Mustafa Mohamadian

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Highlights

- Excellent practical and theoretical experience in Uninterruptible Power Supplies, Electric Drives and Connection of Renewable Energy Sources to the grid using Power Electronics Interfaces.
- Professional experience with variety of Digital Signal Processors and Microcontrollers such as, Texas Instruments TMS320F28335, TMS320F2812, TMS320LF2407, TMS320C30, TMS320C25, Microchip PIC16C558, PIC12C509, PIC16C662, PIC12CE674, Motorola 68332.
- Ability to quickly adapt to new technologies and environment.

Education

- Ph.D. in Electrical & Computer Engineering
 University of Calgary, AB, Canada
 July/94 to Dec/97
 Thesis: DSP Artificial Neural Networks implementation of Indirect Field Orientation Control of AC motor.
- M.Sc. in Electrical & Computer Engineering
 Tehran University, Tehran, Iran Jan/90 to Aug/92
 Thesis: Pspice simulation of Auto sequentially commutated Inverter.
- B.Sc. in Electrical & Computer Engineering
 Amirkabir University of Technology, Tehran, Iran Sep/84 to Sep/89
 Thesis: Design and Implementation of a microprocessor controlled DC motor position control system.

Courses Taught

- Electric Drives
- Advanced Motion Control Systems
- · Application of Power Electronics in Distributed Generation
- Power Electronics
- · Digital Control
- · Uninterruptible Power Supplies
- Application of Digital Signal Processors in Power Electronics
- · Switched Mode Power Supplies

Professional Experience (Employment):

Faculty Member Power Electronics Group April/2005 to Present Faculty of Elec. & Comp. Eng., Tarbiat Modaress University, Tehran, Iran

Research Engineer June/2000 to April/2005

IROST, Tehran, Iran

Software Engineer Dec/97 to June/00

OPISystems, Calgary, Alberta, Canada

R&D Engineer Sep/93 to June/94

Micro Tarh Co., Tehran, Iran

Professional Activities:

Power Group Head: 2005-2007, 2010-2012 Faculty of Elec. & Comp. Eng., Tarbiat Modaress University, Tehran, Iran.

· Director: 2005-Present

Power Electronics Research Committee of Institute of Electrical & Electronics Engineer IAEEE.

· Reviewer Of Int. Journals:

2005-Present

IEEE Trans. On Power Electronics, IEEE Trans. On Industrial Electronics, IEEE Trans. On Industry Applications, IEEE Trans. On Energy Conversion, IEEE Trans. On Industrial Informatics, IET Electric Power Applications, ...

· Associate Editor: 2012-Present

Tarbiat Modares Electrical Engineering Journal.

• Technical Committee Member: 2011,2012 IEEE 2nd, 3rd and 4rd Power Electronics Drive Systems & Technology Conference.

· Conference Web Chair: 2011,2012

IEEE 2nd, 3rd and 4rd Power Electronics Drive Systems & Technology Conference

Conference Vice Chair:
 IEEE 1st Power Electronics Drive Systems & Technology Conference.

Technical Committee Member: 2008,2009,2011,2012
Iranian Electrical Engineering Conference.

Technical Committee Member: 2002-Present Khwarizimi International Research Award, Electrical & Comp. Committee.

Director: 2004
 Khwarizimi International Research Award, Electrical & Comp. Committee.

Selected Research or Commercial Projects

Sep. 2011 -

Firmware development of a 40kVA Transformer-less Parallel Three-phase Uninterruptible Power Supply (UPS) with load sharing using Texas Instruments TMS320F28335 DSP

April 2011 - Firmware development of a 1MVA HVDC Light system, using Texas Instruments

Firmware development of a 1MVA HVDC Light system, using lexas instruments TMS320F2812 DSP

Sep. 2008 - Sep. 2011

2010

Firmware development of a 10kVA Parallel Three-phase Uninterruptible Power Supply (UPS) with load sharing using Texas Instruments TMS320F2812 DSP

Oct. 2009 - June. 2010

Firmware development of a 5kVA prototype Flying Capacitor Multi-Level Electric Drive using Texas Instruments TMS320F2812 DSP

2004 -2005

Adaptive Sensorless Field Oriented Control of Induction Motor using TMS320C2407 DSP

2003 -2004

Second Order Sliding Mode Control of a Synchronous Reluctance Motor using TMS320C2407 DSP

Dec. 1998 - June 2000

Firmware development of a temperature handheld monitor using Motorola 68332 processor using RTXC Real time Operating system.

Dec. 1998 - June 2000

Integrated the hardware and prepared the Labview graphical user interface software for the control and automation of a computer controlled "Cable Production" line using brush less DC motor.

Journal Papers

- 1. A.Fatemi , M. Azizi, M.Mohamadian, A.Yazdian, M.Shahparasti, "Single-phase Dual-output Inverters With Three-switch Legs", Accepted for publication on IEEE Transactions on Industrial Electronics.
- 2. A.Abrishamifar, A.Ale Ahmad, M.Mohamadian, "Fixed Switching Frequency Sliding Mode Control for single phase unipolar inverters", IEEE Transactions on Power Electronics, Vol. 27, No. 5, MAY 2012.
- 3. Gh.Milan, E.Seifi, F.Najati, M.Mohamadian, "A Fault Tolerant Indirect Matrix Converter Motor Drive Against Grid Side Faults", International Review on Modeling and Simulations, vol. 4, no. 3, part A, pp. 1035-1043, June 2011.
- 4. A.H.Rajaee, M. Mohamadian, S.M. Dehghan, "PMSG-based variable speed wind energy conversion system using Vienna rectifier", European Transactions on Electrical Power, 2011; 21:954-972.
- 5. A. Amiri, M. Mohamadian M. Dehghan, A. Sadeghilarijani, "Adaptive compensation of VSI non-idealities to improve sensorless control of PMSM in low speed", International Review of Electrical Engineering-IREE, vol. 5, no. 6, part A, pp. 2610-2622, June. 2011.
- A.S.Larijani, M.Shahparasti, M.Mohamadian, A.Yazdian, "A Novel Switching Algorithm for DC Bus voltage Ripple Reduction in Direct Torque Controlled NPC Inverter", Iranian Journal of Electrical and Computer Engineering, V:9, No:1, Spring 2011, pp: 45-51.
- 7. A. Amiri, M. Mohamadian M. Dehghan, A. Sadeghilarijani, "A Fault Tolerant Indirect Matrix Converter Motor Drive Against Grid Side Faults", International Review on Modeling and Simulations, vol. 4, no. 3, part A, pp. 1035-1043, Nov.-Dec. 2010.
- 8. S.M. Dehghan, M. Mohamadian, A. Yazdian, A. H. Rajaei and H. Zahedi, "Dual Z-Source Network Dual-Input Dual-Output Inverter", Iranian Journal of Electrical and Electronic Engineering, V:6, No:4, December 2010, pp: 205-213.
- 9. Dehghan, S. M.; Mohamadian, M.; Yazdian, A.,, "Current-Type Nine-Switch Inverters", Journal of Power Electronics, Volume 10, No 2, March 2010 Page(s): 146 154.
- 10. H. Ghoreishy, A. Yazdian, Sh. Farhangi and M. Mohamadian, "A Novel Pulse-Width and Amplitude Modulation (PWAM) Control Strategy for Power Converters", Journal of Power Electronics, Volume 10, No 4, July 2010 Page(s): 374 381.
- 11. Dehghan, S. M.; Mohamadian, M.; Yazdian, A., "Hybrid Electric Vehicle Based on Bidirectional Z-Source Nine-Switch Inverter", IEEE Transactions on Vehicular Technology, Volume 59, Issue 6, July 2010 Page(s): 2641 2653.
- 12. S.M.Dehghan, M.Mohamadian, A.Yazdian, F.Ashrafzadeh, "Space Vectors Modulation for Nine-Switch Converters", IEEE Transactions on Power Electronics, Volume 25, Issue 6, Feb. 2010 Page(s):1488 1496.
- 13. S.M.Dehghan, M.Mohamadian, A.Yazdian, F.Ashrafzadeh, "Dual-Input Dual-Output Z-Source Inverter", IEEE Transactions on Power Electronics, Volume 25, Issue 2, Feb. 2010 Page(s):360 368.
 - 14. A.M.Rajaei, M.Mohamadian, S.M.Dehghan, A.Yazdian, "Single phase Induction Motor Drive System using Z-Source Inverter", IET Electric Power Applications, vol. 4, Issue. 1,

- pp. 17-25, Jan. 2010.
- 15. S.M.Dehghan, M. Mohamadian and A.Yazdian, "A New Variable Speed Wind Energy Conversion System Using Permanet Magnet Synchronous Generator and Z-Source Inverter ", IEEE Trans. On Power Conversion, Volume 24, Issue 3, Sept. 2009 Page(s):714 724.
- 16. M. Shahabi, M. Haghifam, M. Mohamadian and S.A. Nabavi Niaki, "Microgrid Dynamic Performance Improvement Using a Doubly Fed Induction Wind Generator ", IEEE Trans. On Power Conversion, Vol. 24, No. 1, March 2009, pp:137-145.
- 17. M. Mohamadian, A.Yazdian, and A.H.Rajaee "A Space Vector Current Regulator with Improved Transient Response", International Journal of Engineering Science, Vol.19, No.10-A,1387, pp. 33-41.
- 18. M.Hendijanizadeh, A.Yazdian, M.Mohamadian, "A New Design Method for Robust Sliding Mode Position Control of DC Motor", Iranian Journal of Electrical and Computer Engineering, Vol.6, No.3, Fall 2008, pp. 208-214.
- 19. M. Nayeripoor, A.Yazdian, M.Mohamadian, , "Bilinear Design of Unified Power Flow Controller for Improved Power System Stability", Iranian Journal of Electrical and Computer Engineering, Vol.6, No.3, Fall 2008, pp. 199-207.
- 20. M. Nayeripoor, A.Yazdian, M.Mohamadian, "Design and Optimization of Three-Phase Shunt Active Filter Using a Modified Sliding Mode Control", Iranian Journal of Electrical and Computer Engineering, V:5, No:4, Winter 2008, pp:215-223.
- 21. S.M.Dehghan, A.Yazdian, M.Mohamadian, "A New Method For DC Voltage Ripple Reduction Using Active Filters", Iranian Journal of Electrical and Computer Engineering, V:5, No:4, Winter 2008, pp:224-232.
- 22. M. Nayeripoor, A. Yazdian, M. Mohamadian, H.R. Mohammadi, "Design and Control of Three-Phase Shunt Active Power Filter Using the Sliding Mode Control and Energy Feedback", Iranian Journal of Electrical and Computer Engineering, V:5, No:1, Spring 2007, pp:32-40.
- 23. S.M.Dehghan, A.Yazdian, M.Mohamadian, "Hybrid Series and Shunt Active DC Line Conditioner", Iranian Journal of Electrical and Electronic Engineering, V:2, No:2, April 2006, pp:47-56.
- 24. M.Mohamadian, E.P.Nowicki, F.Ashrafzadeh, R.Sachdeva, A.Chu, E. Evanik, , " A Novel Neural Network Controller and its Efficient DSP Implementation for Vector Controlled Induction Motor Drives ", IEEE Transactions on Industry Applications, Volume 39, Issue 6, Nov.-Dec. 2003 Page(s):1622 1629

Conference Papers

 M.Heydari, A.Yazdian, M. Mohamadian, "A novel variable-speed wind energy system using induction generator and six-switch AC/AC converter", IEEE 3rd Power Electronics &

- Drive Systems & Technologies Conference, 15-16 Feb 2012, p.p. 244 250, Tehran, Iran.
- 2. M.Azizi, A.Fatemi, M.Mohamadian and A.Yazdian, "Cost-effective solution for microgrid power quality assurance", IEEE 3rd Power Electronics & Drive Systems & Technologies Conference, 15-16 Feb 2012, p.p. 150 155, Tehran, Iran.
- 3. Gh.Milan, M.Mohamadian, E.Seifi, S.M.Dehghan, "A novel minimized switch two-phase matrix converter for driving two-phase induction motor", IEEE 3rd Power Electronics & Drive Systems & Technologies Conference, 15-16 Feb 2012, p.p. 7 12, Tehran, Iran.
- 4. M.Shahparasti, A.M.Rajaei, A.Yazdian, M.Mohamadian, "Interline unified power quality conditioner based on single stage nine switch inverter", IEEE 3rd Power Electronics & Drive Systems & Technologies Conference, 15-16 Feb 2012, p.p. 319 323, Tehran, Iran.
- S.M.Shakouhi, M.Mohamadian, S.E.Afjei, "Torque control of permanent magnet BLDC motor during static eccentricity fault", IEEE 3rd Power Electronics & Drive Systems & Technologies Conference, 15-16 Feb 2012, p.p. 284 - 289, Tehran, Iran.
- 6. E.Seifi , Gh.Milan, M.Heydari, M.Mohamadian, S.M.Dehghan, "Z-source three-phase four-switch inverter with DC link split capacitor and comprehensive investigation of z-source three-phase four-switch inverters", IEEE 3rd Power Electronics & Drive Systems & Technologies Conference, 15-16 Feb 2012, p.p. 25 31, Tehran, Iran.
- 7. Gh.Milan, M.Mohamadian, E.Seifi, S.M.Dehghan, "A single to three-phase Z-source matrix converter", IEEE 3rd Power Electronics & Drive Systems & Technologies Conference, 15-16 Feb 2012, p.p. 1 6, Tehran, Iran.
- A.Fatemi, M.Azizi, M.Mohamadian and A.Yazdian, "Single-phase Delta-conversion UPS With Reduced Components", IEEE 3rd Power Electronics & Drive Systems & Technologies Conference, 15-16 Feb 2012, p.p. 448 - 453, Tehran, Iran.
- 9. M.Heydari, A.Fatemi, A.Yazdian, M. Mohamadian, "A Novel Reduced Switch Count Single-Phase to Three-Phase AC/AC Converter", IECON 2011 37th Annual Conference on IEEE Industrial Electronics Society, 7-10 Nov 2011, , p.p. 1120 1125, Melbourne, Australia.
- 10. M.Azizi, A.Fatemi, M.Mohamadian and A.Yazdian, "Novel Application of Dual-output Four-leg Converter for Unified Power Quality Conditioner", ICEE 2011, May 2011, Tehran, Iran.
- 11. A.Fatemi, M.Azizi, K.Rahmani, M.Mohamadian and A.Yazdian, "A Novel Reduced Switch Count Multilevel AC/AC Converter", ICEE 2011, May 2011, Tehran, Iran.
- 12. M.Shahparasti, A.Fatemi, M. Mohamadian and A.Yazdian, "A Novel Single-stage Power Conversion System Based on T-inverter for Photovoltaic System Connected to Single Phase AC Grid", ICEE 2011, May 2011, Tehran, Iran.
- 13. M.Heydari, A.Yazdian, M. Mohamadian, "A novel three-phase to three-phase AC/AC converter using six IGBTs", International Conference on Electric Power and Energy Conversion Systems (EPECS'11), 15-17 Nov 2011, Sharjah, UAE.

- 14. A.Fatemi , M. Azizi, M.Mohamadian, F.Ashrafzadeh, A minimized switch count single-phase AC/AC converter with active front end", Applied Power Electronics Conference and Exposition (APEC), 2012 Twenty-Seventh Annual IEEE, 5-9 Feb 2012, p.p. 1502 1507, Orlando, FL. .
- 15. S.M.Dehghan, A. Ale Ahmad, R.Lourakzadegan, M.Fazeli, M.Mohamadian, A. Abrishamifar, "A High Performance Controller for Parallel Operation of three-Phase UPSs Powering Unbalanced and Nonlinear Loads", IEEE 2nd Power Electronics & Drive Systems & Technologies Conference, 16-17 Feb 2011, p.p. 433-438, Tehran, Iran.
- 16. A.Fatemi, M. Azizi, M.Shahparasti, M.Mohamadian, A.Yazdian, "A Generalized Algorithm for Switch Reduction in Multioutput Single-Phase Inverters with/without Z-source impedance network", IEEE 2nd Power Electronics & Drive Systems & Technologies Conference, 16-17 Feb 2011, p.p. 293-298, Tehran, Iran.
- 17. S.M. Dehghan, E.Seifi, M.Mohamadian, R.Gharehkhani, "Grid Connected DG Systems Based on Z-Source NPC Inverters", IEEE 2nd Power Electronics & Drive Systems & Technologies Conference, 16-17 Feb 2011, p.p. 104-110, Tehran, Iran.
- 18. M.Heydari, A.Yazdian, M.Mohamadian, H.Zahedi, "A Novel Variable-Speed Wind Energy System Using Permanent-Magnet Synchronous Generator and Nine-Switch AC/AC Converter", IEEE 2nd Power Electronics & Drive Systems & Technologies Conference, 16-17 Feb 2011, p.p. 5-9, Tehran, Iran.
- 19. G.Milan, M.Mohamadian, S.M.Dehghan, E.Seifi, A.Yazdian, "A Novel SPWM Strategy for Single to Three-Phase Matrix Converter", IEEE 2nd Power Electronics & Drive Systems & Technologies Conference, 16-17 Feb 2011, p.p. 495-500, Tehran, Iran.
- 20. A.Fatemi, M. Azizi, M.Shahparasti, M.Mohamadian, A.Yazdian, "A Novel Single-Phase Six-Switch AC/AC Converter for UPS Applications", IEEE 2nd Power Electronics & Drive Systems & Technologies Conference, 16-17 Feb 2011, p.p. 408-414, Tehran, Iran.
- 21. S.M.Dehghan, M. Mohamadian, A.H.Rajaee, A.Yazdian, "Full Modeling of a Series HEV Based on BZS-NSI", IEEE 2nd Power Electronics & Drive Systems & Technologies Conference, 16-17 Feb 2011, p.p. 439-444, Tehran, Iran.
- 22. M. Azizi, A.Fatemi, M.Mohamadian, A.Yazdian, "A Novel Fault-Tolerant Four-Leg AC/AC Converter Capable of Compensating Unbalanced Source/Load", IEEE 2nd Power Electronics & Drive Systems & Technologies Conference, 16-17 Feb 2011, p.p. 552-557, Tehran, Iran.
- 23. S.M.Dehghan, M. Mohamadian, E.Siefi, "Discontinuous Energy Pump Source Inverters", IEEE 2nd Power Electronics & Drive Systems & Technologies Conference, 16-17 Feb 2011, p.p. 427-432, Tehran, Iran.
- 24. E. Seifi Najmi, S.M. Dehghan, M. Mohamadian, A. Yazdian, G.S. Milan, "Fault Tolerant 9 Switch Inverter", IEEE 2nd Power Electronics & Drive Systems & Technologies Conference, 16-17 Feb 2011, p.p. 546-551, Tehran, Iran.
- 25. M.Azizi, A.Fatemi, M. Mohamadian and A.Amiri, "Carrier Based PWM Alforithm for Nine Switch Z-Source Inverter", ICEE 2010, May 2010, pp. 1758-1763, Isfahan, Iran. (In Farsi)

- 26. M.Shahparasti, A.S.Larijani, A.Yazdian, M. Mohamadian and A.Amiri, "Modified Circular Chain Control Algorithm for Parallel Inverters with Different Output Power", ICEE 2010, May 2010, pp. 1985-1990, Isfahan, Iran. (In Farsi)
- 27. H.Ghoreishi, A.Yazdian, M. Mohamadian and Sh.Farhangi, "Design of a Multi-Level Rectifier Inverter System with Variable DC Source for Pulse Width and Amplitude Modulation", ICEE 2010, May 2010, pp. 1926-1931, Isfahan, Iran. (In Farsi)
- 28. M. Shahparasti, M. Farzi, M. Mohamadian and A. Aleahmad, "Unidirectional HVDC-Light, A Solution for Remote or Crowded Area Power Transmission" 25th Int. Power System Conf, Tehran, Iran, PSC2010, Nov. 2010. (In Farsi)
- 29. S.A.Mahdavian, M. Mohamadian and A. Yazdian, "Energy Efficiency Optimization of Parallel Pumps in Hormozgan Steel Company" 25th Int. Power System Conf, Tehran, Iran, PSC2010, Nov. 2010. (In Farsi)
- 30. Dehghan, S. M.; Mohamadian, M.; Yazdian, A., "Current control of nine-switch inverter using integrated current sensors", 2010 4th International, Power Engineering and Optimization Conference (PEOCO), 23-24 June. 2010, Page(s): 95 100.
- 31. Dehghan, S. M.; Mohamadian, M.; Andersen, M. A. E., "Full space vectors modulation for nine-switch converters including CF & DF modes", 2010 4th International, Power Engineering and Optimization Conference (PEOCO), 23-24 June. 2010, Page(s): 89 94
 - 32. A.S.Larijani, M. Mohamadian, A.Yazdian, M.Shahparasti, and A.Amiri, "A Novel Three-level Inverter Induction Motor Direct Torque Control System with Neutral Point Voltage Deviation Minimization", International Conference on Electric Power and Energy Conversion Systems (EPECS'09), 10-12 Nov 2009, Sharjah, UAE.
 - 33. A.S.Larijani, M.Shahparasti, A.Fatemi, A.Amiri and M. Mohamadian, "DTC Drive of Induction Motor using Three-Level Inverter with Optimized Switching Table and Minimizing the Deviation of Neutral Point Voltage", 1st Power Electronics & Drive Systems & Technologies Conference, 17-18 Feb 2010, p.p. 255-260, Tehran, Iran.
 - 34. H.Ghoreishi, A.Yazdian, Sh. Farhangi and M. Mohamadian, "Reducing Common-Mode Voltage and Power Dissipation in Cascaded Multilevel Inverters with Flexible dc Sources", IEEE 1st Power Electronics & Drive Systems & Technologies Conference, 17-18 Feb 2010, p.p. 175-179, Tehran, Iran.
 - 35. M.Azizi, A.Fatemi, M. Mohamadian and A.Yazdian," A Novel Z-source Four-leg Inverter with two Independent Four-wire Outputs", IEEE 1st Power Electronics & Drive Systems & Technologies Conference, 17-18 Feb 2010, p.p. 163-168, Tehran, Iran.
 - 36. M.Shahparasti, S.M.Dehghan, A.S.Larijani, A.Yazdian and M. Mohamadian, "A Z-Source AC/DC/AC with Reduced Semiconductor Stress", ICEE 2009, May 2009, pp. 331-336, Tehran, Iran.
 - 37. A.H.Rajaee, M. Mohamadian and A.Yazdian," Space-Vector Modulation Strategy for Single phase Induction Motor Drive System using Z-Source Inverter", ICEE 2009, May 2009, pp. 429-434, Tehran, Iran.
 - 38. H.Ghoreishi, A.Yazdian, Sh.Farhangi and M. Mohamadian, "A New Pulse and Amplitude

- Selective Harmonic Elimination Method For Multi-Level Inverters", ICEE 2009, May 2009, pp. 245-250, Tehran, Iran.
- 39. H. Zahedi, A.H. Rajaee, S.M. Dehghan, A. Yazdian and M. Mohamadian, "Nine Switch AC/AC Converter with Random Pulse Width Modulation", ICEE 2009, May 2009, pp. 337-342, Tehran, Iran.
- 40. Dehghan, S.M., Mohamadian, M., Yazdian, A., Ashrafzadeh, F., "A novel space vector modulation for nine-switch converters", Energy Conversion Congress and Exposition, 2009. ECCE 2009. IEEE, 20-24 Sept. 2009, San Jose, CA, pp. 885 891.
- 41. Dehghan, S.M., Mohamadian, M., Yazdian, A., Ashrafzadeh, F., "Dual-input dual-output z-source inverter", Energy Conversion Congress and Exposition, 2009. ECCE 2009. IEEE, 20-24 Sept. 2009, San Jose, CA, pp. 3668 3674.
- 42. Gharakhany,R., Mohamadian,M., Varjani,A.Y., "Reactive power compensation using Z-source based photovoltaic system", Power & Energy Society General Meeting, 2009. PES '09. IEEE, Calgary, Canada, 26-30 July 2009, pp. 1-7.
- 43. Shahabi, M., Haghifam, M.R., Mohamadian, M., Nabavi-Niaki, S.A., "Dynamic behavior improvement in a microgrid with multiple DG units using a power sharing approach", PowerTech, 2009 IEEE Bucharest, June 28 2009-July 2 2009, pp. 1-8.
- 44. Shahriari, S.A.A., Abardeh, M.H., Varjani, A.Y., Mohamadian, M., "Using Fault Current Limiter to minimize effect of Thyristor Controlled Series Capacitor on over reach problem of distance protection", Power Systems Conference and Exposition, 2009. PSCE '09. IEEE/PES, Seattle, WA, 15-18 March 2009, pp.1-6.
- 45. M.Shahparasti, A.S.Larijani, A.Yazdian and M.Mohamadian, "Parallel Single-Phase Low Power Grid Connected Z-source Inverter", 24th Int. Power System Conf, Tehran, Iran, PSC2009, Nov. 2009.
 - 46. M. Parsa Moghaddam,, E.Talebi and M. Mohamadian "A new Method For Pricing of Wind Power in Short-Term Power Markets", PowerSystem Computation Conference, PSCC2008, Glasgow, Scotland
 - 47. M. Dehghan, M. Mohamadian and A. Yazdian, "Maximum Boost Control and Current Ripple Reduction of Z-Source Inverter With Space Vector Modulation", ICEE 2008, May 2008, Tehran, Iran.
 - 48. A.H.Rajaee, M. Mohamadian and A.Yazdian, "Improving Single-Phase Induction Motor Drive, Output Voltage Using Z-Source Inverter", ICEE 2008, May 2008, Tehran, Iran.
 - 49. M. Dehghan,, A. Yazdian and M. Mohamadian "Short Circuit Current Reduction With Z-Source Inverter and Dynamic Voltage Restorer", ICEE 2008, May 2008, Tehran, Iran.
 - 50. K. Zare, A. Hatami, and M. Mohamadian, "A new Control Strategy for Active and Reactive Power Control of Fuel Cell Power Plant in Distribution Network", 13th Power System Distribution Conf, Zibakenar, Iran, 2008.
 - 51. M. Hoseinpour, R. Gharekhani, A. Yazdian and M. Mohamadian, "Hybrid Operation of Unified Power Quality Conditioner and Photovoltaic Array", 13th Power System Distribution Conf, Zibakenar, Iran, 2008.
 - 52. M. Abadi, M. Haghifam, and M. Mohamadian, "Improvement of Load Flow Study in Radial

- Distribution Network "13th Power System Distribution Conf, Zibakenar, Iran, 2008.
- 53. M. Nayeripoor, A. Yazdian, M. Mohamadian, and R. Khorshidi, "Optimization of an Improved Sliding Mode Controller for Shunt Active Power Filter", International Conference on Power Engineering, Energy and Electrical Drives, 2007. POWERENG 2007.
- 54. Moradkhani, M. Haghifam, and M. Mohamadian, "Load Restoration in Distribution Network Considering Distributed Generation", 12th Power System Distribution Conf, Tehran, Iran, 2007.
- 55. M. Hoseinpour, A. Yazdian and M. Mohamadian, "Maximum Power Point Tracking of Induction Generator in Variable Speed Wind Turbine", 22th Int. Power System Conf, Tehran, Iran, 2007.
- 56. M. Dehghan, M. Mohamadian, and A. Yazdian, "Sensorless Maximum Power Point Tracking of PMSG Wind Turbine", 22th Int. Power System Conf, Tehran, Iran, 2007.
- 57. M.Abadi, M. Mohamadian, A.Yazdian, and "Improving DFIG Wind Turbine Flicker Using Grid Side Converter", 22th Int. Power System Conf, Tehran, Iran, 2007.
- 58. J. Nourouzi, M. Mohamadian and A. Yazdian, "Evaluation of Fixed Point Digital Signal Processors in Vector Control of Induction Motors", ICEE 2007, May 2007, pp:611-616, Tehran, Iran.
- 59. A.Naghdinezhad, M.Mohamadian, A.Dastfan," Comparison of Off Line Neural Network Training Methods for Sensorless induction Motor Drive", 41st International Universities Power Engineering Conference, 6-8 Sept. 2006, NewCastle, UK.
- 60. M.H.Zadeh, A.Yazdian, M.Mohamadian, "Robust Position Control in DC motor by Fuzzy Sliding Mode Control", International Symposium on Power Electronics, Electrical Drives, Automation and Motion, 23-26 May 2006, PP:1413-1418, Taormina, Italy.
- 61. M.Mohamadian, A.Dastfan, S.M.Sadri," Implementation of Vector Control on a Synchronous Reluctance Motor", ICEE 2006, 16-18 May 2006, Tehran, Iran.
- 62. M.Parsa, A.Yazdian, M.Noorouzbeigi and M. Mohamadian, "Power Plant Energy Efficiency Improvement with Variable Speed Drives, Case Study: Arak Power Plant", 20th Int. Power System Conf, Tehran, Iran, 2005.
- 63. M.Hendijanizadeh, A.Yazdian, M.Mohamadian, "A Novel Sliding Mode Robust DC Motor Position Control System", 20th Int. Power System Conf, Tehran, Iran, 2005.
- 64. R.Nasirpour, A.Yazdian, M.Mohamadian, "A Robust PWM Rectifier with Reduced Input Current THD", 20th Int. Power System Conf, Tehran, Iran, 2005.
- 65. A.Naghdinezhad, A.Dastfan, M.Mohamadian, "Neural Network Speed Estimation in Sensorless Vector Control of Induction Machine", 13th ICEE2005, Vol. 4, Zanjan, Iran, May 10-12, 2005.
 - 66. M.Mohamadian, M.M.Pedram, F.Ashrafzadeh "Digital Second Order Sliding Mode Control for a Synchronous Reluctance Motor", IEEE/IAS Annu. Meet. Conf. Rec. Seatle WA, pp. 1899-1903, OCT. 2004.

- 67. M.Mohamadian, "Speed and Current Controller Design for Induction Motor Controller", Hybrid Vehicle Conference., Tehran, Iran, pp. 11-16, 2002
- 68. M.Mohamadian, E.P.Nowicki, F.Ashrafzadeh, E. Evanik, and J.C. Salmon, "A Modified Space Vector PWM Current Regulator for Improved Torque Control of a Three-Phase Induction Motor", Canadian Conference on Electrical and Computer Eng., pp. 748-751, May 1997.
- 69. J.C.Salmon, S.Olsen, M.Mohamadian, and E.P.Nowicki, "Current harmonic reduction for 3-phase rectification", Micronet annual workshop, pp.59-60, May 1996.
- 70. M.Mohamadian, E.P.Nowicki, A. Chu, F.Ashrafzadeh, and J.C. Salmon, "DSP Implementation of an Artificial Neural Network for Induction Motor Control", Canadian Conference on Electrical and Computer Eng., pp. 435-437, May 1997.
- 71. F.Ashrafzadeh, E.P.Nowicki, M.Mohamadian, and J.C. Salmon, "Reducing the Order of Fuzzy Controllers Based on Control Surface Rotation", Canadian Conference on Electrical and Computer Eng., pp. 785-787, May 1997.
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