Vasile Marinca

List of Publications by Year
in descending order

		361296	276775
100 papers	1,923 citations	20 h-index	41 g-index
113 all docs	113 docs citations	113 times ranked	694 citing authors

#	Article	IF	Citations
1	Application of Optimal Homotopy Asymptotic Method for solving nonlinear equations arising in heat transfer. International Communications in Heat and Mass Transfer, 2008, 35, 710-715.	2.9	306
2	An optimal homotopy asymptotic method applied to the steady flow of a fourth-grade fluid past a porous plate. Applied Mathematics Letters, 2009, 22, 245-251.	1.5	232
3	Optimal homotopy asymptotic method with application to thin film flow. Open Physics, 2008, 6, .	0.8	124
4	Determination of periodic solutions for the motion of a particle on a rotating parabola by means of the optimal homotopy asymptotic method. Journal of Sound and Vibration, 2010, 329, 1450-1459.	2.1	103
5	Explicit analytical approximation to large-amplitude non-linear oscillations of a uniform cantilever beam carrying an intermediate lumped mass and rotary inertia. Meccanica, 2010, 45, 847-855.	1.2	72
6	Nonlinear Dynamical Systems in Engineering. , 2011, , .		72
7	Accurate analytical solutions to oscillators with discontinuities and fractional-power restoring force by means of the optimal homotopy asymptotic method. Computers and Mathematics With Applications, 2010, 60, 1607-1615.	1.4	70
8	A modified iteration perturbation method for some nonlinear oscillation problems. Acta Mechanica, 2006, 184, 231-242.	1.1	62
9	The Optimal Homotopy Asymptotic Method. , 2015, , .		57
10	The Optimal Homotopy Asymptotic Method for solving Blasius equation. Applied Mathematics and Computation, 2014, 231, 134-139.	1.4	56
11	Dynamic Response of a Permanent Magnet Synchronous Generator to a Wind Gust. Energies, 2019, 12, 915.	1.6	52
12	Nonlinear dynamic analysis of an electrical machine rotorâ€"bearing system by the optimal homotopy perturbation method. Computers and Mathematics With Applications, 2011, 61, 2019-2024.	1.4	44
13	An analytical approach to nonâ€linear dynamical model of a permanent magnet synchronous generator. Wind Energy, 2015, 18, 1657-1670.	1.9	38
14	Periodic solutions for some strongly nonlinear oscillations by Heâ€™s variational iteration method. Computers and Mathematics With Applications, 2007, 54, 1188-1196.	1.4	36
15	Optimal Homotopy Perturbation Method for a Non-Conservative Dynamical System of a Rotating Electrical Machine. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2012, 67, 509-516.	0.7	35
16	On the flow of a Walters-type Bâ€™ viscoelastic fluid in a vertical channel with porous wall. International Journal of Heat and Mass Transfer, 2014, 79, 146-165.	2.5	35
17	An Efficient Analytical Approach to Investigate the Dynamics of a Misaligned Multirotor System. Mathematics, 2020, 8, 1083.	1.1	32
18	Periodic solutions of Duffing equation with strong non-linearity. Chaos, Solitons and Fractals, 2008, 37, 144-149.	2.5	29

#	Article	IF	Citations
19	An Optimal Homotopy Asymptotic Approach Applied to Nonlinear MHD Jeffery-Hamel Flow. Mathematical Problems in Engineering, 2011, 2011, 1-16.	0.6	29
20	Approximate solutions for steady boundary layer MHD viscous flow and radiative heat transfer over an exponentially porous stretching sheet. Applied Mathematics and Computation, 2015, 269, 389-401.	1.4	29
21	Explicit and exact solutions to cubic Duffing and double-well Duffing equations. Mathematical and Computer Modelling, 2011, 53, 604-609.	2.0	27
22	Some exact solutions for MHD flow and heat transfer to modified second grade fluid with variable thermal conductivity in the presence of thermal radiation and heat generation/absorption. Computers and Mathematics With Applications, 2018, 76, 1515-1524.	1.4	25
23	Application of the variational iteration method to some nonlinear one-dimensional oscillations. Meccanica, 2008, 43, 75-79.	1.2	20
24	Optimal homotopy asymptotic method to large post-buckling deformation of MEMS. MATEC Web of Conferences, 2018, 148, 13003.	0.1	18
25	Dual Approximate Solutions of the Unsteady Viscous Flow over a Shrinking Cylinder with Optimal Homotopy Asymptotic Method. Advances in Mathematical Physics, 2014, 2014, 1-11.	0.4	17
26	Construction of Analytic Solution to Axisymmetric Flow and Heat Transfer on a Moving Cylinder. Symmetry, 2020, 12, 1335.	1.1	17
27	Optimal Auxiliary Functions Method for a Pendulum Wrapping on Two Cylinders. Mathematics, 2020, 8, 1364.	1.1	17
28	An Iteration Procedure with Application to Van der Pol Oscillator. International Journal of Nonlinear Sciences and Numerical Simulation, 2009, 10, .	0.4	15
29	Optimal homotopy asymptotic method for polytrophic spheres of the Lane-Emden type equation. AIP Conference Proceedings, 2019, , .	0.3	14
30	Application of the Optimal Auxiliary Functions Method to a Permanent Magnet Synchronous Generator. International Journal of Nonlinear Sciences and Numerical Simulation, 2019, 20, 399-406.	0.4	14
31	Dynamics of SEIR epidemic model by optimal auxiliary functions method. Chaos, Solitons and Fractals, 2021, 147, 110949.	2.5	14
32	An optimal iteration method with application to the Thomas-Fermi equation. Open Physics, 2011, 9, .	0.8	13
33	Nonlinear dynamics of a wind turbine permanent magnet generator system in different wind profile conditions. AIP Conference Proceedings, 2017, , .	0.3	13
34	An effective analytical approach to nonlinear free vibration of elastically actuated microtubes. Meccanica, 2021, 56, 813-823.	1.2	13
35	Different Approximations to the Solution of Upper-Convected Maxwell Fluid over a Porous Stretching Plate. Abstract and Applied Analysis, 2014, 2014, 1-12.	0.3	12
36	Analytic Approximate Solution for Falkner-Skan Equation. Scientific World Journal, The, 2014, 2014, 1-22.	0.8	10

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37	Construction of approximate periodic solutions to a modified van der Pol oscillator. Nonlinear Analysis: Real World Applications, 2010, 11, 4355-4362.	0.9	9
38	An Optimal Iteration Method for Strongly Nonlinear Oscillators. Journal of Applied Mathematics, 2012, 2012, 1-11.	0.4	9
39	A Solution Procedure Combining Analytical and Numerical Approaches to Investigate a Two-Degree-of-Freedom Vibro-Impact Oscillator. Mathematics, 2021, 9, 1374.	1.1	9
40	An optimal homotopy perturbation approach to thin film flow of a fourth grade fluid. , 2012, , .		8
41	Optimal homotopy perturbation method for nonlinear differential equations governing MHD Jeffery-Hamel flow with heat transfer problem. Open Physics, 2017, 15, 42-57.	0.8	8
42	An analytical approach to the dynamic analysis of a rotating electric machine. Computers and Mathematics With Applications, 2009, 58, 2320-2324.	1.4	7
43	Analytical approximate solutions to the Thomas-Fermi equation. Open Physics, 2014, 12, .	0.8	7
44	Comments on â€œA one-step optimal homotopy analysis method for nonlinear differential equationsâ€. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 3735-3739.	1.7	6
45	Thin film flow of an Oldroyd 6-constant fluid over a moving belt: an analytic approximate solution. Open Physics, 2016, 14, 44-64.	0.8	6
46	The nonlinear thermomechanical vibration of a functionally graded beam on Winkler-Pasternak foundation. MATEC Web of Conferences, 2018, 148, 13004.	0.1	6
47	Free Oscillations of Euler-Bernoulli Beams on Nonlinear Winkler-Pasternak Foundation. Springer Proceedings in Physics, 2018, , 41-48.	0.1	6
48	Optimal Parametric Iteration Method for Solving Multispecies Lotka-Volterra Equations. Discrete Dynamics in Nature and Society, 2012, 2012, 1-10.	0.5	5
49	Optimal Auxiliary Functions Method for viscous flow due to a stretching surface with partial slip. Open Engineering, 2018, 8, 261-274.	0.7	5
50	An Optimal Approach to Study the Nonlinear Behaviour of a Rotating Electrical Machine. Journal of Applied Mathematics, 2012, 2012, 1-10.	0.4	4
51	Optimal Variational Method for Truly Nonlinear Oscillators. Journal of Applied Mathematics, 2013, 2013, 1-6.	0.4	4
52	Optimal Homotopy Asymptotic Method for Viscous Boundary Layer Flow in Unbounded Domain. , 2014, , .		3
53	An approximate solution for the nonlinear Lane-Emden type equation on a semi-infinite domain. , 2012, , .		2
54	Optimal Homotopy Asymptotic Method for Solving a Nonlinear Problem in Elasticity. , 2012, , .		2

#	ARTICLE	IF	CITATIONS
55	Approximate Analytical Solutions to Nonlinear Vibrations of a Thin Elastic Plate. Applied Mechanics and Materials, 0, 430, 40-44.	0.2	2
56	Optimal Homotopy Asymptotic Approach to Self-Excited Vibrations. Applied Mechanics and Materials, 2013, 430, 27-31.	0.2	2
57	An Optimal Homotopy Asymptotic Approach to a Damped Dynamical System of a Rotating Electrical Machine. Applied Mechanics and Materials, 2015, 801, 202-206.	0.2	2
58	Application of the optimal homotopy asymptotic method to nonlinear Bingham fluid dampers. Open Physics, 2017, 15, 620-626.	0.8	2
59	An Approximate Analytical Solution of Transversal Oscillations with Quintic Nonlinearities. Springer Proceedings in Physics, 2021, , 41-49.	0.1	2
60	Analysis of Nonlinear Dynamic Behavior of a Rotating Electrical Machine Rotor-Bearing System Using Optimal Auxiliary Functions Method. Springer Proceedings in Mathematics and Statistics, 2018, , 159-168.	0.1	2
61	The Optimal Homotopy Asymptotic Method. , 2012, , 103-209.		1
62	Planar Stretching Flows with Partial Slip. , 2013, , .		1
63	Advances in Nonlinear Vibration. Journal of Applied Mathematics, 2013, 2013, 1-2.	0.4	1
64	Approximate Solutions to a Cantilever Beam Using Optimal Homotopy Asymptotic Method. Applied Mechanics and Materials, 0, 430, 22-26.	0.2	1
65	Free Oscillations of a Nonlinear Oscillator with an Exponential Non-Viscous Damping. Applied Mechanics and Materials, 2015, 801, 38-42.	0.2	1
66	An Application of the Optimal Homotopy Asymptotic Method to Generalized Van der Pol Oscillator. Applied Mechanics and Materials, 0, 801, 33-37.	0.2	1
67	Viscous flow and heat transfer over an unsteady stretching surface. Open Physics, 2016, 14, 371-381.	0.8	1
68	Approximate analytic solutions for steady MHD flow and heat transfer of a third grade fluid in wire coating process with constant viscosity. AIP Conference Proceedings, 2017, , .	0.3	1
69	Viscous flow of an incompressible fluid over a curved stretching surface. AIP Conference Proceedings, 2018, , .	0.3	1
70	Optimal Auxiliary Functions Method for Nonlinear Vibration of Doubly Clamped Nanobeam Incorporating the Casimir Force. Springer Proceedings in Physics, 2021, , 51-58.	0.1	1
71	Analytic Approximate Solutions to the Boundary Layer Flow Equation over a Stretching Wall with Partial Slip at the Boundary. PLoS ONE, 2016, 11, e0149334.	1.1	1
72	Analytical Study of Nonlinear Vibration in a Rub-Impact Jeffcott Rotor. Energies, 2021, 14, 8298.	1.6	1

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73	Optimal homotopy perturbation method for solving a nonlinear problem in elasticity. , 2012, , .		0
74	The Flow in a Viscous Fluid over an Unsteady Stretching Surface. , 2015, , .		0
75	On the Open Problem: An Optimal Analytical Solution for Duffing Oscillator. Applied Mechanics and Materials, 0, 801, 43-47.	0.2	0
76	Analytic solution of the static pull-in instability in MEMS considering Casimir force. AIP Conference Proceedings, 2018, , .	0.3	0
77	Optimal homotopy asymptotic method in the study of energy harvesting problems. AIP Conference Proceedings, 2019, , .	0.3	0
78	Analytic approximate solutions to electrically actuated MEMS. AIP Conference Proceedings, 2020, , .	0.3	0
79	Oscillations of a Pendulum Wrapping on Two Cylinders. , 2021, , 41-61.		0
80	The Optimal Auxiliary Functions Method. , 2021, , 11-16.		0
81	The Second Alternative to the Optimal Auxiliary Functions Method. , 2021, , 367-416.		0
82	The Nonlinear Thermomechanical Vibration of a Functionally Graded Beam (FGB) on Winkler-Pasternak Foundation. , 2021, , 109-122.		0
83	The First Alternative of the Optimal Auxiliary Functions Method. , 2021, , 19-40.		0
84	Viscous Flow Due to a Stretching Surface with Partial Slip. , 2021, , 223-243.		0
85	Dynamic Analysis of a Rotating Electrical Machine Rotor-Bearing System. , 2021, , 159-165.		0
86	Investigation of a Permanent Magnet Synchronous Generator. , 2021, , 167-176.		0
87	Some Exact Solutions for Nonlinear Dynamical Systems by Means of the Optimal Auxiliary Functions Method. , 2021, , 435-479.		0
88	Transversal Oscillations of a Beam with Quintic Nonlinearities. , 2021, , 79-86.		0
89	Vibration of Nonlinear Nonlocal Elastic Column with Initial Imperfection. , 2021, , 93-98.		0
90	Free Vibration of Tapered Beams. , 2021, , 153-157.		0

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91	Axisymmetric MHD Flow and Heat Transfer to Modified Second Grade Fluid. , 2021, , 245-265.		0
92	Nonlinear Vibrations of Doubly Clamped Nanobeam Incorporating the Casimir Force. , 2021, , 71-78.		0
93	The Optimal Variational Iteration Method. , 2012, , 259-311.		0
94	The Second Alternative of the Optimal Homotopy Asymptotic Method. , 2015, , 69-390.		0
95	The First Alternative of the Optimal Homotopy Asymptotic Method. , 2015, , 23-68.		0
96	The Third Alternative of the Optimal Homotopy Asymptotic Method. , 2015, , 391-465.		0
97	Incompressible boundary layer flow of nanofluid over a convectively heated stretching sheet. AIP Conference Proceedings, 2020, , .	0.3	0
98	Approximate Analytical Solutions to Nonlinear Oscillations of Horizontally Supported Jeffcott Rotor. Energies, 2022, 15, 1122.	1.6	0
99	Oscillations of a nonlinear energy harvester. AIP Conference Proceedings, 2022, , .	0.3	0
100	Dynamics of a piezoelectric cantilever for energy harvesting. AIP Conference Proceedings, 2022, , .	0.3	0