

# Andrew Ball

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

2,187  
citations

257429

24  
h-index

223791

46  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1789  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of numerical analysis of friction stir welding. <i>Progress in Materials Science</i> , 2014, 65, 1-66.	32.8	386
2	An approach to fault diagnosis of reciprocating compressor valves using Teager's Kaiser energy operator and deep belief networks. <i>Expert Systems With Applications</i> , 2014, 41, 4113-4122.	7.6	327
3	A review on online state of charge and state of health estimation for lithium-ion batteries in electric vehicles. <i>Energy Reports</i> , 2021, 7, 5141-5161.	5.1	166
4	Mechanical properties of extensible die clinched joints in titanium sheet materials. <i>Materials &amp; Design</i> , 2015, 71, 26-35.	5.1	89
5	Gear wear monitoring by modulation signal bispectrum based on motor current signal analysis. <i>Mechanical Systems and Signal Processing</i> , 2017, 94, 202-213.	8.0	86
6	Response analysis of an accelerating unbalanced rotating system with both random and interval variables. <i>Journal of Sound and Vibration</i> , 2020, 466, 115047.	3.9	75
7	Modelling acoustic emissions generated by sliding friction. <i>Wear</i> , 2010, 268, 811-815.	3.1	69
8	Emission Characteristics of a CI Engine Running with a Range of Biodiesel Feedstocks. <i>Energies</i> , 2014, 7, 334-350.	3.1	65
9	Self-piercing riveting of similar and dissimilar metal sheets of aluminum alloy and copper alloy. <i>Materials &amp; Design</i> , 2015, 65, 923-933.	5.1	63
10	Helical gear wear monitoring: Modelling and experimental validation. <i>Mechanism and Machine Theory</i> , 2017, 117, 210-229.	4.5	59
11	Influence of sheet thickness on fatigue behavior and fretting of self-piercing riveted joints in aluminum alloy 5052. <i>Materials and Design</i> , 2015, 87, 1010-1017.	7.0	58
12	Autocorrelated Envelopes for early fault detection of rolling bearings. <i>Mechanical Systems and Signal Processing</i> , 2021, 146, 106990.	8.0	52
13	Vibration characteristics and condition monitoring of internal radial clearance within a ball bearing in a gear-shaft-bearing system. <i>Mechanical Systems and Signal Processing</i> , 2022, 165, 108280.	8.0	48
14	Self-piercing riveting of similar and dissimilar titanium sheet materials. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 80, 2105-2115.	3.0	45
15	Fault detection for planetary gearbox based on an enhanced average filter and modulation signal bispectrum analysis. <i>ISA Transactions</i> , 2020, 101, 408-420.	5.7	45
16	Vibration Characteristics of Rolling Element Bearings with Different Radial Clearances for Condition Monitoring of Wind Turbine. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4731.	2.5	37
17	Numerical and experimental investigations of self-piercing riveting. <i>International Journal of Advanced Manufacturing Technology</i> , 2013, 69, 715-721.	3.0	36
18	Modelling, Testing and Analysis of a Regenerative Hydraulic Shock Absorber System. <i>Energies</i> , 2016, 9, 386.	3.1	34

#	ARTICLE	IF	CITATIONS
19	Self-piercing riveting of aluminium–lithium alloy sheet materials. <i>Journal of Materials Processing Technology</i> , 2019, 268, 192-200.	6.3	32
20	Fretting behavior of self-piercing riveted joints in titanium sheet materials. <i>Journal of Materials Processing Technology</i> , 2017, 249, 246-254.	6.3	31
21	Influence of heat treatment on fatigue performances for self-piercing riveting similar and dissimilar titanium, aluminium and copper alloys. <i>Materials and Design</i> , 2016, 97, 108-117.	7.0	29
22	Single and combined fault diagnosis of reciprocating compressor valves using a hybrid deep belief network. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2018, 232, 3767-3780.	2.1	28
23	Gear Wear Process Monitoring Using a Sideband Estimator Based on Modulation Signal Bispectrum. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 274.	2.5	27
24	Early Fault Diagnosis for Planetary Gearbox Based Wavelet Packet Energy and Modulation Signal Bispectrum Analysis. <i>Sensors</i> , 2018, 18, 2908.	3.8	26
25	Diesel Engine Valve Clearance Detection Using Acoustic Emission. <i>Advances in Mechanical Engineering</i> , 2010, 2, 495741.	1.6	26
26	A Performance Evaluation of Two Bispectrum Analysis Methods Applied to Electrical Current Signals for Monitoring Induction Motor-Driven Systems. <i>Energies</i> , 2019, 12, 1438.	3.1	23
27	A Normalized Frequency-Domain Energy Operator for Broken Rotor Bar Fault Diagnosis. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021, 70, 1-10.	4.7	19
28	The influence of rolling bearing clearances on diagnostic signatures based on a numerical simulation and experimental evaluation. <i>International Journal of Hydromechatronics</i> , 2018, 1, 16.	2.3	18
29	Modulation Sideband Separation Using the Teager–Kaiser Energy Operator for Rotor Fault Diagnostics of Induction Motors. <i>Energies</i> , 2019, 12, 4437.	3.1	16
30	Object-Based Thermal Image Segmentation for Fault Diagnosis of Reciprocating Compressors. <i>Sensors</i> , 2020, 20, 3436.	3.8	15
31	Modelling Acoustic Emissions induced by dynamic fluid-asperity shearing in hydrodynamic lubrication regime. <i>Tribology International</i> , 2021, 153, 106590.	5.9	15
32	Vibration health monitoring of rolling bearings under variable speed conditions by novel demodulation technique. <i>Structural Control and Health Monitoring</i> , 2021, 28, e2672.	4.0	15
33	Effect of foam copper interlayer on the mechanical properties and fretting wear of sandwich clinched joints. <i>Journal of Materials Processing Technology</i> , 2019, 274, 116285.	6.3	14
34	Novel Higher-Order Spectral Cross-Correlation Technologies for Vibration Sensor-Based Diagnosis of Gearboxes. <i>Sensors</i> , 2020, 20, 5131.	3.8	14
35	Extraction of the largest amplitude impact transients for diagnosing rolling element defects in bearings. <i>Mechanical Systems and Signal Processing</i> , 2019, 116, 796-815.	8.0	12
36	Dynamic Modeling and Structural Optimization of a Bistable Electromagnetic Vibration Energy Harvester. <i>Energies</i> , 2019, 12, 2410.	3.1	12

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37	Numerical Modelling of Vibration Responses of Helical Gears under Progressive Tooth Wear for Condition Monitoring. <i>Mathematics</i> , 2021, 9, 213.	2.2	12
38	An Investigation into the Acoustic Emissions of Internal Combustion Engines with Modelling and Wavelet Package Analysis for Monitoring Lubrication Conditions. <i>Energies</i> , 2019, 12, 640.	3.1	10
39	Novel Method for Vibration Sensor-Based Instantaneous Defect Frequency Estimation for Rolling Bearings Under Non-Stationary Conditions. <i>Sensors</i> , 2020, 20, 5201.	3.8	10
40	Model Based IAS Analysis for Fault Detection and Diagnosis of IC Engine Powertrains. <i>Energies</i> , 2020, 13, 565.	3.1	8
41	Novel Instantaneous Wavelet Bicoherence for Vibration Fault Detection in Gear Systems. <i>Energies</i> , 2021, 14, 6811.	3.1	8
42	Effects of Bounded Uncertainties on the Dynamic Characteristics of an Overhung Rotor System with Rubbing Fault. <i>Energies</i> , 2019, 12, 4365.	3.1	7
43	Novel Fault Identification for Electromechanical Systems via Spectral Technique and Electrical Data Processing. <i>Electronics (Switzerland)</i> , 2020, 9, 1560.	3.1	6
44	Novel Prediction of Diagnosis Effectiveness for Adaptation of the Spectral Kurtosis Technology to Varying Operating Conditions. <i>Sensors</i> , 2021, 21, 6913.	3.8	6
45	Analysis of nonlinear vibration energy harvesters using a complex dynamic frequency method. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2020, 64, 1555-1562.	0.6	4
46	Autocorrelation Ensemble Average of Larger Amplitude Impact Transients for the Fault Diagnosis of Rolling Element Bearings. <i>Energies</i> , 2019, 12, 4740.	3.1	3
47	The Investigation into the Tribological Impact of Alternative Fuels on Engines Based on Acoustic Emission. <i>Energies</i> , 2021, 14, 2315.	3.1	1
48	Fault Diagnosis of Reciprocating Compressors Based on Thermal Imaging and Support Vector Machines. <i>Mechanisms and Machine Science</i> , 2021, , 206-216.	0.5	0
49	Dynamic Models for Local Faults on Rolling Element Bearings: A Review. <i>Mechanisms and Machine Science</i> , 2021, , 217-227.	0.5	0
50	Investigation of Spur Gear Dynamics with Gear Mesh Impacts Induced by Tooth Wear. <i>Journal of Physics: Conference Series</i> , 2022, 2184, 012039.	0.4	0