Patrick Guillaume

List of Publications by Year
in descending order

279 papers	6,911 citations	76326 40 h-index	85541 71 g-index
290 all docs	290 docs citations	290 times ranked	3620 citing authors

#	Article	IF	Citations
1	The PolyMAX Frequency-Domain Method: A New Standard for Modal Parameter Estimation?. Shock and Vibration, 2004, 11, 395-409.	0.6	587
2	Parametric identification of transfer functions in the frequency domain-a survey. IEEE Transactions on Automatic Control, 1994, 39, 2245-2260.	5.7	435
3	Crest-factor minimization using nonlinear Chebyshev approximation methods. IEEE Transactions on Instrumentation and Measurement, 1991, 40, 982-989.	4.7	203
4	Identification of modal parameters from transmissibility measurements. Journal of Sound and Vibration, 2008, 314, 343-356.	3.9	151
5	Frequency-domain system identification using non-parametric noise models estimated from a small number of data sets. Automatica, 1997, 33, 1073-1086.	5.0	150
6	SENSITIVITY-BASED OPERATIONAL MODE SHAPE NORMALISATION. Mechanical Systems and Signal Processing, 2002, 16, 757-767.	8.0	144
7	Uncertainty calculation in (operational) modal analysis. Mechanical Systems and Signal Processing, 2007, 21, 2359-2373.	8.0	137
8	The use of transmissibility measurements in output-only modal analysis. Mechanical Systems and Signal Processing, 2007, 21, 2689-2696.	8.0	127
9	Experimental and computational damping estimation of an offshore wind turbine on a monopile foundation. Journal of Wind Engineering and Industrial Aerodynamics, 2013, 120, 96-106.	3.9	127
10	AUTONOMOUS STRUCTURAL HEALTH MONITORING—PART I: MODAL PARAMETER ESTIMATION AND TRACKING. Mechanical Systems and Signal Processing, 2002, 16, 637-657.	8.0	116
11	Application of a Fast-Stabilizing Frequency Domain Parameter Estimation Method. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2001, 123, 651-658.	1.6	115
12	Structural health monitoring of offshore wind turbines using automated operational modal analysis. Structural Health Monitoring, 2014, 13, 644-659.	7.5	111
13	Operational Modal Analysis for Estimating the Dynamic Properties of a Stadium Structure during a Football Game. Shock and Vibration, 2007, 14, 283-303.	0.6	106
14	Operational modal analysis in the presence of harmonic excitations by the use of transmissibility measurements. Mechanical Systems and Signal Processing, 2009, 23, 621-635.	8.0	92
15	DAMAGE ASSESSMENT USING MODE SHAPE SENSITIVITIES. Mechanical Systems and Signal Processing, 2003, 17, 499-518.	8.0	80
16	A comparison of cepstral editing methods as signal pre-processing techniques for vibration-based bearing fault detection. Mechanical Systems and Signal Processing, 2017, 91, 354-381.	8.0	80
17	Vibration-based bearing fault detection for operations and maintenance cost reduction in wind energy. Renewable Energy, 2018, 116, 74-87.	8.9	80
18	A robust singular value decomposition for damage detection under changing operating conditions and structural uncertainties. Journal of Sound and Vibration, 2005, 284, 1033-1050.	3.9	79

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19	A digital image correlation method for fatigue test experiments. Optics and Lasers in Engineering, 2009, 47, 371-378.	3.8	79
20	A modal decomposition and expansion approach for prediction of dynamic responses on a monopile offshore wind turbine using a limited number of vibration sensors. Mechanical Systems and Signal Processing, 2016, 68-69, 84-104.	8.0	78
21	Combined Deterministic-Stochastic Frequency-Domain Subspace Identification for Experimental and Operational Modal Analysis. , 2004, , .		71
22	Measurements of the dynamic railpad properties. Journal of Sound and Vibration, 2006, 293, 557-565.	3.9	68
23	Force identification by means of in-operation modal models. Journal of Sound and Vibration, 2003, 262, 161-173.	3.9	67
24	Sensitivity-based operational mode shape normalisation: Application to a bridge. Mechanical Systems and Signal Processing, 2005, 19, 43-55.	8.0	65
25	Operational modal parameter estimation of MIMO systems using transmissibility functions. Automatica, 2014, 50, 559-564.	5.0	65
26	Operational transfer path analysis. Mechanical Systems and Signal Processing, 2010, 24, 416-431.	8.0	63
27	Directional and oscillating residual stress on the mesoscale in additively manufactured Ti-6Al-4V. Acta Materialia, 2019, 168, 299-308.	7.9	62
28	Finite element model updating taking into account the uncertainty on the modal parameters estimates. Journal of Sound and Vibration, 2006, 296, 919-934.	3.9	60
29	Verification of joint input-state estimation for force identification by means of in situ measurements on a footbridge. Mechanical Systems and Signal Processing, 2016, 75, 245-260.	8.0	60
30	Identification of dynamic forces using group-sparsity in frequency domain. Mechanical Systems and Signal Processing, 2016, 70-71, 756-768.	8.0	60
31	An automatic frequency domain modal parameter estimation algorithm. Journal of Sound and Vibration, 2003, 265, 647-661.	3.9	59
32	An operational modal analysis approach based on parametrically identified multivariable transmissibilities. Mechanical Systems and Signal Processing, 2010, 24, 1250-1259.	8.0	55
33	Nonparametric frequency response function estimators based on nonlinear averaging techniques. IEEE Transactions on Instrumentation and Measurement, 1992, 41, 739-746.	4.7	54
34	Robust parametric transfer function estimation using complex logarithmic frequency response data. IEEE Transactions on Automatic Control, 1995, 40, 1180-1190.	5.7	53
35	Frequency-domain generalized total least-squares identification for modal analysis. Journal of Sound and Vibration, 2004, 278, 21-38.	3.9	53
36	Damping estimation of an offshore wind turbine on a monopile foundation. IET Renewable Power Generation, 2013, 7, 401-412.	3.1	49

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37	Modeling of laser beam and powder flow interaction in laser cladding using ray-tracing. Journal of Laser Applications, 2015, 27, .	1.7	47
38	Acoustic emission monitoring of crack propagation in additively manufactured and conventional titanium components. Mechanics Research Communications, 2017, 84, 8-13.	1.8	47
39	Temperature increases during surface decontamination of titanium implants using CO_2 laser. Clinical Oral Implants Research, 1999, 10, 54-61.	4.5	45
40	From operating deflection shapes towards mode shapes using transmissibility measurements. Mechanical Systems and Signal Processing, 2010, 24, 665-677.	8.0	44
41	On the use of transmissibility measurements for finite element model updating. Journal of Sound and Vibration, 2007, 303, 707-722.	3.9	43
42	Continuous-time operational modal analysis in the presence of harmonic disturbances. Mechanical Systems and Signal Processing, 2008, 22, 1017-1035.	8.0	43
43	The dynamics of an offshore wind turbine in parked conditions: a comparison between simulations and measurements. Wind Energy, 2015, 18, 1685-1702.	4.2	42
44	Optimized Excitation Signals for MIMO Frequency Response Function Measurements. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 2072-2079.	4.7	39
45	Statistical analysis of nonparametric transfer function estimates. IEEE Transactions on Instrumentation and Measurement, 1996, 45, 594-600.	4.7	38
46	Analyses, Development, and Applications of TLS Algorithms in Frequency Domain System Identification. SIAM Journal on Matrix Analysis and Applications, 1998, 19, 983-1004.	1.4	38
47	A Gauss-Newton-like optimization algorithm for "weighted" nonlinear least-squares problems. IEEE Transactions on Signal Processing, 1996, 44, 2222-2228.	5.3	36
48	On the influence of the parameter constraint on the stability of the poles and the discrimination capabilities of the stabilisation diagrams. Mechanical Systems and Signal Processing, 2005, 19, 989-1014.	8.0	36
49	The isotherm migration method in spherical coordinates with a moving heat source. International Journal of Heat and Mass Transfer, 2014, 75, 726-735.	4.8	36
50	Reconstruction of impacts on a composite plate using fiber Bragg gratings (FBG) and inverse methods. Composite Structures, 2016, 149, 1-10.	5.8	36
51	Identification of modal parameters including unmeasured forces and transient effects. Journal of Sound and Vibration, 2003, 265, 609-625.	3.9	35
52	Maximum likelihood identification of non-stationary operational data. Journal of Sound and Vibration, 2003, 268, 971-991.	3.9	35
53	Instantaneous impedance measurements on aluminium using a Schroeder multisine excitation signal. Electrochimica Acta, 2004, 49, 2919-2925.	5.2	35
54	Optical measurement of the dynamic strain field of a fan blade using a 3D scanning vibrometer. Optics and Lasers in Engineering, 2011, 49, 988-997.	3.8	35

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55	Fast maximum-likelihood identification of modal parameters with uncertainty intervals: A modal model-based formulation. Mechanical Systems and Signal Processing, 2013, 37, 422-439.	8.0	35
56	On-line monitoring of fatigue cracks using ultrasonic surface waves. NDT and E International, 2003, 36, 601-607.	3.7	34
57	Identification of Young's modulus from broadband modal analysis experiments. Mechanical Systems and Signal Processing, 2004, 18, 699-726.	8.0	34
58	Fast calculation of confidence intervals on parameter estimates of least-squares frequency-domain estimators. Mechanical Systems and Signal Processing, 2009, 23, 261-273.	8.0	34
59	Combining multiple single-reference transmissibility functions in a unique matrix formulation for operational modal analysis. Mechanical Systems and Signal Processing, 2013, 40, 278-287.	8.0	34
60	Modal parameter estimation by combining stochastic and deterministic frequency-domain approaches. Mechanical Systems and Signal Processing, 2013, 35, 52-68.	8.0	33
61	Constrained maximum likelihood modal parameter identification applied to structural dynamics. Mechanical Systems and Signal Processing, 2016, 72-73, 567-589.	8.0	32
62	High Resolution Temperature Measurement of Liquid Stainless Steel Using Hyperspectral Imaging. Sensors, 2017, 17, 91.	3.8	32
63	AUTONOMOUS STRUCTURAL HEALTH MONITORINGâ€"PART II: VIBRATION-BASED IN-OPERATION DAMAGE ASSESSMENT. Mechanical Systems and Signal Processing, 2002, 16, 659-675.	8.0	31
64	Evaluation of SHM System Produced by Additive Manufacturing via Acoustic Emission and Other NDT Methods. Sensors, 2015, 15, 26709-26725.	3.8	31
65	Hardware-in-the-loop control of additive manufacturing processes using temperature feedback. Journal of Laser Applications, 2016, 28, .	1.7	31
66	Boxâ€"Jenkins identification revisitedâ€"Part III. Automatica, 2007, 43, 868-875.	5.0	30
67	Development of an adaptive response surface method for optimization of computation-intensive models. Computers and Industrial Engineering, 2009, 57, 847-855.	6.3	30
68	Dealing with periodical loads and harmonics in operational modal analysis using time-varying transmissibility functions. Mechanical Systems and Signal Processing, 2014, 49, 154-164.	8.0	30
69	Sensitivity of roots to errors in the coefficient of polynomials obtained by frequency-domain estimation methods. IEEE Transactions on Instrumentation and Measurement, 1989, 38, 1050-1056.	4.7	29
70	Identification of linear systems captured in a feedback loop. IEEE Transactions on Instrumentation and Measurement, 1992, 41, 747-754.	4.7	29
71	User-assisting tools for a fast frequency-domain modal parameter estimation method. Mechanical Systems and Signal Processing, 2004, 18, 759-780.	8.0	28
72	Modal parameter estimation and monitoring for on-line flight flutter analysis. Mechanical Systems and Signal Processing, 2004, 18, 587-610.	8.0	28

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73	Continuous-Time Noise Modeling From Sampled Data. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 2253-2258.	4.7	28
74	Increased reliability of reference-based damage identification techniques by using output-only data. Journal of Sound and Vibration, 2004, 270, 813-832.	3.9	27
75	Experimental investigation of bearing slip in a wind turbine gearbox during a transient grid loss event. Wind Energy, 2016, 19, 2255-2269.	4.2	27
76	A method for crack sizing using Laser Doppler Vibrometer measurements of Surface Acoustic Waves. Ultrasonics, 2010, 50, 76-80.	3.9	26
77	Decoupling of mechanical systems based on in-situ frequency response functions: The link-preserving, decoupling method. Mechanical Systems and Signal Processing, 2015, 58-59, 340-354.	8.0	26
78	Fatigue of Ti6Al4V Structural Health Monitoring Systems Produced by Selective Laser Melting. Materials, 2016, 9, 106.	2.9	26
79	Induction motor dynamic and static inductance identification using a broadband excitation technique. IEEE Transactions on Energy Conversion, 1998, 13, 15-20.	5.2	25
80	Broadband vibration measurements using a continuously scanning laser vibrometer. Measurement Science and Technology, 2002, 13, 1574-1582.	2.6	25
81	Parametric identification of two-port models in the frequency domain. IEEE Transactions on Instrumentation and Measurement, 1992, 41, 233-239.	4.7	23
82	Trajectory Planning for the Walking Biped â€œLucyâ€. International Journal of Robotics Research, 2006, 25, 867-887.	8.5	23
83	Experimental modal testing using pressurized air excitation. Journal of Sound and Vibration, 2007, 299, 83-98.	3.9	22
84	On-line damage detection on a wing panel using transmission of multisine ultrasonic waves. NDT and E International, 2008, 41, 312-317.	3.7	22
85	MiCLAD as a platform for real-time monitoring and machine learning in laser metal deposition. Procedia CIRP, 2020, 94, 456-461.	1.9	22
86	Modal parameter estimation from inputâ€"output Fourier data using frequency-domain maximum likelihood identification. Journal of Sound and Vibration, 2004, 276, 957-979.	3.9	20
87	Fourier fringe processing using a regressive Fourier-transform technique. Optics and Lasers in Engineering, 2005, 43, 645-658.	3.8	20
88	Reliabilityâ€based design optimization of computationâ€intensive models making use of response surface models. Quality and Reliability Engineering International, 2011, 27, 555-568.	2.3	20
89	Fast maximum-likelihood identification of modal parameters with uncertainty intervals: A modal model formulation with enhanced residual term. Mechanical Systems and Signal Processing, 2014, 48, 49-66.	8.0	20
90	Feasibility study on integrated structural health monitoring system produced by metal three-dimensional printing. Structural Health Monitoring, 2015, 14, 622-632.	7.5	20

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91	Description of a parametric maximum likelihood estimator in the frequency domain for multi-input, multi-output systems and its application to flight flutter analysis. Mechanical Systems and Signal Processing, 1990, 4, 405-416.	8.0	19
92	Structural Health Monitoring in Changing Operational Conditions Using Tranmissibility Measurements. Shock and Vibration, 2010, 17, 651-675.	0.6	19
93	Design of a Model-based Controller with Temperature Feedback for Laser Cladding. Physics Procedia, 2014, 56, 211-219.	1.2	19
94	Evaluation of Procedural Simulation as a Training and Assessment Tool in General Surgeryâ€"Simulating a Laparoscopic Appendectomy. Journal of Surgical Education, 2017, 74, 243-250.	2.5	19
95	A minimum drives automatic target definition procedure for multi-axis random control testing. Mechanical Systems and Signal Processing, 2018, 107, 452-468.	8.0	19
96	Bias-specified robust design optimization: A generalized mean squared error approach. Computers and Industrial Engineering, 2008, 54, 259-268.	6.3	18
97	Frequency response measurements of multivariable systems using nonlinear averaging techniques. IEEE Transactions on Instrumentation and Measurement, 1998, 47, 796-800.	4.7	17
98	Multivariable frequencyâ€"response curve fitting with application to modal parameter estimation. Automatica, 2005, 41, 1773-1782.	5.0	17
99	Frequency-domain subspace identification using FRF data from arbitrary signals. Journal of Sound and Vibration, 2006, 290, 555-571.	3.9	17
100	Localization of dynamic forces on structures with an interior point method using group sparsity. Mechanical Systems and Signal Processing, 2019, 115, 593-606.	8.0	17
101	Determination of synchronous machine parameters using network synthesis techniques. IEEE Transactions on Energy Conversion, 1999, 14, 310-314.	5.2	16
102	Modelling of Sprayer Boom Dynamics by Means of Maximum Likelihood Identification Techniques, Part 1: A Comparison of Input-output and Output-only Modal Testing. Biosystems Engineering, 2003, 85, 163-171.	4.3	16
103	Fourier fringe processing by use of an interpolated Fourier-transform technique. Applied Optics, 2004, 43, 5206.	2.1	16
104	Fast variance calculation of polyreference least-squares frequency-domain estimates. Mechanical Systems and Signal Processing, 2009, 23, 1423-1433.	8.0	16
105	Fatigue Performance of Ti-6Al-4V Additively Manufactured Specimens with Integrated Capillaries of an Embedded Structural Health Monitoring System. Materials, 2017, 10, 993.	2.9	16
106	Absorption measurement of acoustic materials using a scanning laser Doppler vibrometer. Journal of the Acoustical Society of America, 2005, 117, 1168-1172.	1.1	15
107	Model-Based Temperature Feedback Control of Laser Cladding Using High-Resolution Hyperspectral Imaging. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2714-2722.	5.8	15
108	Identification of synchronous machines parameters using broadband excitations. IEEE Transactions on Energy Conversion, 1994, 9, 270-280.	5.2	14

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109	Design of narrowband, high-resolution multisines. IEEE Transactions on Instrumentation and Measurement, 1996, 45, 750-753.	4.7	14
110	Measurement of noise (cross-) power spectra for frequency-domain system identification purposes: large-sample results. IEEE Transactions on Instrumentation and Measurement, 1996, 45, 12-21.	4.7	14
111	On-line detection of fatigue cracks using an automatic mode tracking technique. Journal of Sound and Vibration, 2003, 266, 805-814.	3.9	14
112	Modelling of Sprayer Boom Dynamics by Means of Maximum Likelihood Identification Techniques, Part 2: Sensitivity-based Mode Shape Normalisation. Biosystems Engineering, 2003, 85, 291-298.	4.3	14
113	The use of multisine excitations to characterise damage in structures. Mechanical Systems and Signal Processing, 2004, 18, 43-57.	8.0	14
114	On-line identification of operational loads using exogenous inputs. Journal of Sound and Vibration, 2005, 285, 267-279.	3.9	14
115	Parametric frequency domain modeling in modal analysis. Mechanical Systems and Signal Processing, 1989, 3, 389-403.	8.0	13
116	Identification of linear systems captured in a feedback loop. , 0, , .		13
117	Frequency-domain identification of linear systems using arbitrary excitations and a nonparametric noise model. IEEE Transactions on Automatic Control, 1999, 44, 343-347.	5.7	13
118	Combined damage detection techniques. Journal of Sound and Vibration, 2003, 266, 815-831.	3.9	13
119	Improved total least squares estimators for modal analysis. Computers and Structures, 2005, 83, 2077-2085.	4.4	13
120	Robust optimization of an airplane component taking into account the uncertainty of the design parameters. Quality and Reliability Engineering International, 2009, 25, 255-282.	2.3	13
121	Continuous-time operational modal analysis in the presence of harmonic disturbancesâ€"The multivariate case. Mechanical Systems and Signal Processing, 2010, 24, 90-105.	8.0	13
122	Magnetostrictive deformation of a transformer: A comparison between calculation and measurement. International Journal of Applied Electromagnetics and Mechanics, 2014, 44, 295-299.	0.6	13
123	Analyses of drives power reduction techniques for multi-axis random vibration control tests. Mechanical Systems and Signal Processing, 2020, 135, 106395.	8.0	13
124	The restricted problem: An extension of Breakwell-Perko's matching theory. Celestial Mechanics, 1975, 11, 449-467.	0.1	12
125	IDENTIFICATION OF ROTOR-BEARING SYSTEMS IN THE FREQUENCY DOMAIN PART I: ESTIMATION OF FREQUENCY RESPONSE FUNCTIONS. Mechanical Systems and Signal Processing, 2001, 15, 759-773.	8.0	12
126	Improved modal parameter estimation for lowly damped systems using non-parametric exponential windowing techniques. Mechanical Systems and Signal Processing, 2005, 19, 675-699.	8.0	12

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127	Assessment of nonlinear distortions in modal testing and analysis of vibrating automotive structures. Journal of Sound and Vibration, 2006, 293, 299-319.	3.9	12
128	Hyperspectral and thermal temperature estimation during laser cladding. Journal of Laser Applications, 2019, 31, .	1.7	12
129	On the use of signals with a constant signal-to-noise ratio in the frequency domain. IEEE Transactions on Instrumentation and Measurement, 1990, 39, 835-842.	4.7	11
130	An automatic position calibration method for the scanning laser Doppler vibrometer. Measurement Science and Technology, 2003, 14, 1469-1476.	2.6	11
131	â€˜Organised irresponsibilityâ€™: Contradictions in the Australian government's strategy for GM regulation. Environmental Politics, 2006, 15, 399-416.	5.4	11
132	Acoustic source identification using a Generalized Weighted Inverse Beamforming technique. Mechanical Systems and Signal Processing, 2012, 32, 349-358.	8.0	11
133	Experimental dynamic identification of modeshape driving wind turbine grid loss event on nacelle testrig. Renewable Energy, 2016, 85, 259-272.	8.9	11
134	An analytical amplitude model for negative pressure waves in gaseous media. Mechanical Systems and Signal Processing, 2020, 144, 106800.	8.0	11
135	Parametric identification of transfer functions in the frequency domain: a survey. , 0, , .		10
136	An on-line combined linearâ€"nonlinear fatigue crack detection technique. NDT and E International, 2004, 37, 41-45.	3.7	10
137	Accurate estimation of normal incidence absorption coefficients with confidence intervals using a scanning laser Doppler vibrometer. Optics and Lasers in Engineering, 2009, 47, 644-650.	3.8	10
138	High Resolution Temperature Estimation During Laser Cladding of Stainless Steel. Physics Procedia, 2016, 83, 1253-1260.	1.2	10
139	Offline powder-gas nozzle jet characterization for coaxial laser-based Directed Energy Deposition. Procedia CIRP, 2020, 94, 281-287.	1.9	10
140	Removal of non-stationary harmonics for operational modal analysis in time and frequency domain. Mechanical Systems and Signal Processing, 2022, 165, 108329.	8.0	10
141	A Fast Maximum Likelihood-Based Estimation of a Modal Model. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 133-156.	0.5	10
142	A global system identification approach for the accurate parametric modeling of ultrasonic reflection and transmission experiments. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 1996, 43, 628-639.	3.0	9
143	A comparison of frequency-domain transfer function model estimator formulations for structural dynamics modelling. Journal of Sound and Vibration, 2005, 279, 775-798.	3.9	9
144	Reduction of large frequency response function data sets using a robust singular value decomposition. Computers and Structures, 2006, 84, 808-822.	4.4	9

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145	Data reduction using a generalized regressive discrete Fourier series. Journal of Sound and Vibration, 2006, 298, 1-11.	3.9	9
146	Flow characterization using a laser Doppler vibrometer. Optics and Lasers in Engineering, 2007, 45, 19-26.	3.8	9
147	Simultaneous determination of acoustic velocity and density of a cortical bone slab: ultrasonic model-based approach - correspondence. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 496-500.	3.0	9
148	Transmissibilty-Based Operational Modal Analysis for Flight Flutter Testing Using Exogenous Inputs. Shock and Vibration, 2012, 19, 1071-1083.	0.6	9
149	Transmissibility-Based Operational Modal Analysis: Enhanced Stabilisation Diagrams. Shock and Vibration, 2012, 19, 1085-1097.	0.6	9
150	Underwater Acoustic Wavefront Visualization by Scanning Laser Doppler Vibrometer for the Characterization of Focused Ultrasonic Transducers. Sensors, 2015, 15, 19925-19936.	3.8	9
151	The MLMM modal parameter estimation method: A new feature to maximize modal model robustness. Mechanical Systems and Signal Processing, 2019, 120, 465-485.	8.0	9
152	Comparison of visual and hyperspectral monitoring of the melt pool during Laser Metal Deposition. Procedia CIRP, 2020, 94, 462-468.	1.9	9
153	Multivariable Modelling of Gas Turbine Dynamics. , 2001, , .		8
154	Online Vibration-Based Crack Detection during Fatigue Testing. Key Engineering Materials, 2003, 245-246, 571-578.	0.4	8
155	Spectroscopic monitoring and melt pool temperature estimation during the laser metal deposition process. Journal of Laser Applications, 2016, 28, .	1.7	8
156	Automatic Tracking of the Modal Parameters of an Offshore Wind Turbine Drivetrain System. Energies, 2017, 10, 574.	3.1	8
157	A weighted total least squares estimator for multivariable systems with nearly maximum likelihood properties. IEEE Transactions on Instrumentation and Measurement, 1998, 47, 818-822.	4.7	7
158	Relative scaling of mode shapes using transmissibility functions. Mechanical Systems and Signal Processing, 2013, 40, 269-277.	8.0	7
159	Analyses of Target Definition Processes for MIMO Random Vibration Control Tests. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 135-148.	0.5	7
160	Dynamic Performance of an Oil Starved Squeeze Film Damper Combined With a Cylindrical Roller Bearing. Journal of Engineering for Gas Turbines and Power, 2019, 141, 0710091-7100912.	1.1	7
161	Combining Test and Simulation to Tackle the Challenges Derived from Boundary Conditions Mismatches in Environmental Testing. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 259-269.	0.5	7
162	<title>Development of a data-reduction procedure with noise extraction for high-spatial-resolution optical measurements</title>. , 1998, 3411, 357.		6

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163	\<title>Linear and nonlinear damage detection using a scanning laser vibrometer\</title>. , 2000, , .		6
164	Improved Fourier analysis using parametric frequency-domain transfer-function estimators. Mechanical Systems and Signal Processing, 2007, 21, 1704-1716.	8.0	6
165	Reducing measurement time for a laser Doppler vibrometer using regressive techniques. Optics and Lasers in Engineering, 2007, 45, 49-56.	3.8	6
166	Continuous strain prediction for fatigue assessment of an offshore wind turbine using Kalman filtering techniques. , 2015, , .		6
167	Proof of Concept of Integrated Load Measurement in 3D Printed Structures. Sensors, 2017, 17, 328.	3.8	6
168	Fatigue Performance of Powder Bed Fused Ti-6Al-4V Component with Integrated Chemically Etched Capillary for Structural Health Monitoring Application. Proceedings (mdpi), 2018, 2, .	0.2	6
169	Dynamic Performance of a Squeeze Film Damper with a Cylindrical Roller Bearing under a Large Static Radial Loading Range. Machines, 2019, 7, 14.	2.2	6
170	Long-Term Dynamic Monitoring of an Offshore Wind Turbine. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 253-267.	0.5	6
171	Frequency response function-based parameter identification from short data sequences. Mechanical Systems and Signal Processing, 2004, 18, 1097-1116.	8.0	5
172	Robust data reduction of high spatial resolution optical vibration measurements. Journal of Sound and Vibration, 2004, 274, 369-384.	3.9	5
173	Reducing spatial data using an optimized regressive discrete Fourier series. Journal of Sound and Vibration, 2008, 309, 858-867.	3.9	5
174	A study on the bandwidth characteristics of pleated pneumatic artificial muscles. Applied Bionics and Biomechanics, 2009, 6, 3-9.	1.1	5
175	Microphone positioning optimization for conditioning inverse tonal fan noise. Mechanical Systems and Signal Processing, 2010, 24, 1682-1692.	8.0	5
176	Consistent multi-input modal parameter estimators in the frequency domain. Mechanical Systems and Signal Processing, 2012, 31, 130-142.	8.0	5
177	Material properties identification using ultrasonic waves and laser Doppler vibrometer measurements: a multi-input multi-output approach. Measurement Science and Technology, 2013, 24, 105206.	2.6	5
178	Experimental Study of the Shaft Penetration Factor on the Torsional Dynamic Response of a Drive Train. Machines, 2018, 6, 31.	2.2	5
179	Identification of Noise, Vibration and Harshness Behavior of Wind Turbine Drivetrain under Different Operating Conditions. Energies, 2019, 12, 3401.	3.1	5
180	On the Nature of Pressure Wave Propagation through Ducts for Structural Health Monitoring Application. Applied Sciences (Switzerland), 2019, 9, 837.	2.5	5

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181	Nonparametric frequency response function estimators based on nonlinear averaging techniques. , 0, , .		4
182	Accurate and fast estimation of the Fourier coefficients of periodic signals disturbed by trends. IEEE Transactions on Instrumentation and Measurement, 1996, 45, 5-11.	4.7	4
183	Linear and Nonlinear Damage Detection Using a Scanning Laser Vibrometer. Shock and Vibration, 2002, 9, 43-56.	0.6	4
184	An automatic scanning algorithm for high spatial resolution laser vibrometer measurements. Mechanical Systems and Signal Processing, 2004, 18, 79-88.	8.0	4
185	Automatic vibration mode tracking using a scanning laser Doppler vibrometer. Optics and Lasers in Engineering, 2004, 42, 315-326.	3.8	4
186	Reforming the Belgian market for orthotic braces: What can we learn from the international experience?. Health Policy, 2008, 86, 195-203.	3.0	4
187	Underwater visualization of multi-input interleaved multisine wavefronts for ultrasonic testing of bone specimens using laser Doppler vibrometry. Proceedings of SPIE, 2008, , .	0.8	4
188	Development of a regressive finite element model optimization technique making use of transmissibilities. Structural and Multidisciplinary Optimization, 2009, 39, 47-62.	3.5	4
189	Processing optical measurements using a regressive Fourier series: A review. Optics and Lasers in Engineering, 2009, 47, 461-472.	3.8	4
190	Direct calculation of modal parameters from matrix orthogonal polynomials. Mechanical Systems and Signal Processing, 2011, 25, 2375-2387.	8.0	4
191	Turning point based fatigue testing: Combining multisines with turning point replication. Mechanical Systems and Signal Processing, 2012, 30, 23-31.	8.0	4
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