

Patrick Guillaume

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3801636/publications.pdf>

Version: 2024-02-01

279
papers

6,911
citations

76196

40
h-index

85405

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.	0.3	587
2	Parametric identification of transfer functions in the frequency domain-a survey. IEEE Transactions on Automatic Control, 1994, 39, 2245-2260.	3.6	435
3	Crest-factor minimization using nonlinear Chebyshev approximation methods. IEEE Transactions on Instrumentation and Measurement, 1991, 40, 982-989.	2.4	203
4	Identification of modal parameters from transmissibility measurements. Journal of Sound and Vibration, 2008, 314, 343-356.	2.1	151
5	Frequency-domain system identification using non-parametric noise models estimated from a small number of data sets. Automatica, 1997, 33, 1073-1086.	3.0	150
6	SENSITIVITY-BASED OPERATIONAL MODE SHAPE NORMALISATION. Mechanical Systems and Signal Processing, 2002, 16, 757-767.	4.4	144
7	Uncertainty calculation in (operational) modal analysis. Mechanical Systems and Signal Processing, 2007, 21, 2359-2373.	4.4	137
8	The use of transmissibility measurements in output-only modal analysis. Mechanical Systems and Signal Processing, 2007, 21, 2689-2696.	4.4	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.	1.7	127
10	AUTONOMOUS STRUCTURAL HEALTH MONITORINGâ€™PART I: MODAL PARAMETER ESTIMATION AND TRACKING. Mechanical Systems and Signal Processing, 2002, 16, 637-657.	4.4	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.	0.9	115
12	Structural health monitoring of offshore wind turbines using automated operational modal analysis. Structural Health Monitoring, 2014, 13, 644-659.	4.3	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.	0.3	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.	4.4	92
15	DAMAGE ASSESSMENT USING MODE SHAPE SENSITIVITIES. Mechanical Systems and Signal Processing, 2003, 17, 499-518.	4.4	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.	4.4	80
17	Vibration-based bearing fault detection for operations and maintenance cost reduction in wind energy. Renewable Energy, 2018, 116, 74-87.	4.3	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.	2.1	79

#	ARTICLE	IF	CITATIONS
19	A digital image correlation method for fatigue test experiments. Optics and Lasers in Engineering, 2009, 47, 371-378.	2.0	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.	4.4	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.	2.1	68
23	Force identification by means of in-operation modal models. Journal of Sound and Vibration, 2003, 262, 161-173.	2.1	67
24	Sensitivity-based operational mode shape normalisation: Application to a bridge. Mechanical Systems and Signal Processing, 2005, 19, 43-55.	4.4	65
25	Operational modal parameter estimation of MIMO systems using transmissibility functions. Automatica, 2014, 50, 559-564.	3.0	65
26	Operational transfer path analysis. Mechanical Systems and Signal Processing, 2010, 24, 416-431.	4.4	63
27	Directional and oscillating residual stress on the mesoscale in additively manufactured Ti-6Al-4V. Acta Materialia, 2019, 168, 299-308.	3.8	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.	2.1	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.	4.4	60
30	Identification of dynamic forces using group-sparsity in frequency domain. Mechanical Systems and Signal Processing, 2016, 70-71, 756-768.	4.4	60
31	An automatic frequency domain modal parameter estimation algorithm. Journal of Sound and Vibration, 2003, 265, 647-661.	2.1	59
32	An operational modal analysis approach based on parametrically identified multivariable transmissibilities. Mechanical Systems and Signal Processing, 2010, 24, 1250-1259.	4.4	55
33	Nonparametric frequency response function estimators based on nonlinear averaging techniques. IEEE Transactions on Instrumentation and Measurement, 1992, 41, 739-746.	2.4	54
34	Robust parametric transfer function estimation using complex logarithmic frequency response data. IEEE Transactions on Automatic Control, 1995, 40, 1180-1190.	3.6	53
35	Frequency-domain generalized total least-squares identification for modal analysis. Journal of Sound and Vibration, 2004, 278, 21-38.	2.1	53
36	Damping estimation of an offshore wind turbine on a monopile foundation. IET Renewable Power Generation, 2013, 7, 401-412.	1.7	49

#	ARTICLE	IF	CITATIONS
37	Modeling of laser beam and powder flow interaction in laser cladding using ray-tracing. Journal of Laser Applications, 2015, 27, .	0.8	47
38	Acoustic emission monitoring of crack propagation in additively manufactured and conventional titanium components. Mechanics Research Communications, 2017, 84, 8-13.	1.0	47
39	Temperature increases during surface decontamination of titanium implants using CO2 laser. Clinical Oral Implants Research, 1999, 10, 54-61.	1.9	45
40	From operating deflection shapes towards mode shapes using transmissibility measurements. Mechanical Systems and Signal Processing, 2010, 24, 665-677.	4.4	44
41	On the use of transmissibility measurements for finite element model updating. Journal of Sound and Vibration, 2007, 303, 707-722.	2.1	43
42	Continuous-time operational modal analysis in the presence of harmonic disturbances. Mechanical Systems and Signal Processing, 2008, 22, 1017-1035.	4.4	43
43	The dynamics of an offshore wind turbine in parked conditions: a comparison between simulations and measurements. Wind Energy, 2015, 18, 1685-1702.	1.9	42
44	Optimized Excitation Signals for MIMO Frequency Response Function Measurements. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 2072-2079.	2.4	39
45	Statistical analysis of nonparametric transfer function estimates. IEEE Transactions on Instrumentation and Measurement, 1996, 45, 594-600.	2.4	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.	0.7	38
47	A Gauss-Newton-like optimization algorithm for "weighted" nonlinear least-squares problems. IEEE Transactions on Signal Processing, 1996, 44, 2222-2228.	3.2	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.	4.4	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.	2.5	36
50	Reconstruction of impacts on a composite plate using fiber Bragg gratings (FBG) and inverse methods. Composite Structures, 2016, 149, 1-10.	3.1	36
51	Identification of modal parameters including unmeasured forces and transient effects. Journal of Sound and Vibration, 2003, 265, 609-625.	2.1	35
52	Maximum likelihood identification of non-stationary operational data. Journal of Sound and Vibration, 2003, 268, 971-991.	2.1	35
53	Instantaneous impedance measurements on aluminium using a Schroeder multisine excitation signal. Electrochimica Acta, 2004, 49, 2919-2925.	2.6	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.	2.0	35

#	ARTICLE	IF	CITATIONS
55	Fast maximum-likelihood identification of modal parameters with uncertainty intervals: A modal model-based formulation. <i>Mechanical Systems and Signal Processing</i> , 2013, 37, 422-439.	4.4	35
56	On-line monitoring of fatigue cracks using ultrasonic surface waves. <i>NDT and E International</i> , 2003, 36, 601-607.	1.7	34
57	Identification of Young's modulus from broadband modal analysis experiments. <i>Mechanical Systems and Signal Processing</i> , 2004, 18, 699-726.	4.4	34
58	Fast calculation of confidence intervals on parameter estimates of least-squares frequency-domain estimators. <i>Mechanical Systems and Signal Processing</i> , 2009, 23, 261-273.	4.4	34
59	Combining multiple single-reference transmissibility functions in a unique matrix formulation for operational modal analysis. <i>Mechanical Systems and Signal Processing</i> , 2013, 40, 278-287.	4.4	34
60	Modal parameter estimation by combining stochastic and deterministic frequency-domain approaches. <i>Mechanical Systems and Signal Processing</i> , 2013, 35, 52-68.	4.4	33
61	Constrained maximum likelihood modal parameter identification applied to structural dynamics. <i>Mechanical Systems and Signal Processing</i> , 2016, 72-73, 567-589.	4.4	32
62	High Resolution Temperature Measurement of Liquid Stainless Steel Using Hyperspectral Imaging. <i>Sensors</i> , 2017, 17, 91.	2.1	32
63	AUTONOMOUS STRUCTURAL HEALTH MONITORING" PART II: VIBRATION-BASED IN-OPERATION DAMAGE ASSESSMENT. <i>Mechanical Systems and Signal Processing</i> , 2002, 16, 659-675.	4.4	31
64	Evaluation of SHM System Produced by Additive Manufacturing via Acoustic Emission and Other NDT Methods. <i>Sensors</i> , 2015, 15, 26709-26725.	2.1	31
65	Hardware-in-the-loop control of additive manufacturing processes using temperature feedback. <i>Journal of Laser Applications</i> , 2016, 28, .	0.8	31
66	Box"Jenkins identification revisited" Part III. <i>Automatica</i> , 2007, 43, 868-875.	3.0	30
67	Development of an adaptive response surface method for optimization of computation-intensive models. <i>Computers and Industrial Engineering</i> , 2009, 57, 847-855.	3.4	30
68	Dealing with periodical loads and harmonics in operational modal analysis using time-varying transmissibility functions. <i>Mechanical Systems and Signal Processing</i> , 2014, 49, 154-164.	4.4	30
69	Sensitivity of roots to errors in the coefficient of polynomials obtained by frequency-domain estimation methods. <i>IEEE Transactions on Instrumentation and Measurement</i> , 1989, 38, 1050-1056.	2.4	29
70	Identification of linear systems captured in a feedback loop. <i>IEEE Transactions on Instrumentation and Measurement</i> , 1992, 41, 747-754.	2.4	29
71	User-assisting tools for a fast frequency-domain modal parameter estimation method. <i>Mechanical Systems and Signal Processing</i> , 2004, 18, 759-780.	4.4	28
72	Modal parameter estimation and monitoring for on-line flight flutter analysis. <i>Mechanical Systems and Signal Processing</i> , 2004, 18, 587-610.	4.4	28

#	ARTICLE	IF	CITATIONS
73	Continuous-Time Noise Modeling From Sampled Data. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 2253-2258.	2.4	28
74	Increased reliability of reference-based damage identification techniques by using output-only data. Journal of Sound and Vibration, 2004, 270, 813-832.	2.1	27
75	Experimental investigation of bearing slip in a wind turbine gearbox during a transient grid loss event. Wind Energy, 2016, 19, 2255-2269.	1.9	27
76	A method for crack sizing using Laser Doppler Vibrometer measurements of Surface Acoustic Waves. Ultrasonics, 2010, 50, 76-80.	2.1	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.	4.4	26
78	Fatigue of Ti6Al4V Structural Health Monitoring Systems Produced by Selective Laser Melting. Materials, 2016, 9, 106.	1.3	26
79	Induction motor dynamic and static inductance identification using a broadband excitation technique. IEEE Transactions on Energy Conversion, 1998, 13, 15-20.	3.7	25
80	Broadband vibration measurements using a continuously scanning laser vibrometer. Measurement Science and Technology, 2002, 13, 1574-1582.	1.4	25
81	Parametric identification of two-port models in the frequency domain. IEEE Transactions on Instrumentation and Measurement, 1992, 41, 233-239.	2.4	23
82	Trajectory Planning for the Walking Biped "Lucy". International Journal of Robotics Research, 2006, 25, 867-887.	5.8	23
83	Experimental modal testing using pressurized air excitation. Journal of Sound and Vibration, 2007, 299, 83-98.	2.1	22
84	On-line damage detection on a wing panel using transmission of multisine ultrasonic waves. NDT and E International, 2008, 41, 312-317.	1.7	22
85	MiCLAD as a platform for real-time monitoring and machine learning in laser metal deposition. Procedia CIRP, 2020, 94, 456-461.	1.0	22
86	Modal parameter estimation from input-output Fourier data using frequency-domain maximum likelihood identification. Journal of Sound and Vibration, 2004, 276, 957-979.	2.1	20
87	Fourier fringe processing using a regressive Fourier-transform technique. Optics and Lasers in Engineering, 2005, 43, 645-658.	2.0	20
88	Reliability-based design optimization of computation-intensive models making use of response surface models. Quality and Reliability Engineering International, 2011, 27, 555-568.	1.4	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.	4.4	20
90	Feasibility study on integrated structural health monitoring system produced by metal three-dimensional printing. Structural Health Monitoring, 2015, 14, 622-632.	4.3	20

#	ARTICLE	IF	CITATIONS
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. <i>Mechanical Systems and Signal Processing</i> , 1990, 4, 405-416.	4.4	19
92	Structural Health Monitoring in Changing Operational Conditions Using Transmissibility Measurements. <i>Shock and Vibration</i> , 2010, 17, 651-675.	0.3	19
93	Design of a Model-based Controller with Temperature Feedback for Laser Cladding. <i>Physics Procedia</i> , 2014, 56, 211-219.	1.2	19
94	Evaluation of Procedural Simulation as a Training and Assessment Tool in General Surgery – Simulating a Laparoscopic Appendectomy. <i>Journal of Surgical Education</i> , 2017, 74, 243-250.	1.2	19
95	A minimum drives automatic target definition procedure for multi-axis random control testing. <i>Mechanical Systems and Signal Processing</i> , 2018, 107, 452-468.	4.4	19
96	Bias-specified robust design optimization: A generalized mean squared error approach. <i>Computers and Industrial Engineering</i> , 2008, 54, 259-268.	3.4	18
97	Frequency response measurements of multivariable systems using nonlinear averaging techniques. <i>IEEE Transactions on Instrumentation and Measurement</i> , 1998, 47, 796-800.	2.4	17
98	Multivariable frequency response curve fitting with application to modal parameter estimation. <i>Automatica</i> , 2005, 41, 1773-1782.	3.0	17
99	Frequency-domain subspace identification using FRF data from arbitrary signals. <i>Journal of Sound and Vibration</i> , 2006, 290, 555-571.	2.1	17
100	Localization of dynamic forces on structures with an interior point method using group sparsity. <i>Mechanical Systems and Signal Processing</i> , 2019, 115, 593-606.	4.4	17
101	Determination of synchronous machine parameters using network synthesis techniques. <i>IEEE Transactions on Energy Conversion</i> , 1999, 14, 310-314.	3.7	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. <i>Biosystems Engineering</i> , 2003, 85, 163-171.	1.9	16
103	Fourier fringe processing by use of an interpolated Fourier-transform technique. <i>Applied Optics</i> , 2004, 43, 5206.	2.1	16
104	Fast variance calculation of polyreference least-squares frequency-domain estimates. <i>Mechanical Systems and Signal Processing</i> , 2009, 23, 1423-1433.	4.4	16
105	Fatigue Performance of Ti-6Al-4V Additively Manufactured Specimens with Integrated Capillaries of an Embedded Structural Health Monitoring System. <i>Materials</i> , 2017, 10, 993.	1.3	16
106	Absorption measurement of acoustic materials using a scanning laser Doppler vibrometer. <i>Journal of the Acoustical Society of America</i> , 2005, 117, 1168-1172.	0.5	15
107	Model-Based Temperature Feedback Control of Laser Cladding Using High-Resolution Hyperspectral Imaging. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017, 22, 2714-2722.	3.7	15
108	Identification of synchronous machines parameters using broadband excitations. <i>IEEE Transactions on Energy Conversion</i> , 1994, 9, 270-280.	3.7	14

#	ARTICLE	IF	CITATIONS
109	Design of narrowband, high-resolution multisines. IEEE Transactions on Instrumentation and Measurement, 1996, 45, 750-753.	2.4	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.	2.4	14
111	On-line detection of fatigue cracks using an automatic mode tracking technique. Journal of Sound and Vibration, 2003, 266, 805-814.	2.1	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.	1.9	14
113	The use of multisine excitations to characterise damage in structures. Mechanical Systems and Signal Processing, 2004, 18, 43-57.	4.4	14
114	On-line identification of operational loads using exogenous inputs. Journal of Sound and Vibration, 2005, 285, 267-279.	2.1	14
115	Parametric frequency domain modeling in modal analysis. Mechanical Systems and Signal Processing, 1989, 3, 389-403.	4.4	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.	3.6	13
118	Combined damage detection techniques. Journal of Sound and Vibration, 2003, 266, 815-831.	2.1	13
119	Improved total least squares estimators for modal analysis. Computers and Structures, 2005, 83, 2077-2085.	2.4	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.	1.4	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.	4.4	13
122	Magnetostrictive deformation of a transformer: A comparison between calculation and measurement. International Journal of Applied Electromagnetics and Mechanics, 2014, 44, 295-299.	0.3	13
123	Analyses of drives power reduction techniques for multi-axis random vibration control tests. Mechanical Systems and Signal Processing, 2020, 135, 106395.	4.4	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.	4.4	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.	4.4	12

#	ARTICLE	IF	CITATIONS
127	Assessment of nonlinear distortions in modal testing and analysis of vibrating automotive structures. <i>Journal of Sound and Vibration</i> , 2006, 293, 299-319.	2.1	12
128	Hyperspectral and thermal temperature estimation during laser cladding. <i>Journal of Laser Applications</i> , 2019, 31, .	0.8	12
129	On the use of signals with a constant signal-to-noise ratio in the frequency domain. <i>IEEE Transactions on Instrumentation and Measurement</i> , 1990, 39, 835-842.	2.4	11
130	An automatic position calibration method for the scanning laser Doppler vibrometer. <i>Measurement Science and Technology</i> , 2003, 14, 1469-1476.	1.4	11
131	“Organised irresponsibility”™: Contradictions in the Australian government's strategy for GM regulation. <i>Environmental Politics</i> , 2006, 15, 399-416.	3.4	11
132	Acoustic source identification using a Generalized Weighted Inverse Beamforming technique. <i>Mechanical Systems and Signal Processing</i> , 2012, 32, 349-358.	4.4	11
133	Experimental dynamic identification of modeshape driving wind turbine grid loss event on nacelle testrig. <i>Renewable Energy</i> , 2016, 85, 259-272.	4.3	11
134	An analytical amplitude model for negative pressure waves in gaseous media. <i>Mechanical Systems and Signal Processing</i> , 2020, 144, 106800.	4.4	11
135	Parametric identification of transfer functions in the frequency domain: a survey. , 0, , .		10
136	An on-line combined linear“nonlinear fatigue crack detection technique. <i>NDT and E International</i> , 2004, 37, 41-45.	1.7	10
137	Accurate estimation of normal incidence absorption coefficients with confidence intervals using a scanning laser Doppler vibrometer. <i>Optics and Lasers in Engineering</i> , 2009, 47, 644-650.	2.0	10
138	High Resolution Temperature Estimation During Laser Cladding of Stainless Steel. <i>Physics Procedia</i> , 2016, 83, 1253-1260.	1.2	10
139	Offline powder-gas nozzle jet characterization for coaxial laser-based Directed Energy Deposition. <i>Procedia CIRP</i> , 2020, 94, 281-287.	1.0	10
140	Removal of non-stationary harmonics for operational modal analysis in time and frequency domain. <i>Mechanical Systems and Signal Processing</i> , 2022, 165, 108329.	4.4	10
141	A Fast Maximum Likelihood-Based Estimation of a Modal Model. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2015, , 133-156.	0.3	10
142	A global system identification approach for the accurate parametric modeling of ultrasonic reflection and transmission experiments. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 1996, 43, 628-639.	1.7	9
143	A comparison of frequency-domain transfer function model estimator formulations for structural dynamics modelling. <i>Journal of Sound and Vibration</i> , 2005, 279, 775-798.	2.1	9
144	Reduction of large frequency response function data sets using a robust singular value decomposition. <i>Computers and Structures</i> , 2006, 84, 808-822.	2.4	9

#	ARTICLE	IF	CITATIONS
145	Data reduction using a generalized regressive discrete Fourier series. Journal of Sound and Vibration, 2006, 298, 1-11.	2.1	9
146	Flow characterization using a laser Doppler vibrometer. Optics and Lasers in Engineering, 2007, 45, 19-26.	2.0	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.	1.7	9
148	Transmissibility-Based Operational Modal Analysis for Flight Flutter Testing Using Exogenous Inputs. Shock and Vibration, 2012, 19, 1071-1083.	0.3	9
149	Transmissibility-Based Operational Modal Analysis: Enhanced Stabilisation Diagrams. Shock and Vibration, 2012, 19, 1085-1097.	0.3	9
150	Underwater Acoustic Wavefront Visualization by Scanning Laser Doppler Vibrometer for the Characterization of Focused Ultrasonic Transducers. Sensors, 2015, 15, 19925-19936.	2.1	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.	4.4	9
152	Comparison of visual and hyperspectral monitoring of the melt pool during Laser Metal Deposition. Procedia CIRP, 2020, 94, 462-468.	1.0	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, .	0.8	8
156	Automatic Tracking of the Modal Parameters of an Offshore Wind Turbine Drivetrain System. Energies, 2017, 10, 574.	1.6	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.	2.4	7
158	Relative scaling of mode shapes using transmissibility functions. Mechanical Systems and Signal Processing, 2013, 40, 269-277.	4.4	7
159	Analyses of Target Definition Processes for MIMO Random Vibration Control Tests. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 135-148.	0.3	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.	0.5	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.	0.3	7
162	<title>Development of a data-reduction procedure with noise extraction for high-spatial-resolution optical measurements</title>. , 1998, 3411, 357.		6

#	ARTICLE	IF	CITATIONS
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.	4.4	6
165	Reducing measurement time for a laser Doppler vibrometer using regressive techniques. Optics and Lasers in Engineering, 2007, 45, 49-56.	2.0	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.	2.1	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.	1.2	6
170	Long-Term Dynamic Monitoring of an Offshore Wind Turbine. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 253-267.	0.3	6
171	Frequency response function-based parameter identification from short data sequences. Mechanical Systems and Signal Processing, 2004, 18, 1097-1116.	4.4	5
172	Robust data reduction of high spatial resolution optical vibration measurements. Journal of Sound and Vibration, 2004, 274, 369-384.	2.1	5
173	Reducing spatial data using an optimized regressive discrete Fourier series. Journal of Sound and Vibration, 2008, 309, 858-867.	2.1	5
174	A study on the bandwidth characteristics of pleated pneumatic artificial muscles. Applied Bionics and Biomechanics, 2009, 6, 3-9.	0.5	5
175	Microphone positioning optimization for conditioning inverse tonal fan noise. Mechanical Systems and Signal Processing, 2010, 24, 1682-1692.	4.4	5
176	Consistent multi-input modal parameter estimators in the frequency domain. Mechanical Systems and Signal Processing, 2012, 31, 130-142.	4.4	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.	1.4	5
178	Experimental Study of the Shaft Penetration Factor on the Torsional Dynamic Response of a Drive Train. Machines, 2018, 6, 31.	1.2	5
179	Identification of Noise, Vibration and Harshness Behavior of Wind Turbine Drivetrain under Different Operating Conditions. Energies, 2019, 12, 3401.	1.6	5
180	On the Nature of Pressure Wave Propagation through Ducts for Structural Health Monitoring Application. Applied Sciences (Switzerland), 2019, 9, 837.	1.3	5

#	ARTICLE	IF	CITATIONS
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.	2.4	4
183	Linear and Nonlinear Damage Detection Using a Scanning Laser Vibrometer. Shock and Vibration, 2002, 9, 43-56.	0.3	4
184	An automatic scanning algorithm for high spatial resolution laser vibrometer measurements. Mechanical Systems and Signal Processing, 2004, 18, 79-88.	4.4	4
185	Automatic vibration mode tracking using a scanning laser Doppler vibrometer. Optics and Lasers in Engineering, 2004, 42, 315-326.	2.0	4
186	Reforming the Belgian market for orthotic braces: What can we learn from the international experience?. Health Policy, 2008, 86, 195-203.	1.4	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.	1.7	4
189	Processing optical measurements using a regressive Fourier series: A review. Optics and Lasers in Engineering, 2009, 47, 461-472.	2.0	4
190	Direct calculation of modal parameters from matrix orthogonal polynomials. Mechanical Systems and Signal Processing, 2011, 25, 2375-2387.	4.4	4
191	Turning point based fatigue testing: Combining multisines with turning point replication. Mechanical Systems and Signal Processing, 2012, 30, 23-31.	4.4	4
192	Vibration-based angular speed estimation for multi-stage wind turbine gearboxes. Journal of Physics: Conference Series, 2017, 842, 012053.	0.3	4
193	Long term operational modal analysis for rotating machines. Journal of Physics: Conference Series, 2018, 1037, 052035.	0.3	4
194	Fatigue failure monitoring of 316L stainless steel coupons using optical fibre based distributed strain sensing. Smart Materials and Structures, 2019, 28, 105054.	1.8	4
195	Evaluating Different Automated Operational Modal Analysis Techniques for the Continuous Monitoring of Offshore Wind Turbines. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 313-329.	0.3	4
196	A Multiphysical Modelling Approach for Virtual Shaker Testing Correlated with Experimental Test Results. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 87-99.	0.3	4
197	Modal Parameters Estimation of an Offshore Wind Turbine Using Measured Acceleration Signals from the Drive Train. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 41-48.	0.3	4
198	Process parameter study for enhancement of directed energy deposition powder efficiency based on single-track geometry evaluation. Journal of Laser Applications, 2021, 33, .	0.8	4

#	ARTICLE	IF	CITATIONS
199	Frequency response measurements of multivariable systems using nonlinear averaging techniques. , 0, , .		3
200	On-line robust processing techniques for elimination of measurement drop-out. Measurement Science and Technology, 2002, 13, 1183-1190.	1.4	3
201	On the use of a laser Doppler vibrometer for quality control of picture tubes. , 2004, , .		3
202	Laser vibrometer measurements of SAWs for nondestructive testing. , 2006, , .		3
203	Structural dynamics of a mobile substation during transport. Engineering Structures, 2007, 29, 3377-3389.	2.6	3
204	Tomographic reconstruction using a generalized regressive discrete Fourier series. Mechanical Systems and Signal Processing, 2008, 22, 1237-1247.	4.4	3
205	How to Achieve a Rapid Deployment of Mobile Substations and to Guarantee Its Integrity During Transport. IEEE Transactions on Power Delivery, 2008, 23, 196-202.	2.9	3
206	A Study on the Bandwidth Characteristics of Pleated Pneumatic Artificial Muscles. Applied Bionics and Biomechanics, 2009, 6, 3-9.	0.5	3
207	System identification of the kinematics of an oscillating cylinder using wake velocities. Journal of Fluids and Structures, 2013, 41, 57-63.	1.5	3
208	Numerical Simulation of Fatigue Crack Growth in Straight Lugs Equipped with Efficient Structural Health Monitoring. Procedia Structural Integrity, 2018, 13, 1708-1713.	0.3	3
209	Analytical Modeling of Embedded Load Sensing Using Liquid-Filled Capillaries Integrated by Metal Additive Manufacturing. IEEE Sensors Journal, 2019, 19, 9447-9455.	2.4	3
210	On the Influence of Capillary-Based Structural Health Monitoring on Fatigue Crack Initiation and Propagation in Straight Lugs. Materials, 2019, 12, 2965.	1.3	3
211	Effect of Coaxial Powder Nozzle Jet Process Parameters on Single-Track Geometry for Laser Beam Directed Energy Deposition Process. , 2022, , 51-74.		3
212	Parametric identification of two-port models in the frequency domain. , 0, , .		2
213	MIMO identification of parametric models for ultrasonic reflection and transmission experiments. , 1993, , .		2
214	Generating piecewise-constant excitations with an arbitrary power spectrum. IET Control Theory and Applications, 1995, 142, 241-246.	1.7	2
215	Parametric modelling of the permittivity of dielectric materials. , 0, , .		2
216	Identification of the induction motor dynamic and static inductance with regard to saturation. , 1996, , .		2

#	ARTICLE	IF	CITATIONS
217	An Automatic Damage Detection Methodology for Structural Health Monitoring during Fatigue Tests. Key Engineering Materials, 2003, 245-246, 27-34.	0.4	2
218	Elimination of background disturbances from measurement spectra. Measurement Science and Technology, 2003, 14, 155-163.	1.4	2
219	Multisine load cycle design for fatigue testing. International Journal of Fatigue, 2004, 26, 95-102.	2.8	2
220	Mobile Substations: Application, Engineering and Structural Dynamics. , 0, , .		2
221	IMPROVED POLY-REFERENCE FREQUENCY-DOMAIN MODAL ESTIMATORS FOR FLUTTER ANALYSIS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 630-635.	0.4	2
222	MULTIVARIABLE FREQUENCY-DOMAIN SYSTEM IDENTIFICATION ALGORITHMS FOR MODAL ANALYSIS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 94-109.	0.4	2
223	Characterization of acoustic materials using the scanning laser Doppler vibrometer. , 2006, 6345, 389.		2
224	Stable Approximations of Unstable Models. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2007, , .	0.0	2
225	Operational Acoustic Modal Analysis: Sensitivity-Based Mode Shape Normalisation. Acta Acustica United With Acustica, 2008, 94, 580-587.	0.8	2
226	International comparison of orthotic brace prices. European Journal of Health Economics, 2009, 10, 149-155.	1.4	2
227	Proof of Concept of Crack Localization Using Negative Pressure Waves in Closed Tubes for Later Application in Effective SHM System for Additive Manufactured Components. Applied Sciences (Switzerland), 2016, 6, 33.	1.3	2
228	Spatial distributed spectroscopic monitoring of melt pool and vapor plume during the laser metal deposition process. Procedia CIRP, 2020, 94, 445-450.	1.0	2
229	Operational Modal Analysis Based on Multivariable Transmissibility Functions: Revisited. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 317-326.	0.3	2
230	Frequency-Domain TLS and GTLS Algorithms for Modal Analysis Applications. , 2002, , 305-318.		2
231	Acoustic Emission Monitoring of Crack Propagation in Titanium Samples. , 0, , .		2
232	Production Assessment of Hybrid Directed Energy Deposition Manufactured Sample with Integrated Effective Structural Health Monitoring channel (eSHM). Procedia Structural Integrity, 2021, 34, 32-38.	0.3	2
233	Frequency domain identification of linear systems using arbitrary excitations and a nonparametric noise model. , 0, , .		1
234	Tracking of Cracks in Airplane Components Using Nonlinear Surface Wave Propagation Techniques. Key Engineering Materials, 2005, 293-294, 549-556.	0.4	1

#	ARTICLE	IF	CITATIONS
235	Continuous-Time Noise Modelling from Sampled Data. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	1
236	MULTIVARIABLE FREQUENCY DOMAIN BOX-JENKINS IDENTIFICATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 208-213.	0.4	1
237	Aeroacoustic Source Identification Using a Weighted Pseudo Inverse Method. , 2010, , .		1
238	Determining the Power Flow in a Rectangular Plate Using a Generalized Two-Step Regressive Discrete Fourier Series. Journal of Vibration and Acoustics, Transactions of the ASME, 2012, 134, .	1.0	1
239	Implementation of the Scanning Laser Doppler Vibrometer Combined with a Light-Weight Pneumatic Artificial Muscle Actuator for the Modal Analysis of a Civil Structure. Shock and Vibration, 2012, 19, 421-431.	0.3	1
240	Modal Identification Using OMA Techniques: Nonlinearity Effect. Shock and Vibration, 2015, 2015, 1-12.	0.3	1
241	Evaluation of the diffuse reflectivity behaviour of the melt pool during the laser metal deposition process. , 2016, , .		1
242	Optimal Modal Parameter Estimation for Highly Challenging Industrial Cases. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 173-187.	0.3	1
243	Driving a Motion Platform with a Vibration Control Software for Multi-Axis Environmental Testing: Challenges and Solutions. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 215-231.	0.3	1
244	Multi-Input Multi-Output Swept Sine Control: A Steepest Descent Solution for a Challenging Problem. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 83-94.	0.3	1
245	A proof-of-concept analysis relating dimensions of a melt pool to its vibrational behavior to control a laser-based additive manufacturing process. Procedia CIRP, 2020, 94, 404-408.	1.0	1
246	Long-Term Automatic Tracking of the Modal Parameters of an Offshore Wind Turbine Drivetrain System in Standstill Condition. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 91-99.	0.3	1
247	Modal Survey Testing and Vibration Qualification Testing: The Integrated Approach. Journal of the IEST, 2003, 46, 110-118.	0.2	1
248	Evaluation of Different Topologies of Integrated Capillaries in Effective Structural Health Monitoring System Produced by 3D Printing. , 0, , .		1
249	Experimental and Analytical Approaches in a Virtual Shaker Testing Simulation Environment for Numerical Prediction of a Spacecraft Vibration Test. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 71-81.	0.3	1
250	On the use of signals with a constant signal-to-noise ratio in the frequency-domain. , 0, , .		0
251	On the design of optimal test signals in the case of time limited excitations. , 0, , .		0
252	Statistical analysis of nonparametric transfer function estimates. , 0, , .		0

#	ARTICLE	IF	CITATIONS
253	A weighted total least squares estimator for multivariable systems with nearly maximum likelihood properties. , 0, , .		0
254	<title>Heat generation on root surfaces after KTP:NdYAG use in endodontic treatment</title>. , 1997, 2973, 138.		0
255	<title>Temperature rise after KTP:NdYAG laser irradiation as a root-planing complement</title>. , 1997, , .		0
256	<title>Pulp-temperature increases after selective ablation of caries by KTP:NdYAG laser</title>. , 1997, , .		0
257	Determination of synchronous machine parameters using network synthesis techniques. , 0, , .		0
258	Development of an autonomous scanning laser Doppler vibrometer vibration tracking method for inline quality control. , 2003, 5144, 737.		0
259	Data reduction using a regressive discrete Fourier-transform technique. , 2004, , .		0
260	Reducing measurement time for a laser Doppler vibrometer using a spatial regressive technique. , 2006, , .		0
261	8D-5 Tracking of Cracks in Fatigue Experiments Using Nonlinear Propagation of Multi-Sine Surface Acoustic Waves. , 2007, , .		0
262	PHP27 ESTIMATION AND COMPARISON OF ORTHOTIC BRACE COSTS WITH REIMBURSEMENT TARIFFS AND RETAIL PRICES IN BELGIUM. Value in Health, 2008, 11, A36-A37.	0.1	0
263	Continuous-Time Operational Modal Analysis in the Presence of Harmonic Disturbances. , 2008, , .		0
264	Identification of fully parameterized modal models using scanning laser Doppler vibrometer measurements. Proceedings of SPIE, 2008, , .	0.8	0
265	Spatial data reduction for laser vibrometry using advanced regressive Fourier series. Proceedings of SPIE, 2008, , .	0.8	0
266	Improved active non-destructive inspection using periodic binary heating sequences. , 2009, , .		0
267	Identification of material properties from full field measurements of a sound field interacting with a solid. EPJ Web of Conferences, 2010, 6, 37004.	0.1	0
268	Ultrasonic characterization of materials by means of under water Laser Doppler Vibrometer measurements of continuous waves. , 2010, , .		0
269	Fluid flow measurements using a scanning laser Doppler vibrometer. , 2010, , .		0
270	Frequency-domain modal analysis in the OMAX framework. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 465-476.	0.3	0

#	ARTICLE	IF	CITATIONS
271	Negative Pressure Waves Analysis for Crack Localization and Crack Size Estimation for 3D Printed SHM System. , 2015, , .		0
272	Improving Modal Parameter Estimation by Complementary Output-Output Relations. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 37-45.	0.3	0
273	Efficient Use of the Output Information to Improve Modal Parameter Estimation. Proceedings (mdpi), 2018, 2, 519.	0.2	0
274	Let's Make Ball Balancing Great Again: Why You Should Use Temporary Speed Reduction. Machines, 2020, 8, 74.	1.2	0
275	Wave propagation visualisation through ducts using Schlieren technique for crack localisation with eSHM-system. Applied Optics, 2021, 60, 10221-10231.	0.9	0
276	Robust Processing of Mechanical Vibration Measurements. , 2004, , 377-385.		0
277	Continuous strain prediction for fatigue assessment of an offshore wind turbine using a joint input-state estimation algorithm and a modal interpolation algorithm. Life-cycle of Civil Engineering Systems, 2014, , 146-152.	0.1	0
278	Structural health monitoring through surface acoustic wave inspection deployed on capillaries embedded in additively manufactured components. MATEC Web of Conferences, 2021, 349, 03010.	0.1	0
279	Microphone Positioning Optimization for Conditioning of Inverse Tonal Aeroacoustic Problems. , 0, , .		0