Javier Olmedo

List of Publications by Year in descending order

52 papers	1,483 citations	361413 20 h-index	315739 38 g-index
52 all docs	52 docs citations	52 times ranked	292 citing authors

#	Article	IF	Citations
1	Quantum Transfiguration of Kruskal Black Holes. Physical Review Letters, 2018, 121, 241301.	7.8	148
2	Quantum extension of the Kruskal spacetime. Physical Review D, 2018, 98, .	4.7	129
3	Hybrid quantization of an inflationary universe. Physical Review D, 2012, 86, .	4.7	103
4	From black holes to white holes: a quantum gravitational, symmetric bounce. Classical and Quantum Gravity, 2017, 34, 225011.	4.0	92
5	Further improvements in the understanding of isotropic loop quantum cosmology. Physical Review D, 2009, 80, .	4.7	83
6	Quantum black holes in loop quantum gravity. Classical and Quantum Gravity, 2014, 31, 095009.	4.0	76
7	Spherically symmetric loop quantum gravity: analysis of improved dynamics. Classical and Quantum Gravity, 2020, 37, 205012.	4.0	67
8	Hybrid quantization of an inflationary model: The flat case. Physical Review D, 2013, 88, .	4.7	64
9	Cosmological perturbations in hybrid loop quantum cosmology: Mukhanov-Sasaki variables. Physical Review D, 2014, 90, .	4.7	64
10	Primordial power spectra for scalar perturbations in loop quantum cosmology. Journal of Cosmology and Astroparticle Physics, 2016, 2016, 029-029.	5.4	57
11	Prescriptions in loop quantum cosmology: A comparative analysis. Physical Review D, 2011, 84, .	4.7	49
12	Hybrid loop quantum cosmology and predictions for the cosmic microwave background. Physical Review D, 2017, 96, .	4.7	46
13	Unique Fock quantization of scalar cosmological perturbations. Physical Review D, 2012, 85, .	4.7	44
14	Properties of a recent quantum extension of the Kruskal geometry. International Journal of Modern Physics D, 2020, 29, 2050076.	2.1	43
15	A uniqueness criterion for the Fock quantization of scalar fields with time-dependent mass. Classical and Quantum Gravity, 2011, 28, 172001.	4.0	41
16	Criteria for the determination of time dependent scalings in the Fock quantization of scalar fields with a time dependent mass in ultrastatic spacetimes. Physical Review D, 2012, 86, .	4.7	38
17	Primordial tensor modes of the early Universe. Physical Review D, 2016, 93, .	4.7	35
18	Effective dynamics of scalar perturbations in a flat Friedmann-Robertson-Walker spacetime in loop quantum cosmology. Physical Review D, 2014, 89, .	4.7	34

#	Article	IF	Citations
19	Uniqueness of the Fock quantization of fields with unitary dynamics in nonstationary spacetimes. Physical Review D, 2011, 83, .	4.7	28
20	Quantum self-gravitating collapsing matter in a quantum geometry. Classical and Quantum Gravity, 2016, 33, 18LT01.	4.0	28
21	Loop Quantum Black Hole Extensions Within the Improved Dynamics. Frontiers in Astronomy and Space Sciences, 2021, 8, .	2.8	20
22	A unique Fock quantization for fields in non-stationary spacetimes. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 030-030.	5.4	19
23	Primordial scalar power spectrum from the hybrid approach in loop cosmologies. Physical Review D, 2020, 102, .	4.7	19
24	Brief Review on Black Hole Loop Quantization. Universe, 2016, 2, 12.	2.5	17
25	States of low energy in bouncing inflationary scenarios in loop quantum cosmology. Physical Review D, 2021, 103, .	4.7	15
26	Loop quantization of the Gowdy model with local rotational symmetry. Physical Review D, 2017, 96, .	4.7	12
27	Power spectrum of primordial perturbations for an emergent universe in quantum reduced loop gravity. Journal of Cosmology and Astroparticle Physics, 2019, 2019, 030-030.	5.4	12
28	Observational consequences of Bianchi I spacetimes in loop quantum cosmology. Physical Review D, 2020, 102, .	4.7	12
29	Callan-Giddings-Harvey-Strominger vacuum in loop quantum gravity and singularity resolution. Physical Review D, 2016, 94, .	4.7	11
30	Hamiltonian theory of classical and quantum gauge invariant perturbations in Bianchi I spacetimes. Physical Review D, 2020, 101, .	4.7	11
31	Predictions for the Cosmic Microwave Background from an Anisotropic Quantum Bounce. Physical Review Letters, 2020, 124, 251301.	7.8	10
32	Breaking of isospectrality of quasinormal modes in nonrotating loop quantum gravity black holes. Physical Review D, 2022, 105, .	4.7	10
33	Uniqueness of the Fock quantization of scalar fields in a Bianchi I cosmology with unitary dynamics. Physical Review D, 2016, 94, .	4.7	8
34	Non-Oscillatory Power Spectrum From States of Low Energy in Kinetically Dominated Early Universes. Frontiers in Astronomy and Space Sciences, 2021, 8, .	2.8	7
35	Towards a quantum notion of covariance in spherically symmetric loop quantum gravity. Physical Review D, 2022, 105, .	4.7	7
36	Classical axisymmetric gravity in real Ashtekar variables. Classical and Quantum Gravity, 2019, 36, 125009.	4.0	6

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37	Casimir effect in a quantum spaceâ€“time. Classical and Quantum Gravity, 2015, 32, 115002.	4.0	4
38	xAct Implementation of the Theory of Cosmological Perturbation in Bianchi I Spacetimes. Mathematics, 2020, 8, 290.	2.2	4
39	SchrÃ¶dinger-like quantum dynamics in loop quantized black holes. International Journal of Modern Physics D, 2016, 25, 1642006.	2.1	3
40	Evolution in totally constrained models: SchrÃ¶dinger vs. Heisenberg pictures. International Journal of Modern Physics D, 2016, 25, 1642004.	2.1	3
41	Further improvements in the understanding of LQC. Journal of Physics: Conference Series, 2011, 314, 012048.	0.4	1
42	A complete hybrid quantization in inhomogeneous cosmology. , 2012, , .		1
43	Loop Quantum Cosmological Perturbations. Journal of Physics: Conference Series, 2014, 490, 012152.	0.4	1
44	Reply to â€œComment on â€˜Towards a quantum notion of covariance in spherically symmetric loop quantum gravityâ€â€™. Physical Review D, 2022, 105, .	4.7	1
45	Loops 11: Non-Perturbative / Background Independent Quantum Gravity. Journal of Physics: Conference Series, 2012, 360, 011001.	0.4	0
46	Inflation and inhomogeneities: a hybrid quantization. Journal of Physics: Conference Series, 2012, 360, 012033.	0.4	0
47	The $${varvec{SL}}(2,mathbb {R})$$ S L (2 , R) totally constrained model: three quantization approaches. General Relativity and Gravitation, 2014, 46, 1.	2.0	0
48	Inflation from inhomogeneous polarized Gowdy model. Classical and Quantum Gravity, 2022, 39, 015001.	4.0	0
49	Complete Quantization of Scalar Cosmological Perturbations. Springer Proceedings in Mathematics and Statistics, 2014, , 261-265.	0.2	0
50	UNITARY EVOLUTION AS A UNIQUENESS CRITERION. , 2015, , .		0
51	HYBRID QUANTIZATION OF AN INHOMOGENEOUS INFLATIONARY SCENARIO. , 2015, , .		0
52	Local rotational symmetry Gowdy model in loop quantum gravity. , 2017, , .		0