Alessandro Mura

List of Publications by Year
in descending order

122 papers	4,130 citations	136950 32 h-index	128289 60 g-index
153 all docs	153 docs citations	153 times ranked	2871 citing authors

#	ARTICLE	IF	CITATIONS
1	A chemical survey of exoplanets with ARIEL. Experimental Astronomy, 2018, 46, 135-209.	3.7	249
2	The Analyzer of Space Plasmas and Energetic Atoms (ASPERA-3) for the Mars Express Mission. Space Science Reviews, 2007, 126, 113-164.	8.1	241
3	Jupiterâ€™s interior and deep atmosphere: The initial pole-to-pole passes with the Juno spacecraft. Science, 2017, 356, 821-825.	12.6	229
4	The Analyser of Space Plasmas and Energetic Atoms (ASPERA-4) for the Venus Express mission. Planetary and Space Science, 2007, 55, 1772-1792.	1.7	214
5	Solar Wind-Induced Atmospheric Erosion at Mars: First Results from ASPERA-3 on Mars Express. Science, 2004, 305, 1933-1936.	12.6	204
6	The loss of ions from Venus through the plasma wake. Nature, 2007, 450, 650-653.	27.8	168
7	Processes that Promote and Deplete the Exosphere ofÂMercury. Space Science Reviews, 2007, 132, 433-509.	8.1	121
8	Jupiterâ€™s magnetosphere and aurorae observed by the Juno spacecraft during its first polar orbits. Science, 2017, 356, 826-832.	12.6	109
9	A quantitative model of the planetary Na⁺ contribution to Mercuryâ€™s magnetosphere. Annales Geophysicae, 2003, 21, 1723-1736.	1.6	106
10	Mars Express and Venus Express multi-point observations of geoeffective solar flare events in December 2006. Planetary and Space Science, 2008, 56, 873-880.	1.7	102
11	JIRAM, the Jovian Infrared Auroral Mapper. Space Science Reviews, 2017, 213, 393-446.	8.1	91
12	Clusters of cyclones encircling Jupiterâ€™s poles. Nature, 2018, 555, 216-219.	27.8	90
13	Mapping of the cusp plasma precipitation on the surface of Mercury. Icarus, 2003, 166, 229-237.	2.5	83
14	The sodium exosphere of Mercury: Comparison between observations during Mercury's transit and model results. Icarus, 2009, 200, 1-11.	2.5	80
15	Surface-Exosphere-Magnetosphere System Of Mercury. Space Science Reviews, 2005, 117, 397-443.	8.1	76
16	Investigating Mercuryâ€™s Environment with the Two-Spacecraft BepiColombo Mission. Space Science Reviews, 2020, 216, 1.	8.1	71
17	Comet-like tail-formation of exospheres of hot rocky exoplanets: Possible implications for CoRoT-7b. Icarus, 2011, 211, 1-9.	2.5	69
18	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.	1.7	64

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19	A New Model of Jupiter's Magnetic Field at the Completion of Juno's Prime Mission. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	60
20	The role of sputtering and radiolysis in the generation of Europa exosphere. Icarus, 2012, 218, 956-966.	2.5	54
21	Juno observations of spot structures and a split tail in Io-induced aurorae on Jupiter. Science, 2018, 361, 774-777.	12.6	53
22	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.	2.5	52
23	The contribution of impulsive meteoritic impact vapourization to the Hermean exosphere. Planetary and Space Science, 2007, 55, 1541-1556.	1.7	48
24	Ionospheric photoelectrons at Venus: Initial observations by ASPERA-4 ELS. Planetary and Space Science, 2008, 56, 802-806.	1.7	48
25	Comparative analysis of Venus and Mars magnetotails. Planetary and Space Science, 2008, 56, 812-817.	1.7	48
26	The BepiColombo mission: An outstanding tool for investigating the Hermean environment. Planetary and Space Science, 2010, 58, 40-60.	1.7	43
27	Neutral particle release from Europaâ€™s surface. Icarus, 2010, 210, 385-395.	2.5	42
28	Numerical and analytical model of Mercury's exosphere: Dependence on surface and external conditions. Planetary and Space Science, 2007, 55, 1569-1583.	1.7	40
29	Exospheric O2 densities at Europa during different orbital phases. Planetary and Space Science, 2013, 88, 42-52.	1.7	40
30	Dayside H+ circulation at Mercury and neutral particle emission. Icarus, 2005, 175, 305-319.	2.5	39
31	3D-modeling of Mercury's solar wind sputtered surface-exosphere environment. Planetary and Space Science, 2015, 115, 90-101.	1.7	36
32	Towards a Global Unified Model of Europaâ€™s Tenuous Atmosphere. Space Science Reviews, 2018, 214, 1.	8.1	36
33	Infrared observations of Jovian aurora from Juno's first orbits: Main oval and satellite footprints. Geophysical Research Letters, 2017, 44, 5308-5316.	4.0	30
34	Mercury sodium exospheric emission as a proxy for solar perturbations transit. Scientific Reports, 2018, 8, 928.	3.3	30
35	Modelling Mercury's magnetosphere and plasma entry through the dayside magnetopause. Planetary and Space Science, 2007, 55, 1557-1568.	1.7	29
36	Observations of MeV electrons in Jupiter's innermost radiation belts and polar regions by the Juno radiation monitoring investigation: Perijoves 1 and 3. Geophysical Research Letters, 2017, 44, 4481-4488.	4.0	29

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37	The Juno Radiation Monitoring (RM) Investigation. Space Science Reviews, 2017, 213, 507-545.	8.1	29
38	Constraints on the exosphere of CoRoT-7b. Astronomy and Astrophysics, 2011, 525, A24.	5.1	28
39	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.	1.7	27
40	SERENA: Particle Instrument Suite for Determining the Sun-Mercury Interaction from BepiColombo. Space Science Reviews, 2021, 217, 11.	8.1	26
41	Exospheres and Energetic Neutral Atoms of Mars, Venus and Titan. Space Science Reviews, 2011, 162, 213-266.	8.1	25
42	Are Dawn Storms Jupiter's Auroral Substorms?. AGU Advances, 2021, 2, e2020AV000275.	5.4	25
43	First Estimate of Wind Fields in the Jupiter Polar Regions From JIRAMâ€Juno Images. Journal of Geophysical Research E: Planets, 2018, 123, 1511-1524.	3.6	24
44	Twoâ€Year Observations of the Jupiter Polar Regions by JIRAM on Board Juno. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006098.	3.6	24
45	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
46	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.	0.6	23
47	Infrared observations of Io from Juno. Icarus, 2020, 341, 113607.	2.5	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.	1.7	22
49	Dynamical evolution of sodium anisotropies in the exosphere of Mercury. Planetary and Space Science, 2013, 82-83, 1-10.	1.7	22
50	Ganymede's gravity, tides and rotational state from JUICE's 3GM experiment simulation. Planetary and Space Science, 2020, 187, 104902.	1.7	22
51	Preliminary results on the composition of Jupiter's troposphere in hot spot regions from the JIRAM/Juno instrument. Geophysical Research Letters, 2017, 44, 4615-4624.	4.0	20
52	Preliminary JIRAM results from Juno polar observations: 2. Analysis of the Jupiter southern H₃⁺ emissions and comparison with the north aurora. Geophysical Research Letters, 2017, 44, 4633-4640.	4.0	20
53	Kinetic Simulations of the Jovian Energetic Ion Circulation around Ganymede. Astrophysical Journal, 2020, 900, 74.	4.5	20
54	First observation of energetic neutral atoms in the Venus environment. Planetary and Space Science, 2008, 56, 807-811.	1.7	19

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55	The contribution of the ARIEL space mission to the study of planetary formation. Experimental Astronomy, 2018, 46, 45-65.	3.7	19
56	ENA detection in the dayside of Mars: ASPERA-3 NPD statistical study. Planetary and Space Science, 2008, 56, 840-845.	1.7	18
57	Preliminary JIRAM results from Juno polar observations: 1. Methodology and analysis applied to the Jovian northern polar region. Geophysical Research Letters, 2017, 44, 4625-4632.	4.0	18
58	Concurrent ultraviolet and infrared observations of the north Jovian aurora during Juno's first perijove. Icarus, 2018, 312, 145-156.	2.5	18
59	Moist convection drives an upscale energy transfer at Jovian high latitudes. Nature Physics, 2022, 18, 357-361.	16.7	18
60	Empirical model of proton fluxes in the equatorial inner magnetosphere: 2. Properties and applications. Journal of Geophysical Research, 2003, 108, .	3.3	17
61	Shortâ€term observations of doubleâ€peaked Na emission from Mercury's exosphere. Geophysical Research Letters, 2017, 44, 2970-2977.	4.0	17
62	Infrared Observations of Ganymede From the Jovian InfraRed Auroral Mapper on Juno. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006508.	3.6	16
63	Neutral atom imaging at Mercury. Planetary and Space Science, 2006, 54, 144-152.	1.7	15
64	Loss rates and time scales for sodium at Mercury. Planetary and Space Science, 2012, 63-64, 2-7.	1.7	15
65	Characterization of the white ovals on Jupiter's southern hemisphere using the first data by the Juno/JIRAM instrument. Geophysical Research Letters, 2017, 44, 4660-4668.	4.0	15
66	Serendipitous infrared observations of Europa by Juno/JIRAM. Icarus, 2019, 328, 1-13.	2.5	15
67	Morphology of the Auroral Tail of Io, Europa, and Ganymede From JIRAM Lâ€Band Imager. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029450.	2.4	15
68	Junoâ€™s Earth flyby: the Jovian infrared Auroral Mapper preliminary results. Astrophysics and Space Science, 2016, 361, 1.	1.4	14
69	Multipleâ€wavelength sensing of Jupiter during the Juno mission's first perijove passage. Geophysical Research Letters, 2017, 44, 4607-4614.	4.0	14
70	On the Spatial Distribution of Minor Species in Jupiter's Troposphere as Inferred From Juno JIRAM Data. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006206.	3.6	14
71	Preliminary JIRAM results from Juno polar observations: 3. Evidence of diffuse methane presence in the Jupiter auroral regions. Geophysical Research Letters, 2017, 44, 4641-4648.	4.0	13
72	Jupiter's Equatorial Plumes and Hot Spots: Spectral Mapping from Gemini/TEXES and Juno/MWR. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006399.	3.6	13

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73	The influence of space environment on the evolution of Mercury. Icarus, 2014, 239, 281-290.	2.5	12
74	Comparative Na and K Mercury and Moon Exospheres. Space Science Reviews, 2022, 218, 1.	8.1	12
75	The Case for a New Frontiersâ€“Class Uranus Orbiter: System Science at an Underexplored and Unique World with a Mid-scale Mission. Planetary Science Journal, 2022, 3, 58.	3.6	12
76	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.	3.6	11
77	H3+ characteristics in the Jupiter atmosphere as observed at limb with Juno/JIRAM. Icarus, 2019, 329, 132-139.	2.5	11
78	Oscillations and Stability of the Jupiter Polar Cyclones. Geophysical Research Letters, 2021, 48, e2021GL094235.	4.0	11
79	A Preliminary Study of Magnetosphereâ€Ionosphereâ€Thermosphere Coupling at Jupiter: Juno Multiâ€Instrument Measurements and Modeling Tools. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029469.	2.4	11
80	JUNO/JIRAM's view of Jupiter's H ₃ ⁺ emissions. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180406.	3.4	10
81	Exospheric Na distributions along the Mercury orbit with the THEMIS telescope. Icarus, 2021, 355, 114179.	2.5	10
82	Venusian bow shock as seen by the ASPERAâ€4 ion instrument on Venus Express. Journal of Geophysical Research, 2010, 115, .	3.3	9
83	Analytical model of Europaâ€™s O2 exosphere. Planetary and Space Science, 2016, 130, 3-13.	1.7	9
84	Plasma and Fields Evaluation at the Chinese Seismo-Electromagnetic Satellite for Electric Field Detector Measurements. IEEE Access, 2017, 5, 3824-3833.	4.2	9
85	Analysis of IR-bright regions of Jupiter in JIRAM-Juno data: Methods and validation of algorithms. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 202, 200-209.	2.3	8
86	Turbulence Power Spectra in Regions Surrounding Jupiter's South Polar Cyclones From Juno/JIRAM. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006096.	3.6	8
87	Mapping Io's Surface Composition With Juno/JIRAM. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006522.	3.6	8
88	A Comprehensive Set of Juno In Situ and Remote Sensing Observations of the Ganymede Auroral Footprint. Geophysical Research Letters, 2022, 49, .	4.0	8
89	Modeling the time-evolving plasma in the inner magnetosphere: An empirical approach. Journal of Geophysical Research, 2004, 109, .	3.3	7
90	Empirical Model of the Inner Magnetosphere H ⁺ Pitch Angle Distributions. Geophysical Monograph Series, 0, , 283-291.	0.1	7

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91	Low energy high angular resolution neutral atom detection by means of micro-shuttering techniques: the BepiColombo SERENAâˆ•ELENA sensor. , 2009, , .		7
92	Statistical analysis of the observations of the MEX/ASPERA-3 NPI in the shadow. Planetary and Space Science, 2009, 57, 1000-1007.	1.7	7
93	Observing planets and small bodies in sputtered high-energy atom fluxes. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	7
94	Mapping of hydrocarbons and H 3 + emissions at Jupiter's north pole using Galileo/NIMS data. Geophysical Research Letters, 2016, 43, 11,558.	4.0	7
95	Space weathering on near-Earth objects investigated by neutral-particle detection. Planetary and Space Science, 2009, 57, 384-392.	1.7	6
96	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.	2.4	6
97	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.	1.7	6
98	Electric field computation analysis for the Electric Field Detector (EFD) on board the China Seismic-Electromagnetic Satellite (CSES). Advances in Space Research, 2017, 60, 2206-2216.	2.6	6
99	The Exosphere as a Boundary: Origin and Evolution of Airless Bodies in the Inner Solar System and Beyond Including Planets with Silicate Atmospheres. Space Science Reviews, 2022, 218, 1.	8.1	6
100	Characterization of Mesoscale Waves in the Jupiter NEB by Jupiter InfraRed Auroral Mapper on board Juno. Astronomical Journal, 2018, 156, 246.	4.7	5
101	Juno/JIRAM: Planning and commanding activities. Advances in Space Research, 2020, 65, 598-615.	2.6	5
102	Preliminary estimation of the detection possibilities of Ganymedeâ€™s water vapor environment with MAJIS. Planetary and Space Science, 2020, 191, 105004.	1.7	5
103	On the clouds and ammonia in Jupiterâ€™s upper troposphere from Juno JIRAM reflectivity observations. Monthly Notices of the Royal Astronomical Society, 2021, 503, 4892-4907.	4.4	5
104	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
105	Exoplanet discoveries with the CoRoT space observatory. Solar System Research, 2010, 44, 520-526.	0.7	4
106	ELENA microchannel plate detector: absolute detection efficiency for low energy neutral atoms. Optical Engineering, 2013, 52, 051206.	1.0	4
107	Multiscale Features of the Near-Hermean Environment as Derived Through the Hilbert-Huang Transform. Frontiers in Physics, 2021, 9, .	2.1	4
108	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

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109	Report to cross sections related to plasmaâ€“planetary atmosphere interaction processes. Planetary and Space Science, 2011, 59, 801-809.	1.7	3
110	NEUTRAL ATOM EMISSION FROM MERCURY. , 2006, , 37-50.		3
111	Effects of mercury surface temperature on the sodium abundance in its exosphere. Planetary and Space Science, 2022, 212, 105397.	1.7	3
112	Stability of the Jupiter Southern Polar Vortices Inspected Through Vorticity Using Juno/JIRAM Data. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	3
113	Exosphere generation of the Moon investigated through a high-energy neutral detector. Experimental Astronomy, 2011, 32, 37-49.	3.7	2
114	ELENA MCP detector: absolute detection efficiency for low-energy neutral atoms. Proceedings of SPIE, 2012, , .	0.8	2
115	The Analyzer of Space Plasmas and Energetic Atoms (ASPERA-3) for the Mars Express Mission. , 2007, , 113-164.		2
116	Processes that Promote and Deplete the Exosphere ofÂMercury. Space Sciences Series of ISSI, 2008, , 251-327.	0.0	2
117	PROSPECTS OF SOLAR SYSTEM ENVIRONMENT OBSERVATIONS BY MEANS OF ENA DETECTION. , 2009, , 263-291.		1
118	Deep neural networks for analysis of Mercuryâ€™s planetary exosphere. Journal of Physics: Conference Series, 2020, 1548, 012014.	0.4	0
119	Jupiter. , 2021, , 108-122.		0
120	THE DAYSIDE MAGNETOSPHERE OF MERCURY. , 2006, , 29-36.		0
121	Exospheres and Energetic Neutral Atoms of Mars, Venus and Titan. Space Sciences Series of ISSI, 2011, , 213-266.	0.0	0
122	The Juno Radiation Monitoring (RM) Investigation. , 2017, , 385-423.		0