Javier Negro

List of Publications by Year
in descending order

118	2,019	257101	288905
papers	citations	24 h-index	40 g-index

119	119	119	615
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nonrelativistic conformal groups. Journal of Mathematical Physics, 1997, 38, 3786-3809.	0.5	132
2	Classical and quantum position-dependent mass harmonic oscillators. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 369, 400-406.	0.9	94
3	Second-order supersymmetric periodic potentials. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 275, 338-349.	0.9	81
4	Exact analytic solutions for a Dirac electron moving in graphene under magnetic fields. Journal of Physics Condensed Matter, 2009, 21, 455305.	0.7	80
5	Bound states and scattering coefficients of the potential. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 1310-1313.	0.9	77
6	The supersymmetric modified PÃ¶schl-Teller and delta well potentials. Journal of Physics A, 1999, 32, 8447-8460.	1.6	69
7	Nonrelativistic conformal groups. II. Further developments and physical applications. Journal of Mathematical Physics, 1997, 38, 3810-3831.	0.5	67
8	Polynomial Heisenberg algebras. Journal of Physics A, 2004, 37, 10349-10362.	1.6	66
9	Group Approach to the Factorization of the Radial Oscillator Equation. Annals of Physics, 1996, 252, 386-412.	1.0	64
10	A study of the bound states for square potential wells with position-dependent mass. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 360, 228-233.	0.9	63
11	Factorizations of one-dimensional classical systems. Annals of Physics, 2008, 323, 413-431.	1.0	53
12	Self-adjoint Hamiltonians with a mass jump: General matching conditions. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 362, 265-268.	0.9	47
13	Classical motion and coherent states for PÃ¶schlâ€“Teller potentials. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 1391-1405.	0.9	46
14	Symmetries of the heat equation on the lattice. Letters in Mathematical Physics, 1996, 36, 351-355.	0.5	41
15	Third-order differential ladder operators and supersymmetric quantum mechanics. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 045204.	0.7	34
16	Confluent hypergeometric equations and related solvable potentials in quantum mechanics. Journal of Mathematical Physics, 2000, 41, 7964-7996.	0.5	33
17	SUSY approach to Pauli Hamiltonians with an axial symmetry. Journal of Physics A, 2006, 39, 6987-7001.	1.6	30
18	Factorization method and singular Hamiltonians. Journal of Physics A, 1998, 31, 4115-4125.	1.6	29

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19	Resonances and antibound states for the PÃ¶schlâ€“Teller potential: Ladder operators and SUSY partners. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 1600-1609.	0.9	29
20	Traveling-Wave Solutions for Kortewegâ€“de Vriesâ€“Burgers Equations through Factorizations. Foundations of Physics, 2006, 36, 1587-1599.	0.6	28
21	Elementary systems with partial finite ladder spectra. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 324, 139-144.	0.9	27
22	Travelling wave solutions of the generalized Benjaminâ€“Bonaâ€“Mahony equation. Chaos, Solitons and Fractals, 2009, 40, 2031-2040.	2.5	27
23	On position-dependent mass harmonic oscillators. Journal of Physics: Conference Series, 2008, 128, 012053.	0.3	26
24	Dynamical algebras for PÃ¶schlâ€“Teller Hamiltonian hierarchies. Annals of Physics, 2009, 324, 2548-2560.	1.0	26
25	Supersymmetry in spherical molecules and fullerenes under perpendicular magnetic fields. Journal of Physics Condensed Matter, 2013, 25, 165301.	0.7	24
26	Quantum infinite square well with an oscillating wall. Chaos, Solitons and Fractals, 2009, 41, 2067-2074.	2.5	23
27	A unified approach to quantum and classical TTW systems based on factorizations. Annals of Physics, 2012, 332, 27-37.	1.0	23
28	Superintegrable Lissajous systems on the sphere. European Physical Journal Plus, 2014, 129, 1.	1.2	23
29	Refined factorizations of solvable potentials. Journal of Physics A, 2000, 33, 7207-7215.	1.6	22
30	Discrete derivatives and symmetries of difference equations. Journal of Physics A, 2001, 34, 2023-2030.	1.6	22
31	The anisotropic oscillator on curved spaces: A new exactly solvable model. Annals of Physics, 2016, 373, 399-423.	1.0	22
32	Nonlinear dynamics of the two-photon Dicke model. Journal of Optics B: Quantum and Semiclassical Optics, 1999, 1, 562-570.	1.4	21
33	Discreteq-derivatives and symmetries ofq-difference equations. Journal of Physics A, 2004, 37, 3459-3473.	1.6	20
34	Travelling wave solutions of two-dimensional Kortewegâ€“de Vriesâ€“Burgers and Kadomtsevâ€“Petviashvili equations. Journal of Physics A, 2006, 39, 11441-11452.	1.6	19
35	A delta well with a mass jump. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 465207.	0.7	19
36	Anyons, group theory and planar physics. Journal of Mathematical Physics, 2006, 47, 033508.	0.5	18

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37	A quantum architecture for multiplying signed integers. Journal of Physics: Conference Series, 2008, 128, 012013.	0.3	18
38	Superintegrable quantum u(3) systems and higher rank factorizations. Journal of Mathematical Physics, 2006, 47, 043511.	0.5	17
39	Dynamical algebras of general two-parametric PÃ¶schlâ€“Teller Hamiltonians. Annals of Physics, 2012, 327, 808-822.	1.0	16
40	Boson representations, non-standard quantum algebras and contractions. Journal of Physics A, 1997, 30, 6797-6809.	1.6	14
41	Carbon nanotubes in an inhomogeneous transverse magnetic field: exactly solvable model. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 115307.	0.7	14
42	Local realizations of kinematical groups with a constant electromagnetic field. II. The nonrelativistic case. Journal of Mathematical Physics, 1990, 31, 2811-2821.	0.5	13
43	Invariant Connections in a Non-Abelian Principal Bundle. Annals of Physics, 1994, 231, 211-233.	1.0	13
44	Lie symmetries of difference equations. European Physical Journal D, 2001, 51, 341-348.	0.4	13
45	New two-dimensional integrable quantum models from SUSY intertwining. Journal of Physics A, 2006, 39, 9297-9308.	1.6	13
46	Intertwining symmetry algebras of quantum superintegrable systems on the hyperboloid. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 255201.	0.7	13
47	Local realizations of kinematical groups with a constant electromagnetic field. I. The relativistic case. Journal of Mathematical Physics, 1990, 31, 568-578.	0.5	12
48	Superintegrability of the Fockâ€“Darwin system. Annals of Physics, 2017, 383, 101-119.	1.0	12
49	Landau quantum systems: an approach based on symmetry. Journal of Physics A, 2002, 35, 2283-2307.	1.6	11
50	Darboux transformations of the Jaynesâ€“Cummings Hamiltonian. Journal of Physics A, 2004, 37, 10115-10127.	1.6	11
51	Spectrum generating algebras for the free motion in S3. Journal of Mathematical Physics, 2011, 52, 063509.	0.5	11
52	Solutions to the PainlevÃ© V equation through supersymmetric quantum mechanics. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 335203.	0.7	11
53	Twist maps for non-standard quantum algebras and discrete SchrÃ¶dinger symmetries. Journal of Physics A, 2000, 33, 4859-4870.	1.6	10
54	Second-order Darboux displacements. Journal of Physics A, 2003, 36, 10053-10069.	1.6	10

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55	Factorization of a class of almost linear second-order differential equations. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 9819-9824.	0.7	10
56	Partial coherent states in graphene. Journal of Physics: Conference Series, 2019, 1194, 012025.	0.3	10
57	Symmetries of the wave equation in a uniform lattice. Journal of Physics A, 1996, 29, 1107-1114.	1.6	9
58	Contraction of superintegrable Hamiltonian systems. Journal of Mathematical Physics, 2000, 41, 317-336.	0.5	9
59	Darboux transformations for LamÃ© potentials. European Physical Journal D, 2000, 50, 1303-1308.	0.4	9
60	Regularized Scarf potentials: energy band structure and supersymmetry. Journal of Physics A, 2004, 37, 10079-10093.	1.6	9
61	Two Charged Particles in the Plane Under a Constant Perpendicular Magnetic Field. International Journal of Theoretical Physics, 2011, 50, 2019-2028.	0.5	9
62	The hyperbolic step potential: Anti-bound states, SUSY partners and Wigner time delays. Annals of Physics, 2017, 379, 86-101.	1.0	9
63	Heisenberg-type higher order symmetries of superintegrable systems separable in Cartesian coordinates. Nonlinearity, 2017, 30, 1788-1808.	0.6	9
64	Classical ladder functions for Rosenâ€“Morse and curved Keplerâ€“Coulomb systems. Annals of Physics, 2019, 405, 69-82.	1.0	9
65	The general Racah algebra as the symmetry algebra of generic systems on pseudo-spheres. Journal of Physics A: Mathematical and Theoretical, 2020, 53, 405203.	0.7	9
66	Solutions of a Class of Duffing Oscillators with Variable Coefficients. International Journal of Theoretical Physics, 2011, 50, 2046-2056.	0.5	8
67	Factorization approach to superintegrable systems: Formalism and applications. Physics of Atomic Nuclei, 2017, 80, 389-396.	0.1	8
68	Kinematical superalgebras. Journal of Physics A, 1999, 32, 5097-5121.	1.6	7
69	Actionâ€“angle variables, ladder operators and coherent states. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 2515-2521.	0.9	7
70	Classical spectrum generating algebra of the Keplerâ€“Coulomb system and action-angle variables. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 260-264.	0.9	7
71	Solutions of the Dirac Equation in a Magnetic Field and Intertwining Operators. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 2012, , .	0.5	7
72	Classical and quantum three-dimensional integrable systems with axial symmetry. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 10791-10806.	0.7	6

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73	Classical and quantum integrability in 3D systems. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 304030.	0.7	6
74	'Spectrum generating algebras' of classical systems: the Kepler-Coulomb potential. Journal of Physics: Conference Series, 2012, 343, 012063.	0.3	6
75	Dirac-Weyl equation on a hyperbolic graphene surface under magnetic fields. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 118, 113926.	1.3	5
76	Polynomial algebras from su(3) and a quadratically superintegrable model on the two sphere. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 015205.	0.7	5
77	Bundle realizations and invariant connections in an Abelian principal bundle. Journal of Mathematical Physics, 1992, 33, 511-523.	0.5	4
78	Twisted conformal algebraso(4, 2). Journal of Physics A, 2002, 35, 8179-8196.	1.6	4
79	Generalized Jaynesâ€“Cummings Hamiltonians by shape-invariant hierarchies and their SUSY partners. Journal of Physics A, 2006, 39, 11301-11311.	1.6	4
80	Kinetic energy and ground-state electron densities as fingerprints of wavefunction entanglement in two-electron spin-compensated atomic models. Journal of Physics A, 2006, 39, 3741-3751.	1.6	4
81	Approximate solutions to the quantum problem of two opposite charges in a constant magnetic field. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 1817-1823.	0.9	4
82	Confinement of an electron in a non-homogeneous magnetic field: Integrable vs superintegrable quantum systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 48-55.	0.9	4
83	Confinement of Dirac electrons in graphene magnetic quantum dots. Journal of Physics Condensed Matter, 2018, 30, 365502.	0.7	4
84	Redundant poles of the S-matrix for the one-dimensional Morse potential. European Physical Journal Plus, 2020, 135, 1.	1.2	4
85	Intertwining Symmetry Algebras of Quantum Superintegrable Systems. Symmetry, Integrability and Geometry: Methods and Applications (SIGMA), 2009, , .	0.5	4
86	Dirac fermions in armchair graphene nanoribbons trapped by electric quantum dots. Physical Review B, 2022, 105, .	1.1	4
87	A characterization of functional realizations of three-dimensional quantum groups. Journal of Physics A, 1992, 25, 5945-5962.	1.6	3
88	On the local equivalence in a unidimensional world. Journal of Mathematical Physics, 1993, 34, 1206-1217.	0.5	3
89	Dynamical symmetries for superintegrable quantum systems. Physics of Atomic Nuclei, 2007, 70, 496-504.	0.1	3
90	Integrable systems in ellipsoidal coordinates. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 475203.	0.7	3

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91	Quantum mechanics and umbral calculus. Journal of Physics: Conference Series, 2008, 128, 012056.	0.3	3
92	Spectrum generating algebra for the continuous spectrum of a free particle in Lobachevski space. Journal of Mathematical Physics, 2013, 54, .	0.5	3
93	Degeneracy in carbon nanotubes under transverse magneticÎ´-fields. Journal of Physics Condensed Matter, 2015, 27, 285501.	0.7	3
94	A qualitative study of a nanotube model using an iterative Taylor method. International Journal of Modern Physics C, 2017, 28, 1750036.	0.8	3
95	The Perlick system type I: From the algebra of symmetries to the geometry of the trajectories. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 3355-3363.	0.9	3
96	Dirac-like Hamiltonians associated to SchrÃ¶dinger factorizations. European Physical Journal Plus, 2021, 136, 1.	1.2	3
97	Multiboson expansions for the q-oscillator and su(1,1)q. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 188, 1-10.	0.9	2
98	Relativistic Gauge Invariant Potentials. , 1995, 43, 1-39.		2
99	Two Dimensional Cayley-Klein Algebras Generated by Expansions. International Journal of Modern Physics A, 1997, 12, 259-264.	0.5	2
100	Gamow vectors: miscellaneous results. Journal of Physics: Conference Series, 2008, 128, 012038.	0.3	2
101	Discrete coulomb potential. Physics of Atomic Nuclei, 2010, 73, 384-390.	0.1	2
102	Intertwining Symmetry Algebras of Quantum Superintegrable Systems on Constant Curvature Spaces. International Journal of Theoretical Physics, 2011, 50, 2067-2073.	0.5	2
103	Tavis-Cummings models and their quasi-exactly solvable SchrÃ¶dinger Hamiltonians. European Physical Journal Plus, 2019, 134, 1.	1.2	2
104	Coherent states in the symmetric gauge for graphene under a constant perpendicular magnetic field. European Physical Journal Plus, 2021, 136, 1.	1.2	2
105	On a class of nonstandard quantum algebras and their representations. European Physical Journal D, 1997, 47, 1259-1266.	0.4	1
106	Superintegrable hamiltonian systems: An algebraic approach. Journal of Physics: Conference Series, 2009, 175, 012007.	0.3	1
107	Massive and massless two-dimensional Dirac particles in electric quantum dots. Physica E: Low-Dimensional Systems and Nanostructures, 2022, , 115312.	1.3	1
108	IRREDUCIBLE q-BOSON REALIZATIONS. Modern Physics Letters A, 1995, 10, 2279-2288.	0.5	0

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109	IRREDUCIBLE q-BOSON REALIZATIONS: THE SYMMETRIC CASE. Modern Physics Letters A, 1996, 11, 1349-1355.	0.5	0
110	A quantum algebra approach to discrete equations on uniform lattices. European Physical Journal D, 2001, 51, 321-330.	0.4	0
111	Superintegrable Systems and Higher Rank Factorizations. AIP Conference Proceedings, 2006, , .	0.3	0
112	Intertwining algebras of quantum superintegrable systems on the hyperboloid. Journal of Physics: Conference Series, 2008, 128, 012026.	0.3	0
113	The 5th International Symposium in Quantum Theory and Symmetries (QTS5). Journal of Physics: Conference Series, 2008, 128, 011001.	0.3	0
114	Special Issue in Honour of Prof. M. Gadella with Occasion of His 60th Birthday. International Journal of Theoretical Physics, 2011, 50, 1991-1992.	0.5	0
115	Dynamical algebras of general PÃ¶schl-Teller hierarchies. Journal of Physics: Conference Series, 2012, 343, 012086.	0.3	0
116	Integrals of motion and trajectories for the Perlick system I: an algebraic approach. Journal of Physics: Conference Series, 2018, 965, 012033.	0.3	0
117	Second harmonic Hamiltonian: Algebraic and SchrÃ¶dinger approaches. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126091.	0.9	0
118	Special issue on Quantum Theory and Symmetries. Journal of Physics A: Mathematical and Theoretical, 2007, 40, .	0.7	0