Franck Montmessin

List of Publications by Year
in descending order

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227 papers	11,654 citations	20817 60 h-index	36028 97 g-index

291 all docs	291 docs citations	291 times ranked	4038 citing authors

#	Article	IF	Citations
1	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.	5.1	1
2	The SuperCam infrared spectrometer for the perseverance rover of the Mars2020 mission. Icarus, 2022, 373, 114773.	2.5	19
3	The Mars system revealed by the Martian Moons eXploration mission. Earth, Planets and Space, 2022, 74, .	2.5	11
4	Thermal Structure and Aerosols in Marsâ€™ Atmosphere From TIRVIM/ACS Onboard the ExoMars Trace Gas Orbiter: Validation of the Retrieval Algorithm. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	9
5	Thermal Tides in the Martian Atmosphere Near Northern Summer Solstice Observed by ACS/TIRVIM Onboard TGO. Geophysical Research Letters, 2022, 49, .	4.0	10
6	Stratigraphic and Isotopic Evolution of the Martian Polar Caps From Paleoâ€Climate Models. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	4
7	In situ recording of Mars soundscape. Nature, 2022, 605, 653-658.	27.8	30
8	Water Vapor on Mars: A Refined Climatology and Constraints on the Nearâ€Surface Concentration Enabled by Synergistic Retrievals. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	5
9	Reappraising the Production and Transfer of Hydrogen Atoms From the Middle to the Upper Atmosphere of Mars at Times of Elevated Water Vapor. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	5
10	The dynamic atmospheric and aeolian environment of Jezero crater, Mars. Science Advances, 2022, 8, .	10.3	47
11	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, .	3.6	4
12	Troposphere-to-mesosphere microphysics of carbon dioxide ice clouds in a Mars Global Climate Model. Icarus, 2022, 385, 115098.	2.5	9
13	Improved Modeling of Mars' HDO Cycle Using a Mars' Global Climate Model. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	5
14	The HDO Cycle on Mars: Comparison of ACS Observations With GCM Simulations. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	4
15	Ozone vertical distribution in Mars Years 27â€“30 from SPICAM/MEX UV occultations. Icarus, 2022, 387, 115162.	2.5	5
16	Magnetic dipole and electric quadrupole absorption in carbon dioxide. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 259, 107408.	2.3	13
17	Study of the hydrogen escape rate at Mars during martian years 28 and 29 from comparisons between SPICAM/Mars express observations and GCM-LMD simulations. Icarus, 2021, 353, 113498.	2.5	16
18	Impact of gradients at the martian terminator on the retrieval of ozone from SPICAM/MEx. Icarus, 2021, 353, 113598.	2.5	8

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19	Transient HCl in the atmosphere of Mars. Science Advances, 2021, 7, .	10.3	37
20	Seasonal reappearance of HCl in the atmosphere of Mars during the Mars year 35 dusty season. Astronomy and Astrophysics, 2021, 647, A161.	5.1	17
21	The Spatial and Temporal Distribution of Nighttime Ozone and Sulfur Dioxide in the Venus Mesosphere as Deduced From SPICAV UV Stellar Occultations. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006625.	3.6	6
22	The SuperCam Instrument Suite on the Mars 2020 Rover: Science Objectives and Mast-Unit Description. Space Science Reviews, 2021, 217, 1.	8.1	131
23	The Effect of the Martian 2018 Global Dust Storm on HDO as Predicted by a Mars Global Climate Model. Geophysical Research Letters, 2021, 48, e2020GL090962.	4.0	12
24	Upper limits for phosphine (PH₃) in the atmosphere of Mars. Astronomy and Astrophysics, 2021, 649, L1.	5.1	4
25	Relationship Between the Ozone and Water Vapor Columns on Mars as Observed by SPICAM and Calculated by a Global Climate Model. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006838.	3.6	19
26	Revealing a High Water Abundance in the Upper Mesosphere of Mars With ACS Onboard TGO. Geophysical Research Letters, 2021, 48, e2021GL093411.	4.0	24
27	Isotopic fractionation of water and its photolytic products in the atmosphere of Mars. Nature Astronomy, 2021, 5, 943-950.	10.1	27
28	Annual Appearance of Hydrogen Chloride on Mars and a Striking Similarity With the Water Vapor Vertical Distribution Observed by TGO/NOMAD. Geophysical Research Letters, 2021, 48, e2021GL092506.	4.0	15
29	Instrumental requirements for the study of Venusâ€™ cloud top using the UV imaging spectrometer VeSUV. Advances in Space Research, 2021, 68, 275-291.	2.6	5
30	Isotopes of chlorine from HCl in the Martian atmosphere. Astronomy and Astrophysics, 2021, 651, A32.	5.1	7
31	Martian water loss to space enhanced by regional dust storms. Nature Astronomy, 2021, 5, 1036-1042.	10.1	40
32	Gravity Wave Activity in the Martian Atmosphere at Altitudes 20â€“160Âkm From ACS/TGO Occultation Measurements. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006899.	3.6	22
33	Identification of a new spectral signature at 3ÂÎ¼m over martian northern high latitudes: Implications for surface composition. Icarus, 2021, 369, 114627.	2.5	1
34	The RISOTTO radiative transfer and retrieval pipeline for the analysis of occultation spectra. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 274, 107848.	2.3	1
35	Multiâ€Annual Monitoring of the Water Vapor Vertical Distribution on Mars by SPICAM on Mars Express. Journal of Geophysical Research E: Planets, 2021, 126, .	3.6	32
36	The vertical structure of CO in the Martian atmosphere from the ExoMars Trace Gas Orbiter. Nature Geoscience, 2021, 14, 67-71.	12.9	30

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37	The SuperCam Instrument Suite on the NASA Mars 2020 Rover: Body Unit and Combined System Tests. Space Science Reviews, 2021, 217, 4.	8.1	160
38	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, .	3.6	12
39	Climatology of SO2 and UV absorber at Venus' cloud top from SPICAV-UV nadir dataset. Icarus, 2020, 335, 113368.	2.5	50
40	Vertical Propagation of Wave Perturbations in the Middle Atmosphere on Mars by MAVEN/IUVS. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006481.	3.6	18
41	Pre-launch radiometric calibration of the infrared spectrometer onboard SuperCam for the Mars2020 rover. Review of Scientific Instruments, 2020, 91, 063105.	1.3	10
42	Improved calibrations of the stellar occultation data accumulated by the SPICAV UV onboard Venus Express. Planetary and Space Science, 2020, 184, 104868.	1.7	4
43	First observation of the magnetic dipole CO₂absorption band at 3.3Î¼m in the atmosphere of Mars by the ExoMars Trace Gas Orbiter ACS instrument. Astronomy and Astrophysics, 2020, 639, A142.	5.1	25
44	The Atmospheric Structure of the Ice Giant Planets from In Situ Measurements by Entry Probes. Space Science Reviews, 2020, 216, 1.	8.1	5
45	Properties of Water Ice and Dust Particles in the Atmosphere of Mars During the 2018 Global Dust Storm as Inferred From the Atmospheric Chemistry Suite. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006419.	3.6	28
46	Martian Water Ice Clouds During the 2018 Global Dust Storm as Observed by the ACSâ€MIR Channel Onboard the Trace Gas Orbiter. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006300.	3.6	27
47	A Warm Layer in the Nightside Mesosphere of Mars. Geophysical Research Letters, 2020, 47, e2019GL085646.	4.0	9
48	Stormy water on Mars: The distribution and saturation of atmospheric water during the dusty season. Science, 2020, 367, 297-300.	12.6	117
49	First detection of ozone in the mid-infrared at Mars: implications for methane detection. Astronomy and Astrophysics, 2020, 639, A141.	5.1	23
50	Validation of the HITRAN 2016 and GEISA 2015 line lists using ACE-FTS solar occultation observations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 236, 106590.	2.3	7
51	Detection of Mesospheric CO₂ Ice Clouds on Mars in Southern Summer. Geophysical Research Letters, 2019, 46, 7962-7971.	4.0	13
52	Oxygen isotopic ratios in Martian water vapour observed by ACS MIR on board the ExoMars Trace Gas Orbiter. Astronomy and Astrophysics, 2019, 630, A91.	5.1	24
53	Documentation of the NASA/Ames Legacy Mars Global Climate Model: Simulations of the present seasonal water cycle. Icarus, 2019, 333, 130-164.	2.5	51
54	Retrieval of Martian ozone and dust from SPICAM spectrometer for MY27â€“MY28. Journal of Earth System Science, 2019, 128, 1.	1.3	2

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55	No detection of methane on Mars from early ExoMars Trace Gas Orbiter observations. Nature, 2019, 568, 517-520.	27.8	111
56	Martian dust storm impact on atmospheric H2O and D/H observed by ExoMars Trace Gas Orbiter. Nature, 2019, 568, 521-525.	27.8	107
57	The distribution, composition, and particle properties of Mars mesospheric aerosols: An analysis of CRISM visible/near-IR limb spectra with context from near-coincident MCS and MARCI observations. Icarus, 2019, 328, 246-273.	2.5	40
58	Ground-based infrared mapping of H₂O₂ on Mars near opposition. Astronomy and Astrophysics, 2019, 627, A60.	5.1	8
59	A spectral synergy method to retrieve martian water vapor column-abundance and vertical distribution applied to Mars Express SPICAM and PFS nadir measurements. Icarus, 2019, 317, 549-569.	2.5	12
60	Discovery of cloud top ozone on Venus. Icarus, 2019, 319, 491-498.	2.5	19
61	The Atmospheric Chemistry Suite (ACS) of Three Spectrometers for the ExoMars 2016 Trace Gas Orbiter. Space Science Reviews, 2018, 214, 1.	8.1	119
62	Investigations of the Mars Upper Atmosphere with ExoMars Trace Gas Orbiter. Space Science Reviews, 2018, 214, 1.	8.1	13
63	Temperature, Clouds, and Aerosols in the Terrestrial Bodies of the Solar System. , 2018, , 1-29.		0
64	Scale heights and detached haze layers in the mesosphere of Venus from SPICAV IR data. Icarus, 2018, 311, 87-104.	2.5	7
65	Water vapor in the middle atmosphere of Mars during the 2007 global dust storm. Icarus, 2018, 300, 440-457.	2.5	111
66	Long term evolution of temperature in the venus upper atmosphere at the evening and morning terminators. Icarus, 2018, 299, 370-385.	2.5	3
67	The marbll experiment: towards a martian wind lidar. EPJ Web of Conferences, 2018, 176, 06006.	0.3	0
68	UV Dayglow Variability on Mars: Simulation With a Global Climate Model and Comparison With SPICAM/MEx Data. Journal of Geophysical Research E: Planets, 2018, 123, 1934-1952.	3.6	13
69	Mars H Escape Rates Derived From MAVEN/IUVS Lyman Alpha Brightness Measurements and Their Dependence on Model Assumptions. Journal of Geophysical Research E: Planets, 2018, 123, 2192-2210.	3.6	42
70	New measurements of D/H on Mars using EXES aboard SOFIA. Astronomy and Astrophysics, 2018, 612, A112.	5.1	26
71	VUV-absorption cross section of carbon dioxide from 150 to 800 K and applications to warm exoplanetary atmospheres. Astronomy and Astrophysics, 2018, 609, A34.	5.1	35
72	Temperature, Clouds, and Aerosols in the Terrestrial Bodies of the Solar System. , 2018, , 235-263.		0

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73	Global Aurora on Mars During the September 2017 Space Weather Event. Geophysical Research Letters, 2018, 45, 7391-7398.	4.0	44
74	The DREAMS Experiment Onboard the Schiaparelli Module of the ExoMars 2016 Mission: Design, Performances and Expected Results. Space Science Reviews, 2018, 214, 1.	8.1	19
75	High spectral resolution lidar based on quad mach zehnder interferometer for aerosols and wind measurements on board space missions. EPJ Web of Conferences, 2018, 176, 02017.	0.3	0
76	Loss of the Martian atmosphere to space: Present-day loss rates determined from MAVEN observations and integrated loss through time. Icarus, 2018, 315, 146-157.	2.5	216
77	Discovery of a proton aurora at Mars. Nature Astronomy, 2018, 2, 802-807.	10.1	50
78	The DREAMS experiment flown on the ExoMars 2016 mission for the study of Martian environment during the dust storm season. Measurement: Journal of the International Measurement Confederation, 2018, 122, 484-493.	5.0	9
79	Observations of the Proton Aurora on Mars With SPICAM on Board Mars Express. Geophysical Research Letters, 2018, 45, 612-619.	4.0	32
80	Significant Space Weather Impact on the Escape of Hydrogen From Mars. Geophysical Research Letters, 2018, 45, 8844-8852.	4.0	29
81	Martian Thermospheric Response to an X8.2 Solar Flare on 10 September 2017 as Seen by MAVEN/IUVS. Geophysical Research Letters, 2018, 45, 7312-7319.	4.0	24
82	MAVEN/IUVS Stellar Occultation Measurements of Mars Atmospheric Structure and Composition. Journal of Geophysical Research E: Planets, 2018, 123, 1449-1483.	3.6	56
83	Schumann resonances at Mars: Effects of the dayâ€night asymmetry and the dustâ€loaded ionosphere. Geophysical Research Letters, 2017, 44, 648-656.	4.0	8
84	Variability of D and H in the Martian upper atmosphere observed with the MAVEN IUVS echelle channel. Journal of Geophysical Research: Space Physics, 2017, 122, 2336-2344.	2.4	64
85	Unraveling the martian water cycle with high-resolution global climate simulations. Icarus, 2017, 291, 82-106.	2.5	34
86	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.	2.5	34
87	Night side distribution of SO2 content in Venusâ€™ upper mesosphere. Icarus, 2017, 294, 58-71.	2.5	32
88	Martian mesospheric cloud observations by IUVS on MAVEN: Thermal tides coupled to the upper atmosphere. Geophysical Research Letters, 2017, 44, 4709-4715.	4.0	23
89	Retrieving cloud, dust and ozone abundances in the Martian atmosphere using SPICAM/UV nadir spectra. Planetary and Space Science, 2017, 142, 9-25.	1.7	36
90	Sulfur dioxide in the Venus atmosphere: I. Vertical distribution and variability. Icarus, 2017, 295, 16-33.	2.5	47

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91	Sulfur dioxide in the Venus Atmosphere: II. Spatial and temporal variability. Icarus, 2017, 295, 1-15.	2.5	53
92	Detection of a persistent meteoric metal layer in the Martian atmosphere. Nature Geoscience, 2017, 10, 401-404.	12.9	52
93	Nitric oxide nightglow and Martian mesospheric circulation from MAVEN/IUVS observations and LMDâ€MGCM predictions. Journal of Geophysical Research: Space Physics, 2017, 122, 5782-5797.	2.4	36
94	Snow precipitation on Mars driven by cloud-induced night-time convection. Nature Geoscience, 2017, 10, 652-657.	12.9	32
95	SPICAM on Mars Express: A 10 year in-depth survey of the Martian atmosphere. Icarus, 2017, 297, 195-216.	2.5	64
96	The DREAMS experiment flown on the ExoMars 2016 mission for the study of Martian environment during the dust storm season. , 2017, , .		1
97	Mars Clouds. , 2017, , 76-105.		24
98	The Water Cycle. , 2017, , 338-373.		24
99	The supercam infrared instrument on the NASA Mars2020 mission: optical design and performance. , 2017, , .		3
100	High resolution middle infrared spectrometer, a part of atmospheric chemistry suite (ACS) for EXOMARS 2016 trace gas orbiter. , 2017, , .		1
101	New developments on ChemCam laser transmitter and potential applications for other planetology programs. , 2017, , .		4
102	A photochemical model of the dustâ€loaded ionosphere of Mars. Journal of Geophysical Research E: Planets, 2016, 121, 2335-2348.	3.6	12
103	Long-term nadir observations of the O2 dayglow by SPICAM IR. Planetary and Space Science, 2016, 122, 1-12.	1.7	29
104	Variations of water vapor and cloud top altitude in the Venusâ€™ mesosphere from SPICAV/VEx observations. Icarus, 2016, 275, 143-162.	2.5	67
105	The ExoMars DREAMS scientific data archive. , 2016, , .		1
106	Variability of the nitric oxide nightglow at Venus during solar minimum. Journal of Geophysical Research E: Planets, 2016, 121, 846-853.	3.6	3
107	A map of D/H on Mars in the thermal infrared using EXES aboard SOFIA. Astronomy and Astrophysics, 2016, 586, A62.	5.1	39
108	Applications of Electrified Dust and Dust Devil Electrodynamics to Martian Atmospheric Electricity. Space Science Reviews, 2016, 203, 299-345.	8.1	72

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109	Aerosol properties in the upper haze of Venus from SPICAV IR data. Icarus, 2016, 277, 154-170.	2.5	53
110	ACS experiment for atmospheric studies on â€œExoMars-2016â€•Orbiter. Solar System Research, 2015, 49, 529-537.	0.7	19
111	MAVEN IUVS observations of the aftermath of the Comet Siding Spring meteor shower on Mars. Geophysical Research Letters, 2015, 42, 4755-4761.	4.0	56
112	Ten years of Martian nitric oxide nightglow observations. Geophysical Research Letters, 2015, 42, 720-725.	4.0	29
113	Study of the Martian cold oxygen corona from the Oâ€‰I 130.4â€‰nm by IUVS/MAVEN. Geophysical Research Letters, 2015, 42, 9031-9039.	4.0	21
114	The structure and variability of Mars upper atmosphere as seen in MAVEN/IUVS dayglow observations. Geophysical Research Letters, 2015, 42, 9023-9030.	4.0	95
115	Threeâ€dimensional structure in the Mars H corona revealed by IUVS on MAVEN. Geophysical Research Letters, 2015, 42, 9001-9008.	4.0	67
116	MAVEN IUVS observation of the hot oxygen corona at Mars. Geophysical Research Letters, 2015, 42, 9009-9014.	4.0	77
117	New observations of molecular nitrogen in the Martian upper atmosphere by IUVS on MAVEN. Geophysical Research Letters, 2015, 42, 9050-9056.	4.0	41
118	Seasonal variations of hydrogen peroxide and water vapor on Mars: Further indications of heterogeneous chemistry. Astronomy and Astrophysics, 2015, 578, A127.	5.1	53
119	Probing the Martian atmosphere with MAVEN/IUVS stellar occultations. Geophysical Research Letters, 2015, 42, 9064-9070.	4.0	42
120	Thermal structure of Venus nightside upper atmosphere measured by stellar occultations with SPICAV/Venus Express. Planetary and Space Science, 2015, 113-114, 321-335.	1.7	37
121	Near-infrared echelle-AOTF spectrometer ACS-NIR for the ExoMars Trace Gas Orbiter. Proceedings of SPIE, 2015, , .	0.8	5
122	Middle-infrared echelle cross-dispersion spectrometer ACS-MIR for the ExoMars Trace Gas Orbiter. Proceedings of SPIE, 2015, , .	0.8	4
123	The legacy of Venus Express: highlights from the first European planetary mission to Venus. Astronomy and Astrophysics Review, 2015, 23, 1.	25.5	5
124	Altitude profiles of O2 on Mars from SPICAM stellar occultations. Icarus, 2015, 252, 154-160.	2.5	37
125	The Imaging Ultraviolet Spectrograph (IUVS) for the MAVEN Mission. Space Science Reviews, 2015, 195, 75-124.	8.1	139
126	Update of the Venus density and temperature profiles at high altitude measured by SOIR on board Venus Express. Planetary and Space Science, 2015, 113-114, 309-320.	1.7	59

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127	High-resolution infrared detector and its electronic unit for space application. Proceedings of SPIE, 2015, , .	0.8	1
128	The Mars Atmosphere and Volatile Evolution (MAVEN) Mission. Space Science Reviews, 2015, 195, 3-48.	8.1	563
129	MAVEN observations of the response of Mars to an interplanetary coronal mass ejection. Science, 2015, 350, aad0210.	12.6	166
130	Discovery of diffuse aurora on Mars. Science, 2015, 350, aad0313.	12.6	98
131	Early MAVEN Deep Dip campaign reveals thermosphere and ionosphere variability. Science, 2015, 350, aad0459.	12.6	90
132	Preliminary study of Venus cloud layers with polarimetric data from SPICAV/VEx. Planetary and Space Science, 2015, 113-114, 159-168.	1.7	30
133	Marsâ€™ water vapor mapping by the SPICAM IR spectrometer: Five martian years of observations. Icarus, 2015, 251, 50-64.	2.5	90
134	Mars thermospheric scale height: CO Cameron and CO2+ dayglow observations from Mars Express. Icarus, 2015, 245, 295-305.	2.5	29
135	Unexpected variability of Martian hydrogen escape. Geophysical Research Letters, 2014, 41, 314-320.	4.0	137
136	The DREAMS experiment on the ExoMars 2016 mission for the study of Martian environment during the dust storm season. , 2014, , .		13
137	Three infrared spectrometers, an atmospheric chemistry suite for the ExoMars 2016 trace gas orbiter. Journal of Applied Remote Sensing, 2014, 8, 084983.	1.3	32
138	Modeling the microphysics of CO2 ice clouds within wave-induced cold pockets in the martian mesosphere. Icarus, 2014, 237, 239-261.	2.5	30
139	Mars EXPRESS observation of the PHOENIX entry: simulations, planning, results and lessons learned. CEAS Space Journal, 2014, 6, 3-11.	2.3	2
140	Evidence for a bimodal size distribution for the suspended aerosol particles on Mars. Icarus, 2014, 231, 239-260.	2.5	82
141	Recent Ice Ages on Mars: The role of radiatively active clouds and cloud microphysics. Geophysical Research Letters, 2014, 41, 4873-4879.	4.0	75
142	Mars Express investigations of Phobos and Deimos. Planetary and Space Science, 2014, 102, 18-34.	1.7	54
143	O2(a1Î”g) dayglow limb observations on Mars by SPICAM IR on Mars-Express and connection to water vapor distribution. Icarus, 2014, 239, 131-140.	2.5	31
144	The seasonal cycle of water vapour on Mars from assimilation of Thermal Emission Spectrometer data. Icarus, 2014, 237, 97-115.	2.5	47

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145	Global climate modeling of the Martian water cycle with improved microphysics and radiatively active water ice clouds. Journal of Geophysical Research E: Planets, 2014, 119, 1479-1495.	3.6	162
146	Atmospheric chemistry suite (ACS): a set of infrared spectrometers for atmospheric measurements on board ExoMars trace gas orbiter. , 2013, , .		2
147	A complete climatology of the aerosol vertical distribution on Mars from MEx/SPICAM UV solar occultations. Icarus, 2013, 223, 892-941.	2.5	64
148	Transport-driven formation of a polar ozone layer on Mars. Nature Geoscience, 2013, 6, 930-933.	12.9	43
149	Volatile Trapping in Martian Clathrates. Space Science Reviews, 2013, 174, 213-250.	8.1	39
150	First detection of Mars atmospheric hydroxyl: CRISM Near-IR measurement versus LMD GCM simulation of OH Meinel band emission in the Mars polar winter atmosphere. Icarus, 2013, 226, 272-281.	2.5	54
151	Annual survey of water vapor vertical distribution and waterâ€“aerosol coupling in the martian atmosphere observed by SPICAM/MEx solar occultations. Icarus, 2013, 223, 942-962.	2.5	120
152	Variations of sulphur dioxide at the cloud top of Venusâ€™s dynamic atmosphere. Nature Geoscience, 2013, 6, 25-28.	12.9	164
153	Nearâ€pure vapor condensation in the Martian atmosphere: CO₂ ice crystal growth. Journal of Geophysical Research E: Planets, 2013, 118, 2153-2171.	3.6	13
154	New nitric oxide (NO) nightglow measurements with SPICAM/MEx as a tracer of Mars upper atmosphere circulation and comparison with LMDâ€MGCM model prediction: Evidence for asymmetric hemispheres. Journal of Geophysical Research E: Planets, 2013, 118, 2172-2179.	3.6	37
155	Compact echelle spectrometer for occultation sounding of the Martian atmosphere: design and performance. Applied Optics, 2013, 52, 1054.	1.8	17
156	Direct-detection wind lidar operating with a multimode laser. Applied Optics, 2013, 52, 4941.	1.8	18
157	First results of ChemCam on Mars and further laser developments for new space programs. , 2013, , .		0
158	Mesospheric Clouds on Mars and on Earth. , 2013, , .		8
159	First detection of O₂ 1.27 Î¼m nightglow emission at Mars with OMEGA/MEX and comparison with general circulation model predictions. Journal of Geophysical Research, 2012, 117, .	3.3	37
160	Aphelion waterâ€ice cloud mapping and property retrieval using the OMEGA imaging spectrometer onboard Mars Express. Journal of Geophysical Research, 2012, 117, .	3.3	42
161	An aerodynamic roughness length map derived from extended Martian rock abundance data. Journal of Geophysical Research, 2012, 117, .	3.3	45
162	Densities and temperatures in the Venus mesosphere and lower thermosphere retrieved from SOIR on board Venus Express: Carbon dioxide measurements at the Venus terminator. Journal of Geophysical Research, 2012, 117, .	3.3	43

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163	EnVision: taking the pulse of our twin planet. Experimental Astronomy, 2012, 33, 337-363.	3.7	23
164	Atomic oxygen on the Venus nightside: Global distribution deduced from airglow mapping. Icarus, 2012, 217, 849-855.	2.5	50
165	Vertical profiling of SO2 and SO above Venusâ€™ clouds by SPICAV/SOIR solar occultations. Icarus, 2012, 217, 740-751.	2.5	103
166	Mars cryosphere: A potential reservoir for heavy noble gases?. Icarus, 2012, 218, 80-87.	2.5	14
167	The O2 nightglow in the martian atmosphere by SPICAM onboard of Mars-Express. Icarus, 2012, 219, 596-608.	2.5	45
168	SPICAV IR acousto-optic spectrometer experiment on Venus Express. Planetary and Space Science, 2012, 65, 38-57.	1.7	49
169	AOST: Fourier spectrometer for studying mars and phobos. Solar System Research, 2012, 46, 31-40.	0.7	11
170	Volatile Trapping in Martian Clathrates. Space Sciences Series of ISSI, 2012, , 213-250.	0.0	0
171	Final developments of the ChemCam Laser Source and potential applications for new planetology programs. , 2011, , .		0
172	Observations of thermal tides in the middle atmosphere of Mars by the SPICAM instrument. Journal of Geophysical Research, 2011, 116, .	3.3	35
173	A layer of ozone detected in the nightside upper atmosphere of Venus. Icarus, 2011, 216, 82-85.	2.5	81
174	An investigation of the SO2 content of the venusian mesosphere using SPICAV-UV in nadir mode. Icarus, 2011, 211, 58-69.	2.5	86
175	Interferometric millimeter observations of water vapor on Mars and comparison with Mars Express measurements. Planetary and Space Science, 2011, 59, 683-690.	1.7	7
176	Evidence of Water Vapor in Excess of Saturation in the Atmosphere of Mars. Science, 2011, 333, 1868-1871.	12.6	122
177	First climatology of polar mesospheric clouds from GOMOS/ENVISAT stellar occultation instrument. Atmospheric Chemistry and Physics, 2010, 10, 2723-2735.	4.9	18
178	Simulating the density and thermal structure of the middle atmosphere (â^¼80â€“130km) of Mars using the MGCMâ€“MTGCM: A comparison with MEX/SPICAM observations. Icarus, 2010, 206, 5-17.	2.5	50
179	Concatenation of HRSC colour and OMEGA data for the determination and 3D-parameterization of high-altitude CO2 clouds in the Martian atmosphere. Planetary and Space Science, 2010, 58, 1207-1214.	1.7	30
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