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	THE BARYON OSCILLATION SPECTROSCOPIC SURVEY OF SDSS-III. Astronomical Journal, 2013, 145, 10.	4.7	1,571
2	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
3	In the realm of the Hubble tensionâ€”a review of solutions [*]. Classical and Quantum Gravity, 2021, 38, 153001.	4.0	816
4	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
5	Golden measurements at a neutrino factory. Nuclear Physics B, 2000, 579, 17-55.	2.5	428
6	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
7	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
8	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
9	On the measurement of leptonic CP violation. Nuclear Physics B, 2001, 608, 301-318.	2.5	246
10	Snowmass2021 - Letter of interest cosmology intertwined II: The hubble constant tension. Astroparticle Physics, 2021, 131, 102605.	4.3	228
11	Nonminimal dark sector physics and cosmological tensions. Physical Review D, 2020, 101, .	4.7	211
12	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
13	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:m 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
14	The next-generation liquid-scintillator neutrino observatory LENA. Astroparticle Physics, 2012, 35, 685-732.	4.3	181
15	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
16	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 ETQq0 0 0 rgBT /Overlock 10 Tf 50 137 Td (stretchy="false">)</mml:m are tighter than those obtained in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" disp	4.7	144
17	Improvement of cosmological neutrino mass bounds. Physical Review D, 2016, 94, .	4.7	136
18	Dark coupling. Journal of Cosmology and Astroparticle Physics, 2009, 2009, 034-034.	5.4	134

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19	New constraints on coupled dark energy from the Planck satellite experiment. Physical Review D, 2013, 88, .	4.7	132
20	Neutrino Mass Ordering from Oscillations and Beyond: 2018 Status and Future Prospects. Frontiers in Astronomy and Space Sciences, 2018, 5, .	2.8	128
21	Robust neutrino constraints by combining low redshift observations with the CMB. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 003-003.	5.4	125
22	CLUSTERING OF SLOAN DIGITAL SKY SURVEY III PHOTOMETRIC LUMINOUS GALAXIES: THE MEASUREMENT, SYSTEMATICS, AND COSMOLOGICAL IMPLICATIONS. Astrophysical Journal, 2012, 761, 14.	4.5	113
23	Constraining Inverse-Curvature Gravity with Supernovae. Physical Review Letters, 2006, 96, 041103.	7.8	99
24	Superbeams plus neutrino factory: the golden path to leptonic CP violation. Nuclear Physics B, 2002, 646, 301-320.	2.5	92
25	Coupled dark matter-dark energy in light of near universe observations. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 029-029.	5.4	89
26	Constraints on massive sterile neutrino species from current and future cosmological data. Physical Review D, 2011, 83, .	4.7	82
27	A Brief Review on Primordial Black Holes as Dark Matter. Frontiers in Astronomy and Space Sciences, 2021, 8, .	2.8	80
28	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
29	The galaxy power spectrum take on spatial curvature and cosmic concordance. Physics of the Dark Universe, 2021, 33, 100851.	4.9	76
30	Asymmetric Dark Matter and Dark Radiation. Journal of Cosmology and Astroparticle Physics, 2012, 2012, 022-022.	5.4	74
31	Relic neutrinos, thermal axions, and cosmology in early 2014. Physical Review D, 2014, 90, .	4.7	74
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	Flavor Composition of the High-Energy Neutrino Events in IceCube. Physical Review Letters, 2014, 113, 091103.	7.8	72
34	Spectral analysis of the high-energy IceCube neutrinos. Physical Review D, 2015, 91, .	4.7	72
35	NEW NEUTRINO MASS BOUNDS FROM SDSS-III DATA RELEASE 8 PHOTOMETRIC LUMINOUS GALAXIES. Astrophysical Journal, 2012, 761, 12.	4.5	70
36	Impact of neutrino properties on the estimation of inflationary parameters from current and future observations. Physical Review D, 2017, 95, .	4.7	70

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37	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
38	Dark coupling and gauge invariance. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 044-044.	5.4	68
39	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
40	Constraints on dark matter annihilation from CMB observations before Planck. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 046-046.	5.4	65
41	Constraining the primordial black hole abundance with 21-cm cosmology. Physical Review D, 2019, 100, .	4.7	63
42	Most constraining cosmological neutrino mass bounds. Physical Review D, 2021, 104, .	4.7	63
43	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
44	Cosmic Dark Radiation and Neutrinos. Advances in High Energy Physics, 2013, 2013, 1-14.	1.1	59
45	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
46	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
47	Dark sectors with dynamical coupling. Physical Review D, 2019, 100, .	4.7	54
48	Improved cosmological bound on the thermal axion mass. Physical Review D, 2007, 76, .	4.7	53
49	Cosmological limits on neutrino unknowns versus low redshift priors. Physical Review D, 2016, 93, .	4.7	52
50	Revisiting cosmological bounds on sterile neutrinos. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 006-006.	5.4	50
51	Constraints on neutrino masses from Planck and Galaxy clustering data. Physical Review D, 2013, 88, .	4.7	47
52	Analysis of the 4-year IceCube high-energy starting events. Physical Review D, 2016, 94, .	4.7	47
53	UntanglingCPviolation and the mass hierarchy in long baseline experiments. Physical Review D, 2004, 70, .	4.7	45
54	Cosmological parameters degeneracies and non-Gaussian halo bias. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 020-020.	5.4	45

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55	A fresh look into the interacting dark matter scenario. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 007-007.	5.4	45
56	Future CMB cosmological constraints in a dark coupled universe. Physical Review D, 2010, 81, .	4.7	44
57	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
58	All-inclusive interacting dark sector cosmologies. Physical Review D, 2020, 101, .	4.7	43
59	New tests of dark sector interactions from the full-shape galaxy power spectrum. Physical Review D, 2022, 105, .	4.7	42
60	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
61	Low energy neutrino factory for largeÎ¸13. Physical Review D, 2007, 75, .	4.7	38
62	Unified graphical summary of neutrino mixing parameters. Physical Review D, 2004, 69, .	4.7	37
63	Oscillation effects on high-energy neutrino fluxes from astrophysical hidden sources. Physical Review D, 2007, 75, .	4.7	37
64	Neutrino mass hierarchy extraction using atmospheric neutrinos in ice. Physical Review D, 2008, 78, .	4.7	37
65	Dark radiation and interacting scenarios. Physical Review D, 2013, 87, .	4.7	37
66	Interacting dark energy in a closed universe. Monthly Notices of the Royal Astronomical Society: Letters, 2021, 502, L23-L28.	3.3	37
67	Non-standard interactions with high-energy atmospheric neutrinos at IceCube. Journal of High Energy Physics, 2017, 2017, 1.	4.7	36
68	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
69	2021-H₀ odyssey: closed, phantom and interacting dark energy cosmologies. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 008.	5.4	35
70	Future weak lensing constraints in a dark coupled universe. Physical Review D, 2011, 84, .	4.7	34
71	Dark radiation sterile neutrino candidates after Planck data. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 018-018.	5.4	34
72	Do current data prefer a nonminimally coupled inflaton?. Physical Review D, 2015, 91, .	4.7	34

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73	Determining the neutrino mass hierarchy andCP-violation inNOÎ½Awith a second off-axis detector. Physical Review D, 2006, 73, .	4.7	32
74	Neutrino factory for both large and smallÎ¸13. Physical Review D, 2008, 77, .	4.7	32
75	Cold dark matter plus not-so-clumpy dark relics. Journal of Cosmology and Astroparticle Physics, 2017, 2017, 008-008.	5.4	32
76	Soundness of dark energy properties. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 045-045.	5.4	32
77	Dark radiation in extended cosmological scenarios. Physical Review D, 2012, 86, .	4.7	31
78	Neutrino and dark radiation properties in light of recent CMB observations. Physical Review D, 2013, 87, .	4.7	30
79	New cosmological bounds on hot relics: axions and neutrinos. Monthly Notices of the Royal Astronomical Society, 2021, 505, 2703-2711.	4.4	30
80	Emergent Dark Energy, neutrinos and cosmological tensions. Physics of the Dark Universe, 2021, 31, 100762.	4.9	30
81	Sterile neutrino models and nonminimal cosmologies. Physical Review D, 2012, 85, .	4.7	29
82	Warm dark matter and the ionization history of the Universe. Physical Review D, 2017, 96, .	4.7	29
83	UNVEILING NEUTRINO MIXING AND LEPTONIC CP VIOLATION. Modern Physics Letters A, 2005, 20, 1-17.	1.2	28
84	Testing standard and nonstandard neutrino physics with cosmological data. Physical Review D, 2013, 87, .	4.7	28
85	Light sterile neutrino sensitivity at the nuSTORM facility. Physical Review D, 2014, 89, .	4.7	28
86	Dark matter microphysics and 21Âcm observations. Physical Review D, 2019, 99, .	4.7	28
87	Dynamical dark sectors and neutrino masses and abundances. Physical Review D, 2020, 102, .	4.7	28
88	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
89	Warm Dark Matter and Cosmic Reionization. Astrophysical Journal, 2018, 852, 139.	4.5	27
90	The full Boltzmann hierarchy for dark matter-massive neutrino interactions. Journal of Cosmology and Astroparticle Physics, 2021, 2021, 066.	5.4	27

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91	Reconstructing WIMP properties with neutrino detectors. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 664, 92-96.	4.1	26
92	Dark radiation and inflationary freedom after Planck 2015. Physical Review D, 2016, 93, .	4.7	26
93	High intensity neutrino oscillation facilities in Europe. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	25
94	Comprehensive study of neutrino-dark matter mixed damping. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 014-014.	5.4	24
95	A fake interacting dark energy detection?. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 500, L22-L26.	3.3	23
96	Axion cold dark matter: Status after Planck and BICEP2. Physical Review D, 2014, 90, .	4.7	22
97	Cosmological searches for a noncold dark matter component. Physical Review D, 2017, 96, .	4.7	22
98	NOÎ½Aplus T2K: The race for the neutrino mass hierarchy. Physical Review D, 2007, 75, .	4.7	21
99	Improvement of the low energy neutrino factory. Physical Review D, 2010, 81, .	4.7	21
100	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
101	Current status of modified gravity. Physical Review D, 2014, 90, .	4.7	21
102	Robustness of cosmological axion mass limits. Physical Review D, 2015, 91, .	4.7	20
103	Harrison-Zelâ€™dovich primordial spectrum is consistent with observations. Physical Review D, 2010, 81, .	4.7	19
104	Model-independent fit to Planck and BICEP2 data. Physical Review D, 2014, 90, .	4.7	18
105	Higher-order coupled quintessence. Physical Review D, 2010, 82, .	4.7	17
106	High energy neutrinos from novae in symbiotic binaries: The case of V407 Cygni. Physical Review D, 2010, 82, .	4.7	17
107	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
108	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

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109	Exploring dark matter microphysics with galaxy surveys. Journal of Cosmology and Astroparticle Physics, 2015, 2015, 034-034.	5.4	16
110	Physics potential of the Fermilab NuMI beamline. Physical Review D, 2005, 72, .	4.7	15
111	Gravitational lensing of supernova neutrinos. Astroparticle Physics, 2007, 28, 348-356.	4.3	15
112	Cosmological data analysis off(R) gravity models. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 004-004.	5.4	15
113	Atmospheric neutrino oscillations and tau neutrinos in ice. Physical Review D, 2010, 81, .	4.7	15
114	Phenomenological approaches of inflation and their equivalence. Physical Review D, 2015, 91, .	4.7	15
115	An intermediate Î³ beta-beam neutrino experiment with long baseline. Journal of High Energy Physics, 2008, 2008, 115-115.	4.7	14
116	Impact of general reionization scenarios on extraction of inflationary parameters. Physical Review D, 2010, 82, .	4.7	14
117	The dark side of curvature. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 008-008.	5.4	13
118	Atmospheric neutrinos in ice and measurement of neutrino oscillation parameters. Physical Review D, 2010, 82, .	4.7	13
119	Neutrino probes of the nature of light dark matter. Journal of Cosmology and Astroparticle Physics, 2011, 2011, 004-004.	5.4	13
120	Biases on cosmological parameters by general relativity effects. Physical Review D, 2012, 85, .	4.7	13
121	Future constraints on the Hu-Sawicki modified gravity scenario. Physical Review D, 2012, 85, .	4.7	12
122	EDGES result versus CMB and low-redshift constraints on ionization histories. Physical Review D, 2018, 97, .	4.7	12
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	Was there an early reionization component in our universe?. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 024-024.	5.4	11
125	Minimal dark energy: Key to sterile neutrino and Hubble constant tensions?. Physical Review D, 2022, 105, .	4.7	11
126	Current constraints on early and stressed dark energy models and future 21Âcm perspectives. Physical Review D, 2014, 90, .	4.7	10

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127	Neutrino mass ordering at DUNE: An extra Î½ bonus. Physical Review D, 2019, 100, .	4.7	10
128	Ultrahigh-energy neutrino flux as a probe of large extra dimensions. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 015-015.	5.4	9
129	Is it mixed dark matter or neutrino masses?. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 039-039.	5.4	9
130	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
131	Variations in fundamental constants at the cosmic dawn. Journal of Cosmology and Astroparticle Physics, 2020, 2020, 026-026.	5.4	8
132	Instabilities in dark coupled models and constraints from cosmological data. AIP Conference Proceedings, 2010, , .	0.4	7
133	Reconciling tensor and scalar observables in G-inflation. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 039-039.	5.4	7
134	Corrections to the fluxes of a neutrino factory. European Physical Journal C, 2003, 29, 197-206.	3.9	6
135	Primordial power spectrum features in phenomenological descriptions of inflation. Physics of the Dark Universe, 2017, 17, 38-45.	4.9	6
136	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
137	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
138	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
139	The Low-Energy Neutrino Factory. Journal of Physics: Conference Series, 2008, 136, 042032.	0.4	3
140	On the flavor composition of the high-energy neutrinos in IceCube. Nuclear and Particle Physics Proceedings, 2016, 273-275, 433-439.	0.5	3
141	Superbeams plus neutrino factories. Journal of Physics G: Nuclear and Particle Physics, 2003, 29, 1847-1852.	3.6	2
142	The Low Energy Neutrino Factory. , 2010, , .		2
143	Running of featureful primordial power spectra. Physical Review D, 2017, 95, .	4.7	1
144	Intermediate Î³ beta beams with a cluster of detectors. Journal of Physics: Conference Series, 2008, 110, 082015.	0.4	0

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145	Low redshift probes and coupled dark matter-dark energy models. Journal of Physics: Conference Series, 2010, 259, 012084.	0.4	0
146	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