Ronghua Huan

List of Publications by Year
in descending order

49 papers	379 citations

759055

12 h-index

887953

17 g-index

51 all docs	51 docs citations

51 times ranked	202 citing authors

#	Article	IF	Citations
1	Reliability of nonlinear stochastic controlled systems considering the dynamics of sensors and actuators. JVC/Journal of Vibration and Control, 2022, 28, 2052-2060.	1.5	1
2	Response and reliability analysis of random time-delay controlled systems undergo wide-band random excitations. Probabilistic Engineering Mechanics, 2022, 67, 103191.	1.3	3
3	Novel control strategy of force-balance accelerometers for measurement error minimization. International Journal of Dynamics and Control, 2022, 10, 1451-1460.	1.5	2
4	Amplifying charge-sensing in micromechanical oscillators based on synchronization. Sensors and Actuators A: Physical, 2022, 339, 113517.	2.0	1
5	Frequency comb in 1:3 internal resonance of coupled micromechanical resonators. Applied Physics Letters, 2022, 120, .	1.5	8
6	Mode interaction induced response flattening in two mechanically coupled micro-resonators. Mechanical Systems and Signal Processing, 2022, 177, 109164.	4.4	10
7	Frequency locking in the internal resonance of two electrostatically coupled micro-resonators with frequency ratio 1:3. Mechanical Systems and Signal Processing, 2021, 146, 106981.	4.4	40
8	Amplitude region for triggering frequency locking in internal resonance response of two nonlinearly coupled micro-resonators. International Journal of Non-Linear Mechanics, 2021, 130, 103673.	1.4	6
9	Asymmetric phononic frequency comb in a rhombic micromechanical resonator. Applied Physics Letters, 2021, 118, .	1.5	9
10	Dynamics and response reshaping of nonlinear predator-prey system undergoing random abrupt disturbances. Applied Mathematics and Mechanics (English Edition), 2021, 42, 1123-1134.	1.9	6
11	Phase-delay induced variation of synchronization bandwidth and frequency stability in a micromechanical oscillator. Nonlinear Dynamics, 2021, 105, 2981-2994.	2.7	3
12	Asymptotic Stability of Controlled Nonlinear Stochastic Systems Considering the Dynamics of Sensors and Actuators. International Journal of Structural Stability and Dynamics, 2021, 21, .	1.5	0
13	Prediction and Suppression of Vortex-Induced Vibration for Steel Tubes with Bolted Joints in Tubular Transmission Towers. Journal of Structural Engineering, 2021, 147, .	1.7	5
14	Anomalous amplitude-frequency dependence in a micromechanical resonator under synchronization. Nonlinear Dynamics, 2021, 103, 467-479.	2.7	13
15	Generation of Two Correlated Stationary Gaussian Processes. Mathematics, 2021, 9, 2687.	1.1	0
16	MEMS based ultra-high order frequency multiplication utilizing superharmonic synchronization effect. Sensors and Actuators A: Physical, 2021, 332, 113152.	2.0	2
17	A novel method for evaluating the averaged drift and diffusion coefficients of high DOF quasi-non-integrable Hamiltonian systems. Nonlinear Dynamics, 2021, 106, 2975-2989.	2.7	4
18	Reliability of a class of nonlinear systems under switching random excitations. Nonlinear Dynamics, 2020, 99, 2083-2094.	2.7	6

#	Article	IF	Citations
19	Reshaping of the probability density function of nonlinear stochastic systems against abrupt changes. JVC/Journal of Vibration and Control, 2020, 26, 532-539.	1.5	3
20	Single-electron detection utilizing coupled nonlinear microresonators. Microsystems and Nanoengineering, 2020, 6, 78.	3.4	26
21	Nonlinear Stochastic Optimal Control Using Piezoelectric Stack Inertial Actuator. Shock and Vibration, 2020, 2020, 1-7.	0.3	1
22	Effects of phase delay on synchronization in a nonlinear micromechanical oscillator. Applied Physics Letters, 2019, 114, .	1.5	18
23	A MEMS accelerometer based on synchronizing DETF oscillators. , 2019, , .		6
24	Micromechanical vibration absorber for frequency stability improvement of DETF oscillator. Journal of Micromechanics and Microengineering, 2019, 29, 045005.	1.5	4
25	Phase switch in the stochastic response of a micromechanical beam resonator. Acta Mechanica, 2018, 229, 2177-2187.	1.1	7
26	Synchronization of electrically coupled micromechanical oscillators with a frequency ratio of 3:1. Applied Physics Letters, 2018, 112, .	1.5	37
27	Probability-Weighted Optimal Control for Nonlinear Stochastic Vibrating Systems with Random Time Delay. Shock and Vibration, 2018, 2018, 1-8.	0.3	1
28	Effect of nonlinearity and axial force on frequency drift of a T-shaped tuning fork micro-resonator. Journal of Micromechanics and Microengineering, 2018, 28, 125012.	1.5	12
29	Stationary response of stochastically excited nonlinear systems with continuous-time Markov jump. Journal of Zhejiang University: Science A, 2017, 18, 83-91.	1.3	2
30	Frequency stability improvement for piezoresistive micromechanical oscillators via synchronization. AIP Advances, 2017, 7, .	0.6	19
31	Frequency latching in nonlinear micromechanical resonators. Applied Physics Letters, 2017, 110, .	1.5	17
32	Frequency stability of micromechanical beam oscillator under subharmonic synchronization. , 2017, , .		0
33	Asymptotic Stability of Delay-Controlled Nonlinear Stochastic Systems with Actuator Failures. Shock and Vibration, 2017, 2017, 1-8.	0.3	1
34	Optimal Vibration Control of a Class of Nonlinear Stochastic Systems with Markovian Jump. Shock and Vibration, 2016, 2016, 1-9.	0.3	4
35	Asymptotic Stability With Probability One of Random-Time-Delay-Controlled Quasi-Integrable Hamiltonian Systems. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	1.1	8
36	Nonlinear coupling of flexural mode and extensional bulk mode in micromechanical resonators. Applied Physics Letters, 2016, 109, .	1.5	18

#	Article	IF	Citations
37	Stochastic microvibration response analysis of a magnetorheological viscoelastomer based sandwich beam under localized magnetic fields. Applied Mathematical Modelling, 2015, 39, 5559-5566.	2.2	14
38	Stationary Response of a Class of Nonlinear Stochastic Systems Undergoing Markovian Jumps. Journal of Applied Mechanics, Transactions ASME, 2015, 82, .	1.1	14
39	Multi-objective optimal design of active vibration absorber with delayed feedback. Journal of Sound and Vibration, 2015, 339, 56-64.	2.1	21
40	The Effect of High-Frequency Parametric Excitation on a Stochastically Driven Pantograph-Catenary System. Shock and Vibration, 2014, 2014, 1-8.	0.3	3
41	Vertical dynamics of a pantograph carbon-strip suspension under stochastic contact-force excitation. Nonlinear Dynamics, 2014, 76, 765-776.	2.7	3
42	Dynamics of Pantograph-Catenary System Considering Local Singularities of Contact Wire with Critical Wavelengths. Lecture Notes in Electrical Engineering, 2012, , 319-333.	0.3	2
43	Optimal Bounded Control for Stationary Response of Strongly Nonlinear Oscillators under Combined Harmonic and Wide-Band Noise Excitations. Mathematical Problems in Engineering, 2011, 2011, 1-21.	0.6	4
44	Stochastic optimal bounded control of MDOF quasi nonintegrable-Hamiltonian systems with actuator saturation. Archive of Applied Mechanics, 2009, 79, 157-168.	1.2	4
45	Stochastic optimal vibration control of partially observable nonlinear quasi hamiltonian systems with actuator saturation. Acta Mechanica Solida Sinica, 2009, 22, 143-151.	1.0	3
46	Feedback maximization of reliability of MDOF quasi integrable-Hamiltonian systems under combined harmonic and white noise excitations. Journal of Zhejiang University: Science A, 2009, 10, 1245-1251.	1.3	0
47	Nonlinear stochastic optimal bounded control of hysteretic systems with actuator saturation. Journal of Zhejiang University: Science A, 2008, 9, 351-357.	1.3	2
48	Optimal control strategies for stochastically excited quasi partially integrable Hamiltonian systems. Acta Mechanica Sinica/Lixue Xuebao, 2007, 23, 311-319.	1.5	4
49	Feedback control of nonlinear stochastic dynamic systems for accurately tracking a specified stationary probability density function. JVC/Journal of Vibration and Control, 0, , 107754632110689.	1.5	0