

Tielin Shi

List of Publications by Year in descending order

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Version: 2024-02-01

96
papers

1,952
citations

236925

25
h-index

276875

41
g-index

98
all docs

98
docs citations

98
times ranked

1748
citing authors

#	ARTICLE	IF	CITATIONS
1	A level set solution to the stress-based structural shape and topology optimization. Computers and Structures, 2012, 90-91, 55-64.	4.4	167
2	Stress-based topology optimization using bi-directional evolutionary structural optimization method. Computer Methods in Applied Mechanics and Engineering, 2018, 333, 356-370.	6.6	135
3	Dual recycling channel decision in retailer oriented closed-loop supply chain for construction machinery remanufacturing. Journal of Cleaner Production, 2016, 137, 1393-1405.	9.3	126
4	A numerical investigation in effects of inlet pressure fluctuations on the flow and cavitation characteristics inside water hydraulic poppet valves. International Journal of Heat and Mass Transfer, 2016, 103, 684-700.	4.8	73
5	Design of Cu nanoaggregates composed of ultra-small Cu nanoparticles for Cu-Cu thermocompression bonding. Journal of Alloys and Compounds, 2019, 772, 793-800.	5.5	66
6	Leaf Vein-Inspired Hierarchical Wedge-Shaped Tracks on Flexible Substrate for Enhanced Directional Water Collection. ACS Applied Materials & Interfaces, 2018, 10, 44815-44824.	8.0	64
7	A novel approach for flip chip solder joint inspection based on pulsed phase thermography. NDT and E International, 2011, 44, 484-489.	3.7	58
8	Evolutionary topology optimization of continuum structures with stress constraints. Structural and Multidisciplinary Optimization, 2019, 59, 647-658.	3.5	52
9	Research on tool wear prediction based on temperature signals and deep learning. Wear, 2021, 478-479, 203902.	3.1	52
10	All low-temperature processed carbon-based planar heterojunction perovskite solar cells employing Mg-doped rutile TiO ₂ as electron transport layer. Electrochimica Acta, 2018, 283, 1115-1124.	5.2	46
11	Cu(OH) ₂ nanowires/graphene oxide composites based QCM humidity sensor with fast-response for real-time respiration monitoring. Sensors and Actuators B: Chemical, 2020, 304, 127313.	7.8	45
12	Using Wavelet Packet Transform for Surface Roughness Evaluation and Texture Extraction. Sensors, 2017, 17, 933.	3.8	44
13	Real-time tool wear monitoring using thin-film thermocouple. Journal of Materials Processing Technology, 2021, 288, 116901.	6.3	43
14	Superhydrophilic Cu(OH) ₂ nanowire-based QCM transducer with self-healing ability for humidity detection. Journal of Materials Chemistry A, 2019, 7, 9068-9077.	10.3	42
15	Using BP network for ultrasonic inspection of flip chip solder joints. Mechanical Systems and Signal Processing, 2013, 34, 183-190.	8.0	40
16	A Novel End-To-End Fault Diagnosis Approach for Rolling Bearings by Integrating Wavelet Packet Transform into Convolutional Neural Network Structures. Sensors, 2020, 20, 4965.	3.8	40
17	Depressing of Cu Cu bonding temperature by composting Cu nanoparticle paste with Ag nanoparticles. Journal of Alloys and Compounds, 2017, 709, 700-707.	5.5	39
18	Efficient and stable inverted planar perovskite solar cells using dopant-free CuPc as hole transport layer. Electrochimica Acta, 2018, 273, 273-281.	5.2	38

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19	Detection of Micro Solder Balls Using Active Thermography Technology and K-Means Algorithm. IEEE Transactions on Industrial Informatics, 2018, 14, 5620-5628.	11.3	35
20	Nondestructive diagnosis of flip chips based on vibration analysis using PCA-RBF. Mechanical Systems and Signal Processing, 2017, 85, 849-856.	8.0	34
21	A hybrid assembly sequence planning approach based on discrete particle swarm optimization and evolutionary direction operation. International Journal of Advanced Manufacturing Technology, 2013, 68, 617-630.	3.0	33
22	Temperature monitoring of the tool-chip interface for PCBN tools using built-in thin-film thermocouples in turning of titanium alloy. Journal of Materials Processing Technology, 2020, 275, 116376.	6.3	32
23	A novel ResNet-based model structure and its applications in machine health monitoring. JVC/Journal of Vibration and Control, 2021, 27, 1036-1050.	2.6	30
24	In situ measurement of cutting edge temperature in turning using a near-infrared fiber-optic two-color pyrometer. Measurement: Journal of the International Measurement Confederation, 2020, 156, 107595.	5.0	29
25	MS-SSPCANet: A powerful deep learning framework for tool wear prediction. Robotics and Computer-Integrated Manufacturing, 2022, 78, 102391.	9.9	28
26	Molecular dynamics simulation of the melting behavior of copper nanorod. Computational Materials Science, 2018, 143, 248-254.	3.0	26
27	Multi-frequency-band deep CNN model for tool wear prediction. Measurement Science and Technology, 2021, 32, 065009.	2.6	25
28	Fault diagnosis of rolling bearings based on Marginal Fisher analysis. JVC/Journal of Vibration and Control, 2014, 20, 470-480.	2.6	24
29	Spiral tool path generation method in a NURBS parameter space for the ultra-precision diamond turning of freeform surfaces. Journal of Manufacturing Processes, 2020, 60, 340-355.	5.9	24
30	A modal interval based method for dynamic decision model considering uncertain quality of used products in remanufacturing. Journal of Intelligent Manufacturing, 2018, 29, 925-935.	7.3	23
31	Multiband Envelope Spectra Extraction for Fault Diagnosis of Rolling Element Bearings. Sensors, 2018, 18, 1466.	3.8	22
32	Fault diagnosis of a rolling bearing based on the wavelet packet transform and a deep residual network with lightweight multi-branch structure. Measurement Science and Technology, 2021, 32, 085106.	2.6	22
33	Triple Recycling Channel Strategies for Remanufacturing of Construction Machinery in a Retailer-Dominated Closed-Loop Supply Chain. Sustainability, 2017, 9, 2167.	3.2	21
34	Defect Inspection of Flip Chip Solder Bumps Using an Ultrasonic Transducer. Sensors, 2013, 13, 16281-16291.	3.8	20
35	Optimization of through silicon via for three-dimensional integration. Microelectronic Engineering, 2015, 139, 31-38.	2.4	20
36	A kinematic calibration method based on the product of exponentials formula for serial robot using position measurements. Robotica, 2015, 33, 1295-1313.	1.9	18

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37	Weighted Kernel Entropy Component Analysis for Fault Diagnosis of Rolling Bearings. <i>Sensors</i> , 2017, 17, 625.	3.8	15
38	Inline Measurement of Particle Concentrations in Multicomponent Suspensions using Ultrasonic Sensor and Least Squares Support Vector Machines. <i>Sensors</i> , 2015, 15, 24109-24124.	3.8	13
39	Dynamic modeling and analysis of load sharing characteristics of wind turbine gearbox. <i>Advances in Mechanical Engineering</i> , 2015, 7, 168781401557596.	1.6	13
40	Dual attention dense convolutional network for intelligent fault diagnosis of spindle-rolling bearings. <i>JVC/Journal of Vibration and Control</i> , 2021, 27, 2403-2419.	2.6	13
41	Using supervised kernel entropy component analysis for fault diagnosis of rolling bearings. <i>JVC/Journal of Vibration and Control</i> , 2017, 23, 2167-2178.	2.6	12
42	A narrowband envelope spectra fusion method for fault diagnosis of rolling element bearings. <i>Measurement Science and Technology</i> , 2018, 29, 125106.	2.6	12
43	Ultrafast Self-Assembly MoS ₂ /Cu(OH) ₂ Nanowires for Highly Sensitive Gamut Humidity Detection with an Enhanced Self-Recovery Ability. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 46368-46378.	8.0	12
44	Enhanced deep residual network with multilevel correlation information for fault diagnosis of rotating machinery. <i>JVC/Journal of Vibration and Control</i> , 2021, 27, 1713-1723.	2.6	12
45	EnvelopeNet: A robust convolutional neural network with optimal kernels for intelligent fault diagnosis of rolling bearings. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 180, 109563.	5.0	12
46	Microscopic Three-Dimensional Measurement Based on Telecentric Stereo and Speckle Projection Methods. <i>Sensors</i> , 2018, 18, 3882.	3.8	11
47	An evolutionary design approach to shell-infill structures. <i>Additive Manufacturing</i> , 2020, 34, 101382.	3.0	11
48	A new approach to identify geometric errors directly from the surface topography of workpiece in ultra-precision machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 106, 5159-5173.	3.0	11
49	A thermomechanical constitutive model for investigating the fatigue behavior of Sn-rich solder under thermal cycle loading. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2022, 45, 1953-1968.	3.4	11
50	A statistical distribution recalibration method of soft labels to improve domain adaptation for cross-location and cross-machine fault diagnosis. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 182, 109754.	5.0	10
51	Numerical analysis and experimental investigation of modal properties for the gearbox in wind turbine. <i>Frontiers of Mechanical Engineering</i> , 2016, 11, 388-402.	4.3	9
52	Using convolutional neural network for intelligent SAM inspection of flip chips. <i>Measurement Science and Technology</i> , 2021, 32, 115022.	2.6	9
53	Freeform surface topography model for ultraprecision turning under the influence of various errors. <i>Journal of Manufacturing Processes</i> , 2021, 71, 429-449.	5.9	9
54	Metamaterials mapped lightweight structures by principal stress lines and topology optimization: Methodology, additive manufacturing, ductile failure and tests. <i>Materials and Design</i> , 2021, 212, 110192.	7.0	9

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55	Numerical solution, simulation and testing of the thermal dynamic characteristics of ball-screws. <i>Frontiers of Mechanical Engineering in China</i> , 2008, 3, 28-36.	0.4	7
56	New method of fault diagnosis of rotating machinery based on distance of information entropy. <i>Frontiers of Mechanical Engineering</i> , 2011, 6, 249.	4.3	7
57	Class-information-incorporated kernel entropy component analysis with application to bearing fault diagnosis. <i>JVC/Journal of Vibration and Control</i> , 2021, 27, 543-555.	2.6	7
58	Molecular Understanding of Electrochemical-Mechanical Responses in Carbon-Coated Silicon Nanotubes during Lithiation. <i>Nanomaterials</i> , 2021, 11, 564.	4.1	7
59	Multi-objective genetic algorithms based structural optimization and experimental investigation of the planet carrier in wind turbine gearbox. <i>Frontiers of Mechanical Engineering</i> , 2014, 9, 354-367.	4.3	6
60	Sparse Reconstruction for Micro Defect Detection in Acoustic Micro Imaging. <i>Sensors</i> , 2016, 16, 1773.	3.8	6
61	Reliable and Efficient Phosphor-in-Glass-Based Chip-Scale Packaging for High-Power White LEDs. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 4473-4477.	3.0	6
62	A numerical investigation of the effects of blade's geometric parameters on the power consumption of the twin-blade planetary mixer. <i>Advances in Mechanical Engineering</i> , 2016, 8, 168781401667212.	1.6	5
63	Robust, fractal theory, and FEM-based temperature field analysis for machine tool spindle. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 111, 1571-1586.	3.0	5
64	Contact heat transfer analysis between mechanical surfaces based on reverse engineering and FEM. <i>Tribology International</i> , 2021, 161, 107097.	5.9	5
65	Calibration of telecentric cameras with an improved projection model. <i>Optical Engineering</i> , 2018, 57, 1.	1.0	5
66	Length scale control schemes for bi-directional evolutionary structural optimization method. <i>International Journal for Numerical Methods in Engineering</i> , 2022, 123, 755-773.	2.8	5
67	Characterization of fluid mixing in a closed container under horizontal vibrations. <i>Canadian Journal of Chemical Engineering</i> , 2019, 97, 1931-1938.	1.7	4
68	A novel semi-supervised generative adversarial network based on the actor-critic algorithm for compound fault recognition. <i>Neural Computing and Applications</i> , 2022, 34, 10787-10805.	5.6	4
69	Data Analysis Method for MEMS Dynamic Characterization Based on Stroboscopic Interferometer System. , 2007, , .		3
70	Suspended integration of pyrolytic carbon membrane on C-MEMS. <i>Microsystem Technologies</i> , 2015, 21, 1835-1841.	2.0	3
71	Real-time tool condition monitoring method based on in situ temperature measurement and artificial neural network in turning. <i>Frontiers of Mechanical Engineering</i> , 2022, 17, 1.	4.3	3
72	Extracting gear fault features using integrated bispectrum. , 0, , .		2

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73	Low temperature direct bonding for hermetic wafer level packaging. , 2009, , .		2
74	Molecular dynamics simulation of the tensile mechanical behaviors of axial torsional copper nanorod. Journal of Nanoparticle Research, 2019, 21, 1.	1.9	2
75	A Study on Multivariable Optimization in Precision Manufacturing Using MOPSONNS. International Journal of Precision Engineering and Manufacturing, 2020, 21, 2011-2026.	2.2	2
76	Feature selection and condition monitoring of earbo sings m. , 0, , .		1
77	Measurement System for MEMS Dynamics Characterization with Environmental Control Facility. , 2006, , .		1
78	Surface Activated Prebonding in Local Laser Bonding of Silicon and Glass. , 2007, , .		1
79	Blind Separation of Frequency Overlapped Sources Based on Constrained Non-Negative Matrix Factorization. , 2007, , .		1
80	Theory analysis and system identification methods on thermal dynamics characteristics of ballscrews. Frontiers of Mechanical Engineering in China, 2008, 3, 408-415.	0.4	1
81	Analysis of influence factors on microscale laser shock processing in FEM simulation. , 2008, , .		1
82	Axial motion of flat belt induced by angular misalignment of rollers. , 2009, , .		1
83	Wet chemical etching silicon wafer with low-reflection and super-hydrophobicity. , 2011, , .		1
84	A clamped punch-loaded blister test for adhesion: a lumped parameter model and the bending-to-stretching behavior. Journal of Adhesion Science and Technology, 2015, 29, 1733-1744.	2.6	1
85	Ultrasonic characterization of aqueous mixture comprising insoluble and soluble substances with temperature compensation. Chemometrics and Intelligent Laboratory Systems, 2016, 159, 12-19.	3.5	1
86	A novel pattern printing method of applying Ag nanoparticles to Cu pads for high density Cu-Cu interconnection. , 2019, , .		1
87	A Novel Bearing Health Prognostic Method Based on Time-frequency Analysis and LSTM. , 2019, , .		1
88	Patterning Ag nanoparticles by selective wetting for fine size Cu-Ag-Cu bonding. Nanotechnology, 2020, 31, 355302.	2.6	1
89	Deep residual network for enhanced fault diagnosis of rotating machinery. Journal of Physics: Conference Series, 2020, 1707, 012010.	0.4	1
90	Experimental and Numerical Investigation of Micromachining by Laser-induced Electrochemical Process. , 2006, , .		0

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91	UV Enhanced low temperature wafer direct bonding and interface quality test. , 2007, , .		0
92	Improved adhesion between C-MEMS and substrate by micromechanical interlocking. , 2009, , .		0
93	Bulk synthesis of long silicon nitride nanowires on silicon wafer. , 2011, , .		0
94	Pyrolysis-assisted graphene exfoliation from graphite particles deposited on photoresist pillars. , 2012, , .		0
95	Counter botnet activities in the Netherlands a study on organisation and effectiveness. , 2013, , .		0
96	Compound fault recognition based on wavelet packet transform and the transferable combination of ResNet50 and multi-label classifier. , 2021, , .		0