

Recent advances in time–frequency analysis methods review with application examples

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Citation Report

#	ARTICLE	IF	CITATIONS
1	ENSEMBLE EMPIRICAL MODE DECOMPOSITION: A NOISE-ASSISTED DATA ANALYSIS METHOD. <i>Advances in Adaptive Data Analysis</i> , 2009, 01, 1-41.	0.6	6,205
2	EMD Based on Time-Sequence and Window Function and its Application in Diagnosis of Machinery Faults. <i>Applied Mechanics and Materials</i> , 0, 470, 353-356.	0.2	0
3	Recent Advances in Vibration Signal Processing Techniques for Gear Fault Detection-A Review. <i>Applied Mechanics and Materials</i> , 0, 430, 78-83.	0.2	3
4	Natural gas pipeline small leakage feature extraction and recognition based on LMD envelope spectrum entropy and SVM. <i>Measurement: Journal of the International Measurement Confederation</i> , 2014, 55, 434-443.	2.5	138
5	Recent Developments in Vibration Based Diagnostics of Gear and Bearings Used in Belt Conveyors. <i>Applied Mechanics and Materials</i> , 2014, 683, 171-176.	0.2	31
6	Scaling analysis of increment white-noise series. , 2014, , .		0
7	A study on tool wear monitoring using time-frequency transformation techniques. , 2014, , .		6
8	Rolling Bearing Fault Diagnosis under Variable Conditions Using Hilbert-Huang Transform and Singular Value Decomposition. <i>Mathematical Problems in Engineering</i> , 2014, 2014, 1-10.	0.6	25
9	Frequency-varying group delay estimation using frequency domain polynomial chirplet transform. <i>Mechanical Systems and Signal Processing</i> , 2014, 46, 146-162.	4.4	34
10	The local maxima method for enhancement of time-frequency map and its application to local damage detection in rotating machines. <i>Mechanical Systems and Signal Processing</i> , 2014, 46, 389-405.	4.4	54
11	Leak location in gas pipelines using cross-time-frequency spectrum of leakage-induced acoustic vibrations. <i>Journal of Sound and Vibration</i> , 2014, 333, 3889-3903.	2.1	67
12	Empirical mode decomposition of pressure signal for health condition monitoring in waterjet cutting. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 72, 347-364.	1.5	13
13	Bifurcation analysis of a nonlinear pendulum using recurrence and statistical methods: applications to fault diagnostics. <i>Nonlinear Dynamics</i> , 2014, 76, 1963-1975.	2.7	24
14	Circular domain features based condition monitoring for low speed slewing bearing. <i>Mechanical Systems and Signal Processing</i> , 2014, 45, 114-138.	4.4	38
15	Improved process monitoring and supervision based on a reliable multi-stage feature-based pattern recognition technique. <i>Information Sciences</i> , 2014, 259, 282-294.	4.0	6
16	Mixed eccentricity diagnosis in Inverter-Fed Induction Motors via the Adaptive Slope Transform of transient stator currents. <i>Mechanical Systems and Signal Processing</i> , 2014, 48, 423-435.	4.4	35
17	Fault diagnosis of wind turbine planetary gearbox under nonstationary conditions via adaptive optimal kernel time-frequency analysis. <i>Renewable Energy</i> , 2014, 66, 468-477.	4.3	128
18	Complex signal analysis for wind turbine planetary gearbox fault diagnosis via iterative atomic decomposition thresholding. <i>Journal of Sound and Vibration</i> , 2014, 333, 5196-5211.	2.1	72

#	ARTICLE	IF	CITATIONS
19	A rolling bearing fault diagnosis method based on multi-scale fuzzy entropy and variable predictive model-based class discrimination. Mechanism and Machine Theory, 2014, 78, 187-200.	2.7	173
20	Detection and Monitoring of Shaft Misalignment in Rotors Using Hilbert Huang Transform. , 2014, , .		1
21	A Novel Local Time-Frequency Domain Feature Extraction Method for Tool Condition Monitoring Using S-Transform and Genetic Algorithm. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 3516-3521.	0.4	5
22	Multiscale Slope Feature Extraction for Gear and Bearing Fault Diagnosis Using Wavelet Transform. , 2014, 5, 1650-1659.		15
23	Modelling of Material Properties Using Frequency Domain Information from Barkhausen Noise Signal. IFAC-PapersOnLine, 2015, 48, 201-206.	0.5	2
24	Machinery Fault Diagnosis Using Two-Channel Analysis Method Based on Fictitious System Frequency Response Function. Shock and Vibration, 2015, 2015, 1-7.	0.3	3
25	NC Machine Tools Fault Diagnosis Based on Kernel PCA and $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="M1" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle k \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ -Nearest Neighbor Using Vibration Signals. Shock and Vibration, 2015, 2015, 1-10.	0.3	8
26	In-cylinder pressure-based direct techniques and time frequency analysis for combustion diagnostics in IC engines. Energy Conversion and Management, 2015, 99, 299-312.	4.4	32
27	A Compacted Object Sample Extraction (COMPOSE)-based method for fault diagnostics in evolving environment. , 2015, , .		3
28	Transform Operator Pair Assisted Hilbertâ€“Huang Transform for Signals With Instantaneous Frequency Intersections. Journal of Vibration and Acoustics, Transactions of the ASME, 2015, 137, .	1.0	4
29	Detection of Bearing Fault Detection From Heavily Contaminated Signals: A Higher-Order Analytic Energy Operator Method. Journal of Vibration and Acoustics, Transactions of the ASME, 2015, 137, .	1.0	8
30	Fault feature extraction of planetary gearboxes under nonstationary conditions based on reassigned wavelet scalogram. , 2015, , .		2
31	Nonlinear squeezing timeâ€“frequency transform for weak signal detection. Signal Processing, 2015, 113, 195-210.	2.1	71
32	Condition assessment for automatic tool changer based on sparsity-enabled signal decomposition method. Mechatronics, 2015, 31, 50-59.	2.0	28
33	Weak fault signature extraction of rotating machinery using flexible analytic wavelet transform. Mechanical Systems and Signal Processing, 2015, 64-65, 162-187.	4.4	104
34	Natural gas leak location with Kâ€“L divergence-based adaptive selection of Ensemble Local Mean Decomposition components and high-order ambiguity function. Journal of Sound and Vibration, 2015, 347, 232-245.	2.1	31
35	Rolling bearing fault diagnosis based on LCDâ€“TEO and multifractal detrended fluctuation analysis. Mechanical Systems and Signal Processing, 2015, 60-61, 273-288.	4.4	73
36	A Survey of Fault Diagnosis and Fault-Tolerant Techniquesâ€“Part I: Fault Diagnosis With Model-Based and Signal-Based Approaches. IEEE Transactions on Industrial Electronics, 2015, 62, 3757-3767.	5.2	2,166

#	ARTICLE	IF	CITATIONS
37	Time-frequency characterization of lamb waves for material evaluation and damage inspection of plates. <i>Mechanical Systems and Signal Processing</i> , 2015, 62-63, 183-206.	4.4	15
38	Time-frequency demodulation analysis based on iterative generalized demodulation for fault diagnosis of planetary gearbox under nonstationary conditions. <i>Mechanical Systems and Signal Processing</i> , 2015, 62-63, 54-74.	4.4	54
39	A brief review and a first application of time-frequency-based analysis methods for monitoring of strip rolling mills. <i>Journal of Process Control</i> , 2015, 35, 65-79.	1.7	34
40	Fault diagnosis of rolling element bearing based on S transform and gray level co-occurrence matrix. <i>Measurement Science and Technology</i> , 2015, 26, 085008.	1.4	11
41	Adaptive noise cancelling and time-frequency techniques for rail surface defect detection. <i>Mechanical Systems and Signal Processing</i> , 2015, 54-55, 41-51.	4.4	48
42	An online damage identification approach for numerical control machine tools based on data fusion using vibration signals. <i>JVC/Journal of Vibration and Control</i> , 2015, 21, 2925-2936.	1.5	24
43	Development of a generic rotating machinery fault diagnosis approach insensitive to machine speed and support type. <i>Journal of Sound and Vibration</i> , 2015, 337, 321-341.	2.1	29
44	Iterative generalized synchrosqueezing transform for fault diagnosis of wind turbine planetary gearbox under nonstationary conditions. <i>Mechanical Systems and Signal Processing</i> , 2015, 52-53, 360-375.	4.4	169
45	Transient signal analysis based on Levenberg-Marquardt method for fault feature extraction of rotating machines. <i>Mechanical Systems and Signal Processing</i> , 2015, 54-55, 16-40.	4.4	57
46	Identification of temperature-dependent thermal structural properties via finite element model updating and selection. <i>Mechanical Systems and Signal Processing</i> , 2015, 52-53, 147-161.	4.4	14
47	An adaptive non-parametric short-time Fourier transform: Application to echolocation. <i>Applied Acoustics</i> , 2015, 87, 131-141.	1.7	12
48	Additional Notes and Further Reading. , 2016, , 989-993.		0
49	Multisensor Fused Fault Diagnosis for Rotation Machinery Based on Supervised Second-Order Tensor Locality Preserving Projection and Weighted k -Nearest Neighbor Classifier under Assembled Matrix Distance Metric. <i>Shock and Vibration</i> , 2016, 2016, 1-14.	0.3	8
50	Application of Reassigned Wavelet Scalogram in Wind Turbine Planetary Gearbox Fault Diagnosis under Nonstationary Conditions. <i>Shock and Vibration</i> , 2016, 2016, 1-12.	0.3	7
51	Fault Diagnosis for a Multistage Planetary Gear Set Using Model-Based Simulation and Experimental Investigation. <i>Shock and Vibration</i> , 2016, 2016, 1-19.	0.3	12
52	Instantaneous Frequency Identification Using Adaptive Linear Chirplet Transform and Matching Pursuit. <i>Shock and Vibration</i> , 2016, 2016, 1-10.	0.3	3
53	Order Spectrum Analysis for Bearing Fault Detection via Joint Application of Synchrosqueezing Transform and Multiscale Chirplet Path Pursuit. <i>Shock and Vibration</i> , 2016, 2016, 1-11.	0.3	10
54	LPI Radar Waveform Recognition Based on Time-Frequency Distribution. <i>Sensors</i> , 2016, 16, 1682.	2.1	91

#	ARTICLE	IF	CITATIONS
55	Rolling bearing fault diagnosis based on partially ensemble empirical mode decomposition and variable predictive model-based class discrimination. Archives of Civil and Mechanical Engineering, 2016, 16, 784-794.	1.9	22
56	Time-Frequency Representation Based on Robust Local Mean Decomposition. , 2016, , .		2
57	Fault diagnosis of gearbox using EMD and cepstrum method based on LABVIEW. , 2016, , .		3
58	An Automated Approach to Enhance Multiscale Signal Monitoring of Manufacturing Processes. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	1.3	7
59	Multi-domain description method for bearing fault recognition in varying speed condition. , 2016, , .		2
60	Influence of blade pass frequency vibrations on MCSA-based rotor fault detection of induction motors. , 2016, , .		7
61	Nonstationary Vibration Signal Analysis Using Wavelet-Based Time-Frequency Filter and Wigner-Ville Distribution. Journal of Vibration and Acoustics, Transactions of the ASME, 2016, 138, .	1.0	8
62	A new dynamic neural modelling for mechatronic system prognostics. , 2016, , .		1
63	Improved Ensemble Superwavelet Transform for Vibration-Based Machinery Fault Diagnosis. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	1.3	9
64	Reassigned wavelet scalogram for gear fault detection under nonstationary operational conditions. , 2016, , .		1
65	Rub-Impact Detection of Rotor Systems Using Time-Frequency Techniques. , 2016, , .		4
66	Effects of deep neural network parameters on classification of bearing faults. , 2016, , .		11
67	Comparison of measures of time-frequency distribution optimization. , 2016, , .		3
68	Dependence analysis of planetary gearbox vibration marginals. , 2016, , .		0
69	Fault diagnosis from visualization perspective using stream statistics. , 2016, , .		1
70	Performance, aeroacoustics and feature extraction of an axial flow fan with abnormal blade angle. Energy, 2016, 103, 322-339.	4.5	33
71	A data-driven method to enhance vibration signal decomposition for rolling bearing fault analysis. Mechanical Systems and Signal Processing, 2016, 81, 126-147.	4.4	40
72	Time series analysis based study of a mass-spring-like oscillation and detachment of a metal pendant droplet. Mechanical Systems and Signal Processing, 2016, 80, 503-516.	4.4	3

#	ARTICLE	IF	CITATIONS
73	Kurtosis based weighted sparse model with convex optimization technique for bearing fault diagnosis. <i>Mechanical Systems and Signal Processing</i> , 2016, 80, 349-376.	4.4	125
74	Abnormal situation management for smart chemical process operation. <i>Current Opinion in Chemical Engineering</i> , 2016, 14, 49-55.	3.8	36
75	Instantaneous fault frequencies estimation in roller bearings via wavelet structures. <i>Journal of Sound and Vibration</i> , 2016, 383, 446-463.	2.1	12
76	An investigation of rolling bearing early diagnosis based on high-frequency characteristics and self-adaptive wavelet de-noising. <i>Neurocomputing</i> , 2016, 216, 649-656.	3.5	35
77	A New Method Based on Stochastic Process Models for Machine Remaining Useful Life Prediction. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2016, 65, 2671-2684.	2.4	190
78	Application of Zhao-Atlas-Marks Transforms in Non-stationary Bearing Fault Diagnosis. <i>Procedia Engineering</i> , 2016, 144, 297-304.	1.2	8
79	Time-varying singular value decomposition for periodic transient identification in bearing fault diagnosis. <i>Journal of Sound and Vibration</i> , 2016, 379, 213-231.	2.1	54
80	Detection of faults in rotating machinery using periodic time-frequency sparsity. <i>Journal of Sound and Vibration</i> , 2016, 382, 357-378.	2.1	57
81	Generating feature sets for fault diagnosis using denoising stacked auto-encoder. , 2016, , .		66
83	New types of faults detection and diagnosis using a mixed soft & hard clustering framework. , 2016, , .		8
84	Time-frequency spectrum based on iterative generalized demodulation for gearbox fault diagnosis under nonstationary conditions. , 2016, , .		1
85	Comparative Study of Gearbox Fault Diagnosis by Vibration Measurements. <i>MATEC Web of Conferences</i> , 2016, 65, 01003.	0.1	5
86	A Transient Faults Diagnosis Method Based on EEMD, Spectral Kurtosis Theory and Energy Operator Demodulating. <i>Key Engineering Materials</i> , 2016, 693, 1524-1531.	0.4	1
87	Pursuing optimal electric machines transient diagnosis: The adaptive slope transform. <i>Mechanical Systems and Signal Processing</i> , 2016, 80, 553-569.	4.4	28
88	The Doppler Effect based acoustic source separation for a wayside train bearing monitoring system. <i>Journal of Sound and Vibration</i> , 2016, 361, 307-329.	2.1	26
89	A parameterized Doppler distorted matching model for periodic fault identification in locomotive bearing. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2016, 230, 3791-3802.	1.1	11
90	Iterative generalized time-frequency reassignment for planetary gearbox fault diagnosis under nonstationary conditions. <i>Mechanical Systems and Signal Processing</i> , 2016, 80, 429-444.	4.4	68
91	Diagnosing planetary gear faults using the fuzzy entropy of LMD and ANFIS. <i>Journal of Mechanical Science and Technology</i> , 2016, 30, 2453-2462.	0.7	32

#	ARTICLE	IF	CITATIONS
92	An adaptive demodulation approach for bearing fault detection based on adaptive wavelet filtering and spectral subtraction. <i>Measurement Science and Technology</i> , 2016, 27, 025001.	1.4	11
93	An automatic abrupt information extraction method based on singular value decomposition and higher-order statistics. <i>Measurement Science and Technology</i> , 2016, 27, 025007.	1.4	6
94	Vibration response mechanism of faulty outer race rolling element bearings for quantitative analysis. <i>Journal of Sound and Vibration</i> , 2016, 364, 67-76.	2.1	127
95	Determination of knock characteristics in spark ignition engines: an approach based on ensemble empirical mode decomposition. <i>Measurement Science and Technology</i> , 2016, 27, 045109.	1.4	5
96	EEMD-based multiscale ICA method for slewing bearing fault detection and diagnosis. <i>Journal of Sound and Vibration</i> , 2016, 370, 394-423.	2.1	153
97	Time-frequency analysis of nonstationary vibration signals for deployable structures by using the constant-Q nonstationary gabor transform. <i>Mechanical Systems and Signal Processing</i> , 2016, 75, 228-244.	4.4	31
98	Improved Signal Characterization via Empirical Mode Decomposition to Enhance in-line Quality Monitoring. <i>Procedia CIRP</i> , 2016, 41, 717-722.	1.0	5
99	Bearing remaining useful life estimation based on time-frequency representation and supervised dimensionality reduction. <i>Measurement: Journal of the International Measurement Confederation</i> , 2016, 86, 41-55.	2.5	79
100	Robust sensor fault detection and isolation of gas turbine engines subjected to time-varying parameter uncertainties. <i>Mechanical Systems and Signal Processing</i> , 2016, 76-77, 136-156.	4.4	26
101	Joint envelope and frequency order spectrum analysis based on iterative generalized demodulation for planetary gearbox fault diagnosis under nonstationary conditions. <i>Mechanical Systems and Signal Processing</i> , 2016, 76-77, 242-264.	4.4	56
102	Time-frequency interpretation of multi-frequency signal from rotating machinery using an improved Hilbert-Huang transform. <i>Measurement: Journal of the International Measurement Confederation</i> , 2016, 82, 221-239.	2.5	40
103	A novel fault diagnosis method for rotating machinery based on S transform and morphological pattern spectrum. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2016, 38, 1575-1584.	0.8	3
104	Fault detection in rotor bearing systems using time frequency techniques. <i>Mechanical Systems and Signal Processing</i> , 2016, 72-73, 105-133.	4.4	163
105	Sensitivity enhancement of task-evoked fMRI using ensemble empirical mode decomposition. <i>Journal of Neuroscience Methods</i> , 2016, 258, 56-66.	1.3	7
106	Online feature-based multisensor object detection system for bucket-wheel excavators. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 82, 1213-1226.	1.5	3
107	SVD and Hankel matrix based de-noising approach for ball bearing fault detection and its assessment using artificial faults. <i>Mechanical Systems and Signal Processing</i> , 2016, 70-71, 36-50.	4.4	134
108	Wavelet transform based on inner product in fault diagnosis of rotating machinery: A review. <i>Mechanical Systems and Signal Processing</i> , 2016, 70-71, 1-35.	4.4	379
109	Time-frequency analysis based on Vold-Kalman filter and higher order energy separation for fault diagnosis of wind turbine planetary gearbox under nonstationary conditions. <i>Renewable Energy</i> , 2016, 85, 45-56.	4.3	111

#	ARTICLE	IF	CITATIONS
110	Spectral kurtosis for fault detection, diagnosis and prognostics of rotating machines: A review with applications. <i>Mechanical Systems and Signal Processing</i> , 2016, 66-67, 679-698.	4.4	362
111	The instantaneous frequency rate spectrogram. <i>Mechanical Systems and Signal Processing</i> , 2016, 66-67, 361-373.	4.4	36
112	Artificial immune system via Euclidean Distance Minimization for anomaly detection in bearings. <i>Mechanical Systems and Signal Processing</i> , 2016, 76-77, 380-393.	4.4	24
113	Time-frequency vibration analysis for the detection of motor damages caused by bearing currents. <i>Mechanical Systems and Signal Processing</i> , 2017, 84, 747-762.	4.4	65
114	Adaptive radial sinc kernel distribution and its application in mechanical fault diagnosis. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2017, 231, 485-493.	1.1	2
115	Study on nature of crossover phenomena with application to gearbox fault diagnosis. <i>Mechanical Systems and Signal Processing</i> , 2017, 83, 272-295.	4.4	26
116	An Optimal Ensemble Empirical Mode Decomposition Method for Vibration Signal Decomposition. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , 2017, 139, .	1.0	22
117	Damage/fault diagnosis in an operating wind turbine under uncertainty via a vibration response Gaussian mixture random coefficient model based framework. <i>Mechanical Systems and Signal Processing</i> , 2017, 91, 326-353.	4.4	47
118	Influence of Blade Pass Frequency Vibrations on MCSA-Based Rotor Fault Detection of Induction Motors. <i>IEEE Transactions on Industry Applications</i> , 2017, 53, 2049-2058.	3.3	57
119	Atomic decomposition and sparse representation for complex signal analysis in machinery fault diagnosis: A review with examples. <i>Measurement: Journal of the International Measurement Confederation</i> , 2017, 103, 106-132.	2.5	101
120	Early Fault Diagnosis of Rotating Machinery by Combining Differential Rational Spline-Based LMD and K&L Divergence. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2017, 66, 3077-3090.	2.4	46
121	Quaternion singular spectrum analysis using convex optimization and its application to fault diagnosis of rolling bearing. <i>Measurement: Journal of the International Measurement Confederation</i> , 2017, 103, 321-332.	2.5	74
122	Intelligent fault diagnosis of rolling bearing using hierarchical convolutional network based health state classification. <i>Advanced Engineering Informatics</i> , 2017, 32, 139-151.	4.0	313
123	Time-frequency representation based on robust local mean decomposition for multicomponent AM-FM signal analysis. <i>Mechanical Systems and Signal Processing</i> , 2017, 95, 468-487.	4.4	83
124	Time-varying demodulation analysis for rolling bearing fault diagnosis under variable speed conditions. <i>Journal of Sound and Vibration</i> , 2017, 400, 71-85.	2.1	111
125	Matching Demodulation Transform and Its Application in Machine Fault Diagnosis. <i>Smart Sensors, Measurement and Instrumentation</i> , 2017, , 155-202.	0.4	0
126	A health evaluation method of multicopters modeled by Stochastic Hybrid System. <i>Aerospace Science and Technology</i> , 2017, 68, 149-162.	2.5	16
127	Gaussian Mixture Random Coefficient model based framework for SHM in structures with time&dependent dynamics under uncertainty. <i>Mechanical Systems and Signal Processing</i> , 2017, 97, 59-83.	4.4	34

#	ARTICLE	IF	CITATIONS
128	Structural Health Monitoring. Smart Sensors, Measurement and Instrumentation, 2017, , .	0.4	17
129	Application of improved Hilbert-Huang and wavelet packet transforms in broken rotor bar fault detection. , 2017, , .		0
130	Nonlinear Squeezing Time-Frequency Transform and Application in Rotor Rub-Impact Fault Diagnosis. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2017, 139, .	1.3	24
131	Compressive sensing strategy for classification of bearing faults. , 2017, , .		15
132	Convolutional Neural Networks for Automatic Cognitive Radio Waveform Recognition. IEEE Access, 2017, 5, 11074-11082.	2.6	179
133	Improved local mean decomposition for modulation information mining and its application to machinery fault diagnosis. Journal of Sound and Vibration, 2017, 397, 266-281.	2.1	51
134	A hybrid fault diagnosis approach based on mixed-domain state features for rotating machinery. ISA Transactions, 2017, 66, 284-295.	3.1	74
135	Matching Synchrosqueezing Wavelet Transform and Application to Aeroengine Vibration Monitoring. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 360-372.	2.4	140
136	Evaluation of the biodiesel fuels lubricity using vibration signals and multiresolution analysis. Tribology International, 2017, 109, 104-113.	3.0	13
137	High-resolution characterization of geologic structures using the synchrosqueezing transform. Interpretation, 2017, 5, T75-T85.	0.5	52
138	Applications of fractional lower order time-frequency representation to machine bearing fault diagnosis. IEEE/CAA Journal of Automatica Sinica, 2017, 4, 734-750.	8.5	23
139	Adaptive Mode Decomposition Methods and Their Applications in Signal Analysis for Machinery Fault Diagnosis: A Review With Examples. IEEE Access, 2017, 5, 24301-24331.	2.6	120
140	Study for ball bearing outer race characteristic defect frequency based on nonlinear dynamics analysis. Nonlinear Dynamics, 2017, 90, 781-796.	2.7	31
141	Transients Extraction Based on Averaged Random Orthogonal Matching Pursuit Algorithm for Machinery Fault Diagnosis. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 3237-3248.	2.4	34
142	Feature extraction based on DWT and CNN for rotating machinery fault diagnosis. , 2017, , .		13
143	Nonlinear Chirp Mode Decomposition: A Variational Method. IEEE Transactions on Signal Processing, 2017, 65, 6024-6037.	3.2	213
144	Separation of Overlapped Non-Stationary Signals by Ridge Path Regrouping and Intrinsic Chirp Component Decomposition. IEEE Sensors Journal, 2017, 17, 5994-6005.	2.4	140
145	Discrimination of Multiple Faults in Bearings Using Density-Based Orthogonal Functions of the Time Response. , 2017, , .		4

#	ARTICLE	IF	CITATIONS
146	A novel fault diagnosis method for rolling bearing based on EEMD-PE and multiclass relevance vector machine. , 2017, , .		7
147	Time-frequency analysis of the tribological behaviors of Ti6Al4V alloy under a dry sliding condition. Journal of Alloys and Compounds, 2017, 724, 752-762.	2.8	17
148	Review of the Fault Mechanism and Diagnostic Techniques for the Range Extender Hybrid Electric Vehicle. IEEE Access, 2017, 5, 14234-14244.	2.6	17
149	Order-frequency analysis of machine signals. Mechanical Systems and Signal Processing, 2017, 87, 229-258.	4.4	57
150	Early fault feature extraction of rolling bearing based on ICD and tunable Q-factor wavelet transform. Mechanical Systems and Signal Processing, 2017, 86, 204-223.	4.4	103
151	Complex variational mode decomposition for signal processing applications. Mechanical Systems and Signal Processing, 2017, 86, 75-85.	4.4	87
152	Adaptive fault identification of bearing using empirical mode decompositionâ€“principal component analysisâ€“based average kurtosis technique. IET Science, Measurement and Technology, 2017, 11, 30-40.	0.9	30
153	Detection of chipping in ceramic cutting inserts from workpiece profile during turning using fast Fourier transform (FFT) and continuous wavelet transform (CWT). Precision Engineering, 2017, 47, 406-423.	1.8	53
154	Real-time FDM machine condition monitoring and diagnosis based on acoustic emission and hidden semi-Markov model. International Journal of Advanced Manufacturing Technology, 2017, 90, 2027-2036.	1.5	104
155	Repetitive transients extraction algorithm for detecting bearing faults. Mechanical Systems and Signal Processing, 2017, 84, 227-244.	4.4	61
156	A Systematic Semi-Supervised Self-adaptable Fault Diagnostics approach in an evolving environment. Mechanical Systems and Signal Processing, 2017, 88, 413-427.	4.4	25
157	Time-Frequency Analysis of Torsional Vibration Signals in Resonance Region for Planetary Gearbox Fault Diagnosis Under Variable Speed Conditions. IEEE Access, 2017, 5, 21918-21926.	2.6	42
158	Starting current analysis for condition monitoring of medium voltage induction motors in the steel industry. , 2017, , .		5
159	Local damage detection method based on distribution distances applied to time-frequency map of vibration signal. , 2017, , .		1
160	Wayside acoustic fault diagnosis of train wheel bearing based on Doppler effect correction and fault-relevant information enhancement. Advances in Mechanical Engineering, 2017, 9, 168781401773267.	0.8	7
161	Nonnegative factorization of spectrogram for local damage detection of belt conveyor gearboxes. IFAC-PapersOnLine, 2017, 50, 4714-4718.	0.5	7
162	Detection of Bearing Faults Using a Novel Adaptive Morphological Update Lifting Wavelet. Chinese Journal of Mechanical Engineering (English Edition), 2017, 30, 1305-1313.	1.9	17
163	Multiple measurement vector compressive sampling and fisher score feature selection for fault classification of roller bearings. , 2017, , .		6

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164	Bearing faults identification and resonant band demodulation based on wavelet de-noising methods and envelope analysis. IOP Conference Series: Materials Science and Engineering, 2017, 217, 012031.	0.3	1
165	Novel method of informative frequency band selection for vibration signal using nonnegative matrix factorization of short-time fourier transform. , 2017, , .		3
166	A Review of Feature Extraction Methods in Vibration-Based Condition Monitoring and Its Application for Degradation Trend Estimation of Low-Speed Slew Bearing. Machines, 2017, 5, 21.	1.2	285
167	The Shock Pulse Index and Its Application in the Fault Diagnosis of Rolling Element Bearings. Sensors, 2017, 17, 535.	2.1	15
168	Neural Networks for Radar Waveform Recognition. Symmetry, 2017, 9, 75.	1.1	47
169	Application of the DC Offset Cancellation Method and S Transform to Gearbox Fault Diagnosis. Applied Sciences (Switzerland), 2017, 7, 207.	1.3	11
170	Numerical Control Machine Tool Fault Diagnosis Using Hybrid Stationary Subspace Analysis and Least Squares Support Vector Machine with a Single Sensor. Applied Sciences (Switzerland), 2017, 7, 346.	1.3	19
171	Data-Driven Iterative Vibration Signal Enhancement Strategy Using Alpha Stable Distribution. Shock and Vibration, 2017, 2017, 1-11.	0.3	10
172	Deep Learning Enabled Fault Diagnosis Using Time-Frequency Image Analysis of Rolling Element Bearings. Shock and Vibration, 2017, 2017, 1-17.	0.3	228
173	Applications of fractional lower order S transform time frequency filtering algorithm to machine fault diagnosis. PLoS ONE, 2017, 12, e0175202.	1.1	15
174	Classification of bearing faults combining compressive sampling, laplacian score, and support vector machine. , 2017, , .		10
175	Analysis of fiber optic gyroscope vibration error based on improved local mean decomposition and kernel principal component analysis. Applied Optics, 2017, 56, 2265.	2.1	15
176	A Method to Determine System Parameters of Sdof Structural Systems by Applying a Step Load. MATEC Web of Conferences, 2017, 108, 04016.	0.1	0
177	A new damage diagnosis approach for NC machine tools based on hybrid Stationary subspace analysis. Journal of Physics: Conference Series, 2017, 842, 012047.	0.3	0
178	A parameter-adaptive VMD method based on grasshopper optimization algorithm to analyze vibration signals from rotating machinery. Mechanical Systems and Signal Processing, 2018, 108, 58-72.	4.4	376
179	Rolling Bearing Fault Diagnosis Using Modified LFDA and EMD With Sensitive Feature Selection. IEEE Access, 2018, 6, 3715-3730.	2.6	123
180	Real-Time Monitoring of Soil Compaction Using Piezoceramic-Based Embeddable Transducers and Wavelet Packet Analysis. IEEE Access, 2018, 6, 5208-5214.	2.6	28
181	Fault Detection of Broken Rotor Bar Using an Improved form of Hilbertâ€™Huang Transform. Fluctuation and Noise Letters, 2018, 17, 1850012.	1.0	13

#	ARTICLE	IF	CITATIONS
182	Development of a morphological convolution operator for bearing fault detection. <i>Journal of Sound and Vibration</i> , 2018, 421, 220-233.	2.1	13
183	Vibration Analysis Techniques for Rotating Machinery and its effect on Bearing Faults. <i>Procedia Manufacturing</i> , 2018, 20, 247-252.	1.9	65
184	Natural-gas pipeline leak location using variational mode decomposition analysis and cross-time-frequency spectrum. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 124, 163-172.	2.5	79
185	An Intelligent Fault Diagnosis Architecture for Electrical Fused Magnesia Furnace Using Sound Spectrum Submanifold Analysis. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2018, 67, 2014-2023.	2.4	15
186	Time-Frequency-Based Data-Driven Structural Diagnosis and Damage Detection for Cable-Stayed Bridges. <i>Journal of Bridge Engineering</i> , 2018, 23, .	1.4	106
187	Fabrication and electrical and humidity-sensing properties of a flexible and stretchable textile humidity sensor. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2018, 87, 36-43.	2.7	30
188	A closed form expression for the Gaussian-based Caputo-Fabrizio fractional derivative for signal processing applications. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2018, 61, 138-148.	1.7	64
189	Adaptive neuro-fuzzy inference system for deburring stage classification and prediction for indirect quality monitoring. <i>Applied Soft Computing Journal</i> , 2018, 72, 565-578.	4.1	30
190	Gear fault detection using dynamic transmission variance. <i>Journal of Quality in Maintenance Engineering</i> , 2018, 24, 101-118.	1.0	2
191	A novel Pareto-based Bayesian approach on extension of the infogram for extracting repetitive transients. <i>Mechanical Systems and Signal Processing</i> , 2018, 106, 119-139.	4.4	19
192	A compound interpolation envelope local mean decomposition and its application for fault diagnosis of reciprocating compressors. <i>Mechanical Systems and Signal Processing</i> , 2018, 110, 273-295.	4.4	56
193	Research on a configurable method for fault diagnosis knowledge of machine tools and its application. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 95, 937-960.	1.5	20
194	Experimental Investigation of the Excitation Forcing Function in Rotating Machinery. <i>Procedia Manufacturing</i> , 2018, 20, 290-295.	1.9	6
195	Fast recovery of weak signal based on three-dimensional curvelet transform and generalised cross validation. <i>IET Signal Processing</i> , 2018, 12, 149-154.	0.9	8
196	The Varying Compliance Resonance in a Ball Bearing Rotor System Affected by Different Ball Numbers and Rotor Eccentricities. <i>Journal of Tribology</i> , 2018, 140, .	1.0	23
197	Adaptive iterative generalized demodulation for nonstationary complex signal analysis: Principle and application in rotating machinery fault diagnosis. <i>Mechanical Systems and Signal Processing</i> , 2018, 110, 1-27.	4.4	64
198	A fuzzy transition based approach for fault severity prediction in helical gearboxes. <i>Fuzzy Sets and Systems</i> , 2018, 337, 52-73.	1.6	26
199	Machinery fault diagnosis based on time-frequency images and label consistent K-SVD. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2018, 232, 1317-1330.	1.1	7

#	ARTICLE	IF	CITATIONS
200	A novel gearbox fault feature extraction and classification using Hilbert empirical wavelet transform, singular value decomposition, and SOM neural network. <i>JVC/Journal of Vibration and Control</i> , 2018, 24, 2512-2531.	1.5	45
201	Intelligent condition monitoring method for bearing faults from highly compressed measurements using sparse over-complete features. <i>Mechanical Systems and Signal Processing</i> , 2018, 99, 459-477.	4.4	116
202	A time-frequency analysis algorithm for ultrasonic waves generating from a debonding defect by using empirical wavelet transform. <i>Applied Acoustics</i> , 2018, 131, 16-27.	1.7	35
203	Average combination difference morphological filters for fault feature extraction of bearing. <i>Mechanical Systems and Signal Processing</i> , 2018, 100, 827-845.	4.4	61
204	Fault tolerant position-mooring control for offshore vessels. <i>Ocean Engineering</i> , 2018, 148, 426-441.	1.9	18
205	L-Kurtosis and its application for fault detection of rolling element bearings. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 116, 523-532.	2.5	44
206	A two-stage feature selection and intelligent fault diagnosis method for rotating machinery using hybrid filter and wrapper method. <i>Neurocomputing</i> , 2018, 275, 2426-2439.	3.5	75
207	Hurst based vibro-acoustic feature extraction of bearing using EMD and VMD. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 117, 200-220.	2.5	130
208	Basic research on machinery fault diagnostics: Past, present, and future trends. <i>Frontiers of Mechanical Engineering</i> , 2018, 13, 264-291.	2.5	102
209	An identification method of orbit responses rooting in vibration analysis of rotor during touchdowns of active magnetic bearings. <i>Journal of Sound and Vibration</i> , 2018, 414, 174-191.	2.1	14
210	Bearing fault diagnosis under unknown time-varying rotational speed conditions via multiple time-frequency curve extraction. <i>Journal of Sound and Vibration</i> , 2018, 414, 43-60.	2.1	102
211	A feature extraction and visualization method for fault detection of marine diesel engines. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 116, 429-437.	2.5	62
212	Matching synchrosqueezing transform: A useful tool for characterizing signals with fast varying instantaneous frequency and application to machine fault diagnosis. <i>Mechanical Systems and Signal Processing</i> , 2018, 100, 242-288.	4.4	135
213	A Fast Three-Dimensional Display Method for Time-Frequency Spectrogram Used in Embedded Fault Diagnosis Devices. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1930.	1.3	3
214	Three-Stage Method for Rotating Machine Health Condition Monitoring Using Vibration Signals. , 2018, , .		5
215	A Novel Detrended Fluctuation Analysis Method for Gear Fault Diagnosis Based on Variational Mode Decomposition. <i>Shock and Vibration</i> , 2018, 2018, 1-11.	0.3	8
216	Empirical Mode Decomposition for Fault Diagnosis of Multi-Component Systems. , 2018, , .		1
217	Automatic Extraction of a Health Indicator from Vibrational Data by Sparse Autoencoders. , 2018, , .		3

#	ARTICLE	IF	CITATIONS
218	Rolling Bearing Fault Diagnosis via ConceFT-Based Time-Frequency Reconfiguration Order Spectrum Analysis. IEEE Access, 2018, 6, 67131-67143.	2.6	9
219	Rolling Bearing Fault Diagnosis Based on Synchroextracting Transform Under Variable Rotational Speed Conditions. , 2018, , .		1
220	Intelligent Fault Diagnosis of Rolling Bearing via Deep-Layerwise Feature Extraction Using Deep Belief Network. , 2018, , .		2
221	Velocity Synchrosqueezing Windowed Fourier Transform for Fault Diagnosis of Fixed-Shaft Gearbox Under Nonstationary Conditions. , 2018, , .		0
222	The Entropy Algorithm and Its Variants in the Fault Diagnosis of Rotating Machinery: A Review. IEEE Access, 2018, 6, 66723-66741.	2.6	207
223	Differential evolution optimization for resilient stacked sparse autoencoder and its applications on bearing fault diagnosis. Measurement Science and Technology, 2018, 29, 125002.	1.4	36
224	Joint Application of Spectral Kurtosis and Velocity Synchrosqueezing Transform for Fault Diagnosis of Ball Bearing Under Nonstationary Conditions. , 2018, , .		1
225	A New Transfer Learning Method and its Application on Rotating Machine Fault Diagnosis Under Variant Working Conditions. IEEE Access, 2018, 6, 69907-69917.	2.6	73
226	An End-to-End model based on CNN-LSTM for Industrial Fault Diagnosis and Prognosis. , 2018, , .		10
227	Radar Signal Intra-Pulse Modulation Recognition Based on Convolutional Neural Network. IEEE Access, 2018, 6, 43874-43884.	2.6	67
228	A frequency-modulated-continuous-wave laser detection system based on the four-quadrant photodetector. Applied Physics B: Lasers and Optics, 2018, 124, 1.	1.1	3
229	A novel supervised sparse feature extraction method and its application on rotating machine fault diagnosis. Neurocomputing, 2018, 320, 129-140.	3.5	31
230	Multiple instantaneous frequency ridge based integration strategy for bearing fault diagnosis under variable speed operations. Measurement Science and Technology, 2018, 29, 115002.	1.4	14
231	Numerical and experimental diagnosis of complex rotor system by time-frequency techniques. MATEC Web of Conferences, 2018, 169, 01015.	0.1	2
232	Compound fault diagnosis of rotating machinery based on adaptive maximum correlated kurtosis deconvolution and customized multiwavelet transform. Measurement Science and Technology, 2018, 29, 115007.	1.4	28
233	Convolutional sparse coding with periodic overlapped group sparsity for rolling element bearing fault diagnosis. Measurement Science and Technology, 2018, 29, 115103.	1.4	4
234	Broken Rotor Bar Fault Detection and Classification Using Wavelet Packet Signature Analysis Based on Fourier Transform and Multi-Layer Perceptron Neural Network. Applied Sciences (Switzerland), 2018, 8, 25.	1.3	46
235	Local Damage Detection Method Based on Distribution Distances Applied to Time-Frequency Map of Vibration Signal. IEEE Transactions on Industry Applications, 2018, 54, 4091-4103.	3.3	12

#	ARTICLE	IF	CITATIONS
236	Early Fault Diagnosis of Rolling Bearing based Empirical Wavelet Transform and Spectral Kurtosis. , 2018, , .		4
237	Understanding real faults of axle box bearings based on vibration data using decision tree. , 2018, , .		3
238	Compressive Sampling and Feature Ranking Framework for Bearing Fault Classification With Vibration Signals. IEEE Access, 2018, 6, 44731-44746.	2.6	39
239	A Critical Investigation of Hilbert-Huang Transform Based Envelope Analysis for Fault Diagnosis of Gears. , 2018, , .		3
240	Fault Severity Monitoring of Rolling Bearings Based on Texture Feature Extraction of Sparse Timeâ€“Frequency Images. Applied Sciences (Switzerland), 2018, 8, 1538.	1.3	17
241	Vibration Signal Analysis of Rotating Machines Using Vold-Kalman Filter & Phase Analysis Technique. , 2018, , .		0
242	Semi-automated diagnosis of bearing faults based on a hidden Markov model of the vibration signals. Measurement: Journal of the International Measurement Confederation, 2018, 127, 141-166.	2.5	55
243	An intelligent diagnosis scheme based on generative adversarial learning deep neural networks and its application to planetary gearbox fault pattern recognition. Neurocomputing, 2018, 310, 213-222.	3.5	265
244	Refining the ambiguity domain characteristics of non-stationary signals for improved timeâ€“frequency analysis: Test case of multidirectional and multicomponent piecewise LFM and HFM signals. , 2018, 83, 367-382.		10
245	Bearing Diagnostics of Hydro Power Plants Using Wavelet Packet Transform and a Hidden Markov Model with Orbit Curves. Shock and Vibration, 2018, 2018, 1-12.	0.3	7
246	Rolling Bearing Fault Diagnosis Using Modified Neighborhood Preserving Embedding and Maximal Overlap Discrete Wavelet Packet Transform with Sensitive Features Selection. Shock and Vibration, 2018, 2018, 1-29.	0.3	6
247	A novel rolling bearing fault detect method based on empirical wavelet transform. , 2018, , .		4
248	Intrinsic Mode Chirp Multicomponent Decomposition with Kernel Sparse Learning for Overlapped Nonstationary Signals Involving Big Data. Complexity, 2018, 2018, 1-15.	0.9	1
249	Radar Waveform Recognition Based on Time-Frequency Analysis and Artificial Bee Colony-Support Vector Machine. Electronics (Switzerland), 2018, 7, 59.	1.8	18
250	A Stacked Autoencoder-Based Deep Neural Network for Achieving Gearbox Fault Diagnosis. Mathematical Problems in Engineering, 2018, 2018, 1-10.	0.6	96
251	A new instantaneous frequency extraction method for nonstationary response signals in civil engineering structures. Journal of Low Frequency Noise Vibration and Active Control, 2018, 37, 834-848.	1.3	4
252	A Comparative Study of Four Kinds of Adaptive Decomposition Algorithms and Their Applications. Sensors, 2018, 18, 2120.	2.1	62
253	Study on planetary gear fault diagnosis based on variational mode decomposition and deep neural networks. Measurement: Journal of the International Measurement Confederation, 2018, 130, 94-104.	2.5	90

#	ARTICLE	IF	CITATIONS
254	Initial center frequency-guided VMD for fault diagnosis of rotating machines. <i>Journal of Sound and Vibration</i> , 2018, 435, 36-55.	2.1	161
255	Fault detection for rolling element bearing using an enhanced morphological-hat product filtering method. <i>IOP Conference Series: Materials Science and Engineering</i> , 0, 394, 032066.	0.3	1
256	A novel intelligent detection method for rolling bearing based on IVMD and instantaneous energy distribution-permutation entropy. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 130, 435-447.	2.5	38
257	Tool condition monitoring using spectral subtraction and convolutional neural networks in milling process. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 98, 3217-3227.	1.5	137
258	Time-â€“Frequency Analysis of Pressure Pulsation Signal in the Chamber of Self-Resonating Jet Nozzle. <i>International Journal of Pattern Recognition and Artificial Intelligence</i> , 2018, 32, 1858006.	0.7	6
259	Adaptive chirp mode pursuit: Algorithm and applications. <i>Mechanical Systems and Signal Processing</i> , 2019, 116, 566-584.	4.4	112
260	A virtual injection sensor by means of time frequency analysis. <i>Mechanical Systems and Signal Processing</i> , 2019, 116, 832-842.	4.4	9
261	A coarse-to-fine decomposing strategy of VMD for extraction of weak repetitive transients in fault diagnosis of rotating machines. <i>Mechanical Systems and Signal Processing</i> , 2019, 116, 668-692.	4.4	162
262	Intelligent Condition Monitoring for Rotating Machinery Using Compressively-Sampled Data and Sub-space Learning Techniques. <i>Mechanisms and Machine Science</i> , 2019, , 238-251.	0.3	1
263	Local maximum synchrosqueezing transform: An energy-concentrated time-frequency analysis tool. <i>Mechanical Systems and Signal Processing</i> , 2019, 117, 537-552.	4.4	78
264	Deep variational auto-encoders: A promising tool for dimensionality reduction and ball bearing elements fault diagnosis. <i>Structural Health Monitoring</i> , 2019, 18, 1092-1128.	4.3	94
265	Data-driven time-frequency analysis method based on variational mode decomposition and its application to gear fault diagnosis in variable working conditions. <i>Mechanical Systems and Signal Processing</i> , 2019, 116, 462-479.	4.4	82
266	A novel blind deconvolution method and its application to fault identification. <i>Journal of Sound and Vibration</i> , 2019, 460, 114900.	2.1	56
267	Low Speed Bearing Fault Diagnosis Based on EMD-CIIT Histogram Entropy and KFCM Clustering. <i>Journal of Shanghai Jiaotong University (Science)</i> , 2019, 24, 616-621.	0.5	4
268	Detection and classification of bearing faults in industrial geared motors using temporal features and adaptive neuro-fuzzy inference system. <i>Heliyon</i> , 2019, 5, e02046.	1.4	27
269	Vibration Measurement and Analysis of Mechanical Design of the Antenna Radar System. , 2019, , .		0
270	Fault Diagnosis of Reciprocating Compressor Based on Convolutional Neural Networks with Multisource Raw Vibration Signals. <i>Mathematical Problems in Engineering</i> , 2019, 2019, 1-7.	0.6	22
271	Novel data-driven short-frequency mutual information entropy threshold filtering and its application to bearing fault diagnosis. <i>Measurement Science and Technology</i> , 2019, 30, 115006.	1.4	9

#	ARTICLE	IF	CITATIONS
272	Damage detection of in service timber poles using Hilbert-Huang transform. NDT and E International, 2019, 107, 102141.	1.7	30
273	Quality classification methods for ball nut assemblies in a multi-view setting. Mechanical Systems and Signal Processing, 2019, 132, 72-83.	4.4	4
274	Fault diagnosis method and application based on unsaturated piecewise linear stochastic resonance. Review of Scientific Instruments, 2019, 90, 065112.	0.6	18
275	Vibration based brake health monitoring using wavelet features: A machine learning approach. JVC/Journal of Vibration and Control, 2019, 25, 2534-2550.	1.5	37
276	A group sparse representation method in frequency domain with adaptive parameters optimization of detecting incipient rolling bearing fault. Journal of Sound and Vibration, 2019, 462, 114931.	2.1	31
277	A Multi-Stage Hybrid Fault Diagnosis Approach for Rolling Element Bearing Under Various Working Conditions. IEEE Access, 2019, 7, 138426-138441.	2.6	25
278	Demodulation spectrum analysis for multi-fault diagnosis of rolling bearing via chirplet path pursuit. Journal of Central South University, 2019, 26, 2418-2431.	1.2	3
279	Optimized SWPT and Decision Tree for Incipient Bearing Fault Diagnosis. , 2019, , .		10
280	Rolling Bearing Fault Diagnosis Algorithm Based on FMCNN-Sparse Representation. IEEE Access, 2019, 7, 102249-102263.	2.6	20
281	Cross-Domain Fault Diagnosis Using Knowledge Transfer Strategy: A Review. IEEE Access, 2019, 7, 129260-129290.	2.6	124
282	Machinery Fault Diagnosis Using Signal Analysis. Procedia Manufacturing, 2019, 32, 585-590.	1.9	5
283	Starting Current Analysis in Medium Voltage Induction Motors: Detecting Rotor Faults and Reactor Starting Defects. IEEE Industry Applications Magazine, 2019, 25, 69-79.	0.3	8
284	A Deep Learning Method for Fault Detection of Autonomous Vehicles. , 2019, , .		8
285	An amplitude weak component detection technique based on normalized time-frequency coefficients and multi-synchrosqueezing operation. Measurement Science and Technology, 2019, 30, 055008.	1.4	12
286	Intelligent Fault Diagnosis of Rotating Machinery Using ICD and Generalized Composite Multi-Scale Fuzzy Entropy. IEEE Access, 2019, 7, 38983-38995.	2.6	15
287	An improved complementary ensemble empirical mode decomposition with adaptive noise and its application to rolling element bearing fault diagnosis. ISA Transactions, 2019, 91, 218-234.	3.1	115
288	Improved singular spectrum decomposition-based 1.5-dimensional energy spectrum for rotating machinery fault diagnosis. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	0.8	18
289	An adaptive method based on fractional empirical wavelet transform and its application in rotating machinery fault diagnosis. Measurement Science and Technology, 2019, 30, 035005.	1.4	15

#	ARTICLE	IF	CITATIONS
290	Novel method of informative frequency band selection for vibration signal using Nonnegative Matrix Factorization of spectrogram matrix. <i>Mechanical Systems and Signal Processing</i> , 2019, 130, 585-596.	4.4	38
291	Feedforward control for oscillatory signal tracking using Hilbert transform. <i>European Journal of Control</i> , 2019, 50, 41-50.	1.6	3
292	Second order multi-synchrosqueezing transform for rub-impact detection of rotor systems. <i>Mechanism and Machine Theory</i> , 2019, 140, 321-349.	2.7	66
293	A Novel Rolling Bearing Fault Diagnosis and Severity Analysis Method. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 2356.	1.3	44
294	Multiple time-frequency curve extraction Matlab code and its application to automatic bearing fault diagnosis under time-varying speed conditions. <i>MethodsX</i> , 2019, 6, 1415-1432.	0.7	17
295	A combined method for instantaneous frequency identification in low frequency structures. <i>Engineering Structures</i> , 2019, 194, 370-383.	2.6	24
296	LPI Radar Waveform Recognition Based on CNN and TPOT. <i>Symmetry</i> , 2019, 11, 725.	1.1	26
297	An improved separation method of multi-components signal for sensing based on time-frequency representation. <i>Review of Scientific Instruments</i> , 2019, 90, 064901.	0.6	3
298	Diesel engine injection faults' detection and classification utilizing unsupervised fuzzy clustering techniques. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019, 233, 5622-5636.	1.1	3
299	Multiple squeezes from adaptive chirplet transform. <i>Signal Processing</i> , 2019, 163, 26-40.	2.1	43
300	A Review of Early Fault Diagnosis Approaches and Their Applications in Rotating Machinery. <i>Entropy</i> , 2019, 21, 409.	1.1	139
301	Fault Diagnosis of Rolling Element Bearings with a Two-Step Scheme Based on Permutation Entropy and Random Forests. <i>Entropy</i> , 2019, 21, 96.	1.1	22
302	Modifying the Hilbert-Huang transform using the nonlinear entropy-based features for early fault detection of ball bearings. <i>Applied Acoustics</i> , 2019, 150, 313-324.	1.7	21
303	Using a Support Vector Machine Based Decision Stage to Improve the Fault Diagnosis on Gearboxes. <i>Computational Intelligence and Neuroscience</i> , 2019, 2019, 1-13.	1.1	19
304	Synthesis versus analysis priors via generalized minimax-concave penalty for sparsity-assisted machinery fault diagnosis. <i>Mechanical Systems and Signal Processing</i> , 2019, 127, 202-233.	4.4	47
305	Time-Frequency demodulation analysis via Vold-Kalman filter for wind turbine planetary gearbox fault diagnosis under nonstationary speeds. <i>Mechanical Systems and Signal Processing</i> , 2019, 128, 93-109.	4.4	78
306	Generalized Demodulation Transform for Bearing Fault Diagnosis Under Nonstationary Conditions and Gear Noise Interferences. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2019, 32, .	1.9	17
307	Mechanical fault detection in electric motors measured by a digital signal processing device in an optical mouse. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 138, 350-355.	2.5	7

#	ARTICLE	IF	CITATIONS
308	Changes in rotor response characteristics based diagnostic method and its application to identification of misalignment. Measurement: Journal of the International Measurement Confederation, 2019, 138, 91-105.	2.5	16
309	Integration Approach for Local Damage Detection of Vibration Signal from Gearbox Based on KPSS Test. Applied Condition Monitoring, 2019, , 330-339.	0.4	2
310	Multi-Channel Real-Time Condition Monitoring System Based on Wideband Vibration Analysis of Motor Shafts Using SAW RFID Tags Coupled with Sensors. Sensors, 2019, 19, 5398.	2.1	14
311	Blind Source Separation Based on EMD and Correlation Measure for Rotating Machinery Fault Diagnosis. , 2019, , .		2
312	Singular Spectrum Decomposition Based Nonlinear Energy Operator for Rolling Bearing Faulty Diagnosis. , 2019, , .		0
313	Modulation Sideband Separation Using the Teagerâ€œKaiser Energy Operator for Rotor Fault Diagnostics of Induction Motors. Energies, 2019, 12, 4437.	1.6	16
314	Eccentricity fault diagnosis indices for permanent magnet machines: stateâ€œof-the-art. IET Electric Power Applications, 2019, 13, 1241-1254.	1.1	20
315	Adaptive Multiscale Symbolic-Dynamics Entropy for Condition Monitoring of Rotating Machinery. Entropy, 2019, 21, 1138.	1.1	4
316	Analysis and parameter estimation of time-varying signals: theory and methods. Journal of Physics: Conference Series, 2019, 1367, 012091.	0.3	1
317	Redundant Anticipatory Control to Avoid Wind Turbine Failures Based on SCADA Data. , 2019, , .		0
318	Fault Diagnosis for Rail Vehicle Axle-Box Bearings Based on Energy Feature Reconstruction and Composite Multiscale Permutation Entropy. Entropy, 2019, 21, 865.	1.1	14
319	Research on Radio Frequency Assignment Method Based on Improved Genetic Algorithm. , 2019, , .		3
320	Fine-Grained Fault Diagnosis Method of Rolling Bearing Combining Multisynchrosqueezing Transform and Sparse Feature Coding Based on Dictionary Learning. Shock and Vibration, 2019, 2019, 1-13.	0.3	12
322	Fault Pattern Recognition of Axle Box Bearings for High-speed EMU Based on Onboard Real-time Temperature Data. , 2019, , .		0
323	Application of CSA-VMD and optimal scale morphological slice bispectrum in enhancing outer race fault detection of rolling element bearings. Mechanical Systems and Signal Processing, 2019, 122, 56-86.	4.4	138
324	Velocity synchronous bilinear distribution for planetary gearbox fault diagnosis under non-stationary conditions. Journal of Sound and Vibration, 2019, 443, 212-229.	2.1	20
325	Digital Twin for rotating machinery fault diagnosis in smart manufacturing. International Journal of Production Research, 2019, 57, 3920-3934.	4.9	297
326	An improved method of detecting engine misfire by sound quality metrics of radiated sound. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2019, 233, 3112-3124.	1.1	11

#	ARTICLE	IF	CITATIONS
327	A Novel Condition-Monitoring Method for Axle-Box Bearings of High-Speed Trains Using Temperature Sensor Signals. <i>IEEE Sensors Journal</i> , 2019, 19, 205-213.	2.4	31
328	HVSRMS localization formula and localization law: Localization diagnosis of a ball bearing outer ring fault. <i>Mechanical Systems and Signal Processing</i> , 2019, 120, 608-629.	4.4	110
329	Rolling Element Bearing Fault Diagnosis under Impulsive Noise Environment Based on Cyclic Correntropy Spectrum. <i>Entropy</i> , 2019, 21, 50.	1.1	30
330	A multi-source fusion algorithm for high-accuracy signal reconstruction of vehicle interior noise on passenger ear-sides. <i>Applied Acoustics</i> , 2019, 148, 75-85.	1.7	9
331	Particle swarm optimization algorithm to solve the deconvolution problem for rolling element bearing fault diagnosis. <i>ISA Transactions</i> , 2019, 90, 244-267.	3.1	74
332	Intelligent fault diagnosis method of planetary gearboxes based on convolution neural network and discrete wavelet transform. <i>Computers in Industry</i> , 2019, 106, 48-59.	5.7	170
333	Construction of a batch-normalized autoencoder network and its application in mechanical intelligent fault diagnosis. <i>Measurement Science and Technology</i> , 2019, 30, 015106.	1.4	51
334	A method for tachometer-free and resampling-free bearing fault diagnostics under time-varying speed conditions. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 134, 101-117.	2.5	35
335	Structural health monitoring by a new hybrid feature extraction and dynamic time warping methods under ambient vibration and non-stationary signals. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 134, 548-568.	2.5	41
336	Multi-fault diagnosis of rolling bearing using fuzzy entropy of empirical mode decomposition, principal component analysis, and SOM neural network. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019, 233, 3317-3328.	1.1	47
337	Time-frequency space vector modulus analysis of motor current for planetary gearbox fault diagnosis under variable speed conditions. <i>Mechanical Systems and Signal Processing</i> , 2019, 121, 636-654.	4.4	32
338	A Hybrid Approach for Weak Fault Feature Extraction of Gearbox. <i>IEEE Access</i> , 2019, 7, 16616-16625.	2.6	6
339	A multi-step progressive fault diagnosis method for rolling element bearing based on energy entropy theory and hybrid ensemble auto-encoder. <i>ISA Transactions</i> , 2019, 87, 235-250.	3.1	48
340	Time-frequency analysis for bearing fault diagnosis using multiple Q-factor Gabor wavelets. <i>ISA Transactions</i> , 2019, 87, 225-234.	3.1	68
341	Machine learning methods for wind turbine condition monitoring: A review. <i>Renewable Energy</i> , 2019, 133, 620-635.	4.3	487
342	Detection of rub-impact fault for rotor-stator systems: A novel method based on adaptive chirp mode decomposition. <i>Journal of Sound and Vibration</i> , 2019, 440, 83-99.	2.1	107
343	Three-Stage Hybrid Fault Diagnosis for Rolling Bearings With Compressively Sampled Data and Subspace Learning Techniques. <i>IEEE Transactions on Industrial Electronics</i> , 2019, 66, 5516-5524.	5.2	40
344	Parameterised time-frequency analysis methods and their engineering applications: A review of recent advances. <i>Mechanical Systems and Signal Processing</i> , 2019, 119, 182-221.	4.4	138

#	ARTICLE	IF	CITATIONS
345	Multiple local damage detection in gearbox by novel coherent bi-frequency map and its spatial, cycle oriented enhancement. Applied Acoustics, 2019, 144, 23-30.	1.7	12
346	A hybrid fault diagnosis method for mechanical components based on ontology and signal analysis. Journal of Intelligent Manufacturing, 2019, 30, 1693-1715.	4.4	46
347	Application of cointegration to vibration signal for local damage detection in gearboxes. Applied Acoustics, 2019, 144, 4-10.	1.7	25
348	Damage localization under ambient excitations and non-stationary vibration signals by a new hybrid algorithm for feature extraction and multivariate distance correlation methods. Structural Health Monitoring, 2019, 18, 347-375.	4.3	38
349	Early Fault Detection of Machine Tools Based on Deep Learning and Dynamic Identification. IEEE Transactions on Industrial Electronics, 2019, 66, 509-518.	5.2	185
350	Self-adaptive bearing fault diagnosis based on permutation entropy and manifold-based dynamic time warping. Mechanical Systems and Signal Processing, 2019, 114, 658-673.	4.4	76
351	A Novel Statistical Time-Frequency Analysis for Rotating Machine Condition Monitoring. IEEE Transactions on Industrial Electronics, 2020, 67, 531-541.	5.2	60
352	A Novel Sparse Echo Autoencoder Network for Data-Driven Fault Diagnosis of Delta 3-D Printers. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 683-692.	2.4	60
353	Deep semi-supervised generative adversarial fault diagnostics of rolling element bearings. Structural Health Monitoring, 2020, 19, 390-411.	4.3	32
354	A Combined Polynomial Chirplet Transform and Synchroextracting Technique for Analyzing Nonstationary Signals of Rotating Machinery. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 1505-1518.	2.4	110
355	Rotating machinery fault diagnosis based on convolutional neural network and infrared thermal imaging. Chinese Journal of Aeronautics, 2020, 33, 427-438.	2.8	114
356	K-SVD-based WVD enhancement algorithm for planetary gearbox fault diagnosis under a CNN framework. Measurement Science and Technology, 2020, 31, 025003.	1.4	29
358	Adaptive Weighted VMD-WPEE Method of Power-Electronic-Circuit Multiple-Parameter-Fault Diagnosis. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 3878-3890.	3.7	7
359	Automation of low-speed bearing fault diagnosis based on autocorrelation of time domain features. Mechanical Systems and Signal Processing, 2020, 138, 106572.	4.4	43
360	Adaptive data-driven nonlinear synchro squeezed transform with single class radial basis function kernel support vector machine applied to wind turbine planetary gearbox fault diagnostics. Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy, 2020, 234, 1015-1025.	0.8	3
361	Energy-based damage localization under ambient vibration and non-stationary signals by ensemble empirical mode decomposition and Mahalanobis-squared distance. JVC/Journal of Vibration and Control, 2020, 26, 1012-1027.	1.5	36
362	Generalized adaptive mode decomposition for nonstationary signal analysis of rotating machinery: Principle and applications. Mechanical Systems and Signal Processing, 2020, 136, 106530.	4.4	43
363	Synchrosqueezing transform based general linear chirplet transform of instantaneous rotational frequency estimation for rotating machines with speed variations. , 2020, , .		2

#	ARTICLE	IF	CITATIONS
364	Rolling Bearing Fault Diagnosis Based on Sensitive Feature Transfer Learning and Local Maximum Margin Criterion under Variable Working Condition. <i>Shock and Vibration</i> , 2020, 2020, 1-34.	0.3	1
365	Fault Diagnosis of Rolling Bearings Based on a Residual Dilated Pyramid Network and Full Convolutional Denoising Autoencoder. <i>Sensors</i> , 2020, 20, 5734.	2.1	13
366	An effective health indicator for bearing using corrected conditional entropy through diversity-driven multi-parent evolutionary algorithm. <i>Structural Health Monitoring</i> , 2021, 20, 2525-2539.	4.3	26
367	Impulse Feature Extraction of Bearing Faults Based on Convolutional Nonnegative Matrix Factorization. <i>IEEE Access</i> , 2020, 8, 88617-88632.	2.6	4
368	Improved ensemble local mean decomposition based on cubic trigonometric cardinal spline interpolation and its application for rotating machinery fault diagnosis. <i>Advances in Mechanical Engineering</i> , 2020, 12, 168781402094195.	0.8	2
369	A Review of Artificial Intelligence Methods for Condition Monitoring and Fault Diagnosis of Rolling Element Bearings for Induction Motor. <i>Shock and Vibration</i> , 2020, 2020, 1-20.	0.3	87
370	A Survey on Fault Diagnosis and Fault Tolerant Methodologies for Permanent Magnet Synchronous Machines. <i>International Journal of Automation and Computing</i> , 2020, 17, 763-787.	4.5	28
371	Extraction and analysis of transient signals of a deployable structure vibration based on the sparse decomposition with mixed norms. <i>Aerospace Science and Technology</i> , 2020, 105, 106064.	2.5	8
372	The numerical modeling of rotor-stator rubbing in rotating machinery: a comprehensive review. <i>Nonlinear Dynamics</i> , 2020, 101, 1317-1363.	2.7	43
373	On wavelet-based statistical process monitoring. <i>Transactions of the Institute of Measurement and Control</i> , 2022, 44, 525-538.	1.1	12
374	Improvement in classification accuracy and computational speed in bearing fault diagnosis using multiscale fuzzy entropy. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2020, 42, 1.	0.8	14
375	A probabilistic model-based diagnostic framework for nuclear engineering systems. <i>Annals of Nuclear Energy</i> , 2020, 149, 107767.	0.9	13
376	Matching Linear Chirplet Strategy-Based Synchroextracting Transform and Its Application to Rotating Machinery Fault Diagnosis. <i>IEEE Access</i> , 2020, 8, 185725-185737.	2.6	7
377	Probabilistic Principal Component Analysis Assisted New Optimal Scale Morphological Top-Hat Filter for the Fault Diagnosis of Rolling Bearing. <i>IEEE Access</i> , 2020, 8, 156774-156791.	2.6	20
378	High-resolution time-frequency representation for instantaneous frequency identification by adaptive Duffing oscillator. <i>Structural Control and Health Monitoring</i> , 2020, 27, e2635.	1.9	8
379	Review of Key Technologies and Progress in Industrial Equipment Health Management. <i>IEEE Access</i> , 2020, 8, 151764-151776.	2.6	8
380	Novel Method for Vibration Sensor-Based Instantaneous Defect Frequency Estimation for Rolling Bearings Under Non-Stationary Conditions. <i>Sensors</i> , 2020, 20, 5201.	2.1	10
381	A Comparison of Time-Frequency Methods for Real-Time Application to High-Rate Dynamic Systems. <i>Vibration</i> , 2020, 3, 204-216.	0.9	22

#	ARTICLE	IF	CITATIONS
382	Anomaly Detection and Remaining Useful Lifetime Estimation Based on Degradation State for Bearings. , 2020, , .		3
383	Compound Fault Diagnosis of Gearbox Based on Wavelet Packet Transform and Sparse Representation Classification. , 2020, , .		3
384	Rolling Bearing Fault Diagnosis Using Time-Frequency Analysis and Deep Transfer Convolutional Neural Network. IEEE Access, 2020, 8, 150248-150261.	2.6	57
385	Fault Diagnosis of Rotating Machinery: A Review and Bibliometric Analysis. IEEE Access, 2020, 8, 224985-225003.	2.6	17
386	Fault Diagnosis of Planetary Gearbox under Nonstationary Conditions Based on the Velocity Synchronous Chirplet Transform. , 2020, , .		0
387	Graph modeling of singular values for early fault detection and diagnosis of rolling element bearings. Mechanical Systems and Signal Processing, 2020, 145, 106956.	4.4	34
388	Nonconvex Wavelet Thresholding Total Variation Denoising Method for Planetary Gearbox Fault Diagnosis. IEEE Access, 2020, 8, 78753-78763.	2.6	3
389	An unsupervised fault diagnosis method for rolling bearing using STFT and generative neural networks. Journal of the Franklin Institute, 2020, 357, 7286-7307.	1.9	191
390	A novel health indicator based on the Lyapunov exponent, a probabilistic self-organizing map, and the Gini-Simpson index for calculating the RUL of bearings. Measurement: Journal of the International Measurement Confederation, 2020, 164, 108002.	2.5	29
391	Transfer Learning Based Data Feature Transfer for Fault Diagnosis. IEEE Access, 2020, 8, 76120-76129.	2.6	35
392	Fault Diagnosis under Variable Working Conditions Based on STFT and Transfer Deep Residual Network. Shock and Vibration, 2020, 2020, 1-18.	0.3	13
393	Multicomponent signal analysis: Interwoven Fourier decomposition method. , 2020, 104, 102771.		10
394	Informative frequency band selection in the presence of non-Gaussian noise "a novel approach based on the conditional variance statistic with application to bearing fault diagnosis. Mechanical Systems and Signal Processing, 2020, 145, 106971.	4.4	54
395	Frequency-chirprate reassignment. , 2020, 104, 102783.		25
396	A parameter estimation method for time-frequency overlapped frequency hopping signals based on sparse linear regression and quadratic envelope optimization. International Journal of Communication Systems, 2020, 33, e4463.	1.6	5
397	Intelligent fault diagnosis method for rotating machinery based on vibration signal analysis and hybrid multi-object deep CNN. IET Science, Measurement and Technology, 2020, 14, 407-415.	0.9	13
398	A novel classification method based on ICGOA-KELM for fault diagnosis of rolling bearing. Applied Intelligence, 2020, 50, 2833-2847.	3.3	23
399	Research on a Novel Improved Adaptive Variational Mode Decomposition Method in Rotor Fault Diagnosis. Applied Sciences (Switzerland), 2020, 10, 1696.	1.3	39

#	ARTICLE	IF	CITATIONS
400	Fault Diagnosis in the Slipâ€“Frequency Plane of Induction Machines Working in Time-Varying Conditions. <i>Sensors</i> , 2020, 20, 3398.	2.1	13
401	Iterative nonlinear chirp mode decomposition: A Hilbert-Huang transform-like method in capturing intra-wave modulations of nonlinear responses. <i>Journal of Sound and Vibration</i> , 2020, 485, 115571.	2.1	21
402	Bearing fault diagnosis based on sparse representations using an improved OMP with adaptive Gabor sub-dictionaries. <i>ISA Transactions</i> , 2020, 106, 355-366.	3.1	22
403	Gearbox degradation assessment based on a sparse representation feature and Euclidean distance technique. <i>Australian Journal of Mechanical Engineering</i> , 2020, , 1-16.	1.5	2
404	Rope Tension Fault Diagnosis in Hoisting Systems Based on Vibration Signals Using EEMD, Improved Permutation Entropy, and PSO-SVM. <i>Entropy</i> , 2020, 22, 209.	1.1	25
406	Signal Processing Techniques of Circumferential Waves for Characterization of Bilaminated Cylindrical Shells. <i>Journal of Nondestructive Evaluation</i> , 2020, 39, 1.	1.1	4
407	Soft Computing in Condition Monitoring and Diagnostics of Electrical and Mechanical Systems. <i>Advances in Intelligent Systems and Computing</i> , 2020, , .	0.5	142
408	Structural damage diagnosis under varying environmental conditions with very limited measurements. <i>Journal of Intelligent Material Systems and Structures</i> , 2020, 31, 665-686.	1.4	11
409	A Novel Fault Diagnosis Approach for Rolling Bearing Based on High-Order Synchrosqueezing Transform and Detrended Fluctuation Analysis. <i>IEEE Access</i> , 2020, 8, 12533-12541.	2.6	28
410	A Bearing Fault Diagnosis Using a Support Vector Machine Optimised by the Self-Regulating Particle Swarm. <i>Shock and Vibration</i> , 2020, 2020, 1-11.	0.3	14
411	TF Entropy and RFE Based Diagnosis for Centrifugal Pumps Subject to the Limitation of Failure Samples. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2932.	1.3	4
412	Improving the Performance of Dynamic Ship Positioning Systems: A Review of Filtering and Estimation Techniques. <i>Journal of Marine Science and Engineering</i> , 2020, 8, 234.	1.2	6
413	Intelligent Fault Identification for Rolling Element Bearings in Impulsive Noise Environments Based on Cyclic Correntropy Spectra and LSSVM. <i>IEEE Access</i> , 2020, 8, 40925-40938.	2.6	12
414	Instantaneous Feature Extraction and Timeâ€“Frequency Representation of Rotor Purified Orbit Based on Voldâ€“Kalman Filter. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, 69, 7386-7397.	2.4	11
415	Selection of the Informative Frequency Band in a Bearing Fault Diagnosis in the Presence of Non-Gaussian Noiseâ€“Comparison of Recently Developed Methods. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2657.	1.3	41
416	Monitoring of Interfacial Debonding of Concrete Filled Pultrusion-GFRP Tubular Column Based on Piezoelectric Smart Aggregate and Wavelet Analysis. <i>Sensors</i> , 2020, 20, 2149.	2.1	10
417	Sparse Low-Rank Based Signal Analysis Method for Bearing Fault Feature Extraction. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2358.	1.3	3
418	Wind Turbine Blade Bearing Fault Diagnosis Under Fluctuating Speed Operations via Bayesian Augmented Lagrangian Analysis. <i>IEEE Transactions on Industrial Informatics</i> , 2021, 17, 4613-4623.	7.2	32

#	ARTICLE	IF	CITATIONS
419	Novel Machinery Monitoring Strategy Based on Time-Frequency Domain Similarity Measurement With Limited Labeled Data. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	2.4	15
420	Health monitoring of timber poles using time-frequency analysis techniques and stress wave propagation. Journal of Civil Structural Health Monitoring, 2021, 11, 85-103.	2.0	8
421	An adaptive variational mode decomposition based on sailfish optimization algorithm and Gini index for fault identification in rolling bearings. Measurement: Journal of the International Measurement Confederation, 2021, 173, 108514.	2.5	47
422	Local damage detection based on vibration data analysis in the presence of Gaussian and heavy-tailed impulsive noise. Measurement: Journal of the International Measurement Confederation, 2021, 169, 108400.	2.5	34
423	A hybrid of FEM simulations and generative adversarial networks to classify faults in rotor-bearing systems. ISA Transactions, 2021, 108, 356-366.	3.1	52
424	An EMD-based principal frequency analysis with applications to nonlinear mechanics. Mechanical Systems and Signal Processing, 2021, 150, 107300.	4.4	11
425	Fault diagnosis for rolling bearings under unknown time-varying speed conditions with sparse representation. Journal of Sound and Vibration, 2021, 494, 115854.	2.1	23
426	Sparse Representation Classification With Structured Dictionary Design Strategy for Rotating Machinery Fault Diagnosis. IEEE Access, 2021, 9, 10012-10024.	2.6	10
427	A multisynchrosqueezing-based high-resolution time-frequency analysis tool for the analysis of non-stationary signals. Journal of Sound and Vibration, 2021, 492, 115813.	2.1	37
428	Noise and vibrations in machine tools. CIRP Annals - Manufacturing Technology, 2021, 70, 611-633.	1.7	11
429	A novel time-frequency transform for broadband Lamb waves dispersion characteristics analysis. Structural Health Monitoring, 2021, 20, 3056-3074.	4.3	14
430	A Novel Deep Learning Framework Based RNN-SAE for Fault Detection of Electrical Gas Generator. IEEE Access, 2021, 9, 21433-21442.	2.6	32
431	Intelligent Fault Diagnosis of Aeroengine Sensors Using Improved Pattern Gradient Spectrum Entropy. International Journal of Aerospace Engineering, 2021, 2021, 1-20.	0.5	6
432	Fault Diagnosis of Rotating Machinery Based on Wasserstein Distance and Feature Selection. IEEE Transactions on Automation Science and Engineering, 2022, 19, 1997-2007.	3.4	11
433	Intelligent fault diagnosis of diesel engine via adaptive VMD-Rihaczek distribution and graph regularized bi-directional NMF. Measurement: Journal of the International Measurement Confederation, 2021, 172, 108823.	2.5	29
434	Blind source extraction based on EMD and temporal correlation for rolling element bearing fault diagnosis. Smart and Resilient Transportation, 2021, 3, 52-65.	1.6	14
435	Probabilistic Condition Monitoring of Azimuth Thrusters Based on Acceleration Measurements. Machines, 2021, 9, 39.	1.2	3
436	An Unsupervised Intelligent Fault Diagnosis System Based on Feature Transfer. Mathematical Problems in Engineering, 2021, 2021, 1-12.	0.6	3

#	ARTICLE	IF	CITATIONS
437	Early fault diagnosis of rolling bearings based on signal reconstruction through SDD-SVD and FWEO. Journal of Physics: Conference Series, 2021, 1820, 012069.	0.3	1
438	GMC sparse enhancement diagnostic method based on the tunable Q-factor wavelet transform for detecting faults in rotating machines. Measurement: Journal of the International Measurement Confederation, 2021, 174, 109001.	2.5	8
439	Optimal multi-kernel local fisher discriminant analysis for feature dimensionality reduction and fault diagnosis. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2021, 235, 1041-1056.	0.6	2
440	Bearing Fault Feature Extraction and Fault Diagnosis Method Based on Feature Fusion. Sensors, 2021, 21, 2524.	2.1	44
441	Root Crack Identification of Sun Gear in Planetary Gear System Combining Fault Dynamics with VMD Algorithm. Shock and Vibration, 2021, 2021, 1-24.	0.3	2
442	An end-to-end framework combining time-frequency expert knowledge and modified transformer networks for vibration signal classification. Expert Systems With Applications, 2021, 171, 114570.	4.4	22
443	Weak fault detection with a two-stage key frequency focusing model. ISA Transactions, 2022, 125, 384-399.	3.1	5
444	An advanced Wigner-Ville time-frequency analysis of Lamb wave signals based upon an autoregressive model for efficient damage inspection. Measurement Science and Technology, 2021, 32, 095601.	1.4	9
445	Modulation signal bispectrum with optimized wavelet packet denoising for rolling bearing fault diagnosis. Structural Health Monitoring, 2022, 21, 984-1011.	4.3	18
446	Using the Hilbert-Huang spectrum transformation to estimate soil lead concentration. Remote Sensing Letters, 2021, 12, 768-777.	0.6	1
448	Intelligent Fault Classification and Identification of Heat Exchange Station Based on Time-Series Analysis. , 2021, , .		0
449	An Improved Parameter-Adaptive Variational Mode Decomposition Method and Its Application in Fault Diagnosis of Rolling Bearings. Shock and Vibration, 2021, 2021, 1-26.	0.3	4
450	Industrial Process Diagnosis based on Information and Time Domain Models. , 2021, , .		1
451	Enhancing gearbox vibration signals under time-varying operating conditions by combining a whitening procedure and a synchronous processing method. Mechanical Systems and Signal Processing, 2021, 156, 107668.	4.4	22
452	Dependency measures for the diagnosis of local faults in application to the heavy-tailed vibration signal. Applied Acoustics, 2021, 178, 107974.	1.7	14
453	A time series model-based method for gear tooth crack detection and severity assessment under random speed variation. Mechanical Systems and Signal Processing, 2021, 156, 107605.	4.4	38
454	Fault Diagnosis for Rolling Bearings of a Freight Train under Limited Fault Data: Few-Shot Learning Method. Journal of Transportation Engineering Part A: Systems, 2021, 147, .	0.8	7
455	A frequency parameter calculator based on a phase difference method. Measurement: Journal of the International Measurement Confederation, 2021, 181, 109549.	2.5	1

#	ARTICLE	IF	CITATIONS
456	An integrated health condition detection method for rolling bearings using time-shift multi-scale amplitude-aware permutation entropy and uniform phase empirical mode decomposition. Measurement Science and Technology, 2021, 32, 125103.	1.4	6
457	Second-order synchroextracting wavelet transform for nonstationary signal analysis of rotating machinery. Signal Processing, 2021, 186, 108123.	2.1	22
458	Review and prospect of maintenance technology for traction system of high-speed train. Transportation Safety and Environment, 2021, 3, .	1.1	13
459	Metamodeling and On-Line Clustering for Loss-of-Flow Accident Precursors Identification in a Superconducting Magnet Cryogenic Cooling Circuit. Energies, 2021, 14, 5552.	1.6	1
460	Comprehensive review of tribometer dynamics-Cycle-based data analysis and visualization. Friction, 0, , 1.	3.4	3
461	Extracting the time-dependent resonances of a vehicle-bridge interacting system by wavelet synchrosqueezed transform. Structural Control and Health Monitoring, 2021, 28, e2833.	1.9	6
462	A Hybrid SVD-Based Denoising and Self-Adaptive TMSST for High-Speed Train Axle Bearing Fault Detection. Sensors, 2021, 21, 6025.	2.1	9
463	Longitudinal synchroextracting transform: A useful tool for characterizing signals with strong frequency modulation and application to machine fault diagnosis. Measurement: Journal of the International Measurement Confederation, 2021, 182, 109750.	2.5	8
464	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
465	Progress and Challenges in Physiological Artifacts™ Detection in Electroencephalographic Readings. Current Medical Imaging, 2021, 17, .	0.4	1
466	Classification of Design Methodologies to Minimize Vibrations in Gears and Bearings in the 21st Century: A Review. Machines, 2021, 9, 212.	1.2	3
467	Vibration Analysis for Machine Monitoring and Diagnosis: A Systematic Review. Shock and Vibration, 2021, 2021, 1-25.	0.3	30
468	OrbitNet: A new CNN model for automatic fault diagnostics of turbomachines. Applied Soft Computing Journal, 2021, 110, 107702.	4.1	21
469	An injected quantity estimation technique based on time-frequency analysis. Control Engineering Practice, 2021, 116, 104910.	3.2	9
470	Enhancement of adaptive mode decomposition via angular resampling for nonstationary signal analysis of rotating machinery: Principle and applications. Mechanical Systems and Signal Processing, 2021, 160, 107909.	4.4	17
471	A generalized stochastic resonance based instantaneous frequency estimation method under low SNR. Mechanical Systems and Signal Processing, 2022, 164, 108269.	4.4	8
472	Multiscale symbolic fuzzy entropy: An entropy denoising method for weak feature extraction of rotating machinery. Mechanical Systems and Signal Processing, 2022, 162, 108052.	4.4	66
473	Enhancement of time-frequency post-processing readability for nonstationary signal analysis of rotating machinery: Principle and validation. Mechanical Systems and Signal Processing, 2022, 163, 108145.	4.4	33

#	ARTICLE	IF	CITATIONS
474	Fault Diagnosis of Machines Using Deep Convolutional Beta-Variational Autoencoder. IEEE Transactions on Artificial Intelligence, 2022, 3, 287-296.	3.4	15
475	FaultNet: A Deep Convolutional Neural Network for Bearing Fault Classification. IEEE Access, 2021, 9, 25189-25199.	2.6	38
476	Feature Extraction in Time-Frequency Domain for Non-Stationary Data. SpringerBriefs in Applied Sciences and Technology, 2021, , 47-57.	0.2	1
477	A Model for Non-Stationary Time Series and its Applications in Filtering and Anomaly Detection. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	2.4	7
478	Time-Varying Parameter Identification of Bridges Subject to Moving Vehicles Using Ridge Extraction Based on Empirical Wavelet Transform. International Journal of Structural Stability and Dynamics, 2021, 21, 2150046.	1.5	21
479	Study for classification and recognition of radar emitter intra-pulse signals based on the energy cumulant of CWD. Journal of Ambient Intelligence and Humanized Computing, 2021, 12, 9809-9823.	3.3	3
480	Modified Protrugram Method for Damage Detection in Bearing Operating Under Impulsive Load. Applied Condition Monitoring, 2017, , 229-240.	0.4	1
481	Parametric Nonstationary Random Vibration Modeling with SHM Applications. , 2014, , 1-18.		1
482	Novel Machine Health Monitoring System. Advances in Intelligent Systems and Computing, 2019, , 461-468.	0.5	12
483	Soft Computing Methods and Its Applications in Condition Monitoring of DGSâ€™A Review. Advances in Intelligent Systems and Computing, 2020, , 189-204.	0.5	3
484	Deep learning for prognostics and health management: State of the art, challenges, and opportunities. Measurement: Journal of the International Measurement Confederation, 2020, 163, 107929.	2.5	145
485	A review on diagnostic and prognostic approaches for gears. Structural Health Monitoring, 2021, 20, 2853-2893.	4.3	30
486	Time-frequency analysis of seismic data using synchrosqueezing three parameter wavelet transform. , 2015, , .		1
487	Time-Frequency Analysis Method: Research and Prospect. Journal of Image and Signal Processing, 2018, 07, 24-35.	0.1	1
488	Piezoelectric impedance based damage detection in truss bridges based on time frequency ARMA model. Smart Structures and Systems, 2016, 18, 501-523.	1.9	30
489	Tool Condition Monitoring Using Spectral Subtraction Algorithm and Artificial Intelligence Methods in Milling Process. International Journal of Mechanical Engineering and Robotics Research, 2017, 6, 30-34.	0.7	9
490	Sparse Timeâ€™Frequency Representation for the Transient Signal Based on Low-Rank and Sparse Decomposition. , 2019, , .		1
491	Combination of principal component analysis and time-frequency representations of multichannel vibration data for gearbox fault detection. Journal of Vibroengineering, 2016, 18, 2167-2175.	0.5	36

#	ARTICLE	IF	CITATIONS
492	Energy weighting method and its application to fault diagnosis of rolling bearing. Journal of Vibroengineering, 2017, 19, 223-236.	0.5	5
493	A hydraulic fault diagnosis method based on sliding-window spectrum feature and deep belief network. Journal of Vibroengineering, 2017, 19, 4272-4284.	0.5	19
494	Gear fault feature extraction and classification of singular value decomposition based on Hilbert empirical wavelet transform. Journal of Vibroengineering, 2018, 20, 1603-1618.	0.5	13
495	An intelligent fault diagnosis method of rotating machinery based on deep neural networks and time-frequency analysis. Journal of Vibroengineering, 2018, 20, 2321-2335.	0.5	14
496	An intelligent fault diagnosis method of rotating machinery using L1-regularized sparse filtering. Journal of Vibroengineering, 2018, 20, 2839-2854.	0.5	11
497	An improved higher-order analytical energy operator with adaptive local iterative filtering for early fault diagnosis of bearings. Journal of Vibroengineering, 2020, 22, 67-82.	0.5	5
498	Bearing fault analysis using kurtosis and wavelet based multi-scale PCA. Vibroengineering PROCEDIA, 2019, 22, 36-40.	0.3	1
499	Advanced gas turbines health monitoring systems. Diagnostyka, 2018, 19, 77-87.	0.5	6
500	Industrial Bearing Fault Detection Using Time-Frequency Analysis. Engineering, Technology & Applied Science Research, 2018, 8, 3294-3299.	0.8	4
502	Mapping Relation between Contour Error Components of Crankshaft Pin Journal and Axis Position Control Error of Oscillating Grinding Machine. Sensors, 2021, 21, 6497.	2.1	0
503	Quantification of rattle noise generations from automotive compartments by variational mode decomposition. Journal of Sound and Vibration, 2022, 517, 116577.	2.1	7
504	Rolling Bearing Fault Diagnosis by Aperiodic Stochastic Resonance Under Variable Speed Conditions. Fluctuation and Noise Letters, 0, , .	1.0	0
505	Technology development and commercial applications of industrial fault diagnosis system: a review. International Journal of Advanced Manufacturing Technology, 2022, 118, 3497-3529.	1.5	15
506	Basic tools for vibration analysis with applications to predictive maintenance of rotating machines: an overview. International Journal of Advanced Manufacturing Technology, 2022, 118, 2883-2899.	1.5	19
507	Parametric Nonstationary Random Vibration Modeling with SHM Applications. , 2015, , 1834-1849.		0
508	Nonlinear dynamic model and vibration response of faulty outer and inner race rolling element bearings. Journal of Vibroengineering, 2016, 18, 3654-3667.	0.5	1
509	Fault Diagnosis and of Aero-Engine Hydraulic Pipeline Vibration Signals Based on Hilbert Huang Transforms. Journal of Aerospace Science and Technology, 2017, 05, 37-44.	0.1	0
510	Research on Fault Diagnosis of Rotating Machinery of Vehicle Transmission. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
511	Study of Planetary Gear Fault Diagnosis Based on Energy of LMD and BP Neural Network. , 2017, , .		0
512	Adaptive machinery fault diagnosis based on improved shift-invariant sparse coding. Journal of Vibroengineering, 2017, 19, 2497-2505.	0.5	3
513	Fault Diagnostic of Machines Under Variable Speed Operating Conditions Using Order Tracking and Novelty Detection. Applied Condition Monitoring, 2018, , 179-189.	0.4	0
514	A New Technique for Local Damage Detection Based on Statistical Properties of Vibration Signal. Applied Condition Monitoring, 2018, , 117-128.	0.4	0
515	A Non-intrusive IoT System for the Detection of Faults in Internal Combustion Engines. , 2018, , 338-358.		0
516	FEATURE EXTRACTION ENHANCEMENT BASED ON PARAMETERLESS EMPIRICAL WAVELET TRANSFORM: APPLICATION TO BEARING FAULT DIAGNOSIS. The International Conference on Applied Mechanics and Mechanical Engineering, 2018, 18, 1-19.	0.1	1
517	Bearing Fault Signature Extraction Under Time-Varying Speed Conditions Via Oscillatory Behavior-Based Signal Decomposition (Obsd). , 2018, , .		1
518	A novel classification method combining adaptive local iterative filtering with singular value decomposition for fault diagnosis. Journal of Vibroengineering, 2018, 20, 1355-1369.	0.5	0
520	Early fault diagnosis of bearing using empirical wavelet transform with energy entropy. , 2018, , .		0
521	Application of principal component analysis of time-frequency representation for gearbox fault detection. Vibroengineering PROCEDIA, 2018, 19, 82-85.	0.3	1
522	AN APPLICATION OF FUNCTIONAL DATA ANALYSIS TO LOCAL DAMAGE DETECTION. Statistics in Transition, 2019, 20, 131-151.	0.1	0
524	Continuous Leak Location in Gas-Filled Steel Pipe Based on Optimum Wavelet Analysis of Leak AE Signal. Journal of Testing and Evaluation, 2021, 49, 2531-2547.	0.4	1
525	Bearing Condition Monitoring based on the Indicator Generated in Time-frequency Domain. Proceedings of the Annual Conference of the Prognostics and Health Management Society Prognostics and Health Management Society Conference, 2019, 11, .	0.2	0
526	Rolling Bearings Fault Diagnosis Method Based on EWT Approximate Entropy and FCM Clustering. Lecture Notes in Electrical Engineering, 2020, , 67-78.	0.3	0
527	Fault diagnosis of rope tension in hoisting systems based on vibration signals. Vibroengineering PROCEDIA, 2020, 30, 49-54.	0.3	0
528	Development of an IoT based Wireless Condition Monitoring System. Journal of the Korean Society of Manufacturing Technology Engineers, 2020, 29, 331-338.	0.1	0
529	A TEO-based modified Laplacian of Gaussian filter to detect faults in rolling element bearing for variable rotational speed machine. IET Science, Measurement and Technology, 2021, 15, 193-203.	0.9	2
530	An Improved Viterbi Algorithm for Adaptive Instantaneous Angular Speed Estimation and Its Application Into the Machine Fault Diagnosis. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	2.4	7

#	ARTICLE	IF	CITATIONS
531	Intrinsic Mode Function Selection and Statistical Information Analysis for Bearing Ball Fault Detection. <i>Studies in Systems, Decision and Control</i> , 2020, , 111-135.	0.8	0
532	Multiscale Convolutional Neural Network for the Fault Diagnosis of Rolling Bearing. , 2021, , .		0
533	Fault diagnosis of rotating machines based on EEMD-MPE and GA-BP. <i>International Journal of Advanced Manufacturing Technology</i> , 2023, 124, 3911-3922.	1.5	6
534	Time- ϵ frequency synchroextracting transform. <i>IET Signal Processing</i> , 2022, 16, 117-131.	0.9	5
535	Fault Diagnosis Based on Batch-normalized Stacked Sparse Autoencoder. , 2020, , .		0
537	A health-adaptive time-scale representation (HTSR) embedded convolutional neural network for gearbox fault diagnostics. <i>Mechanical Systems and Signal Processing</i> , 2022, 167, 108575.	4.4	22
538	Radar Signal Separation Recognition Method based on Semantic Segmentation. , 2021, , .		1
539	The detection of bearing faults for induction motors by using vibration signals and machine learning. , 2021, , .		10
540	Rotating Machinery Diagnosing in Non-Stationary Conditions with Empirical Mode Decomposition-Based Wavelet Leaders Multifractal Spectra. <i>Sensors</i> , 2021, 21, 7677.	2.1	9
541	Parallel multi-fusion convolutional neural networks based fault diagnosis of rotating machinery under noisy environments. <i>ISA Transactions</i> , 2022, 128, 545-555.	3.1	20
542	Dynamic modelling of the gear system under non-stationary conditions using the iterative convergence of the tooth mesh stiffness. <i>Engineering Failure Analysis</i> , 2022, 131, 105908.	1.8	11
543	Multiple Frequency Modulation Components Detection and Decomposition for Rotary Machine Fault Diagnosis. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-10.	2.4	1
544	Generalized S-Synchroextracting Transform for Fault Diagnosis in Rolling Bearing. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-14.	2.4	9
545	Matching Synchroextracting Transform for Mechanical Fault Diagnosis Under Variable-Speed Conditions. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-12.	2.4	12
546	A Weak Fault Diagnosis Method Based on Sparsity Overlapping Group Lasso for Rolling Bearing. , 2020, , .		1
547	Review of Artificial Intelligence-based Bearing Vibration Monitoring. , 2020, , .		3
548	Radar Signal Separation and Recognition based on Semantic Segmentation. , 2020, , .		1
550	Health condition monitoring of bearings based on multifractal spectrum feature with modified empirical mode decomposition-multifractal detrended fluctuation analysis. <i>Structural Health Monitoring</i> , 2022, 21, 2618-2640.	4.3	13

#	ARTICLE	IF	CITATIONS
551	Clustering Application for Condition-Based Maintenance in Time-Varying Processes: A Review Using Latent Dirichlet Allocation. Applied Sciences (Switzerland), 2022, 12, 814.	1.3	6
552	Frequency-Domain Energy-Concentrated Synchrosqueezing Transform for Frequency-Varying Signal With Linear Group Delay. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-15.	2.4	4
553	A novel method for machine tool structure condition monitoring based on knowledge graph. International Journal of Advanced Manufacturing Technology, 2022, 120, 563-582.	1.5	8
554	Multi-lifting synchrosqueezing transform for nonstationary signal analysis of rotating machinery. Measurement: Journal of the International Measurement Confederation, 2022, 191, 110758.	2.5	9
555	Development of a Reliable Vibration Based Health Indicator for Monitoring the Lubricating Condition of the Toggle Clamping System of a Plastic Injection Molding Machine. Applied Sciences (Switzerland), 2022, 12, 196.	1.3	3
556	Faulty Bearing Signal Analysis With Empirical Morphological Undecimated Wavelet. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	2.4	7
557	Guided Wave Phase Velocity Dispersion Reconstruction Based on Enhanced Phased Spectrum Method. Materials, 2022, 15, 1614.	1.3	1
558	Analysis of Symmetrical and Unsymmetrical Faults Using the EEMD and Scale-Dependent Intrinsic Entropies. Fluctuation and Noise Letters, 0, , .	1.0	1
559	Rolling Bearing Weak Fault Feature Extraction under Variable Speed Conditions via Joint Sparsity and Low-Rankness in the Cyclic Order-Frequency Domain. Applied Sciences (Switzerland), 2022, 12, 2449.	1.3	6
560	Second-Order Multisynchrosqueezing Wavelet Transform for Bearing Fault Detection. Journal of Vibration Engineering and Technologies, 2022, 10, 1541-1559.	1.3	8
561	Proposal and Experimental Study on a Diagnosis Method for Hermetic Refrigeration Compressor Using Dual Time-Frequency Image Fusion. Applied Sciences (Switzerland), 2022, 12, 3033.	1.3	5
562	A novel method for diagnosing rolling bearing faults based on the frequency spectrum distribution of the modulation signal. Measurement Science and Technology, 2022, 33, 085003.	1.4	9
563	An effective centre frequency selection scheme based on variational mode extraction and its application to gear fault diagnosis. Insight: Non-Destructive Testing and Condition Monitoring, 2022, 64, 155-163.	0.3	2
564	Successive multivariate variational mode decomposition. Multidimensional Systems and Signal Processing, 2022, 33, 917-943.	1.7	6
565	Time-extracting S-transform algorithm and its application in rolling bearing fault diagnosis. Science China Technological Sciences, 2022, 65, 932-942.	2.0	11
566	Fault Diagnosis of Rolling Element Bearings Based on Adaptive Mode Extraction. Machines, 2022, 10, 260.	1.2	7
567	Tracking the location of bearing outer raceway defects using multidimensional synchronous signal fusion and tensor Rank-1 decomposition. Measurement: Journal of the International Measurement Confederation, 2022, 198, 111137.	2.5	3
568	High-order synchroextracting transform for characterizing signals with strong AM-FM features and its application in mechanical fault diagnosis. Mechanical Systems and Signal Processing, 2022, 172, 108959.	4.4	20

#	ARTICLE	IF	CITATIONS
569	Reduced features set neural network approach based on high-resolution time-frequency images for cardiac abnormality detection. <i>Computers in Biology and Medicine</i> , 2022, 145, 105425.	3.9	9
570	Analysis of the vibro-acoustic data from test rig -comparison of acoustic and vibrational methods. <i>IOP Conference Series: Earth and Environmental Science</i> , 2021, 942, 012017.	0.2	2
571	Sparse and low-rank decomposition of the time-frequency representation for bearing fault diagnosis under variable speed conditions. <i>ISA Transactions</i> , 2022, 128, 579-598.	3.1	21
572	An optimized variational mode decomposition method and its application in vibration signal analysis of bearings. <i>Structural Health Monitoring</i> , 2022, 21, 2386-2407.	4.3	11
573	Fault feature enhancement and diagnosis of rolling bearing based on complex network. , 2021, , .		0
574	CNN-Based Fault Detection for Smart Manufacturing. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 11732.	1.3	13
575	Dynamic health index extraction for incipient bearing degradation detection. <i>ISA Transactions</i> , 2022, 128, 535-549.	3.1	10
576	The Evolution of the Charge Transport Mechanism in Single-Molecule Break Junctions Revealed by Flicker Noise Analysis. <i>Small</i> , 2022, 18, e2107220.	5.2	9
578	A Comprehensive Review on Signal-Based and Model-Based Condition Monitoring of Wind Turbines: Fault Diagnosis and Lifetime Prognosis. <i>Proceedings of the IEEE</i> , 2022, 110, 754-806.	16.4	43
579	Research on Fault Diagnosis of Rolling Bearing Based on SEMSCNN and GRU Model. <i>Journal of Physics: Conference Series</i> , 2022, 2184, 012054.	0.3	1
580	Theoretical analysis and comparison of transient-extracting transform and time-reassigned synchrosqueezing transform. <i>Mechanical Systems and Signal Processing</i> , 2022, 178, 109190.	4.4	8
581	A Novel Fault Diagnosis Method of Rolling Bearing Based on Integrated Vision Transformer Model. <i>Sensors</i> , 2022, 22, 3878.	2.1	22
582	An efficient diagnosis approach for bearing faults using sound quality metrics. <i>Applied Acoustics</i> , 2022, 195, 108839.	1.7	28
583	Radar Signal Recognition under Impact Noise Based on Convolutional Neural Network. , 2021, , .		0
584	Fault Diagnosis of Rolling Bearings Using Dual-Tree Complex Wavelet Packet Transform and Time-Shifted Multiscale Range Entropy. <i>IEEE Access</i> , 2022, 10, 59308-59326.	2.6	5
585	Proportion-Extracting Chirplet Transform for Nonstationary Signal Analysis of Rotating Machinery. <i>IEEE Transactions on Industrial Informatics</i> , 2023, 19, 2674-2683.	7.2	6
586	Extremum center interpolation-based EMD approach for fault detection of reciprocating compressor. , 2022, , 109-122.		0
587	Deep subclass alignment transfer network based on time-frequency features for intelligent fault diagnosis of planetary gearboxes under time-varying speeds. <i>Measurement Science and Technology</i> , 2022, 33, 105010.	1.4	6

#	ARTICLE	IF	CITATIONS
588	A fault diagnosis method for the HIPPS of FPSO unit based on dynamic Bayesian network. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 0, , 1748006X2211093.	0.6	0
589	An Integration of Spectrum Analysis and Attention-based Network for Condition Monitoring of Vibration Components. , 2022, , .		1
590	A novel time-frequency model, analysis and parameter estimation approach: Towards multiple close and crossed chirp modes. Signal Processing, 2022, 201, 108692.	2.1	9
591	Photonic time-frequency filter based on the software-defined time-frequency prism. Optics Letters, 2022, 47, 3576.	1.7	0
592	An efficient deep convolutional neural network with features fusion for radar signal recognition. Multimedia Tools and Applications, 0, , .	2.6	1
593	Bearing multi-fault diagnosis with iterative generalized demodulation guided by enhanced rotational frequency matching under time-varying speed conditions. ISA Transactions, 2023, 133, 518-528.	3.1	28
594	Investigation of time-varying natural frequencies of high-rise buildings under harsh excitations using a high-resolution combined scheme. Journal of Building Engineering, 2022, 57, 104859.	1.6	1
595	An intelligent fault diagnosis for machine maintenance using weighted soft-voting rule based multi-attention module with multi-scale information fusion. Information Fusion, 2022, 86-87, 17-29.	11.7	20
596	Tool wear prediction using long short-term memory variants and hybrid feature selection techniques. International Journal of Advanced Manufacturing Technology, 2022, 121, 6611-6633.	1.5	13
597	Health Status Recognition of Rotating Machinery Based on Deep Residual Shrinkage Network Under Time-Varying Conditions. IEEE Sensors Journal, 2022, 22, 18332-18348.	2.4	13
598	Empirical wavelet decomposition and BIndex for early detection of bearing defects. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 0, , 1748006X2211147.	0.6	0
600	Wavelet Energy Evolution Characteristics of Acoustic Emission Signal under True-Triaxial Loading during the Rockburst Test. Applied Sciences (Switzerland), 2022, 12, 7786.	1.3	0
601	An automatic real-time cable modal frequency identification and tracking algorithm by combining recursive band-pass filter and recursive Hilbert transform. Mechanical Systems and Signal Processing, 2023, 183, 109614.	4.4	4
602	Reassignment-enable reweighted sparse time-frequency analysis for sparsity-assisted aeroengine rub-impact fault diagnosis. Mechanical Systems and Signal Processing, 2023, 183, 109602.	4.4	8
603	Partial Discharge Pattern Recognition Based on a Multifrequency Fâ€P Sensing Array, AOK Timeâ€Frequency Representation, and Deep Learning. IEEE Transactions on Dielectrics and Electrical Insulation, 2022, 29, 1701-1710.	1.8	5
604	Sparsity enforced timeâ€frequency decomposition in the Bayesian framework for bearing fault feature extraction under time-varying conditions. Mechanical Systems and Signal Processing, 2023, 185, 109755.	4.4	9
605	Classification of Mechanical Fault-Excited Events Based on Frequency. Communications in Computer and Information Science, 2022, , 380-392.	0.4	0
606	Demodulated Multisynchrosqueezing S Transform for Fault Diagnosis of Rotating Machinery. IEEE Sensors Journal, 2022, 22, 20773-20784.	2.4	5

#	ARTICLE	IF	CITATIONS
607	Adaptive Scaling Demodulation Transform: Algorithm and Applications. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	2.4	6
608	Vehicle Interior Noise Mechanism and Prediction. , 2023, , 5-62.		1
609	The recognition of multi-components signals based on semantic segmentation. Wireless Networks, 2023, 29, 147-160.	2.0	3
610	A New Fault Diagnosis Method for Unbalanced Data Based on 1DCNN and L2-SVM. Applied Sciences (Switzerland), 2022, 12, 9880.	1.3	5
611	Weak fault feature extraction of rolling bearing under strong poisson noise and variable speed conditions. Journal of Mechanical Science and Technology, 2022, 36, 5341-5351.	0.7	2
612	Application of Improved Robust Local Mean Decomposition and Multiple Disturbance Multi-Verse Optimizer-Based MCKD in the Diagnosis of Multiple Rolling Element Bearing Faults. Machines, 2022, 10, 883.	1.2	2
613	Scaling operator demodulation spectrum-based planetary gearbox fault diagnosis method under variable speed conditions. Structural Health Monitoring, 2023, 22, 2579-2596.	4.3	1
614	Logistic-ELM: a novel fault diagnosis method for rolling bearings. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2022, 44, .	0.8	2
615	Binomial adversarial representation learning for machinery fault feature extraction and diagnosis. Applied Soft Computing Journal, 2022, 131, 109772.	4.1	1
616	A non-linear time-frequency tool for machinery fault diagnosis under varying speed condition. Mechanical Systems and Signal Processing, 2023, 186, 109849.	4.4	8
617	Data-driven vibration signal filtering procedure based on the $\hat{1}\pm$ -stable distribution. Journal of Vibroengineering, 2016, 18, 826-837.	0.5	33
618	An Efficient Electrocardiogram R-peak Detection Exploiting Ensemble Empirical Mode Decomposition and Hilbert Transform. , 2022, , .		2
619	Deep Robust Autoencoder based Framework for Bearing Fault Detection. , 2022, , .		0
620	Enhanced feature extraction for machinery condition monitoring using recurrence plot and quantification measure. International Journal of Advanced Manufacturing Technology, 2022, 123, 3421-3436.	1.5	2
621	Fault Diagnosis of Rolling Bearing Under Variable Working Conditions Based on CWT and T-ResNet. Journal of Vibration Engineering and Technologies, 2023, 11, 3747-3757.	1.3	3
622	Fault detection of rotating machinery based on marine predator algorithm optimized resonance-based sparse signal decomposition and refined composite multiscale fluctuation dispersion entropy. Review of Scientific Instruments, 2022, 93, 114703.	0.6	1
623	Data-driven adaptive chirp mode decomposition with application to machine fault diagnosis under non-stationary conditions. Mechanical Systems and Signal Processing, 2023, 188, 109997.	4.4	7
624	IMPACT-BASED PIEZOELECTRIC ENERGY HARVESTING SYSTEM EXCITED FROM DIESEL ENGINE SUSPENSION. , 2020, 16, 16-29.		4

#	ARTICLE	IF	CITATIONS
625	A Structural Health Monitoring Technique for the Analysis of Big Data of Bridges. Lecture Notes in Civil Engineering, 2023, , 59-78.	0.3	5
626	Local maximum synchrosqueezes form scaling-basis chirplet transform. PLoS ONE, 2022, 17, e0278223.	1.1	1
627	Rolling Bearing Fault Monitoring for Sparse Time-Frequency Representation and Feature Detection Strategy. Entropy, 2022, 24, 1822.	1.1	2
628	Application of Mobile Mapping System to a Cable-Stayed Bridge in Thailand. Sensors, 2022, 22, 9625.	2.1	1
629	A Domain Adversarial Transfer Model with Inception and Attention Network for Rolling Bearing Fault Diagnosis Under Variable Operating Conditions. Journal of Vibration Engineering and Technologies, 2024, 12, 1-17.	1.3	1
630	Review on the Application of the Nonlinear Output Frequency Response Functions to Mechanical Fault Diagnosis. IEEE Transactions on Instrumentation and Measurement, 2023, 72, 1-12.	2.4	0
631	A novel method for bearing fault diagnosis based on BiLSTM neural networks. International Journal of Advanced Manufacturing Technology, 2023, 125, 1477-1492.	1.5	6
632	Adaptive synchroextracting transform and its application in bearing fault diagnosis. ISA Transactions, 2023, 137, 574-589.	3.1	5
633	Holo-hilbert square spectral analysis: A new fault diagnosis tool for rotating machinery health management. Mechanical Systems and Signal Processing, 2023, 189, 110069.	4.4	5
634	Root cause detection of leakage in check valves using multi-scale signal analysis. Journal of Mechanical Science and Technology, 2023, 37, 55-67.	0.7	1
635	Generalized Synchroextracting-Based Stepwise Demodulation Transform and Its Application to Fault Diagnosis of Rotating Machinery. IEEE Sensors Journal, 2023, 23, 5045-5060.	2.4	4
636	Intelligent Diesel Engine Fault Diagnosis Method Based on Time-Frequency-Nonconvex Robust Principal Component Analysis. , 2022, , .		1
637	Impulse Detection of Welded Joints of High-Speed Railway Turnout Based on Time-Frequency and Correlation Analyses. , 2022, , .		0
638	Adaptive synchronous demodulation transform with application to analyzing multicomponent signals for machinery fault diagnostics. Mechanical Systems and Signal Processing, 2023, 191, 110208.	4.4	18
639	Time-varying filtering for nonstationary signal analysis of rotating machinery: Principle and applications. Mechanical Systems and Signal Processing, 2023, 192, 110204.	4.4	7
640	Performance evaluation of LSTM and Bi-LSTM using non-convolutional features for blockage detection in centrifugal pump. Engineering Applications of Artificial Intelligence, 2023, 122, 106092.	4.3	12
641	Multi-fault diagnosis of Industrial Rotating Machines using Data-driven approach : A review of two decades of research. Engineering Applications of Artificial Intelligence, 2023, 123, 106139.	4.3	41
642	Fault Diagnosing of Cycloidal Gear Reducer Using Statistical Features of Vibration Signal and Multifractal Spectra. Sensors, 2023, 23, 1645.	2.1	4

#	ARTICLE	IF	CITATIONS
643	Weak signal enhancement for rolling bearing fault diagnosis based on adaptive optimized VMD and SR under strong noise background. Measurement Science and Technology, 2023, 34, 064001.	1.4	12
644	Bearing Fault Diagnostics Based on the Square of the Amplitude Gains Method. Applied Sciences (Switzerland), 2023, 13, 2160.	1.3	2
645	Condition Monitoring of Horizontal Sieving Screens—A Case Study of Inertial Vibrator Bearing Failure in Calcium Carbonate Production Plant. Materials, 2023, 16, 1533.	1.3	2
646	Advanced fault detection and diagnosis in spacecraft attitude control systems: Current state and challenges. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 0, , 095441002311571.	0.7	1
647	Optimal Complex Morlet Wavelet Parameters for Quantitative Time-Frequency Analysis of Molecular Vibration. Applied Sciences (Switzerland), 2023, 13, 2734.	1.3	2
648	Intelligent fault diagnosis of planetary gearboxes under time-varying conditions based on dynamic adversarial balance adaptation with multi-label information confusion. Measurement Science and Technology, 2023, 34, 065014.	1.4	1
649	Diesel Engine Fault Diagnosis Based on Block Compression Gray Level Co-occurrence Matrix. , 2022, , .		0
650	Acoustic-Based Rolling Bearing Fault Diagnosis Using a Co-Prime Circular Microphone Array. Sensors, 2023, 23, 3050.	2.1	1
651	Mechanical Fault Diagnosis With Noisy Multisource Signals via Unified Pinball Loss Intuitionistic Fuzzy Support Tensor Machine. IEEE Transactions on Industrial Informatics, 2024, 20, 62-72.	7.2	1
652	A Data-Driven Diagnosis and Prognosis method for Machinery Tools Based on EMD and Dual-Task Deep Neural Networks. , 2022, , .		0
653	Vibration-based fault diagnosis of dynamic rotating systems for real-time maintenance monitoring. International Journal of Advanced Manufacturing Technology, 2023, 126, 3283-3296.	1.5	3
654	A Bayesian Optimized Variational Mode Decomposition-Based Denoising Method for Measurement While Drilling Signal of Down-the-Hole Drilling. IEEE Transactions on Instrumentation and Measurement, 2023, 72, 1-14.	2.4	2
662	Intelligent Diagnostic System for the Sliding Bearing Unit. Lecture Notes in Networks and Systems, 2023, , 577-586.	0.5	0
664	Vibration Anomaly Indicator in UAVs in presence of Wind. , 2023, , .		1
665	Time-Domain Frequency Estimation Approach for Intelligent Control Systems. , 2023, , .		0
680	A New Time Frequency Based Indicator for Planet Gears Anisotropy in Planetary Gearbox. , 2023, , .		0
686	LPI Radar Signals Intra-Pulse Modulation Recognition Based on CA-ShuffleNet. , 2022, , .		0
693	Deep Learning based Time-Frequency Image Enhancement Method for Machinery Health Monitoring. , 2023, , .		1

#	ARTICLE	IF	CITATIONS
702	Implementation of Real-Time STFT for Mixed Domain Analyzer. , 2023, , .		0
704	Non-Negative Matrix Underapproximation as Optimal Frequency Band Selector. , 2023, , .		0
720	Identification of Unbalance in a Rotating System Using Artificial Neural Networks. Structural Integrity, 2024, , 311-326.	0.8	0
721	A New Unsupervised Feature Extraction Method for Fault Diagnosis of Machines. , 2023, , .		0