

# Giuliano Liuzzi

## List of Publications by Year in descending order

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45  
papers

1,058  
citations

393982

19  
h-index

414034

32  
g-index

66  
all docs

66  
docs citations

66  
times ranked

956  
citing authors

#	ARTICLE	IF	CITATIONS
1	Explaining NOMAD D/H Observations by Cloud-Induced Fractionation of Water Vapor on Mars. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	11
2	Variations in Vertical CO <sub>2</sub> Profiles in the Martian Mesosphere and Lower Thermosphere Measured by the ExoMars TGO/NOMAD: Implications of Variations in Eddy Diffusion Coefficient. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	7
3	Planet-Wide Ozone Destruction in the Middle Atmosphere on Mars During Global Dust Storm. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	7
4	The Deuterium Isotopic Ratio of Water Released From the Martian Caps as Measured With TGO/NOMAD. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	15
5	Comprehensive investigation of Mars methane and organics with ExoMars/NOMAD. <i>Icarus</i> , 2021, 357, 114266.	1.1	27
6	Water heavily fractionated as it ascends on Mars as revealed by ExoMars/NOMAD. <i>Science Advances</i> , 2021, 7, .	4.7	31
7	Probing the Atmospheric Cl Isotopic Ratio on Mars: Implications for Planetary Evolution and Atmospheric Chemistry. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL092650.	1.5	7
8	Annual Appearance of Hydrogen Chloride on Mars and a Striking Similarity With the Water Vapor Vertical Distribution Observed by TGO/NOMAD. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL092506.	1.5	15
9	The climatology of carbon monoxide on Mars as observed by NOMAD nadir-geometry observations. <i>Icarus</i> , 2021, 362, 114404.	1.1	11
10	No evidence of phosphine in the atmosphere of Venus from independent analyses. <i>Nature Astronomy</i> , 2021, 5, 631-635.	4.2	50
11	Martian water loss to space enhanced by regional dust storms. <i>Nature Astronomy</i> , 2021, 5, 1036-1042.	4.2	40
12	A Global and Seasonal Perspective of Martian Water Vapor From ExoMars/NOMAD. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, .	1.5	8
13	First Detection and Thermal Characterization of Terminator CO <sub>2</sub> Ice Clouds With ExoMars/NOMAD. <i>Geophysical Research Letters</i> , 2021, 48, .	1.5	12
14	Explanation for the Increase in High-Altitude Water on Mars Observed by NOMAD During the 2018 Global Dust Storm. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL084354.	1.5	62
15	Strong Variability of Martian Water Ice Clouds During Dust Storms Revealed From ExoMars Trace Gas Orbiter/NOMAD. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006250.	1.5	39
16	Potential improvements in global carbon flux estimates from a network of laser heterodyne radiometer measurements of column carbon dioxide. <i>Atmospheric Measurement Techniques</i> , 2019, 12, 2579-2594.	1.2	10
17	No detection of methane on Mars from early ExoMars Trace Gas Orbiter observations. <i>Nature</i> , 2019, 568, 517-520.	13.7	111
18	Martian dust storm impact on atmospheric H <sub>2</sub> O and D/H observed by ExoMars Trace Gas Orbiter. <i>Nature</i> , 2019, 568, 521-525.	13.7	107

#	ARTICLE	IF	CITATIONS
19	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
20	Methane on Mars: New insights into the sensitivity of CH <sub>4</sub> with the NOMAD/ExoMars spectrometer through its first in-flight calibration. Icarus, 2019, 321, 671-690.	1.1	32
21	CO <sub>2</sub> 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	An application to Mediterranean Sea of the SEVIRI level 2 processor for surface parameters. , 2019, , .		0
23	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
24	Evaluation of Radiative Transfer Models With Clouds. Journal of Geophysical Research D: Atmospheres, 2018, 123, 6142-6157.	1.2	28
25	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
26	Four years of IASI CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O retrievals: validation with in situ observations from the Mauna Loa station. , 2018, , .		2
27	Dimensionality reduction through random projections for application to the retrieval of atmospheric parameters from hyperspectral satellite sensors. , 2018, , .		0
28	Assessment of IASI capability for retrieving carbonyl sulphide (OCS). Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 201, 197-208.	1.1	16
29	Using the full IASI spectrum for the physical retrieval of temperature, H <sub>2</sub> O, HDO, O <sub>3</sub> , minor and trace gases. AIP Conference Proceedings, 2017, , .	0.3	1
30	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
31	All-sky radiative transfer calculations for IASI and IASI-NG: The ĩf-IASI-as code. AIP Conference Proceedings, 2017, , .	0.3	1
32	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
33	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
34	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
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	SEVIRI Cloud mask by Cumulative Discriminant Analysis. Journal of Physics: Conference Series, 2015, 633, 012056.	0.3	1

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37	Revisiting the identification of methane on Mars using TES data. <i>Astronomy and Astrophysics</i> , 2015, 581, A136.	2.1	10
38	Infrared atmospheric sounder interferometer radiometric noise assessment from spectral residuals. <i>Applied Optics</i> , 2015, 54, 5924.	2.1	20
39	Simultaneous physical retrieval of Martian geophysical parameters using Thermal Emission Spectrometer spectra: the I <sup>+</sup> -MARS algorithm. <i>Applied Optics</i> , 2015, 54, 2334.	0.9	3
40	Kalman filter physical retrieval of surface emissivity and temperature from SEVIRI infrared channels: a validation and intercomparison study. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 2981-2997.	1.2	47
41	Cloud mask via cumulative discriminant analysis applied to satellite infrared observations: scientific basis and initial evaluation. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 3355-3372.	1.2	33
42	Validation of H <sub>2</sub> O continuum absorption models in the wave number range 180–600 cm <sup>-1</sup> with atmospheric emitted spectral radiance measured at the Antarctica Dome-C site. <i>Optics Express</i> , 2014, 22, 16784.	1.7	24
43	Polarization in binary microlensing events. <i>Physica Scripta</i> , 2014, 89, 084001.	1.2	8
44	Search for Martian methane with TES data: development of a dedicated radiative transfer code: first results. <i>Proceedings of SPIE</i> , 2013, , .	0.8	2
45	Surface parameters from SEVIRI observations through a Kalman filter approach: application and evaluation of the scheme in Southern Italy. <i>Tethys</i> , 0, , .	0.0	2