Tarsicio BelÃ©ndez

List of Publications by Year
in descending order

37 papers	1,198 citations	430874 18 h-index	361022 35 g-index
38 all docs	38 docs citations	38 times ranked	605 citing authors

#	Article	IF	Citations
1	Large and small deflections of a cantilever beam. European Journal of Physics, 2002, 23, 371-379.	0.6	197
2	Analytical approximations for the period of a nonlinear pendulum. European Journal of Physics, 2006, 27, 539-551.	0.6	90
3	Application of the harmonic balance method to a nonlinear oscillator typified by a mass attached to a stretched wire. Journal of Sound and Vibration, 2007, 302, 1018-1029.	3.9	88
4	Application of Heâ€™s homotopy perturbation method to conservative truly nonlinear oscillators. Chaos, Solitons and Fractals, 2008, 37, 770-780.	5.1	85
5	Application of He's Homotopy Perturbation Method to the Duffing-Harmonic Oscillator. International Journal of Nonlinear Sciences and Numerical Simulation, 2007, 8, .	1.0	78
6	Exact solution for the nonlinear pendulum. Revista Brasileira De Ensino De Fisica, 2007, 29, 645-648.	0.2	74
7	Application of the homotopy perturbation method to the nonlinear pendulum. European Journal of Physics, 2007, 28, 93-104.	0.6	71
8	Application of a modified Heâ€™s homotopy perturbation method to obtain higher-order approximations to a nonlinear oscillator with discontinuities. Nonlinear Analysis: Real World Applications, 2009, 10, 601-610.	1.7	62
9	Solution for an anti-symmetric quadratic nonlinear oscillator by a modified Heâ€™s homotopy perturbation method. Nonlinear Analysis: Real World Applications, 2009, 10, 416-427.	1.7	51
10	Exact solution for the unforced Duffing oscillator with cubic and quintic nonlinearities. Nonlinear Dynamics, 2016, 86, 1687-1700.	5.2	38
11	Harmonic balance approaches to the nonlinear oscillators in which the restoring force is inversely proportional to the dependent variable. Journal of Sound and Vibration, 2008, 314, 775-782.	3.9	33
12	Higher accuracy analytical approximations to a nonlinear oscillator with discontinuity by He's homotopy perturbation method. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 2010-2016.	2.1	30
13	Approximation for a large-angle simple pendulum period. European Journal of Physics, 2009, 30, L25-L28.	0.6	30
14	Numerical and Experimental Analysis of Large Deflections of Cantilever Beams Under a Combined Load. Physica Scripta, 2005, , 61.	2.5	29
15	Approximate solutions of a nonlinear oscillator typified as a mass attached to a stretched elastic wire by the homotopy perturbation method. Chaos, Solitons and Fractals, 2009, 39, 746-764.	5.1	28
16	An Improved 'Heuristic' Approximation for the Period of a Nonlinear Pendulum: Linear Analysis of a Classical Nonlinear Problem. International Journal of Nonlinear Sciences and Numerical Simulation, 2007, 8, .	1.0	24
17	Higher-order approximate solutions to the relativistic and Duffing-harmonic oscillators by modified He's homotopy methods. Physica Scripta, 2008, 77, 025004.	2.5	21
18	Rational harmonic balance based method for conservative nonlinear oscillators: Application to the Duffing equation. Mechanics Research Communications, 2009, 36, 728-734.	1.8	20

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19	An analysis of the classical Doppler effect. European Journal of Physics, 2003, 24, 497-505.	0.6	19
20	Asymptotic representations of the period for the nonlinear oscillator. Journal of Sound and Vibration, 2007, 299, 403-408.	3.9	17
21	Comments on â€œinvestigation of the properties of the period for the nonlinear oscillator â€• Journal of Sound and Vibration, 2007, 303, 925-930.	3.9	14
22	Analytical Approximate Solutions for the Cubic-Quintic Duffing Oscillator in Terms of Elementary Functions. Journal of Applied Mathematics, 2012, 2012, 1-16.	0.9	14
23	Nonlinear oscillator with power-form elastic-term: Fourier series expansion of the exact solution. Communications in Nonlinear Science and Numerical Simulation, 2015, 22, 134-148.	3.3	14
24	APPROXIMATE ANALYTICAL SOLUTIONS FOR THE RELATIVISTIC OSCILLATOR USING A LINEARIZED HARMONIC BALANCE METHOD. International Journal of Modern Physics B, 2009, 23, 521-536.	2.0	12
25	Determination of the refractive index and thickness of holographic silver halide materials by use of polarized reflectances. Applied Optics, 2002, 41, 6802.	2.1	10
26	An Equivalent Linearization Method for Conservative Nonlinear Oscillators. International Journal of Nonlinear Sciences and Numerical Simulation, 2008, 9, .	1.0	9
27	Closed-Form Exact Solutions for the Unforced Quintic Nonlinear Oscillator. Advances in Mathematical Physics, 2017, 2017, 1-14.	0.8	8
28	Reply to â€˜Comment on â€œApproximation for the large-angle simple pendulum periodâ€â€™. European Journal of Physics, 2009, 30, L83-L86.	0.6	7
29	Solutions for Conservative Nonlinear Oscillators Using an Approximate Method Based on Chebyshev Series Expansion of the Restoring Force. Acta Physica Polonica A, 2016, 130, 667-678.	0.5	7
30	FlexiÃ³n de Una Barra Delgada Empotrada en un Extremo: AproximaciÃ³n para PequeÃ±as Pendientes. Revista Brasileira De Ensino De Fisica, 2002, 24, 399-407.	0.2	5
31	An Integrated Project for Teaching the Post-Buckling of a Slender Cantilever Bar. International Journal of Mechanical Engineering Education, 2004, 32, 78-92.	1.0	4
32	Post-Buckling of a Cantilever Column: A More Accurate Linear Analysis of a Classical Nonlinear Problem. International Journal of Mechanical Engineering Education, 2007, 35, 293-304.	1.0	3
33	Three approaches to calculating the velocity profile of a laminar incompressible fluid flow in a hollow tube. American Journal of Physics, 2003, 71, 46-48.	0.7	1
34	Exact and approximate solutions for the anti-symmetric quadratic truly nonlinear oscillator. Applied Mathematics and Computation, 2014, 246, 355-364.	2.2	1
35	DeterminaciÃ³n de las constantes Ã³pticas y el espesor de materiales hologrÃ¡ficos. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2004, 43, 457-460.	1.9	1
36	<title>Mechanical behavior of holographic material in high vacuum and with temperature changes</title>. , 2000, , .		0

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37	Estudio de la FlexiÃ³n de una Viga de Material ElÃ¡stico no Lineal. Revista Brasileira De Ensino De Fisica, 2002, 24, 383-389.	0.2	0