Yiming Zhang

List of Publications by Year
in descending order

89 papers	2,779 citations	172207 29 h-index	182168 51 g-index
92 all docs	92 docs citations	92 times ranked	1873 citing authors

#	Article	IF	Citations
1	Soft Switching for Strongly Coupled Wireless Power Transfer System With 90Â° Dual-Side Phase Shift. IEEE Transactions on Industrial Electronics, 2022, 69, 282-292.	5.2	15
2	Design Methodology of Free-Positioning Nonoverlapping Wireless Charging for Consumer Electronics Based on Antiparallel Windings. IEEE Transactions on Industrial Electronics, 2022, 69, 825-834.	5.2	60
3	Coil Relative Position Transient Issue in Wireless Power Transfer Systems. IEEE Transactions on Industrial Electronics, 2022, 69, 2621-2630.	5.2	8
4	Passive Current Sharing of a Multiphase Inverter Based on Parallel Resonance. IEEE Transactions on Industrial Electronics, 2022, 69, 8625-8632.	5.2	4
5	General Multi-Frequency Small-Signal Model for Resonant Converters. IEEE Transactions on Power Electronics, 2022, 37, 3892-3912.	5.4	4
6	A Simple and Reconfigurable Wireless Power Transfer System With Constant Voltage and Constant Current Charging. IEEE Transactions on Power Electronics, 2022, 37, 4921-4925.	5.4	24
7	High-Accuracy and Adaptive Fault Diagnosis of High-Speed Train Bogie Using Dense-Squeeze Network. IEEE Transactions on Vehicular Technology, 2022, 71, 2501-2510.	3.9	8
8	Misalignment-Tolerant Dual-Transmitter Electric Vehicle Wireless Charging System With Reconfigurable Topologies. IEEE Transactions on Power Electronics, 2022, 37, 8816-8819.	5.4	49
9	Research and Application of Capacitive Power Transfer System: A Review. Electronics (Switzerland), 2022, 11, 1158.	1.8	17
10	Dual-Side Phase-Shift Control for Strongly Coupled Seriesâ€“Series Compensated Electric Vehicle Wireless Charging Systems. World Electric Vehicle Journal, 2022, 13, 6.	1.6	1
11	Free Positioning Wireless Charging System Based on Tilted Long-Track Transmitting Coil Array. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 3849-3853.	2.2	5
12	Precise Diagnosis of Unknown Fault of High-Speed Train Bogie Using Novel FBM-Net. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	2.4	3
13	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
14	Operating characteristics of fourâ€coil magnetic resonant coupling wireless power transfer under different resonant states. International Journal of Circuit Theory and Applications, 2021, 49, 415-429.	1.3	7
15	Dual-Side Phase-Shift Control of Wireless Power Transfer Implemented on Primary Side Based on Driving Windings. IEEE Transactions on Industrial Electronics, 2021, 68, 8999-9002.	5.2	43
16	Small-Signal Modeling for Phase-Shift Controlled Resonant Converters. IEEE Transactions on Industrial Electronics, 2021, 68, 11026-11034.	5.2	7
17	A Novel Co-Phase Power Supply System for Electrified Railway Based on V Type Connection Traction Transformer. Energies, 2021, 14, 1214.	1.6	5
18	KCF-Match Target Tracking Algorithm for Tracking Swing Angle of Coupler Based on Video. , 2021, , .		1

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19	Pulsewidth-Modulator-Based Transfer Function Measurement Method for Variable Frequency-Controlled Half- and Full-Bridge Converters. IEEE Transactions on Power Electronics, 2021, 36, 9711-9716.	5.4	1
20	Small-Signal Models of Resonant Converter With Consideration of Different Duty-Cycle Control Schemes. IEEE Transactions on Power Electronics, 2021, 36, 13234-13247.	5.4	6
21	Reduced-Order Equivalent Circuit Model of Series Resonant Converter Considering the Interaction between Resonant Elements. , 2021, , .		1
22	Inverter Phase Current Balancing for Wireless Power Transfer Systems Based on Parallel Resonant Networks. , 2021, , .		0
23	Current Balancing of a Multi-Phase Inverter for Wireless Power Transfer Systems based on Mutually Negatively Coupled Inductors. , 2021, , .		2
24	Research on Synchronous Rectification Driver Technology of High-Frequency DC-DC Resonant Converter Based on GaN Devices. IEEE Access, 2021, 9, 159577-159586.	2.6	1
25	Analysis and Design of Constant-Current and Constant-Voltage Output for LCC-N Topology in Wireless Power Transfer System. , 2021, , .		2
26	Design of High-Power Static Wireless Power Transfer via Magnetic Induction: An Overview. CPSS Transactions on Power Electronics and Applications, 2021, 6, 281-297.	2.9	65
27	A High-Power Wireless Charging System Using <i>LCL-</i>N Topology to Achieve a Compact and Low-Cost Receiver. IEEE Transactions on Power Electronics, 2020, 35, 131-137.	5.4	43
28	Three-Coil Wireless Charging System for Metal-Cover Smartphone Applications. IEEE Transactions on Power Electronics, 2020, 35, 4847-4858.	5.4	31
29	Controlling the Phase Angle in LCC-S IPT for Information Feedback. , 2020, , .		0
30	Grayscale-information-based Segmentation Registration for Fault Diagnosis of Train Components. , 2020, , .		0
31	A Metal Object Detection System with Multilayer Detection Coil Layouts for Electric Vehicle Wireless Charging. Energies, 2020, 13, 2960.	1.6	16
32	Contour-based High-speed Image Registration for Train Fault Diagnosis in Complex Environment. , 2020, , .		0
33	Metalâ€rimâ€connected inductive coupler for smartwatch applications. IET Power Electronics, 2020, 13, 3428-3434.	1.5	4
34	A Design Methodology of a Free Positioning None- Overlapping Wireless Charging System for Consumer Electronics with a Limited Parameter Variation. , 2020, , .		1
35	Three-Phase-Four-Wire Three-Level Inverter with Neutral Inductor and Neutral Module for Saving AC-Filter-Inductances and DC-Link-Capacitances. , 2020, , .		0
36	Transferring Driving Pulses to Implement Dual-Side Phase-Shift Control of Wireless Power Transfer on Primary Side Using Driving Windings. , 2020, , .		0

#	Article	IF	Citations
37	A Dual Phase Shedding Method for the Improvement of Efficiency and Reduction of Regulating Requirements in Series-series Inductive Power Transfer. , 2020, , .		2
38	Efficiency Analysis of LCC-S and S-S Inductive Power Transfer Considering Switching Device and Component Losses. , 2020, , .		4
39	Coil Comparison and Downscaling Principles of Inductive Wireless Power Transfer Systems. , 2020, , .		8
40	A Compact Dynamic Wireless Power Transfer System via Capacitive Coupling Achieving Stable Output. , 2020, , .		6
41	Input Current Ripple Reduction of Switching Capacitor Converter by Dividing the Output Capacitor. , 2020, , .		0
42	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
43	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
44	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
45	A review of foreign object detection (FOD) for inductive power transfer systems. ETransportation, 2019, 1, 100002.	6.8	56
46	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
47	An LCL-N Compensated Strongly-Coupled Wireless Power Transfer System for High-Power Applications. , 2019, , .		4
48	A Useful Methodology to Convert the Smartphone Metal Cover Into an Antenna Booster for NFC Applications. IEEE Transactions on Antennas and Propagation, 2019, 67, 4463-4473.	3.1	8
49	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
50	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
51	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
52	An LCC-P Compensated Wireless Power Transfer System with a Constant Current Output and Reduced Receiver Size. Energies, 2019, 12, 172.	1.6	37
53	A Compact Spatial Free-Positioning Wireless Charging System for Consumer Electronics Using a Three-Dimensional Transmitting Coil. Energies, 2019, 12, 1409.	1.6	10
54	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

#	ARTICLE	IF	CITATIONS
55	Underwater wireless power transfer system with a curly coil structure for AUVs. IET Power Electronics, 2019, 12, 2559-2565.	1.5	42
56	A Rotation-Free Wireless Power Transfer System With Stable Output Power and Efficiency for Autonomous Underwater Vehicles. IEEE Transactions on Power Electronics, 2019, 34, 4005-4008.	5.4	163
57	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
58	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
59	Introduction to Wireless Power Transfer. Springer Theses, 2018, , 1-21.	0.0	1
60	Transfer Efficiency Analysis. Springer Theses, 2018, , 23-38.	0.0	0
61	Multiple-Load Transfer. Springer Theses, 2018, , 67-89.	0.0	0
62	Eddy Current Loss Analysis of Underwater Wireless Power Transfer System. , 2018, , .		8
63	Analytical Models of Wireless Power Transfer Systems with a Constant-Power Load. , 2018, , .		3
64	A Rotation-Resilient Wireless Charging System for Lightweight Autonomous Underwater Vehicles. IEEE Transactions on Vehicular Technology, 2018, 67, 6935-6942.	3.9	71
65	Load characteristics of wireless power transfer system with different resonant types and resonator numbers. AIP Advances, 2017, 7, 056601.	0.6	2
66	Fault-Tolerant Control of MMC With Hot Reserved Submodules Based on Carrier Phase Shift Modulation. IEEE Transactions on Power Electronics, 2017, 32, 6778-6791.	5.4	102
67	Modeling and analysis of wireless power transfer system with constant-voltage source and constant-current load. , 2017, , .		9
68	A selection method of mutual inductance identification models based on sensitivity analysis for wireless electric vehicles charging. , 2016, , .		8
69	Comparative study of current control methods for a 5kW wireless EV charging system. , 2016, , .		2
70	A comparative study of load characteristics of resonance types in wireless transmission systems. , 2016, , .		7
71	Comparison of two bidirectional wireless power transfer control methods. , 2016, , .		5
72	A review of wireless power transfer for electric vehicles: Prospects to enhance sustainable mobility. Applied Energy, 2016, 179, 413-425.	5.1	336

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73	Closed-Form Oriented Modeling and Analysis of Wireless Power Transfer System With Constant-Voltage Source and Load. IEEE Transactions on Power Electronics, 2016, 31, 3472-3481.	5.4	70
74	Quasi-uniform magnetic field generated by multiple transmitters of magnetically-coupled resonant wireless power transfer. , 2015, , .		4
75	Analysis of the passive transient damping branch for suppressing the current spike and oscillation. , 2015, , .		2
76	Increasing power level of resonant wireless power transfer with relay resonators by considering resonator current amplitudes. , 2015, , .		3
77	Maximum efficiency point tracking of the wireless power transfer system for the battery charging in electric vehicles. , 2015, , .		19
78	Employing Load Coils for Multiple Loads of Resonant Wireless Power Transfer. IEEE Transactions on Power Electronics, 2015, 30, 6174-6181.	5.4	46
79	Wireless Power Transfer to Multiple Loads Over Various Distances Using Relay Resonators. IEEE Microwave and Wireless Components Letters, 2015, 25, 337-339.	2.0	74
80	Quantitative Analysis of System Efficiency and Output Power of Four-Coil Resonant Wireless Power Transfer. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2015, 3, 184-190.	3.7	34
81	Selective Wireless Power Transfer to Multiple Loads Using Receivers of Different Resonant Frequencies. IEEE Transactions on Power Electronics, 2015, 30, 6001-6005.	5.4	162
82	Frequency Splitting Analysis of Two-Coil Resonant Wireless Power Transfer. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 400-402.	2.4	98
83	Impact of source internal resistance on efficiency of four resonant wireless power transfer topologies. , 2014, , .		0
84	Reducing the impact of source internal resistance by source coil in resonant wireless power transfer. , 2014, , .		10
85	Frequency Decrease Analysis of Resonant Wireless Power Transfer. IEEE Transactions on Power Electronics, 2014, 29, 1058-1063.	5.4	182
86	Frequency-Splitting Analysis of Four-Coil Resonant Wireless Power Transfer. IEEE Transactions on Industry Applications, 2014, 50, 2436-2445.	3.3	119
87	Frequency splitting analysis of magnetically-coupled resonant wireless power transfer. , 2013, , .		25
88	Analysis of structure and parameters in wireless power transmission system with consideration of losses in source. , 2013, , .		0
89	Load matching analysis of magnetically-coupled resonant wireless power transfer. , 2013, , .		20