Chris Mi

List of Publications by Year
in descending order

279 papers	20,699 citations	11608 70 h-index	11899 134 g-index
318 all docs	318 docs citations	318 times ranked	9301 citing authors

#	Article	IF	Citations
1	Wireless Power Transfer for Electric Vehicle Applications. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2015, 3, 4-17.	3.7	1,450
2	Eliminate Reactive Power and Increase System Efficiency of Isolated Bidirectional Dual-Active-Bridge DCâ€“DC Converters Using Novel Dual-Phase-Shift Control. IEEE Transactions on Power Electronics, 2008, 23, 2905-2914.	5.4	892
3	A Double-Sided LCC Compensation Network and Its Tuning Method for Wireless Power Transfer. IEEE Transactions on Vehicular Technology, 2015, 64, 2261-2273.	3.9	781
4	Compensation Topologies of High-Power Wireless Power Transfer Systems. IEEE Transactions on Vehicular Technology, 2016, 65, 4768-4778.	3.9	672
5	Modern Advances in Wireless Power Transfer Systems for Roadway Powered Electric Vehicles. IEEE Transactions on Industrial Electronics, 2016, 63, 6533-6545.	5.2	607
6	Modeling and Simulation of Electric and Hybrid Vehicles. Proceedings of the IEEE, 2007, 95, 729-745.	16.4	352
7	A Double-Sided <italic>LCLC</italic>-Compensated Capacitive Power Transfer System for Electric Vehicle Charging. IEEE Transactions on Power Electronics, 2015, 30, 6011-6014.	5.4	345
8	A review of wireless power transfer for electric vehicles: Prospects to enhance sustainable mobility. Applied Energy, 2016, 179, 413-425.	5.1	336
9	State of Charge Estimation of Lithium-Ion Batteries in Electric Drive Vehicles Using Extended Kalman Filtering. IEEE Transactions on Vehicular Technology, 2013, 62, 1020-1030.	3.9	333
10	Design Methodology of LLC Resonant Converters for Electric Vehicle Battery Chargers. IEEE Transactions on Vehicular Technology, 2014, 63, 1581-1592.	3.9	331
11	Operation, design and control of dual H-bridge-based isolated bidirectional DCâ€“DC converter. IET Power Electronics, 2008, 1, 507.	1.5	323
12	Quantitative Comparison of Flux-Switching Permanent-Magnet Motors With Interior Permanent Magnet Motor for EV, HEV, and PHEV Applications. IEEE Transactions on Magnetics, 2012, 48, 2374-2384.	1.2	291
13	Energy Management for a Power-Split Plug-in Hybrid Electric Vehicle Based on Dynamic Programming and Neural Networks. IEEE Transactions on Vehicular Technology, 2014, 63, 1567-1580.	3.9	274
14	Comparison Study on SS and Double-Sided LCC Compensation Topologies for EV/PHEV Wireless Chargers. IEEE Transactions on Vehicular Technology, 2016, 65, 4429-4439.	3.9	262
15	Integrated ${LCC} $ Compensation Topology for Wireless Charger in Electric and Plug-in Electric Vehicles. IEEE Transactions on Industrial Electronics, 2015, 62, 4215-4225.	5.2	261
16	A new method to estimate the state of charge of lithium-ion batteries based on the battery impedance model. Journal of Power Sources, 2013, 233, 277-284.	4.0	254
17	The State of Charge Estimation of Lithium-Ion Batteries Based on a Proportional-Integral Observer. IEEE Transactions on Vehicular Technology, 2014, 63, 1614-1621.	3.9	249
18	Experimental Comparison of Traditional Phase-Shift, Dual-Phase-Shift, and Model-Based Control of Isolated Bidirectional DCâ€“DC Converters. IEEE Transactions on Power Electronics, 2010, 25, 1444-1449.	5.4	239

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19	Online battery state of health estimation based on Genetic Algorithm for electric and hybrid vehicle applications. Journal of Power Sources, 2013, 240, 184-192.	4.0	237
20	A New Integration Method for an Electric Vehicle Wireless Charging System Using LCC Compensation Topology: Analysis and Design. IEEE Transactions on Power Electronics, 2017, 32, 1638-1650.	5.4	237
21	A High-Efficiency Active Battery-Balancing Circuit Using Multiwinding Transformer. IEEE Transactions on Industry Applications, 2013, 49, 198-207.	3.3	229
22	Three-Level Inverter-Based Shunt Active Power Filter in Three-Phase Three-Wire and Four-Wire Systems. IEEE Transactions on Power Electronics, 2009, 24, 1350-1363.	5.4	223
23	A correlation based fault detection method for short circuits in battery packs. Journal of Power Sources, 2017, 337, 1-10.	4.0	210
24	A 4-Plate Compact Capacitive Coupler Design and LCL-Compensated Topology for Capacitive Power Transfer in Electric Vehicle Charging Applications. IEEE Transactions on Power Electronics, 2016, , 1-1.	5.4	209
25	A Dynamic Charging System With Reduced Output Power Pulsation for Electric Vehicles. IEEE Transactions on Industrial Electronics, 2016, 63, 6580-6590.	5.2	208
26	Energy management of a power-split plug-in hybrid electric vehicle based on genetic algorithm and quadratic programming. Journal of Power Sources, 2014, 248, 416-426.	4.0	203
27	A Misalignment-Tolerant Series-Hybrid Wireless EV Charging System With Integrated Magnetics. IEEE Transactions on Power Electronics, 2019, 34, 1276-1285.	5.4	194
28	A Review on the Recent Development of Capacitive Wireless Power Transfer Technology. Energies, 2017, 10, 1752.	1.6	190
29	Loosely Coupled Transformer Structure and Interoperability Study for EV Wireless Charging Systems. IEEE Transactions on Power Electronics, 2015, 30, 6356-6367.	5.4	185
30	Compact and Efficient Bipolar Coupler for Wireless Power Chargers: Design and Analysis. IEEE Transactions on Power Electronics, 2015, 30, 6130-6140.	5.4	185
31	Prognostic and Warning System for Power-Electronic Modules in Electric, Hybrid Electric, and Fuel-Cell Vehicles. IEEE Transactions on Industrial Electronics, 2008, 55, 2268-2276.	5.2	184
32	Multi-Paralleled LCC Reactive Power Compensation Networks and Their Tuning Method for Electric Vehicle Dynamic Wireless Charging. IEEE Transactions on Industrial Electronics, 2016, 63, 6546-6556.	5.2	177
33	Modeling of iron losses of permanent-magnet synchronous motors. IEEE Transactions on Industry Applications, 2003, 39, 734-742.	3.3	173
34	Wavelet-transform-based power management of hybrid vehicles with multiple on-board energy sources including fuel cell, battery and ultracapacitor. Journal of Power Sources, 2008, 185, 1533-1543.	4.0	168
35	Study of the Characteristics of Battery Packs in Electric Vehicles With Parallel-Connected Lithium-Ion Battery Cells. IEEE Transactions on Industry Applications, 2015, 51, 1872-1879.	3.3	166
36	A Double-Sided LC-Compensation Circuit for Loosely Coupled Capacitive Power Transfer. IEEE Transactions on Power Electronics, 2018, 33, 1633-1643.	5.4	166

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37	A robust state-of-charge estimator for multiple types of lithium-ion batteries using adaptive extended Kalman filter. Journal of Power Sources, 2013, 243, 805-816.	4.0	164
38	An Inductive and Capacitive Combined Wireless Power Transfer System With <italic>LC</italic>-Compensated Topology. IEEE Transactions on Power Electronics, 2016, 31, 8471-8482.	5.4	164
39	Design and Analysis of a Three-Phase Wireless Charging System for Lightweight Autonomous Underwater Vehicles. IEEE Transactions on Power Electronics, 2018, 33, 6622-6632.	5.4	162
40	Online state-of-health estimation for lithium-ion batteries using constant-voltage charging current analysis. Applied Energy, 2018, 212, 1589-1600.	5.1	156
41	An Automatic Equalizer Based on Forwardâ€“Flyback Converter for Series-Connected Battery Strings. IEEE Transactions on Industrial Electronics, 2017, 64, 5380-5391.	5.2	147
42	Iterative Learning Control of Antilock Braking of Electric and Hybrid Vehicles. IEEE Transactions on Vehicular Technology, 2005, 54, 486-494.	3.9	136
43	Plug-in vs. wireless charging: Life cycle energy and greenhouse gas emissions for an electric bus system. Applied Energy, 2015, 146, 11-19.	5.1	136
44	A Two-Plate Capacitive Wireless Power Transfer System for Electric Vehicle Charging Applications. IEEE Transactions on Power Electronics, 2018, 33, 964-969.	5.4	134
45	Modeling of a Complementary and Modular Linear Flux-Switching Permanent Magnet Motor for Urban Rail Transit Applications. IEEE Transactions on Energy Conversion, 2012, 27, 489-497.	3.7	131
46	Six-Plate Capacitive Coupler to Reduce Electric Field Emission in Large Air-Gap Capacitive Power Transfer. IEEE Transactions on Power Electronics, 2018, 33, 665-675.	5.4	128
47	Frequency Optimization of a Loosely Coupled Underwater Wireless Power Transfer System Considering Eddy Current Loss. IEEE Transactions on Industrial Electronics, 2019, 66, 3468-3476.	5.2	125
48	The Short-Time-Scale Transient Processes in High-Voltage and High-Power Isolated Bidirectional DCâ€“DC Converters. IEEE Transactions on Power Electronics, 2008, 23, 2648-2656.	5.4	124
49	A Switched-Coupling-Capacitor Equalizer for Series-Connected Battery Strings. IEEE Transactions on Power Electronics, 2017, 32, 7694-7706.	5.4	112
50	A Dual-Coupled LCC-Compensated IPT System With a Compact Magnetic Coupler. IEEE Transactions on Power Electronics, 2018, 33, 6391-6402.	5.4	112
51	Influence of Leading Design Parameters on the Force Performance of a Complementary and Modular Linear Flux-Switching Permanent-Magnet Motor. IEEE Transactions on Industrial Electronics, 2014, 61, 2165-2175.	5.2	109
52	Load-Independent Wireless Power Transfer System for Multiple Loads Over a Long Distance. IEEE Transactions on Power Electronics, 2019, 34, 9279-9288.	5.4	109
53	Feasibility study on bipolar pads for efficient wireless power chargers. , 2014, , .		108
54	A novel energy management method for series plug-in hybrid electric vehicles. Applied Energy, 2015, 145, 172-179.	5.1	107

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55	Energy management of power-split plug-in hybrid electric vehicles based on simulated annealing and Pontryagin's minimum principle. Journal of Power Sources, 2014, 272, 160-168.	4.0	99
56	Analytical Method for Predicting the Air-Gap Flux of Interior-Type Permanent-Magnet Machines. IEEE Transactions on Magnetics, 2004, 40, 50-58.	1.2	96
57	Integrated Coil Design for EV Wireless Charging Systems Using LCC Compensation Topology. IEEE Transactions on Power Electronics, 2018, 33, 9231-9241.	5.4	93
58	A CLLC-compensated high power and large air-gap capacitive power transfer system for electric vehicle charging applications. , 2016, , .		86
59	Adaptive State-of-Charge Estimation Based on a Split Battery Model for Electric Vehicle Applications. IEEE Transactions on Vehicular Technology, 2017, 66, 10889-10898.	3.9	85
60	Investigation of path dependence in commercial lithium-ion cells for pure electric bus applications: Aging mechanism identification. Journal of Power Sources, 2015, 274, 29-40.	4.0	84
61	A fault-tolerant voltage measurement method for series connected battery packs. Journal of Power Sources, 2016, 308, 83-96.	4.0	84
62	Charge-Depleting Control Strategies and Fuel Optimization of Blended-Mode Plug-In Hybrid Electric Vehicles. IEEE Transactions on Vehicular Technology, 2011, 60, 1516-1525.	3.9	81
63	Analytical Method for Magnetic Field Calculation in a Low-Speed Permanent-Magnet Harmonic Machine. IEEE Transactions on Energy Conversion, 2011, 26, 862-870.	3.7	79
64	Analytical Approach for the Power Management of Blended-Mode Plug-In Hybrid Electric Vehicles. IEEE Transactions on Vehicular Technology, 2012, 61, 1554-1566.	3.9	77
65	Design of LLC Resonant Converters Based on Operation-Mode Analysis for Level Two PHEV Battery Chargers. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1595-1606.	3.7	77
66	Accurate Lithium-ion battery parameter estimation with continuous-time system identification methods. Applied Energy, 2016, 179, 426-436.	5.1	77
67	A Multi-Load Wireless Power Transfer System With Series-Parallel-Series Compensation. IEEE Transactions on Power Electronics, 2019, 34, 7126-7130.	5.4	76
68	A Load-Independent LCC-Compensated Wireless Power Transfer System for Multiple Loads With a Compact Coupler Design. IEEE Transactions on Industrial Electronics, 2020, 67, 4507-4515.	5.2	76
69	Modeling of Eddy-Current Loss of Electrical Machines and Transformers Operated by Pulsewidth-Modulated Inverters. IEEE Transactions on Magnetics, 2008, 44, 2021-2028.	1.2	75
70	Vehicle Power Management. Power Systems, 2011, , .	0.3	75
71	Modeling and Analysis of Series-None Compensation for Wireless Power Transfer Systems With a Strong Coupling. IEEE Transactions on Power Electronics, 2019, 34, 1209-1215.	5.4	75
72	Single-Stage Resonant Battery Charger With Inherent Power Factor Correction for Electric Vehicles. IEEE Transactions on Vehicular Technology, 2013, 62, 4336-4344.	3.9	74

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73	A Delta-Structured Switched-Capacitor Equalizer for Series-Connected Battery Strings. IEEE Transactions on Power Electronics, 2018, , 1-1.	5.4	74
74	Minimization of Iron Losses of Permanent Magnet Synchronous Machines. IEEE Transactions on Energy Conversion, 2005, 20, 121-127.	3.7	73
75	Evaluation of Model Based State of Charge Estimation Methods for Lithium-Ion Batteries. Energies, 2014, 7, 5065-5082.	1.6	71
76	A Rotation-Resilient Wireless Charging System for Lightweight Autonomous Underwater Vehicles. IEEE Transactions on Vehicular Technology, 2018, 67, 6935-6942.	3.9	71
77	Unified Load-Independent ZPA Analysis and Design in CC and CV Modes of Higher Order Resonant Circuits for WPT Systems. IEEE Transactions on Transportation Electrification, 2019, 5, 977-987.	5.3	71
78	Hybrid vehicle design using global optimisation algorithms. International Journal of Electric and Hybrid Vehicles, 2007, 1, 57.	0.2	69
79	Loss-Minimization-Based Charging Strategy for Lithium-Ion Battery. IEEE Transactions on Industry Applications, 2015, 51, 4121-4129.	3.3	67
80	A Real-Time Battery Thermal Management Strategy for Connected and Automated Hybrid Electric Vehicles (CAHEVs) Based on Iterative Dynamic Programming. IEEE Transactions on Vehicular Technology, 2018, 67, 8077-8084.	3.9	66
81	Revolution of Electric Vehicle Charging Technologies Accelerated by Wide Bandgap Devices. Proceedings of the IEEE, 2021, 109, 985-1003.	16.4	62
82	Realizing Constant Current and Constant Voltage Outputs and Input Zero Phase Angle of Wireless Power Transfer Systems With Minimum Component Counts. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 600-610.	4.7	61
83	A Novel Soft-Switching Bidirectional DCâ€“DC Converter With Coupled Inductors. IEEE Transactions on Industry Applications, 2013, 49, 2730-2740.	3.3	60
84	An Automotive Onboard AC Heater Without External Power Supplies for Lithium-Ion Batteries at Low Temperatures. IEEE Transactions on Power Electronics, 2018, 33, 7759-7769.	5.4	60
85	A Linear Doubly Salient Permanent-Magnet Motor With Modular and Complementary Structure. IEEE Transactions on Magnetics, 2011, 47, 4809-4821.	1.2	58
86	An Integrated Heater Equalizer for Lithium-Ion Batteries of Electric Vehicles. IEEE Transactions on Industrial Electronics, 2019, 66, 4398-4405.	5.2	58
87	A Load-Independent Wireless Power Transfer System With Multiple Constant Voltage Outputs. IEEE Transactions on Power Electronics, 2020, 35, 3328-3331.	5.4	58
88	Fault-Tolerant Wireless Power Transfer System With a Dual-Coupled LCC-S Topology. IEEE Transactions on Vehicular Technology, 2019, 68, 11838-11846.	3.9	57
89	A review of foreign object detection (FOD) for inductive power transfer systems. ETransportation, 2019, 1, 100002.	6.8	56
90	A Modularization Method for Battery Equalizers Using Multiwinding Transformers. IEEE Transactions on Vehicular Technology, 2017, 66, 8710-8722.	3.9	55

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91	Frequency and Voltage Tuning of Seriesâ€“Series Compensated Wireless Power Transfer System to Sustain Rated Power Under Various Conditions. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 1311-1317.	3.7	53
92	An Improved Soft-Switching Buck Converter With Coupled Inductor. IEEE Transactions on Power Electronics, 2013, 28, 4885-4891.	5.4	52
93	Accurate and reliable state of charge estimation of lithium ion batteries using time-delayed recurrent neural networks through the identification of overexcited neurons. Applied Energy, 2022, 305, 117962.	5.1	52
94	The dynamic model and hybrid phase-shift control of a dual-active-bridge converter. , 2008, , .		51
95	Learning of Battery Model Bias for Effective State of Charge Estimation of Lithium-Ion Batteries. IEEE Transactions on Vehicular Technology, 2019, 68, 8613-8628.	3.9	51
96	A Tightly Coupled Inductive Power Transfer System for Low-Voltage and High-Current Charging of Automatic Guided Vehicles. IEEE Transactions on Industrial Electronics, 2019, 66, 6867-6875.	5.2	51
97	Comparison of Complementary and Modular Linear Flux-Switching Motors With Different Mover and Stator Pole Pitch. IEEE Transactions on Magnetics, 2013, 49, 1493-1504.	1.2	50
98	Hybrid Energy Storage System of an Electric Scooter Based on Wireless Power Transfer. IEEE Transactions on Industrial Informatics, 2018, 14, 4169-4178.	7.2	50
99	Wide Design Range of Constant Output Current Using Double-Sided LC Compensation Circuits for Inductive-Power-Transfer Applications. IEEE Transactions on Power Electronics, 2019, 34, 2364-2374.	5.4	50
100	Battery Cell Identification and SOC Estimation Using String Terminal Voltage Measurements. IEEE Transactions on Vehicular Technology, 2012, 61, 2925-2935.	3.9	49
101	Output power and efficiency sensitivity to circuit parameter variations in double-sided LCC-compensated wireless power transfer system. , 2015, , .		49
102	Case Study of an Electric Vehicle Battery Thermal Runaway and Online Internal Short-Circuit Detection. IEEE Transactions on Power Electronics, 2021, 36, 2452-2455.	5.4	49
103	A New Coil Structure to Reduce Eddy Current Loss of WPT Systems for Underwater Vehicles. IEEE Transactions on Vehicular Technology, 2019, 68, 245-253.	3.9	47
104	SOC Based Battery Cell Balancing with a Novel Topology and Reduced Component Count. Energies, 2013, 6, 2726-2740.	1.6	46
105	An Inductive and Capacitive Integrated Coupler and Its LCL Compensation Circuit Design for Wireless Power Transfer. IEEE Transactions on Industry Applications, 2017, 53, 4903-4913.	3.3	46
106	Performance Modeling and Optimization of a Novel Multi-mode Hybrid Powertrain. Journal of Mechanical Design, Transactions of the ASME, 2006, 128, 79-89.	1.7	45
107	A high efficiency 3.3 kW loosely-coupled wireless power transfer system without magnetic material. , 2015, , .		45
108	Modelling, design and optimisation of a battery charger for plug-in hybrid electric vehicles. IET Electrical Systems in Transportation, 2011, 1, 3-10.	1.5	44

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109	Dynamic Charging of Electric Vehicles by Wireless Power Transfer. IEEE Transactions on Industrial Electronics, 2016, 63, 6530-6532.	5.2	44
110	The improved interleaved voltage measurement method for series connected battery packs. Journal of Power Sources, 2016, 334, 12-22.	4.0	44
111	Advanced Electro-Thermal Modeling of Lithium-Ion Battery System for Hybrid Electric Vehicle Applications. , 2007, , .		43
112	Distance-Based Ecological Driving Scheme Using a Two-Stage Hierarchy for Long-Term Optimization and Short-Term Adaptation. IEEE Transactions on Vehicular Technology, 2017, 66, 1940-1949.	3.9	43
113	A High-Power Wireless Charging System Using LCL-N Topology to Achieve a Compact and Low-Cost Receiver. IEEE Transactions on Power Electronics, 2020, 35, 131-137.	5.4	43
114	Modeling of a Hybrid Electric Vehicle Powertrain Test Cell Using Bond Graphs. IEEE Transactions on Vehicular Technology, 2005, 54, 837-845.	3.9	42
115	Underwater wireless power transfer system with a curly coil structure for AUVs. IET Power Electronics, 2019, 12, 2559-2565.	1.5	42
116	Analytical design of permanent-magnet traction-drive motors. IEEE Transactions on Magnetics, 2006, 42, 1861-1866.	1.2	41
117	Development of a high efficiency primary side controlled 7kW wireless power charger. , 2014, , .		41
118	Ecological Driving System for Connected/Automated Vehicles Using a Two-Stage Control Hierarchy. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 2373-2384.	4.7	41
119	Modeling and Control of a Variable-Speed Constant-Frequency Synchronous Generator With Brushless Exciter. IEEE Transactions on Industry Applications, 2004, 40, 565-573.	3.3	39
120	Improved Battery Parameter Estimation Method Considering Operating Scenarios for HEV/EV Applications. Energies, 2017, 10, 5.	1.6	38
121	Sensitivity Analysis of Inductive Power Transfer Systems With Voltage-Fed Compensation Topologies. IEEE Transactions on Vehicular Technology, 2019, 68, 4502-4513.	3.9	38
122	Foreign Object Detection in Wireless Power Transfer Systems. IEEE Transactions on Industry Applications, 2022, 58, 1340-1354.	3.3	38
123	Continuing Education in Power Electronics. IEEE Transactions on Education, 2005, 48, 183-190.	2.0	37
124	Torque Control of IPMSM in the Field Weakening Region with Improved DC-Link Voltage Utilization. IEEE Transactions on Industrial Electronics, 2014, , 1-1.	5.2	37
125	Loosely Coupled Transformer Coil Design to Minimize EMF Radiation in Concerned Areas. IEEE Transactions on Vehicular Technology, 2016, 65, 4779-4789.	3.9	37
126	An LCC-P Compensated Wireless Power Transfer System with a Constant Current Output and Reduced Receiver Size. Energies, 2019, 12, 172.	1.6	37

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127	The improved open-circuit voltage characterization test using active polarization voltage reduction method. Applied Energy, 2019, 237, 682-694.	5.1	36
128	A Low-Voltage and High-Current Inductive Power Transfer System With Low Harmonics for Automatic Guided Vehicles. IEEE Transactions on Vehicular Technology, 2019, 68, 3351-3360.	3.9	36
129	A Lithium-Ion Battery Balancing Circuit Based on Synchronous Rectification. IEEE Transactions on Power Electronics, 2020, 35, 1637-1648.	5.4	35
130	Core Temperature Estimation for Self-Heating Automotive Lithium-Ion Batteries in Cold Climates. IEEE Transactions on Industrial Informatics, 2020, 16, 3366-3375.	7.2	35
131	Energy Absorption of Gold Nanoshells in Hyperthermia Therapy. IEEE Transactions on Nanobioscience, 2008, 7, 206-214.	2.2	34
132	Modelling and analysis of the distortion of stronglyâ€coupled wireless power transfer systems with SS and LCCâ€“LCC compensations. IET Power Electronics, 2019, 12, 1321-1328.	1.5	34
133	Doubly Salient Permanent-Magnet Machine With Skewed Rotor and Six-State Commutating Mode. IEEE Transactions on Magnetics, 2007, 43, 3623-3629.	1.2	33
134	A loosely coupled capacitive power transfer system with LC compensation circuit topology. , 2016, , .		33
135	Robust Predictive Battery Thermal Management Strategy for Connected and Automated Hybrid Electric Vehicles Based on Thermoelectric Parameter Uncertainty. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2018, 6, 1796-1805.	3.7	33
136	A High-Efficiency and Long-Distance Power-Relay System With Equal Power Distribution. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 1419-1427.	3.7	33
137	A novel resistor-inductor network-based equivalent circuit model of lithium-ion batteries under constant-voltage charging condition. Applied Energy, 2019, 254, 113726.	5.1	32
138	Comparison and evaluation of different DC/DC topologies for plug-in hybrid electric vehicle chargers. International Journal of Power Electronics, 2012, 4, 119.	0.1	31
139	Modeling and Analysis of a Strongly Coupled Seriesâ€“Parallel-Compensated Wireless Power Transfer System. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2019, 7, 1364-1370.	3.7	31
140	Three-Coil Wireless Charging System for Metal-Cover Smartphone Applications. IEEE Transactions on Power Electronics, 2020, 35, 4847-4858.	5.4	31
141	An NFC-Connected Coupler Using IPT-CPT-Combined Wireless Charging for Metal-Cover Smartphone Applications. IEEE Transactions on Power Electronics, 2021, 36, 6323-6338.	5.4	31
142	Modeling and Analysis of AC Output Power Factor for Wireless Chargers in Electric Vehicles. IEEE Transactions on Power Electronics, 2017, 32, 1481-1492.	5.4	30
143	An LC-Compensated Electric Field Repeater for Long-Distance Capacitive Power Transfer. IEEE Transactions on Industry Applications, 2017, 53, 4914-4922.	3.3	30
144	Data-based fractional differential models for non-linear dynamic modeling of a lithium-ion battery. Energy, 2017, 135, 171-181.	4.5	30

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145	A high efficiency low cost direct battery balancing circuit using a multi-winding transformer with reduced switch count. , 2012, , .		29
146	Optimal design of line level control resonant converters in plugâ€in hybrid electric vehicle battery chargers. IET Electrical Systems in Transportation, 2014, 4, 21-28.	1.5	29
147	Design of a high efficiency 22 kW wireless power transfer system for EVs fast contactless charging stations. , 2014, , .		28
148	Improving the Starting Performance of Large Salient-Pole Synchronous Machines. IEEE Transactions on Magnetics, 2004, 40, 1920-1928.	1.2	27
149	Simplified Thermal Model of PM Motors in Hybrid Vehicle Applications Taking into Account Eddy Current Loss in Magnets. Journal of Asian Electric Vehicles, 2010, 8, 1337-1343.	0.4	27
150	A Power Relay System With Multiple Loads Using Asymmetrical Coil Design. IEEE Transactions on Industrial Electronics, 2021, 68, 1188-1196.	5.2	27
151	A Novel Capacitive Coupler Array With Free-Positioning Feature for Mobile Tablet Applications. IEEE Transactions on Power Electronics, 2019, 34, 6014-6019.	5.4	26
152	An Electric Roadway System Leveraging Dynamic Capacitive Wireless Charging: Furthering the Continuous Charging of Electric Vehicles. IEEE Electrification Magazine, 2020, 8, 52-60.	1.8	26
153	Magnetic integration of LCC compensated resonant converter for inductive power transfer applications. , 2014, , .		25
154	Active-charging based powertrain control in series hybrid electric vehicles for efficiency improvement and battery lifetime extension. Journal of Power Sources, 2014, 245, 292-300.	4.0	25
155	A Copula-based battery pack consistency modeling method and its application on the energy utilization efficiency estimation. Energy, 2019, 189, 116219.	4.5	25
156	A Two-Layer Real-Time Optimization Control Strategy for Integrated Battery Thermal Management and HVAC System in Connected and Automated HEVs. IEEE Transactions on Vehicular Technology, 2021, 70, 6567-6576.	3.9	25
157	Integrated control of electromechanical braking and regenerative braking in plug-in hybrid electric vehicles. International Journal of Vehicle Design, 2012, 58, 223.	0.1	24
158	A Comparison Study of the Model Based SOC Estimation Methods for Lithium-Ion Batteries. , 2013, , .		24
159	A dynamic capacitive power transfer system with reduced power pulsation. , 2016, , .		24
160	Framework and Research Methodology of Short-Timescale Pulsed Power Phenomena in High-Voltage and High-Power Converters. IEEE Transactions on Industrial Electronics, 2009, 56, 805-816.	5.2	23
161	External short circuit fault diagnosis for lithium-ion batteries. , 2014, , .		23
162	High power capacitive power transfer for electric vehicle charging applications. , 2015, , .		23

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163	The Plasmon Resonance of a Multilayered Gold Nanoshell and its Potential Bioapplications. IEEE Nanotechnology Magazine, 2011, 10, 797-805.	1.1	21
164	Study of the characteristics of battery packs in electric vehicles with parallel-connected lithium-ion battery cells. , 2014, , .		20
165	A Distance-Based Two-Stage Ecological Driving System Using an Estimation of Distribution Algorithm and Model Predictive Control. IEEE Transactions on Vehicular Technology, 2017, 66, 6663-6675.	3.9	20
166	Lithium-ion battery capacity estimation based on battery surface temperature change under constant-current charge scenario. Energy, 2022, 241, 122879.	4.5	20
167	An adaptive online energy management controller for power-split HEV based on Dynamic Programming and fuzzy logic. , 2009, , .		19
168	A three-phase wireless charging system for lightweight autonomous underwater vehicles. , 2017, , .		19
169	State-of-Health Estimation for Lithium-Ion Batteries Based on Decoupled Dynamic Characteristic of Constant-Voltage Charging Current. IEEE Transactions on Transportation Electrification, 2022, 8, 2070-2079.	5.3	19
170	Topology, design, analysis and thermal management of power electronics for hybrid electric vehicle applications. International Journal of Electric and Hybrid Vehicles, 2008, 1, 276.	0.2	18
171	A switched-coupling-capacitor equalizer for series-connected battery strings. , 2017, , .		18
172	Modeling of Iron Losses of Electrical Machines and Transformers Fed by PWM Inverters. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	17
173	Fast Transient Thermal Analysis of Gold Nanoparticles in Tissue-Like Medium. IEEE Transactions on Nanobioscience, 2009, 8, 271-280.	2.2	16
174	Impact of inverter on losses and thermal characteristics of induction motors. International Journal of Power Electronics, 2011, 3, 641.	0.1	16
175	LLC resonant converters for PHEV battery chargers. , 2013, , .		16
176	Multiple cell lithium-ion battery system electric fault online diagnostics. , 2015, , .		16
177	ZVS double-side LCC compensated resonant inverter with magnetic integration for electric vehicle wireless charger. , 2015, , .		16
178	A Metal Object Detection System with Multilayer Detection Coil Layouts for Electric Vehicle Wireless Charging. Energies, 2020, 13, 2960.	1.6	16
179	Modeling of a Series Hybrid Electric High-Mobility Multipurpose Wheeled Vehicle. IEEE Transactions on Vehicular Technology, 2007, 56, 557-565.	3.9	15
180	An automatic battery equalizer based on forward and flyback conversion for series-connected battery strings. , 2017, , .		15

#	Article	IF	Citations
181	A dual-coupled LCC-compensated IPT system to improve misalignment performance. , 2017, , .		15
182	A Multiload Inductive Power Transfer Repeater System With Constant Load Current Characteristics. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2020, 8, 3533-3541.	3.7	15
183	Online temperature estimation of IPMSM permanent magnets in hybrid electric vehicles. , 2011, , .		14
184	A large air-gap capacitive power transfer system with a 4-plate capacitive coupler structure for electric vehicle charging applications. , 2016, , .		13
185	Model Reference Adaptive Control for Hybrid Electric Vehicle With Dual Clutch Transmission Configurations. IEEE Transactions on Vehicular Technology, 2018, 67, 991-999.	3.9	13
186	A hybrid excitation flux-switching permanent magnet linear motor for urban rail transit. , 2011, , .		12
187	An NFC-CPT-Combined Coupler With Series- None Compensation for Metal-Cover Smartphone Applications. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2021, 9, 3758-3769.	3.7	12
188	Modeling of eddy current loss in the magnets of permanent magnet machines for hybrid and electric vehicle traction applications. , 2009, , .		11
189	Transient Temperature Response of Pulsed-Laser-Induced Heating for Nanoshell-Based Hyperthermia Treatment. IEEE Nanotechnology Magazine, 2009, 8, 697-706.	1.1	11
190	Slide Mode and Fuzzy Logic Based Powertrain Controller for the Energy Management and Battery Lifetime Extension of Series Hybrid Electric Vehicles. Journal of Asian Electric Vehicles, 2010, 8, 1425-1432.	0.4	11
191	The impact of bidirectional DC-DC converter on the inverter operation and battery current in hybrid electric vehicles. , 2011, , .		11
192	A novel soft-switching bidirectional DC-DC converter with coupled inductors. , 2013, , .		11
193	Design of a Double-Sided LCLC-Compensated Capacitive Power Transfer System With Predesigned Coupler Plate Voltage Stresses. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2022, 10, 128-137.	3.7	11
194	A Two-Stage Real-Time Optimized EV Battery Cooling Control Based on Hierarchical and Iterative Dynamic Programming and MPC. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 11677-11687.	4.7	11
195	Modeling of iron losses of surface-mounted permanent magnet synchronous motors. , 0, , .		10
196	Design and optimization of a fuzzy-rule based hybrid electric vehicle controller. , 2008, , .		10
197	Multi-objective parameter optimization of a series hybrid electric vehicle using evolutionary algorithms. , 2009, , .		10
198	Power management of PHEV using quadratic programming. International Journal of Electric and Hybrid Vehicles, 2011, 3, 246.	0.2	10

#	Article	IF	Citations
199	A high efficiency and compact inductive power transfer system compatible with both 3.3kW and 7.7kW receivers. , 2017, , .		10
200	A Compact Spatial Free-Positioning Wireless Charging System for Consumer Electronics Using a Three-Dimensional Transmitting Coil. Energies, 2019, 12, 1409.	1.6	10
201	Repeater coilâ€based wireless power transfer system powering multiple gate drivers of seriesâ€connected IGBTs. IET Power Electronics, 2020, 13, 1722-1728.	1.5	10
202	A Multi-Load Capacitive Power Relay System With Load-Independent Constant Current Outputs. IEEE Transactions on Power Electronics, 2022, 37, 6144-6155.	5.4	10
203	Modeling and simulation of a dual clutch hybrid vehicle powertrain. , 2009, , .		9
204	Comparative Study of a Passive Hybrid Energy Storage System Using Lithium Ion Battery and Ultracapacitor. World Electric Vehicle Journal, 2012, 5, 83-90.	1.6	9
205	A delta-structured switched-capacitor equalizer for series-connected battery strings. , 2017, , .		9
206	Modeling of the Starting Performance of Large Solid-Pole Synchronous Motors Using Equivalent Circuit Approach. IEEE Transactions on Magnetics, 2009, 45, 5399-5404.	1.2	8
207	Transverse flux permanent magnet motor with double-C stator hoops and flux-concentrated rotor for in-wheel drive electric vehicle. , 2014, , .		8
208	An inductive and capacitive integrated coupler and its LCL compensation circuit design for wireless power transfer. , 2016, , .		8
209	Eddy Current Loss Analysis of Underwater Wireless Power Transfer System. , 2018, , .		8
210	Interoperability study of fast wireless charging and normal wireless charging of electric vehicles with a shared receiver. IET Power Electronics, 2019, 12, 2551-2558.	1.5	8
211	Field-oriented Control of Induction Motor Drives with Direct Rotor Current Estimation for Applications in Electric and Hybrid Vehicles. Journal of Asian Electric Vehicles, 2007, 5, 989-992.	0.4	7
212	Fault diagnostics in power electronics-based brake-by-wire systems. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2008, 222, 1-11.	1.1	7
213	Fast battery equalization with isolated bidirectional DC-DC converter for PHEV applications. , 2009, , .		7
214	Loss minimization-based charging strategy for lithium-ion battery. , 2014, , .		7
215	A data-driven bias correction method based lithiumion battery modeling approach for electric vehicle applications. IEEE Transactions on Industry Applications, 2015, , 1-1.	3.3	7
216	A Wireless Power Transfer System with Multiple Constant Current and Constant Voltage Outputs. , 2019, , .		7

#	Article	IF	Citations
217	Longâ€distance wireless power transfer system powering multiple loads with constant voltage outputs using Sâ€SP compensation. IET Power Electronics, 2020, 13, 1729-1734.	1.5	7
218	A Novel Ultrafast Transient Constant on-Time Buck Converter for Multiphase Operation. IEEE Transactions on Power Electronics, 2021, 36, 13096-13106.	5.4	7
219	Design and Control of an Isolated Bidirectional DC-DC Converter for Hybrid Electric Vehicle Applications. Journal of Asian Electric Vehicles, 2006, 4, 851-856.	0.4	6
220	Design and testing of silicon carbide JFETs based inverter. , 2009, , .		6
221	A functional model of silicon carbide JFET and its use in the analysis of switching-transient and impact of gate resistor, miller effect and parasitic inductance. International Journal of Power Electronics, 2010, 2, 164.	0.1	6
222	MODELING OF EDDY CURRENT LOSS AND TEMPERATURE OF THE MAGNETS IN PERMANENT MAGNET MACHINES. Journal of Circuits, Systems and Computers, 2011, 20, 1287-1301.	1.0	6
223	Correction to "Eliminate Reactive Power and Increase System Efficiency of Isolated Bidirectional Dual-Active-Bridge DCâ€“DC Converters Using Novel Dual-Phase-Shift Control" [Nov 08 2905-2914]. IEEE Transactions on Power Electronics, 2012, 27, 4177-4177.	5.4	6
224	A novel state-of-charge estimation method for lithium-ion battery pack of electric vehicles. , 2015, , .		6
225	An LC compensated electric field repeater for long distance capacitive power transfer. , 2016, , .		6
226	A correlation based detection method for internal short circuit in battery packs. , 2017, , .		6
227	Identification of Fractional Differential Models for Lithium-ion Polymer Battery Dynamics. IFAC-PapersOnLine, 2017, 50, 405-410.	0.5	6
228	Investigation of negative permeability metamaterials for wireless power transfer. AIP Advances, 2017, 7, 115316.	0.6	6
229	Development of a Dielectric-Gas-Based Single-Phase Electrostatic Motor. IEEE Transactions on Industry Applications, 2019, 55, 2592-2600.	3.3	6
230	A Multi-load Wireless Power Transfer System with Constant Voltage Outputs Using S-LCC Compensation. , 2019, , .		6
231	Electric and Hybrid Vehicles. Proceedings of the IEEE, 2021, 109, 962-966.	16.4	6
232	Modeling of the Starting Performance of Large Solid-pole Synchronous Motors Using Equivalent Circuit Approach. IEEE Power Engineering Society General Meeting, 2007, , .	0.0	5
233	A bidirectional power converter for battery of plug-in hybrid electric vehicles. , 2010, , .		5
234	A modelâ€based deadâ€band compensation for the dualâ€activeâ€bridge isolated bidirectional DCâ€“DC converter. IEEJ Transactions on Electrical and Electronic Engineering, 2011, 6, 517-524.	0.8	5

#	Article	IF	Citations
235	Guest EditorialSpecial Issue on Wireless Power Transfer. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2015, 3, 1-3.	3.7	5
236	A star-structured switched-capacitor equalizer for series-connected battery strings. , 2017, , .		5
237	External short circuit fault diagnosis based on supervised statistical learning. , 2017, , .		5
238	Design and optimization of a dielectric-gas-based single-phase electrostatic motor. , 2018, , .		5
239	A data-driven bias correction method based lithium-ion battery modeling approach for electric vehicles application. , 2014, , .		4
240	Inter-operability considerations of the double-sided LCC compensated wireless charger for electric vehicle and plug-in hybrid electric vehicle applications. , 2015, , .		4
241	Guest Editorial Special Issue on Wireless Power Transfer. IEEE Transactions on Power Electronics, 2015, 30, 6015-6016.	5.4	4
242	Temperature-dependent performance of lithium ion batteries in electric vehicles. , 2015, , .		4
243	A reverse-coupled bipolar coil structure for an integrated LCC-compensated inductive power transfer system. , 2018, , .		4
244	An LCL-N Compensated Strongly-Coupled Wireless Power Transfer System for High-Power Applications. , 2019, , .		4
245	Vehicle Power Management: Basic Concepts. Power Systems, 2011, , 13-48.	0.3	4
246	Metalâ€rimâ€connected inductive coupler for smartwatch applications. IET Power Electronics, 2020, 13, 3428-3434.	1.5	4
247	Nanoparticle Heat Transfer and Its Application to Laser Hyperthermia. , 2007, , 1093.		3
248	Comprehensive Modeling of Automotive Ignition Systems. , 2007, , .		3
249	Effectively dealing with uncontrolled generation of traction motors in hybrid electric vehicles. , 2011, , .		3
250	Management of Energy Storage Systems in EV, HEV and PHEV. Power Systems, 2011, , 259-286.	0.3	3
251	Power management of passive multi-source hybrid electric vehicle. , 2011, , .		3
252	A control method to improve the efficiency of a soft-switching non-isolated bidirectional DC-DC converter for hybrid and plug-in electric vehicle applications. International Journal of Power Electronics, 2014, 6, 66.	0.1	3

#	Article	IF	Citations
253	Optimization and safety evaluation of a 3.3 kW wireless EV charger. , 2015, , .		3
254	Analytical Models of Wireless Power Transfer Systems with a Constant-Power Load. , 2018, , .		3
255	Doubly-Salient Permanent-Magnet Machine with Skewed Rotor and Six-State Commutating Mode. , 2006, , .		2
256	Analysis, Design and Simulation of Direct-drive PM Wind Power Generators with PWM Rectifiers. , 2007, , .		2
257	Improved battery modeling approach considering operating scenarios for HEV/EV applications. , 2017, , .		2
258	Notice of Removal: High efficiency wireless power transfer for EV charging and other applications. , 2017, , .		2
259	A finite-set model-based predictive battery thermal management in connected and automated hybrid electric vehicles. , 2018, , .		2
260	A fast-speed heater with internal and external heating for lithium-ion batteries at low temperatures. , 2018, , .		2
261	A Battery Capacity Estimation Method Using Surface Temperature Change under Constant-current Charge Scenario. , 2021, , .		2
262	Modeling of Plug-In Series Hybrid Powertrain for USPS Carrier Route Vehicle. , 0, , .		1
263	Analysis of Dual Phase Lag Heat Conduction in Gold Nanoparticle Based Hyperthermia Treatment. , 2008, , .		1
264	Hybrid and plug-in hybrid electric vehicle systems. , 2010, , .		1
265	Novel interleaved multiphase proposal for a three level neutral point clamped buck converter. , 2015, , .		1
266	Doubly-Salient Permanent-Magnet Machine with Skewed Rotor and Six-State Commutating Mode. , 2006, , .		1
267	Hardware-in-the-loop and Software-in-the-loop Testing for Vehicle Power Management. Power Systems, 2011, , 303-329.	0.3	1
268	Field-oriented control of induction motors based on a MC68322 microcontroller. , 0, , .		0
269	Special Section on Vehicle Power and Propulsions. IEEE Transactions on Vehicular Technology, 2010, 59, 2638-2640.	3.9	0
270	Electrical Impact and Power Capability of the Battery Pack Equipped in the PHEVs. , 2011, , .		0

#	Article	IF	Citations
271	Accurate Lithium-ion battery parameter estimation with continuous-time system identification methods. , 2016, , .		0
272	On-board state-of-health estimation based on charging current analysis for LiFePO<inf>4</inf> batteries. , 2017, , .		0
273	Improved OCV measurement method with reduced relaxation time. , 2017, , .		0
274	Intelligent System Approaches for Vehicle Power Management. Power Systems, 2011, , 209-257.	0.3	0
275	Dynamic Programming and Quadratic Programming for Vehicle Power Management. Power Systems, 2011, , 179-208.	0.3	0
276	HEV Component Design and Optimization for Fuel Economy. Power Systems, 2011, , 287-301.	0.3	0
277	Uncontrolled Generation of Traciton Motors in Hybrid Electric Vehicles. Journal of Asian Electric Vehicles, 2011, 9, 1459-1464.	0.4	0
278	State-of-health Estimation for Lithium Iron Phosphate Batteries Based on Constant-voltage Charge Data Using a Resistor-inductor Network Based Equivalent Circuit Model. , 2021, , .		0
279	Guest Editorial Special Issue on Advanced and Emerging Technologies of High-efficiency and Long-distance Wireless Power Transfer Systems. IEEE Transactions on Industry Applications, 2021, , 1-1.	3.3	0