

## **Short Papers, Abstracts and Presentations**

1. M.R Barzegaran, A. Nejadpak, O.A. Mohammed, "Electromagnetic signature study of the power converter connected to an electric motor drives", presented at COMPUMAG 2013 Conference on the Computation of Electromagnetic Fields, Budapest, Hungary, July 2013.
2. M.R Barzegaran, O.A. Mohammed, "A Generalized Equivalent Source Model of AC Electric Machines for Numerical Electromagnetic Field Signature Studies", IEEE INTERMAG 2012, Vancouver, Canada 7-11 MAY 2012.
3. M.R Barzegaran, O.A. Mohammed, "3DFE Wire Modeling and Analysis of Electromagnetic Signatures from Electric Power Drive Components and Systems", Fifteenth Biennial IEEE Conference on Electromagnetic Field Computation (CEFC2012).
4. Arash Nejadpak, Ali Sarikhani, Osama A. Mohammed, "Analysis of Radiated EMI and Noise Propagation in Three-Phase Inverter System Operating Under Different Switching Patterns", CEFC November 11-14 Oita Japan 2012.
5. Ali Sarikhani, Arash Nejadpak, Osama A. Mohammed, "Estimation of Operational Inductance in Permanent Magnet Synchronous Machines by a Real-time Physics-based inductance Observer", CEFC November 11-14 Oita Japan 2012
6. A. Nejadpak, M.R Barzegaran, O.A. Mohammed, "Numerical Simulation of Low Frequency Far Fields from an Operating Multi-Component System Including Power Converter Load Switching", Fifteenth Biennial IEEE Conference on Electromagnetic Field Computation (CEFC2012).
7. M.R Barzegaran, O.A. Mohammed, "Multi-Dipole Modeling of XLPE Cable for Electromagnetic Field Studies in Large Power Systems", The Sixth International Conference on Electromagnetic Field Problems and Applications (ICEF), June 19-21 2012, Dalian, China.
8. M. Amin, H. Moussa, and O. A. Mohammed, "Development of A Wide Area Measurement System for Smart Grid Applications", 18th World Congress of the International Federation of Automatic Control (IFAC) Invited Session, IFAC 2011 proceedings, Vol. 18, Part 1, Aug. 28-Sep.2, 2011, Milano, Italy.
9. A. Sarikhani, M.R Barzegaran, O.A. Mohammed, "Optimum Equivalent Models of Multi-conductor Systems for the study of Electromagnetic Signatures and Radiated Emissions from Electric" IEEE COMPUMAG 2011, Australia 12-15 July 2011
10. Sarikhani, A.; Mohammed, O.A. "Hybrid GA-PSO multi-objective design optimization of coupled PM synchronous motor-drive using physics-based modeling approach," Electromagnetic Field Computation (CEFC), 2010 14th Biennial IEEE Conference on , pp. 1, 9-12 May 2010.
11. Mohammed, O.A.; Rosales, A.; Sarikhani, A. "Evaluation of radiated Electromagnetic Field Interference due to frequency switching in PWM motor drives by 3D finite elements," Electromagnetic Field Computation (CEFC), 2010 14th Biennial IEEE Conference on , pp. 1, 9-12 May 2010.
12. Mohammed, O.A.; Abed, N.Y. "Application of Finite Elements to High Frequency Transformer Modeling," Electromagnetic Field Computation, 2006 12th Biennial IEEE Conference on , pp.100.
13. Mohammed, O.A.; Liu, Z.; Liu, S. "A Practical Method for Building the FE-based Phase Variable Model of Single Phase Transformers for Dynamic Simulations," Electromagnetic Field Computation, 2006 12th Biennial IEEE Conference on , pp.173.
14. Mohammed, O.A.; Liu, Z.; Liu, S. "FE-based Modeling of Single Phase Distribution Transformers with Internal Winding Short Circuit Faults," Electromagnetic Field Computation, 2006 12th Biennial IEEE Conference on , pp. 73.

15. Mohammed, O.A.; Liu, S.; Liu, Z. "Internal Short Circuit Fault Diagnosis for PM Machines Using FE-based Phase Variable Model and Wavelet Analysis," *Electromagnetic Field Computation, 2006 12th Biennial IEEE Conference on* , pp.157.
16. Mohammed, O.A.; Abed, N.Y. "Modeling and Characterization of Transformers Internal Faults using Finite Elements and Discrete Wavelet Transforms," *Electromagnetic Field Computation, 2006 12th Biennial IEEE Conference on* , pp.392.
17. Mohammed, O.A.; Liu, S.; Liu, Z. "An FE-based Physical Phase Variable Model for PM Synchronous Machines Including Dynamic Core Losses," *Electromagnetic Field Computation, 2006 12th Biennial IEEE Conference on* , pp.137.
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19. O. A Mohammed, N. Y. Abed, and S. Liu, "Coupled Finite Element Analysis of Distribution Transformer for Fault Studies," *proceedings of the Eleventh Biennial IEEE Conference on Electromagnetic Field Computation, CEFC 2004, June 6-9, Seoul, Korea*, pp.349.
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