Keith P Shine

List of Publications by Year
in descending order

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213 papers	19,380 citations	17405 63 h-index	13727 129 g-index
247 all docs	247 docs citations	247 times ranked	13549 citing authors

#	Article	IF	Citations
1	The HITRAN2016 molecular spectroscopic database. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 203, 3-69.	1.1	2,840
2	On the â€œDownward Controlâ€•of Extratropical Diabatic Circulations by Eddy-Induced Mean Zonal Forces. Journals of the Atmospheric Sciences, 1991, 48, 651-678.	0.6	820
3	New estimates of radiative forcing due to well mixed greenhouse gases. Geophysical Research Letters, 1998, 25, 2715-2718.	1.5	653
4	The effect of anthropogenic sulfate and soot aerosol on the clear sky planetary radiation budget. Geophysical Research Letters, 1995, 22, 603-606.	1.5	575
5	Alternatives to the Global Warming Potential for Comparing Climate Impacts of Emissions of Greenhouse Gases. Climatic Change, 2005, 68, 281-302.	1.7	533
6	Radiative forcing of carbon dioxide, methane, and nitrous oxide: A significant revision of the methane radiative forcing. Geophysical Research Letters, 2016, 43, 12,614.	1.5	529
7	Global warming potentials and radiative efficiencies of halocarbons and related compounds: A comprehensive review. Reviews of Geophysics, 2013, 51, 300-378.	9.0	390
8	Evaluating the climate and air quality impacts of short-lived pollutants. Atmospheric Chemistry and Physics, 2015, 15, 10529-10566.	1.9	365
9	Transport impacts on atmosphere and climate: Metrics. Atmospheric Environment, 2010, 44, 4648-4677.	1.9	358
10	The semi-direct aerosol effect: Impact of absorbing aerosols on marine stratocumulus. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 1407-1422.	1.0	333
11	Stratospheric temperature trends: Observations and model simulations. Reviews of Geophysics, 2001, 39, 71-122.	9.0	326
12	Stratospheric water vapour changes as a possible contributor to observed stratospheric cooling. Geophysical Research Letters, 1999, 26, 3309-3312.	1.5	317
13	Radiative forcing of climate by hydrochlorofluorocarbons and hydrofluorocarbons. Journal of Geophysical Research, 1995, 100, 23227.	3.3	308
14	Radiative forcing and temperature trends from stratospheric ozone changes. Journal of Geophysical Research, 1997, 102, 10841-10855.	3.3	305
15	Assessing the climate impact of trends in stratospheric water vapor. Geophysical Research Letters, 2002, 29, 10-1-10-4.	1.5	292
16	Metrics of Climate Change: Assessing Radiative Forcing and Emission Indices. Climatic Change, 2003, 58, 267-331.	1.7	268
17	An update of observed stratospheric temperature trends. Journal of Geophysical Research, 2009, 114, .	3.3	260
18	A solution to the misrepresentations of CO2-equivalent emissions of short-lived climate pollutants under ambitious mitigation. Npj Climate and Atmospheric Science, 2018, 1, .	2.6	230

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19	Multi-spectral calculations of the direct radiative forcing of tropospheric sulphate and soot aerosols using a column model. Quarterly Journal of the Royal Meteorological Society, 1997, 123, 1907-1930.	1.0	225
20	General Circulation Model Calculations of the Direct Radiative Forcing by Anthropogenic Sulfate and Fossil-Fuel Soot Aerosol. Journal of Climate, 1997, 10, 1562-1577.	1.2	222
21	The global warming potentialâ€"the need for an interdisciplinary retrial. Climatic Change, 2009, 96, 467-472.	1.7	206
22	The indirect global warming potential and global temperature change potential due to methane oxidation. Environmental Research Letters, 2009, 4, 044007.	2.2	199
23	A comparison of model-simulated trends in stratospheric temperatures. Quarterly Journal of the Royal Meteorological Society, 2003, 129, 1565-1588.	1.0	189
24	Fast and slow precipitation responses to individual climate forcers: A PDRMIP multimodel study. Geophysical Research Letters, 2016, 43, 2782-2791.	1.5	179
25	Possibility of an Arctic ozone hole in a doubled-CO2 climate. Nature, 1992, 360, 221-225.	13.7	176
26	Radiative forcing of climate from halocarbon-induced global stratospheric ozone loss. Nature, 1992, 355, 810-812.	13.7	167
27	Studies of the radiative properties of ice and mixed-phase clouds. Quarterly Journal of the Royal Meteorological Society, 1994, 120, 111-137.	1.0	166
28	Comparing the climate effect of emissions of short- and long-lived climate agents. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2007, 365, 1903-1914.	1.6	164
29	The Middle Atmosphere In the Absence of Dynamical Heat Fluxes. Quarterly Journal of the Royal Meteorological Society, 1987, 113, 603-633.	1.0	161
30	New use of global warming potentials to compare cumulative and short-lived climate pollutants. Nature Climate Change, 2016, 6, 773-776.	8.1	160
31	The effect of human activity on radiative forcing of climate change: a review of recent developments. Global and Planetary Change, 1999, 20, 205-225.	1.6	152
32	A Potent Greenhouse Gas Identified in the Atmosphere: SF5CF3. Science, 2000, 289, 611-613.	6.0	146
33	Sensitivity of the Earth's climate to height-dependent changes in the water vapour mixing ratio. Nature, 1991, 354, 382-384.	13.7	144
34	The impact of traffic emissions on atmospheric ozone and OH: results from QUANTIFY. Atmospheric Chemistry and Physics, 2009, 9, 3113-3136.	1.9	143
35	Radiative forcing since preindustrial times due to ozone change in the troposphere and the lower stratosphere. Atmospheric Chemistry and Physics, 2006, 6, 575-599.	1.9	140
36	Tropospheric temperature trends: history of an ongoing controversy. Wiley Interdisciplinary Reviews: Climate Change, 2011, 2, 66-88.	3.6	137

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37	Parametrization of the shortwave flux over high albedo surfaces as a function of cloud thickness and surface albedo. Quarterly Journal of the Royal Meteorological Society, 1984, 110, 747-764.	1.0	133
38	A comparison of climate response to different radiative forcings in three general circulation models: towards an improved metric of climate change. Climate Dynamics, 2003, 20, 843-854.	1.7	131
39	An observational and theoretical study of the radiative properties of cirrus: Some results from ICE'89. Quarterly Journal of the Royal Meteorological Society, 1994, 120, 809-848.	1.0	118
40	An examination of climate sensitivity for idealised climate change experiments in an intermediate general circulation model. Climate Dynamics, 2000, 16, 833-849.	1.7	116
41	PDRMIP: A Precipitation Driver and Response Model Intercomparison Projectâ€"Protocol and Preliminary Results. Bulletin of the American Meteorological Society, 2017, 98, 1185-1198.	1.7	116
42	An alternative to radiative forcing for estimating the relative importance of climate change mechanisms. Geophysical Research Letters, 2003, 30, .	1.5	114
43	The sensitivity of a thermodynamic sea ice model to changes in surface albedo parameterization. Journal of Geophysical Research, 1985, 90, 2243-2250.	3.3	105
44	Effects of anthropogenic emissions on tropospheric ozone and its radiative forcing. Journal of Geophysical Research, 1997, 102, 28101-28126.	3.3	104
45	Laboratory measurements of water vapour continuum absorption in spectral region 5000â€"5600 cm⁻¹: Evidence for water dimers. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 2391-2408.	1.0	103
46	The Water Vapour Continuum: Brief History and Recent Developments. Surveys in Geophysics, 2012, 33, 535-555.	2.1	101
47	CO ₂ Is Not the Only Gas. Science, 2007, 315, 1804-1805.	6.0	100
48	Water vapour self-continuum and water dimers: 1. Analysis of recent work. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1286-1303.	1.1	93
49	The importance of the diurnal and annual cycle of air traffic for contrail radiative forcing. Nature, 2006, 441, 864-867.	13.7	90
50	Response of climate to regional emissions of ozone precursors: sensitivities and warming potentials. Tellus, Series B: Chemical and Physical Meteorology, 2005, 57, 283-304.	0.8	88
51	Impact of perturbations to nitrogen oxide emissions from global aviation. Journal of Geophysical Research, 2008, 113, .	3.3	88
52	Infrared absorption spectra, radiative efficiencies, and global warming potentials of perfluorocarbons: Comparison between experiment and theory. Journal of Geophysical Research, 2010, 115, .	3.3	88
53	Radiative forcing due to changes in ozone and methane caused by the transport sector. Atmospheric Environment, 2011, 45, 387-394.	1.9	87
54	Evolution of tropospheric ozone radiative forcing. Geophysical Research Letters, 1998, 25, 3819-3822.	1.5	85

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55	Response of climate to regional emissions of ozone precursors: sensitivities and warming potentials. Tellus, Series B: Chemical and Physical Meteorology, 2022, 57, 283.	0.8	85
56	Stratospheric Temperature and Radiative Forcing Response to 11-Year Solar Cycle Changes in Irradiance and Ozone. Journals of the Atmospheric Sciences, 2009, 66, 2402-2417.	0.6	81
57	Water vapor self-continuum absorption in near-infrared windows derived from laboratory measurements. Journal of Geophysical Research, 2011, 116, .	3.3	81
58	Direct radiative effect of aerosols emitted by transport: from road, shipping and aviation. Atmospheric Chemistry and Physics, 2010, 10, 4477-4489.	1.9	78
59	Historical Tropospheric and Stratospheric Ozone Radiative Forcing Using the CMIP6 Database. Geophysical Research Letters, 2018, 45, 3264-3273.	1.5	78
60	On the modelled thermal response of the Antarctic stratosphere to a depletion of ozone. Geophysical Research Letters, 1986, 13, 1331-1334.	1.5	74
61	It is premature to include non-CO2 effects of aviation in emission trading schemes. Atmospheric Environment, 2006, 40, 1117-1121.	1.9	73
62	On the Cause of the Relative Greenhouse Strength of Gases such as the Halocarbons. Journals of the Atmospheric Sciences, 1991, 48, 1513-1518.	0.6	71
63	On aspects of the concept of radiative forcing. Climate Dynamics, 1997, 13, 547-560.	1.7	71
64	Radiative forcing by persistent contrails and its dependence on cruise altitudes. Journal of Geophysical Research, 2008, 113, .	3.3	70
65	Parameterization of Ice Cloud Radiative Properties and Its Application to the Potential Climatic Importance of Mixed-Phase Clouds. Journal of Climate, 1995, 8, 1874-1888.	1.2	67
66	Stratospheric temperature trends: our evolving understanding. Wiley Interdisciplinary Reviews: Climate Change, 2011, 2, 592-616.	3.6	67
67	Sources and sinks of zonal momentum in the middle atmosphere diagnosed using the diabatic circulation. Quarterly Journal of the Royal Meteorological Society, 1989, 115, 265-292.	1.0	66
68	Updated radiative forcing estimates of 65 halocarbons and nonmethane hydrocarbons. Journal of Geophysical Research, 2001, 106, 20493-20505.	3.3	65
69	A case study of the radiative forcing of persistent contrails evolving into contrailâ€induced cirrus. Journal of Geophysical Research, 2009, 114, .	3.3	65
70	Laboratory measurements of the water vapor continuum in the 1200â€“8000 cm^{âˆ'1} region between 293 K and 351 K. Journal of Geophysical Research, 2009, 114, .	3.3	63
71	Intercomparison of radiative forcing calculations of stratospheric water vapour and contrails. Meteorologische Zeitschrift, 2009, 18, 585-596.	0.5	63
72	Radiative forcing of climate change by CFC-11 and possible CFC replacements. Journal of Geophysical Research, 1997, 102, 19597-19609.	3.3	62

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73	Updated Global Warming Potentials and Radiative Efficiencies of Halocarbons and Other Weak Atmospheric Absorbers. Reviews of Geophysics, 2020, 58, e2019RG000691.	9.0	60
74	An intercomparison of laboratory measurements of absorption cross-sections and integrated absorption intensities for HCFC-22. Journal of Quantitative Spectroscopy and Radiative Transfer, 2000, 66, 109-128.	1.1	58
75	Water vapour foreign-continuum absorption in near-infrared windows from laboratory measurements. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 2557-2577.	1.6	58
76	The dependence of clearâ€sky outgoing longâ€wave radiation on surface temperature and relative humidity. Quarterly Journal of the Royal Meteorological Society, 1999, 125, 2103-2126.	1.0	56
77	The roles of aerosol, water vapor and cloud in future global dimming/brightening. Journal of Geophysical Research, 2011, 116, .	3.3	56
78	A unifying framework for metrics for aggregating the climate effect of different emissions. Environmental Research Letters, 2012, 7, 044006.	2.2	55
79	Stable climate metrics for emissions of short and long-lived speciesâ€"combining steps and pulses. Environmental Research Letters, 2020, 15, 024018.	2.2	54
80	A GCM Study of Volcanic Eruptions as a Cause of Increased Stratospheric Water Vapor. Journal of Climate, 2003, 16, 3525-3534.	1.2	53
81	Radiative forcing due to stratospheric water vapour from CH4oxidation. Geophysical Research Letters, 2007, 34, .	1.5	53
82	Scientific issues in the design of metrics for inclusion of oxides of nitrogen in global climate agreements. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 15768-15773.	3.3	52
83	Atmospheric Trends and Radiative Forcings of CF4and C2F6Inferred from Firn Air. Environmental Science & Technology, 2007, 41, 2184-2189.	4.6	52
84	The impact of carbon capture and storage on climate. Energy and Environmental Science, 2009, 2, 81-91.	15.6	52
85	Latitudinal variation of the effect of aviation NOx emissions on atmospheric ozone and methane and related climate metrics. Atmospheric Environment, 2013, 64, 1-9.	1.9	52
86	Radiative Forcing of Climate: The Historical Evolution of the Radiative Forcing Concept, the Forcing Agents and their Quantification, and Applications. Meteorological Monographs, 2019, 59, 14.1-14.101.	5.0	52
87	The sensitivity of a oneâ€dimensional thermodynamic sea ice model to changes in cloudiness. Journal of Geophysical Research, 1984, 89, 10615-10622.	3.3	51
88	Aircraft routing with minimal climate impact: the REACT4C climate cost function modelling approach (V1.0). Geoscientific Model Development, 2014, 7, 175-201.	1.3	51
89	Pure water vapor continuum measurements between 3100 and 4400 cmâˆ'1: Evidence for water dimer absorption in near atmospheric conditions. Geophysical Research Letters, 2007, 34, .	1.5	50
90	Atmospheric chemistry of C4F9OC2H5 (HFE-7200), C4F9OCH3 (HFE-7100), C3F7OCH3 (HFE-7000) and C3F7CH2OH: temperature dependence of the kinetics of their reactions with OH radicals, atmospheric lifetimes and global warming potentials. Physical Chemistry Chemical Physics, 2010, 12, 5115.	1.3	50

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91	The Circulation Response to Idealized Changes in Stratospheric Water Vapor. Journal of Climate, 2013, 26, 545-561.	1.2	50
92	Long-lived halocarbon trends and budgets from atmospheric chemistry modelling constrained with measurements in polar firn. Atmospheric Chemistry and Physics, 2009, 9, 3911-3934.	1.9	49
93	A global blended tropopause based on ERA data. Part I: Climatology. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 561-575.	1.0	49
94	Near-infrared water vapour self-continuum at close to room temperature. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 120, 23-35.	1.1	47
95	Radiative forcing and global warming potentials of 11 halogenated compounds. Journal of Quantitative Spectroscopy and Radiative Transfer, 2000, 66, 169-183.	1.1	46
96	The temperature response to stratospheric water vapour changes. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 1070-1082.	1.0	44
97	Characterizing North Atlantic weather patterns for climateâ€optimal aircraft routing. Meteorological Applications, 2013, 20, 80-93.	0.9	44
98	Sensible heat has significantly affected the global hydrological cycle over the historical period. Nature Communications, 2018, 9, 1922.	5.8	44
99	Greenhouse gas radiative forcing: Effects of averaging and inhomogeneities in trace gas distribution. Quarterly Journal of the Royal Meteorological Society, 1998, 124, 2099-2127.	1.0	43
100	Temperature trends derived from Stratospheric Sounding Unit radiances: The effect of increasing CO₂ on the weighting function. Geophysical Research Letters, 2008, 35, .	1.5	43
101	Radiative forcing due to aviation water vapour emissions. Atmospheric Environment, 2012, 63, 1-13.	1.9	43
102	Radiative efficiencies and global warming potentials using theoretically determined absorption cross-sections for several hydrofluoroethers (HFEs) and hydrofluoropolyethers (HFPEs). Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1967-1977.	1.1	42
103	The water vapour continuum in near-infrared windows â€œ Current understanding and prospects for its inclusion in spectroscopic databases. Journal of Molecular Spectroscopy, 2016, 327, 193-208.	0.4	42
104	Infrared absorption cross-sections in HITRAN2016 and beyond: Expansion for climate, environment, and atmospheric applications. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 230, 172-221.	1.1	41
105	Revised IR spectrum, radiative efficiency and global warming potential of nitrogen trifluoride. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	40
106	Feasibility of climate-optimized air traffic routing for trans-Atlantic flights. Environmental Research Letters, 2017, 12, 034003.	2.2	39
107	Climate sensitivity and the marginal cryosphere. Geophysical Monograph Series, 1984, , 221-237.	0.1	37
108	Equivalent CO₂ and its use in understanding the climate effects of increased greenhouse gas concentrations. Weather, 2007, 62, 307-311.	0.6	36

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109	Indicate separate contributions of long-lived and short-lived greenhouse gases in emission targets. Npj Climate and Atmospheric Science, 2022, 5, 5.	2.6	36
110	Stratospheric temperature trends: impact of ozone variability and the QBO. Climate Dynamics, 2010, 34, 381-398.	1.7	35
111	Emission metrics for quantifying regional climate impacts of aviation. Earth System Dynamics, 2017, 8, 547-563.	2.7	35
112	The effect of two decades of ozone change on stratospheric temperature as indicated by a general circulation model. Geophysical Research Letters, 2000, 27, 2617-2620.	1.5	34
113	Regional emission metrics for short-lived climate forcers from multiple models. Atmospheric Chemistry and Physics, 2016, 16, 7451-7468.	1.9	34
114	Traceable radiometry underpinning terrestrial- and helio-studies (TRUTHS). Advances in Space Research, 2003, 32, 2253-2261.	1.2	33
115	The role of ozone-induced diabatic heating anomalies in the quasi-biennial oscillation. Quarterly Journal of the Royal Meteorological Society, 1995, 121, 937-943.	1.0	32
116	Further estimates of radiative forcing due to tropospheric ozone changes. Geophysical Research Letters, 1996, 23, 3321-3324.	1.5	32
117	Infrared spectrum and global warming potential of SF5CF3. Atmospheric Environment, 2002, 36, 1237-1240.	1.9	32
118	The Middle Atmosphere In the Absence of Dynamical Heat Fluxes. , 1987, 113, 603.		32
119	Climate effect of inhaled anaesthetics. British Journal of Anaesthesia, 2010, 105, 731-733.	1.5	31
120	A Concept for Multi-Criteria Environmental Assessment of Aircraft Trajectories. Aerospace, 2017, 4, 42.	1.1	30
121	Role of spatial and temporal variations in the computation of radiative forcing due to sulphate aerosols: A regional study. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 973-989.	1.0	29
122	Resolution of the uncertainties in the radiative forcing of HFC-134a. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 93, 447-460.	1.1	29
123	Evaluation of the use of radiosonde humidity data to predict the occurrence of persistent contrails. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 1413-1423.	1.0	29
124	Coupled chemistry climate model simulations of stratospheric temperatures and their trends for the recent past. Geophysical Research Letters, 2009, 36, .	1.5	29
125	Water vapour adjustments and responses differ between climate drivers. Atmospheric Chemistry and Physics, 2019, 19, 12887-12899.	1.9	29
126	Design and Analysis of Climate Model Experiments for the Efficient Estimation of Anthropogenic Signals. Journal of Climate, 2003, 16, 1320-1336.	1.2	28

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127	Climate-Optimized Trajectories and Robust Mitigation Potential: Flying ATM4E. Aerospace, 2020, 7, 156.	1.1	28
128	Outgoing Longwave Radiation due to Directly Transmitted Surface Emission. Journals of the Atmospheric Sciences, 2012, 69, 1865-1870.	0.6	26
129	A global blended tropopause based on ERA data. Part II: Trends and tropical broadening. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 576-584.	1.0	26
130	How much information is lost by using global-mean climate metrics? an example using the transport sector. Climatic Change, 2012, 113, 949-963.	1.7	26
131	The potential impact of changes in lower stratospheric water vapour on stratospheric temperatures over the past 30 years. Quarterly Journal of the Royal Meteorological Society, 2014, 140, 2176-2185.	1.0	26
132	What are the implications of climate change for trans-Atlantic aircraft routing and flight time?. Transportation Research, Part D: Transport and Environment, 2016, 47, 44-53.	3.2	26
133	Calculating and communicating ensembleâ€based volcanic ash dosage and concentration risk for aviation. Meteorological Applications, 2019, 26, 253-266.	0.9	26
134	The Spectral Nature of Stratospheric Temperature Adjustment and its Application to Halocarbon Radiative Forcing. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001951.	1.3	26
135	Updated radiative forcing estimates of four halocarbons. Journal of Geophysical Research, 2004, 109, .	3.3	25
136	Regional temperature change potentials for short-lived climate forcers based on radiative forcing from multiple models. Atmospheric Chemistry and Physics, 2017, 17, 10795-10809.	1.9	24
137	Radiative Forcing of Climate Change. Space Science Reviews, 2000, 94, 363-373.	3.7	23
138	Clarifying the SF5CF3 Record. Science, 2000, 290, 935-936.	6.0	23
139	Absorption by water vapour in the 1 to region. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 83, 735-749.	1.1	23
140	An estimate of the global impact of multiple scattering by clouds on outgoing long-wave radiation. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 885-895.	1.0	23
141	A simple framework for assessing the trade-off between the climate impact of aviation carbon dioxide emissions and contrails for a single flight. Environmental Research Letters, 2014, 9, 064021.	2.2	23
142	Radiative forcing of climate change from the Copernicus reanalysis of atmospheric composition. Earth System Science Data, 2020, 12, 1649-1677.	3.7	22
143	Modeling Ultraviolet Radiation at the Earth's Surface. Part II: Model and Instrument Comparison. Journal of Applied Meteorology and Climatology, 1995, 34, 2426-2439.	1.7	21
144	A Modelâ€Derived Global Climatology of UV Irradiation at the Earth's Surface. Photochemistry and Photobiology, 1999, 69, 193-202.	1.3	21

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145	A highâ€resolution nearâ€infrared extraterrestrial solar spectrum derived from groundâ€based Fourier transform spectrometer measurements. Journal of Geophysical Research D: Atmospheres, 2013, 118, 5319-5331.	1.2	21
146	Metrics for linking emissions of gases and aerosols to global precipitation changes. Earth System Dynamics, 2015, 6, 525-540.	2.7	21
147	Radiative forcing due to changes in ozone: a comparison of different codes. , 1995, , 373-396.		21
148	Modelling climate and the nature of climate models: A review. Journal of Climatology, 1983, 3, 81-94.	0.8	20
149	The Effects of Changes in HITRAN and Uncertainties in the Spectroscopy on Infrared Irradiance Calculations. Journals of the Atmospheric Sciences, 1998, 55, 1950-1964.	0.6	20
150	A One-Dimensional Study of Possible Cirrus Cloud Feedbacks. Journal of Climate, 1994, 7, 158-173.	1.2	19
151	Validating ECMWF forecasts for the occurrence of ice supersaturation using visual observations of persistent contrails and radiosonde measurements over England. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 1723-1732.	1.0	19
152	The dependence of contrail formation on the weather pattern and altitude in the North Atlantic. Geophysical Research Letters, 2012, 39, .	1.5	19
153	Infrared Absorption Spectra, Radiative Efficiencies, and Global Warming Potentials of Newly-Detected Halogenated Compounds: CFC-113a, CFC-112 and HCFC-133a. Atmosphere, 2014, 5, 473-483.	1.0	19
154	Global radiative and climate effect of the water vapour continuum at visible and nearâ€infrared wavelengths. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 727-738.	1.0	19
155	Estimation of direct radiative forcing due to non-methane hydrocarbons. Atmospheric Environment, 1999, 33, 759-767.	1.9	17
156	IR spectrum and radiative forcing of CF4revisited. Journal of Geophysical Research, 2005, 110, .	3.3	17
157	Radiative forcing of halocarbons: A comparison of line-by-line and narrow-band models using CF4 as an example. Journal of Quantitative Spectroscopy and Radiative Transfer, 1996, 55, 763-769.	1.1	16
158	Ice supersaturation and the potential for contrail formation in a changing climate. Earth System Dynamics, 2015, 6, 555-568.	2.7	15
159	Contrasting fast precipitation responses to tropospheric and stratospheric ozone forcing. Geophysical Research Letters, 2016, 43, 1263-1271.	1.5	15
160	Simulated sensitivity of the earth's radiation budget to 'changes in cloud properties. Quarterly Journal of the Royal Meteorological Society, 1995, 121, 797-819.	1.0	14
161	Self-broadened line parameters for water vapour in the spectral region 5000â€“5600cmâˆ'1. Journal of Molecular Spectroscopy, 2005, 232, 186-201.	0.4	14
162	Impact of new measurements of oxygen collision-induced absorption on estimates of short-wave atmospheric absorption. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 2377-2396.	1.0	13

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163	Assessment of the consistency of near-infrared water vapor line intensities using high-spectral-resolution ground-based Fourier transform measurements of solar radiation. Journal of Geophysical Research, 2006, 111, .	3.3	13
164	Halfway to doubling of CO2 radiative forcing. Nature Geoscience, 2017, 10, 710-711.	5.4	13
165	Changes in ultraviolet radiation due to stratospheric and tropospheric ozone changes since preindustrial times. Journal of Geophysical Research, 1998, 103, 26107-26113.	3.3	12
166	Perfluorodecalin: global warming potential and first detection in the atmosphere. Atmospheric Environment, 2005, , .	1.9	12
167	Stratospheric water vapor and climate: Sensitivity to the representation in radiation codes. Journal of Geophysical Research, 2012, 117, .	3.3	12
168	A Lagrangian analysis of iceâ€supersaturated air over the North Atlantic. Journal of Geophysical Research D: Atmospheres, 2014, 119, 90-100.	1.2	12
169	Effects of improvements in near-infrared water vapor line intensities on short-wave atmospheric absorption. Geophysical Research Letters, 2001, 28, 2401-2404.	1.5	12
170	The influence of the spectral response of satellite sensors on estimates of broadband albedo. Quarterly Journal of the Royal Meteorological Society, 1984, 110, 1170-1179.	1.0	11
171	A comparison of two radiation schemes for calculating ultraviolet radiation. Quarterly Journal of the Royal Meteorological Society, 1995, 121, 1113-1131.	1.0	11
172	Sensitivity of the Earth's radiation budget to interannual variations in cloud amount. Climate Dynamics, 1997, 13, 213-222.	1.7	11
173	The contribution of greenhouse gases to the recent slowdown in global-mean temperature trends. Environmental Research Letters, 2016, 11, 094018.	2.2	11
174	Can Measurements of the Nearâ€Infrared Solar Spectral Irradiance be Reconciled? A New Groundâ€Based Assessment Between 4,000 and 10,000Âcm â^'1. Geophysical Research Letters, 2017, 44, 10,071.	1.5	11
175	Absolute high spectral resolution measurements of surface solar radiation for detection of water vapour continuum absorption. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 2590-2610.	1.6	10
176	3ÂÂµm Water vapor self- and foreign-continuum: New method for determination and new insights into the self-continuum. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 253, 107134.	1.1	10
177	Atmospheric Ozone and Climate Change. Ozone: Science and Engineering, 2001, 23, 429-435.	1.4	9
178	A new fast stratospheric ozone chemistry scheme in an intermediate general-circulation model. II: Application to effects of future increases in greenhouse gases. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 2243-2261.	1.0	9
179	Intensities and self-broadening coefficients of the strongest water vapour lines in the 2.7 and 6.25 Î¼m absorption bands. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 177, 92-107.	1.1	9
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