Rob H B Fey

List of Publications by Year
in descending order

59 papers	858 citations	516561 16 h-index	501076 28 g-index
60 all docs	60 docs citations	60 times ranked	796 citing authors

#	Article	IF	Citations
1	Optimal thermal actuation for mirror temperature control. Computer Methods in Applied Mechanics and Engineering, 2022, 398, 115212.	3.4	1
2	Optimal Thermal Actuation for Mitigation of Heat-Induced Wafer Deformation. IEEE Transactions on Control Systems Technology, 2021, 29, 514-529.	3.2	3
3	The method of images in thermoelasticity with an application to wafer heating. Journal of Thermal Stresses, 2021, 44, 970-1010.	1.1	1
4	Sensor and Actuator Placement for Proportional Feedback Control in Advection-Diffusion Equations. , 2020, 4, 193-198.		5
5	Bifurcation-Based Shimmy Analysis of Landing Gears Using Flexible Multibody Models. Mechanisms and Machine Science, 2019, , 261-291.	0.3	2
6	Semi-analytic approximation of the temperature field resulting from moving heat loads. International Journal of Heat and Mass Transfer, 2018, 122, 128-137.	2.5	20
7	Iterative Poleâ€“Zero model updating: A combined sensitivity approach. Control Engineering Practice, 2018, 71, 164-174.	3.2	5
8	Iterative pole-zero finite element model updating using generic parameters. Mechatronics, 2018, 55, 180-193.	2.0	3
9	Impulsive Steering Between Coexisting Stable Periodic Solutions With an Application to Vibrating Plates. Journal of Computational and Nonlinear Dynamics, 2017, 12, .	0.7	4
10	Large amplitude dynamic behavior of thrust air bearings: Modeling and experiments. Tribology International, 2017, 109, 460-466.	3.0	6
11	A fluid-coupled transmitting CMUT operated in collapse mode: Semi-analytic modeling and experiments. Sensors and Actuators A: Physical, 2017, 267, 474-484.	2.0	6
12	Iterative Pole-Zero Model Updating Using Multiple Frequency Response Functions. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 65-70.	0.3	0
13	Synchronization and Partial Synchronization Experiments with Networks of Time-Delay Coupled Hindmarshâ€“Rose Neurons. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2016, 26, 1650111.	0.7	10
14	Immersion and invariance observers with time-delayed output measurements. Communications in Nonlinear Science and Numerical Simulation, 2016, 30, 227-235.	1.7	9
15	Network synchronization of time-delayed coupled nonlinear systems using predictor-based diffusive dynamic couplings. Chaos, 2015, 25, 023108.	1.0	10
16	Network synchronization using invariant-manifold-based diffusive dynamic couplings with time-delay. Automatica, 2015, 57, 34-44.	3.0	23
17	A numerical and experimental study on viscoelastic damping of a 3D structure. Journal of Sound and Vibration, 2015, 349, 80-98.	2.1	9
18	Experimental Validation of Object Positioning Via Stickâ€“Slip Vibrations. IEEE/ASME Transactions on Mechatronics, 2014, 19, 1092-1101.	3.7	8

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19	Effect of hinge friction on the steady-state response of base-excited shallow arches. JVC/Journal of Vibration and Control, 2014, 20, 1877-1894.	1.5	0
20	An improved model for the classical Huygens×³ experiment on synchronization of pendulum clocks. Journal of Sound and Vibration, 2014, 333, 7248-7266.	2.1	26
21	Synchronization of Identical Linear Systems and Diffusive Time-Delayed Couplings. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 1801-1814.	3.5	14
22	Further understanding of Huygensâ€™ coupled clocks: The effect of stiffness. Physica D: Nonlinear Phenomena, 2014, 270, 11-19.	1.3	21
23	Finite Element Model Reduction and Model Updating of structures for Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4517-4522.	0.4	10
24	Synchronization of weakly nonlinear oscillators with Huygens' coupling. Chaos, 2013, 23, 033118.	1.0	25
25	CONTROLLED SYNCHRONIZATION OF CHAOTIC OSCILLATORS WITH HUYGENSâ€™ COUPLING. , 2013, , 341-352.		1
26	NETWORK SYNCHRONIZATION BY DYNAMIC DIFFUSIVE COUPLING. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2013, 23, 1350076.	0.7	5
27	An Introduction to Parametric Resonance. , 2012, , 1-13.		4
28	Steady-state dynamics of a 3D tensegrity structure: Simulations and experiments. International Journal of Solids and Structures, 2012, 49, 973-988.	1.3	11
29	Parametric and Direct Resonances in a Base-Excited Beam Carrying a Top Mass. , 2012, , 267-285.		0
30	Vibrational self-alignment of a rigid object exploiting friction. Nonlinear Dynamics, 2011, 65, 109-129.	2.7	3
31	Editorial: Special issue on stability of non-linear dynamic structures and systems. Nonlinear Dynamics, 2011, 66, 247-250.	2.7	4
32	Nonlinear resonances in an axially excited beam carrying aÂtop mass: simulations and experiments. Nonlinear Dynamics, 2011, 66, 285-302.	2.7	11
33	Proportional and derivative control for steady-state vibration mitigation in a piecewise linear beam system. Nonlinear Dynamics, 2010, 60, 535-549.	2.7	14
34	Simulations and experiments of hardening and softening resonances in a clampedâ€“clamped beam MEMS resonator. Sensors and Actuators A: Physical, 2010, 162, 225-234.	2.0	67
35	Dynamic stability of a base-excited thin orthotropic cylindrical shell with top mass: Simulations and experiments. Journal of Sound and Vibration, 2010, 329, 3149-3170.	2.1	23
36	Amplitude saturation of MEMS resonators explained by autoparametric resonance. Journal of Micromechanics and Microengineering, 2010, 20, 105012.	1.5	42

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37	Severity of Tip-Out Induced Impacts in Drive Line Systems With Backlash. Journal of Computational and Nonlinear Dynamics, 2010, 5, .	0.7	3
38	Reduction of Steady-State Vibrations in a Piecewise Linear Beam System Using Proportional and Derivative Control. World Scientific Series on Nonlinear Science, Series B, 2010, , 71-88.	0.2	0
39	Experimental validation of hardening and softening resonances in a clamped-clamped beam MEMS resonator. Procedia Chemistry, 2009, 1, 812-815.	0.7	6
40	Classification of periodic orbits for systems with backlash. Chaos, Solitons and Fractals, 2009, 41, 131-144.	2.5	1
41	Phase Feedback for Nonlinear MEM Resonators in Oscillator Circuits. IEEE/ASME Transactions on Mechatronics, 2009, 14, 423-433.	3.7	31
42	Impact Severity in Drive Line Systems With Backlash. , 2009, , .		0
43	Modelling the dynamics of a MEMS resonator: Simulations and experiments. Sensors and Actuators A: Physical, 2008, 142, 306-315.	2.0	159
44	Dynamic stability of a thin cylindrical shell with top mass subjected to harmonic base-acceleration. International Journal of Solids and Structures, 2008, 45, 1587-1613.	1.3	24
45	Airflow-Housing-Induced Resonances of Rotating Optical Disks. Journal of Applied Mechanics, Transactions ASME, 2007, 74, 1252-1263.	1.1	2
46	On phase feedback for nonlinear MEMS resonators. Frequency Control Symposium and Exhibition, Proceedings of the IEEE International, 2007, , .	0.0	4
47	Periodic excitation of a buckled beam using a higher order semianalytic approach. Nonlinear Dynamics, 2007, 50, 325-339.	2.7	10
48	Nonlinear dynamic analysis of a structure with a friction-based seismic base isolation system. Nonlinear Dynamics, 2007, 50, 523-538.	2.7	18
49	Classification of Periodic Solutions in a Single-Degree-of-Freedom System With Backlash. , 2007, , .		2
50	Dynamic buckling of a shallow arch under shock loading considering the effects of the arch shape. International Journal of Non-Linear Mechanics, 2006, 41, 1057-1067.	1.4	35
51	Application of a Dynamic Vibration Absorber to a Piecewise Linear Beam System. Nonlinear Dynamics, 2004, 37, 227-243.	2.7	49
52	Steady-State Dynamics of Two Nonlinear MDOF Mechanical Engineering Systems. Solid Mechanics and Its Applications, 2000, , 13-23.	0.1	0
53	Steady-State Behaviour of a Solar Array System with Elastic Stops. Solid Mechanics and Its Applications, 1999, , 303-312.	0.1	2
54	Experimental verification of the steady-state behavior of a beam system with discontinuous support. Experimental Mechanics, 1996, 36, 159-165.	1.1	9

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55	Experimental analysis of the steady-state behaviour of beam systems with discontinuous support. Meccanica, 1996, 31, 293-308.	1.2	2
56	Steady-state behaviour of flexible rotordynamic systems with oil journal bearings. Nonlinear Dynamics, 1996, 11, 295-313.	2.7	22
57	Long Term Structural Dynamics of Mechanical Systems With Local Nonlinearities. Journal of Vibration and Acoustics, Transactions of the ASME, 1996, 118, 147-153.	1.0	68
58	Manifolds of Nonlinear Dynamic Single-DOF Systems. , 1993, , 293-303.		4
59	Some Aspects of the Analysis of Systems with Local Nonlinearities. , 1990, , 165-172.		1