Min-Fu Hsieh

List of Publications by Year
in descending order

129	2,181	218677	265206
papers	citations	26 h-index	42 g-index

129	129	129	1662
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Review of the Design Issues and Techniques for Radial-Flux Brushless Surface and Internal Rare-Earth Permanent-Magnet Motors. IEEE Transactions on Industrial Electronics, 2011, 58, 3741-3757.	7.9	162
2	A Generalized Magnetic Circuit Modeling Approach for Design of Surface Permanent-Magnet Machines. IEEE Transactions on Industrial Electronics, 2012, 59, 779-792.	7.9	138
3	Alternative Rotor Designs for High Performance Brushless Permanent Magnet Machines for Hybrid Electric Vehicles. IEEE Transactions on Magnetics, 2012, 48, 835-838.	2.1	100
4	Comparative Study of PM-Assisted SynRM and IPMSM on Constant Power Speed Range for EV Applications. IEEE Transactions on Magnetics, 2017, 53, 1-6.	2.1	87
5	Performance Analysis of Permanent Magnet Motors for Electric Vehicles (EV) Traction Considering Driving Cycles. Energies, 2018, 11, 1385.	3.1	85
6	Unbalanced Magnet Pull in Large Brushless Rare-Earth Permanent Magnet Motors With Rotor Eccentricity. IEEE Transactions on Magnetics, 2009, 45, 4586-4589.	2.1	79
7	Different Arrangements for Dual-Rotor Dual-Output Radial-Flux Motors. IEEE Transactions on Industry Applications, 2012, 48, 612-622.	4.9	57
8	Development of a Wave Energy Converter Using a Two Chamber Oscillating Water Column. IEEE Transactions on Sustainable Energy, 2012, 3, 482-497.	8.8	51
9	Online Detection of Induction Motor's Stator Winding Short-Circuit Faults. IEEE Systems Journal, 2014, 8, 1272-1282.	4.6	51
10	Modeling and synchronous control of a single-axis stage driven by dual mechanically-coupled parallel ball screws. International Journal of Advanced Manufacturing Technology, 2007, 34, 933-943.	3.0	45
11	A novel indicator of stator winding inter-turn fault in induction motor using infrared thermal imaging. Infrared Physics and Technology, 2013, 61, 330-336.	2.9	45
12	Design and Analysis of Brushless Doubly Fed Reluctance Machine for Renewable Energy Applications. IEEE Transactions on Magnetics, 2016, 52, 1-5.	2.1	45
13	Damper Windings in Induction Machines for Reduction of Unbalanced Magnetic Pull and Bearing Wear. IEEE Transactions on Industry Applications, 2013, 49, 2206-2216.	4.9	41
14	An investigation on influence of magnet arc shaping upon back electromotive force waveforms for design of permanent-magnet brushless motors. IEEE Transactions on Magnetics, 2005, 41, 3949-3951.	2.1	40
15	Design of Large-Power Surface-Mounted Permanent-Magnet Motors Using Postassembly Magnetization. IEEE Transactions on Industrial Electronics, 2010, 57, 3376-3384.	7.9	40
16	Servo design of a vertical axis drive using dual linear motors for high speed electric discharge machining. International Journal of Machine Tools and Manufacture, 2007, 47, 546-554.	13.4	39
17	Post Assembly Magnetization Patterns in Rare-Earth Permanent-Magnet Motors. IEEE Transactions on Magnetics, 2007, 43, 2489-2491.	2.1	39
18	Magnetic Circuit Modeling of Brushless Doubly-Fed Machines With Induction and Reluctance Rotors. IEEE Transactions on Magnetics, 2013, 49, 2359-2362.	2.1	36

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19	An Investigation Into the Effect of PM Arrangements on PMa-SynRM Performance. IEEE Transactions on Industry Applications, 2018, 54, 5856-5868.	4.9	36
20	Torque Enhancement for a Novel Flux Intensifying PMa-SynRM Using Surface-Inset Permanent Magnet. IEEE Transactions on Magnetics, 2019, 55, 1-8.	2.1	35
21	Post-Assembly Magnetization of Rare-Earth Fractional-Slot Surface Permanent-Magnet Machines Using a Two-Shot Method. IEEE Transactions on Industry Applications, 2011, 47, 2478-2486.	4.9	34
22	Thin current sheet formation in response to the loading and the depletion of magnetic flux during the substorm growth phase. Journal of Geophysical Research: Space Physics, 2015, 120, 4264-4278.	2.4	33
23	Rotor Eccentricity Effect on Cogging Torque of PM Generators for Small Wind Turbines. IEEE Transactions on Magnetics, 2013, 49, 1897-1900.	2.1	31
24	Investigation on End Winding Inductance in Motor Stator Windings. IEEE Transactions on Magnetics, 2007, 43, 2513-2515.	2.1	28
25	Design of Brushless Doubly-Fed Machines Based on Magnetic Circuit Modeling. IEEE Transactions on Magnetics, 2012, 48, 3017-3020.	2.1	27
26	An assessment of ASME III and CEN TC54 methods of determining plastic and limit loads for pressure system components. Journal of Strain Analysis for Engineering Design, 2001, 36, 301-312.	1.8	26
27	Effects of Annealing on Magnetic Properties of Electrical Steel and Performances of SRM After Punching. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	26
28	Machine Learning for Inter-Turn Short-Circuit Fault Diagnosis in Permanent Magnet Synchronous Motors. IEEE Transactions on Magnetics, 2022, 58, 1-7.	2.1	26
29	A Multichamber Oscillating Water Column Using Cascaded Savonius Turbines. IEEE Transactions on Industry Applications, 2010, 46, 2372-2380.	4.9	25
30	A Small Segmented Oscillating Water Column Using a Savonius Rotor Turbine. IEEE Transactions on Industry Applications, 2010, 46, 2080-2088.	4.9	24
31	Calculation of Radial Forces in Cage Induction Motors at Startâ€"The Effect of Rotor Differential. IEEE Transactions on Magnetics, 2010, 46, 3029-3032.	2.1	23
32	Impact of Electrical Steel Punching Process on the Performance of Switched Reluctance Motors. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	23
33	Characteristics Regulation for Manufacture of Permanent-Magnet Motors Using Post-Assembly Magnetization. IEEE Transactions on Magnetics, 2007, 43, 2510-2512.	2.1	22
34	Winding Changeover Permanent-Magnet Generators for Renewable Energy Applications. IEEE Transactions on Magnetics, 2012, 48, 4168-4171.	2.1	21
35	Reduction of Vibration and Sound-Level for a Single-Phase Power Transformer With Large Capacity. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	21
36	The Development of an Indexing Method for the Comparison of Unbalanced Magnetic Pull in Electrical Machines. IEEE Transactions on Industry Applications, 2016, 52, 145-153.	4.9	21

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37	Irreversible Demagnetization Analysis for Multilayer Magnets of Permanent Magnet-Assisted Synchronous Reluctance Machines Considering Current Phase Angle. IEEE Transactions on Magnetics, 2019, 55, 1-9.	2.1	21
38	Design and Analysis of High Temperature Superconducting Generator for Offshore Wind Turbines. IEEE Transactions on Magnetics, 2013, 49, 1881-1884.	2.1	20
39	An Analytical Method Combining Equivalent Circuit and Magnetic Circuit for BDFRG. IEEE Transactions on Magnetics, 2014, 50, 1-5.	2.1	20
40	Unbalanced Magnetic Pull in Cage Induction Machines for Fixed-Speed Renewable Energy Generators. IEEE Transactions on Magnetics, 2011, 47, 4096-4099.	2.1	18
41	Improvement of Traction Motor Performance for Electric Vehicles Using Conductors With Insulation of High Thermal Conductivity Considering Cooling Methods. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	18
42	Improved Accuracy for Performance Evaluation of Synchronous Reluctance Motor. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	16
43	Operational Improvement of Interior Permanent Magnet Synchronous Motor Using Fuzzy Field-Weakening Control. Electronics (Switzerland), 2018, 7, 452.	3.1	16
44	Heat Transfer and Thermal Management of Interior Permanent Magnet Synchronous Electric Motor. Inventions, 2019, 4, 69.	2.5	16
45	Nozzles in the knuckle region of a torispherical head: limit load interaction under combined pressure and piping loads. International Journal of Pressure Vessels and Piping, 2000, 77, 807-815.	2.6	15
46	Computer-aided design and analysis of new fan motors. IEEE Transactions on Magnetics, 2002, 38, 3467-3474.	2.1	15
47	Integrated Design and Realization of a Hubless Rim-driven Thruster. , 2007, , .		15
48	Modeling and Effects of In Situ Magnetization of Isotropic Ferrite Magnet Motors. IEEE Transactions on Industry Applications, 2014, 50, 364-374.	4.9	15
49	Design of Transformer With High-Permeability Ferromagnetic Core and Strengthened Windings for Short-Circuit Condition. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	15
50	Cogging torque reduction in axial flux machines for small wind turbines. , 2009, , .		14
51	Rigorous Design and Optimization of Brushless PM Motor Using Response Surface Methodology with Quantum-Behaved PSO Operator. IEEE Transactions on Magnetics, 2014, 50, 1-4.	2.1	13
52	Analysis and Experimental Study of Permanent Magnet Machines With In-Situ Magnetization. IEEE Transactions on Magnetics, 2013, 49, 2351-2354.	2.1	10
53	Anti-Demagnetization Analysis of Fractional Slot Concentrated Windings Interior Permanent Magnet Motor Considering Effect of Rotor Design Parameters. IEEE Transactions on Magnetics, 2022, 58, 1-6.	2.1	10
54	Development of Supercapacitor-Aided Hybrid Energy Storage System to Enhance Battery Life Cycle of Electric Vehicles. Sustainability, 2021, 13, 7682.	3.2	10

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55	A small segmented oscillating water column using a savonius rotor turbine. , 2008, , .		9
56	Reducing bearing wear in induction generators for wave and tidal current energy devices. , 2011, , .		9
57	Evaluation of Permanent Magnet Generator Manufactured Using Postassembly Magnetization. IEEE Transactions on Magnetics, 2013, 49, 4084-4087.	2.1	9
58	Performance Analysis of Synchronous Reluctance Motor with Limited Amount of Permanent Magnet. Energies, 2019, 12, 3504.	3.1	9
59	A Novel Robust Sensorless Technique for Field-Oriented Control Drive of Permanent Magnet Synchronous Motor. IEEE Access, 2021, 9, 100882-100894.	4.2	9
60	Inductive Charging Coupler With Assistive Coils. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	8
61	Design and analysis of permanent-magnet assisted synchronous reluctance motor. , 2017, , .		8
62	An Efficient Approach for Cogging Torque Analysis of Motors With Three-Dimensional Flux Distribution. IEEE Transactions on Magnetics, 2006, 42, 3464-3466.	2.1	7
63	Modeling and control of a feed drive with multiple mechanically coupled ball screws. Asian Journal of Control, 2012, 14, 1227-1238.	3.0	7
64	Modulating Ring Structural Configuration Influence on the Dual Air-Gap Magnetic Gear Electric Machine. IEEE Transactions on Magnetics, 2017, 53, 1-6.	2.1	7
65	Performance Evaluation of Interior Permanent Magnet Motors Using Thin Electrical Steels. IEEJ Journal of Industry Applications, 2017, 6, 422-428.	1.1	7
66	Analysis and Comparison of Operational Characteristics of Electric Vehicle Traction Units Combining Two Different Types of Motors. IEEE Transactions on Vehicular Technology, 2022, 71, 5727-5742.	6.3	7
67	A LUMPED-MASS MODEL FOR THE DYNAMIC ANALYSIS OF THE SPATIAL BEAM-LIKE LATTICE GIRDERS. Journal of Sound and Vibration, 1999, 228, 275-303.	3.9	6
68	Limit loads for knuckle-encroaching nozzles in torispherical heads: Experimental verification of finite element predictions. Journal of Strain Analysis for Engineering Design, 2002, 37, 313-326.	1.8	6
69	Synchronous control of linear servo systems for CNC machine tools. , 2003, , .		6
70	Design of Large Power Surface-Mounted Permanent-Magnet Motors Using Post-Assembly Magnetization. , 2007, , .		6
71	Cost-effective Design for high efficiency synchronous reluctance motor. , 2015, , .		6
72	Transformer sound level caused by core magnetostriction and winding stress displacement variation. AIP Advances, 2017, 7, 056681.	1.3	6

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73	A Novel Variable Flux Spoke Type Permanent Magnet Motor With Swiveling Magnetization for Electric Vehicles. IEEE Access, 2022, 10, 62194-62209.	4.2	6
74	Comparative study of PM-assisted SynRM and IPMSM on constant power speed range for EV applications. , 2017, , .		5
75	A Low Torque Ripple Direct Torque Control Method for Interior Permanent Magnet Motor. Applied Sciences (Switzerland), 2020, 10, 1723.	2.5	5
76	Analysis on Field Weakening of Flux Intensifying Synchronous Motor Considering PM Dimension and Armature Current. IEEE Transactions on Magnetics, 2021, 57, 1-5.	2.1	5
77	Flux Intensifying Feature of Permanent Magnet Assisted Synchronous Reluctance Motor with High Torque Density. Electronics (Switzerland), 2022, 11, 397.	3.1	5
78	Analysis of a tubular linear motor with soft magnetic composites for reciprocating compressors. Journal of Applied Physics, 2008, 103, 07F112.	2.5	4
79	Post-assembly magnetization of rare-earth fractional-slot permanent-magnet machines using a Two-Shot Method. , 2010, , .		4
80	Effects of Multicore Structure on Magnetic Losses and Magnetomechanical Vibration at High Frequencies. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	4
81	Energy management system with Bi-directional converter on hybrid sources electric scooters. , 2017, , .		4
82	Detailed heat transfer measurements of impinging swirling and non-swirling jet arrays emitted from grooved orifice plate. Chemical Engineering and Processing: Process Intensification, 2020, 149, 107820.	3.6	4
83	A Deadbeat Current and Flux Vector Control for IPMSM Drive with High Dynamic Performance. Applied Sciences (Switzerland), 2022, 12, 3789.	2.5	4
84	Nozzles in the knuckle region of a torispherical head: Stress levels and load interaction effects. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2000, 214, 31-41.	2.5	3
85	A multi-chamber oscillating water column using cascaded Savonius turbines. , 2009, , .		3
86	Damper windings in induction machines for reduction of unbalanced magnetic pull and bearing wear. , 2011, , .		3
87	Subassembly Magnetization Strategies for a Transverse Flux Motor Equipped With NdFeB Magnet. IEEE Transactions on Magnetics, 2011, 47, 3681-3684.	2.1	3
88	The integrated design of a permanent-magnet generator for small wind energy conversion system. International Journal of Computer Applications in Technology, 2012, 45, 98.	0.5	3
89	Design and optimization of high-speed switched reluctance motor using soft magnetic composite material. , 2014, , .		3
90	System Response of Permanent Magnet Synchronous Motor Drive Based on SiC Power Transistor. , 2019, , .		3

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91	A Modified of DTC Control Applied to Novel FI- PMA-SynRM for Torque Ripple Reduction. , 2019, , .		3
92	Convective Heat Transfer Motivated by Liquid-to-Vapor Density Difference in Centrifugal Force Field of Axially Rotating Loop Thermosyphons. Processes, 2021, 9, 1909.	2.8	3
93	Development of a real-time servo control test bench. IEEE Transactions on Education, 1997, 40, 242-252.	2.4	2
94	A general design method for electric machines using magnetic circuit model considering the flux saturation problem. , 2009, , .		2
95	Different arrangements for dual-rotor dual-output radial-flux motors. , 2010, , .		2
96	Combining full and semi closed loop synchronous control for dual mechanically coupled ball screw system. International Journal of Computer Applications in Technology, 2012, 45, 139.	0.5	2
97	Improved accuracy for performance prediction of synchronous reluctance motor by incorporating end turn inductance in 2-D FEM. , 2015, , .		2
98	Implicit predictorâ€“corrector central finite difference scheme for the equations of magnetohydrodynamic simulations. Computer Physics Communications, 2015, 196, 1-12.	7.5	2
99	Analysis of Flux Intensifying Effect on Synchronous Motors Applied to Electric Scooter. , 2019, , .		2
100	Analysis of Operational Characteristics of Traction Unit Combining Two Different Motors and Their Behaviors in Driving Cycle. , 2019, , .		2
101	Analysis of Magnet Configuration on Electromagnetic Performance of High-Speed Generators Using Post-assembly Magnetization. , 2019, , .		2
102	Performance Comparison of SynRM and Novel FI-PMa-SynRM with Different Rotor Surface Layouts. , 2019, , .		2
103	A Simple Model-Based Deadbeat Direct-Current and Flux Linkage Control Scheme for Sensorless SPMSM Drive. , 2021, , .		2
104	Thermal Performance Improvement by Rotating Thermosyphon Loop in Rotor of an Interior Permanent Magnet Synchronous Electric Motor. Inventions, 2022, 7, 37.	2.5	2
105	Novel stator design of fan motors using soft magnetic composites. Journal of Applied Physics, 2008, 103, 07F109.	2.5	1
106	Modeling and effects of in-situ magnetization of isotropic ferrite magnet motors. , 2011, , .		1
107	Comparison of brushless induction and reluctance doubly-fed machines. , 2013, , .		1
108	Hybrid design model for optimal designing of a switched reluctance motor. , 2013, , .		1

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109	A design approach integrating the magnetic circuit and electric circuit models for BDFIM. , 2014, , .		1
110	Improved Non-Linear Torque Sharing Function Applied to Torque Ripple Reduction of Switched Reluctance Motor. , 2016, , .		1
111	Maximum torque per ampere control of IPMSM drive by fuzzy logic. Microsystem Technologies, 2018, 24, 19-26.	2.0	1
112	Analysis of Local Demagnetization in Magnet for PM-Assisted Synchronous Reluctance Motors. , 2018, , .		1
113	Fuzzy Maximum Torque per Ampere and Maximum Torque per Voltage Control of Interior Permanent Magnet Synchronous Motor Drive. Sensors and Materials, 2017, , 461.	0.5	1
114	An Efficient Approach for Cogging Torque Analysis of Motors with Three-Dimensional Flux Distribution. , 2006, , .		0
115	Design of modular inverter for distributed power generation. , 2008, , .		0
116	Issues with low speed direct-drive permanentmagnet generator design — Comparison of radial-flux slotted and torus machines. , 2010, , .		0
117	Dimension effect on a grid-connected brushless doubly-fed reluctance generator. , 2014, , .		0
118	The measurement and indexing of unbalanced magnetic pull in electrical machines. , 2014, , .		0
119	Magnetizing approach for permanent magnets with resonant power conversion. , 2015, , .		0
120	In-situ magnetization of permanent magnet machines considering magnetizer capacity and connection types. , 2015, , .		0
121	Impact of electrical steel punching process on performance of switched reluctance motors. , 2015, , .		0
122	HC-04 Multiphysics Analysis of Traction Motors Considering Electromagnetics and Mechanical Factors. , 2016, , .		0
123	Application of high permeability magnetic core sensor for IoTs device. , 2017, , .		0
124	Reduction of switching loss of DC to AC power inverter with PID-like fuzzy controller. , 2017, , .		0
125	Application of Underactuated mechanism motor control in ball and beam system. , 2017, , .		0
126	Analysis and Implementation of Novel Energy Management System for Electric Vehicles. , 2019, , .		0

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127	Operating efficiency enhancement of hybrid energy storage system for IPMSM drives. International Journal of Electronics, 0, , 1-15.	1.4	0
128	Cumulative currentâ€magnetizing method for a capacitorâ€discharged impulse magnetizer. International Journal of Circuit Theory and Applications, 2017, 45, 1439-1446.	2.0	0
129	Swiveling Magnetization for Anisotropic Magnets for Variable Flux Spoke-Type Permanent Magnet Motor Applied to Electric Vehicles. Energies, 2022, 15, 3825.	3.1	0