

# Mario Zannoni

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4547876/publications.pdf>

Version: 2024-02-01

135  
papers

2,525  
citations

236925

25  
h-index

214800

47  
g-index

136  
all docs

136  
docs citations

136  
times ranked

1639  
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of the Identical Rigidity Dependence of He, C, and O Cosmic Rays at High Rigidities by the Alpha Magnetic Spectrometer on the International Space Station. <i>Physical Review Letters</i> , 2017, 119, 251101.	7.8	204
2	Towards Understanding the Origin of Cosmic-Ray Positrons. <i>Physical Review Letters</i> , 2019, 122, 041102.	7.8	174
3	Observation of New Properties of Secondary Cosmic Rays Lithium, Beryllium, and Boron by the Alpha Magnetic Spectrometer on the International Space Station. <i>Physical Review Letters</i> , 2018, 120, 021101.	7.8	172
4	The Alpha Magnetic Spectrometer (AMS) on the international space station: Part II "Results from the first seven years. <i>Physics Reports</i> , 2021, 894, 1-116.	25.6	160
5	Towards Understanding the Origin of Cosmic-Ray Electrons. <i>Physical Review Letters</i> , 2019, 122, 101101.	7.8	109
6	Exploring cosmic origins with CORE: Survey requirements and mission design. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 014-014.	5.4	98
7	Observation of Fine Time Structures in the Cosmic Proton and Helium Fluxes with the Alpha Magnetic Spectrometer on the International Space Station. <i>Physical Review Letters</i> , 2018, 121, 051101.	7.8	98
8	Exploring cosmic origins with CORE: Inflation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 016-016.	5.4	75
9	Exploring cosmic origins with CORE: Cosmological parameters. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 017-017.	5.4	73
10	Precision Measurement of Cosmic-Ray Nitrogen and its Primary and Secondary Components with the Alpha Magnetic Spectrometer on the International Space Station. <i>Physical Review Letters</i> , 2018, 121, 051103.	7.8	68
11	The Contribution of the Unresolved Extragalactic Radio Sources to the Brightness Temperature of the Sky. <i>Astrophysical Journal</i> , 2008, 682, 223-230.	4.5	64
12	Updated Design of the CMB Polarization Experiment Satellite LiteBIRD. <i>Journal of Low Temperature Physics</i> , 2020, 199, 1107-1117.	1.4	64
13	Observation of Complex Time Structures in the Cosmic-Ray Electron and Positron Fluxes with the Alpha Magnetic Spectrometer on the International Space Station. <i>Physical Review Letters</i> , 2018, 121, 051102.	7.8	62
14	Properties of Neon, Magnesium, and Silicon Primary Cosmic Rays Results from the Alpha Magnetic Spectrometer. <i>Physical Review Letters</i> , 2020, 124, 211102.	7.8	58
15	QUBIC: The QU bolometric interferometer for cosmology. <i>Astroparticle Physics</i> , 2011, 34, 705-716.	4.3	47
16	Properties of Iron Primary Cosmic Rays: Results from the Alpha Magnetic Spectrometer. <i>Physical Review Letters</i> , 2021, 126, 041104.	7.8	46
17	Exploring cosmic origins with CORE: $B$ -mode component separation. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 023-023.	5.4	44
18	Properties of Cosmic Helium Isotopes Measured by the Alpha Magnetic Spectrometer. <i>Physical Review Letters</i> , 2019, 123, 181102.	7.8	40

#	ARTICLE	IF	CITATIONS
19	TRIS. I. Absolute Measurements of the Sky Brightness Temperature at 0.6, 0.82, and 2.5 GHz. <i>Astrophysical Journal</i> , 2008, 688, 12-23.	4.5	39
20	The Large-Scale Polarization Explorer (LSPE). <i>Proceedings of SPIE</i> , 2012, , .	0.8	38
21	TRIS. II. Search for CMB Spectral Distortions at 0.60, 0.82, and 2.5 GHz. <i>Astrophysical Journal</i> , 2008, 688, 24-31.	4.5	33
22	On the forwardâ€backwardâ€time approach for Monte Carlo solution of Parker's transport equation: Oneâ€dimensional case. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 3920-3930.	2.4	31
23	Exploring cosmic origins with CORE: Gravitational lensing of the CMB. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 018-018.	5.4	29
24	The Sky Polarization Observatory. <i>New Astronomy</i> , 2004, 9, 297-327.	1.8	28
25	The large scale polarization explorer (LSPE) for CMB measurements: performance forecast. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 008.	5.4	27
26	Periodicities in the Daily Proton Fluxes from 2011 to 2019 Measured by the Alpha Magnetic Spectrometer on the International Space Station from 1 to 100â€GV. <i>Physical Review Letters</i> , 2021, 127, 271102.	7.8	27
27	Exploring cosmic origins with CORE: The instrument. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 015-015.	5.4	25
28	TRIS. III. The Diffuse Galactic Radio Emission at $\hat{\gamma} = +42^\circ$ . <i>Astrophysical Journal</i> , 2008, 688, 32-42.	4.5	21
29	Small Aperture Telescopes for the Simons Observatory. <i>Journal of Low Temperature Physics</i> , 2020, 200, 461-471.	1.4	21
30	The BRAIN CMB polarization experiment. <i>New Astronomy Reviews</i> , 2007, 51, 256-259.	12.8	20
31	Exploring cosmic origins with CORE: Extragalactic sources in cosmic microwave background maps. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 020-020.	5.4	20
32	QUBIC I: Overview and science program. <i>Journal of Cosmology and Astroparticle Physics</i> , 2022, 2022, 034.	5.4	20
33	Properties of Heavy Secondary Fluorine Cosmic Rays: Results from the Alpha Magnetic Spectrometer. <i>Physical Review Letters</i> , 2021, 126, 081102.	7.8	19
34	Concept design of the LiteBIRD satellite for CMB B-mode polarization. , 2018, , .		19
35	Exploring cosmic origins with CORE: Effects of observer peculiar motion. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 021-021.	5.4	18
36	Properties of a New Group of Cosmic Nuclei: Results from the Alpha Magnetic Spectrometer on Sodium, Aluminum, and Nitrogen. <i>Physical Review Letters</i> , 2021, 127, 021101.	7.8	18

#	ARTICLE	IF	CITATIONS
37	Efficient differential Fourier-transform spectrometer for precision Sunyaev-Zelâ€™dovich effect measurements. <i>Astronomy and Astrophysics</i> , 2014, 565, A125.	5.1	17
38	Exploring cosmic origins with CORE: Cluster science. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 019-019.	5.4	17
39	An iterative destriping technique for diffuse background polarization data. <i>Astronomy and Astrophysics</i> , 2003, 401, 1215-1222.	5.1	17
40	W-band prototype of platelet feed-horn array for CMB polarisation measurements. <i>Journal of Instrumentation</i> , 2011, 6, P06009-P06009.	1.2	16
41	Progress Report on the Large-Scale Polarization Explorer. <i>Journal of Low Temperature Physics</i> , 2020, 200, 374-383.	1.4	16
42	QUBIC: the Q&U Bolometric Interferometer for Cosmology. <i>Journal of Low Temperature Physics</i> , 2012, 167, 872-878.	1.4	15
43	QUBIC: Exploring the Primordial Universe with the Q&U Bolometric Interferometer. <i>Universe</i> , 2019, 5, 42.	2.5	15
44	Properties of Daily Helium Fluxes. <i>Physical Review Letters</i> , 2022, 128, .	7.8	15
45	Exploring cosmic origins with CORE: Mitigation of systematic effects. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 022-022.	5.4	14
46	A coherent polarimeter array for the Large Scale Polarization Explorer (LSPE) balloon experiment. <i>Proceedings of SPIE</i> , 2012, , .	0.8	13
47	The Simons Observatory: metamaterial microwave absorber and its cryogenic applications. <i>Applied Optics</i> , 2021, 60, 864.	1.8	13
48	Intensity and polarization of the atmospheric emission at millimetric wavelengths at Dome Concordia. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 423, 1293-1299.	4.4	12
49	The Simons Observatory Large Aperture Telescope Receiver. <i>Astrophysical Journal, Supplement Series</i> , 2021, 256, 23.	7.7	11
50	A template of atmospheric O <sub>2</sub> circularly polarized emission for cosmic microwave background experiments. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 414, 3272-3280.	4.4	10
51	QUBIC IV: Performance of TES bolometers and readout electronics. <i>Journal of Cosmology and Astroparticle Physics</i> , 2022, 2022, 037.	5.4	10
52	QUBIC: A Fizeau Interferometer Targeting Primordial B-Modes. <i>Journal of Low Temperature Physics</i> , 2016, 184, 739-745.	1.4	9
53	In-flight polarization angle calibration for LiteBIRD: blind challenge and cosmological implications. <i>Journal of Cosmology and Astroparticle Physics</i> , 2022, 2022, 039.	5.4	9
54	QUBIC VIII: Optical design and performance. <i>Journal of Cosmology and Astroparticle Physics</i> , 2022, 2022, 041.	5.4	9

#	ARTICLE	IF	CITATIONS
55	QUBIC II: Spectral polarimetry with bolometric interferometry. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 035.	5.4	9
56	QUBIC: The Q & U Bolometric Interferometer for Cosmology. Journal of Low Temperature Physics, 2020, 199, 482-490.	1.4	8
57	QUBIC V: Cryogenic system design and performance. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 038.	5.4	8
58	QUBIC VI: Cryogenic half wave plate rotator, design and performance. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 039.	5.4	8
59	CMB observations: improvements of the performance of correlation radiometers by signal modulation and synchronous detection. New Astronomy, 2002, 7, 125-134.	1.8	7
60	The STRIP instrument of the Large Scale Polarization Explorer: microwave eyes to map the Galactic polarized foregrounds. , 2018, , .		7
61	Precision CMB Polarization from Dome-C: the BRAIN experiment. EAS Publications Series, 2005, 14, 87-92.	0.3	6
62	TES Bolometer Arrays for the QUBIC B-Mode CMB Experiment. Journal of Low Temperature Physics, 2020, 199, 955-961.	1.4	6
63	QUBIC: the Q and U bolometric interferometer for cosmology. , 2018, , .		6
64	QUBIC VII: The feedhorn-switch system of the technological demonstrator. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 040.	5.4	6
65	The SPORt experiment. AIP Conference Proceedings, 2002, , .	0.4	5
66	The BaR-SPORt experiment. AIP Conference Proceedings, 2002, , .	0.4	5
67	A chemically etched corrugated feedhorn array for D-band CMB observations. Experimental Astronomy, 2021, 51, 249-272.	3.7	5
68	Thermal Vacuum Cold Target for the Metop SG MicroWave Imager. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 10348-10356.	4.9	5
69	Thermal architecture for the QUBIC cryogenic receiver. , 2018, , .		5
70	SPORt: A project for radio polarimetry from the International Space Station. AIP Conference Proceedings, 2000, , .	0.4	4
71	Dual output polarimeter devoted to the study of the Cosmic Microwave Background. , 2003, 4843, 336.		4
72	The long duration cryogenic system of the OLIMPO balloonborne experiment: Design and in-flight performance. Cryogenics, 2020, 110, 103129.	1.7	4

#	ARTICLE	IF	CITATIONS
73	Permittivity and permeability of epoxy-magnetite powder composites at microwave frequencies. Journal of Applied Physics, 2020, 127, 045102.	2.5	4
74	QUBIC: Using NbSi TESs with a Bolometric Interferometer to Characterize the Polarization of the CMB. Journal of Low Temperature Physics, 2020, 200, 363-373.	1.4	4
75	Performance of NbSi transition-edge sensors readout with a 128 MUX factor for the QUBIC experiment. , 2018, , .		4
76	SPOrt: an experiment aimed at measuring the large-scale cosmic microwave background polarization. , 2003, 4843, 305.		3
77	High stability and sensitivity correlation polarimeters for CMB polarization measurements. , 2004, , .		3
78	Superconducting Planar Devices for Cosmology. , 2009, , .		3
79	Design and Verification of a Q-Band Test Source for UAV-Based Radiation Pattern Measurements. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 9366-9370.	4.7	3
80	Simulations and performance of the QUBIC optical beam combiner. , 2018, , .		3
81	TRIS EXPERIMENT: a search for spectral distortions in the CMB spectrum close to 1 GHz. , 1999, , .		2
82	The Milano polarization experiment devoted to the study of the cosmic microwave background. AIP Conference Proceedings, 2002, , .	0.4	2
83	Mechanical design considerations for a 3m class fast pointing telescope. , 2010, , .		2
84	Path to the stars: the evolution of the species in the hunting to the GRBs. , 2010, , .		2
85	Measurement accuracy of S-parameters in W band at cryogenic temperature. , 2010, , .		2
86	W-Band Superconducting Planar Orthogonal Mode Transducer Characterisation. Journal of Low Temperature Physics, 2012, 167, 491-496.	1.4	2
87	Latest Progress on the QUBIC Instrument. Journal of Low Temperature Physics, 2013, 176, 698.	1.4	2
88	A cryogenic set-up for accurate characterization of microwave components for astrophysics. , 2013, , .		2
89	Superconducting NbN Coplanar Switch Driven by DC Current for CMB Instruments. Journal of Low Temperature Physics, 2014, 176, 663-669.	1.4	2
90	Millimetric LNAs for astronomy: characterization at cryogenic temperature. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2015, 28, 745-754.	1.9	2

#	ARTICLE	IF	CITATIONS
91	Q-band antenna-feed system for the Large Scale Polarization Explorer balloon experiment. , 2015, , .		2
92	The LSPE-Strip feed horn array. Journal of Instrumentation, 2022, 17, P01029.	1.2	2
93	Total power horn-coupled 150 GHz LEKID array for space applications. Journal of Cosmology and Astroparticle Physics, 2022, 2022, 009.	5.4	2
94	MASTER: A Triple Heterodyne Receiver for Astronomy in the Millimetre and Submillimetre Domain. Publications of the Astronomical Society of Australia, 2002, 19, 323-327.	3.4	1
95	Polarimetry of the Cosmic Microwave Background from the Antarctic Plateau. Publications of the Astronomical Society of Australia, 2002, 19, 313-317.	3.4	1
96	The BaR-SPOrt experiment: The Science. AIP Conference Proceedings, 2002, , .	0.4	1
97	BaR-SPOrt: A technical overview. AIP Conference Proceedings, 2002, , .	0.4	1
98	Thermal design and preliminary performance evaluation of the cooling system for BaR-SPOrt. AIP Conference Proceedings, 2002, , .	0.4	1
99	A destriping technique for SPOrt polarization data. AIP Conference Proceedings, 2002, , .	0.4	1
100	Calibration techniques and devices for correlation radiometers used in polarization measurements. AIP Conference Proceedings, 2002, , .	0.4	1
101	The BaR-SPOrt experiment. , 2003, , .		1
102	Thermal design and performance evaluation of the BaR-SPOrt cryostat. , 2004, 5498, 735.		1
103	Systematic effects induced by a flat isotropic dielectric slab. Applied Optics, 2006, 45, 5168.	2.1	1
104	The CMB spectrum: Perspective of observing spectral distortions. New Astronomy Reviews, 2007, 51, 406-410.	12.8	1
105	A Path to the Stars: The Evolution of the Species. Advances in Astronomy, 2010, 2010, 1-14.	1.1	1
106	A cryogenic set-up for accurate measurements of S-parameters. , 2012, , .		1
107	New RF data on ECCOSORB CR/MF absorber. Proceedings of SPIE, 2014, , .	0.8	1
108	Comparison of cryogenic W band low noise amplifier based on different III-V HEMT foundry process and technologies. Proceedings of SPIE, 2014, , .	0.8	1

#	ARTICLE	IF	CITATIONS
109	The BaR-SPOrt experiment: measuring the CMBP E-mode power spectrum from Dome C. EAS Publications Series, 2005, 14, 81-86.	0.3	1
110	Effects of thermal fluctuations in the SPOrt experiment. Astronomy and Astrophysics, 2004, 428, 781-791.	5.1	1
111	Search for Cosmic Microwave Background polarization. , 1999, , .		0
112	The long wavelength spectrum of the Cosmic Microwave Background. , 1999, , .		0
113	<title>Ultraviolet Italian Sky Surveyor (LIVISS) on the International Space Station (ISS): study report</title>. , 2000, 4139, 199.		0
114	MASTER: Millimetre and sub-millimetre triple hEterodyne receiver. AIP Conference Proceedings, 2002, , .	0.4	0
115	The Milano polarimeter: An instrument to search for large scale polarization of the cosmic microwave background. AIP Conference Proceedings, 2002, , .	0.4	0
116	Optical properties of dielectrics in the mm range: the case of spurious polarization induced by a vacuum window. , 2004, , .		0
117	BaR-SPOrt: the instrument to be accommodated at Dome C. EAS Publications Series, 2005, 14, 257-262.	0.3	0
118	MASTER: a radiometer for mm and sub-mm observations from the Antarctic Plateau. EAS Publications Series, 2005, 14, 239-244.	0.3	0
119	CMB Polarimetry from the Antarctic Plateau. EAS Publications Series, 2005, 14, 263-268.	0.3	0
120	The Spectral Index of the Galactic Foreground Affecting CMB Measurements. Symposium - International Astronomical Union, 2005, 201, 538-539.	0.1	0
121	Systematic effects induced by flat slabs of isotropic dielectrics: From microwave to millimeter wavelengths. New Astronomy Reviews, 2007, 51, 266-274.	12.8	0
122	Radiometers based on SIS mixers to measure SZ effect from galaxy clusters. New Astronomy Reviews, 2007, 51, 363-367.	12.8	0
123	Experimental Study of an Adding Interferometer at Millimeter Waves. Journal of Infrared, Millimeter, and Terahertz Waves, 2009, 31, 88.	2.2	0
124	Spectroscopic Active Galaxies and Clusters Explorer. , 2009, , .		0
125	Estimators for the performances of the optical combiner of an adding interferometer. , 2010, , .		0
126	The optical design of the QUBIC beam combiner. Proceedings of SPIE, 2012, , .	0.8	0



#	ARTICLE	IF	CITATIONS
127	From an MMIC chip to a working cryogenic low-noise amplifier: a detailed study on packaging. Proceedings of SPIE, 2012, , .	0.8	0
128	A monolithic CMOS automatic biasing system for 40GHz multistage HEMT. , 2013, , .		0
129	Optical design and modelling of the QUBIC instrument, a next-generation quasi-optical bolometric interferometer for cosmology. Proceedings of SPIE, 2016, , .	0.8	0
130	A CMOS application-specified-integrated-circuit for 40 GHz high-electron-mobility-transistors automatic biasing. Review of Scientific Instruments, 2017, 88, 024702.	1.3	0
131	BaR-SPOrt: Balloon-Borne Radiometers for Sky Polarization Observations. Globular Clusters - Guides To Galaxies, 0, , 481-482.	0.1	0
132	THE BRAIN EXPERIMENT. , 2008, , .		0
133	On the detectability of cosmic ray electron spectral features in the microwave/mm-wave range. , 2011, , .		0
134	Optical modelling and analysis of the Q and U bolometric interferometer for cosmology. , 2018, , .		0
135	The Sky Polarization Observatory (SPOrt) Programme. , 0, , 425-426.		0