Giuliano Liuzzi

List of Publications by Year in descending order

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Version: 2024-02-01

45	1,058	393982	414034
papers	citations	19 h-index	32 g-index

66	66	66	956
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	No detection of methane on Mars from early ExoMars Trace Gas Orbiter observations. Nature, 2019, 568, 517-520.	13.7	111
2	Martian dust storm impact on atmospheric H2O and D/H observed by ExoMars Trace Gas Orbiter. Nature, 2019, 568, 521-525.	13.7	107
3	Water Vapor Vertical Profiles on Mars in Dust Storms Observed by TGO/NOMAD. Journal of Geophysical Research E: Planets, 2019, 124, 3482-3497.	1.5	88
4	Explanation for the Increase in Highâ€Altitude Water on Mars Observed by NOMAD During the 2018 Global Dust Storm. Geophysical Research Letters, 2020, 47, e2019GL084354.	1.5	62
5	Physical inversion of the full IASI spectra: Assessment of atmospheric parameters retrievals, consistency of spectroscopy and forward modelling. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 182, 128-157.	1.1	51
6	No evidence of phosphine in the atmosphere of Venus from independent analyses. Nature Astronomy, 2021, 5, 631-635.	4.2	50
7	Kalman filter physical retrieval of surface emissivity and temperature from SEVIRI infrared channels: a validation and intercomparison study. Atmospheric Measurement Techniques, 2015, 8, 2981-2997.	1.2	47
8	Martian water loss to space enhanced by regional dust storms. Nature Astronomy, 2021, 5, 1036-1042.	4.2	40
9	Strong Variability of Martian Water Ice Clouds During Dust Storms Revealed From ExoMars Trace Gas Orbiter/NOMAD. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006250.	1.5	39
10	Cloud mask via cumulative discriminant analysis applied to satellite infrared observations: scientific basis and initial evaluation. Atmospheric Measurement Techniques, 2014, 7, 3355-3372.	1.2	33
11	Methane on Mars: New insights into the sensitivity of CH4 with the NOMAD/ExoMars spectrometer through its first in-flight calibration. Icarus, 2019, 321, 671-690.	1.1	32
12	Water heavily fractionated as it ascends on Mars as revealed by ExoMars/NOMAD. Science Advances, 2021, 7, .	4.7	31
13	Physical Retrieval of Land Surface Emissivity Spectra from Hyper-Spectral Infrared Observations and Validation with In Situ Measurements. Remote Sensing, 2018, 10, 976.	1.8	29
14	Evaluation of Radiative Transfer Models With Clouds. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6142-6157.	1.2	28
15	Comprehensive investigation of Mars methane and organics with ExoMars/NOMAD. Icarus, 2021, 357, 114266.	1.1	27
16	Determining the infrared radiative effects of Saharan dust: a radiative transfer modelling study based on vertically resolved measurements at Lampedusa. Atmospheric Chemistry and Physics, 2018, 18, 4377-4401.	1.9	25
17	Validation of H_2O continuum absorption models in the wave number range 180â€“600 cm^â^'1 with atmospheric emitted spectral radiance measured at the Antarctica Dome-C site. Optics Express, 2014, 22, 16784.	1.7	24
18	Consistency of dimensional distributions and refractive indices of desert dust measured over Lampedusa with IASI radiances. Atmospheric Measurement Techniques, 2017, 10, 599-615.	1.2	21

#	Article	IF	Citations
19	Infrared atmospheric sounder interferometer radiometric noise assessment from spectral residuals. Applied Optics, 2015, 54, 5924.	2.1	20
20	Demonstration of random projections applied to the retrieval problem of geophysical parameters from hyper-spectral infrared observations. Applied Optics, 2016, 55, 6576.	2.1	17
21	CO2 spectroscopy and forward/inverse radiative transfer modelling in the thermal band using IASI spectra. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 222-223, 65-83.	1.1	17
22	Assessment of IASI capability for retrieving carbonyl sulphide (OCS). Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 201, 197-208.	1.1	16
23	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.	1.5	15
24	The Deuterium Isotopic Ratio of Water Released From the Martian Caps as Measured With TGO/NOMAD. Geophysical Research Letters, 2022, 49, .	1.5	15
25	First Detection and Thermal Characterization of Terminator CO₂Ice Clouds With ExoMars/NOMAD. Geophysical Research Letters, 2021, 48, .	1.5	12
26	The climatology of carbon monoxide on Mars as observed by NOMAD nadir-geometry observations. Icarus, 2021, 362, 114404.	1.1	11
27	Explaining NOMAD D/H Observations by Cloudâ€Induced Fractionation of Water Vapor on Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	11
28	Revisiting the identification of methane on Mars using TES data. Astronomy and Astrophysics, 2015, 581, A136.	2.1	10
29	Potential improvements in global carbon flux estimates from a network of laser heterodyne radiometer measurements of column carbon dioxide. Atmospheric Measurement Techniques, 2019, 12, 2579-2594.	1.2	10
30	Polarization in binary microlensing events. Physica Scripta, 2014, 89, 084001.	1.2	8
31	A Global and Seasonal Perspective of Martian Water Vapor From ExoMars/NOMAD. Journal of Geophysical Research E: Planets, 2021, 126, .	1.5	8
32	Probing the Atmospheric Cl Isotopic Ratio on Mars: Implications for Planetary Evolution and Atmospheric Chemistry. Geophysical Research Letters, 2021, 48, e2021GL092650.	1.5	7
33	Variations in Vertical CO/CO₂ Profiles in the Martian Mesosphere and Lower Thermosphere Measured by the ExoMars TGO/NOMAD: Implications of Variations in Eddy Diffusion Coefficient. Geophysical Research Letters, 2022, 49, .	1.5	7
34	Planetâ€Wide Ozone Destruction in the Middle Atmosphere on Mars During Global Dust Storm. Geophysical Research Letters, 2022, 49, .	1.5	7
35	Hyper fast radiative transfer for the physical retrieval of surface parameters from SEVIRI observations. Journal of Physics: Conference Series, 2015, 633, 012059.	0.3	3
36	Simultaneous physical retrieval of Martian geophysical parameters using Thermal Emission Spectrometer spectra: the Ï†-MARS algorithm. Applied Optics, 2015, 54, 2334.	0.9	3

#	Article	IF	Citations
37	Search for Martian methane with TES data: development of a dedicated radiative transfer code: first results. Proceedings of SPIE, 2013, , .	0.8	2
38	The very first multi-temporal and multi-spectral Level-2 SEVIRI processor for the simultaneous physical retrieval of surface temperature and emissivity. AIP Conference Proceedings, 2017, , .	0.3	2
39	Surface parameters from SEVIRI observations through a Kalman filter approach: application and evaluation of the scheme in Southern Italy. Tethys, 0, , .	0.0	2
40	Four years of IASI CO2, CH4, N2O retrievals: validation with in situ observations from the Mauna Loa station. , 2018, , .		2
41	SEVIRI Cloud mask by Cumulative Discriminant Analysis. Journal of Physics: Conference Series, 2015, 633, 012056.	0.3	1
42	Using the full IASI spectrum for the physical retrieval of temperature, H2O, HDO, O3, minor and trace gases. AIP Conference Proceedings, 2017, , .	0.3	1
43	All-sky radiative transfer calculations for IASI and IASI-NG: The ÏƒƒIASI-as code. AIP Conference Proceedings, 2017, , .	0.3	1
44	Dimensionality reduction through random projections for application to the retrieval of atmospheric parameters from hyperspectral satellite sensors. , 2018, , .		0
45	An application to Mediterranean Sea of the SEVIRI level 2 processor for surface parameters. , 2019, , .		0