Maria Przybylska

List of Publications by Year
in descending order

77 papers	**817** citations	516561 **16** h-index	610775 **24** g-index
79 all docs	**79** docs citations	**79** times ranked	**299** citing authors

#	ARTICLE	IF	CITATIONS
1	Full spectrum of the Rabi model. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 16-20.	0.9	49
2	Darboux points and integrability of Hamiltonian systems with homogeneous polynomial potential. Journal of Mathematical Physics, 2005, 46, 062901.	0.5	46
3	All meromorphically integrable 2D Hamiltonian systems with homogeneous potential of degree 3. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 327, 461-473.	0.9	43
4	Analytical method of spectra calculations in the Bargmann representation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 3445-3451.	0.9	41
5	Global integrability of cosmological scalar fields. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 465101.	0.7	31
6	Non-integrability of ABC flow. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 303, 265-272.	0.9	28
7	Necessary conditions for classical super-integrability of a certain family of potentials in constant curvature spaces. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 382001.	0.7	27
8	Comment on â€œSolvability of the two-photon Rabi Hamiltonianâ€. Physical Review A, 2015, 91, .	1.0	26
9	Darboux polynomials and first integrals of natural polynomial Hamiltonian systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 326, 219-226.	0.9	23
10	The Poisson equations in the nonholonomic Suslov problem: integrability, meromorphic and hypergeometric solutions. Nonlinearity, 2009, 22, 2231-2259.	0.6	23
11	On algebraic construction of certain integrable and super-integrable systems. Physica D: Nonlinear Phenomena, 2011, 240, 1426-1448.	1.3	21
12	Note on integrability of certain homogeneous Hamiltonian systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 2970-2976.	0.9	20
13	Non-Integrability of the Problem of a Rigid Satellite in Gravitational and Magnetic Fields. Celestial Mechanics and Dynamical Astronomy, 2003, 87, 317-351.	0.5	19
14	Non-integrability of the generalized spring-pendulum problem. Journal of Physics A, 2004, 37, 2579-2597.	1.6	19
15	Non-Integrability of the Generalized Two Fixed Centres Problem. Celestial Mechanics and Dynamical Astronomy, 2004, 89, 145-164.	0.5	19
16	An exactly solvable system from quantum optics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 1503-1509.	0.9	19
17	Non-integrability of the three-body problem. Celestial Mechanics and Dynamical Astronomy, 2011, 110, 17-30.	0.5	17
18	The inhomogeneous Suslov problem. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 2389-2394.	0.9	16

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19	Nonintegrability of the Suslov problem. Journal of Mathematical Physics, 2004, 45, 1065-1078.	0.5	15
20	Necessary conditions for super-integrability of Hamiltonian systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 5581-5587.	0.9	14
21	DIFFERENTIAL GALOIS THEORY AND INTEGRABILITY. International Journal of Geometric Methods in Modern Physics, 2009, 06, 1357-1390.	0.8	13
22	Non-integrability of flail triple pendulum. Chaos, Solitons and Fractals, 2013, 53, 60-74.	2.5	13
23	Integrability of Hamiltonian systems with algebraic potentials. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 76-82.	0.9	13
24	Integrability Analysis of the Stretch–Twist–Fold Flow. Journal of Nonlinear Science, 2020, 30, 1607-1649.	1.0	13
25	Title is missing!. Regular and Chaotic Dynamics, 2002, 7, 73.	0.3	13
26	Differential Galois approach to the non-integrability of the heavy top problem. Annales De La Faculté Des Sciences De Toulouse, 2005, 14, 123-160.	0.3	13
27	New integrable Hamiltonian system with first integral quartic in momenta. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 343, 171-173.	0.9	12
28	Integrability of Hamiltonian systems with homogeneous potentials of degree zero. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 448-452.	0.9	12
29	Darboux points and integrability of homogeneous Hamiltonian systems with three and more degrees of freedom. Regular and Chaotic Dynamics, 2009, 14, 263-311.	0.3	11
30	Non-integrability of the dumbbell and point mass problem. Celestial Mechanics and Dynamical Astronomy, 2013, 117, 315-330.	0.5	11
31	Nonexistence of the final first integral in the Zipoy-Voorhees space-time. Physical Review D, 2013, 88, .	1.6	11
32	Title is missing!. Regular and Chaotic Dynamics, 2003, 8, 413.	0.3	11
33	Differential Galois obstructions for integrability of homogeneous Newton equations. Journal of Mathematical Physics, 2008, 49, 022701.	0.5	9
34	Finiteness of integrable n-dimensional homogeneous polynomial potentials. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 369, 180-187.	0.9	8
35	Note on integrability of certain homogeneous Hamiltonian systems in 2D constant curvature spaces. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 725-732.	0.9	8
36	Understanding reversals of a rattleback. Regular and Chaotic Dynamics, 2017, 22, 368-385.	0.3	8

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37	Non-integrability of Gross–Neveu systems. Physica D: Nonlinear Phenomena, 2005, 201, 249-267.	1.3	7
38	Darboux points and integrability of homogeneous Hamiltonian systems with three and more degrees of freedom. Nongeneric cases. Regular and Chaotic Dynamics, 2009, 14, 349-388.	0.3	7
39	Partial integrability of Hamiltonian systems with homogeneous potential. Regular and Chaotic Dynamics, 2010, 15, 551-563.	0.3	7
40	Necessary conditions for the existence of additional first integrals for Hamiltonian systems with homogeneous potential. Nonlinearity, 2012, 25, 255-277.	0.6	7
41	Dynamics of a relativistic charge in the Penning trap. Chaos, 2015, 25, 053102.	1.0	7
42	Anisotropic Kepler and anisotropic two fixed centres problems. Celestial Mechanics and Dynamical Astronomy, 2017, 127, 163-184.	0.5	7
43	Differential Galois integrability obstructions for nonlinear three-dimensional differential systems. Chaos, 2020, 30, 013135.	1.0	7
44	Dynamics of a rolling and sliding disk in a plane. Asymptotic solutions, stability and numerical simulations. Regular and Chaotic Dynamics, 2016, 21, 204-231.	0.3	6
45	The generalized Euler–Poinsot rigid body equations: explicit elliptic solutions. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 415201.	0.7	5
46	Darboux points and integrability analysis of Hamiltonian systems with homogeneous rational potentials. Physica D: Nonlinear Phenomena, 2013, 249, 1-15.	1.3	5
47	On Dynamics of Jellet's Egg. Asymptotic Solutions Revisited. Regular and Chaotic Dynamics, 2020, 25, 40-58.	0.3	5
48	Title is missing!. Regular and Chaotic Dynamics, 2005, 10, 437.	0.3	5
49	Electromagnetic trap for polar particles. New Journal of Physics, 2020, 22, 103047.	1.2	4
50	A generalization of the Lax equation defined by an arbitrary anti-automorphism. Journal of Physics A, 1999, 32, 3155-3167.	1.6	3
51	A generalization of the Lax equation. Journal of Geometry and Physics, 2001, 38, 217-252.	0.7	3
52	On matrix differential equations and abstract FG algorithm. Linear Algebra and Its Applications, 2002, 346, 155-175.	0.4	3
53	Bi-homogeneity and integrability of rational potentials. Journal of Differential Equations, 2020, 268, 7012-7028.	1.1	3
54	Comment on "Hyperchaos in constrained Hamiltonian system and its control" by J. Li, H. Wu and F. Mei. Nonlinear Dynamics, 2020, 101, 639-654.	2.7	3

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55	Studies of the Hoyer system. Reports on Mathematical Physics, 2001, 48, 131-138.	0.4	2
56	Isospectral-like flows and eigenvalue problem. Future Generation Computer Systems, 2003, 19, 1165-1175.	4.9	2
57	Differential Galois obstructions for non-commutative integrability. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 5431-5435.	0.9	2
58	Integrable deformations of integrable Hamiltonian systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 376, 80-93.	0.9	2
59	On integrable rational potentials of the Dirac equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 833-841.	0.9	2
60	Thermalization in Many-Particle Quantum Walks. Open Systems and Information Dynamics, 2016, 23, 1650002.	0.5	2
61	Penning trap with an inclined magnetic field. Chaos, 2016, 26, 083118.	1.0	2
62	Global Properties of Kovalevskaya Exponents. Regular and Chaotic Dynamics, 2017, 22, 840-850.	0.3	2
63	Dynamics of a dipole in a stationary electromagnetic field. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2019, 475, 20190230.	1.0	2
64	Integrability of the generalised Hill problem. Nonlinear Dynamics, 2022, 107, 1989-2002.	2.7	2
65	Integrable variational equations of non-integrable systems. Regular and Chaotic Dynamics, 2012, 17, 337-358.	0.3	1
66	Dynamics of multibody chains in circular orbit: non-integrability of equations of motion. Celestial Mechanics and Dynamical Astronomy, 2016, 126, 297-311.	0.5	1
67	Relativistic quantum mechanics of a spin-1/2 charge in a Penning trap. International Journal of Mass Spectrometry, 2017, 422, 13-26.	0.7	1
68	Dynamics of constrained many body problems in constant curvature two-dimensional manifolds. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170425.	1.6	1
69	Non-integrability of generalised Charlier and Saint-Germain problem. Applied Mathematics and Computation, 2020, 365, 124720.	1.4	1
70	Non-integrability of a model of elastic dumbbell satellite. Nonlinear Dynamics, 2021, 106, 125-146.	2.7	1
71	Overview of the differential Galois integrability conditions for non-homogeneous potentials. Banach Center Publications, 0, 94, 221-232.	0.1	1
72	Partial integrability of hamiltonian systems with homogeneous potential. Regular and Chaotic Dynamics, 2010, 15, 551.	0.3	1

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73	Additive generalizations of the lax equation. Reports on Mathematical Physics, 2001, 48, 425-440.	0.4	0
74	Controllability of Matrix Differential Equations Related to Lie Algebra Actions. Open Systems and Information Dynamics, 2001, 08, 115-123.	0.5	0
75	The Poisson Equations in the Nonholonomic Suslov Problem: Integrability, Meromorphic and Hypergeometric Solutions. , 2009, , .		0
76	Probing the Eigenstates Thermalization Hypothesis with Many-Particle Quantum Walks on Lattices. Open Systems and Information Dynamics, 2017, 24, 1750007.	0.5	0
77	Dynamics of dipole in a stationary non-homogeneous electromagnetic field. Scientific Reports, 2021, 11, 17756.	1.6	0