

# List of Publications by Power Electronics Research Laboratory, University of Minnesota in 2008-2009

1. Joshi, N.; Mohan, N., "A Novel Scheme to Connect Wind Turbines to the Power Grid," Energy Conversion, IEEE Transactions on , vol.24, no.2, pp.504-510, June 2009
2. K. K. Mohapatra, Ranjan K. Gupta, Satish Thuta, Apurva Somani, Amod Umarikar, Kaushik Basu and Ned Mohan "New Research on AC-AC Converters without Intermediate Storage and Their Applications in Power-Electronic Transformers and AC Drives ", Invited paper, accepted for publication in IEEE Transactions on Electrical and Electronic Engineering, 2009.
3. H. Krishnaswami and N. Mohan, "Three-port series-resonant dc-dc converter to interface renewable energy sources with bi-directional load and energy storage ports," IEEE Transactions in Power Electronics, (accepted for publication).
4. Ranjan K. Gupta, K. K. Mohapatra and Ned Mohan "A novel three-phase, switched multi-winding power electronic transformer", accepted for publication in the proceedings of IEEE Energy Conversion Congress and Exposition (ECCE), power electronics and machine drives conference, ECCE 2009, San Jose, California.
5. Ranjan K. Gupta, K. K. Mohapatra and Ned Mohan "Novel Topologies of Power Electronic Transformers with Reduced Switch-Count", accepted for publication in the proceedings of GCMS 2009, 2009 Conference on Grand Challenges in Modeling and Simulation (GCMS'09), Istanbul, Turkey
6. Satish, T.; Mohapatra, K.K.; Mohan, N., "Dynamic Performance of a Matrix Converter Fed Speed Sensorless DTC Induction Motor Drive Using Adaptive Speed Observer," Applied Power Electronics Conference and Exposition, 2009. APEC 2009. Twenty-Fourth Annual ,IEEE , vol., no., pp.1984-1990, 15-19 Feb. 2009
7. Shabari Nath, K.K.Mohapatra and Ned Mohan, "Output voltage regulation in matrix converter fed transformer for power systems applications in ship" accepted for publication in 2009 IEEE Electric Ship Technologies Symposium
8. Somani, A.; Gupta, R.K.; Mohapatra, K.K.; Basu K.; Mohan, N., "Modulation Strategies for Direct-Link Drive for Open-End Winding AC Machines," International Electric Machines and Drives Conference, IEEE, 3-6 May 2009
9. Parag Upadhyay and Ned Mohan "Design and FE Analysis of Surface Mounted Permanent Magnet Motor/Generator for High-speed Modular Flywheel Energy Storage Systems" 2009 IEEE Energy Conversion Congress and Exposition-ECCE2009, to be held on September 20-24, 2009 at San Jose, California (Accepted to appear in conference proceedings)
10. Parag Upadhyay and Ned Mohan "Simulation and Analysis of High-speed Modular Flywheel Energy Storage Systems Using MATLAB/Simulink" Grand Challenges in Modeling & Simulation (GCMS'09) Part of 2009 International Simulation Multiconference (ISM'09), to be held on July 13 - 16, 2009 at Istanbul, Turkey (Accepted to appear in conference proceedings)

11. Somani, A.; Gupta, R.K.; Mohapatra, K.K.; Mohan, N., "A minimum-switch direct-link drive with common-mode voltage suppression and active filtering for open-end winding AC machines," /Power Electronics Specialists Conference, 2008. PESC 2008. IEEE/ , vol., no., pp.2889-2893, 15-19 June 2008
12. Kaushik Basu, Amod C Umarikar, Krushna K Mohapatra and Ned Mohan, "High-Frequency Transformer-Link Three-Level Inverter Drive with Common-Mode Voltage Elimination," PESC '08. 2003 IEEE 34th Annual, vol. 4
13. Kaushik Basu, Amod C Umarikar, Krushna K Mohapatra and Ned Mohan, "Loss Estimation in High Frequency AC Link Power Electronic Transformer by SABER Simulation," Proc. SCS Grand Challenges in Modeling and Simulation (GCMS'08), 2008, Edinburgh, Scotland
14. Thuta, S.; Mohapatra, K.K.; Mohan, N.; "Matrix converter over-modulation using carrier-based control: Maximizing the voltage transfer ratio" Power Electronics Specialists Conference, 2008. PESC 2008. IEEE
15. K.K. Mohapatra, Ned Mohan "Matrix converter fed open-ended power electronic transformer for power system application" Power and Energy Society General Meeting - Conversion and Delivery of Electrical Energy in the 21st Century, 2008 IEEE.
16. Rashmi Prasad, K. K. Mohapatra, Ned Mohan, "Switching Loss Optimization in Hysteresis-Current-Controller driven Direct-Matrix Converter using MATLAB/Simulink" Proc. SCS Grand Challenges in Modeling and Simulation (GCMS'08), 2008, Edinburgh, Scotland
17. H. Krishnaswami and N. Mohan, "Constant switching frequency series resonant three-port bi-directional dc-dc converter," in Proc. IEEE Power Electronics Specialists Conference (PESC'08), 2008, pp. 1640-1645.
18. H. Krishnaswami and N. Mohan, "Simulation model of a three-port bi-directional series resonant dc-dc converter to determine component specifications," in Proc. SCS Grand Challenges in Modeling and Simulation (GCMS'08), 2008.