Paolo Amore

List of Publications by Year
in descending order

109 papers	954 citations	516710 16 h-index	526287 27 g-index
112 all docs	112 docs citations	112 times ranked	472 citing authors

#	Article	IF	Citations
1	Improved Lindstedtâ€“PoincarÃ© method for the solution of nonlinear problems. Journal of Sound and Vibration, 2005, 283, 1115-1136.	3.9	93
2	Color superconductivity in finite systems. Physical Review D, 2002, 65, .	4.7	43
3	Presenting a new method for the solution of nonlinear problems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 316, 218-225.	2.1	39
4	Exact and approximate expressions for the period of anharmonic oscillators. European Journal of Physics, 2005, 26, 589-601.	0.6	38
5	Analytical formulas for gravitational lensing. Physical Review D, 2006, 73, .	4.7	38
6	Collocation method for fractional quantum mechanics. Journal of Mathematical Physics, 2010, 51, .	1.1	38
7	Alternative perturbation approaches in classical mechanics. European Journal of Physics, 2005, 26, 1057-1063.	0.6	37
8	A variational sinc collocation method for strong-coupling problems. Journal of Physics A, 2006, 39, L349-L355.	1.6	34
9	Asymptotic and exact series representations for the incomplete Gamma function. Europhysics Letters, 2005, 71, 1-7.	2.0	31
10	Analytical formulas for gravitational lensing: Higher order calculation. Physical Review D, 2006, 74, .	4.7	30
11	Solving the Helmholtz equation for membranes of arbitrary shape: numerical results. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 265206.	2.1	28
12	Comparison of alternative improved perturbative methods for nonlinear oscillations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 340, 201-208.	2.1	22
13	Accurate calculation of the solutions to the Thomasâ€“Fermi equations. Applied Mathematics and Computation, 2014, 232, 929-943.	2.2	19
14	Spectroscopy of drums and quantum billiards: Perturbative and nonperturbative results. Journal of Mathematical Physics, 2010, 51, 052105.	1.1	18
15	Variational collocation on finite intervals. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 13047-13062.	2.1	17
16	High order analysis of nonlinear periodic differential equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 327, 158-166.	2.1	16
17	Convergence acceleration of series through a variational approach. Journal of Mathematical Analysis and Applications, 2006, 323, 63-77.	1.0	15
18	Gravitational lensing from compact bodies: Analytical results for strong and weak deflection limits. Physical Review D, 2007, 75, .	4.7	15

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19	On some conditionally solvable quantum-mechanical problems. Physica Scripta, 2020, 95, 105201.	2.5	15
20	Pion dispersion relation at finite density and temperature. Physical Review C, 2002, 66, .	2.9	14
21	Comment on an application of the asymptotic iteration method to a perturbed Coulomb model. Journal of Physics A, 2006, 39, 10491-10497.	1.6	14
22	A new method for the solution of the SchrÃ¶dinger equation. Journal of Physics A, 2004, 37, 3515-3525.	1.6	13
23	Systematic perturbation calculation of integrals with applications to physics. Physical Review E, 2005, 71, 016704.	2.1	13
24	The period of a classical oscillator. Europhysics Letters, 2005, 70, 425-431.	2.0	13
25	Mathematical analysis of recent analytical approximations to the collapse of an empty spherical bubble. Journal of Chemical Physics, 2013, 138, 084511.	3.0	13
26	High order analysis of the limit cycle of the van der Pol oscillator. Journal of Mathematical Physics, 2018, 59, .	1.1	11
27	A new method for studying the vibration of non-homogeneous membranes. Journal of Sound and Vibration, 2009, 321, 104-114.	3.9	10
28	Collocation on uniform grids. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 115302.	2.1	10
29	One-dimensional oscillator in a box. European Journal of Physics, 2010, 31, 69-77.	0.6	10
30	Is space-time symmetry a suitable generalization of parity-time symmetry?. Annals of Physics, 2014, 350, 533-548.	2.8	10
31	A new approximation method for time-dependent problems in quantum mechanics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 340, 87-93.	2.1	9
32	Bound states in open-coupled asymmetrical waveguides and quantum wires. Journal of Physics A: Mathematical and Theoretical, 2012, 45, 105303.	2.1	9
33	Alternative representation for nonlocal operators and path integrals. Physical Review A, 2007, 75, .	2.5	8
34	The string of variable density: Perturbative and non-perturbative results. Annals of Physics, 2010, 325, 2679-2696.	2.8	8
35	Variational collocation for systems of coupled anharmonic oscillators. Physica Scripta, 2010, 81, 045011.	2.5	8
36	Spectroscopy of annular drums and quantum rings: Perturbative and nonperturbative results. Journal of Mathematical Physics, 2011, 52, 063516.	1.1	8

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37	Accurate calculation of the complex eigenvalues of the SchrÃ¶dinger equation with an exponential potential. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 3149-3152.	2.1	7
38	Rayleighâ€“Ritz variation method and connected-moments expansions. Physica Scripta, 2009, 80, 055002.	2.5	7
39	The string of variable density: Further results. Annals of Physics, 2011, 326, 2315-2355.	2.8	7
40	Bound states for the quantum dipole moment in two dimensions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 235004.	1.5	7
41	Exact sum rules for inhomogeneous drums. Annals of Physics, 2013, 336, 223-244.	2.8	7
42	Exact sum rules for inhomogeneous strings. Annals of Physics, 2013, 338, 341-360.	2.8	7
43	Non-Hermitian oscillators withTdsymmetry. Annals of Physics, 2015, 353, 238-251.	2.8	7
44	High order eigenvalues for the Helmholtz equation in complicated non-tensor domains through Richardson extrapolation of second order finite differences. Journal of Computational Physics, 2016, 312, 252-271.	3.8	7
45	An ubiquitous three-term recurrence relation. Journal of Mathematical Physics, 2021, 62, 032106.	1.1	7
46	Comparative study of quantum anharmonic potentials. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 329, 451-458.	2.1	6
47	Comment on â€œThomson rings in a diskâ€: Physical Review E, 2017, 95, 026601.	2.1	6
48	Thomson problem in one dimension: Minimal energy configurations of N charges on a curve. Physica A: Statistical Mechanics and Its Applications, 2019, 519, 256-266.	2.6	6
49	Exceptional points of the eigenvalues of parameter-dependent Hamiltonian operators. European Physical Journal Plus, 2021, 136, 1.	2.6	6
50	Alternative implementation of PadÃ© approximants. Physical Review D, 2007, 76, .	4.7	5
51	Development of accurate solutions for a classical oscillator. Journal of Sound and Vibration, 2007, 300, 345-351.	3.9	5
52	Can one hear the density of a drum? Weyl's law for inhomogeneous media. Europhysics Letters, 2010, 92, 10006.	2.0	5
53	Collocation approach to the Helmholtz eigenvalue problem on multiply connected domains. Journal of Sound and Vibration, 2010, 329, 1362-1375.	3.9	5
54	A perturbative approach to the spectral zeta functions of strings, drums, and quantum billiards. Journal of Mathematical Physics, 2012, 53, 123519.	1.1	5

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55	Relativistic Hamiltonians in many-body theories. Physical Review C, 1996, 53, 2801-2808.	2.9	4
56	One-loop integrals at finite temperature. Journal of Physics A, 2005, 38, 6463-6472.	1.6	4
57	Exact sum rules for inhomogeneous systems containing a zero mode. Annals of Physics, 2014, 349, 253-267.	2.8	4
58	Quantum particles in a moving potential. Physica Scripta, 2020, 95, 065405.	2.5	4
59	Inversion of the perturbation series. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 025201.	2.1	3
60	Further analysis of the connected moments expansion. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 505302.	2.1	3
61	One cannot hear the density of a drum (and further aspects of isospectrality). Physical Review E, 2013, 88, 042915.	2.1	3
62	On the application of the Lindstedtâ€“PoincarÃ© method to the Lotkaâ€“Volterra system. Annals of Physics, 2018, 396, 293-303.	2.8	3
63	Computing the solutions of the van der Pol equation to arbitrary precision. Physica D: Nonlinear Phenomena, 2022, 435, 133279.	2.8	3
64	Quark distribution functions in nuclear matter. Journal of Physics G: Nuclear and Particle Physics, 2001, 27, 1905-1915.	3.6	2
65	Contrasting and parity-violating asymmetries in nuclei. Nuclear Physics A, 2001, 690, 509-534.	1.5	2
66	Colour Superconductivity in Finite Systems. Acta Physica Hungarica A Heavy Ion Physics, 2002, 16, 163-168.	0.4	2
67	Dispersion relation of the nonlinear Klein-Gordon equation through a variational method. Chaos, 2006, 16, 013131.	2.5	2
68	Comment on â€œQuantization of Friedmann-Robertson-Walker spacetimes in the presence of a negative cosmological constant and radiationâ€• Physical Review D, 2007, 75, .	4.7	2
69	Eigenvalues from power-series expansions: an alternative approach. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 075201.	2.1	2
70	Comment on â€˜Coupled anharmonic oscillators: the Raileighâ€“Ritz approach versus the collocation approachâ€™. Physica Scripta, 2011, 83, 047003.	2.5	2
71	Accurate calculation of the bound states of the quantum dipole problem in two dimensions. Open Physics, 2012, 10, .	1.7	2
72	Comment on â€˜Numerical estimates of the spectrum for anharmonic PT symmetric potentialsâ€™. Physica Scripta, 2013, 87, 047001.	2.5	2

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73	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si32.gif" display="inline" overflow="scroll"><mml:mi mathvariant="script">PT</mml:mi></mml:math>-symmetric strings. Annals of Physics, 2014, 343, 61-71.	2.8	2
74	Weakly bound states in heterogeneous waveguides. European Physical Journal B, 2016, 89, 1.	1.5	2
75	Perturbation theory for short-range weakly-attractive potentials in one dimension. Annals of Physics, 2017, 378, 253-263.	2.8	2
76	The harmonic oscillator in a space with a screw dislocation. Annals of Physics, 2018, 388, 235-240.	2.8	2
77	Analytical approximations to the spectra of quarkâ€“antiquark potentials. Journal of Physics G: Nuclear and Particle Physics, 2006, 32, 1061-1071.	3.6	1
78	The virial theorem for nonlinear problems. European Journal of Physics, 2009, 30, L65-L66.	0.6	1
79	High-order connected moments expansion for the Rabi Hamiltonian. Open Physics, 2012, 10, .	1.7	1
80	Accurate calculation of the eigenvalues of non-uniform strings and membranes. Open Physics, 2012, 10, .	1.7	1
81	Solution to the equations of the moment expansions. Open Physics, 2013, 11, .	1.7	1
82	HETEROGENEOUS SYSTEMS IN DIMENSIONS: LOWERÂSPECTRUM. ANZIAM Journal, 2015, 57, 150-165.	0.2	1
83	On the symmetry of three identical interacting particles in a one-dimensional box. Annals of Physics, 2015, 362, 118-129.	2.8	1
84	BOUND STATES IN WEAKLY DEFORMED WAVEGUIDES: NUMERICAL VERSUS ANALYTICAL RESULTS. ANZIAM Journal, 2017, 59, 200-214.	0.2	1
85	A quantum-mechanical anharmonic oscillator with a most interesting spectrum. Annals of Physics, 2017, 385, 1-9.	2.8	1
86	Remark on Landau quantization, Aharonovâ€“Bohm effect and two-dimensional pseudoharmonic quantum dot around a screw dislocation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 139-140.	2.1	1
87	Exact sum rules for quantum billiards of arbitrary shape. Annals of Physics, 2018, 388, 12-25.	2.8	1
88	On the straightforward perturbation theory in classical mechanics. European Journal of Physics, 2018, 39, 055001.	0.6	1
89	Weakly (and not so weakly) bound states of a relativistic particle in one dimension. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 2097-2102.	2.1	1
90	On a model for rotational tunneling with a $$C_{6}$$-space-time symmetric analog. Journal of Mathematical Chemistry, 2019, 57, 1840-1849.	1.5	1

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91	Spectral sum rules for the SchrÃ¶dinger equation. Annals of Physics, 2020, 423, 168334.	2.8	1
92	On the Hellmann-Feynman theorem in statistical mechanics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126531.	2.1	1
93	Comment on: â€œBidimensional bound states for charged polar nanoparticlesâ€. Journal of Nanoparticle Research, 2020, 22, 1.	1.9	1
94	Gross misinterpretation of a conditionally solvable eigenvalue equation. International Journal of Modern Physics A, 2020, 35, 2050200.	1.5	1
95	High order analysis of nonlinear periodic differential equations. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 327, 158-158.	2.1	0
96	Wronskian perturbation theory. European Physical Journal A, 2007, 32, 109-112.	2.5	0
97	Dalgarnoâ€“Lewis perturbation theory for scattering states. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 367, 182-187.	2.1	0
98	Particle correlation from uncorrelated non Bornâ€“Oppenheimer SCF wavefunctions. Journal of Mathematical Chemistry, 2013, 51, 1023-1035.	1.5	0
99	Comment on: â€¯PT-/non-PT-symmetric and non-Hermitian Hellmann potential: approximate bound and scattering states with anyâ„“-valuesâ€™. Physica Scripta, 2015, 90, 087001.	2.5	0
100	Small-energy series for one-dimensional quantum-mechanical models with non-symmetric potentials. Journal of Mathematical Chemistry, 2015, 53, 1351-1362.	1.5	0
101	Comment on: â€œGround state energies from converging and diverging power series expansionsâ€, Ann. Phys. 373 (2016) 456â€“469. Annals of Physics, 2017, 376, 499-504.	2.8	0
102	Spectral algorithms for multiple scale localized eigenfunctions in infinitely long, slightly bent quantum waveguides. Computer Physics Communications, 2018, 224, 209-221.	7.5	0
103	Isospectral heterogeneous domains: A numerical study. Journal of Computational Physics: X, 2019, 1, 100018.	0.7	0
104	Exact sum rules for heterogeneous spherical drums. Annals of Physics, 2020, 412, 168041.	2.8	0
105	Energy levels of a coupled-rotors model. Journal of Mathematical Chemistry, 2021, 59, 161-167.	1.5	0
106	Comments on two conditionally solvable quantum-mechanical models. International Journal of Modern Physics C, 0, , .	1.7	0
107	The IX Mexican Workshop on Particles and Fields. Journal of Physics: Conference Series, 2006, 37, .	0.4	0
108	Heterogeneous systems in d dimensions: lower spectrum. ANZIAM Journal, 0, 57, 150.	0.0	0

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109	Bound states in weakly deformed waveguides: numerical versus analytical results. ANZIAM Journal, 0, 59, 200.	0.0	0