Jay Lee

List of Publications by Year
in descending order

145 papers	17,523 citations	36303 51 h-index	15732 125 g-index
145 all docs	145 docs citations	145 times ranked	11907 citing authors

#	Article	IF	Citations
1	A Novel Methodology for Lens Matching in Compact Lens Module Assembly. IEEE Transactions on Automation Science and Engineering, 2023, 20, 741-750.	5.2	3
2	Intelligent Robust Cross-Domain Fault Diagnostic Method for Rotating Machines Using Noisy Condition Labels. Mathematics, 2022, 10, 455.	2.2	10
3	A Novel Transfer Learning Approach in Remaining Useful Life Prediction for Incomplete Dataset. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	4.7	46
4	Sequential optimization of the injection molding gate locations using parallel efficient global optimization. International Journal of Advanced Manufacturing Technology, 2022, 120, 3805-3819.	3.0	1
5	Introduction to resilient manufacturing systems. Manufacturing Letters, 2022, 32, 24-27.	2.2	9
6	Knowledge transfer using Bayesian learning for predicting the process-property relationship of Inconel alloys obtained by laser powder bed fusion. Virtual and Physical Prototyping, 2022, 17, 787-805.	10.4	10
7	Evaluating Feature Selection and Anomaly Detection Methods of Hard Drive Failure Prediction. IEEE Transactions on Reliability, 2021, 70, 749-760.	4.6	19
8	Cross-domain gearbox diagnostics under variable working conditions with deep convolutional transfer learning. JVC/Journal of Vibration and Control, 2021, 27, 854-864.	2.6	13
9	Adaptive virtual metrology method based on Just-in-time reference and particle filter for semiconductor manufacturing. Measurement: Journal of the International Measurement Confederation, 2021, 168, 108338.	5.0	11
10	A Markov model for short term wind speed prediction by integrating the wind acceleration information. Renewable Energy, 2021, 164, 242-253.	8.9	30
11	Field-synchronized Digital Twin framework for production scheduling with uncertainty. Journal of Intelligent Manufacturing, 2021, 32, 1207-1228.	7.3	75
12	Methodology for Important Sensor Screening for Fault Detection and Classification in Semiconductor Manufacturing. IEEE Transactions on Semiconductor Manufacturing, 2021, 34, 65-73.	1.7	14
13	Combining Feature Extraction-Based and Full Trace Analysis Capabilities in Fault Detection: Methods and Comparative Analysis. , 2021, , .		1
14	Reference-based Virtual Metrology method with uncertainty evaluation for Material Removal Rate prediction based on Gaussian Process Regression. International Journal of Advanced Manufacturing Technology, 2021, 116, 1199-1211.	3.0	4
15	A unified Bayesian filtering framework for multi-horizon wind speed prediction with improved accuracy. Renewable Energy, 2021, 178, 709-719.	8.9	10
16	A unified digital twin framework for shop floor design in industry 4.0 manufacturing systems. Manufacturing Letters, 2021, 27, 87-91.	2.2	28
17	Intelligent Diagnostics for Ball Screw Fault Through Indirect Sensing Using Deep Domain Adaptation. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	4.7	27
18	A novel scalable method for machine degradation assessment using deep convolutional neural network. Measurement: Journal of the International Measurement Confederation, 2020, 151, 107106.	5.0	22

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19	Gaussian Process Regression for numerical wind speed prediction enhancement. Renewable Energy, 2020, 146, 2112-2123.	8.9	112
20	Deep learning-based cross-domain adaptation for gearbox fault diagnosis under variable speed conditions. Measurement Science and Technology, 2020, 31, 055601.	2.6	53
21	Deep Learning-Based Intelligent Defect Detection of Cutting Wheels with Industrial Images in Manufacturing. Procedia Manufacturing, 2020, 48, 902-907.	1.9	8
22	Deep learning-based cross-sensor domain adaptation for fault diagnosis of electro-mechanical actuators. International Journal of Dynamics and Control, 2020, 8, 1054-1062.	2.5	21
23	Intracranial Pressure Monitoring Signals After Traumatic Brain Injury: A Narrative Overview and Conceptual Data Science Framework. Frontiers in Neurology, 2020, 11, 959.	2.4	16
24	Industrial Artificial Intelligence in Industry 4.0 - Systematic Review, Challenges and Outlook. IEEE Access, 2020, 8, 220121-220139.	4.2	208
25	A systematic review of machine learning algorithms for prognostics and health management of rolling element bearings: fundamentals, concepts and applications. Measurement Science and Technology, 2020, 32, 012001.	2.6	48
26	A unified data security framework for federated prognostics and health management in smart manufacturing. Manufacturing Letters, 2020, 24, 136-139.	2.2	14
27	Enhancing Intelligent Cross-Domain Fault Diagnosis Performance on Rotating Machines with Noisy Health Labels. Procedia Manufacturing, 2020, 48, 940-946.	1.9	11
28	Fault Diagnosis of Ball Screw in Industrial Robots Using Non-Stationary Motor Current Signals. Procedia Manufacturing, 2020, 48, 1102-1108.	1.9	15
29	A similarity based methodology for machine prognostics by using kernel two sample test. ISA Transactions, 2020, 103, 112-121.	5.7	35
30	Deep Learning-Based Intelligent Process Monitoring of Directed Energy Deposition in Additive Manufacturing with Thermal Images. Procedia Manufacturing, 2020, 48, 643-649.	1.9	44
31	Industrial AI. , 2020, , .		23
32	Quality analysis in metal additive manufacturing with deep learning. Journal of Intelligent Manufacturing, 2020, 31, 2003-2017.	7.3	81
33	A virtual metrology method with prediction uncertainty based on Gaussian process for chemical mechanical planarization. Computers in Industry, 2020, 119, 103228.	9.9	29
34	Multisensor data fusion for gearbox fault diagnosis using 2-D convolutional neural network and motor current signature analysis. Mechanical Systems and Signal Processing, 2020, 144, 106861.	8.0	173
35	Integration of digital twin and deep learning in cyberâ€physical systems: towards smart manufacturing. IET Collaborative Intelligent Manufacturing, 2020, 2, 34-36.	3.3	122
36	Intelligent ball screw fault diagnosis using a deep domain adaptation methodology. Mechanism and Machine Theory, 2020, 151, 103932.	4.5	60

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37	Deep Learning-Based Domain Adaptation Method for Fault Diagnosis in Semiconductor Manufacturing. IEEE Transactions on Semiconductor Manufacturing, 2020, 33, 445-453.	1.7	47
38	Intelligent Maintenance Systems and Predictive Manufacturing. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2020, 142, .	2.2	44
39	Convolutional Neural Network Based Rolling-Element Bearing Fault Diagnosis for Naturally Occurring and Progressing Defects Using Time-Frequency Domain Features. , 2019, , .		35
40	A Novel Method for Deposit Accumulation Assessment in Dry Etching Chamber. IEEE Transactions on Semiconductor Manufacturing, 2019, 32, 183-189.	1.7	8
41	An intelligent system for offshore wind farm maintenance scheduling optimization considering turbine production loss. Journal of Intelligent and Fuzzy Systems, 2019, 37, 6911-6923.	1.4	7
42	An Online Virtual Metrology Model With Sample Selection for the Tracking of Dynamic Manufacturing Processes With Slow Drift. IEEE Transactions on Semiconductor Manufacturing, 2019, 32, 574-582.	1.7	19
43	Detection and diagnosis of bottle capping failures based on motor current signature analysis. Procedia Manufacturing, 2019, 34, 840-846.	1.9	11
44	A blockchain enabled Cyber-Physical System architecture for Industry 4.0 manufacturing systems. Manufacturing Letters, 2019, 20, 34-39.	2.2	184
45	A Methodology for the Early Diagnosis of Vehicle Torque Converter Clutch Degradation. , 2019, , .		0
46	A combined filtering strategy for short term and long term wind speed prediction with improved accuracy. Renewable Energy, 2019, 136, 1082-1090.	8.9	35
47	Prognosability study of ball screw degradation using systematic methodology. Mechanical Systems and Signal Processing, 2018, 109, 45-57.	8.0	69
48	Assessment of Data Suitability for Machine Prognosis Using Maximum Mean Discrepancy. IEEE Transactions on Industrial Electronics, 2018, 65, 5872-5881.	7.9	76
49	Fault prediction of power electronics modules and systems under complex working conditions. Computers in Industry, 2018, 97, 1-9.	9.9	23
50	An auto-associative residual based approach for railway point system fault detection and diagnosis. Measurement: Journal of the International Measurement Confederation, 2018, 119, 246-258.	5.0	25
51	Adaptive virtual metrology for semiconductor chemical mechanical planarization process using GMDH-type polynomial neural networks. Journal of Process Control, 2018, 62, 44-54.	3.3	66
52	Instantaneous speed jitter detection via encoder signal and its application for the diagnosis of planetary gearbox. Mechanical Systems and Signal Processing, 2018, 98, 16-31.	8.0	83
53	A deviation based assessment methodology for multiple machine health patterns classification and fault detection. Mechanical Systems and Signal Processing, 2018, 99, 244-261.	8.0	37
54	Sparse filtering with the generalized lp / lq norm and its applications to the condition monitoring of rotating machinery. Mechanical Systems and Signal Processing, 2018, 102, 198-213.	8.0	90

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55	Industrial AI Enabled Prognostics for High-speed Railway Systems. , 2018, , .		14
56	Industrial Artificial Intelligence for industry 4.0-based manufacturing systems. Manufacturing Letters, 2018, 18, 20-23.	2.2	454
57	Motor current signature analysis for gearbox condition monitoring under transient speeds using wavelet analysis and dual-level time synchronous averaging. Mechanical Systems and Signal Processing, 2017, 94, 73-84.	8.0	51
58	Predictive Big Data Analytics and Cyber Physical Systems for TES Systems. Decision Engineering, 2017, , 97-112.	2.0	9
59	Introduction to Data-Driven Methodologies for Prognostics and Health Management. , 2017, , 9-32.		31
60	Cyber physical systems for predictive production systems. Production Engineering, 2017, 11, 155-165.	2.3	70
61	Investigation on the kurtosis filter and the derivation of convolutional sparse filter for impulsive signature enhancement. Journal of Sound and Vibration, 2017, 386, 433-448.	3.9	54
62	A geometrical investigation on the generalized l p /l q norm for blind deconvolution. Signal Processing, 2017, 134, 63-69.	3.7	50
63	CPS-enabled worry-free industrial applications. , 2017, , .		11
64	Smart Agents in Industrial Cyber–Physical Systems. Proceedings of the IEEE, 2016, 104, 1086-1101.	21.3	327
65	Introduction to cyber manufacturing. Manufacturing Letters, 2016, 8, 11-15.	2.2	139
66	Wind turbine performance degradation assessment based on a novel similarity metric for machine performance curves. Renewable Energy, 2016, 99, 1191-1201.	8.9	99
67	A Stochastic Asset Life Prediction Method for Large Fleet Datasets in Big Data Environment. , 2015, , .		3
68	A Cyber Physical Interface for Automation Systems—Methodology and Examples. Machines, 2015, 3, 93-106.	2.2	45
69	Multi-phase preventive maintenance policy for leased equipment. International Journal of Production Research, 2015, 53, 4528-4537.	7.5	32
70	Agents enabling cyber-physical production systems. Automatisierungstechnik, 2015, 63, 777-789.	0.8	64
71	A comprehensive framework of factory-to-factory dynamic fleet-level prognostics and operation management for geographically distributed assets. , 2015, , .		19
72	A Unified Framework and Platform for Designing of Cloud-Based Machine Health Monitoring and Manufacturing Systems. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2015, 137, .	2.2	38

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73	Industrial Big Data Analytics and Cyber-physical Systems for Future Maintenance & Service Innovation. Procedia CIRP, 2015, 38, 3-7.	1.9	296
74	Preventive maintenance modeling for multi-component systems with considering stochastic failures and disassembly sequence. Reliability Engineering and System Safety, 2015, 142, 231-237.	8.9	53
75	Smart Factory Systems. Informatik-Spektrum, 2015, 38, 230-235.	1.3	133
76	Motor current signature analysis for gearbox fault diagnosis in transient speed regimes. , 2015, , .		7
77	Cyber-physical Systems Architecture for Self-Aware Machines in Industry 4.0 Environment. IFAC-PapersOnLine, 2015, 48, 1622-1627.	0.9	227
78	A Cyber-Physical Systems architecture for Industry 4.0-based manufacturing systems. Manufacturing Letters, 2015, 3, 18-23.	2.2	3,341
79	Cyber-Physical Systems in Future Maintenance. Lecture Notes in Mechanical Engineering, 2015, , 299-305.	0.4	17
80	Prognostics and health management design for rotary machinery systemsâ€"Reviews, methodology and applications. Mechanical Systems and Signal Processing, 2014, 42, 314-334.	8.0	1,138
81	Review and recent advances in battery health monitoring and prognostics technologies for electric vehicle (EV) safety and mobility. Journal of Power Sources, 2014, 256, 110-124.	7.8	496
82	Dominant Innovation Design for Smart Products-Service Systems (PSS): Strategies and Case Studies. , 2014, , .		6
83	Service Innovation and Smart Analytics for Industry 4.0 and Big Data Environment. Procedia CIRP, 2014, 16, 3-8.	1.9	1,301
84	A comparative study on vibrationâ€based condition monitoring algorithms for wind turbine drive trains. Wind Energy, 2014, 17, 695-714.	4.2	51
85	New Thinking Paradigm for Maintenance Innovation Design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 7104-7109.	0.4	8
86	Data quality evaluation and improvement for prognostic modeling using visual assessment based data partitioning method. Computers in Industry, 2013, 64, 214-225.	9.9	28
87	Recent advances and trends in predictive manufacturing systems in big data environment. Manufacturing Letters, 2013, 1, 38-41.	2.2	766
88	Discriminant diffusion maps analysis: A robust manifold learner for dimensionality reduction and its applications in machine condition monitoring and fault diagnosis. Mechanical Systems and Signal Processing, 2013, 34, 277-297.	8.0	52
89	A modified support vector data description based novelty detection approach for machinery components. Applied Soft Computing Journal, 2013, 13, 1193-1205.	7.2	60
90	Condition-based maintenance for intelligent monitored series system with independent machine failure modes. International Journal of Production Research, 2013, 51, 4585-4596.	7.5	53

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91	Ensemble Empirical Mode Decomposition-Based Teager Energy Spectrum for Bearing Fault Diagnosis. Journal of Vibration and Acoustics, Transactions of the ASME, 2013, 135, .	1.6	47
92	Predictive Manufacturing System - Trends of Next-Generation Production Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 150-156.	0.4	92
93	Prognostics and Maintenance for Mechanical Systems in Harsh Environment. Advances in Mechanical Engineering, 2013, 5, 121340.	1.6	0
94	Performance Assessment for a Fleet of Machines Using a Combined Method of Ant-Based Clustering and CMAC. Advances in Mechanical Engineering, 2013, 5, 603071.	1.6	4
95	Dynamic maintenance decision-making for series–parallel manufacturing system based on MAM–MTW methodology. European Journal of Operational Research, 2012, 221, 231-240.	5.7	76
96	Bayesian Belief Network-based approach for diagnostics and prognostics of semiconductor manufacturing systems. Robotics and Computer-Integrated Manufacturing, 2012, 28, 66-74.	9.9	78
97	Wind turbine performance assessment using multi-regime modeling approach. Renewable Energy, 2012, 45, 86-95.	8.9	102
98	Novel method for rolling element bearing health assessment—A tachometer-less synchronously averaged envelope feature extraction technique. Mechanical Systems and Signal Processing, 2012, 29, 362-376.	8.0	52
99	Innovative Product Advanced Service Systems (I-PASS): methodology, tools, and applications for dominant service design. International Journal of Advanced Manufacturing Technology, 2011, 52, 1161-1173.	3.0	38
100	Optimal CBPM policy considering maintenance effects and environmental condition. International Journal of Advanced Manufacturing Technology, 2011, 56, 1181-1193.	3.0	23
101	A hybrid feature selection scheme for unsupervised learning and its application in bearing fault diagnosis. Expert Systems With Applications, 2011, 38, 11311-11320.	7.6	62
102	A review on prognostics and health monitoring of Li-ion battery. Journal of Power Sources, 2011, 196, 6007-6014.	7.8	600
103	A comparative study of maintenance data classification based on neural networks, logistic regression and support vector machines. Journal of Quality in Maintenance Engineering, 2010, 16, 303-318.	1.7	15
104	Design of Self-Maintenance and Engineering Immune Systems for Smarter Machines and Manufacturing Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 1-11.	0.4	4
105	Design of a reconfigurable prognostics platform for machine tools. Expert Systems With Applications, 2010, 37, 240-252.	7.6	29
106	Opportunistic preventive maintenance optimization for multi-unit series systems with combing multi-preventive maintenance techniques. Journal of Shanghai Jiaotong University (Science), 2010, 15, 513-518.	0.9	9
107	Production line simulation using STPN for maintenance scheduling. Journal of Intelligent Manufacturing, 2010, 21, 213-221.	7.3	12
108	An online adaptive condition-based maintenance method for mechanical systems. Mechanical Systems and Signal Processing, 2010, 24, 2985-2995.	8.0	39

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109	EFFICIENT MATERIAL ALLOCATIONS IN HIGH-MIX LOW-VOLUME MANUFACTURING. Journal of Advanced Manufacturing Systems, 2010, 09, 101-116.	1.0	4
110	Integrated E-maintenance and Intelligent Maintenance Systems. , 2009, , 499-544.		19
111	Outlier mining based abnormal machine detection in intelligent maintenance. Journal of Shanghai Jiaotong University (Science), 2009, 14, 695-700.	0.9	0
112	Opportunistic preventive maintenance scheduling for a multi-unit series system based on dynamic programming. International Journal of Production Economics, 2009, 118, 361-366.	8.9	100
113	A novel method for machine performance degradation assessment based on fixed cycle features test. Journal of Sound and Vibration, 2009, 326, 894-908.	3.9	72
114	Empirical analysis of support vector machine ensemble classifiers. Expert Systems With Applications, 2009, 36, 6466-6476.	7.6	123
115	A systematic approach for predictive maintenance service design: methodology and applications. International Journal of Internet Manufacturing and Services, 2009, 2, 76.	0.1	13
116	Probe on network-based collaborative maintenance mode for after-sales equipment. Yugoslav Journal of Operations Research, 2009, 19, 299-313.	0.8	2
117	Web-enabled platform for distributed and dynamic decision-making systems. International Journal of Advanced Manufacturing Technology, 2008, 38, 1260-1270.	3.0	10
118	A similarity-based prognostics approach for Remaining Useful Life estimation of engineered systems. , 2008, , .		275
119	Optimized maintenance design for manufacturing performance improvement using simulation. , 2008, , .		10
120	New Technologies for Maintenance. , 2008, , 49-78.		16
121	Maintenance Priority Assignment Utilizing On-line Production Information. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2007, 129, 435-446.	2.2	33
122	Orthonormal Basis Function Based Transient Modeling for Boring Tool Degradation Monitoring. Proceedings of the American Control Conference, 2007, , .	0.0	1
123	A Hybrid Method for On-line Performance Assessment and Life Prediction in Drilling Operations. , 2007, , .		25
124	Residual life predictions for ball bearings based on self-organizing map and back propagation neural network methods. Mechanical Systems and Signal Processing, 2007, 21, 193-207.	8.0	436
125	Similarity based method for manufacturing process performance prediction and diagnosis. Computers in Industry, 2007, 58, 558-566.	9.9	76
126	Reliability-centered predictive maintenance scheduling for a continuously monitored system subject to degradation. Reliability Engineering and System Safety, 2007, 92, 530-534.	8.9	222

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127	A dynamic opportunistic maintenance policy for continuously monitored systems. Journal of Quality in Maintenance Engineering, 2006, 12, 294-305.	1.7	23
128	Intelligent prognostics tools and e-maintenance. Computers in Industry, 2006, 57, 476-489.	9.9	475
129	Wavelet filter-based weak signature detection method and its application on rolling element bearing prognostics. Journal of Sound and Vibration, 2006, 289, 1066-1090.	3.9	1,059
130	Feature signature prediction of a boring process using neural network modeling with confidence bounds. International Journal of Advanced Manufacturing Technology, 2006, 30, 614-621.	3.0	32
131	Remote machine maintenance system through Internet and mobile communication. International Journal of Advanced Manufacturing Technology, 2006, 31, 783-789.	3.0	27
132	A real-time intelligent multiple fault diagnostic system. International Journal of Advanced Manufacturing Technology, 2006, 29, 590-597.	3.0	25
133	A real-time intelligent multiple fault diagnostic system. International Journal of Advanced Manufacturing Technology, 2006, 29, 590-597.	3.0	14
134	Internet Server Controller Based Intelligent Maintenance System for Products. , 2006, , 785-794.		2
135	INTRODUCTION OF WATCHDOG PROGNOSTICS AGENT AND ITS APPLICATION TO ELEVATOR HOISTWAY PERFORMANCE ASSESSMENT. Journal of the Chinese Institute of Industrial Engineers, 2005, 22, 56-63.	0.5	7
136	Degradation Assessment and Fault Modes Classification Using Logistic Regression. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2005, 127, 912-914.	2.2	135
137	A prognostic algorithm for machine performance assessment and its application. Production Planning and Control, 2004, 15, 796-801.	8.8	190
138	Watchdog Agentâ€"an infotronics-based prognostics approach for product performance degradation assessment and prediction. Advanced Engineering Informatics, 2003, 17, 109-125.	8.0	240
139	Robust performance degradation assessment methods for enhanced rolling element bearing prognostics. Advanced Engineering Informatics, 2003, 17, 127-140.	8.0	365
140	Multisensor process performance assessment through use of autoregressive modeling and feature maps. Journal of Manufacturing Systems, 2003, 22, 64-72.	13.9	24
141	E-manufacturingâ€"fundamental, tools, and transformation. Robotics and Computer-Integrated Manufacturing, 2003, 19, 501-507.	9.9	153
142	Smart products and service systems for e-business transformation. International Journal of Technology Management, 2003, 26, 45.	0.5	38
143	Measurement of machine performance degradation using a neural network model. Computers in Industry, 1996, 30, 193-209.	9.9	110
144	Machine performance monitoring and proactive maintenance in computer-integrated manufacturing: review and perspective. International Journal of Computer Integrated Manufacturing, 1995, 8, 370-380.	4.6	77

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145	Prognostics and Health Monitoring of Li-ion Vattery for Hybrid Electric Vehicle. , 0, , .		0