Eduardo Martin-Martinez

List of Publications by Year
in descending order

116	4,021	94433	138484
papers	citations	37 h-index	58 g-index

116	116	116	984
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Harvesting entanglement from complex scalar and fermionic fields with linearly coupled particle detectors. Physical Review D, 2022, 105, .	4.7	14
2	A detector-based measurement theory for quantum field theory. Physical Review D, 2022, 105, .	4.7	31
3	Geometry of spacetime from quantum measurements. Physical Review D, 2022, 105, .	4.7	16
4	Sabotaging the harvesting of correlations from quantum fields. Physical Review D, 2022, 105, .	4.7	13
5	Broken covariance of particle detector models in relativistic quantum information. Physical Review D, 2021, 103, .	4.7	38
6	Relativistic causality in particle detector models: Faster-than-light signaling and impossible measurements. Physical Review D, 2021, 103, .	4.7	32
7	What makes a particle detector click. Physical Review D, 2021, 103, .	4.7	11
8	Dimensional reduction of cavities with axial symmetry: A complete analysis of when an optical fiber is approximately one dimensional. Physical Review A, 2021, 104, .	2.5	1
9	Quantum delocalization, gauge, and quantum optics: Light-matter interaction in relativistic quantum information. Physical Review A, 2021, 103, .	2.5	46
10	Measurements in QFT: Weakly coupled local particle detectors and entanglement harvesting. Physical Review D, 2021, 104, .	4.7	15
11	The Unruh Effect in Slow Motion. Symmetry, 2021, 13, 1977.	2.2	8
12	Antiparticle detector models in QFT. Physical Review D, 2021, 104, .	4.7	14
13	When entanglement harvesting is not really harvesting. Physical Review D, 2021, 104, .	4.7	29
14	The time travelerâ€™s guide to the quantization of zero modes. Journal of High Energy Physics, 2021, 2021, 1.	4.7	2
15	Superadditivity of channel capacity through quantum fields. Physical Review D, 2020, 101, .	4.7	12
16	Duality in the dynamics of Unruh-DeWitt detectors in conformally related spacetimes. Physical Review D, 2020, 101, .	4.7	9
17	Communication through quantum fields near a black hole. Physical Review D, 2020, 101, .	4.7	27
18	Transmission of quantum information through quantum fields. Physical Review D, 2020, 101, .	4.7	26

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19	Vacuum entanglement harvesting with a zero mode. Physical Review D, 2020, 101, .	4.7	11
20	General relativistic quantum optics: Finite-size particle detector models in curved spacetimes. Physical Review D, 2020, 101, .	4.7	49
21	First law of quantum field thermodynamics. Physical Review A, 2020, 102, .	2.5	10
22	Unruh Effect without Thermality. Physical Review Letters, 2019, 123, 041601.	7.8	25
23	Zero mode suppression of superluminal signals in light-matter interactions. Physical Review D, 2019, 99, .	4.7	8
24	Thermal contact: mischief and time scales. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 395305.	2.1	1
25	Fundamental Limitations to Local Energy Extraction in Quantum Systems. Physical Review Letters, 2019, 123, 190601.	7.8	15
26	A classification of Markovian fermionic Gaussian master equations. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 435302.	2.1	4
27	Zeno friction and antifriction from quantum collision models. Physical Review A, 2019, 100, .	2.5	5
28	Work Distributions on Quantum Fields. Physical Review Letters, 2019, 122, 240604.	7.8	26
29	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mover accent="true"><mml:mrow><mml:mi mathvariant="bold-italic">p</mml:mi></mml:mrow><mml:mo stretchy="false">^</mml:mo></mml:mover><mml:mo>Â·</mml:mo><mml:mover accent="true"><mml:mrow><mml:mi mathvariant="bold-italic">A</mml:mi></mml:mrow><mml:mo stretchy="false">^</mml:mo>	4.7	17
30	Faster-than-light signaling in the rotating-wave approximation. Physical Review D, 2019, 100, .	4.7	17
31	Light, matter, and quantum randomness generation: A relativistic quantum information perspective. Optics Communications, 2018, 423, 29-47.	2.1	4
32	Direct measurement of the two-point function in quantum fields. Physical Review D, 2018, 98, .	4.7	10
33	Harvesting correlations from thermal and squeezed coherent states. Physical Review D, 2018, 98, .	4.7	48
34	Unruh-DeWitt detectors and entanglement: The antiâ€“de Sitter space. Physical Review D, 2018, 98, .	4.7	50
35	Casimir forces and quantum friction of finite-size atoms in relativistic trajectories. Physical Review A, 2018, 98, .	2.5	4
36	Particle detectors, cavities, and the weak equivalence principle. Physical Review D, 2018, 98, .	4.7	1

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37	Fluctuations of work cost in optimal generation of correlations. Physical Review E, 2018, 98, .	2.1	10
38	Relativity and quantum optics: accelerated atoms in optical cavities. Classical and Quantum Gravity, 2018, 35, 224001.	4.0	12
39	Transmitting qubits through relativistic fields. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 485301.	2.1	22
40	Relativistic quantum optics: The relativistic invariance of the light-matter interaction models. Physical Review D, 2018, 97, .	4.7	56
41	A classification of open Gaussian dynamics. Journal of Physics A: Mathematical and Theoretical, 2018, 51, 245301.	2.1	10
42	Gaussian ancillary bombardment. Physical Review A, 2018, 97, .	2.5	7
43	General no-go theorem for entanglement extraction. Physical Review D, 2018, 97, .	4.7	36
44	New techniques for entanglement harvesting in flat and curved spacetimes. Physical Review D, 2018, 97, .	4.7	27
45	Information carrying capacity of a cosmological constant. Physical Review D, 2017, 95, .	4.7	11
46	Over the horizon: Distinguishing the Schwarzschild spacetime and the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi mathvariant="double-struck">R</mml:mi><mml:msup><mml:mi mathvariant="double-struck">P</mml:mi><mml:mn>3</mml:mn></mml:msup></mml:math> spacetime using an Unruh-DeWitt detector. Physical Review D, 2017, 96, .	4.7	15
47	Purification in rapid-repeated-interaction systems. Physical Review A, 2017, 95, .	2.5	7
48	Engineering negative stress-energy densities with quantum energy teleportation. Physical Review D, 2017, 96, .	4.7	10
49	Correlation-Enhanced Algorithmic Cooling. Physical Review Letters, 2017, 119, 050502.	7.8	15
50	Transmission of information in nonlocal field theories. Physical Review D, 2017, 96, .	4.7	4
51	Degenerate detectors are unable to harvest spacelike entanglement. Physical Review D, 2017, 95, .	4.7	27
52	Nonperturbative analysis of entanglement harvesting from coherent field states. Physical Review D, 2017, 96, .	4.7	28
53	Finite sizes and smooth cutoffs in superconducting circuits. Physical Review A, 2017, 96, .	2.5	11
54	All coherent field states entangle equally. Physical Review D, 2017, 96, .	4.7	15

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55	Entanglement harvesting and divergences in quadratic Unruh-DeWitt detector pairs. Physical Review D, 2017, 96, .	4.7	35
56	Entanglement harvesting from the electromagnetic vacuum with hydrogenlike atoms. Physical Review D, 2016, 94, .	4.7	121
57	Thermalization of particle detectors: The Unruh effect and its reverse. Physical Review D, 2016, 94, .	4.7	43
58	Anti-Unruh phenomena. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 757, 307-311.	4.1	46
59	Open dynamics under rapid repeated interaction. Physical Review A, 2016, 94, .	2.5	23
60	Certified randomness from a two-level system in a relativistic quantum field. Physical Review A, 2016, 94, .	2.5	4
61	Dynamical Casimir effect in circuit QED for nonuniform trajectories. Physical Review A, 2016, 93, .	2.5	7
62	Asymptotically limitless quantum energy teleportation via qudit probes. Physical Review A, 2016, 93, .	2.5	14
63	Universal scheme for indirect quantum control. Physical Review A, 2016, 93, .	2.5	16
64	Timelike information broadcasting in cosmology. Physical Review D, 2016, 93, .	4.7	23
65	Spacetime structure and vacuum entanglement. Physical Review D, 2016, 93, .	4.7	101
66	Renormalized Unruh-DeWitt particle detector models for boson and fermion fields. Physical Review D, 2016, 93, .	4.7	42
67	Equivalence principle and QFT: Can a particle detector tell if we live inside a hollow shell?. Physical Review D, 2016, 94, .	4.7	13
68	Low energy signatures of nonlocal field theories. Physical Review D, 2016, 94, .	4.7	22
69	Precise spaceâ€“time positioning for entanglement harvesting. New Journal of Physics, 2016, 18, 043031.	2.9	17
70	Harvesting correlations from the quantum vacuum. Physical Review D, 2015, 92, .	4.7	153
71	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo stretchy="false">(</mml:mo><mml:mrow><mml:mn>1</mml:mn><mml:mo>+</mml:mo><mml:mn>1</mml:mn></mml:mrow><mml:mo mathvariant="normal">D</mml:mi></mml:mrow></mml:math>Calculation Provides Evidence that Quantum Entanglement Survives a Firewall. Physical Review Letters, 2015, 115, 031301.	7.8	15
72	Causality issues of particle detector models in QFT and quantum optics. Physical Review D, 2015, 92, .	4.7	67

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73	Violation of the Strong Huygenâ€™s Principle and Timelike Signals from the Early Universe. Physical Review Letters, 2015, 114, 141103.	7.8	48
74	Perfect Zeno-like effect through imperfect measurements at a finite frequency. Physical Review A, 2015, 91, .	2.5	15
75	Information Transmission Without Energy Exchange. Physical Review Letters, 2015, 114, 110505.	7.8	62
76	Entanglement in curved spacetimes and cosmology. Classical and Quantum Gravity, 2014, 31, 214001.	4.0	57
77	Quantum seismology. New Journal of Physics, 2014, 16, 105020.	2.9	21
78	Quantum gates via relativistic remote control. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 739, 74-82.	4.1	6
79	Measuring motion through relativistic quantum effects. Physical Review A, 2014, 90, .	2.5	8
80	Particle detectors and the zero mode of a quantum field. Physical Review D, 2014, 90, .	4.7	26
81	Mode invisibility as a quantum nondemolition measurement of coherent light. Physical Review A, 2014, 90, .	2.5	4
82	Casimir forces on atoms in optical cavities. Physical Review A, 2014, 89, .	2.5	79
83	Unruh-DeWitt detector response along static and circular-geodesic trajectories for Schwarzschildâ€“anti-de Sitter black holes. Physical Review D, 2014, 90, .	4.7	39
84	Echo of the quantum bounce. Physical Review D, 2014, 89, .	4.7	20
85	Cavities in curved spacetimes: The response of particle detectors. Physical Review D, 2014, 89, .	4.7	17
86	Quantum signaling in cavity QED. Physical Review A, 2014, 89, .	2.5	44
87	Quantum Thermometry. Foundations of Physics, 2014, 44, 492-511.	1.3	5
88	Universality and thermalization in the Unruh effect. Physical Review D, 2013, 88, .	4.7	27
89	Processing Quantum Information with Relativistic Motion of Atoms. Physical Review Letters, 2013, 110, 160501.	7.8	48
90	Detectors for probing relativistic quantum physics beyond perturbation theory. Physical Review D, 2013, 87, .	4.7	91

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91	Localized projective measurement of a quantum field in non-inertial frames. Classical and Quantum Gravity, 2013, 30, 235006.	4.0	40
92	Mode invisibility and single-photon detection. Physical Review A, 2013, 88, .	2.5	6
93	Wavepacket detection with the Unruh-DeWitt model. Physical Review D, 2013, 87, .	4.7	119
94	Sustainable entanglement production from a quantum field. Physical Review A, 2013, 88, .	2.5	74
95	Localized detection of quantum entanglement through the event horizon. Physical Review A, 2013, 87, .	2.5	35
96	Simulating accelerated atoms coupled to a quantum field. Physical Review A, 2012, 85, .	2.5	22
97	Fundamental limitations to information transfer in accelerated frames. Physical Review A, 2012, 86, .	2.5	20
98	Convergence of fermionic-field entanglement at infinite acceleration in relativistic quantum information. Physical Review A, 2012, 85, .	2.5	30
99	Vanishing geometric discord in noninertial frames. Physical Review A, 2012, 86, .	2.5	33
100	Cosmological quantum entanglement. Classical and Quantum Gravity, 2012, 29, 224003.	4.0	87
101	Reply to â€œComment on â€˜Fermionic entanglement ambiguity in noninertial framesâ€™ â€. Physical Review A, 2012, 85, .	2.5	17
102	Fundamental quantum optics experiments conceivable with satellitesâ€”reaching relativistic distances and velocities. Classical and Quantum Gravity, 2012, 29, 224011.	4.0	131
103	Extracting Past-Future Vacuum Correlations Using Circuit QED. Physical Review Letters, 2012, 109, 033602.	7.8	58
104	Fermionic entanglement ambiguity in noninertial frames. Physical Review A, 2011, 83, .	2.5	58
105	Using Berryâ€™s Phase to Detect the Unruh Effect at Lower Accelerations. Physical Review Letters, 2011, 107, 131301.	7.8	99
106	Entanglement of arbitrary spin fields in noninertial frames. Physical Review A, 2011, 84, .	2.5	28
107	Redistribution of particle and antiparticle entanglement in noninertial frames. Physical Review A, 2011, 83, .	2.5	81
108	The entangling side of the Unruh-Hawking effect. Journal of High Energy Physics, 2011, 2011, 1.	4.7	37

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109	Residual entanglement of accelerated fermions is not nonlocal. Physical Review A, 2011, 84, .	2.5	51
110	Fermionic entanglement extinction in noninertial frames. Physical Review A, 2011, 84, .	2.5	32
111	Unruh effect in quantum information beyond the single-mode approximation. Physical Review A, 2010, 82, .	2.5	226
112	Unveiling quantum entanglement degradation near a Schwarzschild black hole. Physical Review D, 2010, 82, .	4.7	126
113	Entanglement of Dirac fields in an expanding spacetime. Physical Review D, 2010, 82, .	4.7	103
114	Population bound effects on bosonic correlations in noninertial frames. Physical Review A, 2010, 81, .	2.5	29
115	Quantum correlations through event horizons: Fermionic versus bosonic entanglement. Physical Review A, 2010, 81, .	2.5	69
116	Fermionic entanglement that survives a black hole. Physical Review A, 2009, 80, .	2.5	59