Zhen Cao

List of Publications by Year
in descending order

91 papers	3,544 citations	186265 28 h-index	133252 59 g-index
91 all docs	91 docs citations	91 times ranked	2234 citing authors

#	Article	IF	Citations
1	Absolute calibration of LHAASO WFCTA camera based on LED. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2022, 1021, 165824.	1.6	10
2	Exploring Lorentz Invariance Violation from Ultrahigh-Energy <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î³</mml:mi></mml:math> Rays Observed by LHAASO. Physical Review Letters, 2022, 128, 051102.	7.8	19
3	LHAASO: A milestone of the cosmic ray research. Chinese Science Bulletin, 2022, 67, 1558-1566.	0.7	2
4	Chapter 1 LHAASO Instruments and Detector technology *. Chinese Physics C, 2022, 46, 030001.	3.7	54
5	Chapter 4 Cosmic-Ray Physics *. Chinese Physics C, 2022, 46, 030004.	3.7	4
6	Observation of the Crab Nebula with LHAASO-KM2A âˆ’ a performance study *. Chinese Physics C, 2021, 45, 025002.	3.7	67
7	Geometrical reconstruction of fluorescence events observed by the LHAASO experiment *. Chinese Physics C, 2021, 45, 045101.	3.7	1
8	Ultrahigh-energy photons up to 1.4 petaelectronvolts from 12 Î³-ray Galactic sources. Nature, 2021, 594, 33-36.	27.8	262
9	Construction and on-site performance of the LHAASO WFCTA camera. European Physical Journal C, 2021, 81, 1.	3.9	18
10	Petaâ€“electron volt gamma-ray emission from the Crab Nebula. Science, 2021, 373, 425-430.	12.6	86
11	An ultra-high-energy Î³-ray telescope at 4,410 m. Nature Astronomy, 2021, 5, 849-849.	10.1	7
12	Discovery of a New Gamma-Ray Source, LHAASO J0341+5258, with Emission up to 200 TeV. Astrophysical Journal Letters, 2021, 917, L4.	8.3	21
13	Design and Testing of the Front-End Electronics of WCDA in LHAASO. IEEE Transactions on Nuclear Science, 2021, 68, 2257-2267.	2.0	0
14	Performance of LHAASO-WCDA and observation of the Crab Nebula as a standard candle *. Chinese Physics C, 2021, 45, 085002.	3.7	16
15	A dynamic range extension system for LHAASO WCDA-1. Radiation Detection Technology and Methods, 2021, 5, 520-530.	0.8	1
16	EAS Arrays at High Altitudes Start the Era of UHE Î³-ray Astronomy. Universe, 2021, 7, 339.	2.5	4
17	Calibration of the air shower energy scale of the water and air Cherenkov techniques in the LHAASO experiment. Physical Review D, 2021, 104, .	4.7	9
18	Discovery of the Ultrahigh-energy Gamma-Ray Source LHAASO J2108+5157. Astrophysical Journal Letters, 2021, 919, L22.	8.3	28

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19	Line-of-shower trigger method to lower energy threshold for GRB detection using LHAASO-WCDA. Radiation Detection Technology and Methods, 2021, 5, 531.	0.8	1
20	Measurement of the knees of proton and H&He spectra below 1 PeV. Journal of Physics: Conference Series, 2020, 1342, 012009.	0.4	1
21	Studying the Mass Composition of Cosmic Rays with Energies of 1015â€"1017 eV in the PRISMA Project. Bulletin of the Russian Academy of Sciences: Physics, 2019, 83, 632-634.	0.6	3
22	Expected energy spectrum of cosmic ray protons and helium below 4 PeV measured by LHAASO *. Chinese Physics C, 2019, 43, 075001.	3.7	7
23	Measurement of knees of the spectra of heavy nuclei above 10 PeV with LHAASO. EPJ Web of Conferences, 2019, 208, 14002.	0.3	1
24	Response of the environmental thermal neutron flux to earthquakes. Journal of Environmental Radioactivity, 2019, 208-209, 105981.	1.7	11
25	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.	1.6	3
26	A calibration of WFCTA prototype telescopes using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml38" display="inline" overflow="scroll" altimg="si14.gif"><mml:msub><mml:mrow><mml:mi>N</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></m laser. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 877, 278-287.	1.6	3
27	Performance of SiPMs and pre-amplifier for the wide field of view Cherenkov telescope array of LHAASO. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 899, 94-100.	1.6	10
28	SiPM-Based Camera Design and Development for the Image Air Cherenkov Telescope of LHAASO. Springer Proceedings in Physics, 2018, , 17-21.	0.2	3
29	Seasonal and Lunar Month Periods Observed in Natural Neutron Flux at High Altitude. Pure and Applied Geophysics, 2017, 174, 2763-2771.	1.9	17
30	Simulation of the Galactic Cosmic Ray Shadow of the Sun. Chinese Physics Letters, 2017, 34, 129601.	3.3	0
31	SiPM-based Camera Research and Development for the Wide Field of View Cherenkov Telescope Array of LHAASO. , 2017, , .		1
32	Photomultiplier tube selection for the Wide Field of view Cherenkov/fluorescence Telescope Array of the Large High Altitude Air Shower Observatory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 819, 175-181.	1.6	8
33	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.	4.3	36
34	Knee of the cosmic hydrogen and helium spectrum below 1ÂPeV measured by ARGO-YBJ and a Cherenkov telescope of LHAASO. Physical Review D, 2015, 92, .	4.7	94
35	Readout electronics for the Wide Field of view Cherenkov/Fluorescence Telescope Array. Journal of Instrumentation, 2015, 10, P08003-P08003.	1.2	7
36	An optical design of the telescope in the Wide Field of View Cherenkov/Fluorescence Telescope Array. Astroparticle Physics, 2015, 67, 8-17.	4.3	6

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37	The analog Resistive Plate Chamber detector of the ARGO-YBJ experiment. Astroparticle Physics, 2015, 67, 47-61.	4.3	25
38	Front-end electronics and data acquisition system for imaging atmospheric Cherenkov telescopes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 795, 409-417.	1.6	2
39	Simulating a Measurement of the 2nd Knee in the Cosmic Ray Spectrum with an Atmospheric Fluorescence Telescope Tower Array. Scientific World Journal, The, 2014, 2014, 1-6.	2.1	0
40	Energy spectrum of cosmic protons and helium nuclei by a hybrid measurement at 4300 m a.s.l.. Chinese Physics C, 2014, 38, 045001.	3.7	31
41	IDENTIFICATION OF THE TeV GAMMA-RAY SOURCE ARGO J2031+4157 WITH THE CYGNUS COCOON. Astrophysical Journal, 2014, 790, 152.	4.5	73
42	Status of LHAASO updates from ARGO-YBJ. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 742, 95-98.	1.6	25
43	Highlights of the ARGO-YBJ Experiment at 4,300 m a.s.l.. Brazilian Journal of Physics, 2014, 44, 494-503.	1.4	0
44	Multi-wavelength study of MGRO J2019+37. Chinese Physics C, 2014, 38, 085001.	3.7	3
45	The performance of a prototype array of water Cherenkov detectors for the LHAASO project. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 724, 12-19.	1.6	9
46	OBSERVATION OF TeV GAMMA RAYS FROM THE UNIDENTIFIED SOURCE HESS J1841â€"055 WITH THE ARGO-YBJ EXPERIMENT. Astrophysical Journal, 2013, 767, 99.	4.5	25
47	TeV GAMMA-RAY SURVEY OF THE NORTHERN SKY USING THE ARGO-YBJ DETECTOR. Astrophysical Journal, 2013, 779, 27.	4.5	64
48	Medium scale anisotropy in the TeV cosmic ray flux observed by ARGO-YBJ. Physical Review D, 2013, 88, .	4.7	57
49	ARGO-YBJ: A MULTI-PURPOSE EXPERIMENT OPERATION FOR 5 YEARS. International Journal of Modern Physics D, 2013, 22, 1360013.	2.1	0
50	Light-component spectrum of the primary cosmic rays in the multi-TeV region measured by the ARGO-YBJ experiment. Physical Review D, 2012, 85, .	4.7	49
51	OBSERVATION OF THE TeV GAMMA-RAY SOURCE MGRO J1908+06 WITH ARGO-YBJ. Astrophysical Journal, 2012, 760, 110.	4.5	38
52	Measurement of the cosmic ray antiproton/proton flux ratio at TeV energies with the ARGO-YBJ detector. Physical Review D, 2012, 85, .	4.7	22
53	OBSERVATION OF TeV GAMMA RAYS FROM THE CYGNUS REGION WITH THE ARGO-YBJ EXPERIMENT. Astrophysical Journal Letters, 2012, 745, L22.	8.3	51
54	Highlights from the ARGO-YBJ experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2012, 661, S50-S55.	1.6	20

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55	Intraday optical variability of the BL Lacertae object S5 0716+714. Monthly Notices of the Royal Astronomical Society, 2012, 421, 3111-3115.	4.4	14
56	LONG-TERM MONITORING OF MRK 501 FOR ITS VERY HIGH ENERGY Î³ EMISSION AND A FLARE IN 2011 OCTOBER. Astrophysical Journal, 2012, 758, 2.	4.5	49
57	LONG-TERM MONITORING OF THE TeV EMISSION FROM Mrk 421 WITH THE ARGO-YBJ EXPERIMENT. Astrophysical Journal, 2011, 734, 110.	4.5	67
58	MEAN INTERPLANETARY MAGNETIC FIELD MEASUREMENT USING THE ARGO-YBJ EXPERIMENT. Astrophysical Journal, 2011, 729, 113.	4.5	23
59	The long-term color variability of the BL Lac object OQ 530. Astronomy Reports, 2011, 55, 1074-1077.	0.9	1
60	Properties and performance of two wide field of view Cherenkov/fluorescence telescope array prototypes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 629, 57-65.	1.6	35
61	Performance of a prototype water Cherenkov detector for LHAASO project. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2011, 644, 11-17.	1.6	18
62	Cosmic Ray Experiments in the Era of LHC. , 2011, , .		1
63	Observation of the cosmic ray moon shadowing effect with the ARGO-YBJ experiment. Physical Review D, 2011, 84, .	4.7	63
64	Geometry and optics calibration of WFCTA prototype telescopes using star light. Chinese Physics C, 2011, 35, 478-482.	3.7	3
65	THE ARGO-YBJ EXPERIMENT PROGRESSES AND FUTURE EXTENSION. International Journal of Modern Physics D, 2011, 20, 1713-1721.	2.1	12
66	The Correlated Multi-color Optical Variations of BL Lac Object S5 0716+714. Publications of the Astronomical Society of Australia, 2010, 27, 296-301.	3.4	9
67	The long-term optical behavior of BL Lac object S5 0716+714. Science China: Physics, Mechanics and Astronomy, 2010, 53, 1370-1374.	5.1	4
68	Multi-band optical variability of BL Lac object OQ 530. Research in Astronomy and Astrophysics, 2010, 10, 653-662.	1.7	5
69	Testing Lorentz invariance with the ultrahigh energy cosmic ray spectrum. Physical Review D, 2009, 79, .	4.7	37
70	Simulation of the cosmic ray tau neutrino telescope (CRTNT) experiment. Journal of Physics G: Nuclear and Particle Physics, 2009, 36, 075201.	3.6	5
71	The present status of the Telescope Array experiment. Nuclear Physics, Section B, Proceedings Supplements, 2009, 190, 26-31.	0.4	5
72	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.	1.6	49

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73	Proton-air cross section measurement with the ARGO-YBJ cosmic ray experiment. Physical Review D, 2009, 80, .	4.7	56
74	First Observation of the Greisen-Zatsepin-Kuzmin Suppression. Physical Review Letters, 2008, 100, 101101.	7.8	568
75	Stress-driven buckling patterns in spheroidal core/shell structures. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 19132-19135.	7.1	207
76	Search for GRB counterparts using the ARGO-YBJ experiment in shower mode. , 2008, , .		0
77	GMF model dependence of correlations between BL Lacs and ultra high energy cosmic rays. Astroparticle Physics, 2007, 28, 82-88.	4.3	2
78	The Status of the ARGO Experiment at YBJ. Nuclear Physics, Section B, Proceedings Supplements, 2007, 166, 96-102.	0.4	8
79	The Cosmic Ray Tau Neutrino Telescope (CRTNT) project -tau neutrino detection using fluorescence/Cerenkov light detectors. Nuclear Physics, Section B, Proceedings Supplements, 2006, 151, 287-290.	0.4	2
80	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.	1.6	160
81	Ultra high energy Î½Ï„detection with a cosmic ray tau neutrino telescope using fluorescence/Cerenkov light technique. Journal of Physics G: Nuclear and Particle Physics, 2005, 31, 571-582.	3.6	25
82	A Study of the Composition of Ultraâ€"Highâ€Energy Cosmic Rays Using the Highâ€Resolution Flyâ€™s Eye. Astrophysical Journal, 2005, 622, 910-926.	4.5	170
83	Study of Small-Scale Anisotropy of Ultra-High-Energy Cosmic Rays Observed in Stereo by the High Resolution Fly's Eye Detector. Astrophysical Journal, 2004, 610, L73-L76.	4.5	79
84	A search for arrival direction clustering in the HiRes-I monocular data above 1019.5 eV. Astroparticle Physics, 2004, 22, 139-149.	4.3	18
85	Measurement of the Flux of Ultrahigh Energy Cosmic Rays from Monocular Observations by the High Resolution Flyâ€™s Eye Experiment. Physical Review Letters, 2004, 92, 151101.	7.8	233
86	Measurement of the Cosmicâ€Ray Energy Spectrum and Composition from 1017to 1018.3eV Using a Hybrid Technique. Astrophysical Journal, 2001, 557, 686-699.	4.5	173
87	A measurement of the average longitudinal development profile of cosmic ray air showers between 1017 and 1018 eV. Astroparticle Physics, 2001, 16, 1-11.	4.3	43
88	Cosmic-ray double-coreÎ³-family events at ultrahigh energies. Physical Review D, 1997, 56, 7361-7375.	4.7	10
89	SIGNAL OF QUARK SUBSTRUCTURE IN HADRONIC INTERACTIONS AT SMALL SCATTERING ANGLES. Modern Physics Letters A, 1995, 10, 267-272.	1.2	2
90	Quark compositeness, new physics, and ultrahigh-energy cosmic-ray double-core Î³-family events. Physical Review Letters, 1994, 72, 1794-1797.	7.8	7

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91	Search for steady emission of 10-TeV gamma rays from the Crab Nebula, Cygnus X-3, and Hercules X-1 using the Tibet air shower array. Physical Review Letters, 1992, 69, 2468-2471.	7.8	66