

# Ganna Portyankina

## List of Publications by Year in descending order

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Version: 2024-02-01

39  
papers

1,326  
citations

394421

19  
h-index

361022

35  
g-index

42  
all docs

42  
docs citations

42  
times ranked

993  
citing authors

#	ARTICLE	IF	CITATIONS
1	Seasonal Erosion and Restoration of Marsâ€™ Northern Polar Dunes. <i>Science</i> , 2011, 331, 575-578.	12.6	205
2	Evidence from the Mars Express High Resolution Stereo Camera for a frozen sea close to Mars' equator. <i>Nature</i> , 2005, 434, 352-356.	27.8	201
3	Observations of the northern seasonal polar cap on Mars: I. Spring sublimation activity and processes. <i>Icarus</i> , 2013, 225, 881-897.	2.5	109
4	HiRISE observations of gas sublimation-driven activity in Marsâ€™ southern polar regions: I. Erosion of the surface. <i>Icarus</i> , 2010, 205, 283-295.	2.5	84
5	HiRISE observations of gas sublimation-driven activity in Marsâ€™ southern polar regions: II. Surficial deposits and their origins. <i>Icarus</i> , 2010, 205, 296-310.	2.5	63
6	Agents of change on Marsâ€™ northern dunes: CO <sub>2</sub> ice and wind. <i>Icarus</i> , 2015, 251, 264-274.	2.5	63
7	Water and related chemistry in the solar system. A guaranteed time key programme for Herschel. <i>Planetary and Space Science</i> , 2009, 57, 1596-1606.	1.7	58
8	HiRISE observations of gas sublimation-driven activity in Marsâ€™ southern polar regions: III. Models of processes involving translucent ice. <i>Icarus</i> , 2010, 205, 311-320.	2.5	53
9	Modern Mars' geomorphological activity, driven by wind, frost, and gravity. <i>Geomorphology</i> , 2021, 380, 107627.	2.6	40
10	Evolution of south seasonal cap during Martian spring: Insights from high-resolution observations by HiRISE and CRISM on Mars Reconnaissance Orbiter. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	36
11	An Environmental Wind Tunnel Facility for Testing Meteorological Sensor Systems. <i>Journal of Atmospheric and Oceanic Technology</i> , 2014, 31, 447-457.	1.3	35
12	Photometry and bulk physical properties of Solar System surfaces icy analogs: The Planetary Ice Laboratory at University of Bern. <i>Planetary and Space Science</i> , 2011, 59, 1601-1612.	1.7	33
13	Present-day erosion of Martian polar terrain by the seasonal CO <sub>2</sub> jets. <i>Icarus</i> , 2017, 282, 93-103.	2.5	33
14	Polygonal cracks in the seasonal semiâ€translucent CO <sub>2</sub> ice layer in Martian polar areas. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	29
15	The composition and structure of Enceladus' plume from the complete set of Cassini UVIS occultation observations. <i>Icarus</i> , 2020, 344, 113461.	2.5	29
16	HiRISE observations of gas sublimation-driven activity in Marsâ€™ southern polar regions: IV. Fluid dynamics models of CO <sub>2</sub> jets. <i>Icarus</i> , 2011, 212, 66-85.	2.5	27
17	Observations of the northern seasonal polar cap on Mars III: CRISM/HiRISE observations of spring sublimation. <i>Icarus</i> , 2013, 225, 911-922.	2.5	25
18	Planet Four: Terrains â€“ Discovery of araneiforms outside of the South Polar layered deposits. <i>Icarus</i> , 2018, 308, 148-187.	2.5	23

#	ARTICLE	IF	CITATIONS
19	Investigation of diurnal variability of water vapor in Enceladus' plume by the Cassini ultraviolet imaging spectrograph. <i>Geophysical Research Letters</i> , 2017, 44, 672-677.	4.0	20
20	Planet Four: Probing springtime winds on Mars by mapping the southern polar CO <sub>2</sub> jet deposits. <i>Icarus</i> , 2019, 319, 558-598.	2.5	18
21	6th international conference on Mars polar science and exploration: Conference summary and five top questions. <i>Icarus</i> , 2018, 308, 2-14.	2.5	17
22	Active Mars: A Dynamic World. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2021JE006876.	3.6	17
23	Sub-surface CO <sub>2</sub> gas flow in Mars' polar regions: Gas transport under constant production rate conditions. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	15
24	Spatial variations in the dust-to-gas ratio of Enceladus' plume. <i>Icarus</i> , 2018, 305, 123-138.	2.5	15
25	Observations of the northern seasonal polar cap on Mars II: HiRISE photometric analysis of evolution of northern polar dunes in spring. <i>Icarus</i> , 2013, 225, 898-910.	2.5	12
26	Revealing Active Mars with HiRISE Digital Terrain Models. <i>Remote Sensing</i> , 2022, 14, 2403.	4.0	11
27	Variability of spider spatial configuration at the Martian south pole. <i>Planetary and Space Science</i> , 2020, 185, 104848.	1.7	10
28	How martian araneiforms get their shapes: morphological analysis and diffusion-limited aggregation model for polar surface erosion. <i>Icarus</i> , 2020, 342, 113217.	2.5	8
29	Multiband photometry of Martian Recurring Slope Lineae (RSL) and dust-removed features at Horowitz crater, Mars from TGO/CaSSIS color observations. <i>Planetary and Space Science</i> , 2022, 214, 105443.	1.7	8
30	The evolution of exposed ice in a fresh mid-latitude crater on Mars. <i>Icarus</i> , 2011, 211, 195-206.	2.5	7
31	Laboratory investigations of the physical state of CO <sub>2</sub> ice in a simulated Martian environment. <i>Icarus</i> , 2019, 322, 210-220.	2.5	7
32	Past, Present, and Future of Mars Polar Science: Outcomes and Outlook from the 7th International Conference on Mars Polar Science and Exploration. <i>Planetary Science Journal</i> , 2021, 2, 209.	3.6	6
33	The Exotic Processes Driving Ephemeral Seasonal Surface Change on Mars. , 2018, , 157-186.		2
34	Irregular polygonal ridge networks in ancient Noachian terrain on Mars. <i>Icarus</i> , 2021, 374, 114833.	2.5	2
35	Planet Four: Derived South Polar Martian Winds Interpreted Using Mesoscale Modeling. <i>Planetary Science Journal</i> , 2022, 3, 31.	3.6	2
36	Current Activity on the Martian Surface: A Key Subject for Future Exploration. , 2021, 53, .		1

#	ARTICLE	IF	CITATIONS
37	The Importance of the Climate Record in the Martian Polar Layered Deposits. , 2021, 53, .		1
38	Modeling the complete set of Cassiniâ€™s UVIS occultation observations of Enceladusâ€™ plume. Icarus, 2022, 383, 114918.	2.5	1
39	CO2-Driven Geomorphological Processes. , 2018, , 187-205.		0