

Vitor de souza

List of Publications by Year in descending order

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255
papers

15,456
citations

30070

54
h-index

17592

121
g-index

258
all docs

258
docs citations

258
times ranked

10681
citing authors

#	ARTICLE	IF	CITATIONS
1	Multi-messenger Observations of a Binary Neutron Star Merger [*] . Astrophysical Journal Letters, 2017, 848, L12.	8.3	2,805
2	Properties and performance of the prototype instrument for the Pierre Auger Observatory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 523, 50-95.	1.6	647
3	Correlation of the Highest-Energy Cosmic Rays with Nearby Extragalactic Objects. Science, 2007, 318, 938-943.	12.6	647
4	Design concepts for the Cherenkov Telescope Array CTA: an advanced facility for ground-based high-energy gamma-ray astronomy. Experimental Astronomy, 2011, 32, 193-316.	3.7	640
5	Introducing the CTA concept. Astroparticle Physics, 2013, 43, 3-18.	4.3	504
6	Observation of the Suppression of the Flux of Cosmic Rays above 4×10^{19} eV. Physical Review Letters, 2008, 101, 061101.	7.8	500
7	The Pierre Auger Cosmic Ray Observatory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 798, 172-213.	1.6	442
8	Measurement of the Depth of Maximum of Extensive Air Showers above 10^{18} eV. Physical Review Letters, 2010, 104, 091101.	7.8	429
9	Measurement of the energy spectrum of cosmic rays above 10 ¹⁸ eV using the Pierre Auger Observatory. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 685, 239-246.	4.1	357
10	Correlation of the highest-energy cosmic rays with the positions of nearby active galactic nuclei. Astroparticle Physics, 2008, 29, 188-204.	4.3	305
11	The fluorescence detector of the Pierre Auger Observatory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 620, 227-251.	1.6	275
12	Update on the correlation of the highest energy cosmic rays with nearby extragalactic matter. Astroparticle Physics, 2010, 34, 314-326.	4.3	270
13	Depth of maximum of air-shower profiles at the Pierre Auger Observatory. I. Measurements at energies above $1 < 10^{19}$ eV. Physical Review D, 2014, 90, .	4.7	266
14	Observation of a large-scale anisotropy in the arrival directions of cosmic rays above 8×10^{18} eV. Science, 2017, 357, 1266-1270.	12.6	261
15	Depth of maximum of air-shower profiles at the Pierre Auger Observatory. II. Composition implications. Physical Review D, 2014, 90, .	4.7	213
16	Measurement of the Proton-Air Cross Section at $\sqrt{s} = 57$ TeV at the Pierre Auger Observatory. Physical Review Letters, 2012, 109, 062002.	7.8	212
17	Combined fit of spectrum and composition data as measured by the Pierre Auger Observatory. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 038-038.	5.4	191
18	An Indication of Anisotropy in Arrival Directions of Ultra-high-energy Cosmic Rays through Comparison to the Flux Pattern of Extragalactic Gamma-Ray Sources [*] . Astrophysical Journal Letters, 2018, 853, L29.	8.3	165

#	ARTICLE	IF	CITATIONS
19	Kneelike Structure in the Spectrum of the Heavy Component of Cosmic Rays Observed with KASCADE-Grande. <i>Physical Review Letters</i> , 2011, 107, 171104.	7.8	163
20	KASCADE-Grande measurements of energy spectra for elemental groups of cosmic rays. <i>Astroparticle Physics</i> , 2013, 47, 54-66.	4.3	163
21	Upper limit on the cosmic-ray photon flux above 1019eV using the surface detector of the Pierre Auger Observatory. <i>Astroparticle Physics</i> , 2008, 29, 243-256.	4.3	161
22	Testing Hadronic Interactions at Ultrahigh Energies with Air Showers Measured by the Pierre Auger Observatory. <i>Physical Review Letters</i> , 2016, 117, 192001.	7.8	154
23	Muons in air showers at the Pierre Auger Observatory: Mean number in highly inclined events. <i>Physical Review D</i> , 2015, 91, .	4.7	152
24	Trigger and aperture of the surface detector array of the Pierre Auger Observatory. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010, 613, 29-39.	1.6	151
25	The spectrum of high-energy cosmic rays measured with KASCADE-Grande. <i>Astroparticle Physics</i> , 2012, 36, 183-194.	4.3	148
26	The KASCADE-Grande experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010, 620, 202-216.	1.6	147
27	SEARCHES FOR ANISOTROPIES IN THE ARRIVAL DIRECTIONS OF THE HIGHEST ENERGY COSMIC RAYS DETECTED BY THE PIERRE AUGER OBSERVATORY. <i>Astrophysical Journal</i> , 2015, 804, 15.	4.5	146
28	Upper Limit on the Diffuse Flux of Ultrahigh Energy Tau Neutrinos from the Pierre Auger Observatory. <i>Physical Review Letters</i> , 2008, 100, 211101.	7.8	141
29	Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory. <i>Astrophysical Journal Letters</i> , 2017, 850, L35.	8.3	135
30	Improved limit to the diffuse flux of ultrahigh energy neutrinos from the Pierre Auger Observatory. <i>Physical Review D</i> , 2015, 91, .	4.7	125
31	Upper limit on the cosmic-ray photon fraction at EeV energies from the Pierre Auger Observatory. <i>Astroparticle Physics</i> , 2009, 31, 399-406.	4.3	117
32	Limit on the diffuse flux of ultrahigh energy tau neutrinos with the surface detector of the Pierre Auger Observatory. <i>Physical Review D</i> , 2009, 79, .	4.7	99
33	Measurement of the cosmic-ray energy spectrum above 2.5×10^{18} eV using the Pierre Auger Observatory. <i>Physical Review D</i> , 2020, 102, .	4.7	98
34	Ankle-like feature in the energy spectrum of light elements of cosmic rays observed with KASCADE-Grande. <i>Physical Review D</i> , 2013, 87, .	4.7	96
35	Antennas for the detection of radio emission pulses from cosmic-ray induced air showers at the Pierre Auger Observatory. <i>Journal of Instrumentation</i> , 2012, 7, P10011-P10011.	1.2	95
36	Measurement of the Radiation Energy in the Radio Signal of Extensive Air Showers as a Universal Estimator of Cosmic-Ray Energy. <i>Physical Review Letters</i> , 2016, 116, 241101.	7.8	91

#	ARTICLE	IF	CITATIONS
55	SEARCH FOR POINT-LIKE SOURCES OF ULTRA-HIGH ENERGY NEUTRINOS AT THE PIERRE AUGER OBSERVATORY AND IMPROVED LIMIT ON THE DIFFUSE FLUX OF TAU NEUTRINOS. <i>Astrophysical Journal Letters</i> , 2012, 755, L4.	8.3	55
56	The exposure of the hybrid detector of the Pierre Auger Observatory. <i>Astroparticle Physics</i> , 2011, 34, 368-381.	4.3	54
57	Advanced functionality for radio analysis in the Offline software framework of the Pierre Auger Observatory. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 635, 92-102.	1.6	52
58	Anisotropy studies around the galactic centre at EeV energies with the Auger Observatory. <i>Astroparticle Physics</i> , 2007, 27, 244-253.	4.3	51
59	Search for ultrahigh energy neutrinos in highly inclined events at the Pierre Auger Observatory. <i>Physical Review D</i> , 2011, 84, .	4.7	51
60	Reconstruction of inclined air showers detected with the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 019-019.	5.4	49
61	LARGE SCALE DISTRIBUTION OF ULTRA HIGH ENERGY COSMIC RAYS DETECTED AT THE PIERRE AUGER OBSERVATORY WITH ZENITH ANGLES UP TO 80°. <i>Astrophysical Journal</i> , 2015, 802, 111.	4.5	49
62	Search for photons with energies above 10^{18} eV using the hybrid detector of the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 009-009.	5.4	49
63	LARGE-SCALE DISTRIBUTION OF ARRIVAL DIRECTIONS OF COSMIC RAYS DETECTED ABOVE 10^{18} eV AT THE PIERRE AUGER OBSERVATORY. <i>Astrophysical Journal, Supplement Series</i> , 2012, 203, 34.	7.7	44
64	The energy spectrum of cosmic rays beyond the turn-down around 10^{17} eV as measured with the surface detector of the Pierre Auger Observatory. <i>European Physical Journal C</i> , 2021, 81, 1.	3.9	44
65	Atmospheric effects on extensive air showers observed with the surface detector of the Pierre Auger observatory. <i>Astroparticle Physics</i> , 2009, 32, 89-99.	4.3	43
66	Experimental evidence for the sensitivity of the air-shower radio signal to the longitudinal shower development. <i>Physical Review D</i> , 2012, 85, .	4.7	43
67	The wavefront of the radio signal emitted by cosmic ray air showers. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 025-025.	5.4	42
68	Probing the evolution of the EAS muon content in the atmosphere with KASCADE-Grande. <i>Astroparticle Physics</i> , 2017, 95, 25-43.	4.3	42
69	The KASCADE-Grande energy spectrum of cosmic rays and the role of hadronic interaction models. <i>Advances in Space Research</i> , 2014, 53, 1456-1469.	2.6	40
70	Ultrahigh Energy Neutrinos at the Pierre Auger Observatory. <i>Advances in High Energy Physics</i> , 2013, 2013, 1-18.	1.1	39
71	Cosmic-Ray Anisotropies in Right Ascension Measured by the Pierre Auger Observatory. <i>Astrophysical Journal</i> , 2020, 891, 142.	4.5	39
72	Ultrahigh-energy neutrino follow-up of gravitational wave events GW150914 and GW151226 with the Pierre Auger Observatory. <i>Physical Review D</i> , 2016, 94, .	4.7	38

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73	Prototype muon detectors for the AMIGA component of the Pierre Auger Observatory. <i>Journal of Instrumentation</i> , 2016, 11, P02012-P02012.	1.2	38
74	Direct measurement of the muonic content of extensive air showers between 2×10^{17} and 2×10^{18} eV at the Pierre Auger Observatory. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	36
75	Monte Carlo studies for the optimisation of the Cherenkov Telescope Array layout. <i>Astroparticle Physics</i> , 2019, 111, 35-53.	4.3	35
76	Measurement of the cosmic ray energy spectrum using hybrid events of the Pierre Auger Observatory. <i>European Physical Journal Plus</i> , 2012, 127, 1.	2.6	34
77	CENTAURUS A: THE EXTRAGALACTIC SOURCE OF COSMIC RAYS WITH ENERGIES ABOVE THE KNEE. <i>Astrophysical Journal</i> , 2012, 746, 72.	4.5	34
78	Bounds on the density of sources of ultra-high energy cosmic rays from the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 009-009.	5.4	34
79	Measurement of the Fluctuations in the Number of Muons in Extensive Air Showers with the Pierre Auger Observatory. <i>Physical Review Letters</i> , 2021, 126, 152002.	7.8	34
80	Mass composition working group report. <i>EPJ Web of Conferences</i> , 2013, 53, 01006.	0.3	33
81	Search for signatures of magnetically-induced alignment in the arrival directions measured by the Pierre Auger Observatory. <i>Astroparticle Physics</i> , 2012, 35, 354-361.	4.3	32
82	A comparison of the cosmic-ray energy scales of Tunka-133 and KASCADE-Grande via their radio extensions Tunka-Rex and LOPES. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2016, 763, 179-185.	4.1	32
83	Improved limits on Lorentz invariance violation from astrophysical gamma-ray sources. <i>Physical Review D</i> , 2019, 99, .	4.7	32
84	ULTRA-HIGH-ENERGY COSMIC RAYS FROM CENTAURUS A: JET INTERACTION WITH GASEOUS SHELLS. <i>Astrophysical Journal Letters</i> , 2010, 720, L155-L158.	8.3	31
85	Search for correlations between the arrival directions of IceCube neutrino events and ultrahigh-energy cosmic rays detected by the Pierre Auger Observatory and the Telescope Array. <i>Journal of Cosmology and Astroparticle Physics</i> , 2016, 2016, 037-037.	5.4	31
86	Observation of inclined EeV air showers with the radio detector of the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2018, 2018, 026-026.	5.4	30
87	A SEARCH FOR POINT SOURCES OF EeV PHOTONS. <i>Astrophysical Journal</i> , 2014, 789, 160.	4.5	29
88	Frequency spectra of cosmic ray air shower radio emission measured with LOPES. <i>Astronomy and Astrophysics</i> , 2008, 488, 807-817.	5.1	27
89	Muon production height studies with the air shower experiment KASCADE-Grande. <i>Astroparticle Physics</i> , 2011, 34, 476-485.	4.3	27
90	A SEARCH FOR POINT SOURCES OF EeV NEUTRONS. <i>Astrophysical Journal</i> , 2012, 760, 148.	4.5	27

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91	Interpretation of the depths of maximum of extensive air showers measured by the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 026-026.	5.4	27
92	Improved absolute calibration of LOPES measurements and its impact on the comparison with REAS 3.11 and CoREAS simulations. <i>Astroparticle Physics</i> , 2016, 75, 72-74.	4.3	27
93	Lorentz Invariance Violation Tests in Astroparticle Physics. <i>Symmetry</i> , 2020, 12, 1232.	2.2	25
94	The effect of the geomagnetic field on cosmic ray energy estimates and large scale anisotropy searches on data from the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 022-022.	5.4	24
95	The rapid atmospheric monitoring system of the Pierre Auger Observatory. <i>Journal of Instrumentation</i> , 2012, 7, P09001-P09001.	1.2	24
96	Techniques for measuring aerosol attenuation using the Central Laser Facility at the Pierre Auger Observatory. <i>Journal of Instrumentation</i> , 2013, 8, P04009-P04009.	1.2	24
97	The LOPES experiment—Recent results, status and perspectives. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2012, 662, S72-S79.	1.6	23
98	The KASCADE Cosmic-ray Data Centre KCDC: granting open access to astroparticle physics research data. <i>European Physical Journal C</i> , 2018, 78, 1.	3.9	22
99	A test of the hadronic interaction model EPOS with air shower data. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2009, 36, 035201.	3.6	21
100	Azimuthal asymmetry in the risetime of the surface detector signals of the Pierre Auger Observatory. <i>Physical Review D</i> , 2016, 93, .	4.7	21
101	A Targeted Search for Point Sources of EeV Photons with the Pierre Auger Observatory. <i>Astrophysical Journal Letters</i> , 2017, 837, L25.	8.3	21
102	Calibration of the logarithmic-periodic dipole antenna (LPDA) radio stations at the Pierre Auger Observatory using an octocopter. <i>Journal of Instrumentation</i> , 2017, 12, T10005-T10005.	1.2	21
103	Limits on the Lorentz Invariance Violation from UHECR Astrophysics. <i>Astrophysical Journal</i> , 2018, 853, 23.	4.5	21
104	A Search for Photons with Energies Above 2×10^{17} eV Using Hybrid Data from the Low-Energy Extensions of the Pierre Auger Observatory. <i>Astrophysical Journal</i> , 2022, 933, 125.	4.5	21
105	Measurement of the cosmic ray spectrum above 4×10^{18} eV using inclined events detected with the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2015, 2015, 049-049.	5.4	20
106	Nanosecond-level time synchronization of autonomous radio detector stations for extensive air showers. <i>Journal of Instrumentation</i> , 2016, 11, P01018-P01018.	1.2	20
107	Data-driven estimation of the invisible energy of cosmic ray showers with the Pierre Auger Observatory. <i>Physical Review D</i> , 2019, 100, .	4.7	20
108	Reconstruction of events recorded with the surface detector of the Pierre Auger Observatory. <i>Journal of Instrumentation</i> , 2020, 15, P10021-P10021.	1.2	20

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109	Direction identification in radio images of cosmic-ray air showers detected with LOPES and KASCADE. <i>Astronomy and Astrophysics</i> , 2008, 487, 781-788.	5.1	19
110	On noise treatment in radio measurements of cosmic ray air showers. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2012, 662, S238-S241.	1.6	19
111	Limits on point-like sources of ultra-high-energy neutrinos with the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 004-004.	5.4	18
112	Thunderstorm observations by air-shower radio antenna arrays. <i>Advances in Space Research</i> , 2011, 48, 1295-1303.	2.6	17
113	An upper limit on the cosmic-ray luminosity of individual sources from gamma-ray observations. <i>Journal of Cosmology and Astroparticle Physics</i> , 2013, 2013, 023-023. Lateral distributions of EAS muons ($\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \text{Tj ETQq0.0.0 rgBT /Overlock 10 T}$)	5.4	17
114		4.3	17
115	$\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \text{altimg="si110.gif"} \text{overflow="scroll"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msup} \rangle \langle \text{m} \rangle$. <i>Astroparticle Physics</i> , 2015, 65, 55-63. Searching for dark matter in the Galactic halo with a wide field of view TeV gamma-ray observatory in the Southern Hemisphere. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 061-061.	5.4	17
116	The Pierre Auger Observatory scaler mode for the study of solar activity modulation of galactic cosmic rays. <i>Journal of Instrumentation</i> , 2011, 6, P01003-P01003.	1.2	16
117	The Lateral Trigger Probability function for the Ultra-High Energy Cosmic Ray showers detected by the Pierre Auger Observatory. <i>Astroparticle Physics</i> , 2011, 35, 266-276.	4.3	16
118	Muon counting using silicon photomultipliers in the AMIGA detector of the Pierre Auger observatory. <i>Journal of Instrumentation</i> , 2017, 12, P03002-P03002.	1.2	16
119	Deep-learning based reconstruction of the shower maximum X_{max} using the water-Cherenkov detectors of the Pierre Auger Observatory. <i>Journal of Instrumentation</i> , 2021, 16, P07019.	1.2	16
120	LOPES-3D: An antenna array for full signal detection of air-shower radio emission. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2012, 696, 100-109.	1.6	15
121	Comparing LOPES measurements of air-shower radio emission with REAS 3.11 and CoREAS simulations. <i>Astroparticle Physics</i> , 2013, 50-52, 76-91.	4.3	15
122	Search for ultrarelativistic magnetic monopoles with the Pierre Auger observatory. <i>Physical Review D</i> , 2016, 94, .	4.7	15
123	A TARGETED SEARCH FOR POINT SOURCES OF EeV NEUTRONS. <i>Astrophysical Journal Letters</i> , 2014, 789, L34.	8.3	14
124	Multi-resolution anisotropy studies of ultrahigh-energy cosmic rays detected at the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2017, 2017, 026-026.	5.4	14
125	The cosmic ray energy spectrum in the range 10^{16} – 10^{18} eV measured by KASCADE-Grande. <i>Astrophysics and Space Sciences Transactions</i> , 2011, 7, 229-234.	1.0	13
126	Design, upgrade and characterization of the silicon photomultiplier front-end for the AMIGA detector at the Pierre Auger Observatory. <i>Journal of Instrumentation</i> , 2021, 16, P01026-P01026.	1.2	13

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127	A Search for Ultra-high-energy Neutrinos from TXS 0506+056 Using the Pierre Auger Observatory. <i>Astrophysical Journal</i> , 2020, 902, 105.	4.5	13
128	Search for patterns by combining cosmic-ray energy and arrival directions at the Pierre Auger Observatory. <i>European Physical Journal C</i> , 2015, 75, 269.	3.9	12
129	Depth of maximum of air-shower profiles: testing the compatibility of measurements performed at the Pierre Auger Observatory and the Telescope Array experiment. <i>EPJ Web of Conferences</i> , 2019, 210, 01009.	0.3	12
130	Search for Large-scale Anisotropy in the Arrival Direction of Cosmic Rays with KASCADE-Grande. <i>Astrophysical Journal</i> , 2019, 870, 91.	4.5	12
131	Final results of the LOPES radio interferometer for cosmic-ray air showers. <i>European Physical Journal C</i> , 2021, 81, 1.	3.9	12
132	Revisiting the distance to the nearest ultrahigh energy cosmic ray source: Effects of extragalactic magnetic fields. <i>Physical Review D</i> , 2020, 102, .	4.7	11
133	Extraction of the muon signals recorded with the surface detector of the Pierre Auger Observatory using recurrent neural networks. <i>Journal of Instrumentation</i> , 2021, 16, P07016.	1.2	11
134	Restoring the azimuthal symmetry of lateral distributions of charged particles in the range of the KASCADE-Grande experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 638, 147-156.	1.6	10
135	Upper limits on the total cosmic-ray luminosity of individual sources. <i>Journal of Cosmology and Astroparticle Physics</i> , 2014, 2014, 049-049.	5.4	10
136	A limit on the diffuse gamma-rays measured with KASCADE-Grande. <i>Journal of Physics: Conference Series</i> , 2015, 632, 012013.	0.4	10
137	Measurement of the average shape of longitudinal profiles of cosmic-ray air showers at the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2019, 2019, 018-018.	5.4	10
138	Search for magnetically-induced signatures in the arrival directions of ultra-high-energy cosmic rays measured at the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2020, 2020, 017-017.	5.4	10
139	Longitudinal development of extensive air showers: Hybrid code SENECA and full Monte Carlo. <i>Astroparticle Physics</i> , 2005, 23, 463-476.	4.3	9
140	KASCADE-Grande: An overview and first results. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2008, 588, 162-165.	1.6	9
141	Time structure of the EAS electron and muon components measured by the KASCADE-Grande experiment. <i>Astroparticle Physics</i> , 2008, 29, 317-330.	4.3	9
142	Anisotropy and chemical composition of ultra-high energy cosmic rays using arrival directions measured by the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2011, 2011, 022-022.	5.4	9
143	Cosmic rays: the spectrum and chemical composition from 10^{10} to 10^{20} eV. <i>Journal of Cosmology and Astroparticle Physics</i> , 2015, 2015, 042-042.	5.4	9
144	MARTA: a high-energy cosmic-ray detector concept for high-accuracy muon measurement. <i>European Physical Journal C</i> , 2018, 78, 1.	3.9	9

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145	A 3-Year Sample of Almost 1,600 Elves Recorded Above South America by the Pierre Auger Cosmic-Ray Observatory. <i>Earth and Space Science</i> , 2020, 7, e2019EA000582.	2.6	9
146	Large-scale and multipolar anisotropies of cosmic rays detected at the Pierre Auger Observatory with energies above 4 EeV. , 2021, , .		9
147	Air shower measurements with the LOPES radio antenna array. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 604, S1-S8.	1.6	8
148	Publisher's Note: Search for ultrahigh energy neutrinos in highly inclined events at the Pierre Auger Observatory [<i>Phys. Rev. D</i> 84, 122005 (2011)]. <i>Physical Review D</i> , 2012, 85, .	4.7	8
149	Identifying clouds over the Pierre Auger Observatory using infrared satellite data. <i>Astroparticle Physics</i> , 2013, 50-52, 92-101.	4.3	8
150	Cosmic ray measurements with LOPES: Status and recent results. , 2013, , .		8
151	Status of the technologies for the production of the Cherenkov Telescope Array (CTA) mirrors. , 2013, , .		8
152	Impact of atmospheric effects on the energy reconstruction of air showers observed by the surface detectors of the Pierre Auger Observatory. <i>Journal of Instrumentation</i> , 2017, 12, P02006-P02006.	1.2	8
153	Acceptance of fluorescence detectors and its implication in energy spectrum inference at the highest energies. <i>Physical Review D</i> , 2005, 72, .	4.7	7
154	Radio emission of energetic cosmic ray air showers: Polarization measurements with LOPES. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 604, S81-S84.	1.6	7
155	Comparison of the moments of the distribution predicted by different cosmic ray shower simulation models. <i>Astroparticle Physics</i> , 2013, 47, 18-30.	4.3	7
156	The cosmic ray spectrum and composition measured by KASCADE-Grande between 1016 eV and 1018 eV. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2014, 256-257, 149-160.	0.4	7
157	Cosmic ray energy reconstruction from the S(500) observable recorded in the KASCADE-Grande air shower experiment. <i>Astroparticle Physics</i> , 2016, 77, 21-31.	4.3	7
158	Spectral calibration of the fluorescence telescopes of the Pierre Auger Observatory. <i>Astroparticle Physics</i> , 2017, 95, 44-56.	4.3	7
159	Manufacturing the Schmidt corrector lens for the Pierre Auger Observatory. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004, 522, 360-370.	1.6	6
160	ACTIVE GALACTIC NUCLEI: SOURCES FOR ULTRA HIGH ENERGY COSMIC RAYS. <i>International Journal of Modern Physics D</i> , 2009, 18, 1577-1581.	2.1	6
161	Analysis of inclined showers measured with LOPES. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 604, S9-S12.	1.6	6
162	The Constant Intensity Cut Method applied to the KASCADE-Grande muon data. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2009, 196, 183-186.	0.4	6

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163	New measurements of cosmic ray air showers with the digital radio interferometer LOPES. <i>Astrophysics and Space Sciences Transactions</i> , 2011, 7, 303-306.	1.0	6
164	A search for anisotropy in the arrival directions of ultra high energy cosmic rays recorded at the Pierre Auger Observatory. <i>Journal of Cosmology and Astroparticle Physics</i> , 2012, 2012, 040-040.	5.4	6
165	Reconstructing energy and Xmax of cosmic ray air showers using the radio lateral distribution measured with LOPES. <i>AIP Conference Proceedings</i> , 2013, , .	0.4	6
166	Origin of atmospheric aerosols at the Pierre Auger Observatory using studies of air mass trajectories in South America. <i>Atmospheric Research</i> , 2014, 149, 120-135.	4.1	6
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