

Shuhong Wang

List of Publications by Year in descending order

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138
all docs

138
docs citations

138
times ranked

1190
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic Characteristic Analysis of High Temperature Superconductors by the Elemental Operator Model. IEEE Transactions on Magnetics, 2022, 58, 1-4.	2.1	0
2	Research on Real-Time Disconnecter State Evaluation Method Based on Multi-Source Images. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-15.	4.7	3
3	Multi-Level Transient Modeling of the Aeronautic Asymmetric 18-Pulse Phase-Shifting Auto-Transformer Rectifier in Full-Cycle Design. IEEE Transactions on Transportation Electrification, 2022, 8, 3759-3770.	7.8	6
4	Study on Temperature Field of MVA Capacity High Temperature Superconducting Transformer. Lecture Notes in Electrical Engineering, 2021, , 607-615.	0.4	0
5	Modelling and Experimental Verification on Magnetic Hysteresis Properties of Soft Magnetic Composite Material. Lecture Notes in Electrical Engineering, 2021, , 873-879.	0.4	0
6	Non-Thermal Intervention of Lung Tumor by Core-Shell Magnetic Nanoparticles in a Magnetic Field. Applied Sciences (Switzerland), 2021, 11, 2003.	2.5	0
7	Theoretical Analysis and Design of an Innovative Coil Structure for Transcranial Magnetic Stimulation. Applied Sciences (Switzerland), 2021, 11, 1960.	2.5	1
8	Research on 3D Improved Extended Finite Element Method for Electric Field of Liquid Nitrogen with Bubbles. Applied Sciences (Switzerland), 2021, 11, 4839.	2.5	0
9	Research on a Cell Proliferation Model Based on A549 Cell Line With Magnetic Field Stimulation. IEEE Transactions on Magnetics, 2021, 57, 1-4.	2.1	0
10	Fast Time-Domain Solution of Dynamic Electromagnetic Problems Based on Sinc Interpolation. IEEE Transactions on Magnetics, 2021, 57, 1-4.	2.1	2
11	Research on Extended Finite Element Method for Axisymmetric Electrostatic Field Based on Liquid Nitrogen with Bubbles. Applied Sciences (Switzerland), 2021, 11, 5214.	2.5	1
12	Field-Circuit Coupling and Electromagneticâ€“Thermalâ€“Mechanical Coupling Analysis of the Single-Stage Fast Linear Transformer Driver Using Time-Domain Finite Integration Technique. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	3
13	Computational Investigations on the Four-Stage MA-Class Fast Linear Transformer Driver With Sharing Cavity Shell. IEEE Transactions on Plasma Science, 2021, 49, 2364-2372.	1.3	3
14	Inclusion of frequency dependences into prediction model of conducted electromagnetic emissions for a VFD motor system. International Journal of Applied Electromagnetics and Mechanics, 2021, 67, 313-325.	0.6	0
15	Multi-physics coupling simulation of electrode induction melting gas atomization for advanced titanium alloys powder preparation. Scientific Reports, 2021, 11, 23106.	3.3	3
16	FDTD Formulation Based on High-Order Surface Impedance Boundary Conditions for Lossy Two-Conductor Transmission Lines. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 194-203.	2.2	2
17	Numerical Analysis of a Single-Stage Fast Linear Transformer Driver Using Field-Circuit Coupled Time-Domain Finite Integration Theory. Applied Sciences (Switzerland), 2020, 10, 8301.	2.5	4
18	An Experimental Study of the Sweep Frequency Impedance Method on the Winding Deformation of an Onsite Power Transformer. Energies, 2020, 13, 3511.	3.1	6

#	ARTICLE	IF	CITATIONS
19	FDTD Formulation Based on High-Order Surface Impedance Boundary Conditions for Frequency-Dependent Lossy Multi-Conductor Transmission Lines. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	5
20	Transient Electromagnetic Field Analysis for the Single-Stage Fast Linear Transformer Driver With Two Different Configurations Using the Finite-Element Method and Finite Integration Technique. IEEE Transactions on Magnetics, 2020, 56, 1-5.	2.1	10
21	Ion flow field modelling based on lattice Boltzmann method and its mesh refinement. IET Generation, Transmission and Distribution, 2020, 14, 4539-4546.	2.5	0
22	An Analytical Loss Model of Litz-Wire Windings for Transformers Excited by Converters With Winding Configurations Considered. IEEE Transactions on Magnetics, 2019, 55, 1-5.	2.1	9
23	Circuit-Field Coupling and Magnetic-Thermal Coupling Analysis of RRF Converter Designed With Magnetic Integration. IEEE Transactions on Magnetics, 2019, 55, 1-8.	2.1	9
24	Quasi-3-D Cylindrical Coordinate XFEM Model of HTS Cable. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	2
25	Calculation and Analysis of Mechanical Characteristics of Transformer Windings Under Short-Circuit Condition. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	37
26	Study on the Corona Discharge Ionized Field of UHVdc Based on Particle-in-Cell Iterative Method. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	4
27	Dynamic deformation analysis of power transformer windings considering the influence of temperature on elasticity characteristics of winding materials under short circuit fault. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 657-668.	0.6	2
28	Short-Circuit Characteristics of a High Temperature Superconducting Wind Turbine Generator Employing a Segmented Armature Winding. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	7
29	Research on Voltage Sag Suppression Technique based on CLR and Artificial Current Zero Interruption of FVCB. , 2019, , .		1
30	Current Distribution Calculation of Superconducting Layer in HTS Cable Considering Magnetic Hysteresis by Using XFEM. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	11
31	Frequency-Dependent Multi-Conductor Transmission Line Model for Shielded Power Cables Considering Geometrical Dissymmetry. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	12
32	A New Interpretation of FRA Results by Sensitivity Analysis Method of Two FRA Measurement Connection Ways. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	12
33	Multiscale Modeling of Magnetic Distribution in a Magnetic Core of High-frequency Transformer. , 2018, , .		0
34	Study on the Electromagnetic Field in HVDC/AC Hybrid Submarine Cable Tunnel. , 2018, , .		4
35	Frequency Response Analysis of the Transformer Subjected to Twice Short-circuit Impulse Tests Under Two Different Connection Schemes. , 2018, , .		1
36	Modelling of Hysteresis Phenomenon Based on the Elemental Operator and Wind-Rose Method. , 2018, , .		0

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37	Oscillations and Size Control of Titanium Droplet for Electromagnetic Levitation Melting. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	2
38	Improved Analytical Model for Inductance Calculations of a Dual-Rotor Permanent Magnet Reluctance Machine Based on Magnetic Networks. IEEE Transactions on Industry Applications, 2018, 54, 5822-5832.	4.9	4
39	Study on the Effects of Magnetic Stimulation on K-Ras-Driven Lung Cancer in Mice. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	2
40	A New Multi-Conductor Transmission Line Model of Transformer Winding for Frequency Response Analysis Considering the Frequency-Dependent Property of the Lamination Core. Energies, 2018, 11, 826.	3.1	11
41	Analysis of mechanical characteristics of transformer windings under short circuit fault. , 2018, , .		7
42	A Scalar Hysteresis Model of Ferromagnetic Materials Based on the Elemental Operators. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	0
43	The Design and Analysis of a Static and Extremely Low-Frequency Magnetic Field Stimulation Platform for Cell Prolifation Inhibition. , 2018, , .		0
44	A Temperature-Dependent Hysteresis Model for Soft Ferrites. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	6
45	Accuracy analysis of structure with nearby interfaces within XFEM. AIP Advances, 2017, 7, .	1.3	3
46	Topology Optimization of Rotor Pole in Switched Reluctance Motor for Minimum Torque Ripple. Electric Power Components and Systems, 2017, 45, 905-911.	1.8	12
47	Comparison of Limiting Loop Model and Elemental Operator Model for Magnetic Hysteresis of Ferromagnetic Materials. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	3
48	Radiated EMI Modeling and Performance Analysis of a PWM PMSM Drive System Based on Field-Circuit Coupled FEM. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	9
49	Macro-modeling and passivity enforcement for PMSM winding. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2017, 36, 1729-1738.	0.9	0
50	Improved analytical model of a dual-rotor permanent magnet reluctance machine based on magnetic networks. , 2017, , .		1
51	Mechanical characteristics analysis of defective transformer windings under short-circuit fault using 3-D FEM. , 2017, , .		7
52	Modeling and Measurement of Magnetic Hysteresis of Soft Magnetic Composite Materials Under Different Magnetizations. IEEE Transactions on Industrial Electronics, 2017, 64, 2459-2467.	7.9	21
53	Study on planar coil with multi-frequency stimulations applied to an eddy current non-destructive testing. , 2017, , .		2
54	Fast thermal analysis of an ISG in hybrid electric vehicle drive system. , 2017, , .		3

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55	Core losses calculation of nanocrystalline alloy high frequency transformer considering magnetic hysteresis effects. , 2017, , .		4
56	Simulation analysis and development of industrial design software of phase-shifting reactor used in the 6-phase rectifier system. , 2017, , .		1
57	Radiated EMI simulation for high-power ultra-precision PMSM system driven by PWM converter. , 2016, , .		1
58	Modelling of magnetic properties in soft magnetic composite material under rotational magnetization. , 2016, , .		0
59	Titanium droplet formation in electromagnetic levitation melting process. , 2016, , .		0
60	Dependence of AC Loss on Structural Compactness of Superconducting Power Cables With Narrow Coated Conductors. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	5
61	Mitosis interference of K-Ras driven lung cancer cells by magnetic stimulation. , 2016, , .		0
62	Theoretical Analysis and Design of a Variable Frequency Magnetic Field Stimulation System for Tumor Suppression. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.7	4
63	A Stress-Dependent Magnetic Hysteresis Model for Soft Magnetic Composite Materials. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	4
64	Conducted EMI simulation for a high power Ultra-precision PMSM driven by PWM converter. , 2016, , .		3
65	Design and Calculation of Planar Eddy Current Coil in Coin Identification. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.7	4
66	Conceptual Design of a Liquid-Nitrogen-Insulated Metal-Enclosed Switchgear. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	12
67	Extended Finite-Element Method for Weak Discontinuities in Electric Fields. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-5.	1.7	6
68	Stress-based variable phase-shifting reactor for the multi-phase rectifier system. , 2016, , .		0
69	A temperature-dependent hysteresis model for soft ferrites based on a vectorial elemental operator. , 2016, , .		0
70	Current distribution calculation of superconducting layer in HTS cable considering magnetic hysteresis by using XFEM. , 2016, , .		0
71	Cumulative Deformation Analysis for Transformer Winding Under Short-Circuit Fault Using Magneticâ€œStructural Coupling Model. IEEE Transactions on Applied Superconductivity, 2016, 26, 0-5.	1.7	37
72	Electromagnetic-Thermalâ€œDeformed-Fluid-Coupled Simulation for Levitation Melting of Titanium. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	7

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73	Modeling and Insulation Performance Analysis of Composite Transmission Line Tower Under Lightning Overvoltage. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	14
74	Hysteresis Modeling of High-Temperature Superconductor Using Simplified Preisach Model. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	43
75	Extended Finite-Element Method for Electric Field Analysis of Insulating Plate With Crack. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	4
76	An Improved XFEM With Multiple High-Order Enrichment Functions and Low-Order Meshing Elements for Field Analysis of Electromagnetic Devices With Multiple Nearby Geometrical Interfaces. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	7
77	A new Preisach type hysteresis model of high temperature superconductors. Journal of Applied Physics, 2015, 117, .	2.5	10
78	Study on Neural Regeneration Effect of Rat by Using Pulsed Functional Magnetic Stimulation. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	0
79	Geometry and Power Optimization of Coilgun Based on Adaptive Genetic Algorithms. IEEE Transactions on Plasma Science, 2015, 43, 1208-1214.	1.3	24
80	System-Level Design Optimization Method for Electrical Drive Systems—Robust Approach. IEEE Transactions on Industrial Electronics, 2015, 62, 4702-4713.	7.9	188
81	Double-Ladder Circuit Model of Transformer Winding for Frequency Response Analysis Considering Frequency-Dependent Losses. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	5
82	Transient Lightning Impulse Performance Analysis for Composite Transmission Line Tower. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 1103-1111.	2.2	12
83	The Harmonic Suppression Characteristic Analysis of a Phase-Shifting Reactor in Rectifier System. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	7
84	Multi-level and multi-objective optimization of coilgun considering temperature rise. , 2014, , .		1
85	Surge voltage and environmental electromagnetic field analysis for HV composite transmission tower under lightning strokes. , 2014, , .		1
86	Simulation and analysis for power frequency electric field of building close to power transmission lines. , 2014, , .		2
87	Dynamic Deformation Analysis of Power Transformer Windings in Short-Circuit Fault by FEM. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-4.	1.7	86
88	System-Level Design Optimization Methods for Electrical Drive Systems: Deterministic Approach. IEEE Transactions on Industrial Electronics, 2014, 61, 6591-6602.	7.9	142
89	Transient Performance Analysis of Induction Motor Using Field-Circuit Coupled Finite-Element Method. IEEE Transactions on Magnetics, 2014, 50, 873-876.	2.1	38
90	Optimum Design of Rotor for High-Speed Switched Reluctance Motor Using Level Set Method. IEEE Transactions on Magnetics, 2014, 50, 765-768.	2.1	22

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91	Design of the Electromagnetic Repulsion Mechanism and the Low-Inductive Coil Used in the Resistive-Type Superconducting Fault Current Limiter. IEEE Transactions on Applied Superconductivity, 2014, 24, 1-4.	1.7	4
92	Functional Magnetic Stimulation System and Pulsed Magnetic-Field Effect on Peripheral Nerve. IEEE Transactions on Magnetics, 2013, 49, 1853-1856.	2.1	3
93	Analysis of Inter-Turn Insulation of High Voltage Electrical Machine by Using Multi-Conductor Transmission Line Model. IEEE Transactions on Magnetics, 2013, 49, 1905-1908.	2.1	23
94	Application of an Improved Multi-Conductor Transmission Line Model in Power Transformer. IEEE Transactions on Magnetics, 2013, 49, 2029-2032.	2.1	14
95	Induced voltage analysis of superconducting fault current limiter. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2013, 33, 38-46.	0.9	1
96	Simulation and Analysis for New Bridge-Type High Temperature Superconducting Fault Current Limiter. , 2012, , .		2
97	Analysis and Design in Extra High Voltage Circuit Breakers Employing Shunted Capacitors. , 2012, , .		1
98	Finite Element Analysis of Mechanical and Electric Properties of Electric Connector in Electric Vehicle. , 2012, , .		4
99	Finite Element Analysis and Evaluation of Stator Insulation in High Voltage Synchronous Motor. IEEE Transactions on Magnetics, 2012, 48, 955-958.	2.1	14
100	Robust Multilevel Optimization of PMSM Using Design for Six Sigma. IEEE Transactions on Magnetics, 2011, 47, 3248-3251.	2.1	29
101	Analysis of Transient Overvoltage in 220 kV Saturated Core HTS FCL. IEEE Transactions on Magnetics, 2011, 47, 2620-2623.	2.1	18
102	Initial Rotor Position and Magnetic Polarity Identification of PM Synchronous Machine Based on Nonlinear Machine Model and Finite Element Analysis. IEEE Transactions on Magnetics, 2010, 46, 2016-2019.	2.1	31
103	Dynamic Multilevel Optimization of Machine Design and Control Parameters Based on Correlation Analysis. IEEE Transactions on Magnetics, 2010, 46, 2779-2782.	2.1	17
104	Kinetic characteristics of transformer windings under short circuit condition. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 457-464.	0.6	14
105	Transient electromagnetic force analysis of high temperature superconducting fault current limiter. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 503-510.	0.6	0
106	Current distribution analysis for high temperature superconducting cable considering hysteresis characteristics. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 511-517.	0.6	5
107	Cogging torque reduction of Bldc motor using level set based topology optimization incorporating with triangular finite element. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 1069-1076.	0.6	3
108	Modeling and simulation of direct torque controlled SPMSM Drive incorporating magnetic saturation saliency. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 473-479.	0.6	0

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109	Simulation and optimization of six-stage electromagnetic coilgun. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 465-471.	0.6	1
110	Simulation and optimization of structure parameters in 550kV disconnectors based on Response Surface Method. , 2010, , .		0
111	Magneto-optical visualization of vortices penetration into Ba(Fe _{1.8} Co _{0.2})As ₂ . Journal of Applied Physics, 2010, 107, 09E155.	2.5	4
112	Optimization with sequential GA and dynamic force analysis of capacitor-driven inductive coilgun. , 2010, , .		2
113	Analysis on performance of linear induction motor basing on winding function method. , 2009, , .		3
114	Nonlinear Magnetic Model of Surface Mounted PM Machines Incorporating Saturation Saliency. IEEE Transactions on Magnetics, 2009, 45, 4684-4687.	2.1	16
115	Multilevel Optimization for Surface Mounted PM Machine Incorporating With FEM. IEEE Transactions on Magnetics, 2009, 45, 4700-4703.	2.1	24
116	Survey on electrical machines in electrical vehicles. , 2009, , .		52
117	Design of cold dielectric hts power cable. , 2009, , .		2
118	Optimization for capacitor-driven coilgun based on equivalent circuit model and genetic algorithm. , 2009, , .		7
119	Simulation of sensorless drive for surface mounted PM machine based on comprehensive machine model. , 2009, , .		1
120	Optimal design of a linear induction motor applied in transportation. , 2009, , .		12
121	Performance analysis of electric machine drives for plug-in hybrid electric vehicles. , 2009, , .		7
122	Robust Optimization in HTS Cable Based on Design for Six Sigma. IEEE Transactions on Magnetics, 2008, 44, 978-981.	2.1	25
123	Robust Optimization in HTS Cable Based on DEPSO and Design for Six Sigma. , 2008, , .		1
124	Application of Multi-level Multi-domain Modeling in the Design and Analysis of a PM Transverse Flux Motor with SMC Core. , 2007, , .		6
125	Magnetic properties of soft magnetic composites under three-dimensional excitations. International Journal of Applied Electromagnetics and Mechanics, 2007, 25, 237-241.	0.6	4
126	Determination of 3D magnetic reluctivity tensor of soft magnetic composite material. Journal of Magnetism and Magnetic Materials, 2007, 312, 458-463.	2.3	30

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127	Transient Simulation and Analysis for Saturated Core High Temperature Superconducting Fault Current Limiter. IEEE Transactions on Magnetics, 2007, 43, 1813-1816.	2.1	29
128	Correction to: "Transient simulation and analysis for saturated core high temperature superconducting fault current limiter". IEEE Transactions on Magnetics, 2007, 43, 3540-3540.	2.1	2
129	Design Optimization of an Interior-type Permanent Magnet BLDC Motor using PSO and Improved MEC. , 2007, , .		5
130	Performance analysis of an SMC transverse flux motor with modified double-sided stator and PM flux concentrating rotor. , 2007, , .		1
131	Application of Petri net in development of finite element analysis package for electromagnetic fields. IEEE Transactions on Magnetics, 2006, 42, 1255-1258.	2.1	4
132	Calibration of Sensing Coils of a Three-Dimensional Magnetic Property Tester. IEEE Transactions on Magnetics, 2006, 42, 3243-3245.	2.1	10
133	Robust Optimization of Multilayer Conductors of HTS AC Cable Using PSO and Perturbation Analysis. Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 2006, , .	0.0	3
134	Feature-based fuzzy control adaptive finite-element mesh generation for electromagnetic fields. IEEE Transactions on Magnetics, 2005, 41, 1688-1691.	2.1	1
135	Analytical calculation of air-gap magnetic field distribution and instantaneous characteristics of brushless dc motors. IEEE Transactions on Energy Conversion, 2003, 18, 424-432.	5.2	101
136	Study of A PMSM Model Incorporating Structural and Saturation Saliencies. , 0, , .		1
137	A Novel Optimized Technology for Busbar Based on Finite Element Method. International Journal of Simulation: Systems, Science and Technology, 0, , .	0.0	0