Colin F Wilson

List of Publications by Year
in descending order

48 papers	2,323 citations	236612 25 h-index	223531 46 g-index
62 all docs	62 docs citations	62 times ranked	1789 citing authors

#	Article	IF	Citations
1	The NEMESIS planetary atmosphere radiative transfer and retrieval tool. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 1136-1150.	1.1	415
2	Scientific goals for the observation of Venus by VIRTIS on ESA/Venus express mission. Planetary and Space Science, 2007, 55, 1653-1672.	0.9	155
3	Variable winds on Venus mapped in three dimensions. Geophysical Research Letters, 2008, 35, .	1.5	119
4	The Atmospheric Chemistry Suite (ACS) of Three Spectrometers for the ExoMars 2016 Trace Gas Orbiter. Space Science Reviews, 2018, 214, 1.	3.7	119
5	Stormy water on Mars: The distribution and saturation of atmospheric water during the dusty season. Science, 2020, 367, 297-300.	6.0	117
6	No detection of methane on Mars from early ExoMars Trace Gas Orbiter observations. Nature, 2019, 568, 517-520.	13.7	111
7	South-polar features on Venus similar to those near the north pole. Nature, 2007, 450, 637-640.	13.7	110
8	Martian dust storm impact on atmospheric H2O and D/H observed by ExoMars Trace Gas Orbiter. Nature, 2019, 568, 521-525.	13.7	107
9	Models of the global cloud structure on Venus derived from Venus Express observations. Icarus, 2012, 217, 542-560.	1.1	95
10	Clouds and Hazes of Venus. Space Science Reviews, 2018, 214, 1.	3.7	95
11	Future of Venus Research and Exploration. Space Science Reviews, 2018, 214, 1.	3.7	79
12	Simulating weathering of basalt on Mars and Earth by thermal cycling. Geophysical Research Letters, 2010, 37, .	1.5	54
13	Venusâ€™s Southern Polar Vortex Reveals Precessing Circulation. Science, 2011, 332, 577-580.	6.0	54
14	No evidence of phosphine in the atmosphere of Venus from independent analyses. Nature Astronomy, 2021, 5, 631-635.	4.2	50
15	Spatial variability of carbon monoxide in Venus' mesosphere from Venus Express/Visible and Infrared Thermal Imaging Spectrometer measurements. Journal of Geophysical Research, 2008, 113, .	3.3	48
16	Correlations between cloud thickness and subâ€cloud water abundance on Venus. Geophysical Research Letters, 2010, 37, .	1.5	47
17	Evidence for anomalous cloud particles at the poles of Venus. Journal of Geophysical Research, 2008, 113, .	3.3	38
18	A correlated-k model of radiative transfer in the near-infrared windows of Venus. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 1118-1135.	1.1	37

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19	Tropospheric carbon monoxide concentrations and variability on Venus from Venus Express/VIRTISâ€M observations. Journal of Geophysical Research, 2008, 113, .	3.3	37
20	Coordinated Hubble Space Telescope and Venus Express Observations of Venusâ€™ upper cloud deck. Icarus, 2015, 258, 309-336.	1.1	35
21	The thermal structure of the Venus atmosphere: Intercomparison of Venus Express and ground based observations of vertical temperature and density profiles. Icarus, 2017, 294, 124-155.	1.1	34
22	A new, fast and flexible radiative transfer method for Venus general circulation models. Planetary and Space Science, 2015, 105, 80-93.	0.9	30
23	The vertical structure of CO in the Martian atmosphere from the ExoMars Trace Gas Orbiter. Nature Geoscience, 2021, 14, 67-71.	5.4	30
24	Explosive volcanic activity on Venus: The roles of volatile contribution, degassing, and external environment. Planetary and Space Science, 2015, 113-114, 33-48.	0.9	27
25	Isotopic fractionation of water and its photolytic products in the atmosphere of Mars. Nature Astronomy, 2021, 5, 943-950.	4.2	27
26	Variability of CO concentrations in the Venus troposphere from Venus Express/VIRTIS using a Band Ratio Technique. Icarus, 2009, 201, 432-443.	1.1	24
27	Oxygen isotopic ratios in Martian water vapour observed by ACS MIR on board the ExoMars Trace Gas Orbiter. Astronomy and Astrophysics, 2019, 630, A91.	2.1	24
28	EnVision: taking the pulse of our twin planet. Experimental Astronomy, 2012, 33, 337-363.	1.6	23
29	The CO2 continuum absorption in the 1.10- and 1.18-Î¼m windows on Venus from Maxwell Montes transits by SPICAV IR onboard Venus express. Planetary and Space Science, 2015, 113-114, 66-77.	0.9	23
30	A wind tunnel for the calibration of Mars wind sensors. Planetary and Space Science, 2008, 56, 1532-1541.	0.9	19
31	Seasonal reappearance of HCl in the atmosphere of Mars during the Mars year 35 dusty season. Astronomy and Astrophysics, 2021, 647, A161.	2.1	17
32	The Beagle 2 environmental sensors: science goals and instrument description. Planetary and Space Science, 2004, 52, 1141-1156.	0.9	16
33	European Venus Explorer: An in-situ mission to Venus using a balloon platform. Advances in Space Research, 2009, 44, 106-115.	1.2	16
34	Investigations of the Mars Upper Atmosphere with ExoMars Trace Gas Orbiter. Space Science Reviews, 2018, 214, 1.	3.7	13
35	Long-duration Venus lander for seismic and atmospheric science. Planetary and Space Science, 2020, 190, 104961.	0.9	13
36	Isotopic Composition of CO₂ in the Atmosphere of Mars: Fractionation by Diffusive Separation Observed by the ExoMars Trace Gas Orbiter. Journal of Geophysical Research E: Planets, 2021, 126, .	1.5	12

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37	European Venus Explorer (EVE): an in-situ mission to Venus. Experimental Astronomy, 2009, 23, 741-760.	1.6	9
38	Zonal winds at high latitudes on Venus: An improved application of cyclostrophic balance to Venus Express observations. Icarus, 2012, 217, 629-639.	1.1	9
39	Analysis of thermal emission from the nightside of Venus at 1.51 and 1.55 Î¼m. Icarus, 2009, 201, 814-817.	1.1	7
40	Instrumental requirements for the study of Venusâ€™ cloud top using the UV imaging spectrometer VeSUV. Advances in Space Research, 2021, 68, 275-291.	1.2	5
41	Upper limits for phosphine (PH₃) in the atmosphere of Mars. Astronomy and Astrophysics, 2021, 649, L1.	2.1	4
42	Seasonal Changes in the Vertical Structure of Ozone in the Martian Lower Atmosphere and Its Relationship to Water Vapor. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	4
43	Editorial: Topical Collection on Venus. Space Science Reviews, 2018, 214, 1.	3.7	2
44	Venus: key to understanding the evolution of terrestrial planets. Experimental Astronomy, 2022, 54, 575-595.	1.6	2
45	Characterizing atmospheric waves on Venus, Earth, and Mars. Eos, 2012, 93, 220-220.	0.1	1
46	No detection of SO₂, H₂S, or OCS in the atmosphere of Mars from the first two Martian years of observations from TGO/ACS. Astronomy and Astrophysics, 2022, 658, A86.	2.1	1
47	Venus Corona and Tessera Explorer (VeCaTEx). , 2021, 53, .		0
48	Venus Express: Lessons from Eight Years of Science Operations. , 2015, , 555-578.		0