Shumei Cui

List of Publications by Year in Descending Order

90 papers	834 citations	14 h-index	25 g-index
116 ext. papers	1,081 ext. citations	3.6 avg, IF	4.62 L-index

#	Paper	IF	Citations
90	Current Sensor Fault-Tolerant Control for Five-Phase PMSM Drives Based on Third-Harmonic Space. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	
89	Voltage Stress Calculation and Measurement for Hairpin Winding of EV Traction Machines Driven by SiC MOSFET. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	2
88	A Novel Lightweight Design of UUV Underwater Wireless Power Transfer System by Utilizing Fe-Based Nanocrystalline Material **2021**,		1
87	A Fast and General Method to Calculate Mutual Inductance for EV Dynamic Wireless Charging System. *IEEE Transactions on Power Electronics*, **2021**, 36, 2696-2709	7.2	7
86	A Narrow-Rail Three-Phase Magnetic Coupler With Uniform Output Power for EV Dynamic Wireless Charging. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 6456-6469	8.9	9
85	Sensorless Control of Five-Phase Permanent-Magnet Synchronous Motor Based on Third-Harmonic Space. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	2
84	Research on Bipolar Nonsalient Pole Transmitter for High-Power EV Dynamic Wireless Power Transfer System. *IEEE Transactions on Power Electronics*, **2021**, 1-1	7.2	3
83	Mechanism analysis of output fluctuation in a three-phase dynamic wireless charging system. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	2
82	A Hybrid Modular Cascade Machines System for Electric Vehicles Using Induction Machine and Permanent Magnet Synchronous Machine. *IEEE Transactions on Vehicular Technology*, **2021**, 70, 273-281	6.8	3
81	A Novel Arc-Shaped Lightweight Magnetic Coupler for AUV Wireless Power Transfer. *IEEE Transactions on Industry Applications*, **2021**, 1-1	4.3	5
80	Conducted EMI Investigation of a SiC-Based Multiplexing Converter for EV/PHEV. *IEEE Access*, **2021**, 9, 58807-58823	3.5	1
79	Research on Dual-Phase Non-Salient Pole Receiver for EV Dynamic Wireless Power Transfer System. *World Electric Vehicle Journal*, **2021**, 12, 157	2.5	
78	Power Distribution Strategy for an Electric Bus with a Hybrid Energy Storage System. *World Electric Vehicle Journal*, **2021**, 12, 154	2.5	0
77	Unbalanced Reflected Impedances and Compensation of TS Dynamic Wireless Charging System. *IEEE Transactions on Industrial Electronics*, **2021**, 68, 10378-10387	8.9	3
76	Multiphase PMSM With Asymmetric Windings for More Electric Aircraft. *IEEE Transactions on Transportation Electrification*, **2020**, 6, 1592-1602	7.6	18
75	Permanent Magnet Compensated Pulsed Alternator for Driving Air-Based Loads. *IEEE Transactions on Transportation Electrification*, **2020**, 6, 1497-1507	7.6	3
74	Design of a Paralleled SiC MOSFET Half-Bridge Unit With Distributed Arrangement of DC Capacitors. *IEEE Transactions on Power Electronics*, **2020**, 35, 10879-10891	7.2	7

73	A Dual-Layer Receiver With a Low Aspect Ratio and a Reduced Output Fluctuation for EV Dynamic Wireless Charging. *IEEE Transactions on Power Electronics*, **2020**, 35, 10338-10351	7.2	4
72	Thermal analysis of a Gramme-ring-winding high-speed permanent-magnet motor for pulsed alternator using CFD. *IET Electric Power Applications*, **2020**, 14, 2202-2211	1.8	1
71	Multiphase PMSM with Asymmetric Windings for Electric Drive. *Energies*, **2020**, 13, 3765	3.1	2
70	Sensorless Control Strategy for IPMSM to Reduce Audible Noise by Variable Frequency Current Injection. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 1149-1159	8.9	17
69	Thermal Analysis of Fifteen-Phase Permanent Magnet Synchronous Motor Under Different Fault Tolerant Operations. *IEEE Access*, **2019**, 7, 81466-81480	3.5	7
68	Torque distribution strategy for modular cascade machines used in EVs. *IEEJ Transactions on Electrical and Electronic Engineering*, **2019**, 14, 924-932	1	
67	Research on the Compensation Matching Design and Output Performance for Two-Axis-Compensated Compulsators. *IEEE Transactions on Plasma Science*, **2019**, 47, 2445-2451	1.3	4
66	Mechanical Strength Analysis of Pulsed Alternator Air-Core Rotor. *IEEE Transactions on Plasma Science*, **2019**, 47, 2387-2392	1.3	6
65	Eddy Current Losses Analysis and Optimization Design of Litz-Wire Windings for Air-Core Compulsators. *IEEE Transactions on Plasma Science*, **2019**, 47, 2532-2538	1.3	8
64	Convex modeling for optimal battery sizing and control of an electric variable transmission powertrain. *Oil and Gas Science and Technology*, **2019**, 74, 25	1.9	3
63	Analysis and Design of Multiphase Receiver With Reduction of Output Fluctuation for EV Dynamic Wireless Charging System. *IEEE Transactions on Power Electronics*, **2019**, 34, 4112-4124	7.2	31
62	Comprehensive Analysis and Optimal Configurations of the EVT Powertrain. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 9573-9587	6.8	5
61	Coil Design for High Coupling Performance for Two-phase Receiver of Dynamic Wireless Charging System **2019**,		2
60	A Three-Phase LCC to Single-Phase S Compensation Topology for DWPT-TS System **2019**,		3
59	Comprehensive optimisation and comparison of multiphase receiver for dynamic wireless charging system. *IET Power Electronics*, **2019**, 12, 2475-2484	2.2	1
58	Sizing of Modular Cascade Machines System for Electric Vehicles. *IEEE Transactions on Vehicular Technology*, **2019**, 68, 1278-1287	6.8	4
57	Study on Synchronization of Air-Core Compensated Pulsed Alternator Pairs. *IEEE Transactions on Plasma Science*, **2019**, 47, 2206-2211	1.3	2
56	Design and Analysis of Dual-Electric-Excitation Hybrid Excitation Pulsed Alternator. *IEEE Transactions on Plasma Science*, **2019**, 47, 2464-2471	1.3	3

55	Comparisons of Electric Vehicles Using Modular Cascade Machines System and Classical Single Drive Electric Machine. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 354-361	6.8	14
54	A Novel Magnetic Coupling Mechanism for Dynamic Wireless Charging System for Electric Vehicles. *IEEE Transactions on Vehicular Technology*, **2018**, 67, 124-133	6.8	38
53	Study on the Impact of Machine Parameter Variations on Performance of Modular Pulsed Alternator Power System. *IEEE Transactions on Plasma Science*, **2018**, 46, 3265-3272	1.3	1
52	Design Optimization of an Electric Variable Transmission for Hybrid Electric Vehicles. *Energies*, **2018** , 11, 1118	3.1	1
51	A Hybrid Electric Vehicle Dynamic Optimization Energy Management Strategy Based on a Compound-Structured Permanent-Magnet Motor. *Energies*, **2018**, 11, 2212	3.1	9
50	Analysis and Design of a Compound-Structure Permanent-Magnet Motor for Hybrid Electric Vehicles. *Energies*, **2018**, 11, 2156	3.1	1
49	Analytical Derivation of Efficiency Map of an Induction Machine for Electric Vehicle Applications **2018**,		4
48	A Composite Control Strategy for Suppressing the Current Harmonic at the Grid Side of V2G Charger **2018**,		1
47	A Narrow-Width Three Phase Magnetic Coupling Mechanism with Constant Output Power for Electric Vehicles Dynamic Wireless Charging **2018**,		7
46	Self-Excitation and Energy Recovery of Air-Core Compulsators. *IEEE Transactions on Plasma Science*, **2017**, 45, 1168-1174	1.3	6
45	High-Efficiency Control Strategy of an Air-Core Pulsed Alternator Pair. *IEEE Transactions on Plasma Science*, **2017**, 45, 3342-3348	1.3	2
44	Research of a Modular Pulsed Alternator Power System. *IEEE Transactions on Plasma Science*, **2017**, 45, 1406-1413	1.3	2
43	Design and Analysis of Counter-Rotating Dual Rotors Permanent Magnet Compensated Pulsed Alternator. *IEEE Transactions on Plasma Science*, **2017**, 45, 1101-1107	1.3	10
42	Reduced-Scale Hardware-In-the-Loop Simulation of an Electric Vehicle Using Modular Cascade Machines **2017**,		2
41	Design and Analysis of a High-Speed Permanent Magnet Compensated Pulsed Alternator. *IEEE Transactions on Plasma Science*, **2017**, 45, 1314-1320	1.3	17
40	Overview of Pulsed Alternators. *IEEE Transactions on Plasma Science*, **2017**, 45, 1078-1085	1.3	24
39	Impact Factors for Energy Reclamation Control of an Air-Core Pulsed Alternator. *IEEE Transactions on Applied Superconductivity*, **2016**, 26, 1-5	1.8	4
38	Comparison analysis of power management used in hybrid electric vehicle based on electric variable transmission **2016**,		3

37	Interturn Fault Diagnosis Strategy for Interior Permanent-Magnet Synchronous Motor of Electric Vehicles Based on Digital Signal Processor. *IEEE Transactions on Industrial Electronics*, **2016**, 63, 1694-1706	8.9	49
36	Application of Linear Active Disturbance Rejection Controller for Sensorless Control of Internal Permanent-Magnet Synchronous Motor. *IEEE Transactions on Industrial Electronics*, **2016**, 63, 3019-3027	8.9	108
35	A Study on Magnetic Decoupling of Compound-Structure Permanent-Magnet Motor for HEVs Application. *Energies*, **2016**, 9, 819	3.1	4
34	A Novel Magnetic Coupling Mechanism for Dynamic Wireless Charging System for Electric Vehicles **2016**,		2
33	Analytical Expression for Discharge Process of Multiphase Air-Core Pulsed Alternators. *IEEE Transactions on Plasma Science*, **2016**, 44, 3330-3336	1.3	6
32	Energetic Macroscopic Representation and Inversion-Based Control of an Electrical Vehicle Using Modular Cascade Machines **2016**,		3
31	Choice of Pole Spacer Materials for a High-Speed PMSM Based on the Temperature Rise and Thermal Stress. *IEEE Transactions on Applied Superconductivity*, **2016**, 26, 1-5	1.8	10
30	Design of the Halbach Hybrid-Excitation Compulsator. *IEEE Transactions on Plasma Science*, **2015**, 43, 1377-1380	1.3	5
29	A Flexible Waveform Conditioning Strategy of an Air-Core Pulsed Alternator. *IEEE Transactions on Plasma Science*, **2015**, 43, 1398-1404	1.3	5
28	Research on a New Accurate Thrust Control Strategy for Linear Induction Motor. *IEEE Transactions on Plasma Science*, **2015**, 43, 1321-1325	1.3	11
27	Risk Evaluation for Hybrid Excitation Compulsator. *IEEE Transactions on Plasma Science*, **2015**, 43, 1410-1414	1.3	1
26	Design and Analysis of a Two-Phase Two-Axis-Compensated Compulsaor. *IEEE Transactions on Plasma Science*, **2015**, 43, 1434-1440	1.3	7
25	Overview of multi-machine drive systems for electric and hybrid electric vehicles **2014**,		2
24	Research on the Power Management Strategy of Hybrid Electric Vehicles Based on Electric Variable Transmissions. *Energies*, **2014**, 7, 934-960	3.1	15
23	Electromagnetic Analysis and Design of Switched Reluctance Double-Rotor Machine for Hybrid Electric Vehicles. *Energies*, **2014**, 7, 6665-6688	3.1	6
22	Design Optimization for Unified Field Permanent Magnet Dual Mechanical Ports Machine **2014**,		1
21	Investigation of Multiphase Compulsator Systems Using a Co-Simulation Method of FEM-Circuit Analysis. *IEEE Transactions on Plasma Science*, **2013**, 41, 1247-1253	1.3	17
20	Sensitivity Analysis and Regulation Strategy of Current Waveform for Two-Axis-Compensated Compulsators. *IEEE Transactions on Plasma Science*, **2013**, 41, 1254-1259	1.3	7

19	Optimization Design and Research of a Hybrid Excitation Compulsator. *IEEE Transactions on Plasma Science*, **2013**, 41, 1280-1284	1.3	6
18	Simulation Research of a CPA Powered Railgun System. *IEEE Transactions on Plasma Science*, **2013**, 41, 1484-1487	1.3	3
17	Optimal design of the rotor of air-core compulsator **2012**,		1
16	A Fuzzy Logic Global Power Management Strategy for Hybrid Electric Vehicles Based on a Permanent Magnet Electric Variable Transmission. *Energies*, **2012**, 5, 1175-1198	3.1	34
15	Mechanical Analysis and Evaluation of Compulsator. *IEEE Transactions on Plasma Science*, **2011**, 39, 322-327	1.3	9
14	Research on the Thermal Field and Active Water Cooling System Design of an Air-Core Compulsator. *IEEE Transactions on Plasma Science*, **2011**, 39, 257-262	1.3	10
13	Specifications and Design of a PM Electric Variable Transmission for Toyota Prius II. *IEEE Transactions on Vehicular Technology*, **2011**, 60, 4106-4114	6.8	83
12	Design, Simulation, and Fabrication of a Hybrid Excitation Compulsator. *IEEE Transactions on Plasma Science*, **2011**, 39, 251-256	1.3	9
11	Research on resonance based wireless energy transfer device for small mobile equipments **2011**,		1
10	Research on intelligence torque control for the electrical variable transmission used in hybrid electrical vehicle **2011**,		3
9	Research on fault analysis and diagnosis of PMSM in HEV **2011**,		2
8	Research on direct torque control for the electrical variable transmission **2010**,		2
7	Design of a permanent magnet electric variable transmission for HEV applications **2010**,		13
6	Reluctance torque analysis and reactance calculation of IPM for HEVs based on FEM **2010**,		1
5	Global modeling and control strategy simulation. *IEEE Vehicular Technology Magazine*, **2009**, 4, 73-79	9.9	20
4	Design and Simulation of a Self-Excited All-Air-Core and Fabrication of a Separate-Excited All-Iron-Core Passive Compulsator. *IEEE Transactions on Magnetics*, **2009**, 45, 261-265	2	5
3	The Study of the Operation Modes and Control Strategies of an Advanced Electromechanical Converter for Automobiles. *IEEE Transactions on Magnetics*, **2007**, 43, 430-433	2	48
2	The design principle of electric motors and drive systems for electric vehicles **2005**,		4

List of Publications

1	The torque pulsation analysis of a starter generator with concentrated windings based hybrid electric vehicles	2