

# Rukmi Dutta

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/6334951/rukmi-dutta-publications-by-citations.pdf>

**Version:** 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

77  
papers

752  
citations

13  
h-index

24  
g-index

106  
ext. papers

1,032  
ext. citations

4  
avg, IF

4.43  
L-index

#	Paper	IF	Citations
77	Design and Analysis of an Interior Permanent Magnet (IPM) Machine With Very Wide Constant Power Operation Range. <i>IEEE Transactions on Energy Conversion</i> , <b>2008</b> , 23, 25-33	5.4	91
76	A Comparative Analysis of Two Test Methods of Measuring $d$ - and $q$ -Axes Inductances of Interior Permanent-Magnet Machine. <i>IEEE Transactions on Magnetics</i> , <b>2006</b> , 42, 3712-3718	2	88
75	Design and Experimental Verification of an 18-Slot/14-pole Fractional-Slot Concentrated Winding Interior Permanent Magnet Machine. <i>IEEE Transactions on Energy Conversion</i> , <b>2013</b> , 28, 181-190	5.4	62
74	Winding Inductances of an Interior Permanent Magnet (IPM) Machine With Fractional Slot Concentrated Winding. <i>IEEE Transactions on Magnetics</i> , <b>2012</b> , 48, 4842-4849	2	42
73	Lifetime Cost Assessment of Permanent Magnet Synchronous Generators for MW Level Wind Turbines. <i>IEEE Transactions on Sustainable Energy</i> , <b>2014</b> , 5, 10-17	8.2	28
72	Direct torque and flux control of interior permanent magnet synchronous machine in deep flux-weakening region. <i>IET Electric Power Applications</i> , <b>2018</b> , 12, 98-105	1.8	25
71	Space Vector PWM Techniques for Three-to-Five-Phase Indirect Matrix Converter in the Overmodulation Region. <i>IEEE Transactions on Industrial Electronics</i> , <b>2016</b> , 63, 550-561	8.9	24
70	Performance of a Sensorless Controlled Concentrated-Wound Interior Permanent-Magnet Synchronous Machine at Low and Zero Speed. <i>IEEE Transactions on Industrial Electronics</i> , <b>2016</b> , 63, 2016-2026	8.9	23
69	. <i>IEEE Transactions on Magnetics</i> , <b>2017</b> , 53, 1-12	2	23
68	Planar polymer electrolyte membrane fuel cells: powering portable devices from hydrogen. <i>Sustainable Energy and Fuels</i> , <b>2020</b> , 4, 439-468	5.8	21
67	Design of Optimal Winding Configurations for Symmetrical Multiphase Concentrated-Wound Surface-Mount PMSMs to Achieve Maximum Torque Density Under Current Harmonic Injection. <i>IEEE Transactions on Industrial Electronics</i> , <b>2018</b> , 65, 1751-1761	8.9	18
66	Detailed Analytical Modeling of Fractional-Slot Concentrated-Wound Interior Permanent Magnet Machines for Prediction of Torque Ripple. <i>IEEE Transactions on Industry Applications</i> , <b>2017</b> , 53, 5272-5283	4.3	18
65	Deep flux weakening control of a segmented interior permanent magnet synchronous motor with maximum torque per voltage control <b>2015</b> ,		14
64	Analysis of Low-Speed IPMMs With Distributed and Fractional Slot Concentrated Windings for Wind Energy Applications. <i>IEEE Transactions on Magnetics</i> , <b>2017</b> , 53, 1-10	2	13
63	ANALYSIS AND EXPERIMENTAL VERIFICATION OF LOSSES IN A CONCENTRATED WOUND INTERIOR PERMANENT MAGNET MACHINE. <i>Progress in Electromagnetics Research B</i> , <b>2013</b> , 48, 221-248	0.7	12
62	Analysis of MMF and back-EMF waveforms for fractional-slot concentrated-wound permanent magnet machines <b>2014</b> ,		12
61	Application of partial direct-pole-placement and differential evolution algorithm to optimize controller and LCL filter design for grid-tied inverter <b>2014</b> ,		10

60	Field weakening performance of a concentrated wound PM machine with rotor and magnet geometry variation <b>2010</b> ,		10
59	Cogging Torque Analysis of a Segmented Interior Permanent Magnet Machine <b>2007</b> ,		10
58	<b>2012</b> ,		8
57	A segmented magnet interior permanent magnet machine with wide constant power range for application in hybrid vehicles		8
56	Performances of a Fractional-Slot Concentrated-Winding Permanent Magnet Synchronous Machine Under Position Sensorless Control in Deep Flux-Weakening Region. <i>IEEE Transactions on Industry Applications</i> , <b>2019</b> , 55, 5938-5946	4-3	7
55	Distributed and concentrated winding Interior PM Synchronous Machine (IPMSM) for direct drive wind turbine <b>2013</b> ,		7
54	A preliminary study of the effect of saturation and cross-magnetization on the inductances of a fractional-slot concentrated-wound interior PM synchronous machine <b>2015</b> ,		7
53	<b>2010</b> ,		7
52	Application of concentrated windings in interior permanent magnet machine <b>2007</b> ,		7
51	Torque ripple minimization in dual inverter open-end winding PMSM drives with non-sinusoidal back-EMFs by harmonic current suppression <b>2016</b> ,		7
50	Analysis of Torque Ripple of a Spoke-Type Interior Permanent Magnet Machine. <i>Energies</i> , <b>2020</b> , 13, 28863.1		6
49	Inductances of a fractional-slot concentrated-winding interior PM synchronous machine considering effects of saturation and cross magnetization <b>2015</b> ,		6
48	A Novel Rotor Topology for High-Performance Fractional Slot Concentrated Winding Interior Permanent Magnet Machine. <i>IEEE Transactions on Energy Conversion</i> , <b>2021</b> , 36, 658-670	5-4	6
47	Analytical Calculation of Maximum Mechanical Stress on the Rotor of the Interior Permanent-Magnet Synchronous Machine <b>2018</b> ,		6
46	Deep flux weakening control with six-step overmodulation for a segmented interior permanent magnet synchronous motor <b>2017</b> ,		5
45	Closed-loop control strategy for PM machines with non-sinusoidal back-EMFs using dual-inverter open-end winding <b>2015</b> ,		5
44	Design Optimization of a Spoke-Type FSCW IPM Machine to Achieve Low Torque Ripple and High Torque Density Under a Wide Constant Power Speed Range <b>2018</b> ,		5
43	Cascaded Predictive Flux Control for a 3-L Active NPC Fed IM Drives Without Weighting Factor. <i>IEEE Transactions on Energy Conversion</i> , <b>2021</b> , 36, 1797-1807	5-4	5

42	Optimization of a MW Halbach PMSG for wind turbine applications <b>2016,</b>		4
41	Investigation of flat and V-shaped magnets in interior permanent magnet machine for direct drive wind turbine application <b>2013,</b>		4
40	Flux density analysis of using Halbach array in MW level permanent magnet synchronous generators for wind turbines: A preliminary linear model <b>2012,</b>		4
39	AC Motor Control Applications in Vehicle Traction <b>2013,</b> 453-486		4
38	Experimental verification of core and magnet losses in a concentrated wound IPM machine with V-shaped magnets used in field weakening applications <b>2011,</b>		4
37	Design and Analysis of an Interior Permanent Magnet (IPM) Machine with Very Wide Constant Power Operation Range. <i>Industrial Electronics Society (IECON ), Annual Conference of IEEE, 2006,</i>		4
36	Study on PCB Based Litz Wire Applications for Air-Core Inductor and Planar Transformer <b>2019,</b>		4
35	A Standstill Method to Measure Electromagnetically Induced Torque Ripple of Permanent Magnet Synchronous Machines. <i>IEEE Transactions on Instrumentation and Measurement, 2020,</i> 69, 7627-7635	5-2	3
34	Analytical Calculation of Maximum Mechanical Stress on the Rotor of Interior Permanent-Magnet Synchronous Machines. <i>IEEE Transactions on Industry Applications, 2020,</i> 56, 1321-1331	4-3	3
33	Operation along the maximum torque per voltage trajectory in a direct torque and flux controlled interior permanent magnet synchronous motor <b>2016,</b>		3
32	Design of an Interior Permanent Magnet Synchronous Machine suitable for Direct Drive Wind Turbine <b>2013,</b>		3
31	<b>2017,</b>		3
30	Performance analysis of a new concentratedwinding interior permanent magnet synchronous machine under Field Oriented Control <b>2014,</b>		3
29	An investigation of the use of a Halbach array in MW level permanent magnet synchronous generators <b>2012,</b>		3
28	Application of particle swarm optimization in the design of large permanent magnet synchronous generators for wind turbines <b>2012,</b>		3
27	Experimental verification of open circuit parameters of an IPM machine with concentrated windings <b>2011,</b>		3
26	Analysis of Cogging Torque and its Effect on Direct Torque Control (DTC) in a Segmented Interior Permanent Magnet Machine <b>2007,</b>		3
25	Control Strategy of Post-fault Operation in Dual Inverter-fed, PMSM considering Zero Sequence and Back-emf Harmonic <b>2016,</b>		2

24	Challenges for including characteristic current as a design parameter in optimization of IPM machines <b>2017,</b>		2
23	Analysis of common mode voltage using carrier-based method for dual-inverter open-end winding <b>2014,</b>		2
22	Overmodulation techniques for the three-to-five phase indirect matrix converter with space vector PWM <b>2014,</b>		2
21	Analysis of CPSR in motoring and generating modes of an IPM motor <b>2011,</b>		2
20	Design and thermal considerations of an interior permanent magnet machine with concentrated windings <b>2009,</b>		2
19	The preliminary results on Direct Torque Control for an fractional-slot concentrated winding Interior Permanent Magnet Synchronous Machine <b>2012,</b>		2
18	Application of Concentrated Windings in the Interior Permanent Magnet Machine. <i>Australian Journal of Electrical and Electronics Engineering</i> , <b>2008</b> , 5, 229-236	0.6	2
17	Analysis and Comparison of Methods for Determining d- and q-axes Inductances of IPM Machines <b>2005,</b>		2
16	Comparison of Core Loss Prediction Methods for the Interior Permanent Magnet Machine		2
15	An investigation of a segmented rotor interior permanent magnet (IPM) machine for field weakening		2
14	A new rotor design of interior permanent magnet machine suitable for wide speed range		2
13	Partially-Coupled $dq0$ Components of Magnetically-Isolated FSCW IPM Machines With Open-End-Winding Drives. <i>IEEE Transactions on Industry Applications</i> , <b>2020</b> , 56, 1397-1407	4.3	2
12	Detailed analytical modelling of fractional-slot concentrated-wound interior permanent magnet machines for prediction of torque ripple <b>2016,</b>		2
11	A modified single-current-regulator control scheme for deep flux-weakening operation of interior permanent magnet synchronous motors <b>2016,</b>		2
10	Analysis of low-speed IPMMs with distributed and fractional slot concentrated windings designed for wind energy applications <b>2017,</b>		1
9	Analytical modeling of pulsating torque in concentrated-wound interior permanent magnet machines to achieve maximum average torque under an open-phase fault condition <b>2016,</b>		1
8	Design of a 4KW interior permanent magnet machine suitable for low speed application <b>2013,</b>		1
7	Sensorless direct torque control of a fractional-slot concentrated winding interior permanent magnet synchronous machine using extended rotor flux model <b>2012,</b>		1

6	Reduced-Sensors-Based Predictive Controller for LC Filtered Four-Leg Inverters. <i>IEEE Open Journal of Industry Applications</i> , <b>2021</b> , 2, 301-309	4.7	1
5	COGGING TORQUE AND TORQUE RIPPLE IN A DIRECT-DRIVE INTERIOR PERMANENT MAGNET GENERATOR. <i>Progress in Electromagnetics Research B</i> , <b>2016</b> , 70, 73-85	0.7	1
4	Post-fault control strategy for IPMSMs with non-sinusoidal back-EMFs in an open-ended winding configuration <b>2016</b> ,		1
3	Effect of eliminating rotor iron on a mega-watt halbach permanent magnet synchronous generator for wind turbine applications <b>2016</b> ,		1
2	Control of Interior Permanent Magnet Synchronous Machines <b>2013</b> , 398-428		
1	Development of a cost-effective circuit hardware architecture for brushless direct current motor driver. <i>International Journal of Circuit Theory and Applications</i> , <b>2021</b> , 49, 2183-2198		2