Hyunjae Kim

List of Publications by Year
in descending order

60	1,871	304743	265206
papers	citations	22 h-index	42 g-index

62	62	62	1661
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Physics-of-Failure, Condition Monitoring, and Prognostics of Insulated Gate Bipolar Transistor Modules: A Review. IEEE Transactions on Power Electronics, 2015, 30, 2413-2426.	7.9	400
2	Adaptive-sparse polynomial chaos expansion for reliability analysis and design of complex engineering systems. Structural and Multidisciplinary Optimization, 2011, 43, 419-442.	3.5	147
3	A comprehensive survey on topology optimization of phononic crystals. Structural and Multidisciplinary Optimization, 2016, 54, 1315-1344.	3.5	112
4	A comprehensive review of artificial intelligence-based approaches for rolling element bearing PHM: shallow and deep learning. JMST Advances, 2019, 1, 125-151.	1.9	97
5	Copula-Based Statistical Health Grade System Against Mechanical Faults of Power Transformers. IEEE Transactions on Power Delivery, 2012, 27, 1809-1819.	4.3	91
6	Review of statistical model calibration and validationâ€"from the perspective of uncertainty structures. Structural and Multidisciplinary Optimization, 2019, 60, 1619-1644.	3.5	59
7	Elastic wave localization and harvesting using double defect modes of a phononic crystal. Journal of Applied Physics, 2020, 127, .	2.5	57
8	Model-Based Fault Diagnosis of a Planetary Gear: A Novel Approach Using Transmission Error. IEEE Transactions on Reliability, 2016, 65, 1830-1841.	4.6	52
9	A New Parameter Repurposing Method for Parameter Transfer With Small Dataset and Its Application in Fault Diagnosis of Rolling Element Bearings. IEEE Access, 2019, 7, 46917-46930.	4.2	52
10	A comparative study of probability estimation methods for reliability analysis. Structural and Multidisciplinary Optimization, 2012, 45, 33-52.	3.5	47
11	A Framework for Prognostics and Health Management Applications toward Smart Manufacturing Systems. International Journal of Precision Engineering and Manufacturing - Green Technology, 2018, 5, 535-554.	4.9	44
12	Hierarchical model calibration for designing piezoelectric energy harvester in the presence of variability in material properties and geometry. Structural and Multidisciplinary Optimization, 2016, 53, 161-173.	3.5	37
13	Asymmetric inter-intra domain alignments (AIIDA) method for intelligent fault diagnosis of rotating machinery. Reliability Engineering and System Safety, 2022, 218, 108186.	8.9	37
14	An Energy conversion model for cantilevered piezoelectric vibration energy harvesters using only measurable parameters. International Journal of Precision Engineering and Manufacturing - Green Technology, 2015, 2, 51-57.	4.9	34
15	Appropriate Smart Factory for SMEs: Concept, Application and Perspective. International Journal of Precision Engineering and Manufacturing, 2021, 22, 201-215.	2.2	34
16	A Domain Adaptation with Semantic Clustering (DASC) method for fault diagnosis of rotating machinery. ISA Transactions, 2022, 120, 372-382.	5.7	32
17	A framework of model validation and virtual product qualification with limited experimental data based on statistical inference. Structural and Multidisciplinary Optimization, 2015, 51, 573-583.	3.5	30
18	Toothwise Fault Identification for a Planetary Gearbox Based on a Health Data Map. IEEE Transactions on Industrial Electronics, 2018, 65, 5903-5912.	7.9	27

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19	An Omnidirectional Biomechanical Energy Harvesting (OBEH) Sidewalk Block for a Self-Generative Power Grid in a Smart City. International Journal of Precision Engineering and Manufacturing - Green Technology, 2018, 5, 507-517.	4.9	26
20	Double defects-induced elastic wave coupling and energy localization in a phononic crystal. Nano Convergence, 2021, 8, 27.	12.1	25
21	A Phononic Crystal with Differently Configured Double Defects for Broadband Elastic Wave Energy Localization and Harvesting. Crystals, 2021, 11, 643.	2.2	24
22	An Online-Applicable Model for Predicting Health Degradation of PEM Fuel Cells With Root Cause Analysis. IEEE Transactions on Industrial Electronics, 2016, 63, 7094-7103.	7.9	23
23	A health-adaptive time-scale representation (HTSR) embedded convolutional neural network for gearbox fault diagnostics. Mechanical Systems and Signal Processing, 2022, 167, 108575.	8.0	22
24	A statistical characterization method for damping material properties and its application to structural-acoustic system design. Journal of Mechanical Science and Technology, 2011, 25, 1893-1904.	1.5	21
25	A probabilistic detectability-based sensor network design method for system health monitoring and prognostics. Journal of Intelligent Material Systems and Structures, 2015, 26, 1079-1090.	2.5	19
26	An adaptive dimension decomposition and reselection method for reliability analysis. Structural and Multidisciplinary Optimization, 2013, 47, 423-440.	3.5	17
27	Intelligent Steam Power Plant Boiler Waterwall Tube Leakage Detection via Machine Learning-Based Optimal Sensor Selection. Sensors, 2020, 20, 6356.	3.8	17
28	Optimal Sensor Placement Considering Both Sensor Faults Under Uncertainty and Sensor Clustering for Vibration-Based Damage Detection. Structural and Multidisciplinary Optimization, 2022, 65, 1.	3.5	17
29	An efficient decoupled sensitivity analysis method for multiscale concurrent topology optimization problems. Structural and Multidisciplinary Optimization, 2018, 58, 445-457.	3.5	15
30	A deep transferable motion-adaptive fault detection method for industrial robots using a residualâ€“convolutional neural network. ISA Transactions, 2022, 128, 521-534.	5.7	15
31	Topology optimization for phononic band gap maximization considering a target driving frequency. JMST Advances, 2019, 1, 153-159.	1.9	14
32	A robust and convex metric for unconstrained optimization in statistical model calibrationâ€”probability residual (PR). Structural and Multidisciplinary Optimization, 2019, 60, 1171-1187.	3.5	14
33	Industrial issues and solutions to statistical model improvement: a case study of an automobile steering column. Structural and Multidisciplinary Optimization, 2020, 61, 1739-1756.	3.5	14
34	Random field modeling with insufficient field data for probability analysis and design. Structural and Multidisciplinary Optimization, 2015, 51, 599-611.	3.5	13
35	Autonomous health management for PMSM rail vehicles through demagnetization monitoring and prognosis control. ISA Transactions, 2018, 72, 245-255.	5.7	13
36	Model-Based Fault Detection Method for Coil Burnout in Solenoid Valves Subjected to Dynamic Thermal Loading. IEEE Access, 2020, 8, 70387-70400.	4.2	13

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37	Machining quality monitoring (MQM) in laser-assisted micro-milling of glass using cutting force signals: an image-based deep transfer learning. Journal of Intelligent Manufacturing, 2022, 33, 1813-1828.	7.3	13
38	An adaptive hybrid expansion method (AHEM) for efficient structural topology optimization under harmonic excitation. Structural and Multidisciplinary Optimization, 2020, 61, 895-921.	3.5	12
39	Learning from even a weak teacher: Bridging rule-based Duval method and a deep neural network for power transformer fault diagnosis. International Journal of Electrical Power and Energy Systems, 2022, 136, 107619.	5.5	12
40	Random Field Characterization Considering Statistical Dependence for Probability Analysis and Design. Journal of Mechanical Design, Transactions of the ASME, 2010, 132, .	2.9	11
41	Semi-supervised learning with co-training for data-driven prognostics. , 2012, , .		11
42	A Feature Inherited Hierarchical Convolutional Neural Network (FI-HCNN) for Motor Fault Severity Estimation Using Stator Current Signals. International Journal of Precision Engineering and Manufacturing - Green Technology, 2021, 8, 1253-1266.	4.9	10
43	Designing a phononic crystal with a defect for target frequency matching using an analytical approach. Mechanics of Advanced Materials and Structures, 2022, 29, 2454-2467.	2.6	9
44	A systematic approach for model refinement considering blind and recognized uncertainties in engineered product development. Structural and Multidisciplinary Optimization, 2016, 54, 1527-1541.	3.5	8
45	Probabilistic Lifetime Prediction of Electronic Packages Using Advanced Uncertainty Propagation Analysis and Model Calibration. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 238-248.	2.5	8
46	Sequential optimization and uncertainty propagation method for efficient optimization-based model calibration. Structural and Multidisciplinary Optimization, 2019, 60, 1355-1372.	3.5	8
47	Online thermal state estimation of high power lithium-ion battery. , 2015, , .		6
48	Uncertainty characterization under measurement errors using maximum likelihood estimation: cantilever beam end-to-end UQ test problem. Structural and Multidisciplinary Optimization, 2019, 59, 323-333.	3.5	6
49	Predictive carbon nanotube models using the eigenvector dimension reduction (EDR) method. Journal of Mechanical Science and Technology, 2012, 26, 1089-1097.	1.5	5
50	Vibration-based robust health diagnostics for mechanical failure modes of power transformers. , 2013, , .		5
51	A degenerated equivalent circuit model and hybrid prediction for state-of-health (SOH) of PEM fuel cell. , 2014, , .		5
52	Optimal vibration image size determination for convolutional neural network based fluid-film rotor-bearing system diagnosis. Journal of Mechanical Science and Technology, 2020, 34, 1467-1474.	1.5	5
53	Identifiability-based model decomposition for hierarchical calibration. Structural and Multidisciplinary Optimization, 2019, 60, 1801-1811.	3.5	4
54	A comparative study of statistical validation metrics with consideration of variance to address type II errors in statistical model validation. Structural and Multidisciplinary Optimization, 2022, 65, 1.	3.5	3

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55	TDR-based pipe leakage detection and location using Bayesian inference. , 2015, , .		2
56	Model improvement with experimental design for identifying error sources in a computational model. Structural and Multidisciplinary Optimization, 0, , 1.	3.5	2
57	Health diagnostics of water-cooled power generator stator windings using a Directional Mahalanobis Distance (DMD). , 2013, , .		1
58	A Noise-Robust Feature Extraction Method for Rolling Element Bearing Diagnosis: Linear Power-Normalized Cepstral Coefficients (LPNCC). International Journal of Precision Engineering and Manufacturing - Green Technology, 0, , .	4.9	1
59	A liquid contact indicator model for warranty abuse detection in portable electronics. , 2013, , .		0
60	Structural and multidisciplinary optimization â€“ special issue editorial note. Structural and Multidisciplinary Optimization, 2016, 54, 1365-1366.	3.5	0