Rodrigo Tumolin Rocha

List of Publications by Year in descending order

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44 papers

366 citations

932766 10 h-index 940134 16 g-index

46 all docs

46 docs citations

46 times ranked 258 citing authors

#	Article	IF	CITATIONS
1	An overview on the appearance of the Sommerfeld effect and saturation phenomenon in non-ideal vibrating systems (NIS) in macro and MEMS scales. Nonlinear Dynamics, 2018, 93, 19-40.	2.7	42
2	Nonlinear piezoelectric vibration energy harvesting from a portal frame with two-to-one internal resonance. Meccanica, 2017, 52, 2583-2602.	1.2	34
3	On nonlinear dynamics of a parametrically excited pendulum using both active control and passive rotational (MR) damper. JVC/Journal of Vibration and Control, 2018, 24, 1587-1599.	1.5	25
4	On vibration mitigation and energy harvesting of a non-ideal system with autoparametric vibration absorber system. Meccanica, 2018, 53, 3177-3188.	1.2	20
5	Time Delayed Feedback Control Applied in an Atomic Force Microscopy (AFM) Model in Fractional-Order. Journal of Vibration Engineering and Technologies, 2020, 8, 327-335.	1.3	20
6	Dynamics and control of periodic and non-periodic behavior of Duffing vibrating system with fractional damping and excited by a non-ideal motor. Journal of the Franklin Institute, 2020, 357, 2067-2082.	1.9	19
7	On a non-ideal magnetic levitation system: nonlinear dynamical behavior and energy harvesting analyses. Nonlinear Dynamics, 2019, 95, 3423-3438.	2.7	17
8	Numerical Exploratory Analysis of Dynamics and Control of an Atomic Force Microscopy in Tapping Mode with Fractional Order. Shock and Vibration, 2020, 2020, 1-18.	0.3	13
9	Comments on Energy Harvesting on a 2:1 Internal Resonance Portal Frame Support Structure, Using a Nonlinear-Energy Sink as a Passive Controller. International Review of Mechanical Engineering, 2016, 10, 147.	0.1	13
10	On suppression of chaotic motion of a nonlinear MEMS oscillator. Nonlinear Dynamics, 2020, 99, 537-557.	2.7	12
11	On an Optimal Control Applied in MEMS Oscillator with Chaotic Behavior including Fractional Order. Complexity, 2018, 2018, 1-12.	0.9	11
12	An analytical approximated solution and numerical simulations of a non-ideal system with saturation phenomenon. Nonlinear Dynamics, 2018, 94, 429-442.	2.7	10
13	Using passive control by a pendulum in a portal frame platform with piezoelectric energy harvesting. JVC/Journal of Vibration and Control, 2018, 24, 3684-3697.	1.5	9
14	A Comparison of Time-Frequency Methods for Nonlinear Dynamics and Chaos Analysis in an Energy Harvesting Model. Brazilian Journal of Physics, 2020, 50, 235-244.	0.7	9
15	Jump Attenuation in a Non-Ideal System Using Shape Memory Element. MATEC Web of Conferences, 2018, 148, 03003.	0.1	8
16	Nonlinear dynamics and SDRE control applied to a high-performance aircraft in a longitudinal flight considering atmospheric turbulence in flight. Journal of Sound and Vibration, 2018, 436, 273-285.	2.1	8
17	On Positioning and Vibration Control Application to Robotic Manipulators with a Nonideal Load Carrying. Shock and Vibration, 2019, 2019, 1-14.	0.3	8
18	Chaos control of an atomic force microscopy model in fractional-order. European Physical Journal: Special Topics, 2021, 230, 3643-3654.	1.2	8

#	Article	lF	Citations
19	On Energy Transfer between Vibration Modes under Frequency-Varying Excitations for Energy Harvesting. Applied Mechanics and Materials, 0, 849, 65-75.	0.2	7
20	Dynamical Analysis and Control of a Chaotic Microelectromechanical Resonator Model. Shock and Vibration, 2018, 2018, 1-10.	0.3	7
21	On the Positioning of a Piezoelectric Material in the Energy Harvesting From a Nonideally Excited Portal Frame. Journal of Computational and Nonlinear Dynamics, 2020, 15, .	0.7	6
22	Mode Saturation, Mode Coupling and Energy Harvesting From Ambient Vibration in a Portal Frame Structure. , 2014, , .		5
23	Offshore Energy Harvesting of a Marine Floating Pendulum Platform Model. Latin American Journal of Solids and Structures, 2019, 16, .	0.6	5
24	Numerical Simulations and Control of Offshore Energy Harvesting Using Piezoelectric Materials in a Portal Frame Structure. Shock and Vibration, 2021, 2021, 1-11.	0.3	5
25	Dynamics behaviour of an elastic non-ideal (NIS) portal frame, including fractional nonlinearities. Journal of Physics: Conference Series, 2016, 721, 012004.	0.3	5
26	Non-Ideal System With Quadratic Nonlinearities Containing a Two-to-One Internal Resonance. , 2016, , .		4
27	Position Control of a Manipulator Robotic Arm Considering Flexible Joints Driven by a DC Motor and a Controlled Torque by a MR-Brake. , 2016, , .		4
28	Nonlinear mode saturation in a U-shaped micro-resonator. Scientific Reports, 2022, 12, .	1.6	4
29	Dynamics Characterization of a U-Shaped Micro-Resonator Portal Frame. Journal of Microelectromechanical Systems, 2020, 29, 1362-1371.	1.7	3
30	Remarks on energy harvesting of nonlinear charge and voltage piezoelectric models in a two-degrees-of-freedom nonlinear portal frame model. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2021, 235, 4760-4767.	1.1	3
31	Dynamic Analysis and Synchronization for a System with Hyperchaotic Behavior. Brazilian Journal of Physics, 2021, 51, 1333-1345.	0.7	3
32	Nonparametric identification of a micro-electromechanical resonator. Mechanical Systems and Signal Processing, 2021, 161, 107932.	4.4	3
33	A Note on Anti-Roll Bar Effectiveness Full-Car Dynamics with Magnetorheological Damper Control. International Review of Mechanical Engineering, 2019, 13, 47.	0.1	3
34	On an Optimal Control Applied in Atomic Force Microscopy (AFM) Including Fractional-Order. , 2017, , .		2
35	SDRE Control Applied to the Wheel Speed of a Compressed Air Engine with Crank-Connecting-Rod Mechanism. Shock and Vibration, 2017, 2017, 1-14.	0.3	2
36	Statics and Dynamics of V-Shaped Microbeams Under Axial Forces. Journal of Computational and Nonlinear Dynamics, 2021, 16, .	0.7	2

#	Article	IF	CITATIONS
37	On Mode Coupling Analysis and Stability Regions to Energy Harvesting in a Two-Degrees-of-Freedom Portal Frame Platform. , 2017, , .		1
38	Angular Positioning and Vibration Control of a Slewing Flexible Control by Applying Smart Materials and Sliding Modes Control., 2017,,.		1
39	Optimal Control for Robot Manipulators with Three-Degress-of-Freedom. Springer Proceedings in Mathematics and Statistics, 2018, , 135-149.	0.1	1
40	Dynamics and Control of Energy Harvesting from a Non-ideally Excited Portal Frame System with Fractional Damping. Mechanisms and Machine Science, 2021, , 383-395.	0.3	1
41	Nonparametric Identification of a Nonlinear MEMS Resonator. , 2022, , 405-415.		1
42	Proposal of a Nonlinear Piezoelectric Coupling Term to Energy Harvesting Interactions. Springer Proceedings in Physics, 2015, , 69-76.	0.1	0
43	Using Saturation Phenomenon to Improve Energy Harvesting in a Portal Frame Platform with Passive Control by a Pendulum. Springer Proceedings in Mathematics and Statistics, 2016, , 319-329.	0.1	O
44	On a Time Series Analysis Generated by a Sensor of an Atomic Force Microscope (AFM). International Review of Mechanical Engineering, 2018, 12, 239.	0.1	0