Anna Milillo

List of Publications by Year
in descending order

110 papers	3,228 citations	117571 34 h-index	168321 53 g-index
139 all docs	139 docs citations	139 times ranked	2275 citing authors

#	Article	IF	Citations
1	The Analyzer of Space Plasmas and Energetic Atoms (ASPERA-3) for the Mars Express Mission. Space Science Reviews, 2007, 126, 113-164.	3.7	241
2	Solar Wind-Induced Atmospheric Erosion at Mars: First Results from ASPERA-3 on Mars Express. Science, 2004, 305, 1933-1936.	6.0	204
3	Processes that Promote and Deplete the Exosphere ofÂMercury. Space Science Reviews, 2007, 132, 433-509.	3.7	121
4	Mars Express and Venus Express multi-point observations of geoeffective solar flare events in December 2006. Planetary and Space Science, 2008, 56, 873-880.	0.9	102
5	Mapping of the cusp plasma precipitation on the surface of Mercury. Icarus, 2003, 166, 229-237.	1.1	83
6	The sodium exosphere of Mercury: Comparison between observations during Mercury's transit and model results. Icarus, 2009, 200, 1-11.	1.1	80
7	TandEM: Titan and Enceladus mission. Experimental Astronomy, 2009, 23, 893-946.	1.6	77
8	Surface-Exosphere-Magnetosphere System Of Mercury. Space Science Reviews, 2005, 117, 397-443.	3.7	76
9	BepiColombo - Mission Overview and Science Goals. Space Science Reviews, 2021, 217, 1.	3.7	76
10	Ion loss on Mars caused by the Kelvinâ€“Helmholtz instability. Planetary and Space Science, 2004, 52, 1157-1167.	0.9	71
11	Investigating Mercuryâ€™s Environment with the Two-Spacecraft BepiColombo Mission. Space Science Reviews, 2020, 216, 1.	3.7	71
12	Comet-like tail-formation of exospheres of hot rocky exoplanets: Possible implications for CoRoT-7b. Icarus, 2011, 211, 1-9.	1.1	69
13	Location of the bow shock and ion composition boundaries at Venusâ€”initial determinations from Venus Express ASPERA-4. Planetary and Space Science, 2008, 56, 780-784.	0.9	64
14	Statistical distribution of the storm-time proton ring current: POLAR measurements. Geophysical Research Letters, 2002, 29, 30-1-30-4.	1.5	61
15	The variability of Mercury's exosphere by particle and radiation induced surface release processes. Icarus, 2003, 166, 238-247.	1.1	59
16	The science case for an orbital mission to Uranus: Exploring the origins and evolution of ice giant planets. Planetary and Space Science, 2014, 104, 122-140.	0.9	56
17	SERENA: A suite of four instruments (ELENA, STROFIO, PICAM and MIPA) on board BepiColombo-MPO for particle detection in the Hermean environment. Planetary and Space Science, 2010, 58, 166-181.	0.9	55
18	The role of sputtering and radiolysis in the generation of Europa exosphere. Icarus, 2012, 218, 956-966.	1.1	54

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19	Mercuryâ€™s Surface Composition and Character as Measured by Ground-Based Observations. Space Science Reviews, 2007, 132, 399-431.	3.7	52
20	The H2O and O2 exospheres of Ganymede: The result of a complex interaction between the jovian magnetospheric ions and the icy moon. Icarus, 2015, 245, 306-319.	1.1	52
21	Release of neutral sodium atoms from the surface of Mercury induced by meteoroid impacts. Icarus, 2005, 177, 122-128.	1.1	49
22	The contribution of impulsive meteoritic impact vapourization to the Hermean exosphere. Planetary and Space Science, 2007, 55, 1541-1556.	0.9	48
23	Ionospheric photoelectrons at Venus: Initial observations by ASPERA-4 ELS. Planetary and Space Science, 2008, 56, 802-806.	0.9	48
24	Comparative analysis of Venus and Mars magnetotails. Planetary and Space Science, 2008, 56, 812-817.	0.9	48
25	Rationale for BepiColombo Studies of Mercuryâ€™s Surface and Composition. Space Science Reviews, 2020, 216, 1.	3.7	46
26	Empirical model of proton fluxes in the equatorial inner magnetosphere: Development. Journal of Geophysical Research, 2001, 106, 25713-25729.	3.3	43
27	The BepiColombo mission: An outstanding tool for investigating the Hermean environment. Planetary and Space Science, 2010, 58, 40-60.	0.9	43
28	PHEBUS: A double ultraviolet spectrometer to observe Mercury's exosphere. Planetary and Space Science, 2010, 58, 201-223.	0.9	42
29	Neutral particle release from Europaâ€™s surface. Icarus, 2010, 210, 385-395.	1.1	42
30	Numerical and analytical model of Mercury's exosphere: Dependence on surface and external conditions. Planetary and Space Science, 2007, 55, 1569-1583.	0.9	40
31	Exospheric O2 densities at Europa during different orbital phases. Planetary and Space Science, 2013, 88, 42-52.	0.9	40
32	Dayside H+ circulation at Mercury and neutral particle emission. Icarus, 2005, 175, 305-319.	1.1	39
33	Plasma Sources in Planetary Magnetospheres: Mercury. Space Science Reviews, 2015, 192, 91-144.	3.7	39
34	Planetary space weather: scientific aspects and future perspectives. Journal of Space Weather and Space Climate, 2016, 6, A31.	1.1	38
35	Towards a Global Unified Model of Europaâ€™s Tenuous Atmosphere. Space Science Reviews, 2018, 214, 1.	3.7	36
36	Evolution of the proton ring current energy distribution during 21â€“25 April 2001 storm. Journal of Geophysical Research, 2006, 111, .	3.3	32

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37	Mercury's surface and composition to be studied by BepiColombo. Planetary and Space Science, 2010, 58, 21-39.	0.9	31
38	THEMIS Na exosphere observations of Mercury and their correlation with in-situ magnetic field measurements by MESSENGER. Planetary and Space Science, 2015, 115, 102-109.	0.9	30
39	Mercury sodium exospheric emission as a proxy for solar perturbations transit. Scientific Reports, 2018, 8, 928.	1.6	30
40	Modelling Mercury's magnetosphere and plasma entry through the dayside magnetopause. Planetary and Space Science, 2007, 55, 1557-1568.	0.9	29
41	On the impact of multiply charged heavy solar wind ions on the surface of Mercury, the Moon and Ceres. Planetary and Space Science, 2008, 56, 1506-1516.	0.9	27
42	SERENA: Particle Instrument Suite for Determining the Sun-Mercury Interaction from BepiColombo. Space Science Reviews, 2021, 217, 11.	3.7	26
43	On the Scaling Properties of Magnetic-field Fluctuations through the Inner Heliosphere. Astrophysical Journal, 2020, 902, 84.	1.6	26
44	Models of Solar Wind Structures andÂTheir Interaction withÂtheÂEarthâ€™s Space Environment. Space Science Reviews, 2009, 147, 233-270.	3.7	25
45	BepiColombo Science Investigations During Cruise and Flybys at the Earth, Venus and Mercury. Space Science Reviews, 2021, 217, 1.	3.7	25
46	Energetic neutral atoms at Mars 2. Imaging of the solar wind-Phobos interaction. Journal of Geophysical Research, 2002, 107, SSH 5-1.	3.3	23
47	Coordinated Study on Solar Wind Turbulence During the Venus-Express, ACE and Ulysses Alignment of August 2007. Earth, Moon and Planets, 2009, 104, 101-104.	0.3	23
48	The Venusian induced magnetosphere: A case study of plasma and magnetic field measurements on the Venus Express mission. Planetary and Space Science, 2008, 56, 796-801.	0.9	22
49	Dynamical evolution of sodium anisotropies in the exosphere of Mercury. Planetary and Space Science, 2013, 82-83, 1-10.	0.9	22
50	Ganymede's gravity, tides and rotational state from JUICE's 3GM experiment simulation. Planetary and Space Science, 2020, 187, 104902.	0.9	22
51	Solar Intensity X-Ray and Particle Spectrometer SIXS: Instrument Design and First Results. Space Science Reviews, 2020, 216, 1.	3.7	20
52	Kinetic Simulations of the Jovian Energetic Ion Circulation around Ganymede. Astrophysical Journal, 2020, 900, 74.	1.6	20
53	Energetic neutral atoms in the outer magnetosphere: An upper flux limit obtained with the HEP-LD Spectrometer on board GEOTAIL. Geophysical Research Letters, 1997, 24, 111-114.	1.5	19
54	First observation of energetic neutral atoms in the Venus environment. Planetary and Space Science, 2008, 56, 807-811.	0.9	19

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55	Jupiterâ€™s Magnetosphere: Plasma Sources and Transport. Space Science Reviews, 2015, 192, 209-236.	3.7	19
56	ENA detection in the dayside of Mars: ASPERA-3 NPD statistical study. Planetary and Space Science, 2008, 56, 840-845.	0.9	18
57	Empirical model of proton fluxes in the equatorial inner magnetosphere: 2. Properties and applications. Journal of Geophysical Research, 2003, 108, .	3.3	17
58	Shortâ€term observations of doubleâ€peaked Na emission from Mercury's exosphere. Geophysical Research Letters, 2017, 44, 2970-2977.	1.5	17
59	Remote sensing of Mercury's magnetospheric plasma environment via energetic neutral atoms imaging. Planetary and Space Science, 2001, 49, 1659-1668.	0.9	16
60	A Review of General Physical and Chemical Processes Related to Plasma Sources and Losses for Solar System Magnetospheres. Space Science Reviews, 2015, 192, 27-89.	3.7	16
61	Low-altitude energetic neutral atoms imaging of the inner magnetosphere: A geometrical method to identify the energetic neutral atoms contributions from different magnetospheric regions. Journal of Geophysical Research, 1996, 101, 27123-27131.	3.3	15
62	Neutral atom imaging at Mercury. Planetary and Space Science, 2006, 54, 144-152.	0.9	15
63	Ring current ion flows and convection electric field as expected from observations by SAC-B/ISENA. Geophysical Research Letters, 1996, 23, 3285-3288.	1.5	14
64	Loss rates of Europa×³s tenuous atmosphere. Planetary and Space Science, 2016, 130, 14-23.	0.9	14
65	The influence of space environment on the evolution of Mercury. Icarus, 2014, 239, 281-290.	1.1	12
66	Comparative Na and K Mercury and Moon Exospheres. Space Science Reviews, 2022, 218, 1.	3.7	12
67	Investigation of the possible effects of comet Encke's meteoroid stream on the Ca exosphere of Mercury. Journal of Geophysical Research E: Planets, 2017, 122, 1217-1226.	1.5	11
68	Kronos: exploring the depths of Saturn with probes and remote sensing through an international mission. Experimental Astronomy, 2009, 23, 947-976.	1.6	10
69	Detection of a southern peak in Mercury's sodium exosphere with the TNG in 2005. Icarus, 2009, 201, 424-431.	1.1	10
70	Exospheric Na distributions along the Mercury orbit with the THEMIS telescope. Icarus, 2021, 355, 114179.	1.1	10
71	BepiColomboâ€™s Cruise Phase: Unique Opportunity for Synergistic Observations. Frontiers in Astronomy and Space Sciences, 2021, 8, .	1.1	10
72	Analytical model of Europaâ€™s O2 exosphere. Planetary and Space Science, 2016, 130, 3-13.	0.9	9

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73	Photoionization Loss of Mercury's Sodium Exosphere: Seasonal Observations by MESSENGER and the THEMIS Telescope. Geophysical Research Letters, 2021, 48, e2021GL092980.	1.5	9
74	The â€œSingularâ€•Behavior of the Solar Wind Scaling Features during Parker Solar Probeâ€“BepiColombo Radial Alignment. Astrophysical Journal, 2022, 926, 174.	1.6	9
75	Modeling the time-evolving plasma in the inner magnetosphere: An empirical approach. Journal of Geophysical Research, 2004, 109, .	3.3	7
76	Empirical Model of the Inner Magnetosphere H ⁺ Pitch Angle Distributions. Geophysical Monograph Series, 0, , 283-291.	0.1	7
77	Low energy high angular resolution neutral atom detection by means of micro-shuttering techniques: the BepiColombo SERENAâˆ•ELENA sensor. , 2009, , .		7
78	Statistical analysis of the observations of the MEX/ASPERA-3 NPI in the shadow. Planetary and Space Science, 2009, 57, 1000-1007.	0.9	7
79	Observing planets and small bodies in sputtered high-energy atom fluxes. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	7
80	MESSENGER Observations of Planetary Ion Enhancements at Mercury's Northern Magnetospheric Cusp During Flux Transfer Event Showers. Journal of Geophysical Research: Space Physics, 2022, 127, .	0.8	7
81	Structure and dynamics of the proton energy density in the inner magnetosphere. Advances in Space Research, 2004, 33, 711-718.	1.2	6
82	Space weathering on near-Earth objects investigated by neutral-particle detection. Planetary and Space Science, 2009, 57, 384-392.	0.9	6
83	A nanotechnology application for low energy neutral atom detection with high angular resolution for the BepiColombo mission to Mercury. Microelectronic Engineering, 2011, 88, 2330-2333.	1.1	6
84	Energetic neutral particles detection in the environment of Jupiterâ€™s icy moons: Ganymedeâ€™s and Europaâ€™s neutral imaging experiment (GENIE). Planetary and Space Science, 2013, 88, 53-63.	0.9	6
85	Preliminary estimation of the detection possibilities of Ganymedeâ€™s water vapor environment with MAJIS. Planetary and Space Science, 2020, 191, 105004.	0.9	5
86	Geomagnetic activity dependence of the inner magnetospheric proton distribution: An empirical approach for the 21â€“25 April 2001 storm. Journal of Geophysical Research, 2006, 111, .	3.3	4
87	ELENA microchannel plate detector: absolute detection efficiency for low energy neutral atoms. Optical Engineering, 2013, 52, 051206.	0.5	4
88	Multiscale Features of the Near-Hermean Environment as Derived Through the Hilbert-Huang Transform. Frontiers in Physics, 2021, 9, .	1.0	4
89	Numerical simulations of coronal hole-associated neutral solar wind as expected at the Solar Orbiter position. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	3
90	Venus's induced magnetosphere during active solar wind conditions at BepiColombo's Venus 1 flyby. Annales Geophysicae, 2021, 39, 811-831.	0.6	3

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91	NEUTRAL ATOM EMISSION FROM MERCURY. , 2006, , 37-50.		3
92	Effects of mercury surface temperature on the sodium abundance in its exosphere. Planetary and Space Science, 2022, 212, 105397.	0.9	3
93	An empirical model of the ion distributions in the equatorial inner magnetosphere. Physics and Chemistry of the Earth, Part C: Solar, Terrestrial and Planetary Science, 1999, 24, 209-214.	0.2	2
94	Exosphere generation of the Moon investigated through a high-energy neutral detector. Experimental Astronomy, 2011, 32, 37-49.	1.6	2
95	ELENA MCP detector: absolute detection efficiency for low-energy neutral atoms. Proceedings of SPIE, 2012, , .	0.8	2
96	The Analyzer of Space Plasmas and Energetic Atoms (ASPERA-3) for the Mars Express Mission. , 2007, , 113-164.		2
97	Processes that Promote and Deplete the Exosphere ofÂMercury. Space Sciences Series of ISSI, 2008, , 251-327.	0.0	2
98	SERENA: a Novel Instrument Package on board BepiColombo-MPO to study Neutral and Ionized Particles in the Hermean Environment. , 2009, , .		1
99	A MISSION CALLED SAPPORO. , 2006, , 241-253.		1
100	PROSPECTS OF SOLAR SYSTEM ENVIRONMENT OBSERVATIONS BY MEANS OF ENA DETECTION. , 2009, , 263-291.		1
101	Mercuryâ€™s Surface Composition and Character as Measured by Ground-Based Observations. Space Sciences Series of ISSI, 2008, , 217-249.	0.0	1
102	Participation of women scientists in ESA solar system missions: a historical trend. Advances in Geosciences, 0, 53, 169-182.	12.0	1
103	Empirical modeling of the ring current. Acta Geophysica, 2009, 57, 171-184.	1.0	0
104	Solar wind interaction with the terrestrial planets. Planetary and Space Science, 2015, 115, 1-3.	0.9	0
105	Deep neural networks for analysis of Mercuryâ€™s planetary exosphere. Journal of Physics: Conference Series, 2020, 1548, 012014.	0.3	0
106	THE DAYSIDE MAGNETOSPHERE OF MERCURY. , 2006, , 29-36.		0
107	A Review of General Physical and Chemical Processes Related to Plasma Sources and Losses for Solar System Magnetospheres. Space Sciences Series of ISSI, 2016, , 27-89.	0.0	0
108	Jupiterâ€™s Magnetosphere: Plasma Sources and Transport. Space Sciences Series of ISSI, 2016, , 209-236.	0.0	0

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109	Plasma Sources in Planetary Magnetospheres: Mercury. Space Sciences Series of ISSI, 2016, , 91-144.	0.0	0
110	Reconstruction of the magnetic connection from Mercury to the solar corona during enhancements in the solar proton fluxes at Mercury. Astronomy and Astrophysics, 0, , .	2.1	0