# Zhike Peng

#### List of Publications by Citations

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200 6,218 39 73 g-index

207 7,729 4.9 6.39 ext. papers ext. citations avg, IF L-index

| #   | Paper  | IF                | Citations |
|-----|--|-------------------|-----------|
| 200 | Application of the wavelet transform in machine condition monitoring and fault diagnostics: a review with bibliography. <i>Mechanical Systems and Signal Processing</i> , <b>2004</b> , 18, 199-221          | 7.8               | 755       |
| 199 | A comparison study of improved HilbertHuang transform and wavelet transform: Application to fault diagnosis for rolling bearing. <i>Mechanical Systems and Signal Processing</i> , <b>2005</b> , 19, 974-988 | 7.8               | 536       |
| 198 | Electrostatic pull-in instability in MEMS/NEMS: A review. <i>Sensors and Actuators A: Physical</i> , <b>2014</b> , 214, 187-218  | 3.9               | 339       |
| 197 | An improved Hilbert Huang transform and its application in vibration signal analysis. <i>Journal of Sound and Vibration</i> , <b>2005</b> , 286, 187-205   | 3.9               | 310       |
| 196 | Polynomial Chirplet Transform With Application to Instantaneous Frequency Estimation. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2011</b> , 60, 3222-3229                              | 5.2               | 144       |
| 195 | Nonlinear Chirp Mode Decomposition: A Variational Method. <i>IEEE Transactions on Signal Processing</i> , <b>2017</b> , 65, 6024-6037  | 4.8               | 120       |
| 194 | VIBRATION SIGNAL ANALYSIS AND FEATURE EXTRACTION BASED ON REASSIGNED WAVELET SCALOGRAM. <i>Journal of Sound and Vibration</i> , <b>2002</b> , 253, 1087-1100   | 3.9               | 119       |
| 193 | Theoretical study of the effects of nonlinear viscous damping on vibration isolation of sdof systems. <i>Journal of Sound and Vibration</i> , <b>2009</b> , 323, 352-365                                     | 3.9               | 110       |
| 192 | Crack detection using nonlinear output frequency response functions. <i>Journal of Sound and Vibration</i> , <b>2007</b> , 301, 777-788  | 3.9               | 108       |
| 191 | General Parameterized Time-Frequency Transform. <i>IEEE Transactions on Signal Processing</i> , <b>2014</b> , 62, 27   | 75 <u>1</u> 4-876 | 54103     |
| 190 | Detection of the rubbing-caused impacts for rotorEtator fault diagnosis using reassigned scalogram. <i>Mechanical Systems and Signal Processing</i> , <b>2005</b> , 19, 391-409                              | 7.8               | 89        |
| 189 | Separation of Overlapped Non-Stationary Signals by Ridge Path Regrouping and Intrinsic Chirp Component Decomposition. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 5994-6005                              | 4                 | 87        |
| 188 | Study of the effects of cubic nonlinear damping on vibration isolations using Harmonic Balance Method. <i>International Journal of Non-Linear Mechanics</i> , <b>2012</b> , 47, 1073-1080                    | 2.8               | 84        |
| 187 | Comparisons between harmonic balance and nonlinear output frequency response function in nonlinear system analysis. <i>Journal of Sound and Vibration</i> , <b>2008</b> , 311, 56-73                         | 3.9               | 83        |
| 186 | Parameterised time-frequency analysis methods and their engineering applications: A review of recent advances. <i>Mechanical Systems and Signal Processing</i> , <b>2019</b> , 119, 182-221                  | 7.8               | 79        |
| 185 | Spline-Kernelled Chirplet Transform for the Analysis of Signals With Time-Varying Frequency and Its Application. <i>IEEE Transactions on Industrial Electronics</i> , <b>2012</b> , 59, 1612-1621            | 8.9               | 73        |
| 184 | Stability analysis of a rotorBearing system with time-varying bearing stiffness due to finite number of balls and unbalanced force. <i>Journal of Sound and Vibration</i> , <b>2013</b> , 332, 6768-6784     | 3.9               | 67        |

# (2018-2017)

| 183 | Intrinsic chirp component decomposition by using Fourier Series representation. <i>Signal Processing</i> , <b>2017</b> , 137, 319-327  | 4.4                 | 66 |
|-----|--|---------------------|----|
| 182 | The sum of weighted normalized square envelope: A unified framework for kurtosis, negative entropy, Gini index and smoothness index for machine health monitoring. <i>Mechanical Systems and Signal Processing</i> , <b>2020</b> , 140, 106725 | 7.8                 | 66 |
| 181 | Adaptive chirp mode pursuit: Algorithm and applications. <i>Mechanical Systems and Signal Processing</i> , <b>2019</b> , 116, 566-584  | 7.8                 | 65 |
| 180 | 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> , <b>2019</b> , 440, 83-99  | 3.9                 | 65 |
| 179 | Multicomponent Signal Analysis Based on Polynomial Chirplet Transform. <i>IEEE Transactions on Industrial Electronics</i> , <b>2013</b> , 60, 3948-3956  | 8.9                 | 64 |
| 178 | Singularity analysis of the vibration signals by means of wavelet modulus maximal method. <i>Mechanical Systems and Signal Processing</i> , <b>2007</b> , 21, 780-794  | 7.8                 | 63 |
| 177 | Analysis and design of the force and displacement transmissibility of nonlinear viscous damper based vibration isolation systems. <i>Nonlinear Dynamics</i> , <b>2012</b> , 67, 2671-2687  | 5                   | 61 |
| 176 | Feasibility study of structural damage detection using NARMAX modelling and Nonlinear Output Frequency Response Function based analysis. <i>Mechanical Systems and Signal Processing</i> , <b>2011</b> , 25, 1045-                             | -1⁄0 <sup>8</sup> 1 | 60 |
| 175 | A broadband compressive-mode vibration energy harvester enhanced by magnetic force intervention approach. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 163904   | 3.4                 | 54 |
| 174 | On the energy leakage of discrete wavelet transform. <i>Mechanical Systems and Signal Processing</i> , <b>2009</b> , 23, 330-343   | 7.8                 | 54 |
| 173 | Characterize highly oscillating frequency modulation using generalized Warblet transform. <i>Mechanical Systems and Signal Processing</i> , <b>2012</b> , 26, 128-140  | 7.8                 | 53 |
| 172 | Tunable micro- and nanomechanical resonators. Sensors, 2015, 15, 26478-566   | 3.8                 | 53 |
| 171 | Vibration analysis of a cracked rotor using Hilbert⊞uang transform. <i>Mechanical Systems and Signal Processing</i> , <b>2007</b> , 21, 3030-3041  | 7.8                 | 53 |
| 170 | Component Extraction for Non-Stationary Multi-Component Signal Using Parameterized De-chirping and Band-Pass Filter. <i>IEEE Signal Processing Letters</i> , <b>2015</b> , 22, 1373-1377   | 3.2                 | 50 |
| 169 | Application of Parameterized Time-Frequency Analysis on Multicomponent Frequency Modulated Signals. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2014</b> , 63, 3169-3180  | 5.2                 | 46 |
| 168 | Resonances and resonant frequencies for a class of nonlinear systems. <i>Journal of Sound and Vibration</i> , <b>2007</b> , 300, 993-1014  | 3.9                 | 46 |
| 167 | Analysis of bilinear oscillators under harmonic loading using nonlinear output frequency response functions. <i>International Journal of Mechanical Sciences</i> , <b>2007</b> , 49, 1213-1225   | 5.5                 | 45 |
| 166 | The power performance of an offshore floating wind turbine in platform pitching motion. <i>Energy</i> , <b>2018</b> , 154, 508-521   | 7.9                 | 43 |

| 165 | Time-Varying Frequency-Modulated Component Extraction Based on Parameterized Demodulation and Singular Value Decomposition. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2016</b> , 65, 276-285     | 5.2  | 42 |
|-----|---|------|----|
| 164 | Influences of surge motion on the power and thrust characteristics of an offshore floating wind turbine. <i>Energy</i> , <b>2017</b> , 141, 2054-2068   | 7.9  | 41 |
| 163 | A Fast Rolling Soft Robot Driven by Dielectric Elastomer. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2018</b> , 23, 1630-1640   | 5.5  | 41 |
| 162 | A comprehensive dynamic model to investigate the stability problems of the rotorBearing system due to multiple excitations. <i>Mechanical Systems and Signal Processing</i> , <b>2016</b> , 70-71, 1171-1192            | 7.8  | 39 |
| 161 | A new nonlinear dynamic model of the rotor-bearing system considering preload and varying contact angle of the bearing. <i>Communications in Nonlinear Science and Numerical Simulation</i> , <b>2015</b> , 22, 821-841 | 3.7  | 39 |
| 160 | Y-type three-blade bluff body for wind energy harvesting. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 233903  | 3.4  | 39 |
| 159 | Application of support vector machine based on pattern spectrum entropy in fault diagnostics of rolling element bearings. <i>Measurement Science and Technology</i> , <b>2011</b> , 22, 045708                          | 2    | 37 |
| 158 | High-accuracy fault feature extraction for rolling bearings under time-varying speed conditions using an iterative envelope-tracking filter. <i>Journal of Sound and Vibration</i> , <b>2019</b> , 448, 211-229         | 3.9  | 36 |
| 157 | IDENTIFICATION OF THE SHAFT ORBIT FOR ROTATING MACHINES USING WAVELET MODULUS MAXIMA. <i>Mechanical Systems and Signal Processing</i> , <b>2002</b> , 16, 623-635   | 7.8  | 36 |
| 156 | Label-free manipulation via the magneto-Archimedes effect: fundamentals, methodology and applications. <i>Materials Horizons</i> , <b>2019</b> , 6, 1359-1379   | 14.4 | 35 |
| 155 | On the convergence of the Volterra-series representation of the Duffing & oscillators subjected to harmonic excitations. <i>Journal of Sound and Vibration</i> , <b>2007</b> , 305, 322-332                             | 3.9  | 35 |
| 154 | A novel approach for nonlinearity detection in vibrating systems. <i>Journal of Sound and Vibration</i> , <b>2008</b> , 314, 603-615  | 3.9  | 35 |
| 153 | A hybrid classification autoencoder for semi-supervised fault diagnosis in rotating machinery. <i>Mechanical Systems and Signal Processing</i> , <b>2021</b> , 149, 107327  | 7.8  | 35 |
| 152 | Numerical analysis of cracked beams using nonlinear output frequency response functions. <i>Computers and Structures</i> , <b>2008</b> , 86, 1809-1818  | 4.5  | 34 |
| 151 | Accurate and Robust Displacement Measurement for FMCW Radar Vibration Monitoring. <i>IEEE Sensors Journal</i> , <b>2018</b> , 18, 1131-1139   | 4    | 31 |
| 150 | Effect of surface layer thickness on buckling and vibration of nonlocal nanowires. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2014</b> , 378, 650-654                              | 2.3  | 31 |
| 149 | Accurate Measurement in Doppler Radar Vital Sign Detection Based on Parameterized Demodulation. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2017</b> , 65, 4483-4492                               | 4.1  | 30 |
| 148 | Fork-shaped bluff body for enhancing the performance of galloping-based wind energy harvester. <i>Energy</i> , <b>2019</b> , 183, 92-105  | 7.9  | 29 |

# (2018-2011)

| 147 | The force transmissibility of MDOF structures with a non-linear viscous damping device. <i>International Journal of Non-Linear Mechanics</i> , <b>2011</b> , 46, 1305-1314   | 2.8  | 27 |  |
|-----|--|------|----|--|
| 146 | The effects of nonlinearity on the output frequency response of a passive engine mount. <i>Journal of Sound and Vibration</i> , <b>2008</b> , 318, 313-328   | 3.9  | 27 |  |
| 145 | Performance enhancement of wind energy harvester utilizing wake flow induced by double upstream flat-plates. <i>Applied Energy</i> , <b>2020</b> , 257, 114034   | 10.7 | 26 |  |
| 144 | Dynamics of suspended microchannel resonators conveying opposite internal fluid flow: Stability, frequency shift and energy dissipation. <i>Journal of Sound and Vibration</i> , <b>2016</b> , 368, 103-120        | 3.9  | 25 |  |
| 143 | Non-linear output frequency response functions for multi-input non-linear Volterra systems. <i>International Journal of Control</i> , <b>2007</b> , 80, 843-855  | 1.5  | 25 |  |
| 142 | Frequency-varying group delay estimation using frequency domain polynomial chirplet transform. <i>Mechanical Systems and Signal Processing</i> , <b>2014</b> , 46, 146-162   | 7.8  | 24 |  |
| 141 | Power fluctuation and power loss of wind turbines due to wind shear and tower shadow. <i>Frontiers of Mechanical Engineering</i> , <b>2017</b> , 12, 321-332   | 3.3  | 23 |  |
| 140 | On the power coefficient overshoot of an offshore floating wind turbine in surge oscillations. <i>Wind Energy</i> , <b>2018</b> , 21, 1076-1091  | 3.4  | 23 |  |
| 139 | Chirplet Path Fusion for the Analysis of Time-Varying Frequency-Modulated Signals. <i>IEEE Transactions on Industrial Electronics</i> , <b>2017</b> , 64, 1370-1380  | 8.9  | 23 |  |
| 138 | The Transmissibility of Vibration Isolators With a Nonlinear Antisymmetric Damping Characteristic. <i>Journal of Vibration and Acoustics, Transactions of the ASME, 2010</i> , 132,                                | 1.6  | 22 |  |
| 137 | Non-linear output frequency response functions of MDOF systems with multiple non-linear components. <i>International Journal of Non-Linear Mechanics</i> , <b>2007</b> , 42, 941-958                               | 2.8  | 22 |  |
| 136 | Nonlinear parameter estimation for multi-degree-of-freedom nonlinear systems using nonlinear output frequency-response functions. <i>Mechanical Systems and Signal Processing</i> , <b>2008</b> , 22, 1582-1594    | 7.8  | 22 |  |
| 135 | Warped Variational Mode Decomposition With Application to Vibration Signals of Varying-Speed Rotating Machineries. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2019</b> , 68, 2755-2767       | 5.2  | 22 |  |
| 134 | Box-Cox sparse measures: A new family of sparse measures constructed from kurtosis and negative entropy. <i>Mechanical Systems and Signal Processing</i> , <b>2021</b> , 160, 107930                               | 7.8  | 22 |  |
| 133 | Correlation dimension and approximate entropy for machine condition monitoring: Revisited. <i>Mechanical Systems and Signal Processing</i> , <b>2021</b> , 152, 107497   | 7.8  | 21 |  |
| 132 | Arbitrary-directional broadband vibration energy harvesting using magnetically coupled flextensional transducers. <i>Smart Materials and Structures</i> , <b>2018</b> , 27, 095010                                 | 3.4  | 20 |  |
| 131 | Enhanced directional acoustic sensing with phononic crystal cavity resonance. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 261902   | 3.4  | 20 |  |
| 130 | Vision-Based Measurement System for Instantaneous Rotational Speed Monitoring Using Linearly Varying-Density Fringe Pattern. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2018</b> , 67, 1434- | 1445 | 19 |  |

| 129 | Wavelet basis expansion-based Volterra kernel function identification through multilevel excitations. <i>Nonlinear Dynamics</i> , <b>2014</b> , 76, 985-999   | 5   | 19 |
|-----|---|-----|----|
| 128 | Rub-Impact Fault Diagnosis of Rotating Machinery Based on 1-D Convolutional Neural Networks. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 8349-8363  | 4   | 19 |
| 127 | Aerodynamic and aeroelastic characteristics of flexible wind turbine blades under periodic unsteady inflows. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , <b>2020</b> , 197, 104057                   | 3.7 | 19 |
| 126 | Detecting the Early Damages in Structures With Nonlinear Output Frequency Response Functions and the CNN-LSTM Model. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2020</b> , 69, 9557-9567            | 5.2 | 19 |
| 125 | A numerical study on the angle of attack to the blade of a horizontal-axis offshore floating wind turbine under static and dynamic yawed conditions. <i>Energy</i> , <b>2019</b> , 168, 1138-1156                         | 7.9 | 19 |
| 124 | Vision-based system for simultaneous monitoring of shaft rotational speed and axial vibration using non-projection composite fringe pattern. <i>Mechanical Systems and Signal Processing</i> , <b>2019</b> , 120, 765-776 | 7.8 | 18 |
| 123 | Detecting the position of non-linear component in periodic structures from the system responses to dual sinusoidal excitations. <i>International Journal of Non-Linear Mechanics</i> , <b>2007</b> , 42, 1074-1083        | 2.8 | 18 |
| 122 | Design of fuzzy controller for smart structures using genetic algorithms. <i>Smart Materials and Structures</i> , <b>2003</b> , 12, 979-986   | 3.4 | 18 |
| 121 | Differential Enhancement Method for Robust and Accurate Heart Rate Monitoring via Microwave Vital Sign Sensing. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2020</b> , 69, 7108-7118                 | 5.2 | 17 |
| 120 | Time <b>f</b> requency data fusion technique with application to vibration signal analysis. <i>Mechanical Systems and Signal Processing</i> , <b>2012</b> , 29, 164-173   | 7.8 | 17 |
| 119 | Linear parameter estimation for multi-degree-of-freedom nonlinear systems using nonlinear output frequency-response functions. <i>Mechanical Systems and Signal Processing</i> , <b>2007</b> , 21, 3108-3122              | 7.8 | 17 |
| 118 | Fully interpretable neural network for locating resonance frequency bands for machine condition monitoring. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 168, 108673                                   | 7.8 | 17 |
| 117 | Flexible dynamic modeling and analysis of drive train for Offshore Floating Wind Turbine. <i>Renewable Energy</i> , <b>2020</b> , 145, 1292-1305  | 8.1 | 17 |
| 116 | Nonlinear time-varying vibration system identification using parametric timefrequency transform with spline kernel. <i>Nonlinear Dynamics</i> , <b>2016</b> , 85, 1679-1694   | 5   | 16 |
| 115 | Multisegment annular dielectric elastomer actuators for soft robots. <i>Smart Materials and Structures</i> , <b>2018</b> , 27, 115024   | 3.4 | 16 |
| 114 | Proposal for the Realization of a Single-Detector Acoustic Camera Using a Space-Coiling Anisotropic Metamaterial. <i>Physical Review Applied</i> , <b>2019</b> , 11,  | 4.3 | 15 |
| 113 | Doppler Frequency Estimation by Parameterized Time-Frequency Transform and Phase Compensation Technique. <i>IEEE Sensors Journal</i> , <b>2018</b> , 18, 3734-3744  | 4   | 15 |
| 112 | Steady-state response of a geared rotor system with slant cracked shaft and time-varying mesh stiffness. <i>Communications in Nonlinear Science and Numerical Simulation</i> , <b>2014</b> , 19, 1156-1174                | 3.7 | 15 |

| 111 | Liquid repellency enhancement through flexible microstructures. <i>Science Advances</i> , <b>2020</b> , 6, eaba9721   | 14.3 | 15 |
|-----|---|------|----|
| 110 | Adaptive Weighted Signal Preprocessing Technique for Machine Health Monitoring. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2021</b> , 70, 1-11  | 5.2  | 15 |
| 109 | Generalized dispersive mode decomposition: Algorithm and applications. <i>Journal of Sound and Vibration</i> , <b>2021</b> , 492, 115800  | 3.9  | 14 |
| 108 | Randomized resonant metamaterials for single-sensor identification of elastic vibrations. <i>Nature Communications</i> , <b>2020</b> , 11, 2353   | 17.4 | 13 |
| 107 | Nonstationary Signal Denoising Using an Envelope-Tracking Filter. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2018</b> , 23, 2004-2015   | 5.5  | 13 |
| 106 | Time-Varying Envelope Filtering for Exhibiting Space Bearing Cage Fault Features. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2021</b> , 70, 1-13  | 5.2  | 13 |
| 105 | A scale independent flexible bearing health monitoring index based on time frequency manifold energy & entropy. <i>Measurement Science and Technology</i> , <b>2020</b> , 31, 114003  | 2    | 12 |
| 104 | Design approaches of performance-scaled rotor for wave basin model tests of floating wind turbines. <i>Renewable Energy</i> , <b>2020</b> , 148, 573-584  | 8.1  | 12 |
| 103 | A Comparison of Machine Health Indicators Based on the Impulsiveness of Vibration Signals. <i>Acoustics Australia</i> , <b>2021</b> , 49, 199-206   | 1.4  | 12 |
| 102 | Theoretical and Experimental Investigations on Spectral Lp/Lq Norm Ratio and Spectral Gini Index for Rotating Machine Health Monitoring. <i>IEEE Transactions on Automation Science and Engineering</i> , <b>2021</b> , 18, 1074-1086 | 4.9  | 12 |
| 101 | Tunable rotating-mode density measurement using magnetic levitation. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 142408   | 3.4  | 11 |
| 100 | Slip flow and heat transfer in microbearings with fractal surface topographies. <i>International Journal of Heat and Mass Transfer</i> , <b>2012</b> , 55, 7223-7233  | 4.9  | 11 |
| 99  | A centrifugal magnetic levitation approach for high-reliability density measurement. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 287, 64-70  | 8.5  | 11 |
| 98  | Gaseous slip flow in micro-bearings with random rough surface. <i>International Journal of Mechanical Sciences</i> , <b>2013</b> , 68, 105-113  | 5.5  | 10 |
| 97  | Scale Effect on Tension-Induced Intermodal Coupling in Nanomechanical Resonators. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , <b>2015</b> , 137,  | 1.6  | 10 |
| 96  | Wavelet basis expansion-based spatio-temporal Volterra kernels identification for nonlinear distributed parameter systems. <i>Nonlinear Dynamics</i> , <b>2014</b> , 78, 1179-1192  | 5    | 10 |
| 95  | Feature Extraction for Damage Detection in Structures Based on Nonlinearity Analysis. <i>Key Engineering Materials</i> , <b>2009</b> , 413-414, 627-634   | 0.4  | 10 |
| 94  | Stiffness-mass-coding metamaterial with broadband tunability for low-frequency vibration isolation. <i>Journal of Sound and Vibration</i> , <b>2020</b> , 489, 115685   | 3.9  | 10 |

| 93 | Wind shear effect induced by the platform pitch motion of a spar-type floating wind turbine. <i>Renewable Energy</i> , <b>2019</b> , 135, 1186-1199  | 8.1 | 10 |
|----|--|-----|----|
| 92 | Measurement of instantaneous rotational speed using double-sine-varying-density fringe pattern. <i>Mechanical Systems and Signal Processing</i> , <b>2018</b> , 103, 117-130   | 7.8 | 9  |
| 91 | Static clutter elimination for frequency-modulated continuous-wave radar displacement measurement based on phasor offset compensation. <i>Electronics Letters</i> , <b>2017</b> , 53, 1491-1493  | 1.1 | 9  |
| 90 | Generalized Gini indices: Complementary sparsity measures to Box-Cox sparsity measures for machine condition monitoring. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 169, 108751   | 7.8 | 9  |
| 89 | Effect of random surface topography on the gaseous flow in microtubes with an extended slip model. <i>Microfluidics and Nanofluidics</i> , <b>2015</b> , 18, 897-910   | 2.8 | 8  |
| 88 | 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> , <b>2020</b> , 485, 115571  | 3.9 | 8  |
| 87 | Frequency-domain intrinsic component decomposition for multimodal signals with nonlinear group delays. <i>Signal Processing</i> , <b>2019</b> , 154, 57-63   | 4.4 | 8  |
| 86 | Analysis of Locally Nonlinear MDOF Systems Using Nonlinear Output Frequency Response Functions. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , <b>2009</b> , 131,   | 1.6 | 8  |
| 85 | An Interpretable Denoising Layer for Neural Networks Based on Reproducing Kernel Hilbert Space and its Application in Machine Fault Diagnosis. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , <b>2021</b> , 34,  | 2.5 | 8  |
| 84 | Adsorption-Induced Surface Effects on the Dynamical Characteristics of Micromechanical Resonant Sensors for In Situ Real-Time Detection. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2016</b> , 83,  | 2.7 | 8  |
| 83 | Nonlinear Dynamic Analysis of Atomic Force Microscopy Under Bounded Noise Parametric Excitation. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2011</b> , 16, 1063-1072   | 5.5 | 7  |
| 82 | The Nonlinear Output Frequency Response Functions of One-Dimensional Chain Type Structures. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2010</b> , 77,   | 2.7 | 7  |
| 81 | Parametric Identification of Nonlinear Vibration Systems Via Polynomial Chirplet Transform. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , <b>2016</b> , 138,   | 1.6 | 7  |
| 80 | An Effective Accuracy Evaluation Method for LFMCW Radar Displacement Monitoring With Phasor Statistical Analysis. <i>IEEE Sensors Journal</i> , <b>2019</b> , 19, 12224-12234  | 4   | 7  |
| 79 | Gini Indices II and III: Two New Sparsity Measures and Their Applications to Machine Condition Monitoring. <i>IEEE/ASME Transactions on Mechatronics</i> , <b>2021</b> , 1-1   | 5.5 | 7  |
| 78 | Component isolation for multi-component signal analysis using a non-parametric gaussian latent feature model. <i>Mechanical Systems and Signal Processing</i> , <b>2018</b> , 103, 368-380   | 7.8 | 7  |
| 77 | Variational nonlinear component decomposition for fault diagnosis of planetary gearboxes under variable speed conditions. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 162, 108016  | 7.8 | 7  |
| 76 | Three-Dimensional Printed Surfaces Inspired by Bi-Gaussian Stratified Plateaus. <i>ACS Applied Materials &amp; Discourt Americals (Control of the Control of the C</i> | 9.5 | 6  |

# (2018-2019)

| 75 | Bioinspired Variable Stiffness Dielectric Elastomer Actuators with Large and Tunable Load Capacity. <i>Soft Robotics</i> , <b>2019</b> , 6, 631-643   | 9.2 | 6 |
|----|---|-----|---|
| 74 | Bi-Gaussian Stratified Wetting Model on Rough Surfaces. <i>Langmuir</i> , <b>2019</b> , 35, 5967-5974   | 4   | 6 |
| 73 | Asymmetry bistability for a coupled dielectric elastomer minimum energy structure. <i>Smart Materials and Structures</i> , <b>2016</b> , 25, 115023   | 3.4 | 6 |
| 72 | Finite Volume Modeling of Gas Flow in Microbearings with Rough Surface Topography. <i>Tribology Transactions</i> , <b>2016</b> , 59, 99-107   | 1.8 | 6 |
| 71 | Modal identification of multi-degree-of-freedom structures based on intrinsic chirp component decomposition method. <i>Applied Mathematics and Mechanics (English Edition)</i> , <b>2019</b> , 40, 1741-1758    | 3.2 | 6 |
| 70 | Droplet manipulation of hierarchical steel surfaces using femtosecond laser fabrication. <i>Applied Surface Science</i> , <b>2020</b> , 521, 146474   | 6.7 | 6 |
| 69 | Self-Compensating Liquid-Repellent Surfaces with Stratified Morphology. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2020</b> , 12, 4174-4182  | 9.5 | 6 |
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| 18 | Dynamic Degradation Quantification of Wind Turbine High Speed Shaft Bearing Based on Oscillation Based Sparsity Indices. <i>Journal of Physics: Conference Series</i> , <b>2021</b> , 1880, 012013         | 0.3                                 | 1               |
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| 6  | Stimuli-responsive metamaterials with information-driven elastodynamics programming. <i>Matter</i> , <b>2022</b> , 5, 988-1003   | 12.7                                | O               |
| 5  | Two-level variational chirp component decomposition for capturing intrinsic frequency modulation modes of planetary gearboxes. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 177, 109182 | 7.8                                 | O               |
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#### LIST OF PUBLICATIONS

| 3 | Movel sparse representation degradation modeling for locating informative frequency bands for Machine performance degradation assessment. <i>Mechanical Systems and Signal Processing</i> , <b>2022</b> , 179, 109372 | 7.8 | O |
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