

Stefano Mastroianni

List of Publications by Year in descending order

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117453

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all docs

113
docs citations

113
times ranked

6271
citing authors

#	ARTICLE	IF	CITATIONS
1	Measurement of the Positive Muon Anomalous Magnetic Moment to 0.46 \hat{A} ppm. Physical Review Letters, 2021, 126, 141801.	2.9	991
2	Light Dark Matter Search with Ionization Signals in XENON1T. Physical Review Letters, 2019, 123, 251801.	2.9	344
3	Excess electronic recoil events in XENON1T. Physical Review D, 2020, 102, .	1.6	302
4	Constraining the Spin-Dependent WIMP-Nucleon Cross Sections with XENON1T. Physical Review Letters, 2019, 122, 141301.	2.9	183
5	Layout and performance of RPCs used in the Argo-YBJ experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 562, 92-96.	0.7	160
6	Projected WIMP sensitivity of the XENONnT dark matter experiment. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 031-031.	1.9	159
7	Search for Light Dark Matter Interactions Enhanced by the Migdal Effect or Bremsstrahlung in XENON1T. Physical Review Letters, 2019, 123, 241803.	2.9	158
8	Measurement of the anomalous precession frequency of the muon in the Fermilab Muon $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle \text{mml:mi} \rangle g \langle / \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \hat{a}^{\prime\prime} \langle / \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle / \text{mml:math} \rangle$ Experiment. Physical Review D, 2021, 103, .	1.6	105
9	Knee of the cosmic hydrogen and helium spectrum below 1 \hat{A} PeV measured by ARGO-YBJ and a Cherenkov telescope of LHAASO. Physical Review D, 2015, 92, .	1.6	94
10	Observation of two-neutrino double electron capture in ^{124}Xe with XENON1T. Nature, 2019, 568, 532-535.	13.7	89
11	IDENTIFICATION OF THE TeV GAMMA-RAY SOURCE ARGO J2031+4157 WITH THE CYGNUS COCOON. Astrophysical Journal, 2014, 790, 152.	1.6	73
12	STUDY OF THE DIFFUSE GAMMA-RAY EMISSION FROM THE GALACTIC PLANE WITH ARGO-YBJ. Astrophysical Journal, 2015, 806, 20.	1.6	69
13	LONG-TERM MONITORING OF THE TeV EMISSION FROM Mrk 421 WITH THE ARGO-YBJ EXPERIMENT. Astrophysical Journal, 2011, 734, 110.	1.6	67
14	TeV GAMMA-RAY SURVEY OF THE NORTHERN SKY USING THE ARGO-YBJ DETECTOR. Astrophysical Journal, 2013, 779, 27.	1.6	64
15	Observation of the cosmic ray moon shadowing effect with the ARGO-YBJ experiment. Physical Review D, 2011, 84, .	1.6	63
16	Medium scale anisotropy in the TeV cosmic ray flux observed by ARGO-YBJ. Physical Review D, 2013, 88, .	1.6	57
17	Proton-air cross section measurement with the ARGO-YBJ cosmic ray experiment. Physical Review D, 2009, 80, .	1.6	56
18	XENON1T dark matter data analysis: Signal and background models and statistical inference. Physical Review D, 2019, 99, .	1.6	56

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19	Magnetic-field measurement and analysis for the Muon μ Experiment at Fermilab. Physical Review A, 2021, 103, .	3.0	52
20	OBSERVATION OF TeV GAMMA RAYS FROM THE CYGNUS REGION WITH THE ARGO-YBJ EXPERIMENT. Astrophysical Journal Letters, 2012, 745, L22.	3.0	51
21	ARGO-YBJ OBSERVATION OF THE LARGE-SCALE COSMIC RAY ANISOTROPY DURING THE SOLAR MINIMUM BETWEEN CYCLES 23 AND 24. Astrophysical Journal, 2015, 809, 90.	1.6	51
22	XENON1T dark matter data analysis: Signal reconstruction, calibration, and event selection. Physical Review D, 2019, 100, .	1.6	51
23	Search for Coherent Elastic Scattering of Solar ν Neutrinos in the XENON1T Dark Matter Experiment. Physical Review Letters, 2021, 126, 091301	2.9	50
24	Temperature effect on RPC performance in the ARGO-YBJ experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 608, 246-250.	0.7	49
25	Light-component spectrum of the primary cosmic rays in the multi-TeV region measured by the ARGO-YBJ experiment. Physical Review D, 2012, 85, .	1.6	49
26	LONG-TERM MONITORING OF MRK 501 FOR ITS VERY HIGH ENERGY γ EMISSION AND A FLARE IN 2011 OCTOBER. Astrophysical Journal, 2012, 758, 2.	1.6	49
27	GAMMA-RAY FLARES FROM Mrk421 IN 2008 OBSERVED WITH THE ARGO-YBJ DETECTOR. Astrophysical Journal Letters, 2010, 714, L208-L212.	3.0	46
28	4.5 YEARS OF MULTI-WAVELENGTH OBSERVATIONS OF MRK 421 DURING THE ARGO-YBJ AND FERMI COMMON OPERATION TIME. Astrophysical Journal, Supplement Series, 2016, 222, 6.	3.0	46
29	Software timing calibration of the ARGO-YBJ detector. Astroparticle Physics, 2009, 30, 287-292.	1.9	40
30	Energy resolution and linearity of XENON1T in the MeV energy range. European Physical Journal C, 2020, 80, 1.	1.4	40
31	Scaler mode technique for the ARGO-YBJ detector. Astroparticle Physics, 2008, 30, 85-95.	1.9	39
32	OBSERVATION OF THE TeV GAMMA-RAY SOURCE MGRO J1908+06 WITH ARGO-YBJ. Astrophysical Journal, 2012, 760, 110.	1.6	38
33	Studies of an array of PbF2 Cherenkov crystals with large-area SiPM readout. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 783, 12-21.	0.7	36
34	Detection of thermal neutrons with the PRISMA-YBJ array in extensive air showers selected by the ARGO-YBJ experiment. Astroparticle Physics, 2016, 81, 49-60.	1.9	36
35	Cosmic ray proton plus helium energy spectrum measured by the ARGO-YBJ experiment in the energy range $3 \times 10^2 - 300 \text{ TeV}$. Physical Review D, 2015, 91, .	1.6	34
36	CRAB NEBULA: FIVE-YEAR OBSERVATION WITH ARGO-YBJ. Astrophysical Journal, 2015, 798, 119.	1.6	33

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37	Beam dynamics corrections to the Run-1 measurement of the muon anomalous magnetic moment at Fermilab. <i>Physical Review Accelerators and Beams</i> , 2021, 24, .	0.6	32
38	Emission of single and few electrons in XENON1T and limits on light dark matter. <i>Physical Review D</i> , 2022, 106, .	1.6	32
39	Energy spectrum of cosmic protons and helium nuclei by a hybrid measurement at 4300 m a.s.l.. <i>Chinese Physics C</i> , 2014, 38, 045001.	1.5	31
40	SEARCH FOR GAMMA RAY BURSTS WITH THE ARGO-YBJ DETECTOR IN SCALER MODE. <i>Astrophysical Journal</i> , 2009, 699, 1281-1287.	1.6	29
41	OBSERVATION OF TeV GAMMA RAYS FROM THE UNIDENTIFIED SOURCE HESS J1841â€“055 WITH THE ARGO-YBJ EXPERIMENT. <i>Astrophysical Journal</i> , 2013, 767, 99.	1.6	25
42	The analog Resistive Plate Chamber detector of the ARGO-YBJ experiment. <i>Astroparticle Physics</i> , 2015, 67, 47-61.	1.9	25
43	MEAN INTERPLANETARY MAGNETIC FIELD MEASUREMENT USING THE ARGO-YBJ EXPERIMENT. <i>Astrophysical Journal</i> , 2011, 729, 113.	1.6	23
44	High-Resolution Synthesizable Digitally-Controlled Delay Lines. <i>IEEE Transactions on Nuclear Science</i> , 2015, 62, 3163-3171.	1.2	23
45	First Results on the Scalar WIMP-Pion Coupling, Using the XENON1T Experiment. <i>Physical Review Letters</i> , 2019, 122, 071301.	2.9	23
46	The trigger system of the ARGO-YBJ experiment. <i>IEEE Transactions on Nuclear Science</i> , 2004, 51, 1835-1839.	1.2	22
47	Measurement of the cosmic ray antiproton/proton flux ratio at TeV energies with the ARGO-YBJ detector. <i>Physical Review D</i> , 2012, 85, .	1.6	22
48	Design and performance of SiPM-based readout of $\langle i \rangle \text{PbF}_2 \langle /i \rangle \langle \text{sub} \rangle 2 \langle /sub \rangle$ crystals for high-rate, precision timing applications. <i>Journal of Instrumentation</i> , 2017, 12, P01009-P01009.	0.5	22
49	Galactic Cosmic-Ray Anisotropy in the Northern Hemisphere from the ARGO-YBJ Experiment during 2008â€“2012. <i>Astrophysical Journal</i> , 2018, 861, 93.	1.6	22
50	Rn^{222} emanation measurements for the XENON1T experiment. <i>European Physical Journal C</i> , 2021, 81, 337.	1.4	22
51	Highlights from the ARGO-YBJ experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2012, 661, S50-S55.	0.7	20
52	ARGO-YBJ constraints on very high energy emission from GRBs. <i>Astroparticle Physics</i> , 2009, 32, 47-52.	1.9	17
53	Calibration of the RPC charge readout in the ARGO-YBJ experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2012, 661, S56-S59.	0.7	17
54	The Measurement of the Anomalous Magnetic Moment of the Muon at Fermilab. <i>Journal of Physical and Chemical Reference Data</i> , 2015, 44, .	1.9	17

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55	The XENON1T data acquisition system. <i>Journal of Instrumentation</i> , 2019, 14, P07016-P07016.	0.5	17
56	Electron beam test of key elements of the laser-based calibration system for the muon $g - 2$ experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2017, 842, 86-91.	0.7	14
57	Observation of the thunderstorm-related ground cosmic ray flux variations by ARGO-YBJ. <i>Physical Review D</i> , 2018, 97, .	1.6	14
58	The laser-based gain monitoring system of the calorimeters in the Muon $g\hat{a}^2$ experiment at Fermilab. <i>Journal of Instrumentation</i> , 2019, 14, P11025-P11025.	0.5	14
59	gSeaGen: The KM3NeT GENIE-based code for neutrino telescopes. <i>Computer Physics Communications</i> , 2020, 256, 107477.	3.0	14
60	Local Station: the data read-out basic unit for the ARGO-YBJ experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004, 518, 549-553.	0.7	13
61	Search for inelastic scattering of WIMP dark matter in XENON1T. <i>Physical Review D</i> , 2021, 103, .	1.6	13
62	Test of candidate light distributors for the muon $g - 2$ experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2015, 788, 43-48.	0.7	12
63	Search for Gamma-Ray Bursts with the ARGO-YBJ Detector in Shower Mode. <i>Astrophysical Journal</i> , 2017, 842, 31.	1.6	12
64	SEARCH FOR GeV GAMMA-RAY BURSTS WITH THE ARGO-YBJ DETECTOR: SUMMARY OF EIGHT YEARS OF OBSERVATIONS. <i>Astrophysical Journal</i> , 2014, 794, 82.	1.6	11
65	ARGO-YBJ data acquisition system. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006, 568, 847-853.	0.7	10
66	Integration of the Analog Readout in the ARGO-YBJ DAQ System. <i>IEEE Transactions on Nuclear Science</i> , 2011, 58, 1838-1844.	1.2	10
67	Performance of the Muon $g\hat{a}^2$ calorimeter and readout systems measured with test beam data. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 945, 162558.	0.7	10
68	Search for Gamma-Ray Emission from the Sun during Solar Minimum with the ARGO-YBJ Experiment. <i>Astrophysical Journal</i> , 2019, 872, 143.	1.6	9
69	The Status of the ARGO Experiment at YBJ. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2007, 166, 96-102.	0.5	8
70	Feasibility of measurements of cosmic ray composition by means of RPC digital read out in ARGO-YBJ. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004, 533, 55-59.	0.7	7
71	The calibration system of the new $g\hat{a}^2$ experiment at Fermilab. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2016, 824, 716-717.	0.7	7
72	EAS age determination from the study of the lateral distribution of charged particles near the shower axis with the ARGO-YBJ experiment. <i>Astroparticle Physics</i> , 2017, 93, 46-55.	1.9	7

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73	The laser control of the muon $g-2$ experiment at Fermilab. Journal of Instrumentation, 2018, 13, T02009-T02009.	0.5	7
74	The Readout Controller for the Calibration System of the Muon $g-2$ Experiment. IEEE Transactions on Nuclear Science, 2018, 65, 1033-1039.	1.2	5
75	The DAQ System for the ARGO-YBJ experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 572, 376-377.	0.7	4
76	Evidence of a geomagnetic effect on extensive air showers detected with the ARGO-YBJ experiment. Physical Review D, 2014, 89, .	1.6	4
77	Calibration of the RPC charge readout in the ARGO-YBJ experiment with the iso-gradient method. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 783, 68-75.	0.7	4
78	Application and modeling of an online distillation method to reduce krypton and argon in XENON1T. Progress of Theoretical and Experimental Physics, 0, , .	1.8	4
79	Sensitivity of ARGO-YBJ to different composition models in the energy range 10 \tilde{A} 500 TeV. Nuclear Physics, Section B, Proceedings Supplements, 2004, 136, 376-383.	0.5	3
80	The RPC charge readout system of the ARGO-YBJ experiment. , 2010, , .		3
81	A time-to-digital converter based on a digitally controlled oscillator. , 2016, , .		3
82	Geant4 simulations of the lead fluoride calorimeter. Nuclear Instruments & Methods in Physics Research B, 2017, 402, 256-262.	0.6	3
83	A Time-to-Digital Converter Based on a Digitally Controlled Oscillator. IEEE Transactions on Nuclear Science, 2017, , 1-1.	1.2	3
84	Intrinsic linearity of bakelite Resistive Plate Chambers operated in streamer mode. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 947, 162746.	0.7	3
85	The trigger supervisor of the ARGO-YBJ detector. IEEE Transactions on Nuclear Science, 2006, 53, 849-853.	1.2	2
86	The Argo YBJ Daq System and the GRID Based Data Transfer. IEEE Transactions on Nuclear Science, 2008, 55, 241-245.	1.2	2
87	Stability and calibration of the analog RPC readout in ARGO-YBJ. , 2011, , .		2
88	Spatial correlations applied to gamma/hadron discrimination in the ARGO-YBJ experiment. Nuclear Physics, Section B, Proceedings Supplements, 2013, 239-240, 250-253.	0.5	2
89	A fully-digital and fully synthetizable TDC for high energy physics experiments. , 2016, , .		2
90	The calorimeter system of the new muon $g-2$ experiment at Fermilab. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 718-720.	0.7	2

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91	Absolute-energy-scale calibration of ARGO-YBJ for light primaries in multi-TeV region with the Moon shadow observation. <i>Astroparticle Physics</i> , 2017, 90, 20-27.	1.9	2
92	The Fermilab Muon g-2 experiment: laser calibration system. <i>Journal of Instrumentation</i> , 2017, 12, C08019-C08019.	0.5	2
93	The monitoring electronics of the laser calibration system in the Muon g-2 experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 936, 372-373.	0.7	2
94	The monitoring system of the ARGO-YBJ data acquisition. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010, 617, 294-295.	0.7	1
95	Early warning for VHE gamma-ray flares with the ARGO-YBJ detector. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 659, 428-433.	0.7	1
96	Radon contribution to single particle counts of the ARGO-YBJ detector. <i>Radiation Measurements</i> , 2014, 68, 42-48.	0.7	1
97	The Laser Control System for a Calibration Facility of a Light-Based Detector. <i>IEEE Transactions on Nuclear Science</i> , 2017, 64, 1179-1184.	1.2	1
98	CALPRO, an unconventional calorimetry approach. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 936, 119-120.	0.7	1
99	Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. <i>IEEE Transactions on Nuclear Science</i> , 2020, 67, 832-839.	1.2	1
100	The trigger supervisor of the ARGO-YBJ detector. , 2005, , .		0
101	Online software time calibration for a continuous air shower array. , 2012, , .		0
102	The analog detector of the ARGO-YBJ experiment. , 2013, , .		0
103	High-resolution synthesizable digitally-controlled delay lines. , 2014, , .		0
104	Performance of a high-frequency synthesizable digitally-controlled oscillator. , 2014, , .		0
105	Online Software Time Calibration for a Continuous Air Shower Array. <i>IEEE Transactions on Nuclear Science</i> , 2014, 61, 511-517.	1.2	0
106	The laser control system for a calibration facility of light detector. , 2016, , .		0
107	CALPRO" a unconventional calorimetry project. <i>Journal of Instrumentation</i> , 2019, 14, C10001-C10001.	0.5	0
108	Design and performance of data acquisition and control system for the Muon g-2 laser calibration. , 2019, , .		0

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109	Muon g-2 calibration system data flow. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 936, 335-336.	0.7	0
110	The calibration system of the Muon g ^μ 2 experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 936, 98-101.	0.7	0
111	An approach to light distribution for the calibration of high energy physics calorimeters. Journal of Instrumentation, 2020, 15, P09014-P09014.	0.5	0