Keith Worden

List of Publications by Year
in descending order

464 papers	17,527 citations	27035 58 h-index	25983 112 g-index
531 all docs	531 docs citations	531 times ranked	9010 citing authors

#	Article	IF	Citations
1	When is aÂBridge Not anÂAeroplane? Part II: A Population ofÂReal Structures. Lecture Notes in Civil Engineering, 2023, , 965-974.	0.3	1
2	A Bayesian Approach toÂLamb-Wave Dispersion Curve Material Identification inÂComposite Plates. Lecture Notes in Civil Engineering, 2023, , 139-149.	0.3	1
3	On theÂApplication ofÂPartial Domain Adaptation for PBSHM. Lecture Notes in Civil Engineering, 2023, , 408-418.	0.3	1
4	On statistic alignment for domain adaptation in structural health monitoring. Structural Health Monitoring, 2023, 22, 1581-1600.	4.3	7
5	On Predicting Uncertainties in the Dynamic Response of a Welded Structure. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 45-57.	0.3	0
6	A Bayesian methodology for localising acoustic emission sources in complex structures. Mechanical Systems and Signal Processing, 2022, 163, 108143.	4.4	24
7	Error motion trajectory-driven diagnostics of kinematic and non-kinematic machine tool faults. Mechanical Systems and Signal Processing, 2022, 164, 108271.	4.4	1
8	On Topological Data Analysis for SHM: An Introduction to Persistent Homology. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 169-184.	0.3	1
9	Towards Population-Based Structural Health Monitoring, Part V: Networks and Databases. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 1-8.	0.3	2
10	Transferring Damage Detectors Between Tailplane Experiments. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 199-211.	0.3	0
11	Challenges for SHM from Structural Repairs: An Outlier-Informed Domain Adaptation Approach. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 75-86.	0.3	1
12	On the Application of Heterogeneous Transfer Learning to Population-Based Structural Health Monitoring. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 87-98.	0.3	0
13	Heteroscedastic Gaussian Processes for Localising Acoustic Emission. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 185-197.	0.3	1
14	Bayesian Graph Neural Networks for Strain-Based Crack Localization. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 253-261.	0.3	0
15	Population-Based Structural Health Monitoring. Structural Integrity, 2022, , 413-435.	0.8	4
16	Partially Supervised Learning for Data-Driven Structural Health Monitoring. Structural Integrity, 2022, , 389-411.	0.8	2
17	On the application of generative adversarial networks for nonlinear modal analysis. Mechanical Systems and Signal Processing, 2022, 166, 108473.	4.4	17
18	On risk-based active learning for structural health monitoring. Mechanical Systems and Signal Processing, 2022, 167, 108569.	4.4	16

#	Article	IF	Citations
19	On the application of kernelised Bayesian transfer learning to population-based structural health monitoring. Mechanical Systems and Signal Processing, 2022, 167, 108519.	4.4	18
20	On the Application of the Generating Series for Nonlinear Systems with Polynomial Stiffness. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 135-149.	0.3	0
21	On Health-State Transition Models for Risk-Based Structural Health Monitoring. Conference Proceedings of the Society for Experimental Mechanics, 2022, , 49-60.	0.3	0
22	Bayesian modelling of multivalued power curves from an operational wind farm. Mechanical Systems and Signal Processing, 2022, 169, 108530.	4.4	4
23	Impact of blade structural and aerodynamic uncertainties on wind turbine loads. Wind Energy, 2022, 25, 1060-1076.	1.9	4
24	Domain-adapted Gaussian mixture models for population-based structural health monitoring. Journal of Civil Structural Health Monitoring, 2022, 12, 1343-1353.	2.0	6
25	A population-based SHM methodology for heterogeneous structures: Transferring damage localisation knowledge between different aircraft wings. Mechanical Systems and Signal Processing, 2022, 172, 108918.	4.4	20
26	On Population-based structural health monitoring for bridges. Mechanical Systems and Signal Processing, 2022, 173, 108919.	4.4	21
27	A transfer learning-based digital twin for detecting localised torsional friction in deviated wells. Mechanical Systems and Signal Processing, 2022, 173, 109000.	4.4	12
28	A Bayesian approach for shaft centre localisation in journal bearings. Mechanical Systems and Signal Processing, 2022, 174, 109021.	4.4	1
29	Informative Bayesian tools for damage localisation by decomposition of Lamb wave signals. Journal of Sound and Vibration, 2022, 535, 117063.	2.1	7
30	A sampling-based approach for information-theoretic inspection management. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	1.0	0
31	Structural Health Monitoring and Damage Identification. , 2022, , 989-1061.		0
32	On robust risk-based active-learning algorithms for enhanced decision support. Mechanical Systems and Signal Processing, 2022, 181, 109502.	4.4	5
33	On the dynamic properties of statistically-independent nonlinear normal modes. Mechanical Systems and Signal Processing, 2022, 181, 109510.	4.4	2
34	New results for the ADF statistic in nonstationary signal analysis with a view towards structural health monitoring. Mechanical Systems and Signal Processing, 2021, 146, 106979.	4.4	12
35	Foundations of population-based SHM, Part III: Heterogeneous populations â€“ Mapping and transfer. Mechanical Systems and Signal Processing, 2021, 149, 107142.	4.4	69
36	Foundations of Population-based SHM, Part II: Heterogeneous populations â€“ Graphs, networks, and communities. Mechanical Systems and Signal Processing, 2021, 148, 107144.	4.4	61

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37	A probabilistic risk-based decision framework for structural health monitoring. Mechanical Systems and Signal Processing, 2021, 150, 107339.	4.4	29
38	Probabilistic Inference for Structural Health Monitoring: New Modes of Learning from Data. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engineering, 2021, 7, 03120003.	1.1	5
39	Foundations of population-based SHM, Part I: Homogeneous populations and forms. Mechanical Systems and Signal Processing, 2021, 148, 107141.	4.4	63
40	Machining centre performance monitoring with calibrated artefact probing. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2021, 235, 1569-1587.	1.5	4
41	A Transfer Learning Application to FEM and Monitoring Data for Supporting the Classification of Structural Condition States. Lecture Notes in Civil Engineering, 2021, , 947-957.	0.3	1
42	New Modes of Inference for Probabilistic SHM. Lecture Notes in Civil Engineering, 2021, , 415-426.	0.3	1
43	On generative models as the basis for digital twins. Data-Centric Engineering, 2021, 2, .	1.2	13
44	On Metrics Assessing the Information Content of Datasets for Population-Based Structural Health Monitoring. Lecture Notes in Civil Engineering, 2021, , 494-504.	0.3	4
45	Decomposition of multi-mode signals using dispersion curves and Bayesian linear regression. , 2021, , .		0
46	Damage detection in operational wind turbine blades using a new approach based on machine learning. Renewable Energy, 2021, 168, 1249-1264.	4.3	35
47	Comparing approaches for multi-axis kinematic positioning in machine tools. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2021, 235, 1698-1711.	1.5	2
48	Equation discovery for nonlinear dynamical systems: A Bayesian viewpoint. Mechanical Systems and Signal Processing, 2021, 154, 107528.	4.4	32
49	On the transfer of damage detectors between structures: An experimental case study. Journal of Sound and Vibration, 2021, 501, 116072.	2.1	28
50	Structured machine learning tools for modelling characteristics of guided waves. Mechanical Systems and Signal Processing, 2021, 156, 107628.	4.4	9
51	Foundations of population-based SHM, Part IV: The geometry of spaces of structures and their feature spaces. Mechanical Systems and Signal Processing, 2021, 157, 107692.	4.4	20
52	On sensor optimisation for structural health monitoring robust to environmental variations. Wind Energy Science, 2021, 6, 1107-1116.	1.2	1
53	Overcoming the problem of repair in structural health monitoring: Metric-informed transfer learning. Journal of Sound and Vibration, 2021, 510, 116245.	2.1	23
54	On spike-and-slab priors for Bayesian equation discovery of nonlinear dynamical systems via sparse linear regression. Mechanical Systems and Signal Processing, 2021, 161, 107986.	4.4	23

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55	Normalising Flows and Nonlinear Normal Modes. IFAC-PapersOnLine, 2021, 54, 655-660.	0.5	2
56	Towards Population-Based Structural Health Monitoring, Part III: Graphs, Networks and Communities. Conference Proceedings of the Society for Experimental Mechanics, 2021, , 255-267.	0.3	10
57	On Partitioning of an SHM Problem and Parallels with Transfer Learning. Conference Proceedings of the Society for Experimental Mechanics, 2021, , 41-50.	0.3	7
58	A novel approach to machining process fault detection using unsupervised learning. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2021, 235, 1533-1542.	1.5	7
59	Probabilistic modelling of wind turbine power curves with application of heteroscedastic Gaussian Process regression. Renewable Energy, 2020, 148, 1124-1136.	4.3	55
60	On Digital Twins, Mirrors and Virtualisations. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 285-295.	0.3	13
61	On Key Technologies for Realising Digital Twins for Structural Dynamics Applications. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 267-272.	0.3	9
62	On the application of domain adaptation in structural health monitoring. Mechanical Systems and Signal Processing, 2020, 138, 106550.	4.4	84
63	A Brief Introduction to Recent Developments in Population-Based Structural Health Monitoring. Frontiers in Built Environment, 2020, 6, .	1.2	15
64	Towards the Probabilistic Analysis of Small Bowel Capsule Endoscopy Features to Predict Severity of Duodenal Histology in Patients with Villous Atrophy. Journal of Medical Systems, 2020, 44, 195.	2.2	3
65	Machine learning at the interface of structural health monitoring and non-destructive evaluation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190581.	1.6	32
66	Bayesian Joint Input-State Estimation for Nonlinear Systems. Vibration, 2020, 3, 281-303.	0.9	8
67	Autonomous ultrasonic inspection using Bayesian optimisation and robust outlier analysis. Mechanical Systems and Signal Processing, 2020, 145, 106897.	4.4	13
68	On Treed Gaussian Processes and piecewise-linear NARX modelling. Mechanical Systems and Signal Processing, 2020, 144, 106877.	4.4	3
69	Emerging Trends in Optimal Structural Health Monitoring System Design: From Sensor Placement to System Evaluation. Journal of Sensor and Actuator Networks, 2020, 9, 31.	2.3	25
70	Considering discrepancy when calibrating a mechanistic electrophysiology model. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190349.	1.6	46
71	On the application of Gaussian process latent force models for joint input-state-parameter estimation: With a view to Bayesian operational identification. Mechanical Systems and Signal Processing, 2020, 140, 106580.	4.4	33
72	Towards semi-supervised and probabilistic classification in structural health monitoring. Mechanical Systems and Signal Processing, 2020, 140, 106653.	4.4	42

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73	Investigating Engineering Data by Probabilistic Measures. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 77-81.	0.3	2
74	On the Application of Domain Adaptation in SHM. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 111-122.	0.3	2
75	Towards Population-Based Structural Health Monitoring, Part IV: Heterogeneous Populations, Transfer and Mapping. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 187-199.	0.3	13
76	Towards Population-Based Structural Health Monitoring, Part I: Homogeneous Populations and Forms. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 287-302.	0.3	12
77	Digital Twins: State-of-the-Art and Future Directions for Modeling and Simulation in Engineering Dynamics Applications. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2020, 6, .	0.7	86
78	On Digital Twins, Mirrors, and Virtualizations: Frameworks for Model Verification and Validation. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part B: Mechanical Engineering, 2020, 6, .	0.7	22
79	A PROBABILISTIC APPROACH TOWARDS UNCERTAINTY QUANTIFICATION IN JOINED STRUCTURES. , 2020, , .		0
80	A NEAT APPROACH TO STRUCTURAL HEALTH MONITORING. , 2020, , .		0
81	An Evolutionary Approach to Learning Neural Networks for Structural Health Monitoring. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 237-246.	0.3	0
82	Modelling of Guided Waves in a Composite Plate Through a Combination of Physical Knowledge and Regression Analysis. Conference Proceedings of the Society for Experimental Mechanics, 2020, , 109-114.	0.3	0
83	AN APPLICATION OF GENERATIVE ADVERSARIAL NETWORKS IN STRUCTURAL HEALTH MONITORING. , 2020, , .		1
84	Structural Health Monitoring and Damage Identification. , 2020, , 1-72.		1
85	State-of-the-Art and Future Directions for Predictive Modelling of Offshore Structure Dynamics Using Machine Learning. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 223-233.	0.3	11
86	Active Learning Approaches to Structural Health Monitoring. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 157-159.	0.3	6
87	A probabilistic compressive sensing framework with applications to ultrasound signal processing. Mechanical Systems and Signal Processing, 2019, 117, 383-402.	4.4	24
88	A probabilistic framework for online structural health monitoring: active learning from machining data streams. Journal of Physics: Conference Series, 2019, 1264, 012028.	0.3	4
89	Efficient parameter identification and model selection in nonlinear dynamical systems via sparse Bayesian learning. Journal of Physics: Conference Series, 2019, 1264, 012050.	0.3	7
90	Identification of a Duffing oscillator using particle Gibbs with ancestor sampling. Journal of Physics: Conference Series, 2019, 1264, 012051.	0.3	4

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91	Probabilistic active learning: An online framework for structural health monitoring. Mechanical Systems and Signal Processing, 2019, 134, 106294.	4.4	45
92	Use of the cointegration strategies to remove environmental effects from data acquired on historical buildings. Engineering Structures, 2019, 183, 1014-1026.	2.6	36
93	Model selection and parameter estimation of dynamical systems using a novel variant of approximate Bayesian computation. Mechanical Systems and Signal Processing, 2019, 122, 364-386.	4.4	24
94	Outlier ensembles: A robust method for damage detection and unsupervised feature extraction from high-dimensional data. Journal of Sound and Vibration, 2019, 453, 126-150.	2.1	42
95	On the performance of a cointegration-based approach for novelty detection in realistic fatigue crack growth scenarios. Mechanical Systems and Signal Processing, 2019, 123, 84-101.	4.4	17
96	Nonlinear modal analysis via nonâ€parametric machine learning tools. Strain, 2019, 55, e12297.	1.4	16
97	A cointegration approach for heteroscedastic data based on a time series decomposition: An application to structural health monitoring. Mechanical Systems and Signal Processing, 2019, 120, 16-31.	4.4	28
98	A Bayesian non-parametric clustering approach for semi-supervised Structural Health Monitoring. Mechanical Systems and Signal Processing, 2019, 119, 100-119.	4.4	67
99	Predicting Geometric Tolerance Thresholds in a Five-Axis Machining Centre. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 93-100.	0.3	0
100	Acoustic emission source characterisation using evolutionary optimisation. Strain, 2018, 54, e12272.	1.4	0
101	A comparison of linear approaches to filter out environmental effects in structural health monitoring. Mechanical Systems and Signal Processing, 2018, 105, 1-15.	4.4	89
102	On switching response surface models, with applications to the structural health monitoring of bridges. Mechanical Systems and Signal Processing, 2018, 98, 139-156.	4.4	87
103	Model selection and parameter estimation in structural dynamics using approximate Bayesian computation. Mechanical Systems and Signal Processing, 2018, 99, 306-325.	4.4	55
104	A regime-switching cointegration approach for removing environmental and operational variations in structural health monitoring. Mechanical Systems and Signal Processing, 2018, 103, 381-397.	4.4	48
105	On the confidence bounds of Gaussian process NARX models and their higher-order frequency response functions. Mechanical Systems and Signal Processing, 2018, 104, 188-223.	4.4	32
106	Novelty Detection in a Cantilever Beam using Extreme Function Theory. Journal of Physics: Conference Series, 2018, 1106, 012027.	0.3	10
107	Machine Learning for Energy Load Forecasting. Journal of Physics: Conference Series, 2018, 1106, 012005.	0.3	6
108	A principled multiresolution approach for signal decomposition. Journal of Physics: Conference Series, 2018, 1106, 012001.	0.3	2

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109	Active learning for semi-supervised structural health monitoring. Journal of Sound and Vibration, 2018, 437, 373-388.	2.1	59
110	Damage detection in a laboratory wind turbine blade using techniques of ultrasonic NDT and SHM. Strain, 2018, 54, e12290.	1.4	19
111	On evolutionary system identification with applications to nonlinear benchmarks. Mechanical Systems and Signal Processing, 2018, 112, 194-232.	4.4	46
112	Simultaneous Force Regression and Movement Classification of Fingers via Surface EMG within a Unified Bayesian Framework. Frontiers in Bioengineering and Biotechnology, 2018, 6, 13.	2.0	26
113	A machine learning approach to nonlinear modal analysis. Mechanical Systems and Signal Processing, 2017, 84, 34-53.	4.4	38
114	A new methodology for automating acoustic emission detection of metallic fatigue fractures in highly demanding aerospace environments: An overview. Progress in Aerospace Sciences, 2017, 90, 1-11.	6.3	72
115	Identification of Nonlinear Wave Forces Using Gaussian Process NARX Models. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 203-221.	0.3	4
116	On a Grey Box Modelling Framework for Nonlinear System Identification. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 167-178.	0.3	22
117	Assessment of vocal cord nodules: a case study in speech processing by using Hilbert-Huang Transform. Journal of Physics: Conference Series, 2017, 842, 012025.	0.3	4
118	Wind Turbine Health Monitoring: Current and Future Trends with an Active Learning Twist. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 119-129.	0.3	1
119	Detection of Cracks in Beams Using Treed Gaussian Processes. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 85-97.	0.3	9
120	An illustration of new methods in machine condition monitoring, Part I: stochastic resonance. Journal of Physics: Conference Series, 2017, 842, 012058.	0.3	1
121	An Illustration of New Methods in Machine Condition Monitoring, Part II: Adaptive outlier detection. Journal of Physics: Conference Series, 2017, 842, 012059.	0.3	1
122	On multi-site damage identification using single-site training data. Journal of Sound and Vibration, 2017, 409, 43-64.	2.1	13
123	Uncertainty Bounds on Higher-Order FRFs from Gaussian Process NARX Models. Procedia Engineering, 2017, 199, 1994-2000.	1.2	5
124	Performance monitoring of a wind turbine using extreme function theory. Renewable Energy, 2017, 113, 1490-1502.	4.3	36
125	Robust nonlinear system identification: Bayesian mixture of experts using the t-distribution. Mechanical Systems and Signal Processing, 2017, 85, 977-992.	4.4	14
126	Aspects of computational intelligence in structural dynamics: Structural health monitoring. , 2017, , .		0

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127	Automatic Kernel Selection for Gaussian Processes Regression with Approximate Bayesian Computation and Sequential Monte Carlo. Frontiers in Built Environment, 2017, 3, .	1.2	34
128	Evolutionary Identification of Block-Structured Systems. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 359-366.	0.3	4
129	In-Process Monitoring of Automated Carbon Fibre Tape Layup Using Ultrasonic Guided Waves. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 179-188.	0.3	1
130	Is it worth changing pattern recognition methods for structural health monitoring?. Journal of Physics: Conference Series, 2017, 842, 012006.	0.3	0
131	Fault detection in rolling element bearings using wavelet-based variance analysis and novelty detection. JVC/Journal of Vibration and Control, 2016, 22, 396-411.	1.5	33
132	On Crack Detection in Tuned and Mistuned Repeating Structures Using the Modal Assurance Criterion. Strain, 2016, 52, 175-185.	1.4	3
133	Higher-Order Frequency Response Functions for Hysteretic Systems. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 191-201.	0.3	0
134	Bayesian Sensitivity Analysis of Flight Parameters in a Hard-Landing Analysis Process. Journal of Aircraft, 2016, 53, 1317-1331.	1.7	7
135	Exploring Environmental and Operational Variations in SHM Data Using Heteroscedastic Gaussian Processes. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 145-153.	0.3	13
136	Sensitivity analysis of an Advanced Gas-cooled Reactor control rod model. Nuclear Engineering and Design, 2016, 305, 514-523.	0.8	1
137	A nonlinear cointegration approach with applications to structural health monitoring. Journal of Physics: Conference Series, 2016, 744, 012025.	0.3	29
138	Prediction of landing gear loads using machine learning techniques. Structural Health Monitoring, 2016, 15, 568-582.	4.3	39
139	Some Recent Developments in SHM Based on Nonstationary Time Series Analysis. Proceedings of the IEEE, 2016, 104, 1589-1603.	16.4	24
140	Friction estimation in wind turbine blade bearings. Structural Control and Health Monitoring, 2016, 23, 103-122.	1.9	4
141	Simplifying Transformations for Nonlinear Systems: Part I, An Optimisation-Based Variant of Normal Form Analysis. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 315-320.	0.3	1
142	Simplifying Transformations for Nonlinear Systems: Part II, Statistical Analysis of Harmonic Cancellation. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 321-326.	0.3	1
143	Variational Bayesian mixture of experts models and sensitivity analysis for nonlinear dynamical systems. Mechanical Systems and Signal Processing, 2016, 66-67, 178-200.	4.4	21
144	Novelty detection and dimension reduction via guided ultrasonic waves: Damage monitoring of scarf repairs in composite laminates. Journal of Intelligent Material Systems and Structures, 2016, 27, 549-566.	1.4	31

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145	Linear and Nonlinear System Identification Using Evolutionary Optimisation. Springer Proceedings in Mathematics and Statistics, 2016, , 325-345.	0.1	0
146	On the Behaviour of Structures with Many Nonlinear Elements. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 509-520.	0.3	0
147	Bayesian Inference and RJMCMC in Structural Dynamics: On Experimental Data. Conference Proceedings of the Society for Experimental Mechanics, 2016, , 23-36.	0.3	2
148	A Nonâ€linear Manifold Strategy for SHM Approaches. Strain, 2015, 51, 324-331.	1.4	10
149	Damage Monitoring of External Patch Repairs with Guided Ultrasonic Waves. Strain, 2015, 51, 288-300.	1.4	1
150	Robust methods for outlier detection and regression for SHM applications. International Journal of Sustainable Materials and Structural Systems, 2015, 2, 3.	0.2	6
151	Bayesian and Markov chain Monte Carlo methods for identifying nonlinear systems in the presence of uncertainty. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140405.	1.6	54
152	Aspects of structural health and condition monitoring of offshore wind turbines. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140075.	1.6	50
153	Bayesian system identification of dynamical systems using highly informative training data. Mechanical Systems and Signal Processing, 2015, 56-57, 109-122.	4.4	31
154	Continuous debonding monitoring of a patch repaired helicopter stabilizer: Damage assessment and analysis. Composite Structures, 2015, 127, 231-244.	3.1	30
155	On robust regression analysis as a means of exploring environmental and operational conditions for SHM data. Journal of Sound and Vibration, 2015, 347, 279-296.	2.1	98
156	Numerical simulations of elastic wave propagation using graphical processing unitsâ€"Comparative study of high-performance computing capabilities. Computer Methods in Applied Mechanics and Engineering, 2015, 290, 98-126.	3.4	26
157	A Bee Swarm Algorithm for Optimising Sensor Distributions for Impact Detection on a Composite Panel. Strain, 2015, 51, 147-155.	1.4	10
158	Optimum Sensor Placement for Impact Location Using Trilateration. Strain, 2015, 51, 89-100.	1.4	18
159	A timeâ€"frequency analysis approach for condition monitoring of a wind turbine gearbox under varying load conditions. Mechanical Systems and Signal Processing, 2015, 64-65, 188-216.	4.4	97
160	A New Transmissibility Analysis Method for Detection and Location of Damage via Nonlinear Features in MDOF Structural Systems. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1933-1947.	3.7	38
161	Structural Health Monitoring: from Structures to Systems-of-Systems â˜… â˜…The support of the UK Engineering and Physical Sciences Research Council (EPSRC) through grant reference numbers EP/J016942/1 and EP/K003836/2, and that of the EU Framework 7 Programme for the ITN project SYSWIND, is gratefully acknowledged.. IFAC-PapersOnLine, 2015, 48, 1-17.	0.5	26
162	A Performance Monitoring Approach for the Novel Lillgrund Offshore Wind Farm. IEEE Transactions on Industrial Electronics, 2015, 62, 6636-6644.	5.2	61

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163	An Experimental Investigation of Feature Availability in Nominally Identical Structures for Population-Based SHM. Conference Proceedings of the Society for Experimental Mechanics, 2015, , 185-191.	0.3	2
164	Estimation of Fingertip Force from Surface EMG - A Multivariate Bayesian Mixture of Experts Approach. , 2015, , .		1
165	On the use of the Mahalanobis squared-distance to filter out environmental effects in structural health monitoring. MATEC Web of Conferences, 2014, 16, 02004.	0.1	4
166	Robust evaluation of time series classification algorithms for structural health monitoring. , 2014, , .		1
167	A multiresolution approach to cointegration for enhanced SHM of structures under varying conditions â€“ An exploratory study. Mechanical Systems and Signal Processing, 2014, 47, 243-262.	4.4	47
168	On damage diagnosis for a wind turbine blade using pattern recognition. Journal of Sound and Vibration, 2014, 333, 1833-1850.	2.1	133
169	A Bayesian approach based on a Markov-chain Monte Carlo method for damage detection under unknown sources of variability. Engineering Structures, 2014, 80, 1-10.	2.6	79
170	The use of pseudo-faults for damage location in SHM: An experimental investigation on a Piper Tomahawk aircraft wing. Journal of Sound and Vibration, 2014, 333, 971-990.	2.1	25
171	A numerically-enhanced machine learning approach to damage diagnosis using a Lamb wave sensing network. Journal of Sound and Vibration, 2014, 333, 4499-4525.	2.1	51
172	Robust methods of inclusive outlier analysis for structural health monitoring. Journal of Sound and Vibration, 2014, 333, 5181-5195.	2.1	54
173	Bayesian sensitivity analysis of flight parameters that affect main landing gear yield locations. Aeronautical Journal, 2014, 118, 1481-1497.	1.1	3
174	Identification of Time-Varying Nonlinear Systems Using Differential Evolution Algorithm. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 575-583.	0.3	2
175	Nonlinear Time Series Analysis Using Bayesian Mixture of Experts. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 111-121.	0.3	1
176	A Machine Learning Approach to Nonlinear Modal Analysis. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 521-528.	0.3	6
177	Bayesian System Identification of Dynamical Systems Using Reversible Jump Markov Chain Monte Carlo. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 277-284.	0.3	2
178	On Gaussian Process NARX Models and Their Higher-Order Frequency Response Functions. Springer Proceedings in Mathematics and Statistics, 2014, , 315-335.	0.1	9
179	Analysis of Nonlinear System Response to an Impulse Excitation. Conference Proceedings of the Society for Experimental Mechanics, 2014, , 297-308.	0.3	1
180	Bayesian sensitivity analysis of bifurcating nonlinear models. Mechanical Systems and Signal Processing, 2013, 34, 57-75.	4.4	15

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181	Long-term monitoring and data analysis of the Tamar Bridge. Mechanical Systems and Signal Processing, 2013, 35, 16-34.	4.4	293
182	On the identification and modelling of friction in a randomly excited energy harvester. Journal of Sound and Vibration, 2013, 332, 4696-4708.	2.1	38
183	Structural health monitoring and damage prognosis in composite repaired structures through the excitation of guided ultrasonic waves. Proceedings of SPIE, 2013, , .	0.8	3
184	Machine Learning Applications for a Wind Turbine Blade under Continuous Fatigue Loading. Key Engineering Materials, 2013, 588, 166-174.	0.4	8
185	Damage Detection in RAPTOR Telescope Systems Using Time-Frequency Analysis Methods. Key Engineering Materials, 2013, 588, 43-53.	0.4	2
186	Modelling Friction in a Nonlinear Dynamic System via Bayesian Inference. Conference Proceedings of the Society for Experimental Mechanics, 2013, , 543-553.	0.3	8
187	Switching Response Surface Models for Structural Health Monitoring of Bridges. , 2013, , 337-358.		7
188	Structural Health Monitoring for Civil Infrastructure. , 2013, , 1-31.		5
189	Features for damage detection with insensitivity to environmental and operational variations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 4098-4122.	1.0	94
190	Crack characterisation by detection and classification of nonlinear behaviour using the Hilbert transform. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2012, 226, 2610-2626.	1.1	1
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