Oscar Macias

List of Publications by Year
in descending order

44 papers	2,745 citations	279798 23 h-index	233421 45 g-index
48 all docs	48 docs citations	48 times ranked	2621 citing authors

#	Article	IF	Citations
1	Observation of High-Energy Astrophysical Neutrinos in Three Years of IceCube Data. Physical Review Letters, 2014, 113, 101101.	7.8	873
2	Dark matter and pulsar model constraints from Galactic Center Fermi-LAT gamma-ray observations. Physical Review D, 2013, 88, .	4.7	350
3	Energy reconstruction methods in the IceCube neutrino telescope. Journal of Instrumentation, 2014, 9, P03009-P03009.	1.2	171
4	SEARCHES FOR EXTENDED AND POINT-LIKE NEUTRINO SOURCES WITH FOUR YEARS OF ICECUBE DATA. Astrophysical Journal, 2014, 796, 109.	4.5	149
5	Contribution of cosmic rays interacting with molecular clouds to the Galactic Center gamma-ray excess. Physical Review D, 2014, 89, .	4.7	95
6	Galactic bulge preferred over dark matter for the Galactic centre gamma-ray excess. Nature Astronomy, 2018, 2, 387-392.	10.1	92
7	SEARCH FOR TIME-INDEPENDENT NEUTRINO EMISSION FROM ASTROPHYSICAL SOURCES WITH 3 yr OF IceCube DATA. Astrophysical Journal, 2013, 779, 132.	4.5	81
8	Search for a diffuse flux of astrophysical muon neutrinos with the IceCube 59-string configuration. Physical Review D, 2014, 89, .	4.7	74
9	Green Bank and Effelsberg Radio Telescope Searches for Axion Dark Matter Conversion in Neutron Star Magnetospheres. Physical Review Letters, 2020, 125, 171301.	7.8	57
10	Strong evidence that the galactic bulge is shining in gamma rays. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 042-042.	5.4	56
11	Strong constraints on thermal relic dark matter from Fermi-LAT observations of the Galactic Center. Physical Review D, 2020, 102, .	4.7	54
12	IceCube search for dark matter annihilation in nearby galaxies and galaxy clusters. Physical Review D, 2013, 88, .	4.7	53
13	Probing the origin of cosmic rays with extremely high energy neutrinos using the IceCube Observatory. Physical Review D, 2013, 88, .	4.7	47
14	Foreground mismodeling and the point source explanation of the Fermi Galactic Center excess. Physical Review D, 2020, 102, .	4.7	43
15	Search for non-relativistic magnetic monopoles with IceCube. European Physical Journal C, 2014, 74, 1.	3.9	39
16	Prospects for detecting heavy WIMP dark matter with the Cherenkov Telescope Array: The Wino and Higgsino. Physical Review D, 2021, 103, .	4.7	39
17	Consistency between the luminosity function of resolved millisecond pulsars and the galactic center excess. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 015-015.	5.4	37
18	Probing heavy dark matter decays with multi-messenger astrophysical data. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 003-003.	5.4	34

#	Article	IF	Citations
19	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
20	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
21	The Fermi-LAT gamma-ray excess at the Galactic Center in the singlet-doublet fermion dark matter model. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 048-048.	5.4	28
22	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
23	Search for neutrino-induced particle showers with IceCube-40. Physical Review D, 2014, 89, .	4.7	23
24	Comparing the galactic bulge and galactic disk millisecond pulsars. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 035-035.	5.4	18
25	Millisecond pulsars from accretion-induced collapse as the origin of the Galactic Centre gamma-ray excess signal. Nature Astronomy, 2022, 6, 703-707.	10.1	18
26	Spatial morphology of the secondary emission in the Galactic Center gamma-ray excess. Physical Review D, 2016, 93, .	4.7	16
27	Evidence for a high-energy tail in the gamma-ray spectra of globular clusters. Monthly Notices of the Royal Astronomical Society, 2021, 507, 5161-5176.	4.4	16
28	Evaluating the gamma-ray evidence for self-annihilating dark matter from the Virgo cluster. Physical Review D, 2012, 86, .	4.7	15
29	Cosmological constraints on dark matter annihilation and decay: Cross-correlation analysis of the extragalactic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Î³</mml:mi></mml:mrow></mml:math> -ray background and cosmic shear. Physical Review D, 2016, 94, .	4.7	14
30	Assessing the Impact of Hydrogen Absorption on the Characteristics of the Galactic Center Excess. Astrophysical Journal, 2022, 929, 136.	4.5	14
31	Cosmic ray models of the ridge-like excess of gamma rays in the Galactic Centre. Monthly Notices of the Royal Astronomical Society, 2015, 451, 1833-1847.	4.4	13
32	Inverse Compton emission from millisecond pulsars in the Galactic bulge. Physical Review D, 2019, 99, .	4.7	10
33	Maximum entropy estimation of the Galactic bulge morphology via the VVV Red Clump. Monthly Notices of the Royal Astronomical Society, 2020, 495, 3350-3372.	4.4	10
34	Cherenkov Telescope Array sensitivity to the putative millisecond pulsar population responsible for the Galactic Centre excess. Monthly Notices of the Royal Astronomical Society, 2021, 506, 1741-1760.	4.4	10
35	The IceProd framework: Distributed data processing for the IceCube neutrino observatory. Journal of Parallel and Distributed Computing, 2015, 75, 198-211.	4.1	9
36	Correlation of extragalactic Î³ rays with cosmic matter density distributions from weak gravitational lensing. Physical Review D, 2018, 97, .	4.7	8

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37	Measuring the smearing of the Galactic 511-keV signal: positron propagation or supernova kicks?. Monthly Notices of the Royal Astronomical Society: Letters, 2021, 509, L11-L16.	3.3	8
38	Discovery prospects of dwarf spheroidal galaxies for indirect dark matter searches. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 040-040.	5.4	6
39	Measurement of redshift-dependent cross-correlation of HSC clusters and Fermi Î³-rays. Monthly Notices of the Royal Astronomical Society, 2019, 484, 5256-5266.	4.4	6
40	Constraining dark matter annihilation with HSC low surface brightness galaxies. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 059-059.	5.4	6
41	Cross-correlation of the extragalactic gamma-ray background with the thermal Sunyaev-Zelâ€™dovich effect in the cosmic microwave background. Physical Review D, 2020, 101, .	4.7	3
42	Dark matter and pulsar model constraints from Galactic center Fermi/LAT Î³-ray observations. Proceedings of the International Astronomical Union, 2013, 9, 414-418.	0.0	2
43	Can Cosmic Rays Interacting With Molecular Clouds Explain the Galactic Center Gamma-Ray Excess?. , 2015, , .		0
44	Cosmic Rays Interacting with Molecular Clouds in the Galactic Center. , 2016, , .		0