Hai-Yan Lu

List of Publications by Year
in descending order

117 papers	5,579 citations	70961 41 h-index	82410 72 g-index
117 all docs	117 docs citations	117 times ranked	4676 citing authors

#	Article	IF	Citations
1	Multi-step forecasting for wind speed using a modified EMD-based artificial neural network model. Renewable Energy, 2012, 37, 241-249.	4.3	436
2	A case study on a hybrid wind speed forecasting method using BP neural network. Knowledge-Based Systems, 2011, 24, 1048-1056.	4.0	296
3	Advances in helicene derivatives with circularly polarized luminescence. Chemical Communications, 2019, 55, 13793-13803.	2.2	263
4	Experimental determination of stray capacitances in high frequency transformers. IEEE Transactions on Power Electronics, 2003, 18, 1105-1112.	5.4	226
5	Air Pollution Forecasts: An Overview. International Journal of Environmental Research and Public Health, 2018, 15, 780.	1.2	200
6	A novel combined model based on advanced optimization algorithm for short-term wind speed forecasting. Applied Energy, 2018, 215, 643-658.	5.1	199
7	Experimental study of a new hybrid PSO with mutation for economic dispatch with non-smooth cost function. International Journal of Electrical Power and Energy Systems, 2010, 32, 921-935.	3.3	147
8	An improved grey model optimized by multi-objective ant lion optimization algorithm for annual electricity consumption forecasting. Applied Soft Computing Journal, 2018, 72, 321-337.	4.1	133
9	Optimal Coordination of Plug-In Electric Vehicles in Power Grids With Cost-Benefit Analysisâ€"Part I: Enabling Techniques. IEEE Transactions on Power Systems, 2013, 28, 3546-3555.	4.6	127
10	Combined modeling for electric load forecasting with adaptive particle swarm optimization. Energy, 2010, 35, 1671-1678.	4.5	119
11	Research and application of a combined model based on variable weight for short term wind speed forecasting. Renewable Energy, 2018, 116, 669-684.	4.3	117
12	Hybrid wind energy forecasting and analysis system based on divide and conquer scheme: A case study in China. Journal of Cleaner Production, 2019, 222, 942-959.	4.6	111
13	A semantic enhanced hybrid recommendation approach: A case study of e-Government tourism service recommendation system. Decision Support Systems, 2015, 72, 97-109.	3.5	109
14	Tetrahydro[5]helicene-based imide dyes with intense fluorescence in both solution and solid state. Chemical Communications, 2014, 50, 2993-2995.	2.2	105
15	Measurement and Modeling of Rotational Core Losses of Soft Magnetic Materials Used in Electrical Machines: A Review. IEEE Transactions on Magnetics, 2008, 44, 279-291.	1.2	103
16	Optimal Coordination of Plug-in Electric Vehicles in Power Grids With Cost-Benefit Analysisâ€"Part II: A Case Study in China. IEEE Transactions on Power Systems, 2013, 28, 3556-3565.	4.6	99
17	Research and application of a hybrid model based on multi-objective optimization for electrical load forecasting. Applied Energy, 2016, 180, 213-233.	5.1	99
18	Application of a novel early warning system based on fuzzy time series in urban air quality forecasting in China. Applied Soft Computing Journal, 2018, 71, 783-799.	4.1	96

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19	Novel analysisâ€“forecast system based on multi-objective optimization for air quality index. Journal of Cleaner Production, 2019, 208, 1365-1383.	4.6	95
20	A new hybrid model optimized by an intelligent optimization algorithm for wind speed forecasting. Energy Conversion and Management, 2014, 85, 443-452.	4.4	83
21	Helical aromatic imide based enantiomers with full-color circularly polarized luminescence. Chemical Communications, 2016, 52, 9921-9924.	2.2	83
22	Developing a deep learning framework with two-stage feature selection for multivariate financial time series forecasting. Expert Systems With Applications, 2020, 148, 113237.	4.4	83
23	Web-Page Recommendation Based on Web Usage and Domain Knowledge. IEEE Transactions on Knowledge and Data Engineering, 2014, 26, 2574-2587.	4.0	82
24	Self-adaptive velocity particle swarm optimization for solving constrained optimization problems. Journal of Global Optimization, 2008, 41, 427-445.	1.1	76
25	An analysis-forecast system for uncertainty modeling of wind speed: A case study of large-scale wind farms. Applied Energy, 2018, 211, 492-512.	5.1	76
26	Combining forecasts of electricity consumption in China with time-varying weights updated by a high-order Markov chain model. Omega, 2014, 45, 80-91.	3.6	74
27	A Novel Framework of Reservoir Computing for Deterministic and Probabilistic Wind Power Forecasting. IEEE Transactions on Sustainable Energy, 2020, 11, 337-349.	5.9	74
28	Short term load forecasting technique based on the seasonal exponential adjustment method and the regression model. Energy Conversion and Management, 2013, 70, 1-9.	4.4	72
29	A novel combined model for wind speed prediction â€“ Combination of linear model, shallow neural networks, and deep learning approaches. Energy, 2021, 234, 121275.	4.5	72
30	A hybrid system for short-term wind speed forecasting. Applied Energy, 2018, 226, 756-771.	5.1	67
31	Design and Analysis of a Prototype Linear Motor Driving System for HTS Maglev Transportation. IEEE Transactions on Applied Superconductivity, 2007, 17, 2087-2090.	1.1	63
32	Developing an early-warning system for air quality prediction and assessment of cities in China. Expert Systems With Applications, 2017, 84, 102-116.	4.4	61
33	A novel system based on neural networks with linear combination framework for wind speed forecasting. Energy Conversion and Management, 2019, 181, 425-442.	4.4	59
34	Dynamic-objective particle swarm optimization for constrained optimization problems. Journal of Combinatorial Optimization, 2006, 12, 409-419.	0.8	57
35	1,8-Naphthalimide-based circularly polarized TADF enantiomers as the emitters for efficient orange-red OLEDs. Organic Electronics, 2019, 70, 71-77.	1.4	57
36	Research and application of a combined model based on frequent pattern growth algorithm and multi-objective optimization for solar radiation forecasting. Applied Energy, 2017, 208, 845-866.	5.1	55

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37	Chaotic time series method combined with particle swarm optimization and trend adjustment for electricity demand forecasting. Expert Systems With Applications, 2011, 38, 8419-8429.	4.4	50
38	Core Loss Calculation for Soft Magnetic Composite Electrical Machines. IEEE Transactions on Magnetics, 2012, 48, 3112-3115.	1.2	50
39	Modeling for chaotic time series based on linear and nonlinear framework: Application to wind speed forecasting. Energy, 2019, 173, 468-482.	4.5	45
40	An axially chiral thermally activated delayed fluorescent emitter with a dual emitting core for a highly efficient organic light-emitting diode. Chemical Communications, 2020, 56, 9380-9383.	2.2	44
41	Intense blue circularly polarized luminescence from helical aromatic esters. Chemical Communications, 2017, 53, 6093-6096.	2.2	43
42	Research on a combined model based on linear and nonlinear features - A case study of wind speed forecasting. Renewable Energy, 2019, 130, 814-830.	4.3	43
43	A novel ensemble probabilistic forecasting system for uncertainty in wind speed. Applied Energy, 2022, 313, 118796.	5.1	43
44	Mitigating unbalance using distributed network reconfiguration techniques in distributed power generation grids with services for electric vehicles: A review. Journal of Cleaner Production, 2019, 239, 117932.	4.6	42
45	Multiobjective Optimization Technique for Mitigating Unbalance and Improving Voltage Considering Higher Penetration of Electric Vehicles and Distributed Generation. IEEE Systems Journal, 2020, 14, 3676-3686.	2.9	39
46	Measurement and Modeling of Thermal Effects on Magnetic Hysteresis of Soft Ferrites. IEEE Transactions on Magnetics, 2007, 43, 3952-3960.	1.2	38
47	A Hybrid Wind Speed Forecasting System Based on a â€˜Decomposition and Ensembleâ€™ Strategy and Fuzzy Time Series. Energies, 2017, 10, 1422.	1.6	38
48	Uncertainty modeling for chaotic time series based on optimal multi-input multi-output architecture: Application to offshore wind speed. Energy Conversion and Management, 2018, 156, 597-617.	4.4	38
49	Fuzzy Clustering-Based Adaptive Regression for Drifting Data Streams. IEEE Transactions on Fuzzy Systems, 2020, 28, 544-557.	6.5	38
50	Core Loss Computation in a Permanent Magnet Transverse Flux Motor With Rotating Fluxes. IEEE Transactions on Magnetics, 2014, 50, 1-4.	1.2	32
51	Determination of 3D magnetic reluctivity tensor of soft magnetic composite material. Journal of Magnetism and Magnetic Materials, 2007, 312, 458-463.	1.0	30
52	A hesitant fuzzy wind speed forecasting system with novel defuzzification method and multi-objective optimization algorithm. Expert Systems With Applications, 2021, 168, 114364.	4.4	30
53	A Green Fluorescent Nitrogenâ€Doped Aromatic Belt Containing a [6]Cycloparaphenylene Skeleton. Angewandte Chemie - International Edition, 2021, 60, 15291-15295.	7.2	30
54	Short-term wind power prediction optimized by multi-objective dragonfly algorithm based on variational mode decomposition. Chaos, Solitons and Fractals, 2022, 157, 111982.	2.5	29

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55	Short-term photovoltaic power forecasting based on signal decomposition and machine learning optimization. Energy Conversion and Management, 2022, 267, 115944.	4.4	29
56	Comprehensive assessment of wind resources and the low-carbon economy: An empirical study in the Alxa and Xilin Gol Leagues of inner Mongolia, China. Renewable and Sustainable Energy Reviews, 2015, 50, 1304-1319.	8.2	28
57	High-Frequency Magnetic-Link Medium-Voltage Converter for Superconducting Generator-Based High-Power Density Wind Generation Systems. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-5.	1.1	26
58	The Forecasting Procedure for Long-Term Wind Speed in the Zhangye Area. Mathematical Problems in Engineering, 2010, 2010, 1-17.	0.6	25
59	Naphthyridine-based thermally activated delayed fluorescence emitters for multi-color organic light-emitting diodes with low efficiency roll-off. Journal of Materials Chemistry C, 2019, 7, 4673-4680.	2.7	25
60	State-of-the-Art Technologies for Development of High Frequency Transformers with Advanced Magnetic Materials. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-11.	1.1	25
61	Modeling of electricity demand forecast for power system. Neural Computing and Applications, 2020, 32, 6857-6875.	3.2	25
62	Sign inversions of circularly polarized luminescence for helical compounds by chemically fine-tuning operations. Chemical Communications, 2020, 56, 1863-1866.	2.2	25
63	Oil-saving pathways until 2030 for road freight transportation inÂChina based on a cost-optimization model. Energy, 2015, 86, 369-384.	4.5	23
64	Quinoline-based TADF emitters exhibiting aggregation-induced emission for efficient non-doped organic light-emitting diodes. Materials Chemistry Frontiers, 2021, 5, 834-842.	3.2	22
65	A newly combination model based on data denoising strategy and advanced optimization algorithm for short-term wind speed prediction. Journal of Ambient Intelligence and Humanized Computing, 2023, 14, 8271-8290.	3.3	22
66	Internet of Things (IoT) in E-commerce: For people with disabilities. , 2017, , .		21
67	Synthesis, chiroptical properties, and self-assembled nanoparticles of chiral conjugated polymers based on optically stable helical aromatic esters. RSC Advances, 2018, 8, 1014-1021.	1.7	21
68	Research of a novel short-term wind forecasting system based on multi-objective Aquila optimizer for point and interval forecast. Energy Conversion and Management, 2022, 263, 115583.	4.4	19
69	A supportive situation awareness model for human-autonomy teaming in collaborative driving. Theoretical Issues in Ergonomics Science, 2020, 21, 658-683.	1.0	18
70	Naphthyridine-based thermally activated delayed fluorescence emitters for highly efficient blue OLEDs. Dyes and Pigments, 2020, 178, 108324.	2.0	17
71	Novel oxacalix[2]arene[2]triazines with thermally activated delayed fluorescence and aggregation-induced emission properties. Chemical Communications, 2019, 55, 9559-9562.	2.2	16
72	A Learning System Integrating Temporal Convolution and Deep Learning for Predictive Modeling of Crude Oil Price. IEEE Transactions on Industrial Informatics, 2021, 17, 4602-4612.	7.2	14

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73	Development of a Wound Rotor Brushless Doubly Fed Machine Based on Slot MMF Harmonics. , 2008, , .		12
74	An IoT- Based Decision Support Tool for Improving the Performance of Smart Grids Connected with Distributed Energy Sources and Electric Vehicles. IEEE Transactions on Industry Applications, 2020, , 1-1.	3.3	12
75	Research and Application of a Novel Combined Model Based on Multiobjective Optimization for Multistep-Ahead Electric Load Forecasting. Energies, 2019, 12, 1931.	1.6	11
76	Effect of Armature Reaction of a Permanent-Magnet Claw Pole SMC Motor. IEEE Transactions on Magnetics, 2007, 43, 2561-2563.	1.2	10
77	A fuzzy kernel c-means clustering model for handling concept drift in regression. , 2017, , .		10
78	Optimal Coordination of Electric Vehicles and Distributed Generators for Voltage Unbalance and Neutral Current Compensation. IEEE Transactions on Industry Applications, 2021, 57, 1069-1080.	3.3	10
79	The model of chaotic sequences based on adaptive particle swarm optimization arithmetic combined with seasonal term. Applied Mathematical Modelling, 2012, 36, 1184-1196.	2.2	9
80	Coordinating Electric Vehicles and Distributed Energy Sources Constrained by Userâ€™s Travel Commitment. IEEE Transactions on Industrial Informatics, 2022, 18, 5307-5317.	7.2	9
81	Dynamic economic load dispatch using hybrid genetic algorithm and the method of fuzzy number ranking. , 2005, , .		8
82	SCUC with battery energy storage system for peak-load shaving and reserve support. , 2013, , .		8
83	Effects of Armature Reaction on the Performance of a Claw Pole Motor With Soft Magnetic Composite Stator by Finite-Element Analysis. IEEE Transactions on Magnetics, 2007, 43, 1072-1077.	1.2	7
84	Investigation of sequential pattern mining techniques for web recommendation. International Journal of Information and Decision Sciences, 2012, 4, 293.	0.1	7
85	Context-Aware Personalized Web Search Using Navigation History. International Journal on Semantic Web and Information Systems, 2020, 16, 91-107.	2.2	7
86	Measurement and Modeling of Rotational Core Loss of Fe-Based Amorphous Magnetic Material Under 2-D Magnetic Excitation. IEEE Transactions on Magnetics, 2021, 57, 1-8.	1.2	7
87	Advancements and Impediments in Applications of High-Temperature Superconducting Material. , 2020, , .		6
88	Some further results on minimum distribution cost flow problems. Journal of Combinatorial Optimization, 2006, 11, 351.	0.8	5
89	Influence of inductance variation on performance of a permanent magnet claw pole soft magnetic composite motor. Journal of Applied Physics, 2008, 103, 07F118.	1.1	5
90	Ontology-style Web usage model for semantic Web applications. , 2010, , .		5

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91	Numerical Investigation of AC Loss in HTS Bulks Subjected to Rotating Magnetic Fields. , 2021, , .		5
92	The Research of Software Product Line Engineering Process and Its Integrated Development Environment Model. , 2008, , .		4
93	Application of SVM Combined with Mackov Chain for Inventory Prediction in Supply Chain. , 2008, , .		4
94	An Improved Particle Swarm Optimization Algorithm Based on Cauchy Operator and 3-Opt for TSP. , 2016, , .		4
95	A Green Fluorescent Nitrogenâ€Doped Aromatic Belt Containing a [6]Cycloparaphenylene Skeleton. Angewandte Chemie, 2021, 133, 15419-15423.	1.6	4
96	Triptycene-derived TADF enantiomers displaying circularly polarized luminescence and high-efficiency electroluminescence. Organic Electronics, 2021, 99, 106355.	1.4	4
97	Distribution parameter-determining method comparison for airborne wind energy potential assessment in the eastern coastal area of China. Sustainable Energy Technologies and Assessments, 2022, 52, 102161.	1.7	4
98	Three-Dimensional Numerical Characterization of High-Temperature Superconductor Bulks Subjected to Rotating Magnetic Fields. Energies, 2022, 15, 3186.	1.6	4
99	Design considerations of electric motors with soft magnetic composite cores. , 2016, , .		3
100	Personalized Web Search Based on Ontological User Profile in Transportation Domain. Lecture Notes in Computer Science, 2017, , 239-248.	1.0	3
101	Research of a combined wind speed model based on multiâ€objective ant lion optimization algorithm. International Transactions on Electrical Energy Systems, 2021, 31, e13189.	1.2	3
102	Medium-frequency-link power conversion for high power density renewable energy systems. , 2013, , .		2
103	Suitable error evaluation criteria selection in the wind energy assessment via the K-means clustering algorithm. International Journal of Green Energy, 2016, 13, 1145-1162.	2.1	2
104	An object oriented Bayesian network approach for unsafe driving maneuvers prevention system. , 2017, , .		2
105	Reducing Neutral Current of a higher EV Penetrated Unbalanced Distribution Grid. , 2019, , .		2
106	Research on Real Estate Early Warning System Based on Decision Tree and Fuzzy Recognition Theory. , 2008, , .		1
107	B-H relations of magnetorheological fluid under 2-D rotating magnetic field excitation. , 2013, , .		1
108	Knowledge-based life event model for e-government service integration with illustrative examples. Intelligent Decision Technologies, 2014, 8, 189-205.	0.6	1

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109	ENVIRONMENTAL/ECONOMIC DISPATCH USING GENETIC ALGORITHM AND FUZZY NUMBER RANKING METHOD. , 2006, , .		1
110	Price Forecasting of Supply Chain Product Based on Dynamic Fractal Dimension. , 2008, , .		0
111	Supply Chain Safety Stock Quantity's Fractal Forecast and Study. , 2008, , .		0
112	A new hybrid evolutionary algorithm with quasi-simplex technique. , 2010, , .		0
113	Performance analysis of a linear synchronous motor with HTS bulk magnets. , 2010, , .		0
114	Performance Analysis of a Linear Motor with HTS Bulk Magnets for Driving a Prototype HTS Maglev Vehicle. Applied Mechanics and Materials, 0, 416-417, 33-37.	0.2	0
115	Implementation and comparison of PSO-based algorithms for multi-modal optimization problems. , 2013, , .		0
116	Multi-objective Dynamic Phase re-configuration Technique to Mitigate the Unbalance Due to Penetration of Electric Vehicles. , 2019, , .		0
117	A HYBRID MODEL FOR SHORT-TERM WIND SPEED FORECASTING BASED ON NON-POSITIVE CONSTRAINT COMBINATION THEORY. , 2016, , .		0