Eduardo Jâ€°VillaseÃ±or

List of Publications by Year
in descending order

71 papers	783 citations	516710 16 h-index	580821 25 g-index
71 all docs	71 docs citations	71 times ranked	323 citing authors

#	Article	IF	Citations
1	Black Hole State Counting in Loop Quantum Gravity: A Number-Theoretical Approach. Physical Review Letters, 2008, 100, 211301.	7.8	93
2	Detailed black hole state counting in loop quantum gravity. Physical Review D, 2010, 82, .	4.7	68
3	Combinatorics of the SU(2) black hole entropy in loop quantum gravity. Physical Review D, 2009, 80, .	4.7	46
4	The time-dependent quantum harmonic oscillator revisited: Applications to quantum field theory. Annals of Physics, 2009, 324, 1360-1385.	2.8	30
5	Flux-area operator and black hole entropy. Physical Review D, 2009, 80, .	4.7	29
6	Adiabatic expansions for Dirac fields, renormalization, and anomalies. Physical Review D, 2018, 98, .	4.7	29
7	Generating functions for black hole entropy in loop quantum gravity. Physical Review D, 2008, 77, .	4.7	27
8	On the computation of black hole entropy in loop quantum gravity. Classical and Quantum Gravity, 2009, 26, 035017.	4.0	27
9	Microcausality and quantum cylindrical gravitational waves. Physical Review D, 2003, 67, .	4.7	24
10	Geometric formulation of the covariant phase space methods with boundaries. Physical Review D, 2021, 103, .	4.7	24
11	Quantum unitary evolution of linearly polarized {sbb S}^1imes {sbb S}^2 and {sbb S}^3 Gowdy models coupled to massless scalar fields. Classical and Quantum Gravity, 2008, 25, 085002.	4.0	22
12	Quantization of Midisuperspace Models. Living Reviews in Relativity, 2010, 13, 6.	26.7	19
13	Bivariate generating functions for a class of linear recurrences: General structure. Journal of Combinatorial Theory - Series A, 2014, 125, 146-165.	0.8	19
14	Lorentz violations and Euclidean signature metrics. Physical Review D, 2003, 68, .	4.7	18
15	Statistical description of the black hole degeneracy spectrum. Physical Review D, 2011, 83, .	4.7	18
16	Hamiltonian treatment of linear field theories in the presence of boundaries: a geometric approach. Classical and Quantum Gravity, 2014, 31, 045021.	4.0	18
17	Band structure in the polymer quantization of the harmonic oscillator. Classical and Quantum Gravity, 2013, 30, 165011.	4.0	16
18	Dirac's algorithm in the presence of boundaries: a practical guide to a geometric approach. Classical and Quantum Gravity, 2019, 36, 205014.	4.0	16

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19	Evolution operators for linearly polarized two-Killing cosmological models. Physical Review D, 2006, 74, .	4.7	13
20	Hamiltonian dynamics of linearly polarized Gowdy models coupled to massless scalar fields. Classical and Quantum Gravity, 2007, 24, 5945-5972.	4.0	13
21	Separable Hilbert space for loop quantization. Physical Review D, 2014, 90, .	4.7	13
22	The thermodynamic limit and black hole entropy in the area ensemble. Classical and Quantum Gravity, 2011, 28, 215014.	4.0	11
23	Topology of the Misner space and its $$g$$ g -boundary. General Relativity and Gravitation, 2014, 46, 1.	2.0	11
24	Quantization of scalar fields coupled to point masses. Classical and Quantum Gravity, 2015, 32, 245009.	4.0	10
25	Concise symplectic formulation for tetrad gravity. Physical Review D, 2021, 103, .	4.7	10
26	Higher derivative fermionic field theories. Journal of Physics A, 2002, 35, 6169-6182.	1.6	9
27	Time uncertainty in quantum gravitational systems. Physical Review D, 2004, 69, .	4.7	9
28	Gauge fixing in higher-derivative gravity. Classical and Quantum Gravity, 1999, 16, 2283-2298.	4.0	8
29	BFactions for the Husain-KuchaÅ™ model. Physical Review D, 2001, 63, .	4.7	8
30	Boundary Hilbert spaces and trace operators. Classical and Quantum Gravity, 2017, 34, 095005.	4.0	8
31	Generalizations of the Pontryagin and Husain-KuchaÅ™ actions to manifolds with boundary. Journal of High Energy Physics, 2019, 2019, 1.	4.7	8
32	Higher-derivative boson field theories and constrained second-order theories. Journal of Physics A, 2001, 34, 8919-8940.	1.6	7
33	Asymptotic analysis of field commutators for Einsteinâ€"Rosen gravitational waves. Journal of Mathematical Physics, 2004, 45, 3498-3532.	1.1	7
34	Exact Quantization of Einstein-Rosen Waves Coupled to Massless Scalar Matter. Physical Review Letters, 2005, 95, 051301.	7.8	7
35	Hamiltonian description of the parametrized scalar field in bounded spatial regions. Classical and Quantum Gravity, 2016, 33, 105002.	4.0	7
36	Hamiltonian Gotay-Nester-Hinds analysis of the parametrized unimodular extension of the Holst action. Physical Review D, 2021, 103, .	4.7	7

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37	Covariant phase space for gravity with boundaries: Metric versus tetrad formulations. Physical Review D, 2021, 104, .	4.7	7
38	Unitary evolution of free massless fields in de Sitter spacetime. Classical and Quantum Gravity, 2008, 25, 145008.	4.0	6
39	Palatini gravity with nonmetricity, torsion, and boundaries in metric and connection variables. Physical Review D, 2021, 104, .	4.7	6
40	In search of local degrees of freedom in quadratic diff-invariant Lagrangians. Physical Review D, 2000, 61, .	4.7	5
41	Quadratic s-form field actions with semi-bounded energy. Nuclear Physics B, 2001, 600, 423-449.	2.5	4
42	QUANTUM CYLINDRICAL WAVES AND SIGMA MODELS. International Journal of Modern Physics D, 2004, 13, 1119-1127.	2.1	4
43	Probing quantized Einstein-Rosen waves with massless scalar matter. Physical Review D, 2006, 74, .	4.7	4
44	Hamiltonian dynamics of the parametrized electromagnetic field. Classical and Quantum Gravity, 2016, 33, 125030.	4.0	4
45	On the distribution of the eigenvalues of the area operator in loop quantum gravity. Classical and Quantum Gravity, 2018, 35, 065008.	4.0	4
46	Particles and vacuum for perturbative and nonperturbative Einstein-Rosen gravity. Physical Review D, 2004, 70, .	4.7	3
47	Asymptotics of regulated field commutators for Einstein-Rosen waves. Journal of Mathematical Physics, 2005, 46, 062306.	1.1	3
48	Quantum Einstein–Rosen waves: coherent states and n -point functions. Classical and Quantum Gravity, 2008, 25, 205013.	4.0	3
49	Black hole entropy in loop quantum gravity. Journal of Physics: Conference Series, 2012, 360, 012035.	0.4	3
50	On-shell equivalence of general relativity and Holst theories with nonmetricity, torsion, and boundaries. Physical Review D, 2022, 105, .	4.7	3
51	Consistent and non-consistent deformations of gravitational theories. Journal of High Energy Physics, 2022, 2022, .	4.7	3
52	On the asymptotics of the rescaled Appell polynomials. Advances in Applied Mathematics, 2020, 113, 101962.	0.7	2
53	Quantum isolated horizons and black hole entropy. , 2013, , .		2
54	Proof of the equivalence of the symplectic forms derived from the canonical and the covariant phase space formalisms. Physical Review D, 2022, 105, .	4.7	2

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55	Diff-invariant kinetic terms in arbitrary dimensions. Physical Review D, 2002, 65, .	4.7	1
56	Classical and quantum behavior of dynamical systems defined by functions of solvable Hamiltonians. American Journal of Physics, 2008, 76, 153-157.	0.7	1
57	Introduction to Quantum Mechanics. AIP Conference Proceedings, 2008, , .	0.4	1
58	Gauge invariance in simple mechanical systems. European Journal of Physics, 2015, 36, 055005.	0.6	1
59	Three Roads to the Geometric Constraint Formulation of Gravitational Theories with Boundaries. Symmetry, 2021, 13, 1430.	2.2	1
60	A two-sided Faulhaber-like formula involving Bernoulli polynomials. Comptes Rendus Mathematique, 2020, 358, 41-44.	0.3	1
61	Kinetic terms for 2-forms in four dimensions. Physical Review D, 2002, 66, .	4.7	0
62	Coupling Einstein-Rosen Waves to Matter: The Massless Scalar Field Case. AIP Conference Proceedings, 2006, , .	0.4	0
63	Quantization of linearly polarized cosmological models with two Killing vector fields. Journal of Physics: Conference Series, 2007, 66, 012035.	0.4	0
64	Semiclassical states for a symmetry reduced gravitational system. , 2009, , .		0
65	Functional description of ?1Ã— ?2and ?3Gowdy cosmologies. Journal of Physics: Conference Series, 2009, 175, 012010.	0.4	0
66	Loops 11: Non-Perturbative / Background Independent Quantum Gravity. Journal of Physics: Conference Series, 2012, 360, 011001.	0.4	0
67	THE THERMODYNAMIC LIMIT FOR BLACK HOLES IN LOOP QUANTUM GRAVITY. , 2015, , .		0
68	Functional evolution of scalar fields in bounded one-dimensional regions. Classical and Quantum Gravity, 2017, 34, 065004.	4.0	0
69	EINSTEIN-ROSEN WAVES COUPLED TO MATTER. , 2008, , .		0
70	GENERATING FUNCTIONS FOR BLACK HOLES IN LOOP QUANTUM GRAVITY. , 2012, , .		0
71	FLUX-AREA OPERATOR AND BLACK HOLE ENTROPY. , 2012, , .		0