ThÃ©rÃ¨se Encrenaz

List of Publications by Year
in descending order

91 papers	5,069 citations	76326 40 h-index	91884 69 g-index
95 all docs	95 docs citations	95 times ranked	3796 citing authors

#	Article	IF	Citations
1	Observability of temperate exoplanets with Ariel. Experimental Astronomy, 2022, 53, 375-390.	3.7	1
2	Invited review: Infrared spectroscopy of planetary atmospheres: Searching for insights into their past and present histories. Icarus, 2022, 376, 114885.	2.5	2
3	Climatology of SO2 and UV absorber at Venus' cloud top from SPICAV-UV nadir dataset. Icarus, 2020, 335, 113368.	2.5	50
4	HDO and SO₂thermal mapping on Venus. Astronomy and Astrophysics, 2020, 639, A69.	5.1	19
5	A stringent upper limit of the PH₃abundance at the cloud top of Venus. Astronomy and Astrophysics, 2020, 643, L5.	5.1	49
6	Mars atmospheric chemistry simulations with the GEM-Mars general circulation model. Icarus, 2019, 326, 197-224.	2.5	52
7	HDO and SO₂ thermal mapping on Venus. Astronomy and Astrophysics, 2019, 623, A70.	5.1	26
8	Ground-based infrared mapping of H₂O₂ on Mars near opposition. Astronomy and Astrophysics, 2019, 627, A60.	5.1	8
9	The Atmospheric Chemistry Suite (ACS) of Three Spectrometers for the ExoMars 2016 Trace Gas Orbiter. Space Science Reviews, 2018, 214, 1.	8.1	119
10	Scientific rationale for Uranus and Neptune in situ explorations. Planetary and Space Science, 2018, 155, 12-40.	1.7	69
11	Transit spectroscopy of temperate Jupiters with ARIEL: a feasibility study. Experimental Astronomy, 2018, 46, 31-44.	3.7	28
12	New measurements of D/H on Mars using EXES aboard SOFIA. Astronomy and Astrophysics, 2018, 612, A112.	5.1	26
13	A chemical survey of exoplanets with ARIEL. Experimental Astronomy, 2018, 46, 135-209.	3.7	249
14	Stringent upper limit of CH₄ on Mars based on SOFIA/EXES observations. Astronomy and Astrophysics, 2018, 610, A78.	5.1	10
15	Thermal Structure and Composition. , 2017, , 42-75.		19
16	Unique Spectroscopy and Imaging of Mars with the James Webb Space Telescope. Publications of the Astronomical Society of the Pacific, 2016, 128, 018004.	3.1	5
17	Mars: a small terrestrial planet. Astronomy and Astrophysics Review, 2016, 24, 1.	25.5	22
18	HDO and SO₂thermal mapping on Venus. Astronomy and Astrophysics, 2016, 595, A74.	5.1	24

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19	A map of D/H on Mars in the thermal infrared using EXES aboard SOFIA. Astronomy and Astrophysics, 2016, 586, A62.	5.1	39
20	Submillimeter mapping of mesospheric minor species on Venus with ALMA. Planetary and Space Science, 2015, 113-114, 275-291.	1.7	45
21	Seasonal variations of hydrogen peroxide and water vapor on Mars: Further indications of heterogeneous chemistry. Astronomy and Astrophysics, 2015, 578, A127.	5.1	53
22	The EChO science case. Experimental Astronomy, 2015, 40, 329-391.	3.7	31
23	Transit spectroscopy of exoplanets from space: how to optimize the wavelength coverage and spectral resolving power. Experimental Astronomy, 2015, 40, 523-543.	3.7	29
24	Strong water isotopic anomalies in the martian atmosphere: Probing current and ancient reservoirs. Science, 2015, 348, 218-221.	12.6	245
25	Thermal imaging of Uranus: Upper-tropospheric temperatures one season after Voyager. Icarus, 2015, 260, 94-102.	2.5	22
26	High-resolution imaging spectroscopy of planetary atmospheres. Comptes Rendus - Geoscience, 2015, 347, 145-152.	1.2	2
27	The first submillimeter observation of CO in the stratosphere of Uranus. Astronomy and Astrophysics, 2014, 562, A33.	5.1	52
28	Infrared spectroscopy of exoplanets: observational constraints. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130083.	3.4	6
29	A sensitive search for organics (CH4, CH3OH, H2CO, C2H6, C2H2, C2H4), hydroperoxyl (HO2), nitrogen compounds (N2O, NH3, HCN) and chlorine species (HCl, CH3Cl) on Mars using ground-based high-resolution infrared spectroscopy. Icarus, 2013, 223, 11-27.	2.5	126
30	Sub-millimeter observations of the terrestrial atmosphere during an Earth flyby of the MIRO sounder on the Rosetta spacecraft. Planetary and Space Science, 2013, 82-83, 99-112.	1.7	3
31	Spectroscopy of planetary atmospheres in our Galaxy. Astronomy and Astrophysics Review, 2013, 21, 1.	25.5	102
32	HDO and SO₂thermal mapping on Venus. Astronomy and Astrophysics, 2013, 559, A65.	5.1	26
33	CHARACTERIZING THE ATMOSPHERES OF TRANSITING PLANETS WITH A DEDICATED SPACE TELESCOPE. Astrophysical Journal, 2012, 746, 45.	4.5	49
34	HDO and SO₂thermal mapping on Venus: evidence for strong SO₂Âvariability. Astronomy and Astrophysics, 2012, 543, A153.	5.1	40
35	EChO. Experimental Astronomy, 2012, 34, 311-353.	3.7	98
36	Hydrogen peroxide on Mars: Observations, interpretation and future plans. Planetary and Space Science, 2012, 68, 3-17.	1.7	72

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37	Continuum and spectroscopic observations of asteroid (21) Lutetia at millimeter and submillimeter wavelengths with the MIRO instrument on the Rosetta spacecraft. Planetary and Space Science, 2012, 66, 31-42.	1.7	38
38	A stringent upper limit to SO₂in the Martian atmosphere. Astronomy and Astrophysics, 2011, 530, A37.	5.1	49
39	A spatially resolved high spectral resolution study of Neptuneâ€™s stratosphere. Icarus, 2011, 214, 606-621.	2.5	41
40	Annual survey of water vapor behavior from the OMEGA mapping spectrometer onboard Mars Express. Icarus, 2011, 213, 480-495.	2.5	42
41	Jupiter and the other Giants: A Comparative Study. Proceedings of the International Astronomical Union, 2010, 6, 155-164.	0.0	0
42	Herschel/HIFI observations of Mars: First detection of O₂at submillimetre wavelengths and upper limits on HCl and H₂O₂. Astronomy and Astrophysics, 2010, 521, L49.	5.1	57
43	Millimeter and submillimeter measurements of asteroid (2867) Steins during the Rosetta fly-by. Planetary and Space Science, 2010, 58, 1077-1087.	1.7	30
44	Water vapor map of Mars near summer solstice using ground-based infrared spectroscopy. Astronomy and Astrophysics, 2010, 520, A33.	5.1	10
45	Ground-Based Observations of the Martian Atmosphere in Support of Space Missions. Earth, Moon and Planets, 2009, 105, 127-134.	0.6	2
46	OMEGA/Mars Express: South Pole Region, water vapor daily variability. Icarus, 2009, 201, 102-112.	2.5	17
47	Wind measurements in Mars' middle atmosphere: IRAM Plateau de Bure interferometric CO observations. Icarus, 2009, 201, 549-563.	2.5	25
48	Water and related chemistry in the solar system. A guaranteed time key programme for Herschel. Planetary and Space Science, 2009, 57, 1596-1606.	1.7	58
49	Simultaneous mapping of H2O and H2O2 on Mars from infrared high-resolution imaging spectroscopy. Icarus, 2008, 195, 547-556.	2.5	42
50	Infrared Spectroscopy of Solar-System Planets. Space Science Reviews, 2008, 135, 11-23.	8.1	2
51	Search for methane on Mars: Observations, interpretation and future work. Advances in Space Research, 2008, 42, 1-5.	2.6	6
52	Observations of atmospheric water vapor above the Tharsis volcanoes on Mars with the OMEGA/MEx imaging spectrometer. Icarus, 2008, 194, 53-64.	2.5	31
53	Heterogeneous chemistry in the atmosphere of Mars. Nature, 2008, 454, 971-975.	27.8	130
54	Water in the Solar System. Annual Review of Astronomy and Astrophysics, 2008, 46, 57-87.	24.3	78

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55	Vertical temperature profile and mesospheric winds retrieval on Mars from COÂmillimeter observations. Astronomy and Astrophysics, 2008, 489, 795-809.	5.1	18
56	A study of the Martian water vapor over Hellas using OMEGA and PFS aboard Mars Express. Astronomy and Astrophysics, 2008, 484, 547-553.	5.1	8
57	Remote sensing analysis of solar-system objects. Physica Scripta, 2008, T130, 014037.	2.5	3
58	Infrared Spectroscopy of Solar-System Planets. Space Sciences Series of ISSI, 2008, , 11-23.	0.0	0
59	Evidence for methane escape and strong seasonal and dynamical perturbations of Neptune's atmospheric temperatures. Astronomy and Astrophysics, 2007, 473, L5-L8.	5.1	59
60	Martian water vapor: Mars Express PFS/LW observations. Icarus, 2007, 190, 32-49.	2.5	101
61	Water vapor mapping on Mars using OMEGA/Mars Express. Planetary and Space Science, 2007, 55, 333-342.	1.7	50
62	MIRO: Microwave Instrument for Rosetta Orbiter. Space Science Reviews, 2007, 128, 561-597.	8.1	173
63	Compositional constraints on giant planet formation. Planetary and Space Science, 2006, 54, 1188-1196.	1.7	55
64	Infrared imaging spectroscopy of Mars: H2O mapping and determination of CO2 isotopic ratios. Icarus, 2005, 179, 43-54.	2.5	42
65	The Planets and Titan Observed by ISO. Space Science Reviews, 2005, 119, 123-139.	8.1	13
66	Neutral Atmospheres of the Giant Planets: An Overview of Composition Measurements. , 2005, , 99-119.		4
67	A mapping of martian water sublimation during early northern summer using OMEGA/Mars Express. Astronomy and Astrophysics, 2005, 441, L9-L12.	5.1	26
68	The Planets and Titan Observed by ISO. , 2005, , 123-139.		3
69	The far-infrared spectra of Jupiter and Saturn. Planetary and Space Science, 2004, 52, 379-383.	1.7	11
70	In memoriam Vasily Ivanovitch Moroz (1931â€“2004). Planetary and Space Science, 2004, 52, 1231-1232.	1.7	0
71	Far-infrared spectroscopy of the giant planets: measurements of ammonia and phosphine at Jupiter and Saturn and the continuum of Neptune. Advances in Space Research, 2004, 34, 2247-2250.	2.6	11
72	The Solar System. Astronomy and Astrophysics Library, 2004, , .	0.1	52

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73	Detection of Methane in the Atmosphere of Mars. Science, 2004, 306, 1758-1761.	12.6	683
74	Element Abundances and Isotope Ratios in the Giant Planets and Titan. Space Science Reviews, 2003, 106, 121-138.	8.1	64
75	ISO observations of the giant planets and Titan: what have we learnt?. Planetary and Space Science, 2003, 51, 89-103.	1.7	15
76	Chemical markers of possible hot spots on Mars. Journal of Geophysical Research, 2003, 108, .	3.3	70
77	The formation and evolution of the Solar System. European Review, 2002, 10, 171-184.	0.7	0
78	The Origin of Water Vapor and Carbon Dioxide in Jupiter's Stratosphere. Icarus, 2002, 159, 112-131.	2.5	92
79	The deuterium abundance in Jupiter and Saturn from ISO-SWS observations. Astronomy and Astrophysics, 2001, 370, 610-622.	5.1	204
80	The 2.4â€“ spectrum of Mars observed with the infrared space observatory. Planetary and Space Science, 2000, 48, 1393-1405.	1.7	79
81	Detection of the Methyl Radical on Neptune. Astrophysical Journal, 1999, 515, 868-872.	4.5	82
82	The planet Jupiter. Astronomy and Astrophysics Review, 1999, 9, 171-219.	25.5	18
83	External supply of oxygen to the atmospheres of the giant planets. Nature, 1997, 389, 159-162.	27.8	206
84	A Tentative Detection of the 183-GHz Water Vapor Line in the Martian Atmosphere: Constraints upon the H2O Abundance and Vertical Distribution. Icarus, 1995, 113, 110-118.	2.5	23
85	Chemical and thermal response of Jupiter's atmosphere following the impact of comet Shoemakerâ€“Levy 9. Nature, 1995, 373, 592-595.	27.8	90
86	Millimeter-wave observations of Saturn, Uranus, and Neptune - CO and HCN on Neptune. Astrophysical Journal, 1992, 392, L99.	4.5	64
87	Galileo Infrared Imaging Spectroscopy Measurements at Venus. Science, 1991, 253, 1541-1548.	12.6	156
88	Topography of the Martian tropical regions with ISM. Planetary and Space Science, 1991, 39, 225-236.	1.7	15
89	An estimate of the PH3, CH3D, and GeH4 Abundances on Jupiter from the Voyager IRIS data at 4.5 Î¼m. Icarus, 1982, 49, 416-426.	2.5	67
90	A method for the determination of abundance ratios in the outer planetsâ€”Application to Jupiter. Icarus, 1979, 39, 1-27.	2.5	23

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91	On the abundance of deuterium in Jupiter's atmosphere. Astrophysical Journal, 1978, 221, 378.	4.5	13