## Karen Salomé Caballero Mora

List of Publications by Year in descending order

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109 papers

8,161 citations

50276 46 h-index 89 g-index

112 all docs

112 docs citations

times ranked

112

4898 citing authors

#	Article	IF	CITATIONS
1	Correlation of the Highest-Energy Cosmic Rays with Nearby Extragalactic Objects. Science, 2007, 318, 938-943.	12.6	647
2	Observation of the Suppression of the Flux of Cosmic Rays above <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mn>4</mml:mn><mml:mo>×</mml:mo><mml:msup><mml:mn>10</mml:mn><mml:mr 061101.="" 101,="" 2008,="" above<mml:math<="" air="" depth="" extensive="" letters,="" maximum="" measurement="" of="" physical="" review="" showers="" td="" the=""><td>n&gt;79<td>ıl:<u>500</u> </td></td></mml:mr></mml:msup></mml:math>	n>79 <td>ıl:<u>500</u> </td>	ıl: <u>500</u>
3	xmlns:mml="http://www.w3.org/1998/Math/MathML"  display="inline"> <mml:msup><mml:mn>10</mml:mn><mml:mn>18</mml:mn></mml:msup> <mml:mtext>   Physical Review Letters. 2010. 104. 091101.</mml:mtext>	:/7.8 :/mml:mte	xt>29mml:mt
4	Correlation of the highest-energy cosmic rays with the positions of nearby active galactic nuclei. Astroparticle Physics, 2008, 29, 188-204.	4.3	305
5	Extended gamma-ray sources around pulsars constrain the origin of the positron flux at Earth. Science, 2017, 358, 911-914.	12.6	303
6	An absence of neutrinos associated with cosmic-ray acceleration in $\hat{I}^3$ -ray bursts. Nature, 2012, 484, 351-354.	27.8	272
7	Update on the correlation of the highest energy cosmic rays with nearby extragalactic matter. Astroparticle Physics, 2010, 34, 314-326.	4.3	270
8	Observation of a large-scale anisotropy in the arrival directions of cosmic rays above 8 $\tilde{A}-10$ <sup>18</sup> eV. Science, 2017, 357, 1266-1270.	12.6	261
9	The design and performance of IceCube DeepCore. Astroparticle Physics, 2012, 35, 615-624.	4.3	222
10	Measurement of the Proton-Air Cross Section at <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msqrt><mml:mi>s</mml:mi></mml:msqrt><mml:mo mathvariant="bold">=</mml:mo><mml:mn>57</mml:mn><mml:mtext> </mml:mtext><mml:mtext> </mml:mtext>?mml:mtext&gt;?mml:mtext?mml:mtext?mml:mtext?mml:mtext?mml:mtext?mml:mtext?mml:mtext?mml:mtext?mml:mtext?mml:mtext?mml</mml:math>	7.8 nml:mtext	212 :> < mml:mi > T
11	The 2HWC HAWC Observatory Gamma-Ray Catalog. Astrophysical Journal, 2017, 843, 40.	4.5	200
12	An Indication of Anisotropy in Arrival Directions of Ultra-high-energy Cosmic Rays through Comparison to the Flux Pattern of Extragalactic Gamma-Ray Sources <sup>*</sup> . Astrophysical Journal Letters, 2018, 853, L29.	8.3	165
13	Upper limit on the cosmic-ray photon flux above 1019eV using the surface detector of the Pierre Auger Observatory. Astroparticle Physics, 2008, 29, 243-256.	4.3	161
14	Observation of the Crab Nebula with the HAWC Gamma-Ray Observatory. Astrophysical Journal, 2017, 843, 39.	4.5	159
15	Testing Hadronic Interactions at Ultrahigh Energies with Air Showers Measured by the Pierre Auger Observatory. Physical Review Letters, 2016, 117, 192001.	7.8	154
16	SEARCHES FOR ANISOTROPIES IN THE ARRIVAL DIRECTIONS OF THE HIGHEST ENERGY COSMIC RAYS DETECTED BY THE PIERRE AUGER OBSERVATORY. Astrophysical Journal, 2015, 804, 15.	4.5	146
17	Multiple Galactic Sources with Emission Above 56ÂTeV Detected by HAWC. Physical Review Letters, 2020, 124, 021102.	7.8	143
18	Upper Limit on the Diffuse Flux of Ultrahigh Energy Tau Neutrinos from the Pierre Auger Observatory. Physical Review Letters, 2008, 100, 211101.	7.8	141

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19	IceCube sensitivity for low-energy neutrinos from nearby supernovae. Astronomy and Astrophysics, 2011, 535, A109.	5.1	121
20	Upper limit on the cosmic-ray photon fraction at EeV energies from the Pierre Auger Observatory. Astroparticle Physics, 2009, 31, 399-406.	4.3	117
21	OBSERVATION OF ANISOTROPY IN THE GALACTIC COSMIC-RAY ARRIVAL DIRECTIONS AT 400 TeV WITH ICECUBE. Astrophysical Journal, 2012, 746, 33.	4.5	115
22	OBSERVATION OF ANISOTROPY IN THE ARRIVAL DIRECTIONS OF GALACTIC COSMIC RAYS AT MULTIPLE ANGULAR SCALES WITH IceCube. Astrophysical Journal, 2011, 740, 16.	4.5	103
23	Limit on the diffuse flux of ultrahigh energy tau neutrinos with the surface detector of the Pierre Auger Observatory. Physical Review D, 2009, 79, .	4.7	99
24	3HWC: The Third HAWC Catalog of Very-high-energy Gamma-Ray Sources. Astrophysical Journal, 2020, 905, 76.	4.5	99
25	Measurement of the Crab Nebula Spectrum Past 100 TeV with HAWC. Astrophysical Journal, 2019, 881, 134.	4.5	98
26	Antennas for the detection of radio emission pulses from cosmic-ray induced air showers at the Pierre Auger Observatory. Journal of Instrumentation, 2012, 7, P10011-P10011.	1.2	95
27	IceCube sensitivity for low-energy neutrinos from nearby supernovae ( <i>Corrigendum</i> ). Astronomy and Astrophysics, 2014, 563, C1.	5.1	94
28	Measurement of the Radiation Energy in the Radio Signal of Extensive Air Showers as a Universal Estimator of Cosmic-Ray Energy. Physical Review Letters, 2016, 116, 241101.	7.8	91
29	An upper limit to the photon fraction in cosmic rays above 1019eV from the Pierre Auger Observatory. Astroparticle Physics, 2007, 27, 155-168.	4.3	90
30	Search for a diffuse flux of astrophysical muon neutrinos with the IceCube 40-string detector. Physical Review D, 2011, 84, .	4.7	87
31	Features of the Energy Spectrum of Cosmic Rays above <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mn>2.5</mml:mn><mml:mo>×</mml:mo><mml:msup><mml:mn>10</mml:mn><mml: 121106.<="" 125,="" 2020.="" auger="" letters.="" observatory.="" physical="" pierre="" review="" td="" the="" using=""><td>m<mark>7;8</mark>18<td>mml:mn&gt;</td></td></mml:></mml:msup></mml:math>	m <mark>7;8</mark> 18 <td>mml:mn&gt;</td>	mml:mn>
32	Large-scale Cosmic-Ray Anisotropies above 4 EeV Measured by the Pierre Auger Observatory. Astrophysical Journal, 2018, 868, 4.	4.5	77
33	Very-high-energy particle acceleration powered by the jets of the microquasar SS 433. Nature, 2018, 562, 82-85.	27.8	75
34	Search for first harmonic modulation in the right ascension distribution of cosmic rays detected at the Pierre Auger Observatory. Astroparticle Physics, 2011, 34, 627-639.	4.3	73
35	SEARCHES FOR LARGE-SCALE ANISOTROPY IN THE ARRIVAL DIRECTIONS OF COSMIC RAYS DETECTED ABOVE ENERGY OF $10 < \sup 19 < \sup 20$ AT THE PIERRE AUGER OBSERVATORY AND THE TELESCOPE ARRAY. Astrophysical Journal, 2014, 794, 172.	4.5	72
36	OBSERVATION OF SMALL-SCALE ANISOTROPY IN THE ARRIVAL DIRECTION DISTRIBUTION OF TeV COSMIC RAYS WITH HAWC. Astrophysical Journal, 2014, 796, 108.	4.5	71

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37	Dark Matter Limits from Dwarf Spheroidal Galaxies with the HAWC Gamma-Ray Observatory. Astrophysical Journal, 2018, 853, 154.	4.5	69
38	CONSTRAINTS ON THE ORIGIN OF COSMIC RAYS ABOVE 10 <sup>18 &lt;  sup&gt; eV FROM LARGE-SCALE ANISOTROPY SEARCHES IN DATA OF THE PIERRE AUGER OBSERVATORY. Astrophysical Journal Letters, 2013, 762, L13.</sup>	8.3	67
39	Multiyear search for dark matter annihilations in the Sun with the AMANDA-II and IceCube detectors. Physical Review D, 2012, 85, .	4.7	66
40	Description of atmospheric conditions at the Pierre Auger Observatory using the Global Data Assimilation System (GDAS). Astroparticle Physics, 2012, 35, 591-607.	4.3	66
41	HAWC observations of the acceleration of very-high-energy cosmic rays in the Cygnus Cocoon. Nature Astronomy, 2021, 5, 465-471.	10.1	62
42	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. Astrophysical Journal Letters, 2012, 755, L4.	8.3	55
43	The exposure of the hybrid detector of the Pierre Auger Observatory. Astroparticle Physics, 2011, 34, 368-381.	4.3	54
44	Anisotropy studies around the galactic centre at EeV energies with the Auger Observatory. Astroparticle Physics, 2007, 27, 244-253.	4.3	51
45	Search for ultrahigh energy neutrinos in highly inclined events at the Pierre Auger Observatory. Physical Review D, 2011, 84, .	4.7	51
46	LARGE SCALE DISTRIBUTION OF ULTRA HIGH ENERGY COSMIC RAYS DETECTED AT THE PIERRE AUGER OBSERVATORY WITH ZENITH ANGLES UP TO 80°. Astrophysical Journal, 2015, 802, 111.	4.5	49
47	HAWC J2227+610 and Its Association with G106.3+2.7, a New Potential Galactic PeVatron. Astrophysical Journal Letters, 2020, 896, L29.	8.3	48
48	LARGE-SCALE DISTRIBUTION OF ARRIVAL DIRECTIONS OF COSMIC RAYS DETECTED ABOVE 10 <sup>18</sup> eV AT THE PIERRE AUGER OBSERVATORY. Astrophysical Journal, Supplement Series, 2012, 203, 34.	7.7	44
49	The energy spectrum of cosmic rays beyond the turn-down around $\$$ varvec $\{10^{17}\}$ \$ÂeV as measured with the surface detector of the Pierre Auger Observatory. European Physical Journal C, 2021, 81, 1.	3.9	44
50	Atmospheric effects on extensive air showers observed with the surface detector of the Pierre Auger observatory. Astroparticle Physics, 2009, 32, 89-99.	4.3	43
51	Searching for soft relativistic jets in core-collapse supernovae with the IceCube optical follow-up program. Astronomy and Astrophysics, 2012, 539, A60.	5.1	40
52	Constraints on Lorentz Invariance Violation from HAWC Observations of Gamma Rays above 100ÂTeV. Physical Review Letters, 2020, 124, 131101.	7.8	40
53	Ultrahigh Energy Neutrinos at the Pierre Auger Observatory. Advances in High Energy Physics, 2013, 2013, 1-18.	1.1	39
54	Daily Monitoring of TeV Gamma-Ray Emission from Mrk 421, Mrk 501, and the Crab Nebula with HAWC. Astrophysical Journal, 2017, 841, 100.	4.5	39

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55	Cosmic-Ray Anisotropies in Right Ascension Measured by the Pierre Auger Observatory. Astrophysical Journal, 2020, 891, 142.	4.5	39
56	Prototype muon detectors for the AMIGA component of the Pierre Auger Observatory. Journal of Instrumentation, 2016, 11, P02012-P02012.	1.2	38
57	Cosmic ray composition and energy spectrum from 1–30 PeV using the 40-string configuration of IceTop and IceCube. Astroparticle Physics, 2013, 42, 15-32.	4.3	34
58	Measurement of the Fluctuations in the Number of Muons in Extensive Air Showers with the Pierre Auger Observatory. Physical Review Letters, 2021, 126, 152002.	7.8	34
59	SEARCH FOR TeV GAMMA-RAY EMISSION FROM POINT-LIKE SOURCES IN THE INNER GALACTIC PLANE WITH A PARTIAL CONFIGURATION OF THE HAWC OBSERVATORY. Astrophysical Journal, 2016, 817, 3.	4.5	33
60	Search for signatures of magnetically-induced alignment in the arrival directions measured by the Pierre Auger Observatory. Astroparticle Physics, 2012, 35, 354-361.	4.3	32
61	Evidence that Ultra-high-energy Gamma Rays Are a Universal Feature near Powerful Pulsars. Astrophysical Journal Letters, 2021, 911, L27.	8.3	32
62	SEARCH FOR GAMMA-RAYS FROM THE UNUSUALLY BRIGHT GRB 130427A WITH THE HAWC GAMMA-RAY OBSERVATORY. Astrophysical Journal, 2015, 800, 78.	4.5	30
63	A SEARCH FOR POINT SOURCES OF EeV PHOTONS. Astrophysical Journal, 2014, 789, 160.	4.5	29
64	Search for Very High-energy Gamma Rays from the Northern Fermi Bubble Region with HAWC. Astrophysical Journal, 2017, 842, 85.	4.5	28
65	A SEARCH FOR POINT SOURCES OF EeV NEUTRONS. Astrophysical Journal, 2012, 760, 148.	4.5	27
66	Observation of Anisotropy of TeV Cosmic Rays with Two Years of HAWC. Astrophysical Journal, 2018, 865, 57.	4.5	25
67	The rapid atmospheric monitoring system of the Pierre Auger Observatory. Journal of Instrumentation, 2012, 7, P09001-P09001.	1.2	24
68	Results of a self-triggered prototype system for radio-detection of extensive air showers at the Pierre Auger Observatory. Journal of Instrumentation, 2012, 7, P11023-P11023.	1.2	24
69	Milagro limits and HAWC sensitivity for the rate-density of evaporating Primordial Black Holes. Astroparticle Physics, 2015, 64, 4-12.	4.3	24
70	A Targeted Search for Point Sources of EeV Photons with the Pierre Auger Observatory. Astrophysical Journal Letters, 2017, 837, L25.	8.3	21
71	Calibration of the logarithmic-periodic dipole antenna (LPDA) radio stations at the Pierre Auger Observatory using an octocopter. Journal of Instrumentation, 2017, 12, T10005-T10005.	1.2	21
72	VERITAS and Fermi-LAT Observations of TeV Gamma-Ray Sources Discovered by HAWC in the 2HWC Catalog. Astrophysical Journal, 2018, 866, 24.	4.5	21

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73	A Search for Photons with Energies Above 2 × 10 <sup>17</sup> eV Using Hybrid Data from the Low-Energy Extensions of the Pierre Auger Observatory. Astrophysical Journal, 2022, 933, 125.	4.5	21
74	Nanosecond-level time synchronization of autonomous radio detector stations for extensive air showers. Journal of Instrumentation, 2016, 11, P01018-P01018.	1.2	20
75	Search for ultrahigh-energy tau neutrinos with IceCube. Physical Review D, 2012, 86, .	4.7	19
76	Ultra-violet imaging of the night-time earth by EUSO-Balloon towards space-based ultra-high energy cosmic ray observations. Astroparticle Physics, 2019, 111, 54-71.	4.3	18
77	The Lateral Trigger Probability function for the Ultra-High Energy Cosmic Ray showers detected by the Pierre Auger Observatory. Astroparticle Physics, 2011, 35, 266-276.	4.3	16
78	Muon counting using silicon photomultipliers in the AMIGA detector of the Pierre Auger observatory. Journal of Instrumentation, 2017, 12, P03002-P03002.	1.2	16
79	The HAWC Real-time Flare Monitor for Rapid Detection of Transient Events. Astrophysical Journal, 2017, 843, 116.	4.5	16
80	All-particle cosmic ray energy spectrum measured with 26 IceTop stations. Astroparticle Physics, 2013, 44, 40-58.	4.3	15
81	TeV Emission of Galactic Plane Sources with HAWC and H.E.S.S Astrophysical Journal, 2021, 917, 6.	4.5	15
82	A TARGETED SEARCH FOR POINT SOURCES OF EeV NEUTRONS. Astrophysical Journal Letters, 2014, 789, L34.	8.3	14
83	Spectrum and Morphology of the Very-high-energy Source HAWC J2019+368. Astrophysical Journal, 2021, 911, 143.	4.5	14
84	NEUTRINO ANALYSIS OF THE 2010 SEPTEMBER CRAB NEBULA FLARE AND TIME-INTEGRATED CONSTRAINTS ON NEUTRINO EMISSION FROM THE CRAB USING ICECUBE. Astrophysical Journal, 2012, 745, 45.	4.5	13
85	A Survey of Active Galaxies at TeV Photon Energies with the HAWC Gamma-Ray Observatory. Astrophysical Journal, 2021, 907, 67.	4.5	13
86	A Search for Ultra-high-energy Neutrinos from TXS 0506+056 Using the Pierre Auger Observatory. Astrophysical Journal, 2020, 902, 105.	4.5	13
87	Search for patterns by combining cosmic-ray energy and arrival directions at the Pierre Auger Observatory. European Physical Journal C, 2015, 75, 269.	3.9	12
88	Search for Very-high-energy Emission from Gamma-Ray Bursts Using the First 18 Months of Data from the HAWC Gamma-Ray Observatory. Astrophysical Journal, 2017, 843, 88.	4.5	12
89	SEARCHES FOR PERIODIC NEUTRINO EMISSION FROM BINARY SYSTEMS WITH 22 AND 40 STRINGS OF ICECUBE. Astrophysical Journal, 2012, 748, 118.	4.5	11
90	VAMOS: A pathfinder for the HAWC gamma-ray observatory. Astroparticle Physics, 2015, 62, 125-133.	4.3	11

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91	A 3â€Year Sample of Almost 1,600 Elves Recorded Above South America by the Pierre Auger Cosmicâ€Ray Observatory. Earth and Space Science, 2020, 7, e2019EA000582.	2.6	9
92	Probing the Sea of Cosmic Rays by Measuring Gamma-Ray Emission from Passive Giant Molecular Clouds with HAWC. Astrophysical Journal, 2021, 914, 106.	4.5	9
93	Multimessenger Gamma-Ray and Neutrino Coincidence Alerts Using HAWC and IceCube Subthreshold Data. Astrophysical Journal, 2021, 906, 63.	4.5	9
94	Publisher's Note: Search for ultrahigh energy neutrinos in highly inclined events at the Pierre Auger Observatory [Phys. Rev. D84, 122005 (2011)]. Physical Review D, 2012, 85, .	4.7	8
95	Impact of atmospheric effects on the energy reconstruction of air showers observed by the surface detectors of the Pierre Auger Observatory. Journal of Instrumentation, 2017, 12, P02006-P02006.	1.2	8
96	Long-term Spectra of the Blazars Mrk 421 and Mrk 501 at TeV Energies Seen by HAWC. Astrophysical Journal, 2022, 929, 125.	4.5	8
97	Spectral calibration of the fluorescence telescopes of the Pierre Auger Observatory. Astroparticle Physics, 2017, 95, 44-56.	4.3	7
98	MAGIC and <i>Fermi </i> -LAT gamma-ray results on unassociated HAWC sources. Monthly Notices of the Royal Astronomical Society, 2019, 485, 356-366.	4.4	7
99	Fair Weather Neutron Bursts From Photonuclear Reactions by Extensive Air Shower Core Interactions in the Ground and Implications for Terrestrial Gammaâ€ray Flash Signatures. Geophysical Research Letters, 2021, 48, e2020GL090033.	4.0	7
100	Origin of atmospheric aerosols at the Pierre Auger Observatory using studies of air mass trajectories in South America. Atmospheric Research, 2014, 149, 120-135.	4.1	6
101	HAWC Study of the Ultra-high-energy Spectrum of MGRO J1908+06. Astrophysical Journal, 2022, 928, 116.	4.5	6
102	HAWC and Fermi-LAT Detection of Extended Emission from the Unidentified Source 2HWC J2006+341. Astrophysical Journal Letters, 2020, 903, L14.	8.3	5
103	HAWC Search for High-mass Microquasars. Astrophysical Journal Letters, 2021, 912, L4.	8.3	3
104	HAWC as a Ground-Based Space-Weather Observatory. Solar Physics, 2021, 296, 1.	2.5	2
105	Interplanetary Magnetic Flux Rope Observed at Ground Level by HAWC. Astrophysical Journal, 2020, 905, 73.	4.5	2
106	Constraints on the Emission of Gamma-Rays from M31 with HAWC. Astrophysical Journal, 2020, 893, 16.	<b>4.</b> 5	1
107	Study of Risetime as a function of the distance to the Shower Core in the Surface Detector (SD) of the Pierre Auger Observatory. Journal of Physics: Conference Series, 2017, 866, 012003.	0.4	O
108	Outreach in the era of big data with the Pierre Auger Observatory. Proceedings of the International Astronomical Union, 2019, 15, 428-429.	0.0	0

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109	Probing the Extragalactic Mid-infrared Background with HAWC. Astrophysical Journal, 2022, 933, 223.	4.5	0