Konstantinos C Gryllias

List of Publications by Year
in descending order

68 papers	2,426 citations	279701 23 h-index	206029 48 g-index

70 all docs	70 docs citations	70 times ranked	1535 citing authors

#	Article	IF	Citations
1	A perspective survey on deep transfer learning for fault diagnosis in industrial scenarios: Theories, applications and challenges. Mechanical Systems and Signal Processing, 2022, 167, 108487.	4.4	304
2	A deep learning method for bearing fault diagnosis based on Cyclic Spectral Coherence and Convolutional Neural Networks. Mechanical Systems and Signal Processing, 2020, 140, 106683.	4.4	285
3	Mechanical fault diagnosis using Convolutional Neural Networks and Extreme Learning Machine. Mechanical Systems and Signal Processing, 2019, 133, 106272.	4.4	214
4	Intelligent Fault Diagnosis for Rotary Machinery Using Transferable Convolutional Neural Network. IEEE Transactions on Industrial Informatics, 2020, 16, 339-349.	7.2	197
5	Rolling element bearing fault detection in industrial environments based on a K-means clustering approach. Expert Systems With Applications, 2011, 38, 2888-2911.	4.4	186
6	A Support Vector Machine approach based on physical model training for rolling element bearing fault detection in industrial environments. Engineering Applications of Artificial Intelligence, 2012, 25, 326-344.	4.3	179
7	Domain Adversarial Transfer Network for Cross-Domain Fault Diagnosis of Rotary Machinery. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 8702-8712.	2.4	158
8	Improved Envelope Spectrum via Feature Optimisation-gram (IESFOgram): A novel tool for rolling element bearing diagnostics under non-stationary operating conditions. Mechanical Systems and Signal Processing, 2020, 144, 106891.	4.4	82
9	KDamping: A stiffness based vibration absorption concept. JVC/Journal of Vibration and Control, 2018, 24, 588-606.	1.5	73
10	A semi-supervised Support Vector Data Description-based fault detection method for rolling element bearings based on cyclic spectral analysis. Mechanical Systems and Signal Processing, 2020, 140, 106682.	4.4	71
11	Bearing diagnostics under strong electromagnetic interference based on Integrated Spectral Coherence. Mechanical Systems and Signal Processing, 2020, 140, 106673.	4.4	48
12	Estimation of the instantaneous rotation speed using complex shifted Morlet wavelets. Mechanical Systems and Signal Processing, 2013, 38, 78-95.	4.4	47
13	Cyclostationary-based Multiband Envelope Spectra Extraction for bearing diagnostics: The Combined Improved Envelope Spectrum. Mechanical Systems and Signal Processing, 2021, 149, 107150.	4.4	47
14	Cyclostationary modeling for local fault diagnosis of planetary gear vibration signals. Journal of Sound and Vibration, 2020, 471, 115175.	2.1	36
15	A general anomaly detection framework for fleet-based condition monitoring of machines. Mechanical Systems and Signal Processing, 2020, 139, 106585.	4.4	34
16	A PEAK ENERGY CRITERION (P. E.) FOR THE SELECTION OF RESONANCE BANDS IN COMPLEX SHIFTED MORLET WAVELET (CSMW) BASED DEMODULATION OF DEFECTIVE ROLLING ELEMENT BEARINGS VIBRATION RESPONSE. International Journal of Wavelets, Multiresolution and Information Processing, 2009, 07, 387-410.	0.9	32
17	Simulation-Driven Domain Adaptation for Rolling Element Bearing Fault Diagnosis. IEEE Transactions on Industrial Informatics, 2022, 18, 5760-5770.	7.2	31
18	A discrepancy analysis methodology for rolling element bearing diagnostics under variable speed conditions. Mechanical Systems and Signal Processing, 2019, 116, 40-61.	4.4	30

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19	A methodology for identifying information rich frequency bands for diagnostics of mechanical components-of-interest under time-varying operating conditions. Mechanical Systems and Signal Processing, 2020, 142, 106739.	4.4	30
20	An informative frequency band identification framework for gearbox fault diagnosis under time-varying operating conditions. Mechanical Systems and Signal Processing, 2021, 158, 107771.	4.4	29
21	Computer-vision-based research on friction vibration and coupling of frictional and torsional vibrations in water-lubricated bearing-shaft system. Tribology International, 2020, 150, 106336.	3.0	28
22	Vibration-Based Condition Monitoring of Wind Turbine Gearboxes Based on Cyclostationary Analysis. Journal of Engineering for Gas Turbines and Power, 2019, 141, .	0.5	27
23	Planetary gearbox spectral modeling based on the hybrid method of dynamics and LSTM. Mechanical Systems and Signal Processing, 2020, 138, 106611.	4.4	27
24	A methodology using the spectral coherence and healthy historical data to perform gearbox fault diagnosis under varying operating conditions. Applied Acoustics, 2020, 158, 107038.	1.7	16
25	The anomalous and smoothed anomalous envelope spectra for rotating machine fault diagnosis. Mechanical Systems and Signal Processing, 2021, 158, 107770.	4.4	16
26	Cyclostationary Analysis of Irregular Statistical Cyclicity and Extraction of Rotating Speed for Bearing Diagnostics With Speed Fluctuations. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	2.4	15
27	Nonlinear secondary noise sources for passive defect detection using ultrasound sensors. Journal of Sound and Vibration, 2017, 386, 283-294.	2.1	14
28	Condition Monitoring of Wind Turbine Planetary Gearboxes Under Different Operating Conditions. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	0.5	14
29	An on-line SAX and HMM-based anomaly detection and visualization tool for early disturbance discovery in a dynamic industrial process. Journal of Process Control, 2016, 44, 134-159.	1.7	13
30	Application of Cyclo-Nonstationary Indicators for Bearing Monitoring Under Varying Operating Conditions. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	0.5	13
31	A pre-processing methodology to enhance novel information for rotating machine diagnostics. Mechanical Systems and Signal Processing, 2019, 124, 541-561.	4.4	11
32	Vibration-Based Condition Monitoring of Helicopter Gearboxes Based on Cyclostationary Analysis. Journal of Engineering for Gas Turbines and Power, 2020, 142, .	0.5	11
33	Local damage diagnosis in gearboxes using novel wavelet technology. Insight: Non-Destructive Testing and Condition Monitoring, 2010, 52, 437-442.	0.3	10
34	Least action criteria for blind separation of structural modes. Mechanics and Industry, 2013, 14, 397-411.	0.5	10
35	Domain Adaptation Digital Twin for Rolling Element Bearing Prognostics. Proceedings of the Annual Conference of the Prognostics and Health Management Society Prognostics and Health Management Society Conference, 2020, 12, 10.	0.2	10
36	Enhanced demodulation band selection based on Operational Modal Analysis (OMA) for bearing diagnostics. Mechanical Systems and Signal Processing, 2022, 181, 109300.	4.4	9

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37	Improving the performance of univariate control charts for abnormal detection and classification. Mechanical Systems and Signal Processing, 2017, 86, 122-150.	4.4	7
38	Water-Lubricated Stern Bearing Rubber Layer Construction and Material Parameters: Effects on Frictional Vibration Based on Computer Vision. Tribology Transactions, 2021, 64, 65-81.	1.1	7
39	Combining an optimisation-based frequency band identification method with historical data for novelty detection under time-varying operating conditions. Measurement: Journal of the International Measurement Confederation, 2021, 169, 108517.	2.5	7
40	Application of the Energy Operator Separation Algorithm (EOSA) for the Instantaneous Amplitude and Frequency Calculation of Nonlinear Dynamic Systems Response. , 2009, , .		4
41	IFESIS: Instantaneous frequencies estimation via subspace invariance properties of wavelet structures. Mechanical Systems and Signal Processing, 2014, 49, 264-284.	4.4	4
42	Gearbox Fault Diagnosis Using Convolutional Neural Networks And Support Vector Machines. , 2019, , .		4
43	Rolling Element Bearing Fault Classification Using K-Means Frequency Domain Based Clustering. , 2009, , .		3
44	Assessment of Combustion Mechanical Noise Separation Techniques on a V8 Engine. , 2017, , .		3
45	Vibration Based Condition Monitoring ofÂPlanetary Gearboxes Operating Under Speed Varying Operating Conditions Based on Cyclo-non-stationary Analysis. Mechanisms and Machine Science, 2019, , 265-279.	0.3	3
46	Instantaneous Frequency Estimation in Rotating Machinery Using a Harmonic Signal Decomposition (HARD) Parametric Method. , 2009, , .		2
47	Advanced cyclostationary-based analysis for condition monitoring of complex systems. , 2018, , .		2
48	A Fleet-Wide Approach for Condition Monitoring of Similar Machines Using Time-Series Clustering. Applied Condition Monitoring, 2019, , 101-110.	0.4	2
49	Remaining Useful Life Prediction of Rolling Element Bearings Based on Unscented Kalman Filter. Applied Condition Monitoring, 2019, , 111-121.	0.4	2
50	Novel Cyclo-Nonstationary Indicators for Monitoring of Rotating Machinery Operating Under Speed and Load Varying Conditions. Journal of Engineering for Gas Turbines and Power, 2022, 144, .	0.5	2
51	An Improved 2DCNN With Focal Loss Function for Blade Icing Detection of Wind Turbines Under Imbalanced SCADA Data. , 2021, , .		2
52	Evaluation of the Improved Envelope Spectrum via Feature Optimization-gram (IESFOgram) for bearing diagnostics under low rotating speeds. , 2021, , .		2
53	Vibration Based Condition Monitoring of Helicopter Gearboxes Based on Cyclostationary Analysis. , 2019, , .		2
54	A quantitative estimation method of ball bearing localized defect size based on vibration instantaneous energy analysis. Measurement Science and Technology, 0, , .	1.4	2

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55	Morphological processing of proper orthogonal modes for crack detection in beam structures. Journal of Mechanics of Materials and Structures, 2009, 4, 1063-1088.	0.4	1
56	Application of Cyclo-Non-Stationary Indicators for Bearing Monitoring Under Varying Operating Conditions. , 2017, , .		1
57	Cyclo-non-stationary Based Bearing Diagnostics of Planetary Gearboxes. Applied Condition Monitoring, 2019, , 343-352.	0.4	1
58	A Probabilistic Novelty Detection Methodology Based on the Order-Frequency Spectral Coherence. Applied Condition Monitoring, 2019, , 300-309.	0.4	1
59	Condition Monitoring of Wind Turbine Planetary Gearboxes Under Different Operating Conditions. , 2019, , .		1
60	Informative frequency band identification method using bi-frequency map clustering for fault detection in rotating machines. Vibroengineering PROCEDIA, 2018, 19, 86-90.	0.3	1
61	Application of principal component analysis of time-frequency representation for gearbox fault detection. Vibroengineering PROCEDIA, 2018, 19, 82-85.	0.3	1
62	Similarity-based anomaly score for fleet-based condition monitoring. Proceedings of the Annual Conference of the Prognostics and Health Management Society Prognostics and Health Management Society Conference, 2020, 12, 9.	0.2	1
63	Virtual Sensing for Rotordynamics. , 2016, , .		0
64	Vibration Based Condition Monitoring of Wind Turbine Gearboxes Based on Cyclostationary Analysis. , 2018, , .		0
65	Implementation Assessment of a Wave Energy Converter, Based on Fully Enclosed Multi-axis Inertial Reaction Mechanisms. Discontinuity, Nonlinearity, and Complexity, 2017, 6, 445-463.	0.1	0
66	Condition Monitoring of Wind Turbine Drivetrain Bearings. , 2019, , .		0
67	Novel Cyclo-Non-Stationary Indicators for Monitoring of Rotating Machinery Operating Under Speed and Load Varying Conditions. , 2020, , .		0
68	Comparison of Blind Diagnostic Indicators for Condition Monitoring of Wind Turbine Gearbox Bearings. , 2020, , .		0