

Matt

List of Publications by Year in descending order

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34
papers

1,215
citations

430874

18
h-index

377865

34
g-index

34
all docs

34
docs citations

34
times ranked

773
citing authors

#	ARTICLE	IF	CITATIONS
1	Gauging force by tapping tendons. Nature Communications, 2018, 9, 1592.	12.8	130
2	Experimental modal substructuring to couple and uncouple substructures with flexible fixtures and multi-point connections. Journal of Sound and Vibration, 2010, 329, 4891-4906.	3.9	124
3	Output-only modal analysis of linear time-periodic systems with application to wind turbine simulation data. Mechanical Systems and Signal Processing, 2011, 25, 1174-1191.	8.0	92
4	Nonlinear normal modes, modal interactions and isolated resonance curves. Journal of Sound and Vibration, 2015, 351, 299-310.	3.9	89
5	Advanced age brings a greater reliance on visual feedback to maintain balance during walking. Human Movement Science, 2015, 40, 381-392.	1.4	88
6	Evaluation of Geometrically Nonlinear Reduced-Order Models with Nonlinear Normal Modes. AIAA Journal, 2015, 53, 3273-3285.	2.6	82
7	A global, single-input multi-output (SIMO) implementation of the algorithm of mode isolation and application to analytical and experimental data. Mechanical Systems and Signal Processing, 2006, 20, 1090-1111.	8.0	63
8	Application of Viscous and Iwan Modal Damping Models to Experimental Measurements From Bolted Structures. Journal of Vibration and Acoustics, Transactions of the ASME, 2015, 137, .	1.6	63
9	Nonlinear characterization of a bolted, industrial structure using a modal framework. Mechanical Systems and Signal Processing, 2017, 84, 152-170.	8.0	57
10	Updating structural models containing nonlinear Iwan joints using quasi-static modal analysis. Mechanical Systems and Signal Processing, 2019, 118, 133-157.	8.0	56
11	Frequency-Domain Identification of Linear Time-Periodic Systems Using LTI Techniques. Journal of Computational and Nonlinear Dynamics, 2009, 4, .	1.2	44
12	Measurement of nonlinear normal modes using multi-harmonic stepped force appropriation and free decay. Mechanical Systems and Signal Processing, 2016, 76-77, 612-633.	8.0	40
13	A numerical study on the limitations of modal Iwan models for impulsive excitations. Journal of Sound and Vibration, 2017, 390, 118-140.	3.9	29
14	Visuomotor Entrainment and the Frequency-Dependent Response of Walking Balance to Perturbations. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1135-1142.	4.9	28
15	Experimental modal substructuring to estimate fixed-base modes from tests on a flexible fixture. Journal of Sound and Vibration, 2011, 330, 4413-4428.	3.9	25
16	Piecewise-linear restoring force surfaces for semi-nonparametric identification of nonlinear systems. Nonlinear Dynamics, 2008, 54, 123-135.	5.2	21
17	Estimating the degree of nonlinearity in transient responses with zeroed early-time fast Fourier transforms. Mechanical Systems and Signal Processing, 2010, 24, 2049-2064.	8.0	20
18	DMCMN: Experimental/Analytical Evaluation of the Effect of Tip Mass on Atomic Force Microscope Cantilever Calibration. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2009, 131, .	1.6	19

#	ARTICLE	IF	CITATIONS
19	Experimental Modal Analysis on a Rotating Fan Using Tracking-CSLDV. AIP Conference Proceedings, 2010, , .	0.4	19
20	Finite element model calibration of a nonlinear perforated plate. Journal of Sound and Vibration, 2017, 392, 280-294.	3.9	19
21	Calibration of the shear wave speed-stress relationship in ex vivo tendons. Journal of Biomechanics, 2019, 90, 9-15.	2.1	19
22	Application of quasi-static modal analysis to a finite element model and experimental correlation. Journal of Sound and Vibration, 2020, 479, 115376.	3.9	18
23	Experimental assessment of polynomial nonlinear state-space and nonlinear-mode models for near-resonant vibrations. Mechanical Systems and Signal Processing, 2020, 143, 106796.	8.0	12
24	Numerical and Experimental Determination of Nonlinear Normal Modes of a Circular Perforated Plate. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 239-251.	0.5	11
25	Observations of modal coupling due to bolted joints in an experimental benchmark structure. Mechanical Systems and Signal Processing, 2022, 162, 107968.	8.0	8
26	Nonlinear Normal Mode backbone estimation with near-resonant steady state inputs. Mechanical Systems and Signal Processing, 2022, 162, 108046.	8.0	7
27	Nonlinear substructuring in the modal domain: numerical validation and experimental verification in presence of localized nonlinearities. Nonlinear Dynamics, 2021, 104, 1043-1067.	5.2	6
28	Extension of the Harmonic Balance Method for dynamic systems with Iwan joints. Mechanical Systems and Signal Processing, 2022, 166, 108434.	8.0	6
29	Sensitivity of the shear wave speed-stress relationship to soft tissue material properties and fiber alignment. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 125, 104964.	3.1	6
30	Investigation of the effectiveness of using an experiment to validate experimental substructure models. Mechanical Systems and Signal Processing, 2014, 43, 192-216.	8.0	4
31	Multiharmonic Multiple-Point Collocation: A Method for Finding Periodic Orbits of Strongly Nonlinear Oscillators. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	4
32	Transmission Simulator Based MIMO Response Reconstruction. Experimental Techniques, 2022, 46, 287-297.	1.5	4
33	Time-domain numerical continuation of periodic orbits for harmonically forced hysteretic nonlinear systems with Iwan joints. Journal of Sound and Vibration, 2021, 511, 116342.	3.9	1
34	Nonlinear Normal Mode Estimation with Near-Resonant Steady State Inputs. Conference Proceedings of the Society for Experimental Mechanics, 2021, , 85-88.	0.5	1