Yiming Zhang

List of Publications by Year
in descending order

89 papers	2,779 citations	172386 29 h-index	182361 51 g-index
92 all docs	92 docs citations	92 times ranked	1873 citing authors

#	Article	IF	Citations
1	A review of wireless power transfer for electric vehicles: Prospects to enhance sustainable mobility. Applied Energy, 2016, 179, 413-425.	5.1	336
2	Frequency Decrease Analysis of Resonant Wireless Power Transfer. IEEE Transactions on Power Electronics, 2014, 29, 1058-1063.	5.4	182
3	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
4	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
5	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
6	Frequency-Splitting Analysis of Four-Coil Resonant Wireless Power Transfer. IEEE Transactions on Industry Applications, 2014, 50, 2436-2445.	3.3	119
7	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
8	Frequency Splitting Analysis of Two-Coil Resonant Wireless Power Transfer. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 400-402.	2.4	98
9	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
10	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
11	A Rotation-Resilient Wireless Charging System for Lightweight Autonomous Underwater Vehicles. IEEE Transactions on Vehicular Technology, 2018, 67, 6935-6942.	3.9	71
12	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
13	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
14	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
15	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
16	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
17	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
18	A review of foreign object detection (FOD) for inductive power transfer systems. ETransportation, 2019, 1, 100002.	6.8	56

#	Article	IF	Citations
19	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
20	Misalignment-Tolerant Dual-Transmitter Electric Vehicle Wireless Charging System With Reconfigurable Topologies. IEEE Transactions on Power Electronics, 2022, 37, 8816-8819.	5.4	49
21	Employing Load Coils for Multiple Loads of Resonant Wireless Power Transfer. IEEE Transactions on Power Electronics, 2015, 30, 6174-6181.	5.4	46
22	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
23	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
24	Underwater wireless power transfer system with a curly coil structure for AUVs. IET Power Electronics, 2019, 12, 2559-2565.	1.5	42
25	An LCC-P Compensated Wireless Power Transfer System with a Constant Current Output and Reduced Receiver Size. Energies, 2019, 12, 172.	1.6	37
26	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
27	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
28	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
29	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
30	Three-Coil Wireless Charging System for Metal-Cover Smartphone Applications. IEEE Transactions on Power Electronics, 2020, 35, 4847-4858.	5.4	31
31	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
32	Frequency splitting analysis of magnetically-coupled resonant wireless power transfer. , 2013, , .		25
33	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
34	Load matching analysis of magnetically-coupled resonant wireless power transfer. , 2013, , .		20
35	Maximum efficiency point tracking of the wireless power transfer system for the battery charging in electric vehicles. , 2015, , .		19
36	Research and Application of Capacitive Power Transfer System: A Review. Electronics (Switzerland), 2022, 11, 1158.	1.8	17

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37	A Metal Object Detection System with Multilayer Detection Coil Layouts for Electric Vehicle Wireless Charging. Energies, 2020, 13, 2960.	1.6	16
38	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
39	Reducing the impact of source internal resistance by source coil in resonant wireless power transfer. , 2014, , .		10
40	A Compact Spatial Free-Positioning Wireless Charging System for Consumer Electronics Using a Three-Dimensional Transmitting Coil. Energies, 2019, 12, 1409.	1.6	10
41	Modeling and analysis of wireless power transfer system with constant-voltage source and constant-current load. , 2017, , .		9
42	A selection method of mutual inductance identification models based on sensitivity analysis for wireless electric vehicles charging. , 2016, , .		8
43	Eddy Current Loss Analysis of Underwater Wireless Power Transfer System. , 2018, , .		8
44	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
45	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
46	Coil Relative Position Transient Issue in Wireless Power Transfer Systems. IEEE Transactions on Industrial Electronics, 2022, 69, 2621-2630.	5.2	8
47	Coil Comparison and Downscaling Principles of Inductive Wireless Power Transfer Systems. , 2020, , .		8
48	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
49	A comparative study of load characteristics of resonance types in wireless transmission systems. , 2016, , .		7
50	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
51	Small-Signal Modeling for Phase-Shift Controlled Resonant Converters. IEEE Transactions on Industrial Electronics, 2021, 68, 11026-11034.	5.2	7
52	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
53	A Compact Dynamic Wireless Power Transfer System via Capacitive Coupling Achieving Stable Output. , 2020, , .		6
54	Comparison of two bidirectional wireless power transfer control methods. , 2016, , .		5

#	ARTICLE	IF	CITATIONS
55	A Novel Co-Phase Power Supply System for Electrified Railway Based on V Type Connection Traction Transformer. Energies, 2021, 14, 1214.	1.6	5
56	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
57	Quasi-uniform magnetic field generated by multiple transmitters of magnetically-coupled resonant wireless power transfer. , 2015, , .		4
58	An LCL-N Compensated Strongly-Coupled Wireless Power Transfer System for High-Power Applications. , 2019, , .		4
59	Passive Current Sharing of a Multiphase Inverter Based on Parallel Resonance. IEEE Transactions on Industrial Electronics, 2022, 69, 8625-8632.	5.2	4
60	General Multi-Frequency Small-Signal Model for Resonant Converters. IEEE Transactions on Power Electronics, 2022, 37, 3892-3912.	5.4	4
61	Metalâ€rimâ€connected inductive coupler for smartwatch applications. IET Power Electronics, 2020, 13, 3428-3434.	1.5	4
62	Efficiency Analysis of LCC-S and S-S Inductive Power Transfer Considering Switching Device and Component Losses. , 2020, , .		4
63	Increasing power level of resonant wireless power transfer with relay resonators by considering resonator current amplitudes. , 2015, , .		3
64	Analytical Models of Wireless Power Transfer Systems with a Constant-Power Load. , 2018, , .		3
65	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
66	Analysis of the passive transient damping branch for suppressing the current spike and oscillation. , 2015, , .		2
67	Comparative study of current control methods for a 5kW wireless EV charging system. , 2016, , .		2
68	Load characteristics of wireless power transfer system with different resonant types and resonator numbers. AIP Advances, 2017, 7, 056601.	0.6	2
69	Current Balancing of a Multi-Phase Inverter for Wireless Power Transfer Systems based on Mutually Negatively Coupled Inductors. , 2021, , .		2
70	A Dual Phase Shedding Method for the Improvement of Efficiency and Reduction of Regulating Requirements in Series-series Inductive Power Transfer. , 2020, , .		2
71	Analysis and Design of Constant-Current and Constant-Voltage Output for LCC-N Topology in Wireless Power Transfer System. , 2021, , .		2
72	Introduction to Wireless Power Transfer. Springer Theses, 2018, , 1-21.	0.0	1

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73	KCF-Match Target Tracking Algorithm for Tracking Swing Angle of Coupler Based on Video. , 2021, , .		1
74	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
75	Reduced-Order Equivalent Circuit Model of Series Resonant Converter Considering the Interaction between Resonant Elements. , 2021, , .		1
76	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
77	A Design Methodology of a Free Positioning None- Overlapping Wireless Charging System for Consumer Electronics with a Limited Parameter Variation. , 2020, , .		1
78	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
79	Analysis of structure and parameters in wireless power transmission system with consideration of losses in source. , 2013, , .		0
80	Impact of source internal resistance on efficiency of four resonant wireless power transfer topologies. , 2014, , .		0
81	Transfer Efficiency Analysis. Springer Theses, 2018, , 23-38.	0.0	0
82	Multiple-Load Transfer. Springer Theses, 2018, , 67-89.	0.0	0
83	Controlling the Phase Angle in LCC-S IPT for Information Feedback. , 2020, , .		0
84	Grayscale-information-based Segmentation Registration for Fault Diagnosis of Train Components. , 2020, , .		0
85	Contour-based High-speed Image Registration for Train Fault Diagnosis in Complex Environment. , 2020, , .		0
86	Inverter Phase Current Balancing for Wireless Power Transfer Systems Based on Parallel Resonant Networks. , 2021, , .		0
87	Three-Phase-Four-Wire Three-Level Inverter with Neutral Inductor and Neutral Module for Saving AC-Filter-Inductances and DC-Link-Capacitances. , 2020, , .		0
88	Transferring Driving Pulses to Implement Dual-Side Phase-Shift Control of Wireless Power Transfer on Primary Side Using Driving Windings. , 2020, , .		0
89	Input Current Ripple Reduction of Switching Capacitor Converter by Dividing the Output Capacitor. , 2020, , .		0