geoscience</i> , 2019, 12, 592-596.	5.4	50
126	The Effect of Super Volcanic Eruptions on Ozone Depletion in a Chemistry-Climate Model. <i>Advances in Atmospheric Sciences</i> , 2019, 36, 823-836.	1.9	8
127	Cambio climático y salud. <i>Revista Clinica Espanola</i> , 2019, 219, 260-265.	0.2	14
128	Sulfuric acid decomposition chemistry above Junge layer in Earth's atmosphere concerning ozone depletion and healing. <i>Communications Chemistry</i> , 2019, 2, .	2.0	6
129	Evaluating the Relationship between Interannual Variations in the Antarctic Ozone Hole and Southern Hemisphere Surface Climate in Chemistry-Climate Models. <i>Journal of Climate</i> , 2019, 32, 3131-3151.	1.2	13
130	Middle Atmosphere Temperature Trends in the Twentieth and Twenty-First Centuries Simulated With the Whole Atmosphere Community Climate Model (WACCM). <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 7984-7993.	0.8	24
131	Clear-sky ultraviolet radiation modelling using output from the Chemistry Climate Model Initiative. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 10087-10110.	1.9	22
133	Applications of ultrafast spectroscopy to sunscreen development, from first principles to complex mixtures. <i>International Reviews in Physical Chemistry</i> , 2019, 38, 243-285.	0.9	21
134	The State and Future of Antarctic Environments in a Global Context. <i>Annual Review of Environment and Resources</i> , 2019, 44, 1-30.	5.6	54
135	Stratospheric ozone trends for 1985-2018: sensitivity to recent large variability. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 12731-12748.	1.9	57
136	Observed changes in Brewer-Dobson circulation for 1980-2018. <i>Environmental Research Letters</i> , 2019, 14, 114026.	2.2	23
140	Analysis of a southern sub-polar short-term ozone variation event using a millimetre-wave radiometer. <i>Annales Geophysicae</i> , 2019, 37, 613-629.	0.6	8
141	The ALTIUS atmospheric limb sounder. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 238, 106542.	1.1	10

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142	Australian hot and dry extremes induced by weakenings of the stratospheric polar vortex. <i>Nature Geoscience</i> , 2019, 12, 896-901.	5.4	87
143	Recent Trends in Stratospheric Chlorine From Very Short-Lived Substances. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 2318-2335.	1.2	34
144	Signs of the ozone recovery based on multi sensor reanalysis of total ozone for the period 1979-2017. <i>Atmospheric Environment</i> , 2019, 199, 334-344.	1.9	7
145	Ground-based ozone profiles over central Europe: incorporating anomalous observations into the analysis of stratospheric ozone trends. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 4289-4309.	1.9	12
146	Evaluation of CESM1 (WACCM) free-running and specified dynamics atmospheric composition simulations using global multispecies satellite data records. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 4783-4821.	1.9	40
147	The global diabatic circulation of the stratosphere as a metric for the Brewer-Dobson circulation. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 5069-5090.	1.9	4
148	Global tropopause altitudes in radiosondes and reanalyses. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 5661-5678.	1.9	49
149	Optimal estimation method retrievals of stratospheric ozone profiles from a DIAL. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 2097-2111.	1.2	4
150	The use of QBO, ENSO, and NAO perturbations in the evaluation of GOME-2 MetOp A total ozone measurements. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 987-1011.	1.2	2
151	Attribution of the Hemispheric Asymmetries in Trends of Stratospheric Trace Gases Inferred From Microwave Limb Sounder (MLS) Measurements. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 6283-6293.	1.2	12
152	Comparing the impacts of climate change on the responses and linkages between terrestrial and aquatic ecosystems. <i>Science of the Total Environment</i> , 2019, 682, 239-246.	3.9	71
153	The cause of the strengthening of the Antarctic polar vortex during October-November periods. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2019, 190, 1-5.	0.6	17
154	Five decades observing Earth's atmospheric trace gases using ultraviolet and visible backscatter solar radiation from space. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 238, 106478.	1.1	26
156	<i>The Earth System</i> . , 2019, , 19-43.		0
157	<i>Impacts of Chemical Pollution</i> . , 2019, , 44-64.		0
158	<i>Modelling Environmental Transport and Fate of Pollutants</i> . , 2019, , 65-93.		3
159	<i>Qualitative and Quantitative Risk Assessment</i> . , 2019, , 118-138.		1
160	<i>Environmental Assessment of Products and Processes</i> . , 2019, , 139-169.		0

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163	New method to capture traveling waves in flow passing a wind turbine. <i>Wind Energy</i> , 2019, 22, 922-931.	1.9	4
164	Change climate and health. <i>Revista Científica Española</i> , 2019, 219, 260-265.	0.3	4
165	Exploring Geoethics. , 2019, , .		30
166	Humanistic Geosciences and the Planetary Human Niche. , 2019, , 137-164.		10
167	Lagrangian simulation of ice particles and resulting dehydration in the polar winter stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 543-563.	1.9	13
168	New Insights on the Impact of Ozone-Depleting Substances on the Brewer-Dobson Circulation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 2435-2451.	1.2	26
169	Prediction of Northern Hemisphere Regional Surface Temperatures Using Stratospheric Ozone Information. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 5922-5933.	1.2	18
170	ANTARCTIC OZONE HOLE AS A NATURAL GEOPHYSICAL OBJECT. <i>E3S Web of Conferences</i> , 2019, 75, 02008.	0.2	0
171	Ozone-climate interactions and effects on solar ultraviolet radiation. <i>Photochemical and Photobiological Sciences</i> , 2019, 18, 602-640.	1.6	126
172	The potential of biotechnology for mitigation of greenhouse gasses effects: solutions, challenges, and future perspectives. <i>Arabian Journal of Geosciences</i> , 2019, 12, 1.	0.6	7
173	The Engineer's Role in Environmental Protection. , 2019, , 1-18.		0
174	Introduction to Toxicology. , 2019, , 94-117.		0
175	Regulatory Structures. , 2019, , 170-197.		0
177	The Antarctic ozone hole during 2017. <i>Journal of Southern Hemisphere Earth Systems Science</i> , 2019, 69, 29.	0.7	5
178	Intercomparison of Ground- and Satellite-Based Total Ozone Data Products at Marambio Base, Antarctic Peninsula Region. <i>Atmosphere</i> , 2019, 10, 721.	1.0	1
179	Trends in Antarctic ozone hole metrics 2001-17. <i>Journal of Southern Hemisphere Earth Systems Science</i> , 2019, 69, 52.	0.7	6
180	Possible implications of enhanced chlorofluorocarbon-11 concentrations on ozone. <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 13759-13771.	1.9	10
181	Is the recovery of stratospheric O ₃ speeding up in the Southern Hemisphere? An evaluation from the first IASI decadal record (2008-2017). <i>Atmospheric Chemistry and Physics</i> , 2019, 19, 14031-14056.	1.9	9

#	ARTICLE	IF	CITATIONS
182	Quantifying stochastic uncertainty in detection time of human-caused climate signals. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19821-19827.	3.3	32
183	Delay in recovery of the Antarctic ozone hole from unexpected CFC-11 emissions. Nature Communications, 2019, 10, 5781.	5.8	58
184	Antarctic environmental change and biological responses. Science Advances, 2019, 5, eaaz0888.	4.7	215
186	Climate Forcing and Response to Greenhouse Gases, Aerosols, and Ozone in CESM1. Journal of Geophysical Research D: Atmospheres, 2019, 124, 13876-13894.	1.2	19
187	Spring Ozone's Connection to South Africa's Temperature and Rainfall. Frontiers in Earth Science, 2019, 7, .	0.8	1
188	Analysis of the position and strength of westerlies and trades with implications for Agulhas leakage and South Benguela upwelling. Earth System Dynamics, 2019, 10, 847-858.	2.7	5
189	Increasing Water Vapor in the Stratosphere and Mesosphere After 2002. Geophysical Research Letters, 2019, 46, 13452-13460.	1.5	24
190	Changes in the total ozone content over the period 2006 to 2100 and the effects on the erythemal and vitamin D effective UV doses for South America and Antarctica. Photochemical and Photobiological Sciences, 2019, 18, 2931-2941.	1.6	13
191	Intra-strain Variability in the Effects of Temperature on UV-B Sensitivity of Cyanobacteria. Photochemistry and Photobiology, 2019, 95, 306-314.	1.3	5
192	Anthropogenic chlorine under watch. Nature Geoscience, 2019, 12, 84-86.	5.4	2
193	The Teleconnection of El Niño Southern Oscillation to the Stratosphere. Reviews of Geophysics, 2019, 57, 5-47.	9.0	245
194	Surface and tropospheric ozone trends in the Southern Hemisphere since 1990: possible linkages to poleward expansion of the Hadley circulation. Science Bulletin, 2019, 64, 400-409.	4.3	40
195	Compounding tropical and stratospheric forcing of the record low Antarctic sea-ice in 2016. Nature Communications, 2019, 10, 13.	5.8	111
196	Recent Tropical Expansion: Natural Variability or Forced Response?. Journal of Climate, 2019, 32, 1551-1571.	1.2	87
197	Differential Photosynthetic Response of a Green Tide Alga <i>Ulva linza</i> to Ultraviolet Radiation, Under Short- and Long-term Ocean Acidification Regimes. Photochemistry and Photobiology, 2019, 95, 990-998.	1.3	4
199	Resilience and self-regulation processes of microalgae under UV radiation stress. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2020, 43, 100322.	5.6	40
200	Southern-Hemisphere high-latitude stratospheric warming revisit. Climate Dynamics, 2020, 54, 1671-1682.	1.7	11
201	Results of Long-term Observations of Total Ozone in Antarctica and over the Atlantic and Southern Oceans. Russian Meteorology and Hydrology, 2020, 45, 161-168.	0.2	5

#	ARTICLE	IF	CITATIONS
202	The Anomalous 2019 Antarctic Ozone Hole in the GEOS Constituent Data Assimilation System With MLS Observations. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD033335.	1.2	34
203	DNA Damage Induced by Late Spring Sunlight in Antarctica. <i>Photochemistry and Photobiology</i> , 2020, 96, 1215-1220.	1.3	14
204	Discerning Hope: Intra-Actions of a Philosophy for Children Workshop and the Eco-Socially Just Potential of Practising Hope. <i>Journal of Philosophy of Education</i> , 2020, 54, 975-987.	0.4	6
205	Variations in Ozone Concentration over the Mid-Latitude Region Revealed by Ozonesonde Observations in Pohang, South Korea. <i>Atmosphere</i> , 2020, 11, 746.	1.0	11
206	Ecological City-States in an Era of Environmental Disaster: Security, Climate Change and Biodiversity. <i>Sustainability</i> , 2020, 12, 5532.	1.6	3
207	Emissions and Marine Boundary Layer Concentrations of Unregulated Chlorocarbons Measured at Cape Point, South Africa. <i>Environmental Science & Technology</i> , 2020, 54, 10514-10523.	4.6	9
208	Investigation of the Vertical Influence of the 11-Year Solar Cycle on Ozone Using SBUV and Antarctic Ground-Based Measurements and CMIP6 Forcing Data. <i>Atmosphere</i> , 2020, 11, 873.	1.0	4
209	Trends of UV Radiation in Antarctica. <i>Atmosphere</i> , 2020, 11, 795.	1.0	14
210	Persisting volcanic ash particles impact stratospheric SO ₂ lifetime and aerosol optical properties. <i>Nature Communications</i> , 2020, 11, 4526.	5.8	51
211	Stratospheric drivers of extreme events at the Earth's surface. <i>Communications Earth & Environment</i> , 2020, 1, .	2.6	70
212	The Atmosphere. , 2020, , 51-97.		8
213	Renewed and emerging concerns over the production and emission of ozone-depleting substances. <i>Nature Reviews Earth & Environment</i> , 2020, 1, 251-263.	12.2	32
214	Environmental effects of stratospheric ozone depletion, UV radiation and interactions with climate change: UNEP Environmental Effects Assessment Panel, update 2019. <i>Photochemical and Photobiological Sciences</i> , 2020, 19, 542-584.	1.6	59
215	Solar UV Irradiance in a Changing Climate: Trends in Europe and the Significance of Spectral Monitoring in Italy. <i>Environments - MDPI</i> , 2020, 7, 1.	1.5	39
216	Mechanisms Linked to Recent Ozone Decreases in the Northern Hemisphere Lower Stratosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031631.	1.2	25
217	Impacts of ocean acidification under multiple stressors on typical organisms and ecological processes. <i>Marine Life Science and Technology</i> , 2020, 2, 279-291.	1.8	38
218	Evidence for energetic particle precipitation and quasi-biennial oscillation modulations of the Antarctic NO _x ; springtime stratospheric column from OMI observations. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 6259-6271.	1.9	9
220	Connections with middle and low latitudes. , 2020, , 219-239.		2

#	ARTICLE	IF	CITATIONS
221	Validation of satellite retrieved ozone profiles using in-situ ozonesonde observations over the Indian Antarctic station, Bharati. <i>Polar Science</i> , 2020, 25, 100547.	0.5	4
222	Chlorine partitioning near the polar vortex edge observed with ground-based FTIR and satellites at Syowa Station, Antarctica, in 2007 and 2011. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 1043-1074.	1.9	15
223	Comparison of GTO-ECV and adjusted MERRA-2 total ozone columns from the last 2 decades and assessment of interannual variability. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 1633-1654.	1.2	5
224	Quantifying contributions of chlorofluorocarbon banks to emissions and impacts on the ozone layer and climate. <i>Nature Communications</i> , 2020, 11, 1380.	5.8	72
225	Planetary Accounting. , 2020, , .		11
226	Effect on essential oil components and wedelolactone content of a medicinal plant <i>Eclipta alba</i> due to modifications in the growth and morphology under different exposures of ultraviolet-B. <i>Physiology and Molecular Biology of Plants</i> , 2020, 26, 773-792.	1.4	21
227	A pause in Southern Hemisphere circulation trends due to the Montreal Protocol. <i>Nature</i> , 2020, 579, 544-548.	13.7	106
228	CO2 emission and air pollution (volatile organic compounds, etc.)â€“related problems causing climate change. , 2020, , 1-30.		17
229	Record warming at the South Pole during the past three decades. <i>Nature Climate Change</i> , 2020, 10, 762-770.	8.1	81
230	Solar UV radiation measurements in Marambio, Antarctica, during years 2017â€“2019. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 6037-6054.	1.9	9
231	Seasonal stratospheric ozone trends over 2000â€“2018 derived from several merged data sets. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 7035-7047.	1.9	19
232	Modelling the potential impacts of the recent, unexpected increase in CFC-11 emissions on total column ozone recovery. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 7153-7166.	1.9	10
233	Effects of UVâ€“B radiation on soil carbon conversion and greenhouse gas emission in paddy soil. , 2020, 10, 965-979.		4
235	Australian Lidar Measurements of Aerosol Layers Associated with the 2015 Calbuco Eruption. <i>Atmosphere</i> , 2020, 11, 124.	1.0	6
236	Inertia Risk: Improving Economic Models of Catastrophes*. <i>Scandinavian Journal of Economics</i> , 2020, 122, 1259-1285.	0.7	3
237	Trend analysis of atmospheric temperature, water vapour, ozone, methane and carbon-monoxide over few major cities of India using satellite data. <i>Journal of Earth System Science</i> , 2020, 129, 1.	0.6	10
238	Will Climate Change Impact Polar NO x Produced by Energetic Particle Precipitation?. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087041.	1.5	9
239	Ice Core Record of Persistent Shortâ€“Chain Fluorinated Alkyl Acids: Evidence of the Impact From Global Environmental Regulations. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087535.	1.5	43

#	ARTICLE	IF	CITATIONS
240	Variability of the Antarctic Ozone Anomaly in 2011â€“2018. <i>Russian Meteorology and Hydrology</i> , 2020, 45, 63-73.	0.2	9
241	Aerosol and cloud top height information of Envisat MIPAS measurements. <i>Atmospheric Measurement Techniques</i> , 2020, 13, 1243-1271.	1.2	6
242	Applications of HODMD and STKD in the wind industry. , 2021, , 219-245.		0
244	Bioeconomy moving forward step by step â€“ A global journey. <i>New Biotechnology</i> , 2021, 61, 22-28.	2.4	42
245	Risks to the stratospheric ozone shield in the Anthropocene. <i>Ambio</i> , 2021, 50, 44-48.	2.8	9
246	The role of chemical processes in the quasi-biennial oscillation (QBO) signal in stratospheric ozone. <i>Atmospheric Environment</i> , 2021, 244, 117906.	1.9	12
247	Effects of climate change factors on marine macroalgae: A review. <i>Advances in Marine Biology</i> , 2021, 88, 91-136.	0.7	38
248	The Influence of global climate change on freshwater ecosystem. , 2021, , 347-366.		1
249	Progresses and Major Research Challenges Under Changing Environmental Conditions. , 2021, , 503-527.		0
250	Short-term variability of total column ozone from the Dobson spectrophotometer measurements at Belsk, Poland, in the period 23 March 1963â€“31 December 2019. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2021, 73, 1-10.	0.8	1
251	Dimensions of climate change and its consequences on ecosystem functioning. , 2021, , 109-149.		2
252	Record low ozone values over the Arctic in boreal spring 2020. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 617-633.	1.9	34
254	Evaluation of Antarctic Ozone Profiles derived from OMPS-LP by using Balloon-borne Ozonesondes. <i>Scientific Reports</i> , 2021, 11, 4288.	1.6	3
255	Observational evidence of energetic particle precipitation NO<sub>2</sub><i>x</i></sub> interaction with chlorine curbing Antarctic ozone loss. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 2819-2836.	1.9	6
256	Arctic Ozone Depletion in 2019/20: Roles of Chemistry, Dynamics and the Montreal Protocol. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091911.	1.5	34
257	Transient Response of the Southern Ocean to Idealized Wind and Thermal Forcing across Different Model Resolutions. <i>Journal of Climate</i> , 2021, 34, 5477-5496.	1.2	4
258	Forecasting upper atmospheric scalars advection using deep learning: an \$O_3\$ experiment. <i>Machine Learning</i> , 2023, 112, 765-788.	3.4	2
259	Ultraviolet Radiation Stimulates Activity of CO2 Concentrating Mechanisms in a Bloom-Forming Diatom Under Reduced CO2 Availability. <i>Frontiers in Microbiology</i> , 2021, 12, 651567.	1.5	12

#	ARTICLE	IF	CITATIONS
260	Evaluating stratospheric ozone and water vapour changes in CMIP6 models from 1850 to 2100. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 5015-5061.	1.9	54
261	Land/Atmosphere/Water Interactions. , 2021, , 245-278.		0
262	The Unusual Stratospheric Arctic Winter 2019/20: Chemical Ozone Loss From Satellite Observations and TOMCAT Chemical Transport Model. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD034386.	1.2	19
263	On the effects of the ocean on atmospheric CFC-11 lifetimes and emissions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, e2021528118.	3.3	5
264	Potential Impacts of Supersonic Aircraft Emissions on Ozone and Resulting Forcing on Climate: An Update on Historical Analysis. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2020JD034130.	1.2	10
265	Indicators of Antarctic ozone depletion: 1979 to 2019. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 5289-5300.	1.9	11
266	Three-Year Observations of Ozone Columns over Polar Vortex Edge Area above West Antarctica. <i>Advances in Atmospheric Sciences</i> , 2021, 38, 1197-1208.	1.9	3
267	Evaluation of Total Ozone Column from Multiple Satellite Measurements in the Antarctic Using the Brewer Spectrophotometer. <i>Remote Sensing</i> , 2021, 13, 1594.	1.8	5
268	Total Ozone Columns from the Environmental Trace Gases Monitoring Instrument (EMI) Using the DOAS Method. <i>Remote Sensing</i> , 2021, 13, 2098.	1.8	12
269	Social Integrating Robots Suggest Mitigation Strategies for Ecosystem Decay. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 612605.	2.0	11
270	Joint inference of CFC lifetimes and banks suggests previously unidentified emissions. <i>Nature Communications</i> , 2021, 12, 2920.	5.8	15
271	The ozone hole measurements at the Indian station Maitri in Antarctica. <i>Polar Science</i> , 2021, 30, 100701.	0.5	2
272	Using Climate Model Simulations to Constrain Observations. <i>Journal of Climate</i> , 2021, 34, 6281-6301.	1.2	11
273	Measurement report: regional trends of stratospheric ozone evaluated using the Merged GRidded Dataset of Ozone Profiles (MEGRIDOP). <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 6707-6720.	1.9	14
274	Retrieval of Stratospheric HNO ₃ and HCl Based on Ground-Based High-Resolution Fourier Transform Spectroscopy. <i>Remote Sensing</i> , 2021, 13, 2159.	1.8	6
275	Is our dynamical understanding of the circulation changes associated with the Antarctic ozone hole sensitive to the choice of reanalysis dataset?. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 7451-7472.	1.9	3
276	Analysis of the Antarctic Ozone Hole in November. <i>Journal of Climate</i> , 2021, , 1-53.	1.2	2
277	Differences between in-situ ozonesonde observations and satellite retrieved ozone vertical profiles across Antarctica. <i>Polar Science</i> , 2021, 30, 100688.	0.5	3

#	ARTICLE	IF	CITATIONS
278	Representativeness of the Arosa/Davos Measurements for the Analysis of the Global Total Column Ozone Behavior. <i>Frontiers in Earth Science</i> , 2021, 9, .	0.8	1
279	Pollenâ€chemistry variations along elevation gradients and their implications for a proxy for UVâ€B radiation in the plantâ€fossil record. <i>Journal of Ecology</i> , 2021, 109, 3060-3073.	1.9	4
280	On the response of the middle atmosphere to anthropogenic forcing. <i>Annals of the New York Academy of Sciences</i> , 2021, 1504, 25-43.	1.8	1
281	Effects of enhanced downwelling of NO<sub>x></sub> on Antarctic upper-stratospheric ozone in the 21stÂcentury. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 11041-11052.	1.9	9
282	Middle Atmosphere Temperature Changes Derived from SABER Observations during 2002-2020. <i>Journal of Climate</i> , 2021, , 1.	1.2	5
283	Characterization of aerosol number size distributions and their effect on cloud properties at Syowa Station, Antarctica. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 12155-12172.	1.9	8
285	Emergence of Southern Hemisphere stratospheric circulation changes in response to ozone recovery. <i>Nature Geoscience</i> , 2021, 14, 638-644.	5.4	24
286	A resveratrol-loaded nanostructured lipid carrier hydrogel to enhance the anti-UV irradiation and anti-oxidant efficacy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 204, 111786.	2.5	21
287	Extreme Ozone Loss Following Nuclear War Results in Enhanced Surface Ultraviolet Radiation. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD035079.	1.2	13
289	Exceptional loss in ozone in the Arctic winter/spring of 2019/2020. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 14019-14037.	1.9	10
290	Spatial variability in long-term temperature trends in the middle atmosphere from SABER/TIMED observations. <i>Advances in Space Research</i> , 2021, 68, 2890-2903.	1.2	4
291	Spatiotemporal estimation of hourly 2-km ground-level ozone over China based on Himawari-8 using a self-adaptive geospatially local model. <i>Geoscience Frontiers</i> , 2022, 13, 101286.	4.3	26
292	The Southern Annular Mode: Variability, trends, and climate impacts across the Southern Hemisphere. <i>Wiley Interdisciplinary Reviews: Climate Change</i> , 2020, 11, e652.	3.6	152
293	Trace Gases in the Arctic Atmosphere. <i>Springer Polar Sciences</i> , 2020, , 153-207.	0.0	1
294	Forecasting Global Warming. <i>Springer Climate</i> , 2017, , 51-113.	0.3	9
295	Sektorale Ordnungspolitik im Wandel. , 2018, , 185-209.		1
296	Antarctic atmospheric circulation anomalies and explosive cyclogenesis in the spring of 2016. <i>Theoretical and Applied Climatology</i> , 2020, 141, 537-549.	1.3	6
297	International regulations have paused a jet-stream shift in the Southern Hemisphere. <i>Nature</i> , 2020, 579, 500-501.	13.7	3

#	ARTICLE	IF	CITATIONS
298	Cubesats for monitoring atmospheric processes (CubeMAP): a constellation mission to study the middle atmosphere. , 2020, , .		4
299	Observed Temperature Changes in the Troposphere and Stratosphere from 1979 to 2018. <i>Journal of Climate</i> , 2020, 33, 8165-8194.	1.2	66
300	Effects of environmental change on agriculture, nutrition and health: A framework with a focus on fruits and vegetables. <i>Wellcome Open Research</i> , 2017, 2, 21.	0.9	34
301	Anthropogenic drying in central-southern Chile evidenced by long-term observations and climate model simulations. <i>Elementa</i> , 2018, 6, .	1.1	94
302	Is the Antarctic Ozone Hole Recovering Faster than Changing the Stratospheric Halogen Loading?. <i>Journal of the Meteorological Society of Japan</i> , 2020, 98, 1083-1091.	0.7	5
303	Marine biology on a violated planet: from science to conscience. <i>Ethics in Science and Environmental Politics</i> , 2020, 20, 1-13.	4.6	19
304	Numerical Modeling of the Natural and Manmade Factors Influencing Past and Current Changes in Polar, Mid-Latitude and Tropical Ozone. <i>Atmosphere</i> , 2020, 11, 76.	1.0	5
305	Sensitivity of the Southern Hemisphere circumpolar jet response to Antarctic ozone depletion: prescribed versus interactive chemistry. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 14043-14061.	1.9	10
306	Seasonal impact of biogenic very short-lived bromocarbons on lowermost stratospheric ozone between 60°N and 60°S during the 21st Century. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 8083-8102.	1.9	11
307	Inconsistencies between chemistry-climate models and observed lower stratospheric ozone trends since 1998. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 9737-9752.	1.9	37
308	Projecting ozone hole recovery using an ensemble of chemistry-climate models weighted by model performance and independence. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 9961-9977.	1.9	16
309	Investigation of the behavior of the atmospheric dynamics during occurrences of the ozone hole's secondary effect in southern Brazil. <i>Annales Geophysicae</i> , 2019, 37, 1049-1061.	0.6	2
310	Statistical analysis of the long-range transport of the 2015 Calbuco volcanic plume from ground-based and space-borne observations. <i>Annales Geophysicae</i> , 2020, 38, 395-420.	0.6	12
311	Deriving evaluation indicators for knowledge transfer and dialogue processes in the context of climate research. <i>Advances in Science and Research</i> , 0, 14, 313-322.	1.0	3
312	The Southern Annular Mode (SAM) influences phytoplankton communities in the seasonal ice zone of the Southern Ocean. <i>Biogeosciences</i> , 2020, 17, 3815-3835.	1.3	6
313	Stratospheric Adiabatic Mixing Rates Derived From the Vertical Gradient of Age of Air. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, .	1.2	3
314	Interannual SAM Modulation of Antarctic Sea Ice Extent Does Not Account for Its Long-Term Trends, Pointing to a Limited Role for Ozone Depletion. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094871.	1.5	12
315	How to determine the statistical significance of trends in seasonal records: application to Antarctic temperatures. <i>Climate Dynamics</i> , 0, , 1.	1.7	2

#	ARTICLE	IF	CITATIONS
316	Retrieval of O ₃ , NO ₂ , BrO and OCIO Columns from Ground-Based Zenith Scattered Light DOAS Measurements in Summer and Autumn over the Northern Tibetan Plateau. <i>Remote Sensing</i> , 2021, 13, 4242.	1.8	3
317	The COVID-19 lockdown provides clues for better science communication on environmental recovery. <i>Environmental Conservation</i> , 0, , 1-3.	0.7	2
319	PAST, PRESENT AND SCENARIO OF THE FUTURE STATE OF OZONE ABOVE AÐŠADEMIÐŠ VERNADSKY STATION IN ANTARCTIC SEASON OF THE OZONE HOLE. <i>Ukrainian Antarctic Journal</i> , 2018, , 81-91.	0.1	0
320	Nanocatalysis for Green Chemistry. , 2018, , 1-28.		1
322	Preconditions for the ozone hole decrease in 2017. <i>Ukrainian Journal of Remote Sensing</i> , 2018, , 53-58.	0.3	1
323	The causes of the large-scale ozone depletion over Antarctica in October 2015. , 2018, , .		0
324	Nanocatalysis for Green Chemistry. , 2019, , 83-109.		0
326	La valeur GaÃa. <i>VertigO: La Revue Electronique En Sciences De L'environnement</i> , 2020, , .	0.0	1
327	Multi-Frequency Analysis of Simulated versus Observed Variability in Tropospheric Temperature. <i>Journal of Climate</i> , 2020, 33, 10383-10402.	1.2	7
328	Validation and Trend Analysis of Stratospheric Ozone Data from Ground-Based Observations at Lauder, New Zealand. <i>Remote Sensing</i> , 2021, 13, 109.	1.8	7
329	Comparison of OMI-DOAS total ozone column with ground-based measurements in Argentina. <i>Revista De Teledeteccion</i> , 2020, , 13.	0.6	1
330	Underwater Light Environment of Antarctic Seaweeds. , 2020, , 131-153.		1
331	A Quota for Ozone-Depleting Substances. , 2020, , 157-166.		0
332	Economics of Externalities: An Overview. , 2020, , 1-25.		0
333	Can Stories Influence Sustainable Behavior?. , 2020, , 283-306.		5
334	Managing the Earth System: Why We Need a Poly-Scalar Approach. , 2020, , 53-71.		0
336	Numerical Modeling of the Influence of Physical and Chemical Factors on the Interannual Variability of Antarctic Ozone. <i>Russian Meteorology and Hydrology</i> , 2020, 45, 153-160.	0.2	3
337	An Arctic ozone hole in 2020 if not for the Montreal Protocol. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 15771-15781.	1.9	13

#	ARTICLE	IF	CITATIONS
338	Fingerprints of the cosmic ray driven mechanism of the ozone hole. <i>AIP Advances</i> , 2021, 11, 115307.	0.6	6
339	Photo-generated hydroxyl radicals contribute to the formation of halogen radicals leading to ozone depletion on and within polar stratospheric clouds surface. <i>Chemosphere</i> , 2022, 291, 132816.	4.2	6
340	Total column ozone in New Zealand and in the UK in the 1950s. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 14333-14346.	1.9	1
341	On Recent Large Antarctic Ozone Holes and Ozone Recovery Metrics. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095232.	1.5	28
342	Modeling the Sulfate Aerosol Evolution After Recent Moderate Volcanic Activity, 2008–2012. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD035472.	1.2	7
343	Key challenges for tropospheric chemistry in the Southern Hemisphere. <i>Elementa</i> , 2022, 10, .	1.1	7
345	Rapid increase in dichloromethane emissions from China inferred through atmospheric observations. <i>Nature Communications</i> , 2021, 12, 7279.	5.8	24
346	Persistent extreme ultraviolet irradiance in Antarctica despite the ozone recovery onset. <i>Scientific Reports</i> , 2022, 12, 1266.	1.6	13
347	Causal discovery of drivers of surface ozone variability in Antarctica using a deep learning algorithm. <i>Environmental Sciences: Processes and Impacts</i> , 2022, 24, 447-459.	1.7	3
348	The Life Cycle and Variability of Antarctic Weak Polar Vortex Events. <i>Journal of Climate</i> , 2022, 35, 2075-2092.	1.2	4
349	Twenty-first-century Southern Hemisphere impacts of ozone recovery and climate change from the stratosphere to the ocean. <i>Weather and Climate Dynamics</i> , 2022, 3, 139-171.	1.2	12
350	Weakening of Antarctic stratospheric planetary wave activities in early austral spring since the early 2000s: a response to sea surface temperature trends. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 1575-1600.	1.9	5
351	Influence of NO _x , Cl, and Br on the upper core of the ozone valley over the Tibetan Plateau during summer: Simulations with a box model. <i>Science of the Total Environment</i> , 2022, 817, 152776.	3.9	3
353	Long-range prediction and the stratosphere. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 2601-2623.	1.9	24
354	Influence of Ozone Forcing on 21st Century Southern Hemisphere Surface Westerlies in CMIP6 Models. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	7
355	Good ozone, bad ozone and the Southern Ocean. <i>Nature Climate Change</i> , 2022, 12, 316-317.	8.1	3
356	ML-TOMCAT: machine-learning-based satellite-corrected global stratospheric ozone profile data set from a chemical transport model. <i>Earth System Science Data</i> , 2021, 13, 5711-5729.	3.7	5
357	Increasing collaboration between China and India in the environmental sciences to foster global sustainability. <i>Ambio</i> , 2022, 51, 1474-1484.	2.8	7

#	ARTICLE	IF	CITATIONS
358	Variability and trends in surface solar spectral ultraviolet irradiance in Italy: on the influence of geopotential height and lower-stratospheric ozone. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 18689-18705.	1.9	9
359	Chloroform—An Emerging Pollutant in the Air. <i>Energy, Environment, and Sustainability</i> , 2022, , 101-129.	0.6	2
361	Volcanic effects on climate: recent advances and future avenues. <i>Bulletin of Volcanology</i> , 2022, 84, .	1.1	32
362	Understanding Sea Surface Temperature Cooling in the Central—East Pacific Sector of the Southern Ocean During 1982—2020. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	3
363	Global total ozone recovery trends attributed to ozone-depleting substance (ODS) changes derived from five merged ozone datasets. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 6843-6859.	1.9	29
364	Quantifying stratospheric ozone loss over Antarctica in the last two decades using corrected satellite profiles. <i>Polar Science</i> , 2022, 33, 100860.	0.5	1
365	Economics of Externalities: An Overview. , 2022, , 925-949.		3
366	Global, regional and seasonal analysis of total ozone trends derived from the 1995—2020 GTO-ECV climate data record. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 6861-6878.	1.9	9
367	Climate Impacts and Potential Drivers of the Unprecedented Antarctic Ozone Holes of 2020 and 2021. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	16
369	Century-long column ozone records show that chemical and dynamical influences counteract each other. <i>Communications Earth & Environment</i> , 2022, 3, .	2.6	5
370	Variability of water vapor in the tropical middle atmosphere observed from satellites and interpreted using SD—WACCM simulations. <i>Journal of Geophysical Research D: Atmospheres</i> , 0, , .	1.2	7
371	Integrated ozone depletion as a metric for ozone recovery. <i>Nature</i> , 2022, 608, 719-723.	13.7	7
372	Effects of reanalysis forcing fields on ozone trends and age of air from a chemical transport model. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 10635-10656.	1.9	4
373	Paul Jozef Crutzen. 3 December 1933—28 January 2021. <i>Biographical Memoirs of Fellows of the Royal Society</i> , 2022, 73, 127-156.	0.1	2
374	Measurements and Modelling of Total Ozone Columns near St. Petersburg, Russia. <i>Remote Sensing</i> , 2022, 14, 3944.	1.8	10
375	Sensitivity Analysis of Ozone Profiles Retrieved from SCIAMACHY Limb Radiance Based on the Weighted Multiplicative Algebraic Reconstruction Technique. <i>Remote Sensing</i> , 2022, 14, 3954.	1.8	1
376	Global warming and ozone depletion potentials caused by emissions from HFC and CFC banks due to structural damage. <i>Energy and Buildings</i> , 2022, 273, 112385.	3.1	17
377	Validations of satellite ozone profiles in austral spring using ozonesonde measurements in the Jang Bogo station, Antarctica. <i>Environmental Research</i> , 2022, 214, 114087.	3.7	0

#	ARTICLE	IF	CITATIONS
378	Ozone depletion in the Arctic and Antarctic stratosphere induced by wildfire smoke. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 11701-11726.	1.9	10
379	Elevated CO ₂ modulates the physiological responses of <i>Thalassiosira pseudonana</i> to ultraviolet radiation. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2022, 236, 112572.	1.7	3
380	Aerosol processes in high-latitude environments and the effects on climate. , 2022, , 651-706.		2
381	Updated trends of the stratospheric ozone vertical distribution in the 60°S–60°N latitude range based on the LOTUS regression model. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 11657-11673.	1.9	17
382	Influences of Antarctic Ozone Depletion on Southern Ocean Aerosols. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	4
383	Major Contribution of Halogenated Greenhouse Gases to Global Surface Temperature Change. <i>Atmosphere</i> , 2022, 13, 1419.	1.0	4
384	Ozone, DNA-active UV radiation, and cloud changes for the near-global mean and at high latitudes due to enhanced greenhouse gas concentrations. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 12827-12855.	1.9	6
385	Exploring the driving forces of long-term total ozone change: based on data from a ground based station at the northern mid-latitude over 1958–2018. <i>Theoretical and Applied Climatology</i> , 0, , .	1.3	0
386	Tracking the 2022 Hunga Tonga–Hunga Ha'apai Aerosol Cloud in the Upper and Middle Stratosphere Using Space-Based Observations. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	27
387	Cataluminescence System Coupled with Vacuum Desorption–Sampling Methodology for Real-Time Ozone Sensing during the Self-Decomposition Process on Functional Boron Nitride. <i>Analytical Chemistry</i> , 2022, 94, 14484-14491.	3.2	4
388	Influence of Stratospheric Ozone Changes on Stratospheric Temperature Trends in Recent Decades. <i>Remote Sensing</i> , 2022, 14, 5364.	1.8	6
389	Global tropospheric ozone trends, attributions, and radiative impacts in 1995–2017: an integrated analysis using aircraft (IAGOS) observations, ozonesonde, and multi-decadal chemical model simulations. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 13753-13782.	1.9	18
390	Zonally asymmetric influences of the quasi-biennial oscillation on stratospheric ozone. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 13695-13711.	1.9	10
391	Perturbations in stratospheric aerosol evolution due to the water-rich plume of the 2022 Hunga-Tonga eruption. <i>Communications Earth & Environment</i> , 2022, 3, .	2.6	35
392	Harmonized retrieval of middle atmospheric ozone from two microwave radiometers in Switzerland. <i>Atmospheric Measurement Techniques</i> , 2022, 15, 6395-6417.	1.2	3
393	Extreme Change Events of Stratospheric HCl and N ₂ O in the Mid-Latitude Region of the Northern Hemisphere. <i>Remote Sensing</i> , 2022, 14, 6114.	1.8	1
394	Response to “Comment on ‘Observation of large and all-season ozone losses over the tropics’” [AIP Adv. 12, 075006 (2022)]. <i>AIP Advances</i> , 2022, 12, 129101.	0.6	1
395	UV-B and Its Climatology. , 2022, , 13-21.		0

#	ARTICLE	IF	CITATIONS
396	How Might Climate Change Affect Adaptive Responses of Polar Arthropods?. Diversity, 2023, 15, 47.	0.7	2
398	GAW Ozone Networks. , 2023, , 1-13.		0
399	Envisioning a sustainable future for space launches: a review of current research and policy. Journal of the Royal Society of New Zealand, 2024, 54, 273-289.	1.0	2
400	Long-term variability of human health-related solar ultraviolet-B radiation doses from the 1980s to the end of the 21st century. Physiological Reviews, 2023, 103, 1789-1826.	13.1	3
401	Evolution of total column ozone prior to the era of ozone depletion. Frontiers in Earth Science, 0, 11, .	0.8	0
402	Antarctic sea ice regime shift associated with decreasing zonal symmetry in the Southern Annular Mode. Cryosphere, 2023, 17, 701-717.	1.5	3
403	The data processing and analysis methods for stratospheric ozone and planetary wave study. Ukrainian Antarctic Journal, 2022, 20, .	0.1	0
404	Origins of Multidecadal SST Variations in the Southern Atlantic and Indian Oceans Since the 1960s. Geophysical Research Letters, 2023, 50, .	1.5	0
405	South Pole Station ozonesondes: variability and trends in the springtime Antarctic ozone hole 1986â€“2021. Atmospheric Chemistry and Physics, 2023, 23, 3133-3146.	1.9	3
406	Trends and variability of total column ozone in the Third Pole. Frontiers in Climate, 0, 5, .	1.3	4
407	Stratospheric ozone depletion in the Antarctic region triggers intense changes in sea salt aerosol geochemistry. Communications Earth & Environment, 2023, 4, .	2.6	1
408	First Retrieval of Total Ozone Columns from EMI-2 Using the DOAS Method. Remote Sensing, 2023, 15, 1665.	1.8	0
409	No evidence of worsening Arctic springtime ozone losses over the 21st century. Nature Communications, 2023, 14, .	5.8	3
411	Total ozone trends at three northern high-latitude stations. Atmospheric Chemistry and Physics, 2023, 23, 4165-4184.	1.9	3
412	Whoâ€™s That Scientist? A Scientist Report Writing Assignment for General Chemistry Students. Journal of Chemical Education, 0, , .	1.1	0
413	Assessment of spectral UV radiation at Marambio Base, Antarctic Peninsula. Atmospheric Chemistry and Physics, 2023, 23, 4617-4636.	1.9	0
414	Stratospheric ozone, UV radiation, and climate interactions. Photochemical and Photobiological Sciences, 2023, 22, 937-989.	1.6	22
418	Covalent Modifications of Nucleic Acids and Their Repair. , 2022, , 421-476.		0

#	ARTICLE	IF	CITATIONS
440	Light in Inland Waters. , 2024, , 75-94.		0
441	Global Atmosphere Watch (GAW) Ozone Networks. , 2023, , 181-193.		0