

# Marcos Santander

## List of Publications by Year in descending order

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112  
papers

9,425  
citations

47006

47  
h-index

37204

96  
g-index

113  
all docs

113  
docs citations

113  
times ranked

7677  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence for High-Energy Extraterrestrial Neutrinos at the IceCube Detector. <i>Science</i> , 2013, 342, 1242856.	12.6	1,048
2	Observation of High-Energy Astrophysical Neutrinos in Three Years of IceCube Data. <i>Physical Review Letters</i> , 2014, 113, 101101.	7.8	873
3	Multimessenger observations of a flaring blazar coincident with high-energy neutrino IceCube-170922A. <i>Science</i> , 2018, 361, .	12.6	654
4	Neutrino emission from the direction of the blazar TXS 0506+056 prior to the IceCube-170922A alert. <i>Science</i> , 2018, 361, 147-151.	12.6	601
5	First Observation of PeV-Energy Neutrinos with IceCube. <i>Physical Review Letters</i> , 2013, 111, 021103.	7.8	578
6	Search for Dark Matter Annihilations in the Sun with the 79-String IceCube Detector. <i>Physical Review Letters</i> , 2013, 110, 131302.	7.8	235
7	The design and performance of IceCube DeepCore. <i>Astroparticle Physics</i> , 2012, 35, 615-624.	4.3	222
8	Atmospheric and astrophysical neutrinos above 1 $\hat{\text{A}}$ TeV interacting in IceCube. <i>Physical Review D</i> , 2015, 91, .	4.7	209
9	A Multimessenger Picture of the Flaring Blazar TXS 0506+056: Implications for High-energy Neutrino Emission and Cosmic-Ray Acceleration. <i>Astrophysical Journal</i> , 2018, 864, 84.	4.5	184
10	Energy reconstruction methods in the IceCube neutrino telescope. <i>Journal of Instrumentation</i> , 2014, 9, P03009-P03009.	1.2	171
11	IceTop: The surface component of IceCube. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013, 700, 188-220.	1.6	166
12	Measurement of the atmospheric neutrino energy spectrum from 100 $\hat{\text{A}}$ GeV to 400 $\hat{\text{A}}$ TeV with IceCube. <i>Physical Review D</i> , 2011, 83, .	4.7	156
13	Flavor Ratio of Astrophysical Neutrinos above 35 $\hat{\text{A}}$ TeV in IceCube. <i>Physical Review Letters</i> , 2015, 114, 171102.	7.8	156
14	SEARCHES FOR EXTENDED AND POINT-LIKE NEUTRINO SOURCES WITH FOUR YEARS OF ICECUBE DATA. <i>Astrophysical Journal</i> , 2014, 796, 109.	4.5	149
15	Differential limit on the extremely-high-energy cosmic neutrino flux in the presence of astrophysical background from nine years of IceCube data. <i>Physical Review D</i> , 2018, 98, .	4.7	131
16	TIME-INTEGRATED SEARCHES FOR POINT-LIKE SOURCES OF NEUTRINOS WITH THE 40-STRING IceCube DETECTOR. <i>Astrophysical Journal</i> , 2011, 732, 18.	4.5	126
17	SEARCH FOR PROMPT NEUTRINO EMISSION FROM GAMMA-RAY BURSTS WITH ICECUBE. <i>Astrophysical Journal Letters</i> , 2015, 805, L5.	8.3	124
18	Measurement of South Pole ice transparency with the IceCube LED calibration system. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013, 711, 73-89.	1.6	122

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19	IceCube sensitivity for low-energy neutrinos from nearby supernovae. <i>Astronomy and Astrophysics</i> , 2011, 535, A109.	5.1	121
20	MEASUREMENT OF THE ANISOTROPY OF COSMIC-RAY ARRIVAL DIRECTIONS WITH ICECUBE. <i>Astrophysical Journal Letters</i> , 2010, 718, L194-L198.	8.3	119
21	OBSERVATION OF ANISOTROPY IN THE GALACTIC COSMIC-RAY ARRIVAL DIRECTIONS AT 400 TeV WITH ICECUBE. <i>Astrophysical Journal</i> , 2012, 746, 33.	4.5	115
22	Measurement of the cosmic ray energy spectrum with IceTop-73. <i>Physical Review D</i> , 2013, 88, .	4.7	114
23	OBSERVATION OF ANISOTROPY IN THE ARRIVAL DIRECTIONS OF GALACTIC COSMIC RAYS AT MULTIPLE ANGULAR SCALES WITH IceCube. <i>Astrophysical Journal</i> , 2011, 740, 16.	4.5	103
24	IceCube sensitivity for low-energy neutrinos from nearby supernovae ( <i>&lt;i&gt;Corrigendum&lt;/i&gt;</i> ). <i>Astronomy and Astrophysics</i> , 2014, 563, C1.	5.1	94
25	MULTIWAVELENGTH STUDY OF QUIESCENT STATES OF Mrk 421 WITH UNPRECEDENTED HARD X-RAY COVERAGE PROVIDED BY NuSTAR IN 2013. <i>Astrophysical Journal</i> , 2016, 819, 156.	4.5	90
26	Search for a diffuse flux of astrophysical muon neutrinos with the IceCube 40-string detector. <i>Physical Review D</i> , 2011, 84, .	4.7	87
27	Determining neutrino oscillation parameters from atmospheric muon neutrino disappearance with three years of IceCube DeepCore data. <i>Physical Review D</i> , 2015, 91, .	4.7	86
28	Limits on Neutrino Emission from Gamma-Ray Bursts with the 40 String IceCube Detector. <i>Physical Review Letters</i> , 2011, 106, 141101.	7.8	85
29	OBSERVATION OF COSMIC-RAY ANISOTROPY WITH THE ICETOP AIR SHOWER ARRAY. <i>Astrophysical Journal</i> , 2013, 765, 55.	4.5	85
30	SEARCH FOR TIME-INDEPENDENT NEUTRINO EMISSION FROM ASTROPHYSICAL SOURCES WITH 3 yr OF IceCube DATA. <i>Astrophysical Journal</i> , 2013, 779, 132.	4.5	81
31	Search for dark matter from the Galactic halo with the IceCube Neutrino Telescope. <i>Physical Review D</i> , 2011, 84, .	4.7	79
32	Search for a Lorentz-violating sidereal signal with atmospheric neutrinos in IceCube. <i>Physical Review D</i> , 2010, 82, .	4.7	76
33	Search for steady point-like sources in the astrophysical muon neutrino flux with 8 years of IceCube data. <i>European Physical Journal C</i> , 2019, 79, 1.	3.9	75
34	Search for a diffuse flux of astrophysical muon neutrinos with the IceCube 59-string configuration. <i>Physical Review D</i> , 2014, 89, .	4.7	74
35	GAMMA-RAYS FROM THE QUASAR PKS 1441+25: STORY OF AN ESCAPE. <i>Astrophysical Journal Letters</i> , 2015, 815, L22.	8.3	69
36	Constraints on the extremely-high energy cosmic neutrino flux with the IceCube 2008-2009 data. <i>Physical Review D</i> , 2011, 83, .	4.7	68

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37	Multiyear search for dark matter annihilations in the Sun with the AMANDA-II and IceCube detectors. <i>Physical Review D</i> , 2012, 85, .	4.7	66
38	Measurement of the Atmospheric $\nu_{\mu}$ Flux in IceCube. <i>Physical Review Letters</i> , 2013, 110, 151105.	7.8	64
39	Search for neutrinos from decaying dark matter with IceCube. <i>European Physical Journal C</i> , 2018, 78, 831.	3.9	62
40	SEARCHES FOR TIME-DEPENDENT NEUTRINO SOURCES WITH ICECUBE DATA FROM 2008 TO 2012. <i>Astrophysical Journal</i> , 2015, 807, 46.	4.5	56
41	A SEARCH FOR BRIEF OPTICAL FLASHES ASSOCIATED WITH THE SETI TARGET KIC 8462852. <i>Astrophysical Journal Letters</i> , 2016, 818, L33.	8.3	54
42	IceCube search for dark matter annihilation in nearby galaxies and galaxy clusters. <i>Physical Review D</i> , 2013, 88, .	4.7	53
43	Multi-epoch Modeling of TXS 0506+056 and Implications for Long-term High-energy Neutrino Emission. <i>Astrophysical Journal</i> , 2020, 891, 115.	4.5	53
44	Measurement of Atmospheric Neutrino Oscillations with IceCube. <i>Physical Review Letters</i> , 2013, 111, 081801.	7.8	49
45	FIRST <i>NuSTAR</i> OBSERVATIONS OF MRK 501 WITHIN A RADIO TO TeV MULTI-INSTRUMENT CAMPAIGN. <i>Astrophysical Journal</i> , 2015, 812, 65.	4.5	49
46	Multiband variability studies and novel broadband SED modeling of Mrk 501 in 2009. <i>Astronomy and Astrophysics</i> , 2017, 603, A31.	5.1	49
47	The Lidar system of the Pierre Auger Observatory. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2007, 574, 171-184.	1.6	48
48	Probing the origin of cosmic rays with extremely high energy neutrinos using the IceCube Observatory. <i>Physical Review D</i> , 2013, 88, .	4.7	47
49	Searching for soft relativistic jets in core-collapse supernovae with the IceCube optical follow-up program. <i>Astronomy and Astrophysics</i> , 2012, 539, A60.	5.1	40
50	Search for non-relativistic magnetic monopoles with IceCube. <i>European Physical Journal C</i> , 2014, 74, 1.	3.9	39
51	The most powerful flaring activity from the NLSy1 PMN J0948+0022. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 446, 2456-2467.	4.4	38
52	Development of a general analysis and unfolding scheme and its application to measure the energy spectrum of atmospheric neutrinos with IceCube. <i>European Physical Journal C</i> , 2015, 75, 116.	3.9	38
53	Periastron Observations of TeV Gamma-Ray Emission from a Binary System with a 50-year Period. <i>Astrophysical Journal Letters</i> , 2018, 867, L19.	8.3	38
54	TIME-DEPENDENT SEARCHES FOR POINT SOURCES OF NEUTRINOS WITH THE 40-STRING AND 22-STRING CONFIGURATIONS OF ICECUBE. <i>Astrophysical Journal</i> , 2012, 744, 1.	4.5	37

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55	An improved method for measuring muon energy using the truncated mean of $dE/dx$ . Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 703, 190-198.	1.6	36
56	First search for atmospheric and extraterrestrial neutrino-induced cascades with the IceCube detector. Physical Review D, 2011, 84, .	4.7	34
57	Cosmic ray composition and energy spectrum from $1 \times 10^{30}$ PeV using the 40-string configuration of IceTop and IceCube. Astroparticle Physics, 2013, 42, 15-32.	4.3	34
58	Observation of the cosmic-ray shadow of the Moon with IceCube. Physical Review D, 2014, 89, .	4.7	34
59	Searches for small-scale anisotropies from neutrino point sources with three years of IceCube data. Astroparticle Physics, 2015, 66, 39-52.	4.3	34
60	Evidence for Proton Acceleration up to TeV Energies Based on VERITAS and Fermi-LAT Observations of the Cas A SNR. Astrophysical Journal, 2020, 894, 51.	4.5	34
61	VERITAS DETECTION OF $\gamma$ -RAY FLARING ACTIVITY FROM THE BL LAC OBJECT 1ES 1727+502 DURING BRIGHT MOONLIGHT OBSERVATIONS. Astrophysical Journal, 2015, 808, 110.	4.5	33
62	Demonstration of stellar intensity interferometry with the four VERITAS telescopes. Nature Astronomy, 2020, 4, 1164-1169.	10.1	30
63	Search for Galactic PeV gamma rays with the IceCube Neutrino Observatory. Physical Review D, 2013, 87, .	4.7	29
64	Multimessenger search for sources of gravitational waves and high-energy neutrinos: Initial results for LIGO-Virgo and IceCube. Physical Review D, 2014, 90, .	4.7	29
65	INVESTIGATING BROADBAND VARIABILITY OF THE TeV BLAZAR 1ES 1959+650. Astrophysical Journal, 2014, 797, 89.	4.5	29
66	Multipole analysis of IceCube data to search for dark matter accumulated in the Galactic halo. European Physical Journal C, 2015, 75, 1.	3.9	28
67	TeV GAMMA-RAY OBSERVATIONS OF THE GALACTIC CENTER RIDGE BY VERITAS. Astrophysical Journal, 2016, 821, 129.	4.5	27
68	VERITAS Observations of the BL Lac Object TXS 0506+056. Astrophysical Journal Letters, 2018, 861, L20.	8.3	27
69	Search for relativistic magnetic monopoles with the AMANDA-II neutrino telescope. European Physical Journal C, 2010, 69, 361-378.	3.9	26
70	Lateral distribution of muons in IceCube cosmic ray events. Physical Review D, 2013, 87, .	4.7	25
71	Improvement in fast particle track reconstruction with robust statistics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 736, 143-149.	1.6	25
72	UPPER LIMITS FROM FIVE YEARS OF BLAZAR OBSERVATIONS WITH THE VERITAS CHERENKOV TELESCOPES. Astronomical Journal, 2016, 151, 142.	4.7	24

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73	Search for neutrino-induced particle showers with IceCube-40. <i>Physical Review D</i> , 2014, 89, .	4.7	23
74	Constraints on Minute-Scale Transient Astrophysical Neutrino Sources. <i>Physical Review Letters</i> , 2019, 122, 051102.	7.8	23
75	A Decade of Multiwavelength Observations of the TeV Blazar 1ES 1215+303: Extreme Shift of the Synchrotron Peak Frequency and Long-term Optical–Gamma-Ray Flux Increase. <i>Astrophysical Journal</i> , 2020, 891, 170.	4.5	22
76	VERITAS and Fermi-LAT Observations of TeV Gamma-Ray Sources Discovered by HAWC in the 2HWC Catalog. <i>Astrophysical Journal</i> , 2018, 866, 24.	4.5	21
77	The Great Markarian 421 Flare of 2010 February: Multiwavelength Variability and Correlation Studies. <i>Astrophysical Journal</i> , 2020, 890, 97.	4.5	21
78	VERITAS Observations of the Galactic Center Region at Multi-TeV Gamma-Ray Energies. <i>Astrophysical Journal</i> , 2021, 913, 115.	4.5	21
79	Search for relativistic magnetic monopoles with IceCube. <i>Physical Review D</i> , 2013, 87, .	4.7	20
80	Search for ultrahigh-energy tau neutrinos with IceCube. <i>Physical Review D</i> , 2012, 86, .	4.7	19
81	EXCEPTIONALLY BRIGHT TEV FLARES FROM THE BINARY LS I $\hat{A}+61\hat{A}^{\circ}$ 303. <i>Astrophysical Journal Letters</i> , 2016, 817, L7.	8.3	17
82	Multi-messenger emission from the parsec-scale jet of the flat-spectrum radio quasar PKS 1502+106 coincident with high-energy neutrino IceCube-190730A. <i>Journal of Cosmology and Astroparticle Physics</i> , 2021, 2021, 082.	5.4	16
83	All-particle cosmic ray energy spectrum measured with 26 IceTop stations. <i>Astroparticle Physics</i> , 2013, 44, 40-58.	4.3	15
84	Direct measurement of stellar angular diameters by the VERITAS Cherenkov telescopes. <i>Nature Astronomy</i> , 2019, 3, 511-516.	10.1	14
85	NEUTRINO ANALYSIS OF THE 2010 SEPTEMBER CRAB NEBULA FLARE AND TIME-INTEGRATED CONSTRAINTS ON NEUTRINO EMISSION FROM THE CRAB USING ICECUBE. <i>Astrophysical Journal</i> , 2012, 745, 45.	4.5	13
86	A SEARCH FOR PULSATIONS FROM GEMINGA ABOVE 100 GeV WITH VERITAS. <i>Astrophysical Journal</i> , 2015, 800, 61.	4.5	13
87	Very-High-Energy $\hat{I}^3$ -Ray Observations of the Blazar 1ES 2344+514 with VERITAS. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 471, 2117-2123.	4.4	13
88	VERITAS Discovery of VHE Emission from the Radio Galaxy 3C 264: A Multiwavelength Study. <i>Astrophysical Journal</i> , 2020, 896, 41.	4.5	13
89	Background studies for acoustic neutrino detection at the South Pole. <i>Astroparticle Physics</i> , 2012, 35, 312-324.	4.3	12
90	VERITAS and multiwavelength observations of the BL Lacertae object 1ES 1741+196. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 459, 2550-2557.	4.4	12

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91	Development of an analysis to probe the neutrino mass ordering with atmospheric neutrinos using three years of IceCube DeepCore data. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	12
92	SEARCHES FOR PERIODIC NEUTRINO EMISSION FROM BINARY SYSTEMS WITH 22 AND 40 STRINGS OF ICECUBE. <i>Astrophysical Journal</i> , 2012, 748, 118.	4.5	11
93	High-Energy Extragalactic Neutrino Astrophysics. <i>Annual Review of Nuclear and Particle Science</i> , 2022, 72, 365-387.	10.2	11
94	SEARCHES FOR HIGH-ENERGY NEUTRINO EMISSION IN THE GALAXY WITH THE COMBINED ICECUBE-AMANDA DETECTOR. <i>Astrophysical Journal</i> , 2013, 763, 33.	4.5	10
95	The throughput calibration of the VERITAS telescopes. <i>Astronomy and Astrophysics</i> , 2022, 658, A83.	5.1	10
96	Observation of the Gamma-Ray Binary HESS J0632+057 with the H.E.S.S., MAGIC, and VERITAS Telescopes. <i>Astrophysical Journal</i> , 2021, 923, 241.	4.5	10
97	The IceProd framework: Distributed data processing for the IceCube neutrino observatory. <i>Journal of Parallel and Distributed Computing</i> , 2015, 75, 198-211.	4.1	9
98	Variability and Spectral Characteristics of Three Flaring Gamma-Ray Quasars Observed by VERITAS and Fermi-LAT. <i>Astrophysical Journal</i> , 2022, 924, 95.	4.5	9
99	Design and performance of the prototype Schwarzschild-Couder telescope camera. <i>Journal of Astronomical Telescopes, Instruments, and Systems</i> , 2022, 8, .	1.8	9
100	Constraints on high-energy neutrino emission from SN 2008D. <i>Astronomy and Astrophysics</i> , 2011, 527, A28.	5.1	8
101	Using stars to determine the absolute pointing of the fluorescence detector telescopes of the Pierre Auger Observatory. <i>Astroparticle Physics</i> , 2007, 28, 216-231.	4.3	7
102	Detection of the Temporal Variation of the Sun's Cosmic Ray Shadow with the IceCube Detector. <i>Astrophysical Journal</i> , 2019, 872, 133.	4.5	7
103	A Search for Pulsed Very High-energy Gamma-Rays from 13 Young Pulsars in Archival VERITAS Data. <i>Astrophysical Journal</i> , 2019, 876, 95.	4.5	6
104	Velocity independent constraints on spin-dependent DM-nucleon interactions from IceCube and PICO. <i>European Physical Journal C</i> , 2020, 80, 1.	3.9	6
105	Probing the Properties of the Pulsar Wind in the Gamma-Ray Binary HESS J0632+057 with NuSTAR and VERITAS Observations. <i>Astrophysical Journal</i> , 2020, 888, 115.	4.5	6
106	Constraints on neutrino emission from nearby galaxies using the 2MASS redshift survey and IceCube. <i>Journal of Cosmology and Astroparticle Physics</i> , 2020, 2020, 042-042.	5.4	5
107	Discovery of Very-high-energy Emission from RGB J2243+203 and Derivation of Its Redshift Upper Limit. <i>Astrophysical Journal, Supplement Series</i> , 2017, 233, 7.	7.7	4
108	A Search for TeV Gamma-Ray Emission from Pulsar Tails by VERITAS. <i>Astrophysical Journal</i> , 2021, 916, 117.	4.5	4

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109	An Archival Search for Neutron-star Mergers in Gravitational Waves and Very-high-energy Gamma Rays. <i>Astrophysical Journal</i> , 2021, 918, 66.	4.5	4
110	Multiwavelength Observation Campaign of the TeV Gamma-Ray Binary HESS J0632 + 057 with NuSTAR, VERITAS, MDM, and Swift. <i>Astrophysical Journal</i> , 2021, 923, 17.	4.5	4
111	Anisotropy of TeV and PeV cosmic rays with IceCube and IceTop. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013, 725, 85-88.	1.6	3
112	Multimessenger observations of counterparts to IceCube-190331A. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 497, 2553-2561.	4.4	2