

Shiyou Yang

List of Publications by Year in descending order

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130
papers

1,612
citations

361413

20
h-index

330143

37
g-index

130
all docs

130
docs citations

130
times ranked

1485
citing authors

#	ARTICLE	IF	CITATIONS
1	An Adaptive High-Order Transient Algorithm to Solve Large-Scale Anisotropic Maxwell's Equations. IEEE Transactions on Antennas and Propagation, 2022, 70, 2082-2092.	5.1	20
2	A Novel Methodology for Robust Topology Optimization Considering Manufacturing Errors and Topology Deviations. IEEE Transactions on Magnetics, 2022, 58, 1-4.	2.1	0
3	Voltage control to maximize the transmission efficiency of a multi-input and multi-output wireless power transfer system. International Journal of Circuit Theory and Applications, 2022, 50, 3293-3306.	2.0	1
4	A Hybrid Smart Quantum Particle Swarm Optimization for Multimodal Electromagnetic Design Problems. IEEE Access, 2022, 10, 72339-72347.	4.2	6
5	Metamaterial-Core Probes for Nondestructive Eddy Current Testing. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	9
6	Time-Domain Finite-Element Method for Near-Field Applications With Magnetic Metamaterials. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	1
7	A Multimodal Smart Quantum Particle Swarm Optimization for Electromagnetic Design Optimization Problems. Energies, 2021, 14, 4613.	3.1	7
8	A Novel 3-D Topology Optimization Methodology Based on the Min-Cut Theorem. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	3
9	Thin Film Magnetic Core Microinductor With Stacked Windings. IEEE Transactions on Electron Devices, 2021, 68, 4237-4241.	3.0	2
10	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
11	Characteristics of Air Gap Magnetic Fields in Inter Turn Field Winding Short Circuit of Large Turbo Generator. , 2021, , .		0
12	Online Monitoring of Inter-turn Short Circuit Fault of Field Winding in Large Turbo-generator. , 2021, , .		0
13	A Multimodal Improved Particle Swarm Optimization for High Dimensional Problems in Electromagnetic Devices. Energies, 2021, 14, 8575.	3.1	3
14	The State Evaluation of Power Transformers Based on Grey Target Theory And Simulated Annealing. , 2021, , .		0
15	Abnormal Data Processing of Wind Turbine Based on Combined Algorithm and Class Center Imputation. , 2021, , .		1
16	A Modified Particle Swarm Optimization for the Applications of Electromagnetic Devices. , 2021, , .		2
17	A Novel Topology Optimization Methodology Based on Energy Minimization Via \hat{I}_\pm - \hat{I}_\pm^2 Swap Move. IEEE Access, 2020, 8, 162041-162048.	4.2	1
18	Practical Model for Metamaterials in Wireless Power Transfer Systems. Applied Sciences (Switzerland), 2020, 10, 8506.	2.5	6

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19	A Multi-Objective Topology Optimization Methodology Based on Pareto Optimal Min-Cut. IEEE Transactions on Magnetics, 2020, 56, 1-5.	2.1	18
20	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
21	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
22	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
23	A Coupled 3D FEM-Distribute Circuit Model for Numerical Analysis of Small Time Scale Transients of an IGBT Based Inverter. , 2020, , .		0
24	An Improved PSO for Design Optimizations of a Multiband Rectenna for Miniature Energy Harvester. , 2020, , .		1
25	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
26	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
27	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
28	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
29	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
30	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
31	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
32	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
33	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
34	A New Topology Optimization Methodology Based on Constraint Maximum-Weight Connected Graph Theorem. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	10
35	A Kriging-Assisted Light Beam Search Method for Multi-Objective Electromagnetic Inverse Problems. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	16
36	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

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37	A Wind Driven Optimization Algorithm for Global Optimization of Electromagnetic Devices. IEEE Transactions on Magnetics, 2018, 54, 1-5.	2.1	3
38	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
39	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
40	A Quantum Particle Swarm Optimization Method With Fitness Selection Methodology for Electromagnetic Inverse Problems. IEEE Access, 2018, 6, 63155-63163.	4.2	20
41	An Efficient Direct Search Methodology for Robust Optimization of Electromagnetic Devices. IEEE Transactions on Magnetics, 2018, 54, 1-4.	2.1	1
42	A Fast Methodology for Topology Optimizations of Electromagnetic Devices. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	3
43	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
44	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
45	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
46	Design Optimization and Comparative Study of Novel Magnetic-Geared Permanent Magnet Machines. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	28
47	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
48	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
49	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
50	An improved quantum particle swarm optimization applied to inverse problem in electromagnetics. , 2016, , .		1
51	A particle swarm optimization method applied to global optimization of inverse problem. , 2016, , .		0
52	Low-cost direct instantaneous torque control for switched reluctance motors with bus current detection under soft-chopping mode. IET Power Electronics, 2016, 9, 482-490.	2.1	41
53	A wind driven optimization based methodology for robust optimizations of electromagnetic devices under interval uncertainty. , 2016, , .		1
54	A coupled circuit-ambipolar diffusion equation model and its solution methodology for insulated gate bipolar transistors. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
55	Iron Loss Separation in High Frequency Using Numerical Techniques. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	5
56	An Improved Light Beam Search Method in Multiobjective Inverse Problem Optimizations. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	6
57	Fault diagnosis scheme for open-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
58	A Hybridized Vector Optimal Algorithm for Multi-Objective Optimal Designs of Electromagnetic Devices. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	5
59	A New Methodology for Robust Optimizations of Optimal Design Problems Under Interval Uncertainty. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	9
60	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
61	A Modified Particle Swarm Optimization Algorithm for Global Optimizations of Inverse Problems. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	65
62	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
63	Temperature Field Optimization and Magnetic Nanoparticles Optimal Approximation of MFH for Cancer Therapy. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	1
64	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
65	Online Sensorless Position Estimation for Switched Reluctance Motors Using One Current Sensor. IEEE Transactions on Power Electronics, 2015, , 1-1.	7.9	62
66	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
67	An Improved Evolution Strategy and Its Application to Inverse Scattering in Microwave Imaging. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	8
68	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
69	3D electromagnetic and thermal field analysis of edge induction heater. , 2014, , .		1
70	Design and analysis on switched reluctance motor system using field-circuit coupled method. , 2014, , .		6
71	Suppressing control of rising bus voltage for switched reluctance motor in braking operation. , 2014, , .		1
72	Numerical computation of coupled electromagnetic-thermal field in an induction edge heater for the hot strip mill. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
73	Full 3D eddy current and temperature field analysis of large hydro-generators in different operating conditions. , 2014, , .		1
74	Fast Frequency-Domain Modeling of Return Stroke Including Influence of Lossy Ground. IEEE Transactions on Magnetics, 2014, 50, 149-152.	2.1	3
75	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
76	A Quantum-Based Particle Swarm Optimization Algorithm Applied to Inverse Problems. IEEE Transactions on Magnetics, 2013, 49, 2069-2072.	2.1	27
77	A Quantum-Inspired Evolutionary Algorithm for Multi-Objective Design. IEEE Transactions on Magnetics, 2013, 49, 1609-1612.	2.1	14
78	An Ant Colony Algorithm for Both Robust and Global Optimizations of Inverse Problems. IEEE Transactions on Magnetics, 2013, 49, 2077-2080.	2.1	7
79	Fault diagnosis of power converter for switched reluctance motor based on discrete degree analysis of wavelet packet energy. , 2013, , .		0
80	Optimal Design of Dielectric Embedded Electronically Switchable Multiple Beam Antenna Array for MIMO Wireless Communications. , 2012, , .		0
81	An improved normal boundary intersection method for multiobjective inverse problems. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 121-127.	0.6	6
82	Calculation and control of stray losses in power transformer. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 835-841.	0.6	4
83	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
84	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
85	Resonant Frequency Calculation of Witricity Using Equivalent Circuit Model Combined with Finite Element Method. , 2012, , .		2
86	RF Power Amplifier Design for Wireless Power Transfer Using Method of Moment. , 2012, , .		1
87	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
88	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
89	Optimization of variable speed switched reluctance motor using the torque-speed performance map. , 2011, , .		0
90	Analytical modeling of stator vibration for surface mount permanent magnet brushless motors. , 2011, , .		1

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91	A Modified Tabu Search Method Applied to Inverse Problems. IEEE Transactions on Magnetics, 2011, 47, 1234-1237.	2.1	16
92	Initial Position Estimation in SRM Using Bootstrap Circuit Without Predefined Inductance Parameters. IEEE Transactions on Power Electronics, 2011, 26, 2449-2456.	7.9	76
93	Robust oriented particle swarm optimization algorithm applied to inverse problems. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 1057-1062.	0.6	4
94	Multi-objective design optimization of an inverted-S antenna. International Journal of Applied Electromagnetics and Mechanics, 2010, 33, 1049-1055.	0.6	8
95	A Population-Based Incremental Learning Method for Robust Optimal Solutions. IEEE Transactions on Magnetics, 2010, 46, 3189-3192.	2.1	5
96	The Cross-Entropy Method and Its Application to Inverse Problems. IEEE Transactions on Magnetics, 2010, 46, 3401-3404.	2.1	18
97	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
98	A modified tabu search method applied to inverse problems. , 2010, , .		0
99	Numerical synthesis of dielectric embedded electronically steerable multiple beam antenna array. , 2010, , .		0
100	3D finite element study of transient electromagnetic forces acting on the stator end-windings of a large turbo-generator. , 2010, , .		0
101	Minimizing sidelobe levels and facilitating null placements of nonlinear antenna arrays using an improved Particle Swarm Optimization. , 2010, , .		0
102	Numerical analysis of inverse scattering in microwave imaging. , 2010, , .		0
103	Study on separable transformer's efficiency for contactless energy transmission system. , 2010, , .		0
104	A population based incremental learning vector algorithm for multiobjective optimal designs. , 2010, , .		0
105	Robust optimization using a methodology based on Cross Entropy methods. , 2010, , .		0
106	Multiobjective Synthesis of Antenna Arrays Using a Vector Tabu Search Algorithm. IEEE Antennas and Wireless Propagation Letters, 2009, 8, 947-950.	4.0	21
107	An artificial bee colony algorithm for inverse problems. International Journal of Applied Electromagnetics and Mechanics, 2009, 31, 181-192.	0.6	28
108	Application of Support Vector Machines to Accelerate the Solution Speed of Metaheuristic Algorithms. IEEE Transactions on Magnetics, 2009, 45, 1502-1505.	2.1	7

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109	An Efficient Tabu Search Algorithm for Robust Solutions of Electromagnetic Design Problems. IEEE Transactions on Magnetics, 2008, 44, 1042-1045.	2.1	11
110	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
111	A Computationally Efficient Vector Optimizer Using Ant Colony Optimizations Algorithm for Multiobjective Designs. IEEE Transactions on Magnetics, 2008, 44, 1034-1037.	2.1	9
112	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
113	3-D FEM Analysis in Electromagnetic System Considering Vector Hysteresis and Anisotropy. IEEE Transactions on Magnetics, 2008, 44, 890-893.	2.1	6
114	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
115	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
116	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
117	A Global Optimization Algorithm Based on C^1 Piecewise Response Surface Patches. IEEE Transactions on Magnetics, 2007, 43, 1629-1632.	2.1	3
118	A modified ant colony optimization algorithm modeled on tabu-search methods. IEEE Transactions on Magnetics, 2006, 42, 1195-1198.	2.1	34
119	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
120	A fast global optimizer based on improved CS-RBF and stochastic optimal algorithm. IEEE Transactions on Magnetics, 2006, 42, 1175-1178.	2.1	3
121	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
122	Refinement computations of electromagnetic fields using FE and meshless methods. IEEE Transactions on Magnetics, 2005, 41, 1456-1459.	2.1	6
123	A particle swarm optimization-based method for multiobjective design optimizations. IEEE Transactions on Magnetics, 2005, 41, 1756-1759.	2.1	191
124	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
125	A Meshless Collocation Method Based on Radial Basis Functions and Wavelets. IEEE Transactions on Magnetics, 2004, 40, 1021-1024.	2.1	29
126	A combined wavelet-element free galerkin method for numerical calculations of electromagnetic fields. IEEE Transactions on Magnetics, 2003, 39, 1413-1416.	2.1	14

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127	A simulated annealing algorithm for multiobjective optimizations of electromagnetic devices. IEEE Transactions on Magnetics, 2003, 39, 1285-1288.	2.1	31
128	A tabu based algorithm for multiobjective optimizations of electromagnetic devices. International Journal of Applied Electromagnetics and Mechanics, 2002, 16, 207-214.	0.6	2
129	Study of Magnet Shifting for Reduction of Cogging Torque in Permanent Magnet Motors. , 0, , .		4
130	Optimization of the Different Pole Arc Combination to Reduce the Cogging Torque in PMDC Motors. , 0, , .		4