Francisco GonzÃ¡lez-Galindo

List of Publications by Year
in descending order

62 papers	2,246 citations	218677 26 h-index	223800 46 g-index
83 all docs	83 docs citations	83 times ranked	1448 citing authors

#	Article	IF	Citations
1	Density and temperatures of the upper Martian atmosphere measured by stellar occultations with Mars Express SPICAM. Journal of Geophysical Research, 2009, 114, .	3.3	200
2	Threeâ€dimensional Martian ionosphere model: I. The photochemical ionosphere below 180 km. Journal of Geophysical Research E: Planets, 2013, 118, 2105-2123.	3.6	118
3	A groundâ€toâ€exosphere Martian general circulation model: 1. Seasonal, diurnal, and solar cycle variation of thermospheric temperatures. Journal of Geophysical Research, 2009, 114, .	3.3	107
4	Martian dust storm impact on atmospheric H2O and D/H observed by ExoMars Trace Gas Orbiter. Nature, 2019, 568, 521-525.	27.8	107
5	NOMAD, an Integrated Suite of Three Spectrometers for the ExoMars Trace Gas Mission: Technical Description, Science Objectives and Expected Performance. Space Science Reviews, 2018, 214, 1.	8.1	95
6	On the distribution of CO₂ and CO in the mesosphere and lower thermosphere. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5700-5718.	3.3	90
7	Science objectives and performances of NOMAD, a spectrometer suite for the ExoMars TGO mission. Planetary and Space Science, 2015, 119, 233-249.	1.7	77
8	Variability of the hydrogen in the martian upper atmosphere as simulated by a 3D atmosphereâ€“exosphere coupling. Icarus, 2015, 245, 282-294.	2.5	77
9	Mapping the mesospheric CO2 clouds on Mars: MEx/OMEGA and MEx/HRSC observations and challenges for atmospheric models. Icarus, 2010, 209, 452-469.	2.5	71
10	Gravity waves, cold pockets and CO₂ clouds in the Martian mesosphere. Geophysical Research Letters, 2012, 39, .	4.0	71
11	Variability of the Martian thermosphere during eight Martian years as simulated by a ground-to-exosphere global circulation model. Journal of Geophysical Research E: Planets, 2015, 120, 2020-2035.	3.6	67
12	The first Mars thermospheric general circulation model: The Martian atmosphere from the ground to 240 km. Geophysical Research Letters, 2005, 32, n/a-n/a.	4.0	65
13	Extension of a Martian general circulation model to thermospheric altitudes: UV heating and photochemical models. Journal of Geophysical Research, 2005, 110, .	3.3	65
14	Distribution of the ultraviolet nitric oxide Martian night airglow: Observations from Mars Express and comparisons with a oneâ€dimensional model. Journal of Geophysical Research, 2008, 113, .	3.3	59
15	Marsâ€solar wind interaction: LatHyS, an improved parallel 3â€D multispecies hybrid model. Journal of Geophysical Research: Space Physics, 2016, 121, 6378-6399.	2.4	54
16	Mars exospheric thermal and non-thermal components: Seasonal and local variations. Icarus, 2012, 221, 682-693.	2.5	51
17	Three-dimensional Martian ionosphere model: II. Effect of transport processes due to pressure gradients. Journal of Geophysical Research E: Planets, 2014, 119, 1614-1636.	3.6	51
18	Cooling of the Martian thermosphere by CO₂radiation and gravity waves: An intercomparison study with two general circulation models. Journal of Geophysical Research E: Planets, 2015, 120, 913-927.	3.6	51

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19	The dayside ionospheres of Mars and Venus: Comparing a one-dimensional photochemical model with MaRS (Mars Express) and VeRa (Venus Express) observations. Icarus, 2014, 233, 66-82.	2.5	47
20	A groundâ€toâ€exosphere Martian general circulation model: 2. Atmosphere during solstice conditionsâ€"Thermospheric polar warming. Journal of Geophysical Research, 2009, 114, .	3.3	43
21	The martian mesosphere as revealed by CO2 cloud observations and General Circulation Modeling. Icarus, 2011, 216, 10-22.	2.5	41
22	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
23	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
24	Upper Neutral Atmosphere and Ionosphere. , 2017, , 433-463.		33
25	Expected performances of the NOMAD/ExoMars instrument. Planetary and Space Science, 2016, 124, 94-104.	1.7	31
26	Thermal structure of the upper atmosphere of Venus simulated by a ground-to-thermosphere GCM. Icarus, 2017, 281, 55-72.	2.5	31
27	Temporal variability of waves at the proton cyclotron frequency upstream from Mars: Implications for Mars distant hydrogen exosphere. Geophysical Research Letters, 2013, 40, 3809-3813.	4.0	29
28	On the Origins of Mars' Exospheric Nonthermal Oxygen Component as Observed by MAVEN and Modeled by HELIOSARES. Journal of Geophysical Research E: Planets, 2017, 122, 2401-2428.	3.6	27
29	Optical and radiometric models of the NOMAD instrument part I: the UVIS channel. Optics Express, 2015, 23, 30028.	3.4	26
30	Optical and radiometric models of the NOMAD instrument part II: the infrared channels - SO and LNO. Optics Express, 2016, 24, 3790.	3.4	25
31	Thermal and wind structure of the Martian thermosphere as given by two General Circulation Models. Planetary and Space Science, 2010, 58, 1832-1849.	1.7	24
32	An extremely high-altitude plume seen at Marsâ€™ morning terminator. Nature, 2015, 518, 525-528.	27.8	24
33	MAVEN ROSE Observations of the Response of the Martian Ionosphere to Dust Storms. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027083.	2.4	22
34	Spatial, Seasonal, and Solar Cycle Variations of the Martian Total Electron Content (TEC): Is the TEC a Good Tracer for Atmospheric Cycles?. Journal of Geophysical Research E: Planets, 2018, 123, 1746-1759.	3.6	20
35	Modeling Windâ€Driven Ionospheric Dynamo Currents at Mars: Expectations for InSight Magnetic Field Measurements. Geophysical Research Letters, 2019, 46, 5083-5091.	4.0	20
36	MAVEN/NGIMS Thermospheric Neutral Wind Observations: Interpretation Using the Mâ€GITM General Circulation Model. Journal of Geophysical Research E: Planets, 2019, 124, 3283-3303.	3.6	20

#	ARTICLE	IF	CITATIONS
37	The lower dayside ionosphere of Mars from 14Âyears of MaRS radio science observations. Icarus, 2021, 359, 114213.	2.5	18
38	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
39	Four Martian years of nightside upper thermospheric mass densities derived from electron reflectometry: Method extension and comparison with GCM simulations. Journal of Geophysical Research, 2010, 115, .	3.3	15
40	Tidal Wave-Driven Variability in the Mars Ionosphere-Thermosphere System. Atmosphere, 2020, 11, 521.	2.3	14
41	Investigations of the Mars Upper Atmosphere with ExoMars Trace Gas Orbiter. Space Science Reviews, 2018, 214, 1.	8.1	13
42	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
43	Imaging of Martian Circulation Patterns and Atmospheric Tides Through MAVEN/IUVS Nightglow Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027318.	2.4	13
44	Seasonal and Geographical Variability of the Martian Ionosphere From Mars Express Observations. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006661.	3.6	13
45	MAVEN and the total electron content of the Martian ionosphere. Journal of Geophysical Research: Space Physics, 2017, 122, 3526-3537.	2.4	12
46	Mesospheric OH layer altitude at midlatitudes: variability over the Sierra Nevada Observatory in Granada, Spain (37Â°â€¯N, 3Â°â€¯W). Annales Geophysicae, 2017, 35, 1151-1164.	1.6	10
47	The Mars Climate Database (version 4.3). , 0, , .		9
48	Global distributions of CO₂ volume mixing ratio in the middle and upper atmosphere from daytime MIPAS high-resolution spectra. Atmospheric Measurement Techniques, 2016, 9, 6081-6100.	3.1	9
49	Troposphere-to-mesosphere microphysics of carbon dioxide ice clouds in a Mars Global Climate Model. Icarus, 2022, 385, 115098.	2.5	9
50	Modeled O₂ airglow distributions in the Martian atmosphere. Journal of Geophysical Research, 2012, 117, .	3.3	8
51	CO 2 nonâ€LTE limb emissions in Mars' atmosphere as observed by OMEGA/Mars Express. Journal of Geophysical Research E: Planets, 2016, 121, 1066-1086.	3.6	6
52	MIPAS observations of longitudinal oscillations in the mesosphere and the lower thermosphere: climatology of odd-parity daily frequency modes. Atmospheric Chemistry and Physics, 2016, 16, 11019-11041.	4.9	6
53	Effect of the Lateral Exospheric Transport on the Horizontal Hydrogen Distribution Near the Exobase of Mars. Journal of Geophysical Research: Space Physics, 2018, 123, 2441-2454.	2.4	6
54	CO2 retrievals in the Mars daylight thermosphere from its 4.3â€Î¼m limb emission measured by OMEGA/MEx. Icarus, 2021, 353, 113830.	2.5	6

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55	Density and Temperature of the Upper Mesosphere and Lower Thermosphere of Mars Retrieved From the OI 557.7Ânm Dayglow Measured by TGO/NOMAD. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	6
56	The Wave Origins of Longitudinal Structures in ExoMars Trace Gas Orbiter (TGO) Aerobraking Densities. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028769.	2.4	5
57	Improved Modeling of Mars' HDO Cycle Using a Mars' Global Climate Model. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	5
58	First Detection of a Brief Mesoscale Elevated Stratopause in Very Early Winter. Geophysical Research Letters, 2020, 47, e2019GL086751.	4.0	4
59	Isobar Altitude Variations in the Upper Mesosphere Observed With IUVSâ€MAVEN in Response to Martian Dust Storms. Geophysical Research Letters, 2020, 47, e2020GL087468.	4.0	4
60	The HDO Cycle on Mars: Comparison of ACS Observations With GCM Simulations. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	4
61	Reply to comment â€œOn the hydrogen escape: Comment to variability of the hydrogen in the Martian upper atmosphere as simulated by a 3D atmosphere-exosphere coupling by J.-Y. Chaufray etÂal.â€•by V. Krasnopolsky, Icarus, 281, 262. Icarus, 2018, 301, 132-135.	2.5	2
62	On the derivation of thermospheric temperatures from dayglow emissions on Mars. Icarus, 2021, 358, 114284.	2.5	2