

# Claudio Furtado

## List of Publications by Year in descending order

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145  
papers

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148  
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148  
times ranked

589  
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene-based topological insulator in the presence of a disclination submitted to a uniform magnetic field. <i>Annals of Physics</i> , 2021, 425, 168384.	2.8	2
2	Strong gravitational lensing in a spacetime with topological charge within the Eddington-inspired Born-Infeld gravity. <i>Physical Review D</i> , 2021, 103, .	4.7	6
3	On an attractive inverse-square potential in an elastic medium with a screw dislocation. <i>International Journal of Modern Physics A</i> , 2021, 36, 2150066.	1.5	2
4	Quantum holonomy based in a Kaluza-Klein description for defects in C60 fullerenes. <i>International Journal of Geometric Methods in Modern Physics</i> , 2021, 18, 2150163.	2.0	2
5	On the missing magnetic flux and topological effects of a screw dislocation on a charged particle in an inhomogeneous magnetic field. <i>Annals of Physics</i> , 2021, 433, 168598.	2.8	4
6	Transfer-matrix method of circular polarization light in an axionic photonic insulator. <i>Physical Review A</i> , 2021, 104, .	2.5	0
7	Landau Quantization for $\hat{I}$ -Type Neutral Atoms in an Homogeneous Spin-Dependent Gauge Potential. <i>Brazilian Journal of Physics</i> , 2020, 50, 30-34.	1.4	0
8	Graphene wormhole trapped by external magnetic field. <i>Nuclear Physics B</i> , 2020, 950, 114853.	2.5	10
9	Aharonov-Casher effect in the presence of spin-dependent potential. <i>Annals of Physics</i> , 2020, 422, 168325.	2.8	10
10	Semiclassical treatment of an attractive inverse-square potential in an elastic medium with a disclination. <i>International Journal of Geometric Methods in Modern Physics</i> , 2020, 17, 2050178.	2.0	6
11	Analysis of the interaction of an electron with radial electric fields in the presence of a disclination. <i>International Journal of Geometric Methods in Modern Physics</i> , 2019, 16, 1950172.	2.0	13
12	A quantum ring in a nanosphere. <i>International Journal of Geometric Methods in Modern Physics</i> , 2019, 16, 1950167.	2.0	8
13	Weyl fermions in a family of Godel-type geometries with a topological defect. <i>International Journal of Modern Physics D</i> , 2018, 27, 1850027.	2.1	18
14	Linear confinement of a scalar particle in a Godel-type spacetime. <i>European Physical Journal C</i> , 2018, 78, 1.	3.9	42
15	Quantum ring in gapped graphene layer with wedge disclination in the presence of a uniform magnetic field. <i>European Physical Journal Plus</i> , 2018, 133, 1.	2.6	28
16	An analog of magnetic oscillations for neutral atoms with induced electric dipole. <i>International Journal of Modern Physics B</i> , 2018, 32, 1850206.	2.0	0
17	Analogue of the quantum Hall effect for neutral particles with magnetic dipole moment. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2017, 381, 849-851.	2.1	2
18	Fermions in Godel-type background space-times with torsion and the Landau quantization. <i>European Physical Journal Plus</i> , 2017, 132, 1.	2.6	32

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19	The geometric theory of defects description for C60 fullerenes in a rotating frame. <i>European Physical Journal Plus</i> , 2017, 132, 1.	2.6	17
20	Aharonov-Bohm effect in graphene Möbius strips: an analytical treatment. <i>European Physical Journal B</i> , 2017, 90, 1.	1.5	3
21	Evidence for field induced proximity type behavior in based ferromagnetic nanofluid. <i>Philosophical Magazine Letters</i> , 2017, 97, 287-293.	1.2	3
22	Evolution of Landau levels in graphene-based topological insulators in the presence of wedge disclinations. <i>Annals of Physics</i> , 2017, 383, 610-619.	2.8	8
23	Gap-dependent mass of a photon in a photonic topological insulator. <i>Physical Review A</i> , 2017, 96, .	2.5	5
24	Geometric quantum phase for displaced states for a particle with an induced electric dipole moment. <i>Europhysics Letters</i> , 2016, 115, 20001.	2.0	8
25	Klein-Gordon oscillator in Kaluza-Klein theory. <i>European Physical Journal C</i> , 2016, 76, 1.	3.9	107
26	On a relativistic particle and a relativistic position-dependent mass particle subject to the Klein-Gordon oscillator and the Coulomb potential. <i>Annals of Physics</i> , 2016, 370, 128-136.	2.8	74
27	de Haas-van Alphen oscillations for neutral atoms in electric fields. <i>European Physical Journal Plus</i> , 2016, 131, 1.	2.6	3
28	Two-dimensional quantum ring in a graphene layer in the presence of a Aharonov-Bohm flux. <i>Annals of Physics</i> , 2016, 373, 273-285.	2.8	37
29	Description for rotating C60 fullerenes via an analogue of Godel-type metric. <i>European Physical Journal Plus</i> , 2016, 131, 1.	2.6	17
30	On the confinement of massless Dirac fermions in topological Möbius strips. <i>International Journal of Modern Physics B</i> , 2016, 30, 1650224.	2.0	3
31	Relativistic Andaman quantum phase and the Aharonov-Casher effect under Lorentz symmetry breaking effects in the cosmic string spacetime. <i>Annals of Physics</i> , 2016, 372, 544-552.	2.8	9
32	Residual degeneracy from non-degenerate Landau levels of ultracold atoms in light-induced gauge potentials. <i>Physica B: Condensed Matter</i> , 2016, 498, 15-20.	2.7	1
33	On the effects of a screw dislocation and a linear potential on the harmonic oscillator. <i>Physica B: Condensed Matter</i> , 2016, 496, 45-48.	2.7	24
34	Berry's phase for displaced Landau-He-McKellar-Wilkens states. <i>European Physical Journal Plus</i> , 2016, 131, 1.	2.6	3
35	Coherent states of Landau-Aharonov-Casher levels. <i>International Journal of Modern Physics B</i> , 2016, 30, 1650022.	2.0	3
36	De Haas-van Alphen effect of a two-dimensional ultracold atomic gas. <i>Physica B: Condensed Matter</i> , 2016, 481, 19-23.	2.7	7

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37	Lorentz symmetry breaking effects on relativistic EPR correlations. <i>European Physical Journal C</i> , 2015, 75, 1.	3.9	14
38	On the Klein-Gordon oscillator subject to a Coulomb-type potential. <i>Annals of Physics</i> , 2015, 355, 48-54.	2.8	116
39	Wigner rotation via Fermi-Walker transport and relativistic EPR correlations in the Schwarzschild spacetime. <i>International Journal of Quantum Information</i> , 2015, 13, 1550020.	1.1	3
40	Geometric phases modified by a Lorentz-symmetry violation background. <i>International Journal of Modern Physics A</i> , 2015, 30, 1550072.	1.5	30
41	Quantum ring in a rotating frame in the presence of a topological defect. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2015, 379, 11-15.	2.1	75
42	Persistent currents for a moving neutral particle with no permanent electric dipole moment. <i>European Physical Journal B</i> , 2014, 87, 1.	1.5	18
43	Geometric model of a fullerene molecule in the presence of Aharonov-Bohm flux. <i>Journal of Physics and Chemistry of Solids</i> , 2014, 75, 1265-1268.	4.0	12
44	Quantum dot in a graphene layer with topological defects. <i>European Physical Journal Plus</i> , 2014, 129, 1.	2.6	45
45	Quantum holonomies for displaced Landau-Aharonov-Casher states. <i>Quantum Information Processing</i> , 2014, 13, 1563-1572.	2.2	4
46	Quantum influence of topological defects in Godel-type space-times. <i>European Physical Journal C</i> , 2014, 74, 1.	3.9	71
47	Degenerate Landau levels for tripod-type cold atoms in U(2) Abelian gauge field. <i>European Physical Journal D</i> , 2014, 68, 1.	1.3	7
48	Aharonov-Bohm effect for light in a moving medium. <i>Physical Review A</i> , 2014, 90, .	2.5	6
49	Bound states in disclinated graphene with Coulomb impurities in the presence of a uniform magnetic field. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2014, 378, 2317-2324.	2.1	15
50	One-qubit quantum gates associated with topological defects in solids. <i>Quantum Information Processing</i> , 2013, 12, 119-128.	2.2	22
51	Holonomy transformations and application in the curved structure of graphene. <i>European Physical Journal Plus</i> , 2013, 128, 1.	2.6	5
52	On the interaction of the Dirac oscillator with the Aharonov-Casher system in topological defect backgrounds. <i>Annals of Physics</i> , 2013, 336, 489-504.	2.8	90
53	Persistent spin currents in an elastic Landau system. <i>European Physical Journal B</i> , 2013, 86, 1.	1.5	7
54	Abelian geometric phase due to the presence of an edge dislocation. <i>Physical Review A</i> , 2013, 87, .	2.5	31

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55	Induced electric dipole in a quantum ring. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2013, 377, 2926-2930.	2.1	23
56	Some remarks on Landau quantization for induced dipole. <i>Physica Scripta</i> , 2012, T151, 014075.	2.5	0
57	An analogy of the quantum hall conductivity in a Lorentz-symmetry violation setup. <i>Journal of Physics G: Nuclear and Particle Physics</i> , 2012, 39, 105004.	3.6	58
58	LANDAU QUANTIZATION FOR A NEUTRAL PARTICLE IN THE PRESENCE OF TOPOLOGICAL DEFECTS. <i>International Journal of Modern Physics Conference Series</i> , 2012, 18, 101-104.	0.7	0
59	THE GÄDEL METRIC IN THE CHERN-SIMONS MODIFIED GRAVITY. <i>International Journal of Modern Physics Conference Series</i> , 2012, 18, 145-149.	0.7	5
60	GEOMETRIC PHASES, SQUEEZED QUANTUM STATES AND GAUSSIAN WAVE PACKET STATES OF RELIC GRAVITONS. <i>International Journal of Modern Physics Conference Series</i> , 2012, 18, 13-17.	0.7	1
61	COHERENT STATES OF LIGHT PROPAGATING IN CURVED SPACETIMES. <i>International Journal of Modern Physics Conference Series</i> , 2012, 18, 140-144.	0.7	3
62	A Kaluza-Klein description of geometric phases in graphene. <i>Annals of Physics</i> , 2012, 327, 2946-2954.	2.8	27
63	Yet another position-dependent mass quantum model. <i>Journal of Mathematical Physics</i> , 2012, 53, .	1.1	27
64	Landau levels in graphene layers with topological defects. <i>European Physical Journal B</i> , 2012, 85, 1.	1.5	61
65	On the Aharonov-Casher system and the Landau-Aharonov-Casher system confined to a two-dimensional quantum ring. <i>Journal of Mathematical Physics</i> , 2012, 53, 023514.	1.1	22
66	Holonomic quantum computation based on the scalar Aharonov-Bohm effect for neutral particles and linear topological defects. <i>Annals of Physics</i> , 2012, 327, 376-385.	2.8	14
67	On the confinement of a Dirac particle to a two-dimensional ring. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2012, 376, 1269-1273.	2.1	49
68	Horava-Lifshitz gravity and GÄdel universe. <i>Physical Review D</i> , 2011, 84, .	4.7	11
69	Dirac oscillator interacting with a topological defect. <i>Physical Review A</i> , 2011, 84, .	2.5	74
70	Landau quantization for an electric quadrupole moment. <i>Physica Scripta</i> , 2011, 84, 045023.	2.5	16
71	Geometric quantum phase in the spacetime of topological defects. <i>Journal of Physics: Conference Series</i> , 2011, 306, 012069.	0.4	3
72	Light propagation: From dielectrics to curved spacetimes. <i>Europhysics Letters</i> , 2011, 94, 30002.	2.0	9

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73	Quantum holonomies for an electric dipole moment. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 3956-3959.	2.1	32
74	THE ANALOGUE OF THE AHARONOVâ€BOHM EFFECT FOR BOUND STATES FOR NEUTRAL PARTICLES. Modern Physics Letters A, 2011, 26, 1331-1341.	1.2	38
75	HQC with the AC setup associated with topological defects. Quantum Information and Computation, 2011, 11, 444-455.	0.3	13
76	Landau quantization for an induced electric dipole in the presence of topological defects. Open Physics, 2010, 8, .	1.7	26
77	Anandan quantum phase for a neutral particle withâ€Walker reference frame in the cosmic string background. European Physical Journal C, 2010, 69, 531-539.	3.9	34
78	Scalar Aharonovâ€Bohm effect in the presence of a topological defect. Annalen Der Physik, 2010, 522, 447-455.	2.4	29
79	Influence of electronâ€phonon interaction on soliton mediated spinâ€charge conversion effects in two-component polymer model. Annals of Physics, 2010, 325, 455-464.	2.8	3
80	Dynamical Chernâ€Simons modified gravity, GÃrdel Universe and variable cosmological constant. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 693, 494-497.	4.1	16
81	Quantum Scattering of an Electric Dipole by a Charged Screw Dislocation. Progress of Theoretical Physics, 2010, 124, 547-553.	2.0	6
82	Quantum rings in a space with topological defects. Journal of Physics: Conference Series, 2010, 249, 012041.	0.4	0
83	RELATIVISTIC EINSTEINâ€PODOLSKYâ€ROSEN CORRELATIONS IN COSMIC STRING SPACEâ€TIME VIA FERMIONâ€WALKER TRANSPORT. International Journal of Quantum Information, 2010, 08, 1277-1288.	1.1	9
84	RELATIVISTIC LANDAUâ€AHARONOVâ€CASHER QUANTIZATION IN TOPOLOGICAL DEFECT SPACEâ€TIME. International Journal of Modern Physics D, 2010, 19, 85-96.	2.1	36
85	Bound states for neutral particles in a rotating frame in the cosmic string spacetime. Physical Review D, 2010, 82, .	4.7	73
86	Relativistic Landau quantization for a neutral particle. Physical Review A, 2009, 80, .	2.5	44
87	Gaussian wave packet states of scalar fields in a universe of de Sitter. Journal of Mathematical Physics, 2009, 50, 083511.	1.1	9
88	TOPOLOGICAL DEFECT DISTRIBUTIONS AND THE SELF-ENERGY OF A CHARGED PARTICLE. International Journal of Modern Physics D, 2009, 18, 237-249.	2.1	6
89	Gaussian wave packet states of relic gravitons. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 671, 314-317.	4.1	8
90	Gravitational geometric phase in the presence of torsion. European Physical Journal C, 2009, 60, 501.	3.9	43

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91	Circular orbits in cosmic string and Schwarzschild AdS spacetime with Fermi-Walker transport. European Physical Journal C, 2009, 63, 149-155.	3.9	14
92	Geometric phase for a neutral particle in rotating frames in a cosmic string spacetime. Physical Review D, 2009, 80, .	4.7	64
93	Gödel solution in modified gravity. Physical Review D, 2009, 79, .	4.7	29
94	Landau quantization for a neutral particle in the presence of topological defects. Physical Review D, 2009, 79, .	4.7	71
95	Geometric phases and squeezed quantum states of relic gravitons. Journal of Mathematical Physics, 2009, 50, .	1.1	16
96	Holonomic quantum computation associated with a defect structure of conical graphene. Europhysics Letters, 2009, 87, 30002.	2.0	38
97	Geometric phases in graphitic cones. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 5368-5371.	2.1	87
98	Influence of topology in a quantum ring. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 3894-3897.	2.1	55
99	Landau analog levels for dipoles in non-commutative space and phase space. European Physical Journal C, 2008, 56, 597-606.	3.9	34
100	Berry's phase for a spin 1/2 particle in the presence of topological defects. European Physical Journal C, 2008, 57, 817-822.	3.9	14
101	Self-interaction in the von Neumann cosmic string street configuration. European Physical Journal C, 2008, 58, 331-335.	3.9	0
102	Geometric phase for a neutral particle in the presence of a topological defect. Physical Review D, 2008, 78, .	4.7	71
103	Dual equivalence between self-dual and Maxwell-Chern-Simons models with Lorentz symmetry breaking. Physical Review D, 2008, 78, .	4.7	7
104	Elastic Landau levels. Journal of Physics Condensed Matter, 2008, 20, 125209.	1.8	39
105	Influence of the topology in EPR correlations. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 065301.	2.1	6
106	Noncommutative Anandan quantum phase. Physical Review A, 2007, 76, .	2.5	49
107	Landau quantization and curvature effects in a two-dimensional quantum dot. Europhysics Letters, 2007, 79, 57001.	2.0	55
108	Exact linear invariants and quantum effects in the early universe. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2007, 651, 384-387.	4.1	21

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109	Holonomy transformation in the FRW metric. <i>General Relativity and Gravitation</i> , 2007, 39, 1311-1322.	2.0	1
110	Landau levels analog to electric dipole. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2006, 348, 135-140.	2.1	89
111	Landau quantization of neutral particles in an external field. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2006, 358, 336-338.	2.1	85
112	AHARONOVâ€™BOHM EFFECT AND DISCLINATIONS IN AN ELASTIC MEDIUM. <i>Modern Physics Letters A</i> , 2006, 21, 1393-1403.	1.2	12
113	BOUND STATES IN THE DYNAMICS OF A DIPOLE IN THE PRESENCE OF A CONICAL DEFECT. <i>Modern Physics Letters A</i> , 2005, 20, 1991-1995.	1.2	19
114	QUANTUM EFFECTS DUE TO A MAGNETIC FLUX ASSOCIATED TO A TOPOLOGICAL DEFECT. <i>International Journal of Modern Physics A</i> , 2005, 20, 6051-6064.	1.5	40
115	Dual Aharonovâ€™Bohm Effect. <i>Physica Scripta</i> , 2005, 71, 7-11.	2.5	48
116	Geometric phase for fermionic quasiparticles scattering by disgyration in superfluids. <i>Europhysics Letters</i> , 2004, 67, 538-544.	2.0	6
117	Brane structure from a scalar field in warped spacetime. <i>Journal of Cosmology and Astroparticle Physics</i> , 2004, 2004, 002-002.	5.4	139
118	Scalar fields and exact invariants in a Friedmann-Robertson-Walker spacetime. <i>Physical Review D</i> , 2004, 70, .	4.7	29
119	THE SELF-ENERGY OF A CHARGED PARTICLE IN THE PRESENCE OF A TOPOLOGICAL DEFECT DISTRIBUTION. <i>International Journal of Modern Physics A</i> , 2004, 19, 2113-2122.	1.5	17
120	CIRCULAR ORBITS AROUND SCHWARZSCHILDâ€™AdS SPACETIME. <i>Modern Physics Letters A</i> , 2004, 19, 2683-2695.	1.2	3
121	Global Properties of the Black Cigar Spacetime. <i>Journal of High Energy Physics</i> , 2004, 2004, 029-029.	4.7	2
122	Quantum dynamics of magnetic and electric dipoles and the geometric phase. <i>Physical Review A</i> , 2004, 69, .	2.5	38
123	Topological interactions in spacetimes with thick line defects. <i>Physical Review D</i> , 2003, 68, .	4.7	6
124	Solid-state analog for the He-McKellar-Wilkins quantum phase. <i>Europhysics Letters</i> , 2003, 62, 306-312.	2.0	24
125	Loop variables in the geometry of a rotating black string. <i>Classical and Quantum Gravity</i> , 2003, 20, 2063-2074.	4.0	7
126	NON-ADIABATIC BERRY'S QUANTUM PHASES IN ANISOTROPIC UNIVERSES. <i>Modern Physics Letters A</i> , 2002, 17, 1665-1672.	1.2	2



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127	Aharonovâ€™Bohm effect in the presence of a density of defects. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 296, 171-175.	2.1	35
128	On the localization of electrons and holes by a disclination core. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 288, 329-334.	2.1	7
129	Quantum scattering by a magnetic flux screw dislocation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 289, 160-166.	2.1	101
130	Dipole dynamics in the presence of a cosmic string. Journal of Physics A, 2001, 34, 6119-6125.	1.6	7
131	Landau levels in the presence of topological defects. Journal of Physics A, 2001, 34, 5945-5954.	1.6	118
132	AHARONOVâ€™BOHM EFFECT FOR BOUND STATES IN KALUZAâ€™KLEIN THEORY. Modern Physics Letters A, 2000, 15, 253-258.	1.2	44
133	Berry's quantum phase in media with dislocations. Europhysics Letters, 2000, 52, 1-7.	2.0	42
134	Harmonic oscillator interacting with conical singularities. Journal of Physics A, 2000, 33, 5513-5519.	1.6	129
135	Gravitational Berryâ€™s quantum phase. Physical Review D, 2000, 62, .	4.7	45
136	Self-forces on electric and magnetic linear sources in the presence of a torsional defect. Physical Review D, 2000, 62, .	4.7	7
137	Landau levels in the presence of a screw dislocation. Europhysics Letters, 1999, 45, 279-282.	2.0	131
138	Global effects due to cosmic defects in Kaluza-Klein theory. Physical Review D, 1999, 59, .	4.7	78
139	Charge Localization around Disclinations in Monolayer Graphite. Physica Status Solidi (B): Basic Research, 1998, 207, 387-392.	1.5	33
140	Electrostatic self-force in -dimensional cosmological gravity. Classical and Quantum Gravity, 1997, 14, 3425-3432.	4.0	7
141	Nonrelativistic scattering problem by a global monopole. Physical Review D, 1997, 56, 1345-1348.	4.7	67
142	Self-forces on electric and magnetic linear sources in the space-time of a cosmic string. Physical Review D, 1995, 51, 7140-7143.	4.7	28
143	Landau levels in the presence of disclinations. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 195, 90-94.	2.1	191
144	On the binding of electrons and holes to disclinations. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 188, 394-396.	2.1	121

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145	Mechanically deformed crumpled surfaces. Journal Physics D: Applied Physics, 1989, 22, 1217-1221.	2.8	29