Olga Mena

List of Publications by Year
in descending order

146 papers	12,137 citations	38742 50 h-index	25787 108 g-index
148 all docs	148 docs citations	148 times ranked	6084 citing authors

#	Article	IF	Citations
1	Cosmology intertwined: A review of the particle physics, astrophysics, and cosmology associated with the cosmological tensions and anomalies. Journal of High Energy Astrophysics, 2022, 34, 49-211.	6.7	350
2	Minimal dark energy: Key to sterile neutrino and Hubble constant tensions?. Physical Review D, 2022, 105, .	4.7	11
3	New tests of dark sector interactions from the full-shape galaxy power spectrum. Physical Review D, 2022, 105, .	4.7	42
4	The full Boltzmann hierarchy for dark matter-massive neutrino interactions. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 066.	5.4	27
5	A Brief Review on Primordial Black Holes as Dark Matter. Frontiers in Astronomy and Space Sciences, 2021, 8, .	2.8	80
6	New cosmological bounds on hot relics: axions and neutrinos. Monthly Notices of the Royal Astronomical Society, 2021, 505, 2703-2711.	4.4	30
7	In the realm of the Hubble tensionâ€"a review of solutions [*]. Classical and Quantum Gravity, 2021, 38, 153001.	4.0	816
8	The galaxy power spectrum take on spatial curvature and cosmic concordance. Physics of the Dark Universe, 2021, 33, 100851.	4.9	76
9	Snowmass2021 - Letter of interest cosmology intertwined II: The hubble constant tension. Astroparticle Physics, 2021, 131, 102605.	4.3	228
10	Cosmology intertwined III: <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si4.svg"><mml:mrow><mml:mi>f</mml:mi><mml:msub><mml:mi>Ïƒ</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:mro and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.svg"><mml:msub><mml:mi>S</mml:mi><mml:mn>8</mml:mn></mml:msub></mml:math>. Astroparticle Physics, 2021, 131, 102604.	4.3	182
11	Most constraining cosmological neutrino mass bounds. Physical Review D, 2021, 104, .	4.7	63
12	Interacting dark energy in a closed universe. Monthly Notices of the Royal Astronomical Society: Letters, 2021, 502, L23-L28.	3.3	37
13	Emergent Dark Energy, neutrinos and cosmological tensions. Physics of the Dark Universe, 2021, 31, 100762.	4.9	30
14	2021-H₀ odyssey: closed, phantom and interacting dark energy cosmologies. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 008.	5.4	35
15	A fake interacting dark energy detection?. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 500, L22-L26.	3.3	23
16	Dynamical dark sectors and neutrino masses and abundances. Physical Review D, 2020, 102, .	4.7	28
17	Soundness of dark energy properties. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 045-045.	5.4	32
18	All-inclusive interacting dark sector cosmologies. Physical Review D, 2020, 101, .	4.7	43

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19	Is it mixed dark matter or neutrino masses?. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 039-039.	5.4	9
20	Interacting dark energy in the early 2020s: A promising solution to the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1519" altimg="si57.svg"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mn>0</mml:mn></mml:mrow></m and cosmic shear tensions. Physics of the Dark Universe, 2020, 30, 100666.	4.9	184
21	Nonminimal dark sector physics and cosmological tensions. Physical Review D, 2020, 101, .	4.7	211
22	Do we have any hope of detecting scattering between dark energy and baryons through cosmology?. Monthly Notices of the Royal Astronomical Society, 2020, 493, 1139-1152.	4.4	58
23	Variations in fundamental constants at the cosmic dawn. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 026-026.	5.4	8
24	Dark sectors with dynamical coupling. Physical Review D, 2019, 100, .	4.7	54
25	Comprehensive study of neutrino-dark matter mixed damping. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 014-014.	5.4	24
26	Dark matter microphysics and 21Âcm observations. Physical Review D, 2019, 99, .	4.7	28
27	Constraining the primordial black hole abundance with 21-cm cosmology. Physical Review D, 2019, 100, .	4.7	63
28	Neutrino mass ordering at DUNE: An extra Î½ bonus. Physical Review D, 2019, 100, .	4.7	10
29	Reconciling tensor and scalar observables in G-inflation. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 039-039.	5.4	7
30	Warm Dark Matter and Cosmic Reionization. Astrophysical Journal, 2018, 852, 139.	4.5	27
31	A fresh look into the interacting dark matter scenario. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 007-007.	5.4	45
32	Neutrino masses and their ordering: global data, priors and models. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 011-011.	5.4	74
33	Constraints on the sum of the neutrino masses in dynamical dark energy models with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>w</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>z</mml:mi><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 177 Td (stretchy="false">)< are tighter than those obtained in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" disp	4.7	14
34	Was there an early reionization component in our universe?. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 024-024.	5.4	11
35	EDGES result versus CMB and low-redshift constraints on ionization histories. Physical Review D, 2018, 97, .	4.7	12
36	Neutrino Mass Ordering from Oscillations and Beyond: 2018 Status and Future Prospects. Frontiers in Astronomy and Space Sciences, 2018, 5, .	2.8	128

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37	Cold dark matter plus not-so-clumpy dark relics. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 008-008.	5.4	32
38	Cosmological searches for a noncold dark matter component. Physical Review D, 2017, 96, .	4.7	22
39	Primordial power spectrum features in phenomenological descriptions of inflation. Physics of the Dark Universe, 2017, 17, 38-45.	4.9	6
40	Warm dark matter and the ionization history of the Universe. Physical Review D, 2017, 96, .	4.7	29
41	Non-standard interactions with high-energy atmospheric neutrinos at IceCube. Journal of High Energy Physics, 2017, 2017, 1.	4.7	36
42	Unveiling <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î½</mml:mi></mml:math> secrets with cosmological data: Neutrino masses and mass hierarchy. Physical Review D, 2017, 96, .	4.7	277
43	A novel approach to quantifying the sensitivity of current and future cosmological datasets to the neutrino mass ordering through Bayesian hierarchical modeling. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 775, 239-250.	4.1	36
44	Impact of neutrino properties on the estimation of inflationary parameters from current and future observations. Physical Review D, 2017, 95, .	4.7	70
45	Running of featureful primordial power spectra. Physical Review D, 2017, 95, .	4.7	1
46	Can interacting dark energy solve the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>H</mml:mi><mml:mn>0</mml:mn></mml:msub></mml:math> tension?. Physical Review D, 2017, 96, .	4.7	268
47	Cosmological axion and neutrino mass constraints from Planck 2015 temperature and polarization data. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 752, 182-185.	4.1	79
48	On the flavor composition of the high-energy neutrinos in IceCube. Nuclear and Particle Physics Proceedings, 2016, 273-275, 433-439.	0.5	3
49	Analysis of the 4-year IceCube high-energy starting events. Physical Review D, 2016, 94, .	4.7	47
50	The 21 cm signal and the interplay between dark matter annihilations and astrophysical processes. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 004-004.	5.4	44
51	Dark radiation and inflationary freedom after Planck 2015. Physical Review D, 2016, 93, .	4.7	26
52	Cosmological limits on neutrino unknowns versus low redshift priors. Physical Review D, 2016, 93, .	4.7	52
53	Improvement of cosmological neutrino mass bounds. Physical Review D, 2016, 94, .	4.7	136
54	The present and future of the most favoured inflationary models after Planck 2015. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 020-020.	5.4	27

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55	Publisherâ€™s Note: High intensity neutrino oscillation facilities in Europe [Phys. Rev. Accel. Beams16, 021002 (2013)]. Physical Review Accelerators and Beams, 2016, 19, .	1.6	0
56	Phenomenological approaches of inflation and their equivalence. Physical Review D, 2015, 91, .	4.7	15
57	Do current data prefer a nonminimally coupled inflaton?. Physical Review D, 2015, 91, .	4.7	34
58	Spectral analysis of the high-energy IceCube neutrinos. Physical Review D, 2015, 91, .	4.7	72
59	Robustness of cosmological axion mass limits. Physical Review D, 2015, 91, .	4.7	20
60	Primordial power spectrum features and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>f</mml:mi></mml:mrow><mml:mrow><mml:mi>NL</mml:mi></mml: Physical Review D, 2015, 92, .	4.7	16
61	Exploring dark matter microphysics with galaxy surveys. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 034-034.	5.4	16
62	Revisiting cosmological bounds on sterile neutrinos. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 006-006.	5.4	50
63	Current constraints on early and stressed dark energy models and future 21Âcm perspectives. Physical Review D, 2014, 90, .	4.7	10
64	The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: measuring DA and H at zÂ=Â0.57 from the baryon acoustic peak in the Data Release 9 spectroscopic Galaxy sample. Monthly Notices of the Royal Astronomical Society, 2014, 439, 83-101.	4.4	169
65	Constraining dark matter late-time energy injection: decays and p-wave annihilations. Journal of Cosmology and Astroparticle Physics, 2014, 2014, 017-017.	5.4	66
66	Flavor Composition of the High-Energy Neutrino Events in IceCube. Physical Review Letters, 2014, 113, 091103.	7.8	72
67	Light sterile neutrino sensitivity at the nuSTORM facility. Physical Review D, 2014, 89, .	4.7	28
68	Axion cold dark matter: Status after Planck and BICEP2. Physical Review D, 2014, 90, .	4.7	22
69	Model-independent fit to Planck and BICEP2 data. Physical Review D, 2014, 90, .	4.7	18
70	Current status of modified gravity. Physical Review D, 2014, 90, .	4.7	21
71	The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: baryon acoustic oscillations in the Data Releases 10 and 11 Galaxy samples. Monthly Notices of the Royal Astronomical Society, 2014, 441, 24-62.	4.4	1,168
72	Relic neutrinos, thermal axions, and cosmology in early 2014. Physical Review D, 2014, 90, .	4.7	74

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73	New constraints on coupled dark energy from the Planck satellite experiment. Physical Review D, 2013, 88, .	4.7	132
74	Determining the dark matter mass with DeepCore. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 725, 297-301.	4.1	8
75	Testing standard and nonstandard neutrino physics with cosmological data. Physical Review D, 2013, 87, .	4.7	28
76	Dark radiation and interacting scenarios. Physical Review D, 2013, 87, .	4.7	37
77	Constraints on dark matter annihilation from CMB observations before Planck. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 046-046.	5.4	65
78	Hints of an axion-like particle mixing in the GeV gamma-ray blazar data?. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 023-023.	5.4	21
79	Dark radiation sterile neutrino candidates after Planck data. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 018-018.	5.4	34
80	THE BARYON OSCILLATION SPECTROSCOPIC SURVEY OF SDSS-III. Astronomical Journal, 2013, 145, 10.	4.7	1,571
81	Cosmic Dark Radiation and Neutrinos. Advances in High Energy Physics, 2013, 2013, 1-14.	1.1	59
82	High intensity neutrino oscillation facilities in Europe. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	25
83	Constraints on neutrino masses from Planck and Galaxy clustering data. Physical Review D, 2013, 88, .	4.7	47
84	Neutrino and dark radiation properties in light of recent CMB observations. Physical Review D, 2013, 87, .	4.7	30
85	Thinking outside the box: effects of modes larger than the survey on matter power spectrum covariance. Journal of Cosmology and Astroparticle Physics, 2012, 2012, 019-019.	5.4	54
86	The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: baryon acoustic oscillations in the Data Release 9 spectroscopic galaxy sample. Monthly Notices of the Royal Astronomical Society, 2012, 427, 3435-3467.	4.4	738
87	Future constraints on the Hu-Sawicki modified gravity scenario. Physical Review D, 2012, 85, .	4.7	12
88	Asymmetric Dark Matter and Dark Radiation. Journal of Cosmology and Astroparticle Physics, 2012, 2012, 022-022.	5.4	74
89	NEW NEUTRINO MASS BOUNDS FROM SDSS-III DATA RELEASE 8 PHOTOMETRIC LUMINOUS GALAXIES. Astrophysical Journal, 2012, 761, 12.	4.5	70
90	CLUSTERING OF SLOAN DIGITAL SKY SURVEY III PHOTOMETRIC LUMINOUS GALAXIES: THE MEASUREMENT, SYSTEMATICS, AND COSMOLOGICAL IMPLICATIONS. Astrophysical Journal, 2012, 761, 14.	4.5	113

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91	Biases on cosmological parameters by general relativity effects. Physical Review D, 2012, 85, .	4.7	13
92	Dark radiation in extended cosmological scenarios. Physical Review D, 2012, 86, .	4.7	31
93	Sterile neutrino models and nonminimal cosmologies. Physical Review D, 2012, 85, .	4.7	29
94	The next-generation liquid-scintillator neutrino observatory LENA. Astroparticle Physics, 2012, 35, 685-732.	4.3	181
95	Future weak lensing constraints in a dark coupled universe. Physical Review D, 2011, 84, .	4.7	34
96	Neutrino probes of the nature of light dark matter. Journal of Cosmology and Astroparticle Physics, 2011, 2011, 004-004.	5.4	13
97	Signatures of photon and axion-like particle mixing in the gamma-ray burst jet. Journal of Cosmology and Astroparticle Physics, 2011, 2011, 030-030.	5.4	17
98	Constraints on massive sterile neutrino species from current and future cosmological data. Physical Review D, 2011, 83, .	4.7	82
99	Robust neutrino constraints by combining low redshift observations with the CMB. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 003-003.	5.4	125
100	Low redshift probes and coupled dark matter-dark energy models. Journal of Physics: Conference Series, 2010, 259, 012084.	0.4	0
101	The Low Energy Neutrino Factory. , 2010, , .		2
102	Cosmological data analysis off(R) gravity models. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 004-004.	5.4	15
103	Dark coupling and gauge invariance. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 044-044.	5.4	68
104	Cosmological parameters degeneracies and non-Gaussian halo bias. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 020-020.	5.4	45
105	The dark side of curvature. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 008-008.	5.4	13
106	Coupled dark matter-dark energy in light of near universe observations. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 029-029.	5.4	89
107	Impact of general reionization scenarios on extraction of inflationary parameters. Physical Review D, 2010, 82, .	4.7	14
108	Improvement of the low energy neutrino factory. Physical Review D, 2010, 81, .	4.7	21

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109	Atmospheric neutrino oscillations and tau neutrinos in ice. Physical Review D, 2010, 81, .	4.7	15
110	Harrison-Zelâ€™dovich primordial spectrum is consistent with observations. Physical Review D, 2010, 81, .	4.7	19
111	Higher-order coupled quintessence. Physical Review D, 2010, 82, .	4.7	17
112	Atmospheric neutrinos in ice and measurement of neutrino oscillation parameters. Physical Review D, 2010, 82, .	4.7	13
113	High energy neutrinos from novae in symbiotic binaries: The case of V407 Cygni. Physical Review D, 2010, 82, .	4.7	17
114	Instabilities in dark coupled models and constraints from cosmological data. AIP Conference Proceedings, 2010, , .	0.4	7
115	Future CMB cosmological constraints in a dark coupled universe. Physical Review D, 2010, 81, .	4.7	44
116	PROMPT TeV EMISSION FROM COSMIC RAYS ACCELERATED BY GAMMA-RAY BURSTS INTERACTING WITH A SURROUNDING STELLAR WIND. Astrophysical Journal, 2009, 691, L37-L40.	4.5	4
117	Sterile neutrinos in light of recent cosmological and oscillation data: a multi-flavor scheme approach. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 036-036.	5.4	68
118	Dark coupling. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 034-034.	5.4	134
119	Reconstructing WIMP properties with neutrino detectors. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 664, 92-96.	4.1	26
120	Neutrino mass hierarchy extraction using atmospheric neutrinos in ice. Physical Review D, 2008, 78, .	4.7	37
121	Neutrino factory for both large and smallÎ¸13. Physical Review D, 2008, 77, .	4.7	32
122	An intermediate Î³ beta-beam neutrino experiment with long baseline. Journal of High Energy Physics, 2008, 2008, 115-115.	4.7	14
123	Combining<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>C</mml:mi><mml:mi>P</mml:mi><mml:mi>T</mml:mi></mml:math>-conjugate neutrino channels at Fermilab. Physical Review D, 2008, 78, .	4.7	11
124	The Low-Energy Neutrino Factory. Journal of Physics: Conference Series, 2008, 136, 042032.	0.4	3
125	Intermediate Î³ beta beams with a cluster of detectors. Journal of Physics: Conference Series, 2008, 110, 082015.	0.4	0
126	Present bounds on the relativistic energy density in the Universe from cosmological observables. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 006-006.	5.4	62

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127	Ultrahigh-energy neutrino flux as a probe of large extra dimensions. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 015-015.	5.4	9
128	Low energy neutrino factory for largeÎ¸13. Physical Review D, 2007, 75, .	4.7	38
129	Oscillation effects on high-energy neutrino fluxes from astrophysical hidden sources. Physical Review D, 2007, 75, .	4.7	37
130	NOÎ½Aplus T2K: The race for the neutrino mass hierarchy. Physical Review D, 2007, 75, .	4.7	21
131	Improved cosmological bound on the thermal axion mass. Physical Review D, 2007, 76, .	4.7	53
132	Gravitational lensing of supernova neutrinos. Astroparticle Physics, 2007, 28, 348-356.	4.3	15
133	Determining the neutrino mass hierarchy andCP-violation inNOÎ½Awith a second off-axis detector. Physical Review D, 2006, 73, .	4.7	32
134	Constraining Inverse-Curvature Gravity with Supernovae. Physical Review Letters, 2006, 96, 041103.	7.8	99
135	Physics potential of the Fermilab NuMI beamline. Physical Review D, 2005, 72, .	4.7	15
136	UNVEILING NEUTRINO MIXING AND LEPTONIC CP VIOLATION. Modern Physics Letters A, 2005, 20, 1-17.	1.2	28
137	Unified graphical summary of neutrino mixing parameters. Physical Review D, 2004, 69, .	4.7	37
138	UntanglingCPviolation and the mass hierarchy in long baseline experiments. Physical Review D, 2004, 70, .	4.7	45
139	Corrections to the fluxes of a neutrino factory. European Physical Journal C, 2003, 29, 197-206.	3.9	6
140	Leptonic CP Violation measurement at the neutrino factory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 503, 199-204.	1.6	4
141	Superbeams plus neutrino factories. Journal of Physics G: Nuclear and Particle Physics, 2003, 29, 1847-1852.	3.6	2
142	Superbeams plus neutrino factory: the golden path to leptonic CP violation. Nuclear Physics B, 2002, 646, 301-320.	2.5	92
143	On the measurement of leptonic CP violation. Nuclear Physics B, 2001, 608, 301-318.	2.5	246
144	Summary of golden measurements at a Î½-factory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 472, 403-407.	1.6	5

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145	Beam and experiments: summary. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 451, 102-122.	1.6	41
146	Golden measurements at a neutrino factory. Nuclear Physics B, 2000, 579, 17-55.	2.5	428