Kinetics of O₃ destruction by ClO and BrO analysis based on in situ ERâ€²2 data

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#	Article	IF	Citations
2	Stratospheric ozone: Impact of human activity. Planetary and Space Science, 1989, 37, 1653-1672.	1.7	23
3	Photoisomerization of OClO: a possible mechanism for polar ozone depletion. Nature, 1989, 342, 405-408.	27.8	126
4	Remote sensing observations of daytime column NO₂ during the Airborne Antarctic Ozone Experiment, August 22 to October 2, 1987. Journal of Geophysical Research, 1989, 94, 16619-16632.	3.3	23
5	In situ observations of BrO over Antarctica: ERâ€2 aircraft results From 54Â°S to 72Â°S latitude. Journal of Geophysical Research, 1989, 94, 16639-16647.	3.3	75
6	In situ observations of ClO in the Antarctic: ERâ€2 aircraft results from 54Â°S to 72Â°S latitude. Journal of Geophysical Research, 1989, 94, 16649-16663.	3.3	98
7	Measurements of nitric oxide and total reactive nitrogen in the Antarctic stratosphere: Observations and chemical implications. Journal of Geophysical Research, 1989, 94, 16665-16681.	3.3	130
8	Transport into the south polar vortex in early spring. Journal of Geophysical Research, 1989, 94, 16779-16795.	3.3	83
9	Evidence for diabatic cooling and poleward transport within and around the 1987 Antarctic ozone hole. Journal of Geophysical Research, 1989, 94, 16797-16813.	3.3	65
10	Stratospheric ozone depletion and future levels of atmospheric chlorine and bromine. Nature, 1990, 344, 729-734.	27.8	179
11	Ozone loss in the Arctic polar vortex inferred from high-altitude aircraft measurements. Nature, 1990, 347, 31-36.	27.8	187
12	Progress towards a quantitative understanding of Antarctic ozone depletion. Nature, 1990, 347, 347-354.	27.8	728
13	Tropospheric lifetimes of three compounds for possible replacement of CFC and halons. Nature, 1990, 347, 541-543.	27.8	35
14	Evaluating ozone depletion potentials. Nature, 1990, 348, 203-204.	27.8	5
15	The Br+HO2 reaction revisited: Absolute determination of the rate constant at 298 K. Chemical Physics Letters, 1990, 172, 430-434.	2.6	6
16	Spatial variation of ozone depletion rates in the springtime Antarctic polar vortex. Science, 1990, 248, 721-724.	12.6	9
17	The Role of Chlorine Chemistry in Antarctic Ozone Loss: Implications of New Kinetic Data. Geophysical Research Letters, 1990, 17, 255-258.	4.0	7
18	Total ozone during the 88â€89 Northern Hemisphere winter. Geophysical Research Letters, 1990, 17, 317-320.	4.0	10
19	Near UV atmospheric absorption measurements of column abundances during Airborne Arctic Stratospheric Expedition, January â€“ February 1989: 2. OClO observations. Geophysical Research Letters, 1990, 17, 501-504.	4.0	43

#	Article	IF	Citations
20	In situ observations of ClO in the Arctic stratosphere: ERâ€2 aircraft results from 59Â°N TO 80Â°N latitude. Geophysical Research Letters, 1990, 17, 505-508.	4.0	109
21	In situ measurements of BrO in the Arctic stratosphere. Geophysical Research Letters, 1990, 17, 513-516.	4.0	70
22	On the influence of polar stratospheric cloud formation on chemical composition during the 1988/89 Arctic winter. Geophysical Research Letters, 1990, 17, 545-548.	4.0	30
23	Loss of ozone in the Arctic vortex for the winter of 1989. Geophysical Research Letters, 1990, 17, 561-564.	4.0	65
24	The pressure dependence of the reaction between ClO and OClO at 226K. Geophysical Research Letters, 1990, 17, 2357-2360.	4.0	14
25	A general circulation model simulation of the springtime Antarctic ozone decrease and its impact on midâ€latitudes. Journal of Geophysical Research, 1990, 95, 1883-1898.	3.3	110
26	Polar twilight UVâ€visible radiation field: Perturbations due to multiple scattering, ozone depletion, stratospheric clouds, and surface albedo. Journal of Geophysical Research, 1990, 95, 7429-7434.	3.3	62
27	Visible and nearâ€ultraviolet spectroscopy at McMurdo Station, Antarctica 7. OClO diurnal photochemistry and implications for ozone destruction. Journal of Geophysical Research, 1990, 95, 13807-13817.	3.3	54
28	Evolution of the total ozone field during the breakdown of the Antarctic circumpolar vortex. Journal of Geophysical Research, 1990, 95, 16529-16543.	3.3	8
29	On the relevance of OClO photodissociation to the destruction of stratospheric ozone. Journal of Geophysical Research, 1990, 95, 18591-18595.	3.3	65
30	Heterogeneous chemistry on polar stratospheric clouds. Atmospheric Environment Part A General Topics, 1991, 25, 2535-2537.	1.3	31
31	Sensitivity of stratospheric ozone to heterogeneous chemistry on sulfate aerosols. Geophysical Research Letters, 1991, 18, 833-836.	4.0	23
32	Ozone and other trace gases in the Arctic and Antarctic regions: Threeâ€dimensional model simulations. Journal of Geophysical Research, 1991, 96, 2995-3011.	3.3	33
33	Ozone loss rates calculated along ERâ€2 flight tracks. Journal of Geophysical Research, 1991, 96, 5045-5053.	3.3	19
34	Groundâ€based UVâ€VIS spectroscopy: Diurnal OClOâ€profiles during January 1990 above SÃ¸ndre StrÃ¸mfjord, Greenland. Geophysical Research Letters, 1991, 18, 787-790.	4.0	27
35	The 1990 Antarctic Ozone Hole as observed by TOMS. Geophysical Research Letters, 1991, 18, 661-664.	4.0	22
36	Evidence for denitrification in the 1990 Antarctic spring stratosphere: I, Lidar and temperature measurements. Geophysical Research Letters, 1991, 18, 1995-1998.	4.0	23
37	Ozone trend in the northern hemisphere: A numerical study. Journal of Geophysical Research, 1991, 96, 10931-10940.	3.3	5

#	Article	IF	Citations
38	Total ozone from the TIROS operational vertical sounder during the formation of the 1987 â€œozone holeâ€• Journal of Geophysical Research, 1991, 96, 12893-12911.	3.3	17
39	Free Radicals Within the Antarctic Vortex: The Role of CFCs in Antarctic Ozone Loss. Science, 1991, 251, 39-46.	12.6	375
40	The Dynamics of the Stratospheric Polar Vortex and Its Relation to Springtime Ozone Depletions. Science, 1991, 251, 46-52.	12.6	273
41	Stratospheric Chemistry. Reviews of Geophysics, 1991, 29, 12-24.	23.0	5
42	Chlorine Perchlorate Formation in the Gas Phase Photolysis of Chlorine Dioxide. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1991, 95, 893-900.	0.9	26
43	Extension of Antarctic ozone hole to lower latitudes in the South-American region. Pure and Applied Geophysics, 1991, 135, 611-624.	1.9	8
44	Multireference configuration interaction calculations of the lowâ€lying electronic states of ClO2. Journal of Chemical Physics, 1992, 96, 8948-8961.	3.0	144
45	Supercooled Sulfuric Acid Droplets: Perturbed Stratospheric Chemistry in Early Winter. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1992, 96, 323-334.	0.9	30
46	FTIR Studies on the Photooxidation Mechanisms of CH₃Cl, CH₃Br, CHBr₃ and CF₃Br. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1992, 96, 409-413.	0.9	13
47	Observation of Global Stratospheric Ozone Change. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1992, 96, 257-263.	0.9	4
48	Collisional Line Mixing. , 1992, , 261-337.		60
49	Twilight variation of vertical column abundances of OClO and BrO in the north polar region. Journal of Geophysical Research, 1992, 97, 8047-8055.	3.3	41
50	Seasonal variations in Antarctic NO_x chemistry. Journal of Geophysical Research, 1992, 97, 7971-7978.	3.3	21
51	Global ozone depletion and the Antarctic ozone hole. Journal of Geophysical Research, 1992, 97, 8075-8082.	3.3	8
52	The structure of the polar vortex. Journal of Geophysical Research, 1992, 97, 7859-7882.	3.3	328
53	On the evaluation of ozone depletion potentials. Journal of Geophysical Research, 1992, 97, 825-842.	3.3	148
54	Ozone response to a CO₂ doubling: Results from a stratospheric circulation model with heterogeneous chemistry. Journal of Geophysical Research, 1992, 97, 5953-5962.	3.3	44
55	Laboratory measurements of direct ozone loss on ice and dopedâ€ice surfaces. Geophysical Research Letters, 1992, 19, 41-44.	4.0	21

#	Article	IF	Citations
56	Ozone depletion in the upper stratosphere estimated from satellite and Space Shuttle data. Nature, 1992, 358, 131-133.	27.8	14
57	A decrease in the growth rates of atmospheric halon concentrations. Nature, 1992, 359, 403-405.	27.8	55
58	The spectroscopy of OClO in polar liquids. Spectrochimica Acta Part A: Molecular Spectroscopy, 1992, 48, 1293-1301.	0.1	19
59	The changing stratosphere. Planetary and Space Science, 1992, 40, 373-401.	1.7	83
60	Spring polar ozone behavior. Planetary and Space Science, 1992, 40, 7-26.	1.7	4
61	Stratospheric ClO and ozone from the Microwave Limb Sounder on the Upper Atmosphere Research Satellite. Nature, 1993, 362, 597-602.	27.8	272
62	Stratospheric Meteorological Conditions in the Arctic Polar Vortex, 1991 to 1992. Science, 1993, 261, 1143-1146.	12.6	41
63	Ozone Loss Inside the Northern Polar Vortex During the 1991-1992 Winter. Science, 1993, 261, 1150-1154.	12.6	114
64	OH reaction kinetics and atmospheric lifetimes of CF₃CFHCF₃ and CF₃CH₂Br. Geophysical Research Letters, 1993, 20, 197-200.	4.0	12
65	MLS CLO observations and Arctic polar vortex temperatures. Geophysical Research Letters, 1993, 20, 2861-2864.	4.0	25
66	Visible and nearâ€ultraviolet spectroscopy at McMurdo Station, Antarctica: 9. Observations of OClO from April to October 1991. Journal of Geophysical Research, 1993, 98, 7219-7228.	3.3	59
67	Highâ€speed civil transport impact: Role of sulfate, nitric acid trihydrate, and ice aerosols studied with a twoâ€dimensional model including aerosol physics. Journal of Geophysical Research, 1993, 98, 23141-23164.	3.3	53
68	Stratospheric ozone depletion. Lancet, The, 1993, 342, 1156-1158.	13.7	45
69	Interannual variability of some trace elements and surface aerosol. International Journal of Climatology, 1994, 14, 691-704.	3.5	11
70	Comparisons between the reactivity of chlorine dioxide in the gas phase and water solution. Journal of Molecular Liquids, 1994, 61, 133-152.	4.9	29
71	Groundbased measurements of stratospheric OClO, NO2, and O3at SÃ¸ndre StrÃ¸mfjord in winter 1991/92. Geophysical Research Letters, 1994, 21, 1367-1370.	4.0	23
72	Aircraft measurements of CLO and HCL during EASOE 1991/92. Geophysical Research Letters, 1994, 21, 1267-1270.	4.0	20
73	Observations of the stratospheric BrO column over Colorado, 40Â°N. Journal of Geophysical Research, 1994, 99, 8175.	3.3	34

#	Article	IF	Citations
74	Spread of denitrification from 1987 Antarctic and 1988â€“1989 Arctic stratospheric vortices. Journal of Geophysical Research, 1994, 99, 20573.	3.3	16
75	Kinetics and mechanisms of the reactions of O(¹D)â€Atoms with CF₃Br and CF₂BrCF₂Br in the gas phase and in solid argon matrices. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1994, 98, 1622-1629.	0.9	5
76	Methyl bromide under scrutiny. Nature, 1995, 376, 469-470.	27.8	41
77	Absorption spectra of Cl2, Br2 and BrCl between 190 and 600 nm. Journal of Photochemistry and Photobiology A: Chemistry, 1995, 86, 1-7.	3.9	68
78	Ab initio study of the molecular structure and vibrational spectra of dichlorine hexoxide and its significance to stratospheric ozone depletion. Chemical Physics, 1995, 199, 183-193.	1.9	7
79	Ab initio quantum chemical calculations of geometry and vibrational frequencies of chlorine heptoxide. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 1995, 51, 2453-2458.	3.9	4
80	Efficiency of formation of CH3O in the reaction of CH3O2with ClO. Geophysical Research Letters, 1995, 22, 1221-1224.	4.0	22
81	Halogen oxides: Radicals, sources and reservoirs in the laboratory and in the atmosphere. Atmospheric Environment, 1995, 29, 2677-2881.	4.1	123
82	The Photoreactivity of Chlorine Dioxide. Science, 1995, 268, 1443-1448.	12.6	147
83	Impact of aerosols and clouds on the troposphere and stratosphere radiation field with application to twilight photochemistry at 20 km. Journal of Geophysical Research, 1995, 100, 7135-7145.	3.3	21
84	Interhemispheric differences in springtime production of HCl and ClONO2in the polar vortices. Journal of Geophysical Research, 1995, 100, 13967.	3.3	124
85	Stratospheric effects of bromine activation on/in sulfate aerosol. Journal of Geophysical Research, 1995, 100, 11237.	3.3	40
86	Remote sensing of ClO and HCl over northern Scandinavia in winter 1992 with an airborne submillimeter radiometer. Journal of Geophysical Research, 1995, 100, 20957.	3.3	20
87	Methyl bromide: Ocean sources, ocean sinks, and climate sensitivity. Global Biogeochemical Cycles, 1996, 10, 175-190.	4.9	49
88	An improved estimate of the oceanic lifetime of atmospheric CH3Br. Geophysical Research Letters, 1996, 23, 53-56.	4.0	64
89	Bromine-chlorine coupling in the Antarctic Ozone Hole. Geophysical Research Letters, 1996, 23, 153-156.	4.0	27
90	Chemical loss of polar vortex ozone inferred from UARS MLS measurements of ClO during the Arctic and Antarctic late winters of 1993. Journal of Geophysical Research, 1996, 101, 14505-14518.	3.3	25
91	The role of aerosol variations in anthropogenic ozone depletion at northern midlatitudes. Journal of Geophysical Research, 1996, 101, 6713-6727.	3.3	330

#	Article	IF	Citations
92	Decadal evolution of the Antarctic ozone hole. Journal of Geophysical Research, 1996, 101, 8985-8999.	3.3	21
93	Model study of polar stratospheric clouds and their effect on stratospheric ozone: 2. Model results. Journal of Geophysical Research, 1996, 101, 12575-12584.	3.3	14
94	The effect of dynamical mixing in a simple model of the ozone hole. Journal of Geophysical Research, 1996, 101, 16771-16778.	3.3	19
95	Correlated millimeter wave measurements of ClO, N2O, and HNO3from McMurdo, Antarctica, during polar spring 1994. Journal of Geophysical Research, 1996, 101, 20925-20932.	3.3	5
96	On the possibility of complicated dynamic behavior of atmospheric photochemical systems: Instability of the Antarctic photochemistry during the ozone hole formation. Journal of Geophysical Research, 1996, 101, 26023-26038.	3.3	28
97	Comparison of models of middle atmosphere composition with observations. Advances in Space Research, 1996, 18, 241-254.	2.6	1
98	Measurements of stratospheric chlorine monoxide (ClO) from groudbased FTIR observations. Journal of Atmospheric Chemistry, 1996, 24, 285.	3.2	16
99	On the relationship between the quasi-biennial oscillation, total chlorine and the severity of the antarctic ozone hole. Quarterly Journal of the Royal Meteorological Society, 1996, 122, 183-217.	2.7	17
100	Uptake of Chlorine Dioxide by Model PSCs under Stratospheric Conditions. The Journal of Physical Chemistry, 1996, 100, 3121-3125.	2.9	27
101	Structures, Relative Stabilities, and Vibrational Spectra of Isomers of HClO3. The Journal of Physical Chemistry, 1996, 100, 573-579.	2.9	30
102	Kinetic Studies of the Reaction between NO3and OClO atT= 300 K andP= 2â^'8 Torr. The Journal of Physical Chemistry, 1996, 100, 130-137.	2.9	8
103	Study of the Stability of Cl2O3 Using ab Initio Methods. Journal of Physical Chemistry A, 1997, 101, 7145-7153.	2.5	15
104	Ozone depletion in the late winter lower Arctic stratosphere: Observations and model results. Journal of Geophysical Research, 1997, 102, 10815-10828.	3.3	23
105	Ab initio study of XOClO3(X = Cl, F, and H): Implications for formation of ClOClO3in the stratosphere. Journal of Geophysical Research, 1997, 102, 12927-12935.	3.3	6
106	Ozone mass exchange between the stratosphere and troposphere for background and volcanic sulfate aerosol conditions. Journal of Geophysical Research, 1997, 102, 25487-25500.	3.3	19
107	Bromine emissions from leaded gasoline. Geophysical Research Letters, 1997, 24, 1371-1374.	4.0	47
108	On the origin of midlatitude ozone changes: Data analysis and simulations for 1979-1993. Journal of Geophysical Research, 1997, 102, 1215-1228.	3.3	42
109	DOAS Zenith Sky Observations: 1. BrO Measurements over Bremen (53Â°N) 1993â€“1994. Journal of Atmospheric Chemistry, 1997, 26, 93-108.	3.2	27

#	Article	IF	Citations
110	The Brewer-Dobson Circulation In the Light of High AltitudeIn Situ Aircraft Observations. Quarterly Journal of the Royal Meteorological Society, 1997, 123, 1-69.	2.7	61
111	Microwave Spectrum, Nuclear Quadrupole Coupling Constants, and Structure of Bromodifluoromethane. Journal of Molecular Spectroscopy, 1997, 185, 147-152.	1.2	11
112	A G1 study of the isomers of ClOOBr and related systems. Chemical Physics Letters, 1997, 271, 296-301.	2.6	14
113	Evidence for the reaction of highly vibrationally excited ClO radicals with nitrogen. Chemical Physics Letters, 1997, 281, 407-412.	2.6	14
114	Ozone depletion, related UVB changes and increased skin cancer incidence. International Journal of Climatology, 1998, 18, 457-472.	3.5	29
115	Study of the Stability of BrClO3Isomers. Journal of Physical Chemistry A, 1998, 102, 2209-2214.	2.5	9
116	Photofragmentation of OClO(Ãƒ2A2Î½1Î½2Î½3) â†' Cl(2PJ) + O2. Journal of Physical Chemistry A, 1998, 102, 7680-7685.	2.5	20
117	Distribution of halon-1211 in the upper troposphere and lower stratosphere and the 1994 total bromine budget. Journal of Geophysical Research, 1998, 103, 1513-1526.	3.3	131
118	Growth and distribution of halons in the atmosphere. Journal of Geophysical Research, 1998, 103, 1503-1511.	3.3	48
119	Global distribution of atmospheric bromine-monoxide from GOME on Earth Observing Satellite ERS-2. Geophysical Research Letters, 1998, 25, 3127-3130.	4.0	44
120	Correlations of stratospheric abundances of NOy, O3, N2O, and CH4derived from ATMOS measurements. Journal of Geophysical Research, 1998, 103, 28347-28359.	3.3	120
121	Absorption and fluorescence of OClO Ãƒâ€‰2A2â€“XÌƒâ€‰2B1 in solid Ne, Ar, and Kr. I. Vibrationally unrelaxed Ãƒâ†'XÌƒ emission. Journal of Chemical Physics, 1998, 109, 978-987.	3.0	20
122	Radiativeâ€dynamic effects of the antarctic ozone hole and chemical feedback. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 2171-2203.	2.7	5
123	Microwave Spectrum, Structure, and Nuclear Quadrupole Coupling Constants of 1-Bromo-1-fluoroethane. Journal of Molecular Spectroscopy, 1999, 196, 189-196.	1.2	4
124	Estimation of global vehicular methyl bromide emissions: Extrapolation from a case study in Santiago, Chile. Geophysical Research Letters, 1999, 26, 283-286.	4.0	20
125	Toward understanding of the nonlinear nature of atmospheric photochemistry: Multiple equilibrium states in the high-latitude lower stratospheric photochemical system. Journal of Geophysical Research, 1999, 104, 3669-3689.	3.3	16
126	Southern Hemispheric halon trends (1978-1998) and global halon emissions. Journal of Geophysical Research, 1999, 104, 15985-15999.	3.3	98
127	Preface [to special section on Photochemistry of Ozone Loss in the Arctic Region in Summer (POLARIS)]. Journal of Geophysical Research, 1999, 104, 26481-26495.	3.3	32

#	Article	IF	Citations
128	Structure and Bonding of Chlorine Oxides and Peroxides:Â ClOx, ClOx-(x= 1â˜4), and Cl2Ox(x= 1â˜8). Journal of Physical Chemistry A, 1999, 103, 3078-3088.	2.5	74
129	Fourier Transform Ultraviolet Spectroscopy of the A2Î3/2â†•X2Î3/2Transition of BrOâ€. Journal of Physical Chemistry A, 1999, 103, 8935-8945.	2.5	182
130	Production and consumption of methyl halides in a freshwater lake. Limnology and Oceanography, 2000, 45, 1537-1545.	3.1	8
131	The Heterogeneous Kinetics of the Reactions ClONO2 + HX/ice (X = Br, I), BrONO2 + HI/ice and the Reactivity of the Interhalogens BrCl, ICl and IBr with HX/ice (X = Cl, Br, I) in the Temperature Range 180 to 205 K. Zeitschrift Fur Physikalische Chemie, 2000, 214, .	2.8	3
132	Homogeneous and Heterogeneous Chemistry in the Stratosphere. , 2000, , 657-726.		5
133	State resolved detection of Cl, Br, ClO and BrO. Physics and Chemistry of the Earth, Part C: Solar, Terrestrial and Planetary Science, 2000, 25, 229-234.	0.2	0
134	What controls the temperature of the Arctic stratosphere during the spring?. Journal of Geophysical Research, 2001, 106, 19999-20010.	3.3	315
135	Comparisons between measurements and models of Antarctic ozone loss. Journal of Geophysical Research, 2001, 106, 3195-3201.	3.3	15
136	Tests of halogen photochemistry using in situ measurements of ClO and BrO in the lower polar stratosphere. Journal of Geophysical Research, 2001, 106, 10411-10421.	3.3	47
137	A new method for describing long-term changes in total ozone. Geophysical Research Letters, 2001, 28, 4535-4538.	4.0	23
138	Microwave spectrum, barrier to internal rotation of CF 3 , structure, and ab initio calculation of 1,1,1,2,2-pentafluoropropane. Journal of Molecular Structure, 2001, 599, 305-315.	3.6	3
139	Introduction. Phytopathology, 2002, 92, 1334-1336.	2.2	17
140	Acid Dissociation of HBr on a Model Ice Surface. Journal of Physical Chemistry A, 2002, 106, 7639-7645.	2.5	35
141	Heterophase Processes in the Formation of Antarctica's Spring Ozone Anomaly. Mapping Sciences and Remote Sensing, 2002, 39, 194-203.	0.0	3
142	Ozone depletion and chlorine activation in the Arctic winter 1999/2000 observed in Ny-Ã…lesund. Journal of Geophysical Research, 2002, 107, SOL 31-1.	3.3	18
143	Use of long-lived tracer observations to examine transport characteristics in the lower stratosphere. Journal of Geophysical Research, 2002, 107, ACL 6-1.	3.3	5
144	Photoionization of the primary photoproducts of A(2â‚)-excited ClO. Journal of Chemical Physics, 2002, 117, 9663-9670.	3.0	19
145	Nuclear Quadrupole Coupling Constants of Chlorine and Microwave Spectrum, Structure, and ab Initio Calculation of 1-Chloro-1,1,2-trifluoroethane. Journal of Molecular Spectroscopy, 2002, 211, 99-106.	1.2	2

#	Article	IF	Citations
146	A study of the kinetics and mechanisms involved in the atmospheric degradation of bromoform by atomic chlorine. Chemical Physics Letters, 2002, 353, 335-344.	2.6	18
147	Title is missing!. Journal of Atmospheric Chemistry, 2002, 41, 297-314.	3.2	12
148	Theoretical study on the ClO/ClOâ˙ system electron-transfer reactivity by the Golden-rule. Computational and Theoretical Chemistry, 2003, 629, 105-115.	1.5	3
149	Golden-rule treatment on the ClO/ClO+ electron-transfer system. Computational and Theoretical Chemistry, 2003, 629, 151-163.	1.5	2
150	Air-sea flux of bromoform: Controls, rates, and implications. Global Biogeochemical Cycles, 2003, 17, .	4.9	235
151	Law of mass action in the Arctic lower stratospheric polar vortex Januaryâ€“March 2000: ClO scaling and the calculation of ozone loss rates in a turbulent fractal medium. Journal of Geophysical Research, 2003, 108, .	3.3	17
152	Environmental Fate of Methyl Bromide as a Soil Fumigant. Reviews of Environmental Contamination and Toxicology, 2003, 177, 45-122.	1.3	34
153	Efficient penetration of the basal plane (0001) face of ice Ih by HF at Ts=150â€‰K: Dependence on incidence energy, incidence angle, and rotational energy. Journal of Chemical Physics, 2004, 120, 11796-11803.	3.0	7
154	An Algorithm for the Determination of All Significant Pathways in Chemical Reaction Systems. Journal of Atmospheric Chemistry, 2004, 47, 45-78.	3.2	60
155	New ultraviolet absorption cross-sections of BrO at atmospheric temperatures measured by time-windowing Fourier transform spectroscopy. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 168, 117-132.	3.9	201
156	Mobility of haloforms on ice surfaces. Chemical Physics Letters, 2004, 385, 244-248.	2.6	20
157	Structural and relative stability studies of (IClO3) and (IBrO3) polyoxides. Molecular Physics, 2004, 102, 789-795.	1.7	5
158	Spaceborne ClO observations by the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS) before and during the Antarctic major warming in September/October 2002. Journal of Geophysical Research, 2004, 109, .	3.3	41
159	Continuum and discrete pulsed cavity ring down laser absorption spectra of Br2 vapor. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2005, 61, 2115-2120.	3.9	2
160	Experimental and computational studies of the thermal decomposition of halon 1211. International Journal of Chemical Kinetics, 2005, 37, 134-146.	1.6	17
161	Theoretical prediction of the contact distance dependence of the electron transfer reactivity of the ClO/ClO? coupling system. International Journal of Quantum Chemistry, 2005, 101, 305-319.	2.0	1
162	A measurement/model comparison of ozone photochemical loss in the Antarctic ozone hole using Polar Ozone and Aerosol Measurement observations and the Match technique. Journal of Geophysical Research, 2005, 110, .	3.3	20
163	Chemical reaction pathways affecting stratospheric and mesospheric ozone. Journal of Geophysical Research, 2006, 111, .	3.3	45

#	Article	IF	Citations
164	Specific features of vernal ozone destruction over different antarctic regions. Geomagnetism and Aeronomy, 2006, 46, 765-769.	0.8	5
165	Heats of formation of perchloric acid, HClO4, and perchloric anhydride, Cl2O7. Probing the limits of W1 and W2 theory. Computational and Theoretical Chemistry, 2006, 771, 19-26.	1.5	47
166	Thermal Decomposition of ClOOCl. Journal of Physical Chemistry A, 2006, 110, 3280-3288.	2.5	15
167	Field Masurements of Atmospheric Composition. , 0, , 1-71.		4
168	Atmospheric Oxidation Mechanism of Bromoethane. Journal of Physical Chemistry A, 2007, 111, 11652-11660.	2.5	7
169	Computational Study of the Reaction of n-Bromopropane with OH Radicals and Cl Atoms. Advances in Quantum Chemistry, 2008, 55, 215-244.	0.8	1
170	Hydroxyl-Radical-Initiated Oxidation Mechanism of Bromopropane. Journal of Physical Chemistry A, 2008, 112, 7930-7938.	2.5	7
171	Structure and vibrational spectra of bromine reservoir species from the atmospheric oxidations of bromoethane and bromopropane. Molecular Physics, 2008, 106, 299-314.	1.7	3
172	Atmospheric Oxidation Mechanism of 1,2-Dibromoethane. Journal of Physical Chemistry A, 2009, 113, 7189-7204.	2.5	14
174	New retrieval of BrO from SCIAMACHY limb: an estimate of the stratospheric bromine loading during April 2008. Atmospheric Measurement Techniques, 2013, 6, 2549-2561.	3.1	8
175	DENSITY FUNCTIONAL THEORY STUDIES OF SPECTROSCOPIC CONSTANTS AND ANHARMONIC FORCE FIELD OF O³⁵ClO. Journal of Theoretical and Computational Chemistry, 2013, 12, 1250117.	1.8	6
176	Chlorine in the stratosphere. Atmosfera, 2013, 26, 415-458.	0.8	17
177	Stratospheric controlled perturbation experiment: a small-scale experiment to improve understanding of the risks of solar geoengineering. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140059.	3.4	73
178	Experimental and Chemical Kinetics Study of the Effects of Halon 1211 (CF₂BrCl) on the Laminar Flame Speed and Ignition of Light Hydrocarbons. Journal of Physical Chemistry A, 2015, 119, 7611-7626.	2.5	12
179	Experimental and modeling study on the effects of dimethyl methylphosphonate (DMMP) addition on H2, CH4, and C2H4 ignition. Combustion and Flame, 2018, 191, 320-334.	5.2	27
180	Chlorine nitrate in the atmosphere. Atmospheric Chemistry and Physics, 2018, 18, 15363-15386.	4.9	11
181	Chlorinated Fluorocarbons and Other Ozone-Destroying Chemicals. , 2018, , 33-41.		1
182	Stratospheric Ozone Depletion and Recovery. , 2018, , 177-209.		9

#	Article	IF	Citations
183	The discovery of the Antarctic ozone hole. Nature, 2019, 575, 46-47.	27.8	18
184	Halocarbons in the Arctic and Antarctic Atmosphere. , 1993, , 117-130.		5
185	Comparison of the Southern Hemisphere Springs of 1988 and 1987. , 1990, , 71-89.		4
186	Stratospheric Chemistry. , 2001, , 469-505.		0
187	Singularities of vertical ozone distribution before spring antarctic hole. KosmÃ¬Ä¸na Nauka Ã¬ TehnologÃ¬Ã¢, 2004, 10, 45-50.	0.5	0
188	Stratospheric Pollution. , 2012, , 373-382.		0
189	Stratospheric Pollution stratosphere/stratospheric pollution. , 2012, , 10129-10138.		0
190	Nitrogen Chemistry in Antarctica: A Brief Review. , 1990, , 191-201.		0
191	Dynamical Properties of the Antarctic Circumpolar Vortex Inferred from Aircraft Observations. , 1990, , 117-134.		0
192	Chemistry of the Stratosphere. , 1993, , 399-415.		1
193	Excited State Photoreactions of Chlorine Dioxide in Solution. Springer Series in Chemical Physics, 1993, , 661-663.	0.2	0
194	Modeling the Latitude-Dependent Increase in Non-Melanoma Skin Cancer Incidence as a Consequence of Stratospheric Ozone Depletion. , 1994, , 329-337.		1
195	The Antarctic Ozone Hole. , 1996, , 798-808.		0
196	Stratospheric Chemistry. , 2016, , 671-714.		0
197	OBSOLETE: Chlorinated fluorocarbons and other ozone-destroying chemicals. , 2018, , .		0
198	Effect of functional group on dissociation kinetics of ester and acid derivative of bromopropane. Computational and Theoretical Chemistry, 2022, 1207, 113509.	2.5	0