Nikolaos Dervilis

List of Publications by Year in descending order

36 papers	782 citations	759055 12 h-index	526166 27 g-index
39 all docs	39 docs citations	39 times ranked	747 citing authors

#	Article	IF	Citations
1	On statistic alignment for domain adaptation in structural health monitoring. Structural Health Monitoring, 2023, 22, 1581-1600.	4.3	7
2	Population-Based Structural Health Monitoring. Structural Integrity, 2022, , 413-435.	0.8	4
3	Predicting local material thickness from steady-state ultrasonic wavefield measurements using a convolutional neural network. Ultrasonics, 2022, 123, 106661.	2.1	3
4	Impact of blade structural and aerodynamic uncertainties on wind turbine loads. Wind Energy, 2022, 25, 1060-1076.	1.9	4
5	Domain-adapted Gaussian mixture models for population-based structural health monitoring. Journal of Civil Structural Health Monitoring, 2022, 12, 1343-1353.	2.0	6
6	Informative Bayesian tools for damage localisation by decomposition of Lamb wave signals. Journal of Sound and Vibration, 2022, 535, 117063.	2.1	7
7	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
8	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
9	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
10	On generative models as the basis for digital twins. Data-Centric Engineering, 2021, 2, .	1.2	13
11	Damage detection in operational wind turbine blades using a new approach based on machine learning. Renewable Energy, 2021, 168, 1249-1264.	4.3	35
12	Machine Learning Approach to Model Order Reduction of Nonlinear Systems via Autoencoder and LSTM Networks. Journal of Engineering Mechanics - ASCE, 2021, 147, .	1.6	26
13	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
14	A Brief Introduction to Recent Developments in Population-Based Structural Health Monitoring. Frontiers in Built Environment, 2020, 6, .	1.2	15
15	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
16	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
17	Nonlinear modal analysis via nonâ€parametric machine learning tools. Strain, 2019, 55, e12297.	1.4	16
18	Model selection and parameter estimation in structural dynamics using approximate Bayesian computation. Mechanical Systems and Signal Processing, 2018, 99, 306-325.	4.4	55

#	Article	IF	Citations
19	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
20	Performance monitoring of a wind turbine using extreme function theory. Renewable Energy, 2017, 113, 1490-1502.	4.3	36
21	Aspects of computational intelligence in structural dynamics: Structural health monitoring. , 2017, , .		0
22	Automatic Kernel Selection for Gaussian Processes Regression with Approximate Bayesian Computation and Sequential Monte Carlo. Frontiers in Built Environment, 2017, 3, .	1.2	34
23	A Nonâ€linear Manifold Strategy for SHM Approaches. Strain, 2015, 51, 324-331.	1.4	10
24	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
25	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
26	A Performance Monitoring Approach for the Novel Lillgrund Offshore Wind Farm. IEEE Transactions on Industrial Electronics, 2015, 62, 6636-6644.	5.2	61
27	On damage diagnosis for a wind turbine blade using pattern recognition. Journal of Sound and Vibration, 2014, 333, 1833-1850.	2.1	133
28	Robust methods of inclusive outlier analysis for structural health monitoring. Journal of Sound and Vibration, 2014, 333, 5181-5195.	2.1	54
29	Machine Learning Applications for a Wind Turbine Blade under Continuous Fatigue Loading. Key Engineering Materials, 2013, 588, 166-174.	0.4	8
30	Damage Detection in RAPTOR Telescope Systems Using Time-Frequency Analysis Methods. Key Engineering Materials, 2013, 588, 43-53.	0.4	2
31	On damage detection in wind turbine gearboxes using outlier analysis. , 2012, , .		4
32	Structural Health Monitoring of Composite Material Typical of Wind Turbine Blades by Novelty Detection on Vibration Response. Key Engineering Materials, 2012, 518, 319-327.	0.4	0
33	Advanced Tools for Damage Detection in Wind Turbines. Key Engineering Materials, 0, 569-570, 547-554.	0.4	0
34	Comparative Study of Robust Novelty Detection Techniques. Key Engineering Materials, 0, 569-570, 1109-1115.	0.4	0
35	An SHM View of a CFD Model of Lillgrund Wind Farm. Applied Mechanics and Materials, 0, 564, 164-169.	0.2	2
36	Envelope Analysis Using the Teager-Kaiser Energy Operator for Condition Monitoring of a Wind Turbine Bearing. Applied Mechanics and Materials, 0, 564, 170-175.	0.2	5