Liangfei Xu

List of Publications by Year
in descending order

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138	4,476	101384	114278
papers	citations	36 h-index	63 g-index

143	143	143	2618
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A comprehensive overpotential analysis of highâ€power density fuel cell: channel/rid width design. International Journal of Energy Research, 2022, 46, 10998-11010.	2.2	4
2	Dynamic modeling of Pt degradation and mitigation strategies in polymer electrolyte membrane fuel cells. ETransportation, 2022, 12, 100171.	6.8	16
3	Mechanistic insight into the accelerated decay of fuel cells from catalyst-layer structural failure. Energy Conversion and Management, 2021, 227, 113568.	4.4	19
4	Power distribution strategy of a dual-engine system for heavy-duty hybrid electric vehicles using dynamic programming. Energy, 2021, 215, 118851.	4.5	52
5	Dynamic modeling of chemical membrane degradation in polymer electrolyte fuel cells: Effect of pinhole formation. Journal of Power Sources, 2021, 487, 229367.	4.0	14
6	Polymer electrolyte membrane fuel cell transient voltage characteristic considering liquid water imbibition and drainage in gas diffusion layer. Journal of Power Sources, 2021, 493, 229683.	4.0	13
7	Adoptive Control of Injector for Polymer Electrolyte Membrane Fuel Cell Hydrogen Feeding System. , 2021, , .		0
8	The Cruising Range Analysis of Heavy-duty Fuel Cell Vehicles with Liquid Hydrogen Storage and Supply Systems Based on Dynamic Programming. , 2021, , .		2
9	A comparative study of equivalent circuit model and distribution of relaxation times for fuel cell impedance diagnosis. International Journal of Energy Research, 2021, 45, 15948-15961.	2.2	22
10	Simulation analysis of fuel economy of a fuel cell/battery passive hybrid power system for commercial vehicles. , 2021, , .		1
11	Performance Analysis of Automotive Fuel Cell during Activation Period. , 2021, , .		0
12	Anode state observation of polymer electrolyte membrane fuel cell based on unscented Kalman filter and relative humidity sensor before flooding. Renewable Energy, 2021, 168, 1294-1307.	4.3	11
13	Characteristic Analysis of Fuel Cell Decay Based on Actual Vehicle Operating Conditions. , 2021, , .		4
14	A reducedâ€dimension dynamic model of a protonâ€exchange membrane fuel cell. International Journal of Energy Research, 2021, 45, 18002-18017.	2.2	9
15	All-condition economy evaluation method for fuel cell systems: System efficiency contour map. ETransportation, 2021, 9, 100127.	6.8	22
16	Pseudo-Steady State of High-frequency Resistance for Polymer Electrolyte Membrane Fuel Cell: Effect of In-Plane Heterogeneity. Journal of the Electrochemical Society, 2021, 168, 084509.	1.3	7
17	On-Board Liquid Hydrogen Cold Energy Utilization System for a Heavy-Duty Fuel Cell Hybrid Truck. World Electric Vehicle Journal, 2021, 12, 136.	1.6	13
18	Carbon corrosion induced fuel cell accelerated degradation warning: From mechanism to diagnosis. Electrochimica Acta, 2021, 389, 138627.	2.6	24

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19	Constructing representative driving cycle for heavy duty vehicle based on Markov chain method considering road slope. Energy and AI, 2021, 6, 100115.	5.8	6
20	Modeling of Pt Degradation in Polymer Electrolyte Fuel Cells: Effect of Electrode Potential Cycles. , 2021, , .		0
21	A Design of Air System Control Algorithm for Full Power Fuel Cell Vehicles. , 2021, , .		0
22	Feedforward and Feedback Integrated Control for Handling Characteristics Adjustment of Multi-axle Heavy-duty Vehicles Using Independent-drive Electric Wheels. , 2021, , .		1
23	Design and Performance Analysis of Multi-axle Independent-drive Heavy-duty Fuel Cell Vehicles. , 2021, , .		1
24	Comparison of self-humidification effect on polymer electrolyte membrane fuel cell with anodic and cathodic exhaust gas recirculation. International Journal of Hydrogen Energy, 2020, 45, 3108-3122.	3.8	48
25	Modeling of Fuel Cell Cold Start and Dimension Reduction Simplification Method. Journal of the Electrochemical Society, 2020, 167, 044501.	1.3	31
26	A prognostic-based dynamic optimization strategy for a degraded solid oxide fuel cell. Sustainable Energy Technologies and Assessments, 2020, 39, 100682.	1.7	14
27	Design, integration and performance analysis of an 80kW automotive fuel cell system. , 2020, , .		2
28	Decoupling Control Strategy for Cathode System of Proton Exchange Membrane Fuel Cell Engine. , 2020, , .		0
29	Analysis of fuel cell impedance characteristics at high current density based on distribution of relaxation times. , 2020, , .		1
30	Technical assessment and feasibility validation of liquid hydrogen storage and supply system for heavy-duty fuel cell truck. , 2020, , .		5
31	A comparative study on capillary pressure correlations of water transport in PEMFC gas diffusion layer. , 2020, , .		0
32	Optimization of channel dimensions and gas diffusion layer thickness based on mass transfer characteristics of proton exchange membrane fuel cell. , 2020, , .		0
33	Optimal sizing of fuel cell electric vehicle powertrain considering multiple objectives. , 2020, , .		7
34	Experimental Study and Performance Analysis on High Power Fuel Cell System. , 2020, , .		2
35	Optimization of gas feeding operations for polymer electrolyte membrane fuel cell with the co-flow feeding gas mode. , 2020, , .		0
36	Experimental study on metallic bipolar plates fuel cell system with high power density. , 2020, , .		0

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37	A semiempirical dynamic model of reversible open circuit voltage drop in a PEM fuel cell. International Journal of Energy Research, 2019, 43, 2550-2561.	2.2	9
38	An Economy Evaluation Method for Fuel Cell Hybrid Powertrain System. , 2019, , .		1
39	Energy Management of a Dual-Engine System for Hybrid Heavy-Duty Vehicles. , 2019, , .		1
40	Numerical modeling and performance prediction of water transport for PEM fuel cell. Energy Procedia, 2019, 158, 2256-2265.	1.8	3
41	The uniformity and consistency analysis of a fuel cell stack with multipoint voltage-monitoring method. Energy Procedia, 2019, 158, 2118-2125.	1.8	10
42	Adaptive estimation of road slope and vehicle mass of fuel cell vehicle. ETransportation, 2019, 2, 100023.	6.8	31
43	Energy management and component sizing for a fuel cell/battery/supercapacitor hybrid powertrain based on two-dimensional optimization algorithms. Energy, 2019, 177, 386-396.	4.5	116
44	A novel diagnostic methodology for fuel cell stack health: Performance, consistency and uniformity. Energy Conversion and Management, 2019, 185, 611-621.	4.4	75
45	Hysteresis of output voltage and liquid water transport in gas diffusion layer of polymer electrolyte fuel cells. Energy Conversion and Management, 2019, 185, 169-182.	4.4	32
46	A Study on Optimal Speed Trajectory during Engine Start for Minimum Torsional Vibration*. , 2019, , .		0
47	Hardware-in-the-loop Simulation of Electronic Differential Moment Power Steering Control Strategy for Multi-axle Vehicle. , 2019, , .		1
48	Modelling a polymer electrolyte membrane fuel cell system with anodic and cathodic exhaust gas recirculation. , 2019, , .		0
49	Study on Sensitivity of Internal States to Operating Conditions within PEM Fuel Cell. , 2019, , .		0
50	A review of the applications of fuel cells in microgrids: opportunities and challenges. BMC Energy, 2019, 1, .	6.3	34
51	Real-Time Energy Management Strategy for Fuel Cell Range Extender Vehicles Based on Nonlinear Control. IEEE Transactions on Transportation Electrification, 2019, 5, 1294-1305.	5.3	65
52	Comprehensive analysis of galvanostatic charge method for fuel cell degradation diagnosis. Applied Energy, 2018, 212, 1321-1332.	5.1	52
53	Self-Humidification of a Polymer Electrolyte Membrane Fuel Cell System With Cathodic Exhaust Gas Recirculation. Journal of Electrochemical Energy Conversion and Storage, 2018, 15, .	1.1	6
54	Design of durability test protocol for vehicular fuel cell systems operated in power-follow mode based on statistical results of on-road data. Journal of Power Sources, 2018, 377, 59-69.	4.0	44

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55	A reconstructed fuel cell life-prediction model for a fuel cell hybrid city bus. Energy Conversion and Management, 2018, 156, 723-732.	4.4	102
56	Performance prediction of proton exchange membrane fuel cell engine thermal management system using 1D and 3D integrating numerical simulation. International Journal of Hydrogen Energy, 2018, 43, 1736-1748.	3.8	41
57	A multipoint voltage-monitoring method for fuel cell inconsistency analysis. Energy Conversion and Management, 2018, 177, 572-581.	4.4	29
58	A cell interaction phenomenon in a multi-cell stack under one cell suffering fuel starvation. Energy Conversion and Management, 2018, 174, 465-474.	4.4	32
59	Study on voltage clamping and self-humidification effects of pem fuel cell system with dual recirculation based on orthogonal test method. International Journal of Hydrogen Energy, 2018, 43, 16268-16278.	3.8	47
60	Nonlinear dynamic mechanism modeling of a polymer electrolyte membrane fuel cell with dead-ended anode considering mass transport and actuator properties. Applied Energy, 2018, 230, 106-121.	5.1	48
61	Interactions between a polymer electrolyte membrane fuel cell and boost converter utilizing a multiscale model. Journal of Power Sources, 2018, 395, 237-250.	4.0	16
62	Parameter extraction of polymer electrolyte membrane fuel cell based on quasi-dynamic model and periphery signals. Energy, 2017, 122, 675-690.	4.5	21
63	Optimal warm-up control strategy of the PEMFC system on a city bus aimed at improving efficiency. International Journal of Hydrogen Energy, 2017, 42, 11632-11643.	3.8	17
64	Robust control of internal states in a polymer electrolyte membrane fuel cell air-feed system by considering actuator properties. International Journal of Hydrogen Energy, 2017, 42, 13171-13191.	3.8	27
65	Nonlinear observation of internal states of fuel cell cathode utilizing a high-order sliding-mode algorithm. Journal of Power Sources, 2017, 356, 56-71.	4.0	21
66	Modeling and analysis of internal water transfer behavior of PEM fuel cell of large surface area. International Journal of Hydrogen Energy, 2017, 42, 18540-18550.	3.8	21
67	Experimental study on dual recirculation of polymer electrolyte membrane fuel cell. International Journal of Hydrogen Energy, 2017, 42, 18551-18559.	3.8	33
68	Comparison of daily operation strategies for a fuel cell/battery tram. International Journal of Hydrogen Energy, 2017, 42, 18532-18539.	3.8	16
69	Sliding-mode-based temperature regulation of a proton exchange membrane fuel cell test bench. International Journal of Hydrogen Energy, 2017, 42, 11745-11757.	3.8	24
70	Optimization for a fuel cell/battery/capacity tram with equivalent consumption minimization strategy. Energy Conversion and Management, 2017, 134, 59-69.	4.4	195
71	Parameter extraction and uncertainty analysis of a proton exchange membrane fuel cell system based on Monte Carlo simulation. International Journal of Hydrogen Energy, 2017, 42, 2309-2326.	3.8	29
72	Modeling of membrane electrode assembly of PEM fuel cell to analyze voltage losses inside. Energy, 2017, 139, 277-288.	4.5	14

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73	Methodology of designing durability test protocol for vehicular fuel cell system operated in soft run mode based on statistic results of on-road data. International Journal of Hydrogen Energy, 2017, 42, 29840-29851.	3.8	19
74	Control-oriented modeling of gas purging process on the cathode of polymer electrolyte membrane fuel cell during shutting down. International Journal of Hydrogen Energy, 2017, 42, 18584-18594.	3.8	12
75	A new approach to online AC impedance measurement at high frequency of PEM fuel cell stack. International Journal of Hydrogen Energy, 2017, 42, 19156-19169.	3.8	35
76	Faults diagnosis for PEM fuel cell system based on multi-sensor signals and principle component analysis method. International Journal of Hydrogen Energy, 2017, 42, 18524-18531.	3.8	37
77	Development of a PEM Fuel Cell City Bus with a Hierarchical Control System. Energies, 2016, 9, 417.	1.6	24
78	Multi-objective energy management optimization and parameter sizing for proton exchange membrane hybrid fuel cell vehicles. Energy Conversion and Management, 2016, 129, 108-121.	4.4	214
79	Design of a multi-channel gas sampling system for fuel cell with dead-ended anode configuration. , 2016, , .		0
80	Design and validation of an embedded signal analyzer for AC impedance identification of PEM fuel cell. , 2016, , .		3
81	Comparison study on life-cycle costs of different trams powered by fuel cell systems and others. International Journal of Hydrogen Energy, 2016, 41, 16577-16591.	3.8	28
82	Fuel cell system degradation analysis of a Chinese plug-in hybrid fuel cell city bus. International Journal of Hydrogen Energy, 2016, 41, 15295-15310.	3.8	64
83	Analytical calculation and evaluation of water transport through a proton exchange membrane fuel cell based on a one-dimensional model. Energy, 2016, 111, 869-883.	4.5	55
84	Modeling and simulation of parallel DC/DC converters for online AC impedance estimation of PEM fuel cell stack. International Journal of Hydrogen Energy, 2016, 41, 3004-3014.	3.8	50
85	Energy flow modeling and real-time control design basing on mean values for maximizing driving mileage of a fuel cell bus. International Journal of Hydrogen Energy, 2015, 40, 15052-15066.	3.8	37
86	Optimized Torque Distribution Strategy for In-Wheel-Drive Electric Vehicles to Reduce Tire Wear. , 2015, , .		1
87	Wheel Slip Control Using Sliding-Mode Technique and Maximum Transmissible Torque Estimation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	0.9	15
88	Multi-objective component sizing based on optimal energy management strategy of fuel cell electric vehicles. Applied Energy, 2015, 157, 664-674.	5.1	159
89	Model-based temperature regulation of a PEM fuel cell system on a city bus. International Journal of Hydrogen Energy, 2015, 40, 13566-13575.	3.8	83
90	Model-based estimation of liquid saturation in cathode gas diffusion layer and current density difference under proton exchange membrane fuel cell flooding. International Journal of Hydrogen Energy, 2015, 40, 14187-14201.	3.8	29

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91	Model-based fuel pressure regulation algorithm for a hydrogen-injected PEM fuel cell engine. International Journal of Hydrogen Energy, 2015, 40, 14942-14951.	3.8	24
92	Energy management of plug-in hybrid electric vehicles with unknown trip length. Journal of the Franklin Institute, 2015, 352, 500-518.	1.9	37
93	Research on the control of the generating system in the walking machines. , 2014, , .		0
94	Multi-mode control strategy for fuel cell electric vehicles regarding fuel economy and durability. International Journal of Hydrogen Energy, 2014, 39, 2374-2389.	3.8	95
95	Approximate Pontryaginâ€™s minimum principle applied to the energy management of plug-in hybrid electric vehicles. Applied Energy, 2014, 115, 174-189.	5.1	241
96	Multi-objective optimization of a semi-active battery/supercapacitor energy storage system for electric vehicles. Applied Energy, 2014, 135, 212-224.	5.1	275
97	On-line equalization for lithium-ion battery packs based on charging cell voltages: Part 1. Equalization based on remaining charging capacity estimation. Journal of Power Sources, 2014, 247, 676-686.	4.0	104
98	On-line equalization for lithium-ion battery packs based on charging cell voltages: Part 2. Fuzzy logic equalization. Journal of Power Sources, 2014, 247, 460-466.	4.0	53
99	Application of Pontryagin's Minimal Principle to the energy management strategy of plugin fuel cell electric vehicles. International Journal of Hydrogen Energy, 2013, 38, 10104-10115.	3.8	150
100	Cell state-of-charge inconsistency estimation for LiFePO4 battery pack in hybrid electric vehicles using mean-difference model. Applied Energy, 2013, 111, 571-580.	5.1	158
101	Optimal sizing of plug-in fuel cell electric vehicles using models of vehicle performance and system cost. Applied Energy, 2013, 103, 477-487.	5.1	111
102	An assessment of PHEV energy management strategies using driving range data collected in Beijing. , 2013, , .		1
103	Real-Time Estimation of Vehicle Mass and Road Grade Based on Multi-Sensor Data Fusion. , 2013, , .		15
104	Traction Control System for EV Based on Modified Maximum Transmissible Torque Estimation. , 2013, , .		2
105	Closed Loop Control Algorithm of Fuel Cell Output Power for a City Bus. SAE International Journal of Alternative Powertrains, 2013, 2, 74-81.	0.8	5
106	Dynamic Programming Algorithm for minimizing operating cost of a PEM fuel cell vehicle. , 2012, , .		26
107	Economic operating characteristics of permanent magnet synchronous motor in electric vehicle. , 2012, , .		1
108	Real time optimal energy management strategy targeting at minimizing daily operation cost for a plug-in fuel cell city bus. International Journal of Hydrogen Energy, 2012, 37, 15380-15392.	3.8	82

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109	A distributed control system for an automatic mechanical transmission of a fuel cell city bus. , 2012, , .		0
110	Research on a battery test profile based on road test data from hybrid fuel cell buses. Journal of Power Sources, 2012, 209, 30-39.	4.0	13
111	Proton exchange membrane fuel cell system diagnosis based on the multivariate statistical method. International Journal of Hydrogen Energy, 2011, 36, 9896-9905.	3.8	56
112	Proton exchange membrane fuel cell system diagnosis based on the signed directed graph method. Journal of Power Sources, 2011, 196, 5881-5888.	4.0	15
113	Integration of PEM fuel cell/battery powertrain: EMI noises and power split strategy. , 2011, , .		2
114	Online management of lithium-ion battery based on time-triggered controller area network for fuel-cell hybrid vehicle applications. Journal of Power Sources, 2010, 195, 3338-3343.	4.0	40
115	Performance analysis of proton-exchange membrane fuel cell stacks used in Beijing urban-route buses trial project. International Journal of Hydrogen Energy, 2010, 35, 3841-3847.	3.8	34
116	Active fault tolerance control system of fuel cell hybrid city bus. International Journal of Hydrogen Energy, 2010, 35, 12510-12520.	3.8	38
117	A New Generation of Fuel Cell Hybrid Powertrain for Public Traffic. , 2010, , .		0
118	Hierarchical control of vehicular fuel cell / battery hybrid powertrain. World Electric Vehicle Journal, 2010, 4, 133-142.	1.6	1
119	Influence of powertrain parameters on vehicle performance of a fuel cell / battery city bus. World Electric Vehicle Journal, 2010, 4, 143-150.	1.6	2
120	A Distributed Real-Time Control System for PEM Fuel Cell Engine. , 2009, , .		2
121	Influence of Bus Voltage on Motor Torque and Efficiency in Fuel Cell Hybrid Powertrain. Journal of Highway and Transportation Research and Development (English Edition), 2009, 4, 112-116.	0.2	0
122	Modeling and control of air system for PEMFC system. , 2009, , .		1
123	MEMS and J2ME based acceleration real-time measurement and monitoring system for fuel cell city bus. , 2009, , .		1
124	Bluetooth wireless monitoring, diagnosis and calibration interface for control system of fuel cell bus in Olympic demonstration. Journal of Power Sources, 2009, 186, 478-484.	4.0	20
125	Modeling and experimental study of PEM fuel cell transient response for automotive applications. Tsinghua Science and Technology, 2009, 14, 639-645.	4.1	11
126	Optimal vehicle control strategy of a fuel cell/battery hybrid city bus. International Journal of Hydrogen Energy, 2009, 34, 7323-7333.	3.8	114

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127	Power management strategy for vehicular-applied hybrid fuel cell/battery power system. Journal of Power Sources, 2009, 191, 542-549.	4.0	106
128	Adaptive supervisory control strategy of a fuel cell/battery-powered city bus. Journal of Power Sources, 2009, 194, 360-368.	4.0	119
129	Power management and economic estimation of fuel cell hybrid vehicle using fuzzy logic. , 2009, , .		9
130	Parameter Identification and Control Strategy Optimization of Hybrid Fuel Cell Powertrain. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2009, 45, 56.	0.7	4
131	Modeling and Simulation of a Hybrid Fuel Cell System and Energy Management Strategy. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2009, 45, 141.	0.7	5
132	Control algorithm of fuel cell/battery hybrid vehicular power system. , 2008, , .		4
133	Application and study of novel electronic technologies on vehicle control system of fuel cell bus. , 2008, , .		0
134	A Time-triggered CAN Network and Test Platform for Fuel Cell Bus. , 2008, , .		3
135	Modeling and control of air system for fuel cell system. Jixie Gongcheng Xuebao/Chinese Journal of Mechanical Engineering, 2008, 44, 112.	0.7	0
136	Systematic Fuel Reduction Strategies of Series Hybrid Transit Bus. Control Applications (CCA), Proceedings of the IEEE International Conference on, 2007, , .	0.0	0
137	Performance comparison of two fuel cell hybrid buses with different powertrain and energy management strategies. Journal of Power Sources, 2006, 163, 467-479.	4.0	60
138	Modeling and Experiment Validation of the DC/DC Converter for Online AC Impedance Identification of the Lithium-Ion Battery. SAE International Journal of Alternative Powertrains, 0, 6, 233-245.	0.8	3