J T Erwin

List of Publications by Year
in descending order

25 papers	919 citations	567281 15 h-index	580821 25 g-index
44 all docs	44 docs citations	44 times ranked	892 citing authors

#	Article	IF	Citations
1	Explaining NOMAD D/H Observations by Cloudâ€Induced Fractionation of Water Vapor on Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	11
2	Calibration of NOMAD on ESA's ExoMars Trace Gas Orbiter: Part 1 â€“ The Solar Occultation channel. Planetary and Space Science, 2022, 218, 105411.	1.7	8
3	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, .	4.0	7
4	Planetâ€Wide Ozone Destruction in the Middle Atmosphere on Mars During Global Dust Storm. Geophysical Research Letters, 2022, 49, .	4.0	7
5	The Deuterium Isotopic Ratio of Water Released From the Martian Caps as Measured With TGO/NOMAD. Geophysical Research Letters, 2022, 49, .	4.0	15
6	Comprehensive investigation of Mars methane and organics with ExoMars/NOMAD. Icarus, 2021, 357, 114266.	2.5	27
7	Machine learning for automatic identification of new minor species. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 259, 107361.	2.3	2
8	Transient HCl in the atmosphere of Mars. Science Advances, 2021, 7, .	10.3	37
9	Probing the Atmospheric Cl Isotopic Ratio on Mars: Implications for Planetary Evolution and Atmospheric Chemistry. Geophysical Research Letters, 2021, 48, e2021GL092650.	4.0	7
10	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
11	Martian water loss to space enhanced by regional dust storms. Nature Astronomy, 2021, 5, 1036-1042.	10.1	40
12	Calibration of NOMAD on ESA's ExoMars Trace Gas Orbiter: Part 2 â€“ The Limb, Nadir and Occultation (LNO) channel. Planetary and Space Science, 2021, , 105410.	1.7	3
13	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.	3.6	39
14	Atmospheric Escape Processes and Planetary Atmospheric Evolution. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027639.	2.4	58
15	Retrieval and characterization of carbon monoxide (CO) vertical profiles in the Martian atmosphere from observations of PFS/MEX. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 238, 106498.	2.3	6
16	No detection of methane on Mars from early ExoMars Trace Gas Orbiter observations. Nature, 2019, 568, 517-520.	27.8	111
17	Martian dust storm impact on atmospheric H2O and D/H observed by ExoMars Trace Gas Orbiter. Nature, 2019, 568, 521-525.	27.8	107
18	Water Vapor Vertical Profiles on Mars in Dust Storms Observed by TGO/NOMAD. Journal of Geophysical Research E: Planets, 2019, 124, 3482-3497.	3.6	88

#	Article	IF	Citations
19	On the escape of CH₄ from Pluto's atmosphere. Geophysical Research Letters, 2015, 42, 7200-7205.	4.0	4
20	The density and thermal structure of Plutoâ€™s atmosphere and associated escape processes and rates. Icarus, 2014, 228, 301-314.	2.5	75
21	Hybrid fluid/kinetic modeling of Plutoâ€™s escaping atmosphere. Icarus, 2013, 226, 375-384.	2.5	43
22	MOLECULAR-KINETIC SIMULATIONS OF ESCAPE FROM THE EX-PLANET AND EXOPLANETS: CRITERION FOR TRANSONIC FLOW. Astrophysical Journal Letters, 2013, 768, L4.	8.3	58
23	THERMALLY DRIVEN ATMOSPHERIC ESCAPE: TRANSITION FROM HYDRODYNAMIC TO JEANS ESCAPE. Astrophysical Journal Letters, 2011, 729, L24.	8.3	113
24	Fluidâˆ•Kinetic Hybrid Simulation of Atmospheric Escape: Pluto. , 2011, , .		1
25	Kinetic simulations of thermal escape from a single component atmosphere. Physics of Fluids, 2011, 23, .	4.0	32