Guillaume Gronoff

List of Publications by Year
in descending order

67	2,070	201674	254184
papers	citations	27 h-index	43 g-index

83	83	83	2389
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prebiotic chemistry and atmospheric warming of early Earth by an active young Sun. Nature Geoscience, 2016, 9, 452-455.	12.9	213
2	Impact of space weather on climate and habitability of terrestrial-type exoplanets. International Journal of Astrobiology, 2020, 19, 136-194.	1.6	125
3	The neutral photochemistry of nitriles, amines and imines in the atmosphere of Titan. Icarus, 2015, 247, 218-247.	2.5	118
4	1D-coupled photochemical model of neutrals, cations and anions in the atmosphere of Titan. Icarus, 2016, 268, 313-339.	2.5	109
5	On the Magnetic Protection of the Atmosphere of Proxima Centauri b. Astrophysical Journal Letters, 2017, 844, L13.	8.3	107
6	Volatile chemical product emissions enhance ozone and modulate urban chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	103
7	Doubly-charged ions in the planetary ionospheres: a review. Physical Chemistry Chemical Physics, 2011, 13, 18264.	2.8	92
8	Comprehensive calculation of the energy per ion pair or <I>W</I> values for five major planetary upper atmospheres. Annales Geophysicae, 2011, 29, 187-195.	1.6	60
9	Atmospheric Escape Processes and Planetary Atmospheric Evolution. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027639.	2.4	58
10	Transmission spectrum of Venus as a transiting exoplanet. Astronomy and Astrophysics, 2012, 537, L2.	5.1	51
11	Modelling the Venusian airglow. Astronomy and Astrophysics, 2008, 482, 1015-1029.	5.1	50
12	Dayglow on Mars: Kinetic modelling with SPICAM UV limb data. Planetary and Space Science, 2009, 57, 1008-1021.	1.7	47
13	Ionization processes in the atmosphere of Titan. Astronomy and Astrophysics, 2009, 506, 955-964.	5.1	45
14	The Ozone Waterâ€“Land Environmental Transition Study: An Innovative Strategy for Understanding Chesapeake Bay Pollution Events. Bulletin of the American Meteorological Society, 2019, 100, 291-306.	3.3	41
15	Validation of the TOLNet lidars: the Southern California Ozone Observation Project (SCOOP). Atmospheric Measurement Techniques, 2018, 11, 6137-6162.	3.1	40
16	Hybrid modelling of cometary plasma environments. Astronomy and Astrophysics, 2017, 604, A73.	5.1	37
17	Computing uncertainties in ionosphereâ€airglow models: II. The Martian airglow. Journal of Geophysical Research, 2012, 117, .	3.3	36
18	Modelling dications in the diurnal ionosphere of Venus. Astronomy and Astrophysics, 2007, 465, 641-645.	5.1	35

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19	Numerical simulation of the effects of a solar energetic particle event on the ionosphere of Mars. Journal of Geophysical Research, 2012, 117, .	3.3	35
20	Computation of cosmic ray ionization and dose at Mars. I: A comparison of HZETRN and Planetocosmics for proton and alpha particles. Advances in Space Research, 2015, 55, 1799-1805.	2.6	35
21	Langley mobile ozone lidar: ozone and aerosol atmospheric profiling for air quality research. Applied Optics, 2017, 56, 721.	2.1	34
22	Dications and thermal ions in planetary atmospheric escape. Icarus, 2013, 222, 169-187.	2.5	33
23	The atmosphere of comet 67P/Churyumov-Gerasimenko diagnosed by charge-exchanged solar wind alpha particles. Astronomy and Astrophysics, 2016, 587, A154.	5.1	33
24	Cosmic radiation dose measurements from the RaD-X flight campaign. Space Weather, 2016, 14, 874-898.	3.7	30
25	A method for quantifying near range point source induced O3 titration events using Co-located Lidar and Pandora measurements. Atmospheric Environment, 2019, 204, 43-52.	4.1	30
26	Ionization processes in the atmosphere of Titan. Astronomy and Astrophysics, 2009, 506, 965-970.	5.1	30
27	Ionization processes in the atmosphere of Titan. Astronomy and Astrophysics, 2011, 529, A143.	5.1	30
28	THEORETICAL UV ABSORPTION SPECTRA OF HYDRODYNAMICALLY ESCAPING O₂/CO₂-RICH EXOPLANETARY ATMOSPHERES. Astrophysical Journal, 2014, 788, 191.	4.5	23
29	Can hydrogen coronae be inferred around a CO2-dominated exoplanetary atmosphere?. Icarus, 2014, 239, 23-31.	2.5	23
30	Influence of dust loading on atmospheric ionizing radiation on Mars. Journal of Geophysical Research: Space Physics, 2014, 119, 452-461.	2.4	21
31	Quantifying TOLNet ozone lidar accuracy during the 2014 DISCOVER-AQ and FRAPPÃ‰ campaigns. Atmospheric Measurement Techniques, 2017, 10, 3865-3876.	3.1	21
32	Solar wind charge exchange in cometary atmospheres. Astronomy and Astrophysics, 2019, 630, A37.	5.1	21
33	Evaluation of NASA's high-resolution global composition simulations: Understanding a pollution event in the Chesapeake Bay during the summer 2017 OWLETS campaign. Atmospheric Environment, 2020, 222, 117133.	4.1	20
34	A fast computation of the secondary ion production in the ionosphere of Mars. Monthly Notices of the Royal Astronomical Society, 2009, 400, 369-382.	4.4	19
35	The Effect of Cosmic Rays on Cometary Nuclei. I. Dose Deposition. Astrophysical Journal, 2020, 890, 89.	4.5	18
36	The precipitation of keV energetic oxygen ions at Mars and their effects during the comet Siding Spring approach. Geophysical Research Letters, 2014, 41, 4844-4850.	4.0	17

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37	Modeling a Transient Secondary Paleolunar Atmosphere: 3â€D Simulations and Analysis. Geophysical Research Letters, 2019, 46, 5107-5116.	4.0	16
38	Synergistic aircraft and ground observations of transported wildfire smoke and its impact on air quality in New York City during the summer 2018 LISTOS campaign. Science of the Total Environment, 2021, 773, 145030.	8.0	16
39	Solar wind charge exchange in cometary atmospheres. Astronomy and Astrophysics, 2019, 630, A35.	5.1	14
40	Radiation Environment and Doses on Mars at Oxia Planum and Mawrth Vallis: Support for Exploration at Sites With High Biosignature Preservation Potential. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006488.	3.6	14
41	Ground-based evaluation of dosimeters for NASA high-altitude balloon flight. Space Weather, 2016, 14, 1011-1025.	3.7	13
42	Demonstration of an off-axis parabolic receiver for near-range retrieval of lidar ozone profiles. Atmospheric Measurement Techniques, 2019, 12, 363-370.	3.1	13
43	The Effect of Cosmic Rays on Cometary Nuclei. II. Impact on Ice Composition and Structure. Astrophysical Journal, 2020, 901, 136.	4.5	13
44	Computing uncertainties in ionosphereâ€airglow models: I. Electron ï¬,ux and species production uncertainties for Mars. Journal of Geophysical Research, 2012, 117, .	3.3	12
45	Prediction of blue, red and green aurorae at Mars. Planetary and Space Science, 2015, 115, 48-56.	1.7	11
46	Solar wind charge exchange in cometary atmospheres. Astronomy and Astrophysics, 2019, 630, A36.	5.1	11
47	Photochemistry of forbidden oxygen lines in the inner coma of 67P/Churyumovâ€Gerasimenko. Journal of Geophysical Research: Space Physics, 2016, 121, 804-816.	2.4	10
48	Observations of bay-breeze and ozone events over a marine site during the OWLETS-2 campaign. Atmospheric Environment, 2021, 263, 118669.	4.1	10
49	Sensitivity of total column NO2 at a marine site within the Chesapeake Bay during OWLETS-2. Atmospheric Environment, 2022, 277, 119063.	4.1	10
50	Case study of stratospheric intrusion above Hampton, Virginia: Lidar-observation and modeling analysis. Atmospheric Environment, 2021, 259, 118498.	4.1	9
51	Vertical Profiles of Ozone Concentrations in the Lower Troposphere Downwind of New York City During LISTOS 2018â€“2019. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD035108.	3.3	9
52	Titanâ€™s emission processes during eclipse. Icarus, 2014, 241, 397-408.	2.5	6
53	Evaluation of UV aerosol retrievals from an ozone lidar. Atmospheric Measurement Techniques, 2020, 13, 5277-5292.	3.1	6
54	The Planeterrella, a pedagogic experiment in planetology and plasma physics. Acta Geophysica, 2009, 57, 220-235.	2.0	5

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55	Photoabsorption in Ganymedeâ€™s atmosphere. Icarus, 2012, 218, 308-319.	2.5	5
56	Assessment of the influence of the RaD-X balloon payload on the onboard radiation detectors. Space Weather, 2016, 14, 835-845.	3.7	5
57	Auroral Formation and Plasma Interaction Between Magnetized Objects Simulated With the Planeterrella. IEEE Transactions on Plasma Science, 2011, 39, 2712-2713.	1.3	4
58	Polarisation in the auroral red line during coordinated EISCAT Svalbard Radar/optical experiments. Annales Geophysicae, 2011, 29, 1101-1112.	1.6	4
59	The early Earth under a superflare and super-CME attack: prospects for life. Proceedings of the International Astronomical Union, 2015, 11, 409-415.	0.0	2
60	Tropospheric NO₂ measurements using a three-wavelength optical parametric oscillator differential absorption lidar. Atmospheric Measurement Techniques, 2021, 14, 4069-4082.	3.1	2
61	NExtUP: the Normal-incidence Extreme Ultraviolet Photometer. , 2021, , .		2
62	2D photochemical model for forbidden oxygen line emission for comet 1P/Halley. Monthly Notices of the Royal Astronomical Society, 2016, 462, S116-S123.	4.4	1
63	TOLNet ozone lidar intercomparison during the discover-aq and frappÃ© campaigns. EPJ Web of Conferences, 2018, 176, 10007.	0.3	1
64	Retrieval of UVB aerosol extinction profiles from the ground-based Langley Mobile Ozone Lidar (LMOL) system. Atmospheric Measurement Techniques, 2022, 15, 2465-2478.	3.1	1
65	Validation of the TOLNet lidars during SCOOP (Southern California Ozone Observation Project). EPJ Web of Conferences, 2018, 176, 05019.	0.3	0
66	Modeling and Lidar Study on Ozone Over the Chesapeake Bay During OWLETS-2. EPJ Web of Conferences, 2020, 237, 03015.	0.3	0
67	Variation of Ozone and PBL from the Lidar Observations and WRF-Chem Model in NYC Area During the 2018 Summer LISTOS Campaign. EPJ Web of Conferences, 2020, 237, 08027.	0.3	0