

Marc Mt Thomas

List of Publications by Year in descending order

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76
papers

2,070
citations

236925

25
h-index

254184

43
g-index

82
all docs

82
docs citations

82
times ranked

1778
citing authors

#	ARTICLE	IF	CITATIONS
1	Vibration analysis of rectangular plates coupled with fluid. <i>Applied Mathematical Modelling</i> , 2008, 32, 2570-2586.	4.2	132
2	A Numerical Model to Predict Damaged Bearing Vibrations. <i>JVC/Journal of Vibration and Control</i> , 2007, 13, 1603-1628.	2.6	127
3	A Frequency-Weighted Energy Operator and complementary ensemble empirical mode decomposition for bearing fault detection. <i>Mechanical Systems and Signal Processing</i> , 2017, 82, 103-116.	8.0	116
4	Residual stress and microstructure in welds of 13%Cr-4%Ni martensitic stainless steel. <i>Journal of Materials Processing Technology</i> , 2009, 209, 2195-2202.	6.3	99
5	Cyclostationarity approach for monitoring chatter and tool wear in high speed milling. <i>Mechanical Systems and Signal Processing</i> , 2014, 44, 177-198.	8.0	96
6	Indicators for monitoring chatter in milling based on instantaneous angular speeds. <i>Mechanical Systems and Signal Processing</i> , 2014, 44, 72-85.	8.0	94
7	Chatter detection in milling machines by neural network classification and feature selection. <i>JVC/Journal of Vibration and Control</i> , 2015, 21, 1251-1266.	2.6	93
8	An innovative magnetorheological damper for automotive suspension: from design to experimental characterization. <i>Smart Materials and Structures</i> , 2005, 14, 811-822.	3.5	90
9	Effect of tool vibrations on surface roughness during lathe dry turning process. <i>Computers and Industrial Engineering</i> , 1996, 31, 637-644.	6.3	83
10	Residual stress characterization in low transformation temperature 13%Cr-4%Ni stainless steel weld by neutron diffraction and the contour method. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 6205-6210.	5.6	78
11	Statistical investigation of modal parameters of cutting tools in dry turning. <i>International Journal of Machine Tools and Manufacture</i> , 2003, 43, 1093-1106.	13.4	59
12	An electrorheological hydrostatic journal bearing for controlling rotor vibration. <i>Computers and Structures</i> , 2008, 86, 463-472.	4.4	59
13	Frictional heating model for efficient use of vibrothermography. <i>NDT and E International</i> , 2009, 42, 345-352.	3.7	54
14	Nonlinear damping calculation in cylindrical gear dynamic modeling. <i>Journal of Sound and Vibration</i> , 2012, 331, 2110-2128.	3.9	52
15	Operational modal analysis by updating autoregressive model. <i>Mechanical Systems and Signal Processing</i> , 2011, 25, 1028-1044.	8.0	49
16	Comparison of a full factorial experiment to fractional and taguchi designs in a lathe dry turning operation. <i>Computers and Industrial Engineering</i> , 1994, 27, 59-62.	6.3	45
17	An experimental design for surface roughness and built-up edge formation in lathe dry turning. <i>International Journal of Quality Science</i> , 1997, 2, 167-180.	0.3	44
18	A classifier fusion system for bearing fault diagnosis. <i>Expert Systems With Applications</i> , 2013, 40, 6788-6797.	7.6	44

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19	Equivalent Stiffness and Damping Investigation of a Hydrostatic Journal Bearing. Tribology Transactions, 2007, 50, 257-267.	2.0	33
20	Towards an automatic spectral and modal identification from operational modal analysis. Journal of Sound and Vibration, 2013, 332, 213-227.	3.9	33
21	Investigation of cutting parameter effects on surface roughness in lathe boring operation by use of a full factorial design. Computers and Industrial Engineering, 1996, 31, 645-651.	6.3	32
22	Evaluation of lumbar vertebra injury risk to the seated human body when exposed to vertical vibration. Journal of Sound and Vibration, 2009, 321, 454-470.	3.9	31
23	Reformed austenite transformation during fatigue crack propagation of 13%Cr-4%Ni stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 6519-6526.	5.6	30
24	Numerical modeling of vibrothermography based on plastic deformation. NDT and E International, 2010, 43, 476-483.	3.7	26
25	Robotic High Speed Machining of Aluminum Alloys. Advanced Materials Research, 0, 188, 584-589.	0.3	21
26	Angular analysis of the cyclic impacting oscillations in a robotic grinding process. Mechanical Systems and Signal Processing, 2014, 44, 160-176.	8.0	21
27	Dimension reduction and 2D-visualization for early change of state detection in a machining process with a variational autoencoder approach. International Journal of Advanced Manufacturing Technology, 2020, 111, 3597-3611.	3.0	21
28	Extraction of modal parameters for identification of time-varying systems using data-driven stochastic subspace identification. JVC/Journal of Vibration and Control, 2018, 24, 4781-4796.	2.6	20
29	Three-dimensional modeling of curved structures containing and/or submerged in fluid. Finite Elements in Analysis and Design, 2008, 44, 334-345.	3.2	18
30	ARMA MODELS FOR MODAL ANALYSIS: EFFECT OF MODEL ORDERS AND SAMPLING FREQUENCY. Mechanical Systems and Signal Processing, 1999, 13, 925-941.	8.0	16
31	Nonlinear Dynamic Analysis of a Rigid Rotor Supported by a Three-Pad Hydrostatic Squeeze Film Dampers. Tribology Transactions, 2013, 56, 717-727.	2.0	16
32	Nonlinear Dynamic Behavior of a Rigid Rotor Supported by Hydrostatic Squeeze Film Dampers. Journal of Tribology, 2008, 130, .	1.9	15
33	Monitoring Machines by Using a Hybrid Method Combining MED, EMD, and TKEO. Advances in Acoustics and Vibration, 2014, 2014, 1-10.	0.5	15
34	ASSESSMENT OF OPTIMAL ARMA MODEL ORDERS FOR MODAL ANALYSIS. Mechanical Systems and Signal Processing, 1999, 13, 803-819.	8.0	14
35	Hybrid method for vibration analysis of rectangular plates. Nuclear Engineering and Design, 2007, 237, 791-801.	1.7	14
36	Nonlinear Parameters for Monitoring Gear: Comparison Between Lempel-Ziv, Approximate Entropy, and Sample Entropy Complexity. Shock and Vibration, 2015, 2015, 1-12.	0.6	14

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37	Specific cutting energy: a physical measurement for representing tool wear. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 103, 101-110.	3.0	14
38	Predicting the quality of a machined workpiece with a variational autoencoder approach. <i>Journal of Intelligent Manufacturing</i> , 2023, 34, 719-737.	7.3	14
39	Development of a new frequency weighting filter for the assessment of grinder exposure to wrist-transmitted vibration. <i>Computers and Industrial Engineering</i> , 1998, 35, 651-654.	6.3	13
40	Modeling and monitoring of tooth fillet crack growth in dynamic simulation of spur gear set. <i>Journal of Sound and Vibration</i> , 2015, 343, 144-165.	3.9	13
41	An experimental investigation of the dielectric properties of electrorheological fluids. <i>Smart Materials and Structures</i> , 2009, 18, 024004.	3.5	12
42	Output-only identification of modal shape coupling in a flexible robot by vector autoregressive modeling. <i>Mechanism and Machine Theory</i> , 2016, 97, 141-154.	4.5	12
43	Prediction of the response of a thin structure subjected to a turbulent boundary-layer-induced random pressure field. <i>Journal of Sound and Vibration</i> , 2009, 328, 109-128.	3.9	11
44	Nonlinear Dynamic Behavior of a Flexible Shaft Supported by Smart Hydrostatic Squeeze Film Dampers. <i>Journal of Tribology</i> , 2013, 135, .	1.9	11
45	Uncertainties on modal parameters by operational modal analysis. <i>Mechanics and Industry</i> , 2014, 15, 153-158.	1.3	11
46	Performance characteristics of a three-pad hydrostatic squeeze film damper compensated with new electrorheological valve restrictors. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2017, 231, 889-899.	1.8	10
47	On the design and testing of a smart car damper based on electro-rheological technology. <i>Smart Materials and Structures</i> , 2003, 12, 873-880.	3.5	9
48	Empirical Mode Decomposition of Acoustic Emission for Early Detection of Bearing Defects. <i>Lecture Notes in Mechanical Engineering</i> , 2014, , 367-377.	0.4	9
49	Application of adaptable functional series vector time-dependent autoregressive model for extraction of real modal parameters for identification of time-varying systems. <i>Measurement: Journal of the International Measurement Confederation</i> , 2017, 103, 143-156.	5.0	9
50	A quasi-Bingham model for predicting electrorheological fluid behaviour. <i>Multidiscipline Modeling in Materials and Structures</i> , 2010, 6, 141-165.	1.3	8
51	Psychophysical measurements as an effective way of evaluating climbability of wood treated utility poles. <i>Computers and Industrial Engineering</i> , 1997, 33, 513-516.	6.3	6
52	A Design of Experiments for Statistically Predicting Risk of Adverse Health Effects on Drivers Exposed to Vertical Vibrations. <i>International Journal of Occupational Safety and Ergonomics</i> , 2011, 17, 221-232.	1.9	6
53	Harmonic and modal frequency discrimination in time domain operational modal analysis. <i>Mechanics and Industry</i> , 2014, 15, 29-37.	1.3	5
54	A hybrid method combining Teager Kaiser energy operator, empirical mode decomposition and minimum entropy deconvolution for monitoring gears damages. <i>Mechanics and Industry</i> , 2015, 16, 610.	1.3	5

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55	Performance analysis of four-pad hydrostatic squeeze film dampers loaded between pads under laminar and turbulent flow conditions. Tribology - Materials, Surfaces and Interfaces, 2018, 12, 59-70.	1.4	5
56	Numerical analysis of a rigid rotor mounted on four-pad hydrostatic squeeze film damper lubricated with micropolar lubricant. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2018, 232, 513-524.	1.8	5
57	DYNAMIC RESPONSE OBTAINED BY DIRECT NUMERICAL INTEGRATION FOR PRE-DEFORMED RECTANGULAR PLATES SUBJECTED TO IN-PLANE LOADING. Journal of Sound and Vibration, 1996, 197, 67-83.	3.9	4
58	Detecting bearing defects under high noise levels: A classifier fusion approach. , 2012, , .		4
59	Application of Time Descriptors to the Modified Hilbert Transform of Empirical Mode Decomposition for Early Detection of Gear Defects. , 2012, , 471-479.		3
60	Control of phases by ESPRIT and WLSE methods for the early detection of gear cracks. Mechanics and Industry, 2014, 15, 487-495.	1.3	3
61	Bearing fault detection using motor current signal analysis based on wavelet packet decomposition and Hilbert envelope. MATEC Web of Conferences, 2015, 20, 03002.	0.2	3
62	Monitoring gears by vibration measurements: Lempel-Ziv complexity and Approximate Entropy as diagnostic tools. MATEC Web of Conferences, 2015, 20, 07001.	0.2	3
63	Design of a Vibration Isolator for the Inertial Navigation System of an Autopilot Dedicated to the Operation of Light Drones. , 2018, , .		3
64	Cyclostationarity analysis of instantaneous angular speeds for monitoring chatter in high speed milling. , 2012, , .		2
65	Pressure distribution in orifice-compensated turbulent hydrostatic bearing with fluid inertia effects using numerical simulations via Navier-Stokes. Tribology - Materials, Surfaces and Interfaces, 2017, 11, 19-29.	1.4	2
66	Analytical analysis of a rigid rotor mounted on three hydrostatic pads lubricated with micropolar fluids. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2019, 233, 859-869.	1.8	2
67	MORE DETAILS ABOUT THE INTERACTION OF FORCED AND PARAMETRIC RESONANCES ARISING FROM IN-PLANE EXCITATION OF IMPERFECT RECTANGULAR PLATES. Journal of Sound and Vibration, 2001, 243, 503-524.	3.9	1
68	Turbomachinery Blade Modal Analysis Using Contact Elements. , 2004, , .		1
69	Numerical modeling of frictional heating based vibrothermography. Proceedings of SPIE, 2009, , .	0.8	1
70	Complexity based on synchrosqueezing analysis in gear diagnosis. Mechanics and Industry, 2015, 16, 508.	1.3	1
71	Variable Drive Frequency Effect on Spindle Dynamic Behavior in High Speed Machining. , 2012, , 547-554.		1
72	Faulty bearing features by variational mode decomposition. Vibroengineering PROCEDIA, 2017, 16, 29-34.	0.5	1

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73	Experimental investigation of dielectric properties on electrorheological fluids. Proceedings of SPIE, 2007, , .	0.8	0
74	Critical Velocity of Potential Flow in Interaction With a System of Plates. , 2009, , .		0
75	Spectrum construction for non stationary vibration: Application to a moving flexible robot. MATEC Web of Conferences, 2015, 20, 01004.	0.2	0
76	Experimental Shock and Vibration Analysis. Shock and Vibration, 2015, 2015, 1-1.	0.6	0