Charles H Jackman

List of Publications by Year
in descending order

58 papers	3,878 citations	126708 33 h-index	161609 54 g-index
64 all docs	64 docs citations	64 times ranked	2579 citing authors

#	Article	IF	Citations
1	Solar forcing for CMIP6 (v3.2). Geoscientific Model Development, 2017, 10, 2247-2302.	1.3	293
2	Efficiencies for production of atomic nitrogen and oxygen by relativistic proton impact in air. Journal of Chemical Physics, 1976, 65, 154-167.	1.2	290
3	Past, present, and future modeled ozone trends with comparisons to observed trends. Journal of Geophysical Research, 1996, 101, 28753-28767.	3.3	225
4	Production of odd nitrogen in the stratosphere and mesosphere: An intercomparison of source strengths. Journal of Geophysical Research, 1980, 85, 7495-7505.	3.3	169
5	Northern hemisphere atmospheric effects due to the July 2000 Solar Proton Event. Geophysical Research Letters, 2001, 28, 2883-2886.	1.5	164
6	Neutral atmospheric influences of the solar proton events in October-November 2003. Journal of Geophysical Research, 2005, 110, .	3.3	160
7	Short- and medium-term atmospheric constituent effects of very large solar proton events. Atmospheric Chemistry and Physics, 2008, 8, 765-785.	1.9	156
8	Composition changes after the "Halloween" solar proton event: the High Energy Particle Precipitation in the Atmosphere (HEPPA) model versus MIPAS data intercomparison study. Atmospheric Chemistry and Physics, 2011, 11, 9089-9139.	1.9	145
9	Effect of solar proton events on the middle atmosphere during the past two solar cycles as computed using a twoâ€dimensional model. Journal of Geophysical Research, 1990, 95, 7417-7428.	3.3	134
10	Observation of NOxenhancement and ozone depletion in the Northern and Southern Hemispheres after the October-November 2003 solar proton events. Journal of Geophysical Research, 2005, 110, .	3.3	132
11	The middle atmospheric response to short and long term solar UV variations: analysis of observations and 2D model results. Journal of Atmospheric and Solar-Terrestrial Physics, 1995, 57, 333-365.	0.9	116
12	Influence of extremely large solar proton events in a changing stratosphere. Journal of Geophysical Research, 2000, 105, 11659-11670.	3.3	111
13	Longâ€term middle atmospheric influence of very large solar proton events. Journal of Geophysical Research, 2009, 114, .	3.3	103
14	A comparison of sources of odd nitrogen production from 1974 through 1993 in the Earth's middle atmosphere as calculated using a two-dimensional model. Journal of Geophysical Research, 1996, 101, 6729-6739.	3.3	102
15	A model study of the impact of source gas changes on the stratosphere for 1850â€“2100. Atmospheric Chemistry and Physics, 2011, 11, 8515-8541.	1.9	92
16	Ozone depletion during the solar proton events of October/November 2003 as seen by SCIAMACHY. Journal of Geophysical Research, 2005, 110, .	3.3	90
17	Comparison of model results transporting the odd nitrogen family with results transporting separate odd nitrogen species. Journal of Geophysical Research, 1989, 94, 9862-9872.	3.3	83
18	Simulation of stratospheric tracers using an improved empirically based two-dimensional model transport formulation. Journal of Geophysical Research, 1999, 104, 23911-23934.	3.3	74

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19	The influence of the several very large solar proton events in years 2000â€“2003 on the neutral middle atmosphere. Advances in Space Research, 2005, 35, 445-450.	1.2	74
20	Northern Hemisphere atmospheric influence of the solar proton events and ground level enhancement in January 2005. Atmospheric Chemistry and Physics, 2011, 11, 6153-6166.	1.9	71
21	Two-dimensional and three-dimensional model simulations, measurements, and interpretation of the influence of the October 1989 solar proton events on the middle atmosphere. Journal of Geophysical Research, 1995, 100, 11641.	3.3	70
22	HNO3, N2O5, and ClONO2enhancements after the October-November 2003 solar proton events. Journal of Geophysical Research, 2005, 110, .	3.3	69
23	Relationship of loss, mean age of air and the distribution of CFCs to stratospheric circulation and implications for atmospheric lifetimes. Journal of Geophysical Research, 2008, 113, .	3.3	61
24	Nighttime auroral energy deposition in the middle atmosphere. Journal of Geophysical Research, 1984, 89, 5581-5596.	3.3	55
25	Observations of ozone depletion associated with solar proton events. Journal of Geophysical Research, 1981, 86, 12071-12081.	3.3	54
26	The space shuttle's impact on the stratosphere. Journal of Geophysical Research, 1990, 95, 18583-18590.	3.3	50
27	The effect of solar proton events on ozone and other constituents. Geophysical Monograph Series, 2004, , 305-319.	0.1	49
28	Effects of a polar stratospheric cloud parameterization on ozone depletion due to stratospheric aircraft in a two-dimensional model. Journal of Geophysical Research, 1994, 99, 18879.	3.3	48
29	An intercomparison of nitrogenâ€containing species in Nimbus 7 LIMS and SAMS data. Journal of Geophysical Research, 1987, 92, 995-1008.	3.3	44
30	Relativistic electron fluxes in May 1992 and their effect on the middle atmosphere. Journal of Geophysical Research, 1995, 100, 1027-1033.	3.3	42
31	Multimodel estimates of atmospheric lifetimes of longâ€lived ozoneâ€depleting substances: Present and future. Journal of Geophysical Research D: Atmospheres, 2014, 119, 2555-2573.	1.2	42
32	Middle atmospheric changes caused by the January and March 2012 solar proton events. Atmospheric Chemistry and Physics, 2014, 14, 1025-1038.	1.9	40
33	A global modeling study of solid rocket aluminum oxide emission effects on stratospheric ozone. Geophysical Research Letters, 1998, 25, 907-910.	1.5	39
34	The impact of interannual variability on multidecadal total ozone simulations. Journal of Geophysical Research, 2007, 112, .	3.3	37
35	Space shuttle's impact on the stratosphere: An update. Journal of Geophysical Research, 1996, 101, 12523-12529.	3.3	31
36	Two-dimensional model simulations of the QBO in ozone and tracers in the tropical stratosphere. Journal of Geophysical Research, 2002, 107, ACL 1-1-ACL 1-17.	3.3	28

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37	Atmospheric changes caused by galactic cosmic rays over the period 1960â€“2010. Atmospheric Chemistry and Physics, 2016, 16, 5853-5866.	1.9	26
38	Atmospheric Beacons of Life from Exoplanets Around G and K Stars. Scientific Reports, 2017, 7, 14141.	1.6	26
39	Deriving Global OH Abundance and Atmospheric Lifetimes for Longâ€Lived Gases: A Search for CH₃CCl₃ Alternatives. Journal of Geophysical Research D: Atmospheres, 2017, 122, 11,914.	1.2	26
40	Nitrate ion spikes in ice cores not suitable as proxies for solar proton events. Journal of Geophysical Research D: Atmospheres, 2016, 121, 2994-3016.	1.2	25
41	Solar Proton Events as Tests for the Fidelity of Middle Atmosphere Models. Physica Scripta, 1987, T18, 309-316.	1.2	25
42	The sensitivity of total ozone and ozone perturbation scenarios in a twoâ€dimensional model due to dynamical inputs. Journal of Geophysical Research, 1989, 94, 9873-9887.	3.3	22
43	Satellite Measurements of Middle Atmospheric Impacts by Solar Proton Events in Solar Cycle 23. Space Science Reviews, 2007, 125, 381-391.	3.7	21
44	Effects of Energetic Particles on Minor Constituents of the Middle Atmosphere. Journal of Geomagnetism and Geoelectricity, 1991, 43, 637-646.	0.8	21
45	Impact of January 2005 solar proton events on chlorine species. Atmospheric Chemistry and Physics, 2012, 12, 4159-4179.	1.9	19
46	Effects of the September 2005 Solar Flares and Solar Proton Events on the Middle Atmosphere in WACCM. Journal of Geophysical Research: Space Physics, 2018, 123, 5747-5763.	0.8	19
47	Nitrate deposition to surface snow at Summit, Greenland, following the 9 November 2000 solar proton event. Journal of Geophysical Research D: Atmospheres, 2014, 119, 6938-6957.	1.2	16
48	A search of UARS data for ozone depletions caused by the highly relativistic electron precipitation events of May 1992. Journal of Geophysical Research, 1999, 104, 165-175.	3.3	15
49	Separating chemistry and transport effects in two-dimensional models. Journal of Geophysical Research, 2004, 109, .	3.3	14
50	Comment on â€œDetection of multiply deuterated methane in the atmosphereâ€• Geophysical Research Letters, 1990, 17, 659-660.	1.5	11
51	Variation of mesospheric ozone during the highly relativistic electron event in May 1992 as measured by the High Resolution Doppler Imager instrument on UARS. Journal of Geophysical Research, 2000, 105, 22943-22953.	3.3	11
52	Energetic particle influences on NOy and ozone in the middle atmosphere. Geophysical Monograph Series, 1993, , 131-139.	0.1	7
53	Changes in the concentration of mesospheric O₃and OH during a highly relativistic electron precipitation event. Geophysical Monograph Series, 0, , 215-223.	0.1	6
54	Stratospheric ozone response to a solar irradiance reduction in a quadrupled <scp>CO₂</scp> environment. Earth's Future, 2014, 2, 331-340.	2.4	5

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55	Stratospheric ozone change. Environmental Science & Technology, 1989, 23, 1329-1332.	4.6	4
56	Satellite Measurements of Middle Atmospheric Impacts by Solar Proton Events in Solar Cycle 23. , 2007, , 381-391.		2
57	Reply [to â€œComment on â€˜An intercomparison of nitrogenâ€containing species in Nimbus 7 LIMS and SAMS dataâ€™ by C. H. Jackman, P. D. Guthrie, and Jack A. Kayeâ€]. Journal of Geophysical Research, 1987, 92, 14871-14871.	3.3	0
58	Overview and highlights of the Upper Atmosphere Research Satellite (UARS) mission. , 1994, 2266, 254.		0