# Anna Milillo

List of Publications by Year
in descending order



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|---|---|---|---|
| 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 | Comparative Na and K Mercury and Moon Exospheres. Space Science Reviews, 2022, 218, 1. | 3.7 | 12 |
| 2 | Effects of mercury surface temperature on the sodium abundance in its exosphere. Planetary and Space Science, 2022, 212, 105397. | 0.9 | 3 |
| 3 | 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 |
| 4 | 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 |
| 5 | Exospheric Na distributions along the Mercury orbit with the THEMIS telescope. Icarus, 2021, 355, 114179. | 1.1 | 10 |
| 6 | SERENA: Particle Instrument Suite for Determining the Sun-Mercury Interaction from BepiColombo. Space Science Reviews, 2021, 217, 11. | 3.7 | 26 |
| 7 | BepiColombo Science Investigations During Cruise and Flybys at the Earth, Venus and Mercury. Space Science Reviews, 2021, 217, 1. | 3.7 | 25 |
| 8 | Photoionization Loss of Mercury's Sodium Exosphere: Seasonal Observations by MESSENGER and the THEMIS Telescope. Geophysical Research Letters, 2021, 48, e2021GL092980. | 1.5 | 9 |
| 9 | Multiscale Features of the Near-Hermean Environment as Derived Through the Hilbert-Huang Transform. Frontiers in Physics, 2021, 9, . | 1.0 | 4 |
| 10 | Venus's induced magnetosphere during active solar wind conditions at BepiColombo's Venus 1 flyby. Annales Geophysicae, 2021, 39, 811-831. | 0.6 | 3 |
| 11 | BepiColomboâ€™s Cruise Phase: Unique Opportunity for Synergistic Observations. Frontiers in Astronomy and Space Sciences, 2021, 8, . | 1.1 | 10 |
| 12 | BepiColombo - Mission Overview and Science Goals. Space Science Reviews, 2021, 217, 1. | 3.7 | 76 |
| 13 | Deep neural networks for analysis of Mercuryâ€™s planetary exosphere. Journal of Physics: Conference Series, 2020, 1548, 012014. | 0.3 | 0 |
| 14 | Investigating Mercuryâ€™s Environment with the Two-Spacecraft BepiColombo Mission. Space Science Reviews, 2020, 216, 1. | 3.7 | 71 |
| 15 | Solar Intensity X-Ray and Particle Spectrometer SIXS: Instrument Design and First Results. Space Science Reviews, 2020, 216, 1. | 3.7 | 20 |
| 16 | Ganymede's gravity, tides and rotational state from JUICE's 3GM experiment simulation. Planetary and Space Science, 2020, 187, 104902. | 0.9 | 22 |
| 17 | Preliminary estimation of the detection possibilities of Ganymedeâ€™s water vapor environment with MAJIS. Planetary and Space Science, 2020, 191, 105004. | 0.9 | 5 |
| 18 | Rationale for BepiColombo Studies of Mercuryâ€™s Surface and Composition. Space Science Reviews, 2020, 216, 1. | 3.7 | 46 |

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|---|---|---|---|
| 19 | Kinetic Simulations of the Jovian Energetic Ion Circulation around Ganymede. Astrophysical Journal, 2020, 900, 74. | 1.6 | 20 |
| 20 | On the Scaling Properties of Magnetic-field Fluctuations through the Inner Heliosphere. Astrophysical Journal, 2020, 902, 84. | 1.6 | 26 |
| 21 | Mercury sodium exospheric emission as a proxy for solar perturbations transit. Scientific Reports, 2018, 8, 928. | 1.6 | 30 |
| 22 | Towards a Global Unified Model of Europaâ€™s Tenuous Atmosphere. Space Science Reviews, 2018, 214, 1. | 3.7 | 36 |
| 23 | 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 |
| 24 | Shortâ€term observations of doubleâ€peaked Na emission from Mercury's exosphere. Geophysical Research Letters, 2017, 44, 2970-2977. | 1.5 | 17 |
| 25 | Planetary space weather: scientific aspects and future perspectives. Journal of Space Weather and Space Climate, 2016, 6, A31. | 1.1 | 38 |
| 26 | Analytical model of Europaâ€™s O2 exosphere. Planetary and Space Science, 2016, 130, 3-13. | 0.9 | 9 |
| 27 | Loss rates of Europa×³s tenuous atmosphere. Planetary and Space Science, 2016, 130, 14-23. | 0.9 | 14 |
| 28 | 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 |
| 29 | Jupiterâ€™s Magnetosphere: Plasma Sources and Transport. Space Sciences Series of ISSI, 2016, , 209-236. | 0.0 | 0 |
| 30 | Plasma Sources in Planetary Magnetospheres: Mercury. Space Sciences Series of ISSI, 2016, , 91-144. | 0.0 | 0 |
| 31 | 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 |
| 32 | Plasma Sources in Planetary Magnetospheres: Mercury. Space Science Reviews, 2015, 192, 91-144. | 3.7 | 39 |
| 33 | Solar wind interaction with the terrestrial planets. Planetary and Space Science, 2015, 115, 1-3. | 0.9 | 0 |
| 34 | Jupiterâ€™s Magnetosphere: Plasma Sources and Transport. Space Science Reviews, 2015, 192, 209-236. | 3.7 | 19 |
| 35 | 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 |
| 36 | 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 |

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|---|---|---|---|
| 37 | 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 |
| 38 | The influence of space environment on the evolution of Mercury. Icarus, 2014, 239, 281-290. | 1.1 | 12 |
| 39 | ELENA microchannel plate detector: absolute detection efficiency for low energy neutral atoms. Optical Engineering, 2013, 52, 051206. | 0.5 | 4 |
| 40 | Exospheric O2 densities at Europa during different orbital phases. Planetary and Space Science, 2013, 88, 42-52. | 0.9 | 40 |
| 41 | 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 |
| 42 | Dynamical evolution of sodium anisotropies in the exosphere of Mercury. Planetary and Space Science, 2013, 82-83, 1-10. | 0.9 | 22 |
| 43 | ELENA MCP detector: absolute detection efficiency for low-energy neutral atoms. Proceedings of SPIE, 2012, , . | 0.8 | 2 |
| 44 | The role of sputtering and radiolysis in the generation of Europa exosphere. Icarus, 2012, 218, 956-966. | 1.1 | 54 |
| 45 | Observing planets and small bodies in sputtered high-energy atom fluxes. Journal of Geophysical Research, 2011, 116, n/a-n/a. | 3.3 | 7 |
| 46 | Exosphere generation of the Moon investigated through a high-energy neutral detector. Experimental Astronomy, 2011, 32, 37-49. | 1.6 | 2 |
| 47 | Comet-like tail-formation of exospheres of hot rocky exoplanets: Possible implications for CoRoT-7b. Icarus, 2011, 211, 1-9. | 1.1 | 69 |
| 48 | 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 |
| 49 | PHEBUS: A double ultraviolet spectrometer to observe Mercury's exosphere. Planetary and Space Science, 2010, 58, 201-223. | 0.9 | 42 |
| 50 | The BepiColombo mission: An outstanding tool for investigating the Hermean environment. Planetary and Space Science, 2010, 58, 40-60. | 0.9 | 43 |
| 51 | Mercury's surface and composition to be studied by BepiColombo. Planetary and Space Science, 2010, 58, 21-39. | 0.9 | 31 |
| 52 | 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 |
| 53 | Neutral particle release from Europaâ€™s surface. Icarus, 2010, 210, 385-395. | 1.1 | 42 |
| 54 | Low energy high angular resolution neutral atom detection by means of micro-shuttering techniques: the BepiColombo SERENAâˆ•ELENA sensor. , 2009, , . | | 7 |

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| 55 | SERENA: a Novel Instrument Package on board BepiColombo-MPO to study Neutral and Ionized Particles in the Hermean Environment. , 2009, , . | | 1 |
| 56 | 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 |
| 57 | Kronos: exploring the depths of Saturn with probes and remote sensing through an international mission. Experimental Astronomy, 2009, 23, 947-976. | 1.6 | 10 |
| 58 | TandEM: Titan and Enceladus mission. Experimental Astronomy, 2009, 23, 893-946. | 1.6 | 77 |
| 59 | Models of Solar Wind Structures andÂTheir Interaction withÂtheÂEarthâ€™s Space Environment. Space Science Reviews, 2009, 147, 233-270. | 3.7 | 25 |
| 60 | The sodium exosphere of Mercury: Comparison between observations during Mercury's transit and model results. Icarus, 2009, 200, 1-11. | 1.1 | 80 |
| 61 | Detection of a southern peak in Mercury's sodium exosphere with the TNG in 2005. Icarus, 2009, 201, 424-431. | 1.1 | 10 |
| 62 | 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 |
| 63 | Space weathering on near-Earth objects investigated by neutral-particle detection. Planetary and Space Science, 2009, 57, 384-392. | 0.9 | 6 |
| 64 | Empirical modeling of the ring current. Acta Geophysica, 2009, 57, 171-184. | 1.0 | 0 |
| 65 | PROSPECTS OF SOLAR SYSTEM ENVIRONMENT OBSERVATIONS BY MEANS OF ENA DETECTION. , 2009, , 263-291. | | 1 |
| 66 | 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 |
| 67 | 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 |
| 68 | 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 |
| 69 | Ionospheric photoelectrons at Venus: Initial observations by ASPERA-4 ELS. Planetary and Space Science, 2008, 56, 802-806. | 0.9 | 48 |
| 70 | First observation of energetic neutral atoms in the Venus environment. Planetary and Space Science, 2008, 56, 807-811. | 0.9 | 19 |
| 71 | Comparative analysis of Venus and Mars magnetotails. Planetary and Space Science, 2008, 56, 812-817. | 0.9 | 48 |
| 72 | ENA detection in the dayside of Mars: ASPERA-3 NPD statistical study. Planetary and Space Science, 2008, 56, 840-845. | 0.9 | 18 |

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| 73 | 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 |
| 74 | Processes that Promote and Deplete the Exosphere ofÂMercury. Space Sciences Series of ISSI, 2008, , 251-327. | 0.0 | 2 |
| 75 | Mercuryâ€™s Surface Composition and Character as Measured by Ground-Based Observations. Space Sciences Series of ISSI, 2008, , 217-249. | 0.0 | 1 |
| 76 | 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 |
| 77 | The contribution of impulsive meteoritic impact vapourization to the Hermean exosphere. Planetary and Space Science, 2007, 55, 1541-1556. | 0.9 | 48 |
| 78 | 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 |
| 79 | Modelling Mercury's magnetosphere and plasma entry through the dayside magnetopause. Planetary and Space Science, 2007, 55, 1557-1568. | 0.9 | 29 |
| 80 | 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 |
| 81 | Mercuryâ€™s Surface Composition and Character as Measured by Ground-Based Observations. Space Science Reviews, 2007, 132, 399-431. | 3.7 | 52 |
| 82 | Processes that Promote and Deplete the Exosphere ofÂMercury. Space Science Reviews, 2007, 132, 433-509. | 3.7 | 121 |
| 83 | The Analyzer of Space Plasmas and Energetic Atoms (ASPERA-3) for the Mars Express Mission. , 2007, , 113-164. | | 2 |
| 84 | Evolution of the proton ring current energy distribution during 21â€“25 April 2001 storm. Journal of Geophysical Research, 2006, 111, . | 3.3 | 32 |
| 85 | 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 |
| 86 | Neutral atom imaging at Mercury. Planetary and Space Science, 2006, 54, 144-152. | 0.9 | 15 |
| 87 | NEUTRAL ATOM EMISSION FROM MERCURY. , 2006, , 37-50. | | 3 |
| 88 | A MISSION CALLED SAPPORO. , 2006, , 241-253. | | 1 |
| 89 | THE DAYSIDE MAGNETOSPHERE OF MERCURY. , 2006, , 29-36. | | 0 |
| 90 | Dayside H+ circulation at Mercury and neutral particle emission. Icarus, 2005, 175, 305-319. | 1.1 | 39 |

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| 91 | Release of neutral sodium atoms from the surface of Mercury induced by meteoroid impacts. Icarus, 2005, 177, 122-128. | 1.1 | 49 |
| 92 | Surface-Exosphere-Magnetosphere System Of Mercury. Space Science Reviews, 2005, 117, 397-443. | 3.7 | 76 |
| 93 | Solar Wind-Induced Atmospheric Erosion at Mars: First Results from ASPERA-3 on Mars Express. Science, 2004, 305, 1933-1936. | 6.0 | 204 |
| 94 | Structure and dynamics of the proton energy density in the inner magnetosphere. Advances in Space Research, 2004, 33, 711-718. | 1.2 | 6 |
| 95 | Ion loss on Mars caused by the Kelvinâ€“Helmholtz instability. Planetary and Space Science, 2004, 52, 1157-1167. | 0.9 | 71 |
| 96 | Modeling the time-evolving plasma in the inner magnetosphere: An empirical approach. Journal of Geophysical Research, 2004, 109, . | 3.3 | 7 |
| 97 | Mapping of the cusp plasma precipitation on the surface of Mercury. Icarus, 2003, 166, 229-237. | 1.1 | 83 |
| 98 | The variability of Mercury's exosphere by particle and radiation induced surface release processes. Icarus, 2003, 166, 238-247. | 1.1 | 59 |
| 99 | Empirical model of proton fluxes in the equatorial inner magnetosphere: 2. Properties and applications. Journal of Geophysical Research, 2003, 108, . | 3.3 | 17 |
| 100 | Statistical distribution of the storm-time proton ring current: POLAR measurements. Geophysical Research Letters, 2002, 29, 30-1-30-4. | 1.5 | 61 |
| 101 | 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 |
| 102 | Empirical model of proton fluxes in the equatorial inner magnetosphere: Development. Journal of Geophysical Research, 2001, 106, 25713-25729. | 3.3 | 43 |
| 103 | Remote sensing of Mercury's magnetospheric plasma environment via energetic neutral atoms imaging. Planetary and Space Science, 2001, 49, 1659-1668. | 0.9 | 16 |
| 104 | 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 |
| 105 | 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 |
| 106 | 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 |
| 107 | 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 |
| 108 | Empirical Model of the Inner Magnetosphere H <sup>+</sup> Pitch Angle Distributions. Geophysical Monograph Series, 0, , 283-291. | 0.1 | 7 |

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| 109 | Participation of women scientists in ESA solar system missions: a historical trend. Advances in Geosciences, 0, 53, 169-182. | 12.0 | 1 |
| 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 |