Shiyou Yang

List of Publications by Year
in descending order

130	1,612	361413	330143
papers	citations	20 h-index	37 g-index

130	130	130	1485
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A particle swarm optimization-based method for multiobjective design optimizations. IEEE Transactions on Magnetics, 2005, 41, 1756-1759.	2.1	191
2	Investigation of Skewing Effects on the Vibration Reduction of Three-Phase Switched Reluctance Motors. IEEE Transactions on Magnetics, 2015, 51, 1-9.	2.1	122
3	A particle swarm optimization method with enhanced global search ability for design optimizations of electromagnetic devices. IEEE Transactions on Magnetics, 2006, 42, 1107-1110.	2.1	80
4	Initial Position Estimation in SRM Using Bootstrap Circuit Without Predefined Inductance Parameters. IEEE Transactions on Power Electronics, 2011, 26, 2449-2456.	7.9	76
5	Fault diagnosis scheme for openâ€circuit faults in switched reluctance motor drives using fast Fourier transform algorithm with bus current detection. IET Power Electronics, 2016, 9, 20-30.	2.1	72
6	Phase Current Reconstruction of Switched Reluctance Motors From DC-Link Current Under Double High-Frequency Pulses Injection. IEEE Transactions on Industrial Electronics, 2015, 62, 3265-3276.	7.9	71
7	A Modified Particle Swarm Optimization Algorithm for Global Optimizations of Inverse Problems. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	65
8	Online Sensorless Position Estimation for Switched Reluctance Motors Using One Current Sensor. IEEE Transactions on Power Electronics, 2015, , 1-1.	7.9	62
9	Lowâ€cost direct instantaneous torque control for switched reluctance motors with bus current detection under softâ€chopping mode. IET Power Electronics, 2016, 9, 482-490.	2.1	41
10	A modified ant colony optimization algorithm modeled on tabu-search methods. IEEE Transactions on Magnetics, 2006, 42, 1195-1198.	2.1	34
11	3-D eddy current analysis in the end region of a turbogenerator by using reduced magnetic vector potential. IEEE Transactions on Magnetics, 2006, 42, 1323-1326.	2.1	34
12	A simulated annealing algorithm for multiobjective optimizations of electromagnetic devices. IEEE Transactions on Magnetics, 2003, 39, 1285-1288.	2.1	31
13	A Quantum Particle Swarm Optimizer With Enhanced Strategy for Global Optimization of Electromagnetic Devices. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	30
14	A Meshless Collocation Method Based on Radial Basis Functions and Wavelets. IEEE Transactions on Magnetics, 2004, 40, 1021-1024.	2.1	29
15	An artificial bee colony algorithm for inverse problems. International Journal of Applied Electromagnetics and Mechanics, 2009, 31, 181-192.	0.6	28
16	A Fast Robust Optimization Methodology Based on Polynomial Chaos and Evolutionary Algorithm for Inverse Problems. IEEE Transactions on Magnetics, 2012, 48, 259-262.	2.1	28
17	Design Optimization and Comparative Study of Novel Magnetic-Geared Permanent Magnet Machines. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	28
18	A Quantum-Based Particle Swarm Optimization Algorithm Applied to Inverse Problems. IEEE Transactions on Magnetics, 2013, 49, 2069-2072.	2.1	27

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19	A modified PSO algorithm with dynamic parameters for solving complex engineering design problem. International Journal of Computer Mathematics, 2018, 95, 2308-2329.	1.8	23
20	Multiobjective Synthesis of Antenna Arrays Using a Vector Tabu Search Algorithm. IEEE Antennas and Wireless Propagation Letters, 2009, 8, 947-950.	4.0	21
21	Incorporating A Priori Preferences in a Vector PSO Algorithm to Find Arbitrary Fractions of the Pareto Front of Multiobjective Design Problems. IEEE Transactions on Magnetics, 2008, 44, 1038-1041.	2.1	20
22	A Quantum Particle Swarm Optimization Method With Fitness Selection Methodology for Electromagnetic Inverse Problems. IEEE Access, 2018, 6, 63155-63163.	4.2	20
23	An Adaptive High-Order Transient Algorithm to Solve Large-Scale Anisotropic Maxwellâ€™s Equations. IEEE Transactions on Antennas and Propagation, 2022, 70, 2082-2092.	5.1	20
24	Multiobjective Optimization Based on Response Surface Model and Its Application to Engineering Shape Design. IEEE Transactions on Magnetics, 2008, 44, 1006-1009.	2.1	19
25	The Cross-Entropy Method and Its Application to Inverse Problems. IEEE Transactions on Magnetics, 2010, 46, 3401-3404.	2.1	18
26	A Multi-Objective Topology Optimization Methodology Based on Pareto Optimal Min-Cut. IEEE Transactions on Magnetics, 2020, 56, 1-5.	2.1	18
27	A Modified Tabu Search Method Applied to Inverse Problems. IEEE Transactions on Magnetics, 2011, 47, 1234-1237.	2.1	16
28	A Kriging-Assisted Light Beam Search Method for Multi-Objective Electromagnetic Inverse Problems. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	16
29	A combined wavelet-element free galerkin method for numerical calculations of electromagnetic fields. IEEE Transactions on Magnetics, 2003, 39, 1413-1416.	2.1	14
30	A Quantum-Inspired Evolutionary Algorithm for Multi-Objective Design. IEEE Transactions on Magnetics, 2013, 49, 1609-1612.	2.1	14
31	An improved particle swarm optimization algorithm for global optimizations of electromagnetic devices. International Journal of Applied Electromagnetics and Mechanics, 2007, 25, 723-728.	0.6	13
32	A modified QPSO algorithm applied to engineering inverse problems in electromagnetics. International Journal of Applied Electromagnetics and Mechanics, 2017, 54, 107-121.	0.6	12
33	Independent Current Control of Dual Parallel SRM Drive Using a Public Current Sensor. IEEE/ASME Transactions on Mechatronics, 2017, 22, 392-401.	5.8	12
34	An Efficient Tabu Search Algorithm for Robust Solutions of Electromagnetic Design Problems. IEEE Transactions on Magnetics, 2008, 44, 1042-1045.	2.1	11
35	A Vector Tabu Search Algorithm With Enhanced Searching Ability for Pareto Solutions and Its Application to Multiobjective Optimizations. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	11
36	A Novel Design Method for the Electrical Machines With Biased DC Excitation Flux Linkage. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	11

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37	A New Topology Optimization Methodology Based on Constraint Maximum-Weight Connected Graph Theorem. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	10
38	A Computationally Efficient Vector Optimizer Using Ant Colony Optimizations Algorithm for Multobjective Designs. IEEE Transactions on Magnetics, 2008, 44, 1034-1037.	2.1	9
39	A New Methodology for Robust Optimizations of Optimal Design Problems Under Interval Uncertainty. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	9
40	A Coupled Circuit-Ambipolar Diffusion Equation Model and Its Solution Methodology for Insulated Gate Bipolar Transistors. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	9
41	Reconstruction of cracks in a carbon fiber-reinforced polymer laminate plate from signals of eddy current testing. Journal of Composite Materials, 2020, 54, 3527-3536.	2.4	9
42	Metamaterial-Core Probes for Nondestructive Eddy Current Testing. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	9
43	Multi-objective design optimization of an inverted-S antenna. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 1049-1055.	0.6	8
44	Efficient robust optimization based on polynomial chaos and tabu search algorithm. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 145-150.	0.6	8
45	An Improved Evolution Strategy and Its Application to Inverse Scattering in Microwave Imaging. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	8
46	Application of Support Vector Machines to Accelerate the Solution Speed of Metaheuristic Algorithms. IEEE Transactions on Magnetics, 2009, 45, 1502-1505.	2.1	7
47	Many-Objective Optimization of Antenna Arrays Using an Improved Multiple-Single-Objective Pareto Sampling Algorithm. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 399-402.	4.0	7
48	An Ant Colony Algorithm for Both Robust and Global Optimizations of Inverse Problems. IEEE Transactions on Magnetics, 2013, 49, 2077-2080.	2.1	7
49	Incorporating Light Beam Search in a Vector Normal Boundary Intersection Method for Linear Antenna Array Optimization. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	7
50	A Multimodal Smart Quantum Particle Swarm Optimization for Electromagnetic Design Optimization Problems. Energies, 2021, 14, 4613.	3.1	7
51	Refinement computations of electromagnetic fields using FE and meshless methods. IEEE Transactions on Magnetics, 2005, 41, 1456-1459.	2.1	6
52	3-D FEM Analysis in Electromagnetic System Considering Vector Hysteresis and Anisotropy. IEEE Transactions on Magnetics, 2008, 44, 890-893.	2.1	6
53	An improved normal boundary intersection method for multiobjective inverse problems. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 121-127.	0.6	6
54	Design and analysis on switched reluctance motor system using field-circuit coupled method. , 2014, , .		6

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55	An Improved Light Beam Search Method in Multiobjective Inverse Problem Optimizations. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	6
56	A New Methodology Based on Multi-Label Graph Cut Theorem for Multi-Phase Topology Optimization. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	6
57	Practical Model for Metamaterials in Wireless Power Transfer Systems. Applied Sciences (Switzerland), 2020, 10, 8506.	2.5	6
58	A Hybrid Smart Quantum Particle Swarm Optimization for Multimodal Electromagnetic Design Problems. IEEE Access, 2022, 10, 72339-72347.	4.2	6
59	A Population-Based Incremental Learning Method for Robust Optimal Solutions. IEEE Transactions on Magnetics, 2010, 46, 3189-3192.	2.1	5
60	A robust optimal methodology using ant colony algorithm for inverse problems. International Journal of Applied Electromagnetics and Mechanics, 2014, 45, 703-708.	0.6	5
61	Iron Loss Separation in High Frequency Using Numerical Techniques. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	5
62	A Hybridized Vector Optimal Algorithm for Multi-Objective Optimal Designs of Electromagnetic Devices. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	5
63	Detection and Analysis of Fault for HTS AMDT Cores by Magnetostriction-Induced Vibration. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	5
64	Study of Magnet Shifting for Reduction of Cogging Torque in Permanent Magnet Motors. , 0, , .		4
65	Optimization of the Different Pole Arc Combination to Reduce the Cogging Torque in PMDC Motors. , 0, , .		4
66	Robust oriented particle swarm optimization algorithm applied to inverse problems. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 1057-1062.	0.6	4
67	Calculation and control of stray losses in power transformer. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 835-841.	0.6	4
68	A Real Coded Vector Population-Based Incremental Learning Algorithm for Multi-Objective Optimizations of Electromagnetic Devices. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	4
69	A Network Topological Approach-Based Transient 3-D Electrothermal Model of Insulated-Gate Bipolar Transistor. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	4
70	A fast global optimizer based on improved CS-RBF and stochastic optimal algorithm. IEEE Transactions on Magnetics, 2006, 42, 1175-1178.	2.1	3
71	A Global Optimization Algorithm Based on C^{1} Piecewise Response Surface Patches. IEEE Transactions on Magnetics, 2007, 43, 1629-1632.	2.1	3
72	Fast Frequency-Domain Modeling of Return Stroke Including Influence of Lossy Ground. IEEE Transactions on Magnetics, 2014, 50, 149-152.	2.1	3

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73	A Fast Methodology for Topology Optimizations of Electromagnetic Devices. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	3
74	A Wind Driven Optimization-Based Methodology for Robust Optimizations of Electromagnetic Devices under Interval Uncertainty. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	3
75	A Wind Driven Optimization Algorithm for Global Optimization of Electromagnetic Devices. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	3
76	A Novel 3-D Topology Optimization Methodology Based on the Min-Cut Theorem. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	3
77	A Multimodal Improved Particle Swarm Optimization for High Dimensional Problems in Electromagnetic Devices. Energies, 2021, 14, 8575.	3.1	3
78	A tabu based algorithm for multiobjective optimizations of electromagnetic devices. International Journal of Applied Electromagnetics and Mechanics, 2002, 16, 207-214.	0.6	2
79	Resonant Frequency Calculation of Witricity Using Equivalent Circuit Model Combined with Finite Element Method. , 2012, , .		2
80	An quantum-inspired evolutionary algorithm applied to design optimizations of electromagnetic devices. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 89-95.	0.6	2
81	A Methodology Based on Mesh Morphing Algorithm and Improved Tabu Algorithm for Non-linear Inverse Scattering. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	2
82	A 2-D Nonlinear Ambipolar Diffusion Equation Model of an IGBT and Its Numerical Solution Methodology. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	2
83	An Integral Equation Hybrid Method for the Impedance Calculation of the Grid Power Distribution Network With an Arbitrary Shape. IEEE Transactions on Magnetics, 2019, 55, 1-4.	2.1	2
84	A robust methodology for design optimizations of electromagnetic devices under uncertainties. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 71-78.	0.6	2
85	Stability of Properties on Magnetic Ribbon and Cores With Domestic Fe-Based Amorphous Alloy for HTS AMDT. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	2
86	A Broadband Enhanced Nodal-Order Reduction Methodology for Large-Scale Equation Sets of 3-D Transient Field Problems. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	2
87	Thin Film Magnetic Core Microinductor With Stacked Windings. IEEE Transactions on Electron Devices, 2021, 68, 4237-4241.	3.0	2
88	A Modified Particle Swarm Optimization for the Applications of Electromagnetic Devices. , 2021, , .		2
89	An improved vector evolutionary algorithm for multiobjective designs of electromagnetic devices. International Journal of Applied Electromagnetics and Mechanics, 2007, 25, 711-715.	0.6	1
90	A fast global optimal method based on combinations of MLS and PSO algorithm. International Journal of Applied Electromagnetics and Mechanics, 2007, 25, 759-764.	0.6	1

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91	Analytical modeling of stator vibration for surface mount permanent magnet brushless motors. , 2011, , .		1
92	RF Power Amplifier Design for Wireless Power Transfer Using Method of Moment. , 2012, , .		1
93	3D electromagnetic and thermal field analysis of edge induction heater. , 2014, , .		1
94	Suppressing control of rising bus voltage for switched reluctance motor in braking operation. , 2014, , .		1
95	Full 3D eddy current and temperature field analysis of large hydro-generators in different operating conditions. , 2014, , .		1
96	Temperature Field Optimization and Magnetic Nanoparticles Optimal Approximation of MFH for Cancer Therapy. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	1
97	An improved quantum particle swarm optimization applied to inverse problem in electromagnetics. , 2016, , .		1
98	A wind driven optimization based methodology for robust optimizations of electromagnetic devices under interval uncertainty. , 2016, , .		1
99	An Efficient Direct Search Methodology for Robust Optimization of Electromagnetic Devices. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	1
100	A methodology for topology optimization based on level set method and its application to piezoelectric energy harvester design. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 79-85.	0.6	1
101	A Novel Topology Optimization Methodology Based on Energy Minimization Via Î±-Î² Swap Move. IEEE Access, 2020, 8, 162041-162048.	4.2	1
102	Time-Domain Finite-Element Method for Near-Field Applications With Magnetic Metamaterials. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	1
103	An Improved PSO for Design Optimizations of a Multiband Rectenna for Miniature Energy Harvester. , 2020, , .		1
104	Abnormal Data Processing of Wind Turbine Based on Combined Algorithm and Class Center Imputation. , 2021, , .		1
105	Voltage control to maximize the transmission efficiency of a multiâ€input and multiâ€output wireless power transfer system. International Journal of Circuit Theory and Applications, 2022, 50, 3293-3306.	2.0	1
106	A fast global optimal technique based on combinations of improved radial basis functions and tabu search method. International Journal of Applied Electromagnetics and Mechanics, 2004, 19, 515-520.	0.6	0
107	The cross-entropy method and its application to minimize the ripple of magnetic levitation forces of a maglev system. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 1063-1068.	0.6	0
108	A modified tabu search method applied to inverse problems. , 2010, , .		0

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109	Numerical synthesis of dielectric embedded electronically steerable multiple beam antenna array. , 2010, , .		0
110	3D finite element study of transient electromagnetic forces acting on the stator end-windings of a large turbo-generator. , 2010, , .		0
111	Minimizing sidelobe levels and facilitating null placements of nonlinear antenna arrays using an improved Particle Swarm Optimization. , 2010, , .		0
112	Numerical analysis of inverse scattering in microwave imaging. , 2010, , .		0
113	Study on separable transformer's efficiency for contactless energy transmission system. , 2010, , .		0
114	A population based incremental learning vector algorithm for multiobjective optimal designs. , 2010, , .		0
115	Robust optimization using a methodology based on Cross Entropy methods. , 2010, , .		0
116	Optimization of variable speed switched reluctance motor using the torque-speed performance map. , 2011, , .		0
117	Optimal Design of Dielectric Embedded Electronically Switchable Multiple Beam Antenna Array for MIMO Wireless Communications. , 2012, , .		0
118	Fault diagnosis of power converter for switched reluctance motor based on discrete degree analysis of wavelet packet energy. , 2013, , .		0
119	Numerical computation of coupled electromagnetic-thermal field in an induction edge heater for the hot strip mill. , 2014, , .		0
120	A Direct Coupled Solution Methodology for Efficient Robust Optimizations of Inverse Problems Under Uncertainty. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	0
121	A particle swarm optimization method applied to global optimization of inverse problem. , 2016, , .		0
122	A coupled circuit-ambipolar diffusion equation model and its solution methodology for insulated gate bipolar transistors. , 2016, , .		0
123	Coupled distribute circuit-3D FEM model to simulate the transient electromagnetic performances of IGBTs. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 39-46.	0.6	0
124	A vector wind driven optimization algorithm for multi-objective optimizations of electromagnetic devices. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 55-62.	0.6	0
125	A Block Arnoldi Algorithm Based Reduced-Order Model Applied to Large-Scale Algebraic Equations of a 3-D Field Problem. Applied Sciences (Switzerland), 2021, 11, 9435.	2.5	0
126	A Coupled 3D FEM-Distribute Circuit Model for Numerical Analysis of Small Time Scale Transients of an IGBT Based Inverter. , 2020, , .		0

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127	Characteristics of Air Gap Magnetic Fields in Inter Turn Field Winding Short Circuit of Large Turbo Generator. , 2021, , .		0
128	Online Monitoring of Inter-turn Short Circuit Fault of Field Winding in Large Turbo-generator. , 2021, , .		0
129	The State Evaluation of Power Transformers Based on Grey Target Theory And Simulated Annealing. , 2021, , .		0
130	A Novel Methodology for Robust Topology Optimization Considering Manufacturing Errors and Topology Deviations. IEEE Transactions on Magnetics, 2022, 58, 1-4.	2.1	0