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Biography: **G. B. Gharehpetian** received his BS, MS and Ph.D. degrees in electrical engineering in 1987, 1989 and 1996 from Tabriz University, Tabriz, Iran and Amirkabir University of Technology (AUT), Tehran, Iran and Tehran University, Tehran, Iran, respectively, graduating all with First Class Honors. As a Ph.D. student, he has received scholarship from DAAD (German Academic Exchange Service) from 1993 to 1996 and he was with High Voltage Institute of RWTH Aachen, Aachen, Germany.

He has been holding the Assistant Professor position at AUT from 1997 to 2003, the position of Associate Professor from 2004 to 2007 and has been Professor since 2007. The power engineering group of AUT has been selected as a Center of Excellence on Power Systems in Iran since 2001. He is a member of this center.

He was selected by the ministry of higher education as the distinguished professor of Iran and by IAEEE (Iranian Association of Electrical and Electronics Engineers) as the distinguished researcher of Iran and was awarded the National Prize in 2008 and 2010, respectively. Based on the ISI Web of Science database (2005-2015), he is among world's top 1% elite scientists according to ESI (Essential Science Indicators) ranking system.

Prof. Gharehpetian is a senior and distinguished member of IEEE and IAEEE, respectively, and a member of the central board of IAEEE. Since 2004, he is the Editor-in-Chief of the Journal of IAEEE.

He is the author of more than 1000 journal and conference papers. His teaching and research interest include Smart Grid, Microgrids, FACTS and HVDC Systems, Monitoring of Power Transformers and its Transients.

Education:

- Ph.D. in Electrical Engineering, Tehran University, Tehran, IRAN, April 1996
- M.S. in Electrical Engineering, Amirkabir University, Tehran, IRAN, Sep. 1989
- B.S. in Electrical Engineering, Tabriz University, Tabriz, IRAN, Feb. 1987

Academic Positions:

- Professor (since 2007) AUT, Electrical Engineering Faculty

- Associate Professor (2004 - 2007) AUT, Electrical Engineering Faculty
- Assistant Professor (1997 - 2003) AUT, Electrical Engineering Faculty
- Lecturer (1989 – 1996), Amirkabir University of Technology ([AUT](#)), Electrical Engineering Faculty

Teaching:

Undergraduate Courses: Future Power System Elements, Electric Machinery, Power Plants and Power Electronics

Graduate Courses: Microgrids and Smart Grid, Distributed Generation, HVDC Transmission, FACTS Devices and Power System Transients

Research Interests:

Smart Grid, DGs, Monitoring of Power Transformers, FACTS Devices, HVDC Systems, Power Electronic Converters, Power System Transients

Languages:

Armenian: Native and bilingual proficiency

Persian: Bilingual proficiency

German: Professional working proficiency

English: Professional working proficiency

Executive Positions:

-Vice President for Research, Niroo Research Institute ([NRI](#)), Ministry of Energy (Oct. 2014-present)

-Director of Grand (National) Project, Iranian Smart Grid at AUT (Sep. 2012-present)

-Director of Industrial Relation Office of AUT (Nov.2005-2008)

-Head of Iran Grid Secure Operation Research Center at AUT (Oct. 2005-present)

-Director of Electrical Engineering Committee of the [International Khwarizmi Award](#), Iranian Research Organization for Science and Technology (IROST), Ministry of Higher Education(2005)

-Research Deputy of [Center of Excellence on Power Systems](#) at AUT (April 2004- 2006)

-Head of Power Engineering Group (Oct. 2001-Oct. 2003) AUT, Electrical Engineering Faculty

Selected Professional Experiences:

-Member of board of trustee, Niroo Research Institute (NRI), Energy Ministry (2014-present)

-Member of education, research and technology council of Energy Ministry (2013-present)

-Member of research committee of Iran Power Development Co. ([IPDC](#)) (2011-2015)

-Member of central research committee of Iran Grid Management Co. ([IGMC](#)) (2006-2008)

-Member of research council of Zob-e Ahan Co. (2006-2008)

-Scientific staff member of Tehran Regional Electric Co. ([TREC](#)) (April 2005-Present)

-Member of [Center of Excellence on Power Systems](#) (since 2001)

-Senior councilor of [Iran Transformer Research Institute](#) (ITRI) (1999-2005)

-Member of central research committee of Tehran Regional Electric Co. ([TREC](#)) (1999-2004) (2007-present)

-Member of research council of power generation department of Niroo Research Institute ([NRI](#)), Iran Energy Ministry (1999-2004)

-Senior researcher and project manager, Niroo Research Institute ([NRI](#)) (1998-2006)

Academic Awards and Honors:

- Among world's top 1% elite scientists according to ESI (Essential Science Indicators) ranking system based on the ISI Web of Science database (2005-2015)
- Distinguished researcher and prize winner all over Iran, selected by IAEEE (2010)
- Distinguished professor and prize winner all over Iran, selected by the ministry of higher education and awarded by the president of Iran (2008)
- Scholarship from German Academic Exchange Service ([DAAD](#)), as a visiting Professor in the University of Stuttgart, Stuttgart, Germany (Summer 2003)
- Scholarship from DAAD, as a visiting Professor in the University of Stuttgart, Stuttgart, Germany (Summer 2000)
- Scholarship from DAAD, as a Ph. D. Student in RWTH Aachen, Aachen, Germany (1993-1996)
- First rank among graduated Ph. D. students at Tehran University, in 1996
- First rank among graduated M.S. students at Amirkabir University of Technology (Tehran Polytechnic), in 1989
- First rank among graduated B.S. students at Tabriz University, in 1987

Patents:

- [19] Three Phase Current Compensator Automatic System Based on Loads Unbalance Recording, Registered under No. 90010 in Iran, Oct. 1, 2016
- [18] Buck-Boost DC-DC Converter with Reduced Voltage Stress, Registered under No. 89543 in Iran, Aug. 9, 2016
- [17] Single Switch DC/DC Converter with Capability of Voltage Increase and Decrease, Registered under No. 89515 in Iran, Aug. 3, 2016
- [16] Fault Detection and HV Transformers Radial Deformation Detection Using Magnetic Fields of Their Winding, Registered under No. 89495 in Iran, Aug. 3, 2016
- [15] Parallel Single Phase Active Filter to Compensate Different Types of Disturbances in Different Operating Conditions, Registered under No. 89416 in Iran, July 25, 2016
- [14] Presentation of New Structure of Modules with 3 Voltage Sources and 4 Switches for Asymmetric/Symmetric Multilevel Voltage Source AC/DC Converters in Order to Reduce Converter Elements, Registered under No. 87819 in Iran, March 1, 2016
- [13] Device of Symmetric/Asymmetric Multi-level Voltage Source Inverter Based on Interleaved 3-Voltage Source and 4-Semiconductor Switch Modules in Order to Reduce Number of Used Devices, Registered under No. 87155 in Iran, Nov. 8, 2015
- [12] Symmetric and Asymmetric Multi-level Voltage Source Inverters Based on 4-Voltage Source and 6-Switch Modules in Order to Reduce Number of Power Electronic Devices, Registered under No. 87157 in Iran, Nov. 8, 2015
- [11] Measurement of Electrical and Magnetic Fields of Transformer HV Winding in and near Tank for Axial Displacement Detection, Registered under No. 85849 in Iran, 2015
- [10] Sensor with Mach-Zehnder Interferometer Fiber Optic Interferometer for Axial Displacement Measurement of Power Transformers, Registered under No. 83503 in Iran, Aug. 6, 2014
- [9] Ferroresonance Overvoltage Clipping Circuit Including Metal-oxide Arresters, Registered under No. 77241 in Iran, Oct. 17, 2012

- [8] Software and Hardware Setup to Measure Axial Displacement of Transformer Winding using UWB Waves in Time Domain, Registered under No. 76808 in Iran, Sep. 18, 2012
- [7] Transformer Winding Radial Deformation Estimation System based on Scattering Parameters Measurements, Registered under No. 76668 in Iran, Sep. 9, 2012
- [6] Mechanical Defects Allocation in Transformer Windings Using Radar Imaging, Registered under No. 390090380 in Iran, Jan. 31 , 2012
- [5] Flexible distributed generation interfacing inverter with sliding mode controller, Registered under No. 65010 in Iran, June 6, 2010
- [4] Power supply with a very high power factor, Registered under No. 56622 in Iran, Jan. 31, 2009
- [3] Bidirectional power electronic transformer with maximum power point tracking capability for induction heating applications, Registered under No. 52876 in Iran, Sep. 17, 2008
- [2] High current transformer with equal current distribution in parallel windings, Registered under No. 38305092 in Iran, July 31, 2004
- [1] Passive 1 phase to 3 phase converter, Registered under No. 38012011 in Iran, Feb. 25, 2002

Journals Editorial Board Membership:

International Journals

- Advisory editorial board of International Journal of Electric Power & Energy Systems (JEPE), Elsevier Publications (Nov. 2016- present)
- Editorial board of International Journal of Energy and Environmental Engineering (IJEEE), Associate Editor (2015-present)
- Editorial board of Scientific World Journal, Lead Guest Editor of Special Issue on Smart Grid (2014-2015)
- Editorial board of Journal of Intelligent and Fuzzy Systems (JIFS), Associate Editor (2014-present)
- Editorial board of International Journal of Engineering, Science and Technology (IJEST) (2010-2012)

National Journals

- Editorial board member of Iranian Journal of Power Engineering, Birjand University (2015-present)
- Editorial Board of Journal of Electric Power System Engineering of Azarbaijan Shahid Madani University (2015-present)
- Editorial board of Journal of Operation and Automation in Electrical Engineering of Mohaghegh Ardabili University (2014-present)
- Editorial board member of Journal of Research in Quality, Iranian Society for Quality (2013-present)
- Editorial board member of Journal of Malek Ashtar University (2011- present)
- Editorial board member of Journal of Electrical Engineering, Ferdowsi Mashad University (2011- present)
- Editorial board member of Journal of Energy Management of Kashan University (2010-present)
- Editorial board member of Electrical Engineering Journal of Tabriz University (2009- present)
- Editorial board member of Journal of IAEEE (April 2004- present)
- Editor-in-Chief of Journal of IAEEE (Jan. 2004-present)

-Editorial board member of Bargh Journal (Journal of NRI) (1998-Present)

Scientific Board Membership of Conferences:

International Conferences

- Energy and Sustainability in Small Developing Economies (ES2DE) (since 2017)
- International Conference on Power and Sustainable Energy (ICPSE) (since 2017)
- IEEE Industrial Electronics and Applications Conference (IEACon), (since 2016)
- IEEE Power and Energy Conference (PECon), (since 2008)
- International Conference on Renewable Energies and Power Quality (since 2006)
- Spanish Portuguese Conference on Electrical Engineering (CHLIE), (since 2005)
- IEEE-EPEC-2015 Conference TPC committee member

National Conferences:

- Renewable Energies and Distributed Generation (since 2010)
- Power Quality Conference (since 2010)
- Electric Power Generation Conference (since 2010)
- Power System Protection and Control System (since 2008)
- Electric Power Distribution Conference (EPDC) (since 2005)
- Iranian Conference on Electrical Engineering (ICEE)
- Power System Conference ([PSC](#)) (since 2001)

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Scientific Societies Membership:

- IRASA ([Iranian Academics and Specialists Association in Germany](#)), member (since 2014), member of board of directors (since 2016)
- IEEE Iran Section Power Chapter, founder member, secretary (Dec. 2013-June 2015), chair (since July 2015)
- Iranian Power Electronic Association (IPEA), founder member
- Iranian Productivity Association for Power Industry, founder member
- IAEEE ([Iranian Association of Electrical and Electronics Engineers](#)), member (since 1992), senior member (since 2004), distinguished member (since 2011)
- IAEEE central board member (April 2003-April 2005) (April 2007-April 2017)
- IEEE, Power Energy Society, member (since 2000) and senior member (since 2008)
- CIGRE (International Council on Large Electric Systems), [Iran branch](#), member (since 2008)
- [Iranian Society of Advancement of Industry-Academia Collaboration](#), member (since 2007) and member of central board and secretary (2011- 2016)
- Iranian Wind Energy Association (IRWEA), founder member, member (since 2011) and member of central board (since 2014)
- Iranian National Electrotechnical Committee (INEC), member (2011-2015)
- Iranian Society of Smart Energy Grids, founder member, member (since 2012) and member of central board (since 2012)

Journal Papers

[1] G. B. Gharehpetian, S.M. Kouhsari “*AC-DC Load Flow*”, Amirkabir Journal, of Science and Technology No. 15, 1990 (in Persian).

[2] G. B. Gharehpetian, H. Mohseni, K. Lux, “*Overvoltage Studies of Transformer Windings Using Monte Carlo Simulation of Lightning*”, Journal of Technical Faculty of Tehran University, No. 55, 1995, pp. 73-86 (in Persian)

[3] G. B. Gharehpetian, H. Mohseni and K. Moeller, “*Hybrid Modeling of Inhomogeneous Transformer Windings for Very Fast Transient Overvoltage Studies*”, IEEE Trans. on Power Delivery, Vol. 13, No. 1, Jan. 1998, pp. 157-163 (ISI-ranked)

[4] G. B. Gharehpetian, A. Der Minasian, “*AC/DC Load Flow in Metro Power System*”, Bargh Journal, Niroo Research Institute of Energy Ministry , No. 25, 1998 (in Persian)

[5] M. Farmad, S. Raie, G. B. Gharehpetian, H. Mohseni “*Price Determination of Losses in Iranian Power System Considering Power Plant Contribution in Generation and Different Fuel Consumption*”, Bargh Journal, NIROO Research Institute of Energy Ministry, No. 28, Winter 1999 (in Persian)

[6] G. B. Gharehpetian, et. al. (FACTS Working Group), “*Flexible AC Transmission System and it's Application in Iranian Power System*”, Bargh Journal, NIROO Research Institute of Energy Ministry, No. 29, Spring 2000 (in Persian)

[7] R. Barati, G.B. Gharehpetian, E. Sadeghian, S. Sorooshian, A. H. Miragha, “*Suggestion of Methods for Energy Consumption Minimization in Auxiliary Service System of Steam Power Plants and Their Evaluation in NEKA Power Plant*”, Bargh Journal, NIROO Research Institute of Energy Ministry, No. 30., Winter 2000-2001 (in Persian)

[8] E. Sadeghian, A. Dindar, G.B. Gharehpetian, “*Efficiency and Performance Improvement of Power Plants Electro-pumps With Different Flow Control Methods*”, Bargh Journal, NIROO Research Institute of Energy Ministry, No. 32, Summer 2001 (in Persian)

- [9] B. Tousi, G. B. Gharehpetian, M. Abedi, J.S. Moghani, “*Eddy Current Losses Modeling for VFTO Studies of Power Transformers*”, Amirkabir Journal of Science and Technology, Vol. 13, No. 51, Summer 2002, pp. 498-491 (in Persian)
- [10] B. Tousi, G. B. Gharehpetian, M. Abedi, J.S. Moghani, “*A Finite Element Technique for Calculating the AC Losses of Transformer Windings at High Frequencies*”, Amirkabir Journal of Science and Technology, Vol. 13, No. 51, Summer 2002, pp. 95-104
- [11] M. S. Naderi, G. B. Gharehpetian, M. Abedi, “*An Accurate Method for Calculation and Estimation of Series and Parallel Resistances of Transformer Detailed Model based on Impulse Test Results*”, Amirkabir Journal of Science and Technology, Vol. 14, No. 56-A, Fall 2003, pp. 1023-1032 (in Persian)
- [12] K. Rahmani, G. B. Gharehpetian, M. Karrari, “*Dynamic Stability Improvement of AC/DC Power System Using Fuzzy Variable Structure Controller*”, Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE), Vol. 1, No. 1, Spring 2004 (in Persian)
- [13] A. Der Minassians, G. B. Gharehpetian, “*Decoupled AC/DC Load Flow for Montecarlo Simulation of Metro Power Systems*”, Iranian Journal of Science and Technology, Transaction B: Engineering, Vol.28, No. B3, June 2004, pp. 305-314. (ISI-ranked)
- [14] S. Porkar, G. B. Gharehpetian, K. Feser, “*A Disk-To-Disk breakdown and Arc Modeling Method for Fault Diagnosis of Power Transformers During Impulse*”, Journal of Electrical Engineering, Springer Publication, Vol. 86, No. 5, 2004, pp. 261-265 (ISI-ranked)
- [15] M. S. Naderi, G. B. Gharehpetian, M. Abedi, K. Feser, “*An Accurate Method for Estimation of Series and Parallel Resistances in Detailed Model of Transformer Winding Using Impulse Test Results*”, Journal of Electrical Engineering, Springer Publication, Vol. 86, No. 5, 2004, pp. 255-260 (ISI-ranked)

- [16] M. Sadeghian, M. Shafiee, G.B. Gharehpetian, M. Mardaneh and M. Hosseini, "*Estimation of Transient Parameters of Transformer HV Winding Using Artificial Neural Networks*", WSEAS Transactions on Circuits and Systems, Issue 6, Vol. 3, Aug. 2004, pp. 1510-1512
- [17] M. Nafar, M. Abedi, G. B. Gharehpetian, S. Taghipour and B. Yousefpour, "*Locating Partial Discharge in Transformer by Wavelet*", WSEAS Transactions on Circuits and Systems, Issue 6, Vol. 3, Aug. 2004, pp. 1499-1503
- [18] R. Noroozian, G. B. Gharehpetian, M. Abedi, S. H. Fathi, "*UPQC Performance Improvement Using Combination of Instantaneous Power Balance and Synchronous Reference Frame Methods*", Journal of Technical Faculty of Tabriz University, Vol. 32, No.1, Fall 2005 (in Persian)
- [19] M. H. Nazemi, G. B. Gharehpetian, M. Shafiee, "*Selection of Proper Method for Order Reduction of Power Transformer Detailed Model*", Amirkabir Journal of Science and Technology, Vol. 16, No. 63-A, Winter 2005, pp. 25-34 (in Persian)
- [20] M. R. Banaei, S. H. Hosseini, S. Khanmohamadi and G. B. Gharehpetian, "*Loss Reduction of Distribution System Using APLC* ", Elsevier Journal of Simulation Modeling Practice and Theory, Vol. 13 (2005) 169–178 (ISI-ranked)
- [21] M. R. Banaei, S. H. Hosseini, S. Khanmohamadi, G. B. Gharehpetian, "*Verification of a New Energy Control Strategy for Dynamic Voltage Restorer by Simulation*", Elsevier Journal of Simulation Modeling Practice and Theory ,Vol. 14, Issue 2, February 2006, 112-125 (ISI-ranked)
- [22] E. Babaei, S. H. Hosseini, G. B. Gharehpetian, "*A New Topology for Multilevel Current Source Converters* ", ECTI Transactions on Electrical Eng., Electronics and Communications, Vol. 4, No.1, Feb. 2006

[23] A. Ajami, S. H. Hosseini, S. Khanmohamadi, G. B. Gharehpetian, “*Modeling and Control of C-UPFC for Power System Transient Studies*”, Elsevier Journal of Simulation Modeling Practice and Theory, Vol. 14, Issue 5, (July 2006) 481-676 (ISI-ranked)

[24] D. Nazarpour, S. H. Hosseini and G. B. Gharehpetian, “*Damping of Generator Oscillations Using an Adaptive UPFC-based Controller*”, American Journal of Applied Science, Vol. Issue 1, 1662-1668, 2006 (ISI-ranked)

[25] M. R. Banaei, S. H. Hosseini, G. B. Gharehpetian, “*Inter-line Dynamic Voltage Restorer Control using a Novel Optimum Energy Consumption Strategy*”, Elsevier Journal of Simulation Modeling Practice and Theory, Vol. 14, Issue 7, (Oct. 2006) 989-999 (ISI-ranked)

[26] E. Babaei, S. H. Hosseini, G. B. Gharehpetian “*A New Strategy for Determination of DC Voltage Levels in Asymmetrical Cascaded Multilevel Converters for Utility Applications*”, Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE), Vol.3, No.1, Spring and Summer 2006

[27] M. Pishvaei, S. H. Fathi, G. B. Gharehpetian “*Effects of Load Harmonics Variation on Performance of Shunt Active Filters*”, Amirkabir Journal of Science and Technology, Vol. 17, No. 64-A, Spring-Summer 2006, pp. 55-61

[28] E. Babaei, S. H. Hosseini, G. B. Gharehpetian, M. Tarafdar Haque and M. Sabahi, “*Reduction of DC Voltage Sources and Switches in Asymmetrical Multilevel Converters Using a Novel Topology*”, Elsevier Journal of Electric Power Systems Research, Vol. 77, (2007) 1073-1085 (ISI-ranked)

[29] R. Noroozian, M. Abedi, G. B. Gharehpetian and S.H. Hosseini, “*Operation of Stand Alone PV Generating System for Supplying Unbalanced AC Loads*” Iranian Journal of Electrical and Electronics Engineering (IJEET), Vol. 3, No. 3 and 4, July 2007

[30] A. Ajami, S. H. Hosseini, and G. B. Gharehpetian, “*Modeling and Controlling of UPFC for Power System Transient Studies*”, ”, ECTI Transactions on Electrical Eng., Electronics and Communications, Vol. 5, No. 2, Aug. 2007

[31] M. G. Hosseini Aghdam, S. H. Fathi and G. B. Gharehpetian, “*A New and Complete Solution of Harmonics Elimination Problem in a Multi-Level Inverter with Unequal DC Sources*”, Journal of Electrical Systems, Vol.3 Issue 4, Dec. 2007, ISSN 1112-5209

[32] M. S. Naderi, G. B. Gharehpetian, T.R. Blackburn and M. Abedi “*Pattern Classification of Internal Incipient Faults During Impulse Test Using Continuous Wavelet Analysis*”, Journal of Electrical Engineering, Springer Publication, Vol. 90, No.2, Dec. 2007 (ISI-ranked)

[33] E. Babaei, S. H. Hosseini, G. B. Gharehpetian, and M. Sabahi, "*Design and Implementation of a Three-Phase Matrix Converter with Snubber Circuit*", Journal of Faculty of Engineering of Tabriz University, Vol. 35, No. 1, Winter 2008 (in Persian)

[34] S. Ghasem Zadeh, S. H. Hosseini and G. B. Gharehpetian,, "*Unified Modeling of Wind Power Station Including DFIG for Distributed Generation Studies*", Journal of Faculty of Engineering of Tabriz University, Vol. 35, No. 1, Winter 2008 (in Persian)

[35] M. S. Naderi, G. B. Gharehpetian, T.R. Blackburn and M. Abedi “*Modeling and Detection of Transformer Internal Incipient Fault during Impulse Test*”, IEEE Transactions on Dielectrics and Electrical Insulation, Vol. 15, No.1 Feb. 2008, pp. 284-291 (ISI-ranked)

[36] M. G. Hosseini Aghdam, S. H. Fathi and G. B. Gharehpetian, “*Comparison of OMTHD and OHSW Harmonic Optimization Techniques in Multi-Level Inverter with Non-Equal DC Sources*”, International Journal of Electrical Power and Energy Systems Engineering, No.2, Vol. 1, Spring 2008 (ISI-ranked)

[37] M. G. Hosseini Aghdam, S. H. Fathi and G. B. Gharehpetian, “*Harmonic Optimization Techniques in Multi-Level Voltage-Source Inverter with Unequal DC Sources*”, Journal of Power Electronics, Vol.8, No. 2, April 2008.

[38] S. M. H. Hosseini, M. Vakilian and G. B. Gharehpetian “*Comparison of Transformer Detailed Models for Fast and Very Fast Transient Studies*”, IEEE Transactions on Power Delivery, Vol. 23, No. 2, April 2008, pp. 733-741 (ISI-ranked)

- [39] P. Karimifard G. B. Gharehpetian and S. Tenbohlen, “*Determination of Axial Displacement Extent based on Transformer Winding Transfer Function Estimation Using Vector Fitting Method*”, Journal of European Transactions on Electrical Power (ETEP), Vol. 18, 2008, pages: 423-436 (ISI-ranked)
- [40] R. Hosseini, M. Nourolahi and G. B. Gharehpetian, “*Determination of OD Cooling System Parameters Based on Thermal Modeling of Power Transformer Winding*”, Elsevier Journal of Simulation Modeling Practice and Theory ,Vol. 16, Issue 6, July 2008, 585-596 (ISI-ranked)
- [41] J. Olamaei, T. Niknam and G. B. Gharehpetian, “*Application of Particle Swarm Optimization for Distribution Feeder Reconfiguration Considering Distributed Generation*”, Elsevier Journal of Applied Mathematics and Computation, Vol.201, Issue 1-2, July 2008, pages: 575-586 (ISI-ranked)
- [42] P. Karimifard and G. B. Gharehpetian "A new algorithm for localization of radial deformation and determination of deformation extent in transformer windings", the Elsevier Journal of Electric Power Systems Research (EPSR), Vol. 78, Issue 10, Oct. 2008, pages: 1701-1711 (ISI-ranked)
- [43] M. Mohammadi and G. B. Gharehpetian, “*Power System On-line Static Security Assessment by using Multi-Class Support Vector Machines*” Journal of Applied Sciences, (JAS), Vol. 8, No. 12, July 2008, pages: 2226-2233 (ISI-ranked)
- [44] R. Bagheri, J. S. Moghani, G. B. Gharehpetian “*Harmonic Distortion Separation of the Customer and Utility using an Improved Load Model*”, Amirkabir Journal of Science and Technology, Vol. 19, No. 68-A, Spring-Summer 2008, pp. 35-45 (in Persian)
- [45] M. Mohammadi and G. B. Gharehpetian, “*Application of Multi-Class Support Vector Machines for Power System on-line Static Security Assessment*” , International Review of Electrical Engineering (IREE), Vol. 3, No.3, May-June 2008 (ISI-ranked)

[46] A. Sakhavati G. B. Gharehpetian and S.H. Hosseini, "Decentralized Power System Load-Frequency Control Using a Novel Cost Function Based on Particle Swarm Optimization (PSO)", Scientific Bulletin of University of PITESTI, Electronics and Computer Science Series, ISSN:1453-1119, No. 8, Vol. 2, 2008, pp. 111-116

[47] M. G. Hosseini Aghdam, S. H. Fathi and G. B. Gharehpetian, "A Novel Switching Algorithm to Balance Conduction Losses in Power Semiconductor Devices of Full-Bridge Inverters", Journal of European Transactions on Electrical Power, Vol. 18, Issue 7, Oct. 2008, Pages: 694-708 (ISI-ranked)

[48] E. Babaei, S. H. Hosseini and G. B. Gharehpetian, "Analytical and Experimental Assessment of Losses in Matrix Converters", Journal of Faculty of Engineering of Tabriz University, Vol. 36, No. 1, Fall 2008 (in Persian)

[49] O. Kavosinejad, M. Mohammadi Ardehali and G.B. Gharehpetian, "Techno-Economical Environmental Feasibility Studies of Optimal Utilization of Distributed System of Microturbine and Photovoltaic System Using PSO Algorithm", Journal of Energy Economics Studies, Fall 2008 (in Persian)

[50] R. Noroozian, M. Abedi, G. B. Gharehpetian and S. H. Hosseini, "Combined Operation of DC Isolated Distribution and PV Systems for Supplying Unbalanced AC loads", Elsevier Journal of Renewable Energy, Vol. 34, No. 3, March 2009, pages 889-908 (ISI-ranked)

[51] M. G. Hosseini Aghdam, S. H. Fathi and G. B. Gharehpetian, "A Modified Harmonic Elimination Method with a Wide Range of Modulation Indices for Multi-Level Inverter with Unequal DC-Sources", International Journal of Latin American Applied Research (LAAR), Vol. 39, No.1, 2009, pages 65-74 (ISI-ranked)

[52] M. G. Hosseini Aghdam, S. H. Fathi, A. Zahedi and G. B. Gharehpetian, "Optimum Regulation of DC Sources in Cascaded Multi-Level Inverters", International Journal for Computation and Mathematics in Electrical and Electronic Engineering (COMPEL), Vol. 28, No. 2, 2009, pages 385-395 (ISI-ranked)

[53] O. Alizadeh Mousavi, M. Javad Sanjari, G. B. Gharehpetian and R. A. Naghizadeh, "A Simple and Unified Method to Model HVDC Links and FACTS Devices in DC Load Flow", Journal of Simulation- Transactions of the Society for Modeling and Simulation International, Vol. 85, No. 2, Feb. 2009 (ISI-ranked)

[54] M. Sabahi, S. H. Hosseini, M. B. Bana Sharifian, A. Yazdanpanah Goharrizi and G. B. Gharehpetian, "Three Phase Dimmable Lighting System Using Bi-directional Power Electronic Transformer", IEEE Transactions on Power Electronics, Vol. 24, No. 3, March 2009 (ISI-ranked)

[55] R. Baghery, J. S. Moghani, G. B. Gharehpetian and S. M. M. Mirtalaei "Determination of Aggregated Load Power Consumption, under Non-Sinusoidal Supply Using an Improved Load Model", Elsevier Journal of Energy Conversion and Management, Vol. 50, Issue 6, June 2009 (ISI-ranked)

[56] R. Noroozian, M. Abedi, G. B. Gharehpetian and S.H. Hosseini, "A Novel Control Strategy for Load Converter of DC Isolated Distribution System under Unbalanced Loading Condition", Journal of Zhejiang University-SCIENCE A, Vo. 10, No. 6, 2009, pages 890-899 (ISI-ranked)

[57] M. Mohammadi and G. B. Gharehpetian, "Application of Multi-Class Support Vector Machines for Power System on-line Static Security Assessment Using DT-based Feature and Data Selection Algorithms", Journal of Intelligent and Fuzzy Systems, Vol. 20, Issue 3, June 2009, pages 133–146 (ISI-ranked)

[58] M. Mohammadi and G. B. Gharehpetian, "On-line Voltage Security Assessment of Power Systems using Core Vector Machines" Elsevier Journal of Engineering Applications of Artificial Intelligence, Vol. 22, Issue 4-5, June 2009, pages 695-701 (ISI-ranked)

[59] B. Abdi, A. H. Ranjbar, J. Milimonfared and G. B. Gharehpetian, "Reliability Considerations for Parallel Performance of Semiconductor Switches in High Power Switching Power Supplies", IEEE Transactions on Industrial Electronics, Vol. 56, no. 6, June 2009, pages 2133-2139 (ISI-ranked)

[60] R. Noroozian, M. Abedi, G. B. Gharehpetian and S.H. Hosseini, "*On-Grid and Off-Grid Operation of Multi-Input Single-Output DC/DC Converter based Fuel Cell Generation System*", Iranian Journal of Electrical and Electronic Engineering, Vol.5, No. 2, June 2009

[61] O. Alizadeh Mousavi, S. M. Farashbashi-Astaneh and G. B. Gharehpetian, "*Improving Power System Risk Evaluation Method Using Monte Carlo Simulation and Gaussian Mixture Method*", Journal of Advances in Electrical and Computer Engineering, Vol. 9, No. 2, 2009 (ISI-ranked)

[62] M. Mohammadi and G. B. Gharehpetian, "*Application of Core Vector Machines for On-line Voltage Security Assessment using a DT-based Feature Selection Algorithm*", Journal of IET, Generation, Transmission & Distribution, Vol. 3, Issue 8, 2009, pp. 701-712 (ISI-ranked)

[63] P. Karimifard G. B. Gharehpetian and S. Tenbohlen, "*Localization of Winding Radial Deformation and Determination of Deformation Extent using Vector Fitting based Estimated Transfer Function*", Journal of European Transactions on Electrical Power, Vol. 19, Issue 5, pp. 749-762, July 2009 (ISI-ranked)

[64] H. R. Baghaee, M. Mirsalim, A. Kashefi-Kaviani and G. B. Gharehpetian, "*Optimal Allocation of Multi-type FACTS Devices to Improve Security and Reduce the Losses and Fault Level using Multi-Objective Particle Swarm Optimization* ", International Review of Electrical Engineering (IREE), Vol. 4, No.6, Dec. 2009 (ISI-ranked)

[65] E. Babaei, S. H. Hosseini, G. B. Gharehpetian and M. Sabahi "*Development of Modulation Strategies for Three-phase to Two-phase Matrix Converters*", International Journal of Power Electronics, Vol. 2, No. 1, 2010

[66] R. Noroozian, G. B. Gharehpetian, M. Abedi and M. Mahmoodi, "*Grid-Tied and Stand-Alone Operation of Distributed Generation Modules Aggregated by Cascaded Boost Converters*", Journal of Power Electronics, Vol. 10, No. 1, pp.97-105, 2010 (ISI-ranked)

[67] R. Bagheri, J. S. Moghani, G. B. Gharehpetian "*Proposal of Improved Model and its Parameters Determination in order to Estimate Non-Sinusoidal Voltage Effects on Load Power*

Consumption ”, Sharif Journal of Science and Technology, Vol. 25, No. 52, Feb.-March 2010, pp21-29 (in Persian)

[68] E. Babaei, S. H. Hosseini, and G. B. Gharehpetian “*Reduction of THD and Low Order Harmonics with Symmetrical Output Current for Single-Phase AC/AC Matrix Converters*”, International Journal of Electrical Power and Energy Systems, Vol. 32, Issue 3, 2010 (ISI-ranked)

[69] M. Mohammadi and G. B. Gharehpetian, “*On-line transient stability assessment of large-scale power systems by using ball vector machines*” Elsevier Journal of Energy Conversion and Management, Vol. 51, Issue 4, 2010, pp. 640–647 (ISI-ranked)

[70] R. Noroozian, M. Abedi, and G. B. Gharehpetian, “*Premium Power Quality Using Combination of Microturbine Unit and DC Distribution System*”, Journal of Electrical Engineering & Technology, Vol. 5, No. 1, pp. 103-115, March 2010 (ISI-ranked)

[71] H. Afshari, M. Nazari, M. Davari and G. B. Gharehpetian, “*Dynamic Voltage Restorer with Sliding Mode Control at Medium Voltage Level*”, International Review of Electrical Engineering (IREE), Vol. 5, No.2, March-April 2010 (ISI-ranked)

[72] Arash Khoshkbar Sadigh, S. H. Hosseini, M. Sabahi and G. B. Gharehpetian, “*Double Flying Capacitor Multicell Converter Based on Modified Phase Shifted Pulse Width Modulation*”, IEEE Transactions on Power Electronics, Vol. 25, No. 6, June 2010 (ISI-ranked)

[73] Z. Ghofrani Jahromi, M. Abedi, G.B. Gharehpetian and Masjed-Jamei, “*Contingency Ranking Using Analytical Hierarchy Process for Calculating Bus Weighting Factors*”, International Journal of Power and Energy Systems (IJPES), Vol. 30, No. 2, 2010, pp. 86-93 (ISI-ranked)

[74] Arash Khoshkbar Sadigh, G. B. Gharehpetian and S. H. Hosseini, “*New Method for Estimation of Flying Capacitors Voltages in Stacked Multicell and Flying Capacitor Multicell*

Converter”, Journal of Zhejiang University - SCIENCE C (Computer & Electronics), Vol. 11, No. 8, 2010, pp654-662 (ISI-ranked)

[75] S. Jazebi, H. R. Baghaee and G. B. Gharehpetian, “*Optimal Variable-gain Neural Network-Based UPFC Controller by Means of Differential Evolution Algorithm*”, International Review of Electrical Engineering (IREE), Vol. 5, No.3, May-June 2010 (ISI-ranked)

[76] M. Davari, A.R. Pourshoghi, M.R. Hajiahmadi, G. B. Gharehpetian, and S.H. Fathi, “*New Hybrid Controller based on Sliding Mode modulation for Inverter-based DG with Existing Fast Loads Changes*”, International Review of Electrical Engineering (IREE), Vol. 5, No.3, May-June 2010 (ISI-ranked)

[77] A. Sakhavati, G. B. Gharehpetian and S. H. Hosseini, “*QFT-based Load Frequency Controller design with GA-based Optimized Bias Coefficients*”, International Review of Electrical Engineering (IREE), Vol. 5, No.3, May-June 2010 (ISI-ranked)

[78] I. Rahimi Pordanjani, H. Efranian Mazin, G. B. Gharehpetian, “*Economic Effects of FACTS on the Transient Stability of Power Plants*”, International Review of Electrical Engineering (IREE), Vol. 5, No.4, July-August 2010 (ISI-ranked)

[79] R. Noroozian, M. Abedi and G. B. Gharehpetian “*Combined Operation of AC and DC Distribution System with Distributed Generation Units*”, Journal of Electrical Engineering-Elektrotechnicky Casopis, Vol. 61, No. 4, Aug. 2010, 193–204 (ISI-ranked)

[80] M. Sabahi, A. G. Yazdanpanah, S. H. Hosseini, M. B. B. Sharifian, and G. B. Gharehpetian, “*Flexible Power Electronic Transformer*”, IEEE Transactions on Power Electronics., Vol. 25, No. 8, August 2010, pp. 2159-2169 (ISI-ranked)

[81] R. Noroozian, M. Abedi, G. B. Gharehpetian and S.H. Hosseini, “*Distributed Resources and DC Distribution System Combination for High Power Quality*”, International Journal of Electrical Power and Energy Systems, Vol. 32, Issue 7, Sep. 2010, pp. 769–781 (ISI-ranked)

[82] M. Sabahi, S.H. Hosseini, M.B. Sharifian, A. Y.Goharrizi and G.B. Gharehpetian , “*Zero Voltage Switching Bi-directional Power Electronic Transformer*”, IET Power Electronics, Vol. 3, Issue 5, Oct. 2010, pp.818-828. (ISI-ranked)

[83] M. Sabahi, S.H. Hosseini, M.B. Sharifian, A. Y.Goharrizi and G.B. Gharehpetian , “*Bidirectional Power Electronic Transformer with Maximum Power Point Tracking Capability for Induction Heating Applications*”, IET Power Electronics, Vol. 3, Issue 5, Oct. 2010, pp.724-731. (ISI-ranked)

[84] P. Javanbakht, M. Noroozian, M. Abedi and G.B. Gharehpetian, ”*The Enhancement of Transient Stability of a Wind Farm in a Weak Network Using SVC and OLTC*”, International Journal of Distributed Energy Resources, Vol. 6, No. 4, Oct.- Dec. 2010, pp. 325-241

[85] M. Mohammadi, G. B. Gharehpetian and T. Niknam, “*On-line Small Signal Stability Assessment of Power Systems Using Ball Vector Machines*”, Electric Power Components and Systems, Vol. 38, No. 13, Nov. 2010, pp.1427-1445 (ISI-ranked)

[86] A. H. Ranjbar, B. Abdi, G. B. Gharehpetian and B. Fahimi, “*A Comparative Study of Reliability in Single and two Stage PFC*”, International Review of Electrical Engineering (IREE), Vol. 5, No. 5, October 2010 (ISI-ranked)

[87] M. Daryabak, J. Milimonfared, G. B. Gharehpetian, I. Salabeigi, M. Taheri, “*Digital Controller Dynamic Response Modification of SDM-based PFC Converter*”, International Review of Electrical Engineering (IREE), Vol. 5, No. 5, October 2010 (ISI-ranked)

[88] G. Mokhtari, G. B. Gharehpetian, R. Faraji-dana, M. A. Hejazi, “*On-line Monitoring of Transformer Winding Axial Displacement Using UWB Sensors and Neural Network*”, International Review of Electrical Engineering (IREE), Vol. 5, No. 5, October 2010 (ISI-ranked)

[89] H. Vahedi, A. Jalilvand , R. Noroozian and G. B. Gharehpetian, “*Islanding Detection of Inverter-Based Distributed Generation Using a Hybrid SFS and Q-f Curve Methods*”, International Review of Electrical Engineering (IREE), Vol. 5, No. 5, October 2010 (ISI-ranked)

[90] M. Mohammadi, G. B. Gharehpetian and M. Raoofat, “*A New BVM based Approach to Transient Security Assessment*”, European Transactions on Electrical Power (ETEP), Volume 20, Issue 8, pages 1163–1176, November 2010 (ISI-ranked)

[91] M. Nazari, M. Abedi, G. B. Gharehpetian and H. Toodeji, “*Photovoltaic Array, Fuel Cell and Electrolyzer Connection to Grid by Direct Non-linear Controlled H-Bridge Multilevel Inverter*”, International Review of Automatic Control (IREACO), Vol. 3, No.6, November 2010

[92] S. Ghassem Zadeh, S.H. Hosseini and G.B. Gharehpetian, “*Modeling of Wind Energy Conversion System Including DFIG for Distributed Generation Studies*”, Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE), Vol. 7, No. 2, Fall-Winter 2010

[93] K. Rahmani, Mehdi S. Naderi, G.B. Gharehpetian, Mohammad S. Naderi and M. Karrari, “*Damping of Low Frequency Oscillation in AC/DC Interconnected Power System Using LQG/LTR Controller Approach*”, International Review of Electrical Engineering (IREE), Vol. 5, No. 6, Nov.-Dec. 2010 (ISI-ranked)

[94] M. Abdollahi Sofla and G. B. Gharehpetian, “*Dynamic Performance Enhancement of Microgrids by Advanced Sliding Mode Controller*”, International Journal of Electrical Power and Energy Systems, Vol. 33, No.1, Jan. 2011, pp. 1-7 (ISI-ranked)

[95] H. Nafisi, M. Abedi and G.B. Gharehpetian, “*Comparison of Bayesian and Fuzzy ARTmap Networks in Transformers PD Localization*”, International Review of Electrical Engineering (IREE), Vol. 6, No. 2, March-April 2011 (ISI-ranked)

[96] M. A. Hejazi, G. B. Gharehpetian, G. R. Moradi, M. Mohammadi and H. A. Alehoseini, “*Application of classifiers for On-line Monitoring of Transformer Winding Axial Displacement*”

by *Electromagnetic NDT*”, *Electric Power Components and Systems*, Vol. 39, Issue 4, April 2011, 387 (ISI-ranked)

[97] H. Vahedi, R. Noroozian, A. Jalilvand and G. B. Gharehpetian, “*A New Method for Islanding Detection of Inverter-Based Distributed Generation Using DC link Voltage Control*”, *IEEE Transactions on Power Delivery*, Vol. 26, No. 2, April 2011, pp.1176-1186 (ISI-ranked)

[98] J. Ebrahimi, S. H. Hosseini and G.B. Gharehpetian, “*Unit Commitment Problem Solution Using the Shuffled Frog Leaping Algorithm*”, *IEEE Transactions on Power Systems*, Vol. 26, No. 2, May 2011, pp. 573-581 (ISI-ranked)

[99] A. Sakhavati, G. B. Gharehpetian and S. H. Hosseini, “*Decentralized Robust Load-Frequency Control of Power System based on Quantitative Feedback Theory*”, *Turkish Journal of Electrical Engineering and Computer Sciences*, Vol. 19, No. 4, 2011, pp.1-18 (ISI-ranked)

[100] A.J. Ghanizadeh, G. Mokhtari, M. Abedi, G.B. Gharehpetian, “*Optimal Power Flow Based on Imperialist Competitive Algorithm*” , *International Review of Electrical Engineering (IREE)*, Vol.6, No. 4, Part B, June 2011, (ISI-ranked)

[101] Aras Sheikhi, Mehdi S. Naderi, Ali Mohammad Ranjbar, G.B. Gharehpetian, Farahbakhsh Safe, “*CHP Optimized Selection Methodology for a Multi-Carrier Energy System*” *International Review of Electrical Engineering (IREE)*, Vol.6, No. 4, Part B, June 2011, (ISI-ranked)

[102] M. Sarhangzadeh, S. H. Hosseini, M. B. B. Sharifian, G. B. Gharehpetian, “*Multi-Input Direct DC-AC Converter with High Frequency Link for Clean Power Generation Systems*” *IEEE Transactions on Power Electronics*, Vol. 26, No. 6, June 2011 (ISI-ranked)

[103] M. A. Hejazi, G. B. Gharehpetian, R. Farajidana, G. R. Moradi, M. Mohammadi and H. A. Alehoseini, “*A New On-line Monitoring Method of Transformer Winding Axial Displacement Based on Measurement of Scattering Parameters and Decision Tree*”, *Elsevier Journal of Expert Systems With Applications*, Vol. 38, Issue 7, July 2011, pp. 8886-8893 (ISI-ranked)

- [104] M. Nafar, G.B. Gharehpetian and T.Niknam, “*A New Parameter Estimation Algorithm for Metal Oxide Surge Arrester*”, *Electric Power Components and Systems*, Vol. 39 No. 7, July 2011, pp. 696-712 (ISI-ranked)
- [105] A. Ashrafian, M. Rostami, G. B. Gharehpetian, “*Discrimination Among Internal Incipient Faults, Internal Faults and Inrush Current of Transformer by using S-Transform*”, *International Review of Modelling and Simulation (IREMOS)*, Vol.4, No. 4, August 2011
- [106] M. Nafar, G. B. Gharehpetian and T. Niknam, “*Improvement of Estimation of Surge Arrester Parameters by Using Modified Particle Swarm Optimization*”, *Elsevier Journal of Energy*, Vol. 36, Issue 8, Aug. 2011, pp: 4848-4854 (ISI-ranked)
- [107] M. Mohammadi, S. H. Hosseini, G. B. Gharehpetian, “*Optimal Sizing of Micro Grid (MG) & Distributed Generation (DG) Units under Pool Electricity Market*”, *Journal of Renewable and Sustainable Energy*, Vol. 3, Issue 5, Sep. 2011 (ISI-ranked)
- [108] H. Vahedi, R. Noroozian, A. Jalilvand and G. B. Gharehpetian, “*A New method to Utilize and Detect Islanding of Inverter-Based DGs*”, *Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE)*, Vol. 8, No. 2, Fall-Winter 2011 pp. 17-27 (in Persian)
- [109] M. Mohammadi, M. Raoofat, H. Marzoghi and G. B. Gharehpetian, “*Nonlinear Multivariable Modeling of Solid Oxide Fuel Cells Using Core Vector Regression*”, *International Journal of Hydrogen Energy*, Vol.36, Issue 19, Oct. 2011 pp. 12538-12548 (ISI-ranked)
- [110] M. A. Hejazi, G. B. Gharehpetian, G. Moradi, H. A. Alehosseini, M. Mohammad, “*On-line Monitoring of Transformer Winding Axial Displacement and its Extent Using Scattering Parameters and k-Nearest Neighbor Method*”, *IET Generation, Transmission & Distribution*, Vol.5, Issue 8, Oct. 2011, pp. 824-832 (ISI-ranked)

[111] M. J. Sanjari, A. J. Ghanizadeh, and G.B. Gharehpetian, “*Dual Functional Series Compensator to Reduce Fault Current in a Distribution System with DG Units*”, International Journal of Engineering, Science and Technology (IJEST), Vol. 3, No.11, Nov. 2011, pp.15-27

[112] M. Farmad, S. Farhangi, S. Afsharnia and G. B. Gharehpetian, “*Modeling and Simulation of VSC-based IPC as Fault Current Limiter and Power Flow Controller*”, Journal of IET Generation, Transmission & Distribution, Vol. 5, Issue 11, Nov. 2011, pp.1132-1140 (ISI-ranked)

[113] J. Ebrahimi, E. Babaei and G.B. Gharehpetian, “*A New Topology of Cascaded Multilevel Converters with Reduced Number of Components for High-Voltage Applications*”, IEEE Transactions on Power Electronics, Vol. 26, No. 11, Nov. 2011, pp.3109-3118 (ISI-ranked)

[114] M. Nafar, G. B. Gharehpetian and T. Niknam, “*A Novel Parameter Estimation Method for Metal Oxide Surge Arrester Models*”, Journal of SADHANA, Indian Academy Proceedings in Engineering Sciences, Vol. 36, Part 6, Dec. 2011, pp. 941-961 (ISI-ranked)

[115] M. Nafar, G. B. Gharehpetian and T. Niknam, “*Using Modified Fuzzy Particle Swarm Optimization Algorithm for Parameter Estimation of Surge Arresters Models*”, International Journal of Innovative Computing, Information and Control (IJICIC), Vol.8, No. 1 Jan. 2012 (ISI-ranked)

[116] K. Pourhossein, G. B. Gharehpetian, E. Rahimpour and B. N. Araabi, “*A Probabilistic Feature to Determine Type and Extent of Winding Mechanical Defects in Power Transformers*”, Elsevier Journal of Electric Power Systems Research (EPSR), Vol. 82, No. 1, Jan. 2012, pp.1-10 (ISI-ranked)

[117] M. Mohammadi, S. H. Hosseinian, G. B. Gharehpetian, “*Optimization of Hybrid Solar Energy Sources/Wind Turbine Systems Integrated to Utility Grids as Micro Grid (MG) under Pool/Bilateral/Hybrid Electricity Market Using PSO*”, Elsevier Journal of Solar Energy, Vol. 86, Issue 1, Jan. 2012, pp.112-125 (ISI-ranked)

[118] M. Mohammadi, S. H. Hosseini, G. B. Gharehpetian, “*GA-Based Optimal Sizing of Microgrid and DG Units under Pool and Hybrid Electricity Markets*”, International Journal of Electrical Power and Energy Systems (IJEPES), Vol. 35, Issue 1, Feb. 2012, pp. 83-92 (ISI-ranked)

[119] J. Ebrahimi, E. Babaei and G.B. Gharehpetian, “*A New Multilevel Converter Topology with Reduced Number of Power Electronic Components*”, IEEE Transactions on Industrial Electronics, Vol. 59, No. 2, Feb. 2012 (ISI-ranked)

[120] Ali Roghani Araghia, S. H. Hosseini, G.B. Gharehpetian and B. Vahidi, “*Employing TCPS for Suppressing Oscillations in Two-Area System Consist of Wind Farm and Thermal System*”, IEEE Transactions on Electrical and Electronic Engineering (IEEJ Trans), Vol. 7, Issue 2, March 2012 pp. 130–135 (ISI-ranked)

[121] M. S. Naderi and G. B. Gharehpetian, “*Overview on CHP-based DG Application in Iranian Industries with Rating Higher Than 1MW*”, Journal of Sanat-e Bargh, No. 167, Spring 2012 (in Persian)

[122] Hamed Nafisi, M. Abedi and G. B. Gharehpetian, “*Partial Discharge Localization using Transformer Detailed Model and Bayesian and FAM Neural Networks*”, Journal of Iranian Electric Industry Journal of Quality and Productivity, Vol. 1, No. 1, Spring 2012, pp. 46-56 (in Persian)

[123] S. Abedi, A. Alimardani, G. B. Gharehpetian, G. H. Riahy, S. H. Hosseini, ” *A Comprehensive Method for Optimal Power Management and Design of Hybrid RES-based Autonomous Energy Systems*”, Renewable and Sustainable Energy Reviews, Vol. 16, Issue 3, April 2012, pp.1577-1587 (ISI-ranked)

[124] Ali Yazdanpanah Goharrizi, S.H. Hosseini, M. Sabahi and G.B. Gharehpetian, “*Three-Phase HFL-DVR with Independently Controlled Phase*”, IEEE Transactions on Power Electronics, Vol. 27, No. 4, April 2012, pp. 1706- 1718 (ISI-ranked)

[125] Abdolaziz Ashrafian, Mehdi S. Naderi and G.B. Gharehpetian, “*Characterization of Internal Incipient Faults in Transformers during Impulse Test Using Index Based on S-Matrix Energy and Standard Deviation*”, IET Journal of Electric Power Applications, Vol. 6, Issue 4, April 2012, p.225–232 (ISI-ranked)

[126] A. Ashrafian, M. Rostami, G. B. Gharehpetian and M. Gholamghasemi, "*Application of Discrete S-Transform for Differential Protection of Power Transformers*", International Journal of Computer and Electrical Engineering (IJCEE), Vol. 4, No. 2, April 2012, pp. 186-190

[127] A. Ashrafian, M. Rostami, G. B. Gharehpetian and S. S. Shafiee Bahnamiri, "*Improving Transformer Protection by Detecting Internal Incipient Faults*", International Journal of Computer and Electrical Engineering (IJCEE), Vol. 4, No. 2, April 2012, pp. 196-201

[128] H. Radmanesh, G. B. Gharehpetian and S.H. Fathi “*Ferroresonance of Power Transformers Considering Nonlinear Core Losses and Metal Oxide Surge Arrester Effects*”, Electric Power Components and Systems, Vol. 40, issue 5, May 2012, pp. 463-479 (ISI-ranked)

[129] K. Pourhossein, G. B. Gharehpetian, E. Rahimpour and B. N. Araabi, “*A Vector-Based Approach to Discriminate Radial Deformation and Axial Displacement of Transformer Winding and Determine Defect Extent*”, Electric Power Components and Systems, Vol. 40, issue 6, June 2012, pp. 597-612 (ISI-ranked)

[130] N. Moaddabi, S. H. Hosseinian and G. B. Gharehpetian, “*Practical Framework for Self-healing of Smart Grids in Stable/Unstable Power Swing Conditions*”, Electric Power Components and Systems, Vol. 40, Issue 6, June 2012, pp. 575-596 (ISI-ranked)

[131] M. A. Hejazi, J. Ebrahimi, G. B. Gharehpetian, M. Mohammadi, R. Faraji-Dana, G. Moradi, “*Application of Ultra-Wideband Sensors for On-line Monitoring of Transformer Winding Radial Deformations – A Feasibility Study*”, IEEE Sensors Journal, Vol. 12, No. 6, pp. 1649-1659, June 2012 (ISI-ranked)

[132] Peyman Karimifard, G.B. Gharehpetian, Ahmad Javid Ghanizadeh and Stefan Tenbohlen, "Estimation of Simulated Transfer Function to Discriminate Axial Displacement and Radial Deformation of Transformer Winding", COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, Vol. 31, Issue 4, July 2012 pp. 1277 – 1292 (ISI-ranked)

[133] R. Noroozian and G.B. Gharehpetian, "Combined Operation of Converter-Based Distributed Generation Unit in DC Distribution System in order to have Premium Power Quality", European Transactions on Electrical Power, Vol. 22, Issue 4, pp. 449-470, Aug. 2012 (ISI-ranked)

[134] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian and A. Kashefi-Kaviani, "Security/Cost-based Optimal Allocation of Multi-Type FACTS Devices using Multi-Objective Particle Swarm Optimization", Journal of Simulation: Transactions of the Society for Modeling and Simulation International, Vol. 88, No. 8, pp.999-1010, Aug. 2012 (ISI-ranked)

[135] A. Shiroudi, R. Rashidi, G. B. Gharehpetian, S. A. Mousavifar and A. Akbari Foroud, "Case Study: Simulation and Optimization of Photovoltaic-Wind-Battery Hybrid Energy System in Taleghan-Iran Using HOMER Software", Journal of Renewable and Sustainable Energy, Vol. 4, Issue 5, Sep. 2012 (ISI-ranked)

[136] M. Rahmatian, M. S. Naderi, G. B. Gharehpetian and A. J. Ghanizadeh, "Simultaneous Detection of Radial Deformation Location and Axial Displacement Extent in a Transformer Winding Using Cross-correlation Technique and ANN", International Journal of Engineering Innovation and Research (IJEIR), Vol.1, Issue 5, pp. 478-483, Sep. 2012

[137] M. Rahmatian, A. Rahiminejad, S. H. Hosseinian, G. B. Gharehpetian and M. J. Sanjari, "HVDC Link and HVAC Transmission Line Comparison in Transmission Expansion Considering Social Welfare Maximization", International Review of Electrical Engineering (IREE), Vol. 7, No. 5, September - October 2012 (ISI-ranked)

[138] Hesam Vahedi, G.B. Gharehpetian, and Mehdi Karrari, "Application of Duffing Oscillators for Passive Islanding Detection of Inverter-Based Distributed Generation Units", IEEE Transactions on Power Delivery, Vol. 27, No. 4, pp. 1973-1983, Oct. 2012 (ISI-ranked)

- [139] J. Pourhossein, G. B. Gharehpetian, and S. H. Fathi, "*Unified Inter-Phase Power Controller (UIPC) Modeling and Its Comparison with IPC and UPFC*", IEEE Transactions on Power Delivery, Vol. 27, No. 4, pp. 1956-1963, Oct. 2012 (ISI-ranked)
- [140] M. S. Golsorkhi¹, G. B. Gharepetian, M. Dehmollaian, M. A. Hejazi, "*A Feasibility Study on Application of Radar Imaging for Detection of Transformer Winding Radial Deformation*", IEEE Transactions on Power Delivery, Vol. 27, No. 4, Oct. 2012, pp. 2113-2121 (ISI-ranked)
- [141] A. Ashrafian, M. Rostami, G. B. Gharehpetian, "*Hyperbolic S-transform Based Method for Classification of External Faults, Incipient Faults, Inrush Currents and Internal Faults in Power Transformers*", Journal of IET, Generation, Transmission & Distribution, Vol. 6, Issue 10, pp. 940–950, October 2012 (ISI-ranked)
- [142] Seyed Majid Madani, Mehrdad Rostami, G.B.Gharehpetian and Reza Hagh Maram, "*Inrush Current Limiter Based on Three Phase Diode Bridge for Y-yg Transformers*", IET Electric Power Applications, Vol. 6, Issue 6, Nov. 2012, pp. 345 – 352 (ISI-ranked)
- [143] N. Farokhnia, S. H. Fathi, R. Salehi, G. B. Gharehpetian and M. Ehsani, "*Improved Selective Harmonic Elimination Pulse-Width Modulation Strategy in Multilevel Inverters*", Journal of IET Power Electronics, Vol. 5, Issue 9, pp. 1904–1911, Nov. 2012 (ISI-ranked)
- [144] M. Nafar, G. B. Gharehpetian and T. Niknam, "*Comparison of Parameter Estimation Methods of Surge Arresters Using Modified Particle Swarm Optimization Algorithm*", European Transactions on Electrical Power, Vol. 22, Issue 8, November 2012, pp. 1146–1160 (ISI-ranked)
- [145] M. Gholami, M. J. Sanjari and G. B. Gharehpetian, "*PMU-based Voltage Stability Assessment in Microgrids by ANNs Considering Single Contingencies*", International Review of Electrical Engineering (IREE), Vol. 7, No. 6, November - December 2012, pp. 6317-6323 (ISI-ranked)

[146] Javad Pourhossein, G. B. Gharehpetiang and S. H. Fathi, "*Static Inter-Phase Power Controller (SIPC) Modeling for Load Flow and Short Circuit Studies*", Energy Conversion and Management, Vol. 64, Issue 12, Dec. 2012, pp. 145–151 (ISI-ranked)

[147] A. Taghipour Rezvan, N. Shams Gharneh, G. B. Gharehpetian, "*Robust Optimization of Distributed Generation Investment in Buildings*", Journal of Energy, Vol. 48, December 2012, Pages 455–463 (ISI-ranked)

[148] H. Radmanesh, G. B. Gharehpetian and S.H. Fathi, "*Resistive ferroresonance limiter for potential transformers*", Advances in Power Electronics, Vol. 2012, Article ID 529178, 2012, doi:10.1155/2012/529178

[149] M. Farmad, S. Farhangi, G. B. Gharehpetian and S. Afsharnia, "*Nonlinear Controller Design for IPC Using Feedback Linearization Method*", International Journal of Electrical Power and Energy Systems (IJEPEs), Vol. 44, Issue 1, January 2013, Pages 778–785 (ISI-ranked)

[150] N. Moaddabi and G. B. Gharehpetian, "*Wide Area Method for Self-Healing of Smart Grids in Unstable Oscillations*", Electric Power Components and Systems, Vol. 41, Issue 4, Jan. 2013, Pages 365-382 (ISI-ranked)

[151] M. J. Sanjari, O. Alizadeh Mousavi and G. B. Gharehpetian, "*Assessing the Risk of Blackout in the Power System Including HVDC and FACTS Devices*", International Transactions on Electrical Energy Systems, Vol. 23, Issue 1, Jan. 2013, pages 109–121 (ISI-ranked)

[152] Seyed Majid Madani, Mehrdad Rostami, G.B.Gharehpetian and Reza Hagh Maram, "*Improved Bridge Type Inrush Current Limiter for Primary Grounded Transformers*", Electric Power Systems Research (EPSR), Vol. 95, No. 2, February 2013, pp. 1-8 (ISI-ranked)

[153] Hamid Radmanesh, G.B. Gharehpetian, "*Ferroresonance Suppression in Power Transformers using Chaos Theory*", International Journal of Electrical Power and Energy Systems, Vol. 45, Issue 1, pages 1-9, February 2013, (ISI-ranked)

[154] A. Taghipour Rezvan, N. Shams Gharneh, G. B. Gharehpetian, "*Optimization of Distributed Generation Capacities in Buildings under Uncertainty in Load Demand*", Journal of Energy and Buildings, Vol. 57, No. 2, February 2013, pp. 58 – 64 (ISI-ranked)

[155] M. Firouzi, G. B. Gharehpetian and M. Pishvaei, "*A Dual-Functional Bridge Type FCL to Restore PCC Voltage*", International Journal of Electrical Power and Energy Systems (IJEPES), Vol. 46, Issue 3, March 2013, pp. 49–55 (ISI-ranked)

[156] R. Noroozian and G.B. Gharehpetian, "*An Investigation on Combined Operation of Active Power Filter with Photovoltaic Arrays*", International Journal of Electrical Power and Energy Systems, Vol. 46, Issue 3, March 2013, Pages 392–399 (ISI-ranked)

[157] M. J. Sanjari and G. B. Gharehpetian, "*Small Signal Stability Based Fuzzy Potential Function Proposal for Secondary Frequency and Voltage Control of Islanded Microgrid*", Electric Power Components and Systems, Volume 41, Issue 5, March 2013, pages 485-499 (ISI-ranked)

[158] Abdolaziz Ashrafiyan, Mehrdad Rostami, G.B. Gharehpetian, "*Characterization of Internal Disturbances and External Faults in Transformers Using S-Transform Based Algorithm*", Turkish Journal of Electrical Engineering and Computer Sciences, Vol. 21, April 2013, pp. 330-349 (ISI-ranked)

[159] Hesam Rahbari Magham, Erfan Maali Amiri, Javad Shokrollahi Moghani, Babak Abdi and G. B. Gharehpetian, "*DC Link Voltage Effects on the Performance of the Two Current Control Strategies of Voltage Source Converters*", International Journal on Electrical Engineering and Informatics, Vol. 5, No. 1, March 2013, pp. 105-121

[160] Mohammad Rezaei Jegarluei, N. Moaddabi, G. B. Gharehpetian, M. Mohammadalizadeh Shabestary, "*Accurate Unbalanced Fault Location Method for Multi-Ended Multi-Tapped Structures*", International Review of Electrical Engineering (IREE), Vol. 8, No. 2, March - April 2013, pp. 839-848

[161] H. Karami, M. J. Sanjari, A. Tavakoli and G. B. Gharehpetian, "*Optimal Scheduling of Residential Energy System Including CHP System and Storage Device*", Electric Power Components and Systems, Volume 41, Issue 8, April 2013, pages 765-780 (ISI-ranked)

[162] A.J. Ghanizadeh and G.B. Gharehpetian, "*Application of Characteristic Impedance and Wavelet Coherence Technique to Discriminate Mechanical Defects of Transformer Winding*", Journal of Electric Power Components and Systems, Volume 41, Issue 9, May 2013, pages 868-878 (ISI-ranked)

[163] Ali Bidadfar, M. Abedi, M. Karrari and G.B. Gharehpetian, "*Integration of CCC-HVDC and VSC-HVDC Systems to Supply an Island Network*", Research Journal of Applied Sciences Engineering and Technology, Vol. 5, Issue 24, pp. 5534-5541, May 2013 (ISI-ranked)

[164] Hasan Doagou-Mojarrad, G. B. Gharehpetian, H. Rastegar and Javad Olamaei, "*Optimal Placement and Sizing of DG Units in Distribution Networks by Novel Hybrid Evolutionary Algorithm*", Elsevier Journal of Energy, Vol. 54, No. 6, June 2013, pp. 129–138 (ISI-ranked)

[165] S. Azizi, G. B. Gharehpetian and A. S. Dobakhshari, "*Optimal Integration of Phasor Measurement Units in Power Systems Considering Conventional Measurement*", IEEE Transactions on Smart Grid, Vol. 4, No. 2, June 2013, pp. 1113-1121

[166] M. Rashidi, M. Abide and G.B. Gharehpetian, "*Comparison between 7-Level Cascaded and 7-Level Diode-Clamped Multilevel Inverters for Feeding Induction Motor*", Research Journal of Applied Sciences, Engineering and Technology, Vol. 6, No. 6, June 2013 pp. 936-942 (ISI-ranked)

[167] Mohsen Bakhshi, Reza Noroozian and G. B. Gharehpetian, "*Islanding Detection of Synchronous Machine-Based DGs using Average Frequency Based Index*", Iranian Journal of Electrical & Electronic Engineering, Vol. 9, No. 2, June 2013

[168] M. Firouzi, G. B. Gharehpetian, "*Improving Fault Ride-Through Capability of Fixed Speed Wind Turbine by Using Bridge-Type Fault Current Limiter*", IEEE Transactions on Energy Conversion, Vol. 28, No. 2, June 2013, pp. 361-369 (ISI-ranked)

[169] A. Ashrafiyan, Mehdi S.Naderi, G.B.Gharehpetian, "*Detection of Internal Incipient Faults in Transformers During Impulse Test Using Hyperbolic S-Transform*", International Transactions on Electrical Energy Systems, Vol. 23, Issue 5, July 2013, pp. 701–718 (ISI-ranked)

[170] M. Firouzi, G.B. Gharehpetian and M. Pishvaei, "*THD Reduction of PCC Voltage by Using Bridge-Type Fault Current Limiter*", International Transaction on Electrical Energy Systems, Vol. 23, Issue 5, July 2013, pp. 655–668 (ISI-ranked)

[171] Sanaz Namayan Tavana, G. B. Gharehpetian, M. Abedi and A. Bidadfar, "*Novel Control Strategy for Voltage Source Converters Based on Energy Function*", Turkish Journal of Electrical Engineering and Computer Sciences, Vol. 21, Issue 4, July 2013, pp. 924-933 (ISI-ranked)

[172] A. Abbasi, S. H. Fathi, G. B. Gharehpatian, A. Gholami, H. R. Abbasi, "*Voltage Transformer Ferroresonance Analysis using Multiple Scales Method and Chaos Theory*", Complexity, Vol. 18, No. 6, July/August 2013, pp. 34- 45 (ISI-ranked)

[173] A. J. Ghanizadeh, S. H. Hosseinian, G. B. Gharehpetian, "*Harmonic Disturbance Compensating and Monitoring in Electric Traction System*", Electrical and Electronics Engineering: An International Journal (ELELIJ), Vol. 2, No. 3, August 2013, pp.1- 11

[174] Adel Mohseni, M. Abedi and G.B. Gharehpetian, "*Electric Power Generation Expansion Planning and Power Plant Allocation based on Improved GA and AHP*", Journal of Energy Engineering Management, Vol.3, No. 2, Summer 2013, pp. 2-13 (in Persian)

[175] M. J. Sanjari, G. B. Gharehpetian, "*Unified Framework for Secondary Frequency and Voltage Control of Autonomous Microgrids*", IET Generation, Transmission & Distribution, Vol. 7, Issue 9, September 2013, pp. 965–972 (ISI-ranked)

[176] E. Babaei, S.H. Hosseini, G.B. Gharehpetian, "Three-phase to single-phase matrix converters: A new topology based on a new control method", Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE), Vol. 10, No.2, Fall & Winter 2013

[177] Mohsen Bakhshi, Reza Noroozian and G. B. Gharehpetian, "Anti-Islanding Scheme for Synchronous DG Units Based on Tufts–Kumaresan Signal Estimation Method", IEEE Transactions on Power Delivery, Vol. 28, No. 4, Oct. 2013, pp. 2185-2193 (ISI-ranked)

[178] Hosein Ghasemi, G. B. Gharehpetian, Seyed Ali Nabavi-Niaki, Jamshid Aghaei, "Overview of Subsynchronous Resonance Analysis and Control in Wind Turbines", Renewable and Sustainable Energy Reviews, Vol. 27, No. 11, Nov. 2013, pp. 234–243 (ISI-ranked)

[178] Bahram Poornazaryan, M. Abedi, G. B. Gharehpetian and Shores Shokoochi, "Suggestion of New Voltage and Frequency Control Framework for Autonomous Operation of Microgrids", Amirkabir International Journal of Electrical & Electronics Engineering, Vol. 45, No. 2, Fall 2013, pp. 11-17

[179] M. Gholami, G. B. Gharehpetian, M. Mohammadi, "Online Static Security Margin Improvement based on Wind Farms", Modares Journal of Electrical Engineering, Vol. 12, No. 4, Winter 2013, pp. 1-11

[180] Hosein Ghasemi, G. B. Gharehpetian, Seyed Ali Nabavi-Niaki, Jamshid Aghaei, "Overview of Subsynchronous Resonance Analysis and Control in Wind Turbines", Renewable and Sustainable Energy Reviews, Vol. 27, No. 11, Nov. 2013, pp. 234–243 (ISI-ranked)

[181] H. Radmanesh, S. Heidari, S. U. Mosazadeh, G. B. Gharehpetian, "Studying Voltage Stability in Power System Considering Load Dynamics", Indian Journal of Science and Technology, Vol. 6, Issue 11, pp. 5487–5494, November 2013 (ISI-ranked)

[182] Atrin Tavakoli, B. Vahidi, M. J. Sanjari, H. Karami, G. B. Gharehpetian, "A Novel Control Approach of Isolated Power System to Reduce THD", Journal of Science International-Lahore , Vol. 25, Issue 4, Nov. 2013 pp. 769-775 (ISI-ranked)

[183] M. Rahmatian, B. Vahidi, A. J. Ghanizadeh, G. B. Gharehpetian and H. A. Alehosseini, "Insulation Failure Detection in Transformer Winding Using Cross-correlation Technique with ANN and k-NN Regression Method during Impulse Test", International Journal of Electrical Power and Energy Systems (IJEPE), Vol. 53, Issue 12, December 2013, pp. 209-218 (ISI-ranked)

[184] Hamed Hashemi Dezaki, Masoud Mohammadalizadeh Shabestary, H. Askarian Abyaneh, G.B. Gharehpetian, Mehdi Garmrudi, "*A New Method based on Sensitivity Analysis to Optimize the Placement of SSSCs*", Turkish Journal of Electrical Engineering and Computer Sciences, Vol. 21, Issue Sup.1, Dec. 2013, pp. 1956-1971 (ISI-ranked)

[185] Peyman Karimyan, G. B. Gharehpetian, M. Abedi, A. Gavili, "*Long-Term Scheduling for Optimal Allocation and Sizing of DG Unit Considering Load Variations and DG Type*", International Journal of Electrical Power and Energy Systems (IJEPES), Vol. 54, Issue 1, Jan. 2014, pp. 277–287 (ISI-ranked)

[186] M. R. Vatani, M. J. Sanjari, G. B. Gharehpetian, "*Islanding Detection in Distribution Networks with Distributed Energy Resources before Main Circuit Breaker Opening*", Universal Journal of Electrical and Electronic Engineering, Vol. 2, Issue 1, Jan. 2014, pp. 1-5

[187] Sadegh Ghani Varzaneh, Hassan Rastegar, G. B. Gharehpetian, "*A New Three-Mode MPPT Algorithm for DFIG Based Wind Energy Conversion System*", Electric Power Components and Systems, Vol. 42, Issue 1, Jan. 2014, pp. 45-59 (ISI-ranked)

[188] E. Maali Amiri, M. Abedi, H. Rahbari Magham, G.B. Gharehpetian, S.S. Heidary Yazdi, M. J. Sanjari, "*Robustness Evaluation of Multivariable PI Control Strategy in Autonomous Operation of Distributed Generations*", International Journal of Distributed Energy Resources and Smart Grids, Vol. 10. No. 1, Jan.-March 2014, pp. 15-30

[189] M. Mohammad Alizadeh Shabestary, B. Vahidi, Shahed Mortazavian and G. B. Gharehpetian, "*Stability Index Improvement in Power Systems by UPFC based on Smart Coefficients Algorithm*", Science International-Lahore, Vol. 26, Issue 1, Jan.-March 2014, pp. 91-95 (ISI-ranked)

[190] M. M. Shabestary, A. J. Ghanizadeh, G. B. Gharehpetian, M. Agha-Mirsalim, "*Ladder Network Parameters Determination Considering Non-dominant Resonances of Transformer Winding*", IEEE Transactions on Power Delivery, Vol. 29, No.1, Feb. 2014, pp. 108-117 (ISI-ranked)

[191] A. Bidadfar, M. Abedi, M. Karrari, G. B. Gharehpetian and Sanaz Namayan Tavana, "Passive AC Network Supplying the Integration of CCC-HVDC and VSC-HVDC Systems", Turkish Journal of Electrical Engineering and Computer Sciences, Vol. 22, Issue 2, March 2014, pp. 353-362 (ISI-ranked)

[192] Hamed Nafisi, Mehrdad Abedi and G. B. Gharehpetian, "Locating PD in Transformers Through Detailed Model and Neural Networks", Journal of Electrical Engineering - ELEKTROTECHNICKY CASOPIS, Vol. 65, No. 2, March-April 2014, pp. 75-82 (ISI-ranked)

[193] S. Azizi, A. Salehi Dobakhshari, S. A. Nezam Sarmadi, A. M. Ranjbar and G. B. Gharehpetian, "Optimal Multi-Stage PMU Placement in Electric Power Systems Using Boolean Algebra", International Transactions on Electrical Energy Systems, Vol. 24, Issue 4, April 2014, pp. 562-577 (ISI-ranked)

[194] M. J. Sanjari, G. B. Gharehpetian, "Pattern Discovery Based Preventive Control Strategy for VSI-based Microgrids Against Islanding", Electric Power Components and Systems, Vol. 42, Issue 5, April 2014, pp. 507-519 (ISI-ranked)

[195] Raziye Mosayebi, H. Sheikhzadeh, M. S. Golsorkhi, M. A. Hejazi, G. B. Gharehpetian, "Detection of Winding Radial Deformation in Power Transformers by Confocal Microwave Imaging", Electric Power Components and Systems, Vol. 42, Issue 6, April 2014, pp. 605-611 (ISI-ranked)

[196] Hamid Radmanesh, Seyed Saeid Heidari Yazdi, G. B. Gharehpetian and S. H. Fathi, "Modelling and Simulation of Fuel Cell Dynamics for Electrical Energy Usage of Hercules Airplanes", The Scientific World Journal, Vol. 2014, Article ID 593121, 2014, pp. 1-10, doi:10.1155/2014/593121 (ISI-ranked)

[197] R. Jafari, N. Moaddabi, M. Eskandari-Nasab, G. B. Gharehpetian, M. S. Naderi, "A Novel Power Swing Detection Scheme Independent of Rate of Change of Power System Parameters", IEEE Transactions on Power Delivery, Vol. 29, No. 3, June 2014, pp. 1192-1202 (ISI-ranked)

- [198] Mohammad Javad Sanjari, G. B. Gharehpetian, "*Incomplete Information Based Decentralized Cooperative Control Strategy for Distributed Energy Resources of VSI-Based Microgrids*", Neural Computing and Applications, July 2014, Volume 25, Issue 1, pp 189-197 (ISI-ranked)
- [199] Mohammad Javad Sanjari, G. B. Gharehpetian, "*Game Theoretic Approach to Cooperative Control of Distributed Energy Resources in Islanded Microgrid Considering Voltage and Frequency Stability*", Neural Computing and Applications, August 2014, Volume 25, Issue 2, pp 343-351 (ISI-ranked)
- [200] Farzad Sedaghati, Seyed Hossein Hosseini, Mehran Sabahi and G. B. Gharehpetian, "*Analysis and Implementation of a Modular Isolated Zero Voltage Switching Bidirectional DC-DC Converter*", IET Power Electronics, Vol. 7, Issue. 8, August 2014, pp. 2035–2049 (ISI-ranked)
- [201] Hamed Hashemi Dezaki, H. Askarian Abyaneh, G. B. Gharehpetian and Haemd Nafisi, "*Optimized Allocation of DGs to Improve System Reliability Based on Loading Effects*", Arabian Journal for Science and Engineering (AJSE), Vol. 39, No. 5, Sep. 2014, pp. 3907-3915 (ISI-ranked)
- [202] H. Karami, M. J. Sanjari, S. H. Hosseinian, G. B. Gharehpetian, "*An Optimal Dispatch Algorithm for Managing Residential Distributed Energy Resources*", IEEE Transactions on Smart Grid, Vol. 5, Issue 5, Sep. 2014, pp. 2360-2367 (ISI-ranked)
- [203] F. Safdarian, M. M. Ardehali, G. B. Gharehpetian, "*Performance of Optimal Controller of VSC-HVDC Systems in Weak Networks*", International Journal of Modern Engineering (IJME), Vol. 15, No. 1, Fall/Winter 2014, pp. 68-74
- [204] Ahmad Javid Ghanizadeh and G. B. Gharehpetian, "*ANN and Cross-correlation based Features for Discrimination between Electrical and Mechanical Defects and their Localization in Transformer Winding*", IEEE Transactions on Dielectrics and Electrical Insulation, Vol. 21, No. 5, October 2014, pp. 2374-2382 (ISI-ranked)

[205] Sadegh Ghani Varzaneh, G. B. Gharehpetian and M. Abedi, "*Output Power Smoothing of Variable Speed Wind Farms Using Rotor-Inertia*", Electric Power Systems Research, Vol. 116, Issue 11, Nov. 2014, pp. 208-217 (ISI-ranked)

[206] H. Karami, M. J. Sanjari, G. B. Gharehpetian, "*Hyper-Spherical Search (HSS) Algorithm: A Novel Meta-heuristic Algorithm to Optimize Nonlinear Functions*", Neural Computing and Applications, Vol. 25, Issue 6, Nov. 2014, pp. 1455-1465 (ISI-ranked)

[207] E. Ebrahimi, M. J. Sanjari and G.B. Gharehpetian, "*Control of Three-Phase Inverter-Based DG System During Fault Condition without Changing Protection Coordination*", International Journal of Electrical Power & Energy Systems, Vol. 63, Dec. 2014, pp. 814–823 (ISI-ranked)

[208] A. Ghafouri, J. Milimonfared and G. B. Gharehpetian, "*Coordinated Control of Distributed Energy Resources and Conventional Power Plants for Frequency Control of Power Systems*", IEEE Transactions on Smart Grid, Vol. 6, Issue 1, Jan. 2015, pp. 104-114 (ISI-ranked)

[209] Mehdi Firouzi, G. B. Gharehpetian and Babak Mozafari, "*Improvement of Power System Stability by Using New Switching Technique in Bridge-type Fault Current Limiter*", Electric Power Components and Systems Journal, Vol. 43, Issue 2, Feb. 2015, pp. 234-244 (ISI-ranked)

[210] Hossein Shahinzadeh, G. B. Gharehpetian, S. H. Fathi, Sayed Mohsen Nasr-Azadani, "*Optimal Planning of an Off-grid Electricity Generation with Renewable Energy Resources using the HOMER Software* ", International Journal of Power Electronics and Drive System (IJPEDS), Vol. 6, No. 1, March 2015, pp. 137-147

[211] Atrin Tavakoli, M. J. Sanjari, H. Karami, S. H. Hosseinian and G. B. Gharehpetian, "*Imperialistic Competitive Algorithm Based Unit Commitment Considering Risk of Cascading Blackout*", Electric Power Components and Systems, Vol. 43, Issue 4, April 2015, pp. 374-383 (ISI-ranked)

[212] Davood Solati Alkaran, Mohammad Reza Vatani, Mohammad Javad Sanjari, G.B. Gharehpetian, and Abdul Halim Yatim, "*Overcurrent Relays Coordination in Interconnected*

Networks Using Accurate Analytical Method and Based on Determination of Fault Critical Point", IEEE Transactions on Power Delivery, Vol. 30, No. 2, April 2015, pp. 870-878 (ISI-ranked)

[213] Mehran Esmaeili, Mehrdad Rostami, G. B. Gharehpetian and Colin P. McInnis, "*Ferroresonance after Islanding of Synchronous Machine Based Distributed Generation*", Canadian Journal of Electrical and Computer Engineering, Vol. 38, Issue 2, Spring 2015, pp. 154-161 (ISI-ranked)

[214] F. Safdarian, M. M. Ardehali, G. B. Gharehpetian, "*Ramp Rate Effect on Maximizing Profit of a Microgrid Using Gravitational Search Algorithm*", International Journal of Engineering Research and Innovation (IJERI), Vol. 7, No. 1, Spring/Summer 2015, pp. 32-42

[215] Hamid Radmanesh, S. H. Fathi and G. B. Gharehpetian, "*Novel High Performance DC Reactor Type Fault Current Limiter*", Electric Power Systems Research (EPSR), Vol. 122, Issue 5, May 2015, pp. 198-207 (ISI-ranked)

[216] H. Gholami, A. Khalilnejad and G. B. Gharehpetian, "*Electrothermal Performance and Environmental Effects of Optimal Photovoltaic-Thermal System*", Energy Conversion and Management, Vol.95, May 2015, pp. 326–333 (ISI-ranked)

[217] A. Alehosseini, M. A. Hejazi, G. Mokhtari, G. B. Gharehpetian, M. Mohammadi, "*Detection and Classification of Transformer Winding Mechanical Faults Using UWB Sensors and Bayesian Classifier*", International Journal of Emerging Electric Power Systems, Vol. 16, Issue 3, May-June 2015, pp. 207–215

[218] N. Ghardash Khani, M. Abedi, G. B. Gharehpetian and G. H. Riahy, "*Analyzing the Effect of Wind Farm to Improve Transmission Line Stability in Contingencies*", Indian Journal of Science and Technology, Vol. 8, No. 11, 55131, June 2015 (ISI-ranked)

[219] S. Beydaghi, B. Vahidi, Y. Ankouti, G. B. Gharehpetian, "*Simulation of Improved Perturb and Observe MPPT Using SEPIC Converter*", Science International-LAHORE, June-July 2015, Vol. 27, Issue 3, p1869-1873 (ISI-ranked)

[220] Hamid Radmanesh, S. H. Fathi, G. B. Gharehpetian, "*Series Transformer Based Solid State Fault Current Limiter*", IEEE Transactions on Smart Grid, Vol. 6, No.4, July 2015 pp. 1983-1991 (ISI-ranked)

[221] M. M. Shabestary, H. Hashemi Dezaki, S. Mortazavian, H. Askarian-Abyaneh, G. B. Gharehpetian, "*A General Approach for Optimal Allocation of FACTS Devices Using Equivalent Impedance Models of VSCs*", International Transactions on Electrical Energy Systems, Vol. 25, No. 7, pp. 1187-1203, July 2015 (ISI-ranked)

[222] Hesam Rahbarimagham, Erfan Maali Amiri, Behrooz Vahidi, G. B. Gharehpetian, Mehrdad Abedi, "*Superior Decoupled Control of Active and Reactive Power for Three Phase Voltage Source Converters*", Turkish Journal of Electrical Engineering & Computer Sciences, Vol. 23, No. 4, July-Aug. 2015, pp.1025-1039 (ISI-ranked)

[223] H. Rahbarimagham, H. Karami, M. A. Hejazi, M. S. Naderi and G. B. Gharehpetian, "*Determination of Transformer Winding Radial Deformation Using UWB System and Hyperboloid Method*", IEEE Sensors Journal, Vol. 15, No. 8, Aug. 2015, pp. 4194-4202 (ISI-ranked)

[224] S. Hosseini,, G. B. Gharehpetian, and F. Farzianpour, "*Fore Sighting and Estimating the Risk of Investing in the Construction of Power Plants Using AHP*", Journal of Service Science and Management, Vol. 8, No. 4, Aug. 2015, pp. 526-535.

[225] Amir Heidary, Hamid Radmanesh, S. H. Fathi, and G. B. Gharehpetian, "*Series Transformer Based Diode-Bridge-Type Solid State Fault Current Limiter*", Frontiers of Information Technology & Electronic Engineering, Vol. 16, No. 9, Sep. 2015, pp. 769-784 (ISI-ranked)

[226] S. Danyali, S.A. Kh. Mozaffari Niapour, S.H. Hosseini, G. B. Gharehpetian, M. Sabahi, "New Single-Stage Single-Phase Three-Input DC-AC Boost Converter for Stand-Alone Hybrid PV/FC/UC Systems", *Electric Power System Research*, Vol. 127, Vol. 10, Oct. 2015, pp 1–12 (ISI-ranked)

[227] Morteza Alizadeh, Naser Khodabakhshi-Javinani, G. B. Gharehpetian and Hossein Askarian-Abyaneh, "Performance Analysis of Distance Relay in Presence of Unified Interphase Power Controller and Voltage-Source Converters Based Interphase Power Controller", *IET Generation, Transmission & Distribution*, Vol. 9, Issue 13, Oct. 2015, pp. 1642–1651 (ISI-ranked)

[228] H. Karami, M. J. Sanjari, S. Hadavi, S. H. Hosseinian, G. B. Gharehpetian, "Stochastic Load Effect on Home Energy System Scheduling Optimization", *International Transactions on Electrical Energy Systems*, Vol. 25, Issue 10, pp. 2412–2426, Oct. 2015 (ISI-ranked)

[229] Seyed Masoud Fatemi, Sajjad Abedi, G. B. Gharehpetian, S. H. Hosseinian, M. Abedi, "Introducing a Novel DC Power Flow Method with Reactive Power Considerations", *IEEE Transactions on Power Systems*, Vol. 30, No. 6, Nov. 2015, pp. 3012-3023 (ISI-ranked)

[230] Mohammad Reza Jannati Oskuee, Sajad Najafi Ravadanegh, and G. B. Gharehpetian, "An Innovative Scheme of Symmetric Multilevel Voltage Source Inverter with Lower Number of Circuit Devices", *IEEE Transactions on Industrial Electronics*, Vol. 62, No. 11, Nov. 2015 (ISI-ranked)

[231] M. J. Sanjari, H. Karami, A. H. Yatim, G. B. Gharehpetian, "Application of Hyper-Spherical Search Algorithm for Optimal Energy Resources Dispatch in Residential Microgrids", *Applied Soft Computing*, Vol. 37, No. 12, Dec. 2015, pp. 15-23 (ISI-ranked)

[232] S. Mortazavian, M. M. Shabestary, Y. A. R. I. Mohamed, G. B. Gharehpetian, "Experimental Studies on Monitoring and Metering of Radial Deformations on Transformer HV Winding Using Image Processing and UWB Transceivers", *IEEE Transactions on Industrial Informatics*, Vol. 11, No. 6, Dec. 2015, pp. 1334-1345 (ISI-ranked)

[233] B. Zaker, M. Karrari, M. Mirsalim, G. B. Gharehpetian, N. Moaddabi, "*PMU-Based Matching Pursuit Method for Black-Box Modeling of Synchronous Generator* ", Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE), Vol. 12, No. 3, Winter 2015, pp. 33-39

[234] R. Jalilzadeh, Hamidi, H. Livani, S. H. Hosseinian, G. B. Gharehpetian, "*Distributed Cooperative Control System for Smart Microgrids*", Journal of Electric Power Systems Research, Vol. 130, Issue 1, January 2016, pp. 241–250 (ISI-ranked)

[235] S. Golestan, Josep M. Guerrero, G. B. Gharehpetian, "*Five Approaches to Deal With Problem of DC Offset in Phase-Locked Loop Algorithms: Design Considerations and Performance Evaluations*", IEEE Transactions on Power Electronics, Vol. 31, No. 1, Jan. 2016, pp.648-661 (ISI-ranked)

[236] Ali Bidadfar, Hans-Peter Nee, Lidong Zhang, Lennart Harnfors, Sanaz Namayantavana, Mehrdad Abedi, Mehdi Karrari, and Gevork B. Gharehpetian, "*Power System Stability Analysis Using Feedback Control System Modeling Including HVDC Transmission Links*", IEEE Transactions on Power Systems, Vol. 31, No. 1, January 2016 (ISI-ranked)

[237] Mohammad Ali Norouzi, Javad Olamaei, and Gevork B. Gharehpetian, "*Compensation of Voltage Sag and Flicker During Thermal Power Plant Turbo-Expander Operation by Dynamic Voltage Restorer*", International Transactions on Electrical Energy Systems, Vol. 26, Issue 1, Jan. 2016, pages 16–31 (ISI-ranked)

[238] Hamid Radmanesh, Seyed Hamid Fathi, G. B. Gharehpetian, Amir Heidary, "*Bridge Type Solid State Fault Current Limiter Based on AC/DC Reactor*", IEEE Transactions on Power Delivery, Vol. 31, No.1, Feb. 2016, pp. 200-209 (ISI-ranked)

[239] Hamid Radmanesh, S. H. Fathi, G.B. Gharehpetian, and Amir Heidary, "*A Novel Solid State Fault Current Limiting Circuit Breaker for Medium Voltage Network Applications*", IEEE Transactions on Power Delivery, Vol. 31, No. 1, Feb. 2016, pp. 236-244 (ISI-ranked)

- [240] R. Abdollahi, G. B. Gharehpetian, "*Inclusive Design and Implementation of Novel 40-Pulse AC-DC Converter for Retrofit Applications and Harmonic Mitigation*", IEEE Transactions on Industrial Electronics, Vol. 63, No. 2, Feb. 2016, pp. 667-677 (ISI-ranked)
- [241] Amir Heidary, Hamid Radmanesh and G. B. Gharehpetian, "*Effect of Series Resonance LC Tank on Mitigation of Fault Current in Radial Distribution Networks*", Indian Journal of Science and Technology, Vol. 9, Issue 7, February 2016, pp. 1-7 (ISI-ranked)
- [242] H. Doagou-Mojarrad, H. Rastegar and G. B. Gharehpetian, "*Probabilistic Interactive Fuzzy Satisfying Generation and Transmission Expansion Planning Using Fuzzy Adaptive Chaotic Binary PSO Algorithm*", Journal of Intelligent and Fuzzy Systems, Vol. 30, No.3, March 2016, pp. 1629–1641 (ISI-ranked)
- [243] Omid Zhoulai Bakhoda, M. B. Menhaj, G. B. Gharehpetian, "*Fuzzy Logic Controller Vs. PI Controller for MPPT of Three-phase Grid-connected PV System Considering Different Irradiation Conditions*", Journal of Intelligent & Fuzzy Systems, Vol. 30, No. 3, March 2016, pp. 1353-1366 (ISI-ranked)
- [244] Reza Ghanizadeh, Mahmoud Ebadian, G. B. Gharehpetian, "*Control of Inverter-Interfaced Distributed Generation Units for Voltage and Current Harmonics Compensation in Grid-Connected Microgrids*", Journal of Operation and Automation in Power Engineering, Vol. 4, No. 1, Winter & Spring 2016, pp. 66-82
- [245] Mohammad Reza Jannati Oskuee, Sahar Khalilnasab, Sajad Najafi Ravadanegh, G. B. Gharehpetian, "*Reduction of Circuit Devices in Developed Symmetrical/Asymmetrical Multilevel Converters*", Journal of Circuits Systems and Computers, Vol. 25, No. 4, April 2016, 1650020 (ISI-ranked)
- [246] A. A. Khodadoost Arani, J. S. Moghani, A. Khoshsaadat, G. B. Gharehpetian, "*THD Minimization of the Output Voltage for Asymmetrical 27-Level Inverter Using GA and PSO Methods*", Iranian Journal of Electrical & Electronic Engineering, Vol. 12, No. 2, June 2016 pp. 126-133
- [247] H. Doagou-Mojarrad, H. Rastegar and G. B. Gharehpetian, "*Probabilistic Multi-objective HVDC/AC Transmission Expansion Planning Considering Distant Wind/Solar Farms*", Journal of IET Science, Measurement & Technology, Vol. 10, Issue 2, April 2016, pp. 140–149 (ISI-ranked)
- [248] M. Hamzeh, H. Hashemi-Dezaki, H. Askarian Abyaneh, G. B. Gharehpetian, and B. Vahidi, "*Risk Management of Smart Grids based on Plug-in Hybrid Electric Vehicles' Charging Considering Transformers' Hottest Spot Temperature-Dependent Aging Failures*", Journal of Renewable and Sustainable Energy, Vol.8, Issue 3, May 2016, pp. 034102-1-18 (ISI-ranked)

[249] Reza Sharifi, Reza Khamooshi, G.B. Gharehpetian, Seyyed Hamid Fathi, Javad Sh. Moghani, "*Enhancement of Power System Oscillation Damping Using Fuzzy Inference System Based Coordinated Design of SSSC Controllers*", Indian Journal of Science and Technology, Vol. 9, Issue 17, May 2016, pp. 1-7 (ISI-ranked)

[250] B. Zaker, G. B. Gharehpetian, M. Karrari, N. Moaddabi, "*Simultaneous Parameter Identification of Synchronous Generator and Excitation System Using Online Measurements*", IEEE Transactions on Smart Grid, Vol. 7, No. 3, May 2016, pp. 1230-1238 (ISI-ranked)

[251] Navid Ghardash khani, M. Abedi, G. B. Gharehpetian and G. H. Riahy, "*Offshore Wind Farm Power Control Using HVdc Link* ", Canadian Journal of Electrical and Computer Engineering, Vol. 39, Issue 2, Spring 2016, pp. 168-173 (ISI-ranked)

[252] Mohammad Ali Norouzi, Javad Olamaei, and G. B. Gharehpetian, "*Turbo-Expander Starting Compensation Improvement Using Improved DVR and STATCOM in Neka Power Plant during Fault*", Journal of Energy Engineering Management, Vol. 6, Issue 1, Spring 2016, pages 2–15 (in Persian)

[253] Hesam Vahedi, Mehdi Karrari, and G. B. Gharehpetian, "*Accurate SFS Parameter Design Criterion for Inverter-Based Distributed Generation*", IEEE Transactions on Power Delivery, Vol. 31, No. 3, June 2016, pp. 1050-1059 (ISI-ranked)

[254] K. Rouzbehi, J. I. Candela, A. Luna, G. B. Gharehpetian, P. Rodriguez, "*Flexible Control of Power Flow in Multi-Terminal DC Grids Using DC-DC Converter*", IEEE Journal of Emerging and Selected Topics in Power Electronics, Vol. 4, No. 3, June 2016, pp. 1135-1144 (ISI-ranked)

[255] B. Poornazaryan, P. Karimyan, G.B. Gharehpetian, M. Abedi, "*Optimal Allocation and Sizing of DG Units Considering Voltage Stability, Losses and Load Variations*", International Journal of Electrical Power and Energy Systems, Vol. 79, No. 7, July 2016, pp. 42-52 (ISI-ranked)

[256] M. Mokhtari, Zulkurnain Abdul-Malek, and G. B. Gharehpetian, "*A Critical Review on Soil Ionisation Modeling for Grounding Electrodes*", Archives of Electrical Engineering, Vol. 65, Issue 3, pp. 449-461, July 2016 (ISI-ranked)

[257] Hamid Radmanesh, Seyed Hamid Fathi, G. B. Gharehpetian, "*Thyristor-Controlled AC Reactor Based Fault Current Limiter for Distribution Network Stability Enhancement*", Journal of Electrical Engineering & Technology (JEET), Vol. 11, No. 5, pp. 1070-1076, Sep. 2016 (ISI-ranked)

[258] Hamid Reza Baghaee, Mojtaba Mirsalim, Gevork B. Gharehpetian, "*Real-time Verification of New Controller to Improve Small/Large-Signal Stability and Fault Ride-Through Capability of Multi-DER Microgrids*", IET Generation, Transmission & Distribution, Vol. 10 Issue 12, pp. 3068-3084, Sep. 2016 (ISI-ranked)

[259] A. A. Khodadoost Arani, B. Zaker, G. B. Gharehpetian, "*Flywheel Energy Storage System Modeling and Simulation as Voltage and Frequency Reference in Off-grid Microgrid*", Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE), Vol. 13, No. 3, pages 11-18, Fall 2016 (in Persian)

[260] M. Saadatmand, B. Mozafari, G. B. Gharehpetian, E. Rasuli, "*Harmonics Management in Electrical Distribution Networks using Harmonic Allocation*", Majlesi Journal of Energy Management Vol. 5, No. 3, pp. 35-41, September 2016

[261] H. Karami, G. B. Gharehpetian, Y. Norouzi, M. A. Hejazi, "*GLRT-based Mitigation of Partial Discharge Effect on Detection of Radial Deformation of Transformer HV Winding using SAR Imaging Method*", IEEE Sensors Journal, Vol. 16, No. 19, pp. 7234-7241, Oct. 2016 (ISI-ranked)

[262] H. Karami, B. Zaker, B. Vahidi, and G. B. Gharehpetian, "*Optimal Multi-Objective Number, Locating and Sizing of the DGs and DSTATCOMs Considering Loadability Using Genetic Algorithm*", Electric Power Components and Systems, Vol. 44, No.19, pp. 2161–2171, Nov. 2016 (ISI-ranked)

[263] R. Noroozian, G. B. Gharehpetian, "*Novel Control Strategy for Grid-Connected Photovoltaic Array*", IIUM Engineering Journal, Vol. 17, No. 2, pp. 169-184, Nov. 2016 (ISI-ranked)

[264] M. Gholami, G. B. Gharehpetian, and M. Mohammadi, "*Online Decision Tree Based Strategy for Power System Static Security Margin Improvement Using Wind Farms*", International Journal of Electrical Power and Energy Systems, Vol. 83, Dec. 2016, pp.15-20 (ISI-ranked)

[265] S. A. Ahmadi, H. Karami, M.J. Sanjari, H. Tarimoradi, G. B. Gharehpetian, "*Application of Hyper-Spherical Search Algorithm for Optimal Coordination of Overcurrent Relays Considering Different Relays Characteristics*", International Journal of Electrical Power and Energy Systems (IJEPES), Vol. 83, Issue 12 , Dec. 2016 pp. 443-449 (ISI-ranked)

[266] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian, H. Talebi, "*Reliability/Cost based Multi-Objective Pareto Optimal Design of Stand-Alone Wind/PV/FC generation Microgrid System*", Energy, Vol. 115, Issue 12, pp.1022-1041, Dec. 2016 (ISI-ranked)

[267] Hamid Reza Baghaee, M. Mirsalim, G. B. Gharehpetian, "*Power Calculation using RBF Neural Networks to Improve Power Sharing of Hierarchical Control Scheme in Multi-DER Microgrids*", IEEE Journal of Emerging and Selected Topics in Power Electronics, Vol. 4, No. 4, pp. 1217-1225, Dec. 2016 (ISI-ranked)

[268] Mohammad Reza Jannati Oskuee, Sahar Khalilnasab, Sajad Najafi Ravadanagh, G. B. Gharehpetian, "*A Developed Symmetric/Asymmetric Multilevel Converter Topology with Reduced Number of Power Electronic Components*", U.P.B. Scientific Bulletin., Series C, Vol. 78, Issue 4, pp. 109-122, 2016 (ISI-ranked)

[269] Ehsan Karami, G. B. Gharehpetian, M. Madrigal, "*A Step Forward in Application of Dynamic Harmonic Domain: Phase Shifting Property of Harmonics*", IEEE Transactions on Power Delivery Vol. 32, No. 1, pp. 219-225, Feb. 2017 (ISI-ranked)

[270] Hamid Reza Baghaee, M. Mirsalim, G. B. Gharehpetan, "*Multi-objective Optimal Power Management and Sizing of a Reliable Wind/PV Microgrid with Hydrogen Energy Storage Using MOPSO*", Journal of Intelligent and Fuzzy Systems, Vol. 32, No. 3, pp. 1753-1773, February 2017 (ISI-ranked)

[271] M. Firouzi, G. B. Gharehpetian, and B. Mozafari, "*Power Flow Control and Short Circuit Current Limitation of Wind Farms Using Unified Inter-Phase Power Controller*", IEEE Transactions on Power Delivery, Vol. 32, No. 1, Feb. 2017, pp.62-71 (ISI-ranked)

[272] K. Gharani Khajeh, E. Bashar, A. Mahboub Rad, and G. B. Gharehpetian, "*Integrated Model Considering Effects of Zero Injection Buses and Conventional Measurements on Optimal PMU Placement*", IEEE Transactions on Smart Grid, Vol. 8, No. 2, March 2017, pp. 1006-1013 (ISI-ranked)

[273] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian, H. Talebi, "*Three Phase AC/DC Power-flow for Balanced/Unbalanced Microgrids Including Wind/Solar, Droop-Controlled and Electronically-Coupled Distributed Energy Resources using RBF Neural Networks*", IET Power Electronics, Vol. 10, No. 3, pp. 313-328, March 2017 (ISI-ranked)

[274] A. Khodadoost Arani, H. Karami, G.B. Gharehpetian and M.S. A. Hejazi, "*Review of Flywheel Energy Storage Systems Structures and Applications in Power Systems and Microgrids*", Renewable & Sustainable Energy Reviews, Vol. 69, Issue 3, pp.9-18, March 2017 (ISI-ranked)

[275] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian, H. A. Talebi, "*Application of RBF Neural Networks and Unscented Transformation in Probabilistic Power-Flow of Microgrids including Correlated Wind/PV Units and Plug-in Hybrid Electric Vehicles* ", Simulation Modelling Practice and Theory, Vol. 72, Part C, pp. 51-68, March 2017 (ISI-ranked)

[276] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian, H. Talebi, "*Eigenvalue, Robustness and Time Delay Analysis of Hierarchical Control Scheme in Multi-DER Microgrid to Enhance Small/Large-Signal Stability using Complementary Loop and Fuzzy Logic Controller*", Journal of Circuits, Systems, and Computers, Vol. 26, No. 6, (2017), 1750099, pp.1-34 (ISI-ranked)

[277] Kumars Rouzbehi, J. Ignacio Candela, G. B. Gharehpetian, Lennart Harnefors, Alvaro Luna, Pedro Rodriguez, "*Multi-terminal DC Grids: Operating Analogies to AC Power Systems*", Renewable & Sustainable Energy Reviews, Vol. 70, No. 4, pages 886–895, April 2017 (ISI-ranked)

[278] H. Karami, M.J. Sanjari, H. B. Gooi, G. B. Gharehpetian, J. M. Guerrero, "Stochastic Analysis of Residential Micro Combined Heat and Power System", *Energy Conversion and Management*, Vol. 138, 15 April 2017, pp. 190–198 (ISI-ranked)

[279] H. Rahbarimagham, S. Esmaeili, and G. B. Gharehpetian, "*Localization of Radial Deformation and Its Extent in Power Transformer HV Winding Using Stationary UWB Antennas*", *IEEE Sensors*, Vol. 17, No. 10, May 2017, Pages 3184-3192 (ISI-ranked)

[280] M. Nazari-Heris, B. Mohammadi-Ivatloo, G. B. Gharehpetian, "*Short-term Scheduling of Hydro-based Power Plants Considering Application of Heuristic Algorithms: A Comprehensive Review*", *Renewable & Sustainable Energy Reviews*, Vol. 74, July 2017, Pages 116–129 (ISI-ranked)

[281] Sadegh Ghani Varzaneh, and M. Abedi and G. B. Gharehpetian, "*A New Simplified Model for Assessment of Power Variation of DFIG-Based Wind Farm Participating in Frequency Control System*", *Electric Power Systems Research*, Vol. 148, No. 7, July 2017, Pages 220–229 (ISI-ranked)

[282] Mahdi Bayati, M. Abedi, S. H. Hosseinian, G. B. Gharehpetian, "*A Novel Control Strategy for Reflex-Based Electric Vehicle Charging Station with Grid Support Functionality*", *Journal of Energy Storage*, Vol. 12, Issue 3, Aug. 2017, Pages 108–120 (ISI-ranked)

[283] S. A. Ahmadi, H. Karami, G. B. Gharehpetian, "*Comprehensive Coordination of Combined Directional Overcurrent and Distance Relays Considering Miscoordination Reduction*", *International Journal of Electrical Power and Energy Systems (IJEPES)*, Vol. 92, , No. 1, Nov. 2017, pages 42-52 (ISI-ranked)

[284] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian, H. Talebi, "*A Generalized Descriptor-System Robust H_∞ Control of Autonomous Microgrids to Improve Small and Large Signal Stability Considering Communication Delays and Load Nonlinearities*", *International Journal of Electrical Power and Energy Systems*, Vol. 92, No. 1, Nov. 2017, pages. 63-82 (ISI-ranked)

[285] H. R. Baghaee, M. Mirsalim and G. B. Gharehpetian, "*Power Factor Improvement of DC/DC Converters for Micro-Turbines*" to be appeared in Journal of Energy and Power Engineering

[286] M. Farmad, S. Farhangi, S. Afsharnia and G. B. Gharehpetian, "*Nonlinear Decoupled Controller for VSC-based IPC Using Feedback Linearization with Dynamic Extension*", to be appeared in International Journal of Innovative Computing Information and Control (IJICIC) (ISI-ranked)

[287] H. Radmanesh, G. B. Gharehpetian and S.H. Fathi, "*Resistive Ferroresonance Limiter for Potential Transformers*", to be appeared in the Journal of Advances in Power Electronics

[288] S. Danyali, S. H. Hosseini, G. B. Gharehpetian, "*New Extendable Single-Stage Multi-Input DC-DC/AC Boost Converter*", to be appeared in IEEE Transactions on Power Electronics (ISI-ranked)

[289] Peyman Farhang, M. Reza Safari Tirtashi, Reza Noroozian, G.B. Gharehpetian, "*Combined Design of VSC-HVDC and PSS Controllers for LFO Damping Enhancement*", to be appeared in Transactions of the Institute of Measurement and Control (ISI-ranked)

[290] Majid Farmad, Shahrokh Farhangi, G. B. Gharehpetian and Saeed Afsharnia, "*Modeling and Non-linear Control of a Common DC Bus VSC-based IPC*", to be appeared in Electric Power Components and Systems (ISI-ranked)

[291] J. Ghanizadeh and G. B. Gharehpetian, "*A Linear Feature for On-line Monitoring of Mechanical Defects in Transformer Windings*", to be appeared in Research Journal of Recent Sciences (ISI-ranked)

[292] N. Moaddabi and G. B. Gharehpetian, "*General Prefault Transient Stability Estimation Index Using Wide Area Phasor Measurements*", to be appeared in International Transactions on Electrical Energy Systems (ISI-ranked)

[293] M. R. Vatani, M. J. Sanjari and G. B. Gharehpetian, "*Islanding Detection in Multiple-DG Microgrid by Utility Side Current Measurement*", to be appeared in International Transactions on Electrical Energy Systems (ISI-ranked)

[294] A. Rahiminejad, M. Rahmatian, G. B. Gharehpetian, M. Abedi, S. H. Hosseinian, and B. Vahidi, "*Social Welfare Maximization in AC-DC Power Systems Based on Evolutionary Algorithms: A New Merit of HVDC Links*", to be appeared in International Transactions on Electrical Energy Systems

[295] Farzad Sedaghati, S. H. Hosseini, Mehran Sabahi, and G. B. Gharehpetian, "*Dynamic Analysis of Modular Isolated Bidirectional DC-DC Converter for High Power Applications*", to be appeared in Turkish Journal of Electrical Engineering & Computer Science (ISI-ranked)

[296] Farzad Sedaghati, Seyed Hossein Hosseini, Mehran Sabahi and G. B. Gharehpetian, "*Extended Configuration of Dual Active Bridge DC-DC Converter with Reduced Number of Switches*", to be appeared in IET Power Electronics (ISI-ranked)

[297] M. Firouzi, G. B. Gharehpetian, S. B. Mozafari, "*Bridge-Type Superconducting Fault Current Limiter Effect on Distance Relay Characteristic*", to be appeared in International Journal of Electrical Power and Energy Systems (ISI-ranked)

[298] Mostafa Gholami, G. B. Gharehpetian, Mohammad Mohammadi, "*Intelligent Hierarchical Structure of Classifiers to Assess Static Security of Power System*", to be appeared in Journal of Intelligent and Fuzzy Systems (ISI-ranked)

[299] N. Ghardash Khani, M. Abedi, G. B. Gharehpetian and G. H. Riahy, "*A New Control Method for Smoothing PMSG-based Offshore Wind Farm Output Power*", to be appeared in Indian Journal of Science and Technology (ISI-ranked)

[300] A. Ghafouri, J. Milimonfared, and G. B. Gharehpetian, "*Microgrid Modelling for Contribution to the Frequency Control of Power System*", to be appeared in Indian Journal Science and Technology (ISI-ranked)

[301] Mohammad Reza Jannati Oskuee, Sahar Khalilnasab, Sajad Najafi Ravadanegh, and G. B. Gharehpetian, "*Reduction of Circuit Devices in Developed Symmetrical/Asymmetrical Multilevel Converters*", to be appeared in Journal of Circuits, Systems, and Computers (ISI-ranked)

[302] Davood Solati Alkaran, Mohammad Reza Vatani, Mohammad Javad Sanjari, G. B. Gharehpetian, "*Multiple DG Units Maximum Hosting Capacity Determination in Distribution Network for Loss Reduction Based on a Combination of Analytical and GA Methods*", to be appeared in IET Generation, Transmission & Distribution (ISI-ranked)

[303] A.Ghafouri, J. Milimonfared, and G. B. Gharehpetian, "*Classification of Microgrids for Effective Contribution to Primary Frequency Control of Power System*", to be appeared in IEEE Systems Journal (ISI-ranked)

[304] Sina Tonekaboni Bandpeya, Behrooz Vahidia, Masoud Mohammad Alizadeh Shabestary, Seyed Hossein Hosseiniana and G. B. Gharehpetian, "*Sensitivity Analysis on Ladder Network Equivalent Circuit Parameters of Power Transformer*", to be appeared in Electric Power Components and Systems (ISI-ranked)

[305] Weiyi Zhang, Kumars Rouzbehi, Alvaro Luna, G. B. Gharehpetian, Pedro Rodriguez, "*Multi-terminal HVDC Grids with Inertia Mimicry Capability*", to be appeared in IET Renewable Power Generation (ISI-ranked)

[306] Hamid Radmanesh, Amir Heidary, S. H. Fathi, G. B. Gharehpetian, "*Dual Function Ferroresonance and Fault Current Limiter Based on DC Reactor*", to be appeared in Journal of IET Generation, Transmission & Distribution (ISI-ranked)

[307] H. Doagou-Mojarrad, H. Rastegar and G. B. Gharehpetian, "*Fuzzy Satisfying-Based HVDC/AC Transmission Expansion Planning Considering Investment Cost and Network Loss*", to be appeared in International Transactions on Electrical Energy Systems (ISI-ranked)

[308] Mohammad Saeed Mahdavi, B. Vahidi and G. B. Gharehpetian, "*A Novel Optimized Fuzzy Approach Based on Monte Carlo Method for System Load, Wind Turbine and Photovoltaic Unit Uncertainty Modeling in Unit Commitment*", to be appeared in Electric Power Components and Systems (ISI-ranked)

[309] Reza Sharifi, Reza Khamooshi, Hamid Radmanesh, G. B. Gharehpetian, S. H. Fathi, J. S. Moghani, "*Enhancement of Power System Oscillation Damping using Fuzzy Inference System based Coordinated Design of SSSC Controllers*", to be appeared in Indian Journal of Science and Technology (ISI-ranked)

[310] Zulkurnain Abdul-Malek, Mehrdad Mokhtari, and G. B. Gharehpetian, "*Improved Electromagnetic Grounding System Computation Using the Method of Moments by Incorporating the Frequency-Dependent Soil Electrical Properties*", to be appeared in Journal of Applied Physics (ISI-ranked)

[311] Zulkurnain Abdul-Malek, Mehrdad Mokhtari, and G. B. Gharehpetian, "*Lightning and AC Transient Response of Grounding Electrodes with the Consideration of Frequency Dependence Soil Electrical Properties*", to be appeared in Journal of Applied Physics (ISI-ranked)

[312] Zulkurnain Abdul-Malek, Mehrdad Mokhtari, and G. B. Gharehpetian, "*The Effects of Frequency on Soil Electromagnetic Model Behavior*", to be appeared in Journal of Applied Physics (ISI-ranked)

[313] R. Ghanizadeh, M. Ebadian and G. B. Gharehpetian, "*Non-Linear Load Sharing and Voltage Harmonics Compensation in Islanded Microgrids with Converter Interfaced Units*", to be appeared in International Transactions on Electrical Energy Systems (ISI-ranked)

[314] H.R. Baghaee, M. Mirsalim, G.B. Gharehpetian, "*Performance Improvement of Multi-DER Microgrid for Small and Large-Signal Disturbances and Nonlinear Loads: Novel Complementary Control Loop and Fuzzy Controller in A Hierarchical Droop-based Control Scheme*", to be appeared in IEEE Systems Journal (ISI-ranked)

[315] H. Radmanesh, A. Heidary, S. H. Fathi, G. B. Gharehpetian, "*Series Resonance Based Fault Current Limiter with Controlling the Point of Common Coupling Voltage*", to be appeared in Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE)

[316] Zulkurnain Abdul-Malek, M. Mokhtari, and G. B. Gharehpetian, "*A New Soil Ionization Model for Grounding Electrodes*", to be appeared in International Transactions on Electrical Energy Systems (ISI-ranked)

- [317] Mohammad Reza Jannati Oskuee, Masoumeh Karimi, Farhad Mohajel Kazemi, Sajad Najafi Ravadanegh, and G. B. Gharehpetian, "*A Novel Symmetric/Asymmetric Multilevel Current Source Inverter Topology with Lower Number of Components and Lowest Power Rating of Switches*", to be appeared in International Journal of Ambient Energy (ISI-ranked)
- [318] F. Mohammadi, H. Gholami, G. B. Gharehpetian, S. H. Hosseini, "Allocation of Centralized Energy Storage System and Its effect on Daily Grid Energy Generation Cost", to be appeared in IEEE Transactions on Power Systems, (ISI-ranked)
- [319] D. Solati Alkaran, M. R. Vatani, M. J. Sanjari, and G. B. Gharehpetian, "*Parameters Estimation of Electric Arc Furnace Based on an Analytical Solution of Power Balance Equation*", to be appeared in International Transactions on Electrical Energy Systems (ISI-ranked)
- [320] Jaber Fallah Ardashir, Mehran Sabahi, Seyed Hossein Hosseini, Ebrahim Babaei, G. B. Gharehpetian, "*Transformerless Inverter with Charge Pump Circuit Concept for PV Application*", to be appeared in IEEE Journal of Emerging and Selected Topics in Power Electronics (ISI-ranked)
- [321] Rahim Tohidi, Seyed Hossein Hosseini, Mehran Sabahi, Mehdi Abapour, G. B. Gharehpetian, "*A New Three-Phase Soft-Switching-Based Interleaved Boost Converter with High Reliability*", to be appeared in IET Power Electronics (ISI-ranked)
- [322] Ehsan Karami, Manuel Madrigal, G. B. Gharehpetian, "*Dynamic Harmonic Modeling and Analysis of VSC-HVDC Systems*", to be appeared in Amirkabir Journal of Science & Technology
- [323] Davood Solati Alkaran, Mohammad Reza Vatani, Javad Sanjari, G. B. Gharehpetian, "*Optimal Overcurrent Relay Coordination in Interconnected Networks by Using Fuzzy-Based GA Method*", to be appeared in IEEE Transactions on Smart Grid (ISI-ranked)
- [324] Jaber Fallah Ardashir, Mehran Sabahi, Seyed Hossein Hosseini, Ebrahim Babaei, G. B. Gharehpetian, "*A Single-Phase Transformerless Inverter with Charge Pump Circuit Concept for Grid-Tied PV Applications*", to be appeared in IEEE Transactions on Industrial Electronics (ISI-ranked)
- [325] S. Bagheri, Z. Moravvej, G. B. Gharehpetian, "*Effect of Transformer Winding Mechanical Defects, Internal and External Electrical Faults and Inrush Currents on Performance of Differential Protection*", to be appeared in IET Generation, Transmission & Distribution (ISI-ranked)
- [326] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian, H. A. Talebi, "*Nonlinear Load Sharing and Voltage Compensation of Microgrids based on Harmonic Power-Flow Calculations using Radial Basis Function Neural Networks*", to be appeared in IEEE Systems Journal (ISI-ranked)

- [327] Hadi Tarimoradi, G. B. Gharehpetian, "A Novel Calculation Method of Indices to Improve Classification of Transformer Winding Fault Type, Location and Extent", to be appeared in IEEE Transactions on Industrial Informatics (ISI-ranked)
- [328] M. Firouzi, G. B. Gharehpetian, S. B. Mozafari, "Application of UIPC to Improve Power System Stability and LVRT Capability of SCIG-Based Wind Farms", to be appeared in IET Generation, Transmission & Distribution (ISI-ranked)
- [329] J. Nosratian Ahour, S. Seyedtabaie, G. B. Gharehpetian, "Modified Transformer Winding Ladder Network Model to Assess Non-Dominant Frequencies", to be appeared in IET Electric Power Applications (ISI-ranked)
- [330] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian, H. Talebi, "A New Current Limiting Strategy and Fault Model to improve Fault Ride-Through Capability of Inverter Interfaced DERs in Autonomous Microgrids", to be appeared in Sustainable Energy Technologies and Assessments (ISI-ranked)
- [331] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian, H. Talebi, "Fuzzy Unscented Transform for Uncertainty Quantification of Correlated Wind/PV Microgrids: Possibilistic-Probabilistic Power Flow based on RBFNNs", to be appeared in IET Renewable Power Generation (ISI-ranked)
- [332] A. A. Khodadoost Arani, B. Zaker, G. B. Gharehpetian, "Induction Machine-Based Flywheel Energy Storage System Modeling and Control for Frequency Regulation after Microgrid Islanding", to be appeared in International Transactions on Electrical Energy Systems (ISI-ranked)
- [333] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian, H. Talebi, "A Decentralized Power Management and Sliding Mode Control Strategy for Hybrid AC/DC Microgrids including Renewable Energy Resources", to be appeared in IEEE Transactions on Industrial Informatics (ISI-ranked)
- [334] Rasoul Shalchi Alishah, Seyed Hossein Hosseini, Ebrahim Babaei, Mehran Sabahi, G. B. Gharehpetian, "New High Step-Up Multilevel Converter Topology with Self-voltage Balancing Ability and Its Optimization Analysis", to be appeared in IEEE Transactions on Industrial Electronics (ISI-ranked)
- [335] Ehsan Karami, Manuel Madrigal, G. B. Gharehpetian, Kumars Rouzbehi and Pedro Rodriguez, "Single-Phase Modeling Approach in Dynamic Harmonic Domain", to be appeared in IEEE Transactions on Power Systems (ISI-ranked)
- [336] H. R. Baghaee, M. Mirsalim, G. B. Gharehpetian, H. Talebi, A. Niknam-Kumle, "A Hybrid ANFIS/ABC-based Online Selective Harmonic Elimination Switching Pattern for Cascaded Multi-level Inverters of Microgrids", to be appeared in Journal of IEEE Transactions on Industrial Electronics (ISI-ranked)

- [337] Mohammad Reza Jannati Oskueea, Shahla Nikpour, Sajad Najafi Ravadanegh and G. B. Gharehpetian, "*Improved configuration for symmetric and asymmetric multilevel inverters with reduced number of circuit devices*", to be appeared in International Journal of Ambient Energy (ISI-ranked)
- [338] A. Ghafouri, J. Milimonfared and G. B. Gharehpetian, "*Fuzzy-Adaptive Frequency Control of Power System Including Microgrids, Wind Farms and Conventional Power Plants*", to be appeared in IEEE Systems Journal (ISI-ranked)
- [339] Sadegh Ghani Varzaneh, M. Abedi, G. B. Gharehpetian and A. A. Suratgar, "*Enhancement of Output Power Smoothing and Transient Stability of DFIG-Based Wind Energy Conversion System Using Optimized Controllers Parameters*", to be appeared in Electric Power Components and Systems (ISI-ranked)
- [340] Seyed Majid Madani, M. Rostami, G. B. Gharehpetian, Lance Pope, "*Inrush Current Limiting of Transformer Primary Winding with Grounded or Non-grounded Y-Connection Using Diode-Bridges*", to be appeared in IEEE Canadian Journal of Electrical and Computer Engineering
- [341] J. Nosratian Ahoor, S. Seyedtabai and G. B. Gharehpetian, "*Application of Large Scale Developed Detailed Model for Transformer Transient Studies*", to be appeared in Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE) (in Persian)
- [342] H. Karami Porzani, B. Zaker, M. Nasiri, H. Tarimoradi and G. B. Gharehpetian, "*DSTATCOMs and DGs Optimal Allocation in Order to Reduce Losses and Increase Loadability*", to be appeared in Journal of Electrical Engineering of Tabriz University (in Persian)
- [343] T. Rahimi, S. H. Hosseini, M. Abapour, M. Sabahi, G. B. Gharehpetian, "*Ordinary Surplus Configurations Reliability Analysis for Power Switches and New Surplus Structure Suggestion*", to be appeared in Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE) (in Persian)
- [344] A. Nazeri Ardakani, A. A. Khodadoost Arani, M. B. Menhaj, M. Karrari, G. B. Gharehpetian, "*A Smart Optimized Adaptive Fuzzy Controller for Frequency Control Using PSO Considering Nonlinear Aspects*", to be appeared in Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE) (in Persian)
- [345] Mahtab Parsi, Mahmoud Jourabian and G. B. Gharehpetian, "*MV Islanded Inverter-based Microgrid Security Assessment in Presence of Power and Load Disturbances Using Adaptive Fuzzy Neural Network*", to be appeared in Journal of Iranian Association of Electrical and Electronics Engineers (IAEEE) (in Persian)
- [346] Zahra Moravvej, Sajad Bagheri and G. B. Gharehpetian, "*Distinguishing among Winding Mechanical Defects, Internal and External Electrical Faults and Inrush Current in Transformers*"

Using Combined Method “, to be appeared in Journal of Electrical Engineering of Tabriz University (in Persian)

[347] M. A. Hejazi, J. Ebrahimi, M. Sabaghpour Arani and G. B. Gharehpetian, “*Transformer Winding Mechanical Defects On-line Detection Using UWB Wave Emission Channel Transfer Function Estimation*“, to be appeared in Journal of Electrical Engineering of Tabriz University (in Persian)

Invited Key Notes

[1] G. B. Gharehpetian, “*On-line Monitoring of Power Transformer Mechanical Defects Using UWB Electromagnetic Waves*”, Invited paper, 20th Iranian Conference on Electrical Engineering, Tehran, Iran, 15-17 May 2012

[2] G. B. Gharehpetian, “*Smart Distribution Systems*”, Invited paper, First Isfahan Electrical Engineering National Conference (IECC), Isfahan, Iran, 3-4 Oct. 2012

[3] G. B. Gharehpetian, “*Real-Time Simulation*”, Invited paper, Modeling and Simulation of Power Plant Equipments, Karaj, Iran, 24 Oct. 2012

[4] G. B. Gharehpetian, “*Smart Microgrids*”, Invited paper, 21st Iranian Conference on Electrical Engineering, Mashhad, Iran, 14-16 May 2013

[5] G. B. Gharehpetian, “*Transformation of Ordinary Grids to Smart Grids through Microgrids*”, Invited Speaker, Engineering Day, Tabriz, Iran, Feb. 24, 2014

[6] G. B. Gharehpetian, “*Microgrids, Entering Port to Smart Grids*”, Invited Paper, First International Congress on Technology, Communication and Knowledge, ICTCK 2014, (ICCECSG 2014), Mashhad, Iran, 26-27 Nov. 2014

[7] G. B. Gharehpetian, “*Missed Elements of Smart Microgrids*”, Invited paper, Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014

[8] H. Karami Porzani, G. B. Gharehpetian, Y. Norouzi, M. S. Akhavan Hejazi, “*Feasibility Study on On-line and Simultaneous Transformer Winding Radial Deformation and PD Localization Using Electromagnetic Waves*”, Invited paper, 2nd International Transformer Conference and Exhibition, ITCE 2015, Tehran, Iran, 1-2 Sep., 2015

[9] M. Ghorat, B. Zaker, G. B. Gharehpetian, “*Advanced Technologies for Iran Future Power System*”, Invited paper, 2nd International Conference and Project Meeting on Advanced Science and Technologies for Sustainable Development in Iran (STSD 2015), Berlin, Germany, 8-12 Sep. 2015

[10] G. B. Gharehpetian, “*Novel Methods of Power Transformer Monitoring, Interdisciplinary Techniques*”, Invited paper, Future Horizons of Electrical and Computer Engineering, Seminar of The Academy of Sciences of Iran, Tehran, Iran, 29 Feb. 2016

[11] G. B. Gharehpetian, "*Flywheel Application for Frequency Regulation of Microgrids: Opportunities and Challenges*", Invited paper , 24th Iranian Conference on Electrical Engineering, Shiraz, Iran, 10-12 May 2016

[12] G. B. Gharehpetian "*Fiber Optic Sensor Application for PD Detection*", Invited paper, 3rd International Transformer Conference and Exhibition, Tehran, Iran, September 6-7, 2016

[13] G. B. Gharehpetian "*Application of Flywheel Storage System for Frequency Control of Wind Turbines and Microgrids*", Invited paper, 3rd National Conference on Energy New Technologies, Mashhad, Iran, Jan. 4-5, 2017

Conference Papers

[1] K. Y. Nikraves, G. B. Gharehpetian, "*A New Method to Calculate the State Transition Matrix and Other Functions of Matrices in Closed Form*", 9-th International Symposium of IASTED on Modeling, Identification and Control, Feb.7-10, 1989, Grindelwald, Switzerland.

[2] G. B. Gharehpetian, S. M. Kouhsari "*Decoupled AC-DC Load Flow*", 6-th International Power System Conference, Nov. 1991, Tehran, Iran (in Persian)

[3] S. H. Hosseinian, G. B. Gharehpetian, "*Harmonic Studies of Aluminum Factories in Iranian Power System*", 6-th Power System Conference, Nov. 1991, Tehran, Iran (in Persian)

[4] G. B. Gharehpetian, P. Jabedar Maralani, "*Nontypical Loads Model in Load Flow Calculations*", 7-th International Power System Conference, Nov. 1992, Tehran, Iran (in Persian)

[5] G. B. Gharehpetian, S. M. Kouhsari, "*Voltage Instability due to Operation of AC/DC Converters*", 7-th International Power System Conference, Nov. 1992, Tehran, Iran, (in Persian)

[6] G. B. Gharehpetian, S. H. Hoesinian, "*Study of Overvoltages Due to Switching of Back to Back Capacitor Banks and Limiting of their Inrush Current*", 7-th International Power System Conference, Nov. 1992, Tehran, Iran (in Persian)

[7] G. B. Gharehpetian, S. H. Hosseinian, "*Digital Computer Studies of Non Characteristic Harmonics of AC/DC Converters*", International Aegean Conference on Electrical Machinery and Power Electronics, May 1992, Kusadasi, Turkey

[8] H. Mohseni, G. B. Gharehpetian, B. Moshiri, "*Transformer Winding Oscillations Considering Core Nonlinearities*", 8-th International Power System Conference, Nov. 1993, Tehran, Iran (in Persian)

- [9] G. B. Gharehpetian, “*Die Detaillierte Transformatorwicklungsmodellierung Durch Impedanz – und Spannungsuebertragungsfunktionsmessungen*”, Jahresbericht 1994 von IHT, RWTH Aachen, Germany
- [10] G. B. Gharehpetian, “*Neue Methode zur Modellierung Einer Transformatorwicklung im MHz-Bereich*”, Jahresbericht 1995 von IHT, RWTH Aachen, Germany
- [11] G. B. Gharehpetian, H. Mohseni, M. Gehnen and K. Moeller, “*Resonance Phenomena in Inhomogeneous Transformer Winding Due to Fast Transients*”, 9-th International Symposium on High Voltage Engineering, ISH’95 28 Aug.-1 Sep. 1995, Paper No. 6756, Graz, Austria
- [12] G. B. Gharehpetian, H. Mohseni and K. Moeller, “*HF Detailed Model of Transformer Winding Based on Frequency Domain Measurements*”, 11-th International Power System Conference, Nov. 1997, Tehran, Iran
- [13] G. B. Gharehpetian, “*Modellierung von Transformatorwicklungen zur Untersuchung Schnellveraenderlicher Transienter Vorgaenge*”, Jahresbericht 1996 von IHT, RWTH Aachen, Germany
- [14] G. B. Gharehpetian, H. Mohseni, “*Transient Studies on Terminal and Internal Resonances of Transformer Windings*”, 10-th Int. Sym. on High Voltage Engineering, ISH’9725-29 Aug. 1997, Paper No. 3321, Montreal, Canada
- [15] G. B. Gharehpetian, H. Mohseni and K. Moeller, “*Power Transformer Core Performance Under FT and VFT Conditions*”, 12-th International Power System Conference, 2-4 Nov. 1997, Tehran, Iran
- [16] G. B. Gharehpetian, H. Mohseni, “*Eigenvalue Studies of Transformer Winding Detailed Model*”, 29-th Iranian Mathematics Conference, 28-31 March, 1998, Tehran, Iran, (in Persian)
- [17] G. B. Gharehpetian, H. Mohseni, “*Eigenvalue Calculation of Transformer Winding HF Model*”, 6-th Iranian Conference on Electrical Engineering, 12-14 May, 1998, Tehran, Iran, (in Persian)
- [18] G. B. Gharehpetian, H. Mohseni and K. Moeller, “*Very Fast Transient Overvoltages Due to Discontinuity of Transformer Windings*”, International Conference on Electrical Machines, ICEM’98, Sep. 2-4, 1998, Istanbul, Turkey, pp. 547-551
- [19] G. B. Gharehpetian, H. Mohseni, “*General Thermal Considerations for Transformer*”, 13-th International Power System Conference, 9-11 Nov. 1998, Tehran, Iran
- [20] A. Der Mianasian, G. B. Gharehpetian, “*Determination of Maximum Current Flow in Metro Power System based on Monte Carlo Stimulation Method*”, 7-th Iranian Conference on Electrical Engineering, 17-19 May, 1999, Tehran, Iran (in Persian)

- [21] G. B. Gharehpetian, H. Mohseni, “*Comparison of Transformer Winding Losses in Very Fast Transient Conditions*”, 7-th Iranian Conference on Electrical Engineering, 17-19 May, 1999, Tehran, Iran (in Persian)
- [22] H. Raihani, G. B. Gharehpetian, “*Turn to Turn Fault Modeling and its Effect on Frequency Response of Interleaved and Inverted Double Disks*”, 14-th International Power System Conference, Nov. 1999, Tehran, Iran (in Persian)
- [23] S. Sorooshian, A. Der Minassian, P. Ansarimehr, S. M. Batehi, G. B. Gharehpetian, “*Review of Analysis Methods of Auxiliary Service System in Steam Power Plants and Energy Consumption Optimization Methods*”, 14-th International Power System Conference, Nov. 1999, Tehran, Iran (in Persian)
- [24] G.B. Gharehpetian, M. Farmad, S. Raie, H. Mohseni, “*Transmission Losses Reduction Using Phase Shifting Transformers in Power System of Tehran Regional Electric Company*”, 14-th International Power System Conference, Nov. 1999, Tehran, Iran (in Persian)
- [25] M. Eftekharian, G.B. Gharehpetian, “*VFTO Studies of Transformer Winding with Different Winding Parts*”, 14-th International Power System Conference, Nov. 1999, Tehran, Iran (in Persian)
- [26] M. Eftekharian, G.B. Gharehpetian, “*Relation Between Maximum Flux and Voltage Gradient in Inverted and Interleaved Double Disks*”, 8-th Iranian Conference on Electrical Engineering, May. 18-20, 2000, Isfahan, Iran (in Persian)
- [27] F. Bozorgi, G.B. Gharehpetian, S.H. Hosseinian, “*UPFC Modeling Considering Switching Effect of Valves, and Suggestion of a Method for Performance Improvement*”, 8-th Iranian Conference on Electrical Engineering, May 18-20, 2000, Isfahan, Iran (in Persian)
- [28] R. Barati, S. Sorooshaian, G.B. Gharehpatian, “*Induction Motors and Their Mechanical Loads Modeling in Optimal Power Flow Program for Energy Consumption Minimization in Auxiliary Service System and Industrial Distribution Networks*”, 15-th International Power System Conference, Nov. 2000, Tehran, Iran (in Persian)
- [29] M. Ghafarpour, G.B. Gharehpetian, “*Voltage Magnification Studies of Auxiliary Service System of NEKA Steam Power Plant*”, 15-th International Power System Conference, Nov. 2000, Tehran, Iran (in Persian)
- [30] M. Mazadi, G.B. Gharehpetian, “*Studies of Surge Voltage Transfer From HV to LV Winding Based on Detailed Modeling of Windings*”, 15-th International Power System Conference Nov. 2000, Tehran, Iran (in Persian)
- [31] Y. Mohamadzadeh, G.B. Gharehpetian, “*A Method to Determine Probability Distribution Function of Transformer Winding Overvoltages*”, 15-th International Power System Conference, Nov. 2000, Tehran, Iran (in Persian)

- [32] K. Rahmani, S. Aliasghari, G.B. Gharehpetian, “*Network Short Circuits Effects on Life Expectancy of Power Transformer of NEKA Steam Power Plant*”, 15-th International Power System Conference, Nov. 2000, Tehran, Iran (in Persian)
- [33] A.A. Ghadimi, G.B. Gharehpetian, “*Conecting Remote Rural Networks Using HVDC-Light System*”, 4-th Conference on Rural Areas and Energy, March 2001, Chahbahar, Iran (in Persian)
- [34] R. Barati, S. Sorooshain, G.B. Gharehpetian, “*Modeling and Optimization of Energy Consumption in Auxiliary Service System of NEKA Steam Power Plant*”, 9-th Iranian Conference on Electrical Engineering, May 2001, Tehran, Iran (in Persian)
- [35] S.H. Hosseini, S.M. Batae, G.B. Gharehpetian, “*Transformer Winding for VFTO Studies Based on N-Phase Transmission Line Approach*”, 9-th Iranian Conference on Electrical Engineering, May 2001, Tehran (in Persian)
- [36] R. Maktoobian, G.B. Gharehpetian, B. Vahidi, “*Design of Optimal Linear Limiters for Power System Transient Overvoltage Protection*”, 9-th Iranian Conference on Electrical Engineering, May 2001, Tehran, Iran (in Persian)
- [37] M. Lenz, K. Feser, G.B. Gharehpetian, “*Detection and Localization of Short Circuit in Transformer Windings Based on Wavelet Analysis*”, 12-th International Symposium on High Voltage Engineering, ISH 2001, 20-24 Aug. 2001, Paper No. 6-20 Bangalore, India
- [38] H.S. Tabari, G.B. Gharehpetian, “*Suggestion of a Proper Probability Distribution Function for Lightning*”, 3-th Conference on Probability and Stochastic Process, 29-30 Aug. 2001 (in Persian)
- [39] G.B. Gharehpetian, H. Rastegar, M. Mohammadi, “*Power System Stability Improvement Using Thyristor Controlled Interphase Power Controller*”, 36-th Universities Power Engineering Conference, UPEC 2001, 12-14 Sep. 2001, Paper No. 439, Swansea, UK
- [40] M. Mohammadi, G.B. Gharehpetian, H. Rastegar, “*Power Systems interconnection by Phase Shifting Transformers*”, 1-st Iranian Seminar on Transformers, Sep. 2001, Zanjan, Iran (in Persian)
- [41] S. Gorjani, S.H. Hosseinian, G.B. Gharehpetian, “*Transformer Inrush Current Detection Using Wavelet Technique*”, 16-th International Power System Conference, 22-24 Oct. 2001, Tehran, Iran (in Persian)
- [42] M. Mohammadi, G.B. Gharehpetian, H. Rastegar, “*Transient Stability Improvement Using TC-IPC*”, 16-th International Power System Conference, 22-24 Oct. 2001, Tehran, Iran (in Persian)
- [43] A. Yazdani, G.B. Gharehpetian, S.M. Kouhsari, “*Application of Optimal Power Flow Idea for Placement and Adjustment of Phase Shifting Transformers to Minimize Transmission*”

Losses". 16-th International Power System Conference, 22-24 Oct. 2001, Tehran, Iran (in Persian)

[44] H. Raihani, G.B. Gharehpetian, "*A Method for Turn-to-Turn Fault Detection of Transformer Windings Based on Frequency Domain Measurements*", 16-th International Power System Conference, 22-24 Oct. 2001, Tehran, Iran (in Persian)

[45] G.B. Gharehpetian, "*Transformer Winding Modeling for VFTO Studies*", First Iranian Seminar and Exhibition on Electricity, 27-29 Nov. 2001, Yerevan, Armenia

[46] P. Karimifard, G.B. Gharehpetian, S. Ghamari, "*Simulation of Train Movement Between Two Stations*", 1-st Students Conference on Rail Transportation, 18. Dec. 2001, Tehran, Iran (in Persian)

[47] G.B. Gharehpetian, M. A. Sandidzadeh, P. Karimifard, S. Ghamari, "*Chopper System Simulation of Series DC Traction Machine*", 1-st Students Conference on Rail Transportation, 18 Dec. 2001, Tehran, Iran (in Persian)

[48] P. Karimifard, M.S. Ghazizadeh, G.B. Gharehpetian, "*Voltage Profile Calculation in Electrical Rail Way With Autotransformer*", 1-th Students Conference on Rail Transportation, 18. Dec, 2001, Tehran, Iran (in Persian)

[49] P. Karimifard, G.B. Gharehpetian, M.S. Ghazizadeh, "*Chaper Control System Simulation of Series DC Traction Machine, Considering Deacceleration*", 1-st Students Conference in Rail Transportation, 18. Dec. 2001, Tehran Iran (in Persian)

[50] R. Noroozian, G.B. Gharehpetian, "*Effect of SVC Operation on Overvoltages Caused by Inrush Current of AC/DC Converter Transformer*", 10-th Iranian Conference on Electrical Engineering, 14-16 May 2002, Tabriz, Iran (in Persian)

[51] A. Farsi, H. Rastegar, G.B. Gharehpetian, "*Modeling and Simulation of Voltage Source Converter Based Transmission Systems*", 10-th Iranian Conference on Electrical Engineering, 14-16 May 2002. Tabriz, Iran (in Persian)

[52] A.A. Ghadimi, M. Abedi, H. Rastegar, G.B. Gharehpetian, "*UPFC Role in Performance Improvement of Industrial Networks Considering Motor Loads*", 10-th Iranian Conference on Electrical Engineering, 14-16 May 2002, Tabriz, Iran, (in Persian)

[53] M. Firoozian, G.B. Gharehpetian, "*Comparison of Fourier and Wavelet Transform for Fault Localization in Transmission line*", 10-th Iranian Conference on Electrical Engineering, 14-16 May 2002, Tabriz, Iran (in Persian)

[54] A. Farsi, H. Rastegar, G.B. Gharehpetian, "*HVDC-Light System, A Economical Alternative in Distribution Systems*", 7-th Electric Power Distribution Conference, 18-20 May, 2002, Tehran, Iran (in Persian)

- [55] E. Sadeghian, S.R. Hosseini, G.B. Gharehpetian, "*Review of Conventional Flow Control Methods of Electropumps and Fans in Iranian Power Plants and Suggestion of ASD Application for Energy Saving*", 3-rd Conference on Quality and Productivity in Power Industry, 17-19 June 2002 Tehran, Iran (in Persian)
- [56] A.H. Miragha, R. Barati, G.B. Gharehpetian, "*Reduction of Energy Consumption in Auxiliary Service System of Steam Power Plans*", 2-ed IASTED Conference on Power and Energy Systems, EUROPE 2002, 25-28 June 2002, Crete, Greece
- [57] A.H. Miragha, R. Barati, G.B. Gharehpetian, "*Optimal Tap Setting and VAr Compensation Effect on Energy Consumption of Auxiliary System of Steam Power Plants*", IEEE Region 10 Int. Conference on Computers, Communications, Control and Power Engineering, IEEE TENCON 2002, 28-31 Oct. 2002, Beijing, China, pp.1791-1796
- [58] M. Hosseini, G.B. Gharehpetian, A. Rezaei, "*Bus-duct and Transformer Inductance Effect on Generator Overvoltages*", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)
- [59] S.H. Hosseini, G.B. Gharehpetian, A. Farshchian, "*Evaluation and Comparison between Different Types of Electrical Auxiliary System of Steam Power Plants from the View Point of Reliability*", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)
- [60] A. Kalantari G. B. Gharehpetian, "*Evaluation of Current Chopping and Reignition Overvoltages and their Transfer to LV Side of Transformers*", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)
- [61] M.H. Nazemi, G.B. Gharehpetian, H. Javadi, "*Effect of High Voltage Cable Characteristics on Damping of Transient Overvoltages due to lightning in Combination of Line, Cable and Transformer*", 17-th Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)
- [62] S.H. Ghodsypour, G.B.Gharehpetian, V. Gohari Sadr, P. Karimifard, "*Determination of Thermal Power Plants Best Combination Using Integrated AHP and LP method*", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)
- [63] A. Ajami, S. Khanmohammadi, G.B. Gharehpetian, "*Transient Stability Enhancement of AC Transmission System Using STATCOM with Fuzzy Controller*", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran
- [64] R. Noroozian, M. Abedi, G.B. Gharehpetian, S.H. Fathi, "*Simultaneous Power Quality Conditioning in Source and Load Sides of Distribution Networks Using UPQC with Improved Control Algorithm*", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)

- [65] M. Teimouri, H. Hosseini, G.B. Gharehpetian, "New Rotating Transformation for control of Active Power line Conditioner to Suppress Harmonics and load Balancing", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)
- [66] M. Meshkin, G. B. Gharehpetian, M. Mohamadi, "Combination of MLP Neural Networks and Wavelet Analysis for Fault Detection in HVDC System", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)
- [67] A. Farsi, G.B. Gharehpetian, H. Rastegar, "Improving of VSC HVDC Operation based on Multiplex Control", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)
- [68] H. Rasoldokht, G. B. Gharehpetian, S. H. Hosseini, "Effect of Cable on Voltage Waveform of Inverter Fed Induction Motor", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)
- [69] K. Kamyar, G.B. Gharehpetian, "Some Guidelines for Reduction of Transformer Failures based on Statistical Data of Tehran Regional Electric Company", 17-th International Power System Conference, 28-30 Oct. 2002, Tehran, Iran (in Persian)
- [70] S. Porkar, B. Porkar, B. Vahidi, G.B. Gharehpetian, "Model Suggestion for Simulation of Arc in Air Blast and SF6 Circuit Breakers", 10-th Iranian Conference on Electrical Engineering, 6-8 May 2003, Shiraz, Iran (in Persian)
- [71] P. Karimi Fard, G.B. Gharehpetian, R. Noroozian, "Posibility of Typical STATCOM Installation in Iran South-East Network for Operation Condition Improvement", 10-th Iranian Conference on Electrical Engineering, 6-8 May 2003, Shiraz, Iran (in Persian)
- [72] A. Naderian Jahromi, G.B. Gharehpetian, H. Mohseni, "Life and Behavior Study of Solid Insulation of HVDC Cable", 10-th Iranian Conference on Electrical Engineering, 6-8 May 2003, Shiraz, Iran (in Persian)
- [73] K. Rahmani, G.B. Gharehpetian, M. Karrari, "Fuzzy Variable Structure Controller Design of HVDC Link to Improve Dynamic Stability of AC/DC Power System", 10-th Iranian Conference on Electrical Engineering, 6-8 May 2003, Shiraz, Iran (in Persian)
- [74] R. Noroozian, M. Abedi, G.B. Gharehpetian, S.H. Fathi, "Review of Active Power Filters and their Application Cases in Japan Distribution Networks", 8-th Electric Power Distribution Conference, 20-21 May, 2003, Tehran, Iran (in Persian)
- [75] M.H Nazemi, G.B. Gharehpetian, M. Shafiee, A.R. Allami, "Transformation of Transformer Winding Detailed Model to its terminal Model", 13-th International Symposium on High Voltage Engineering, ISH2003, 25-28 Aug 2003, Delft, Netherlands

[76] B. Hashemi, S. Montasser-Kouhsari, G.B. Gharehpetian, “*A New Approach for Modeling of Multiterminal DC System in Load Flow Programs*” IFAC Symposium on Power Plants and Power Systems Control 2003, Sep. 15-18, 2003, Seoul, Korea.

[77] A. Yazdani, G.B. Gharehpetian, S. Montasser-Kouhsari, “*A New Approach for Locating and Adjustment of Phase Shifters*” IFAC Symposium on Power Plants and Power Systems Control 2003, Sep. 15-18, 2003, Seoul, Korea.

[78] S.H. Hosseini, S.M. Batae, G.B. Gharehpetian, “*Modeling of IPC Reactors for VFTO Studies*”, First Seminar of IAEEE on Flexible AC Transmission Systems (FACTS), 9 Oct. 2003, Tehran, Iran (in Persian)

[79] S.M. Batae, G.B. Gharehpetian, M. Arefian “*Series Connection of IGBTs for HVDC-light Application*”, First Seminar of IAEEE on Flexible AC Transmission Systems (FACTS), 9 Oct. 2003, Tehran, Iran (in Persian)

[80] K. Kamyar, G.B. Gharehpetian, “*Case Study of No.5 63kV/230kV Transformer of North Ray Substation and Suggestion of Some Guidelines for Reduction of Similar Failure*”, 18-th International Power System Conference, 20-22 Oct. 2003, Tehran, Iran (in Persian)

[81] A. Rezai, H. Mohseni, G.B. Gharehpetian, “*Instability of HVDC Systems because of Converter Transformer Saturation and Harmonics Interaction*”, 18-th International Power System Conference, 20-22 Oct. 2003, Tehran, Iran (in Persian)

[82] A. Farsi, R. Noroozian, G.B. Gharehpetian, “*VSC-HVDC System, A Solution for Power Quality Problems of Industrial Distribution Networks*”, 18-th International Power System Conference, 20-22 Oct. 2003, Tehran, Iran (in Persian)

[83] G.B. Gharehpetian, M. Farmad, S. Raee, H. Mohseni, “*Effect of Network Development on Phase Shifting Transformer Allocation in Iran Power System*”, 18-th International Power System Conference, 20-22 Oct. 2003, Tehran, Iran (in Persian)

[84] R.Noroozian, M. Abedi, G.B. Gharehpetian, S.H. Fathi, “*A New Control Approach of UPQC for General Power Quality Improvement*”, 18-th International Power System Conference, 20-22 Oct. 2003, Tehran, Iran (in Persian)

[85] S.H. Hosseini, S.M. Batae, G.B. Gharehpetian, “*Modeling of IPC Transformers for VFTO Studies*”, 18-th International Power System Conference, 20-22 Oct. 2003, Tehran, Iran (in Persian)

[86] M.H. Nazemi, A.R. Allami, G.B. Gharehpetian, M. Shafiee, “*A New Approach for Derivation of Reduced Order Model from Transformer Detailed Model*”, 18-th International Power System Conference, 20-22 Oct. 2003, Tehran, Iran

- [87] R. Noroozian, G.B. Gharehpetian, S.H. Fathi, M. Abedi, “*Comparison of SCC and TCR, Harmonic Studies*”, 9-th Electric Power Distribution Conference, 28-29 April, 2004, Zanjan, Iran (in Persian)
- [88] M. Sadeghian, A. Afshar, G.B. Gharehpetian, S.O. Moosavi, “*Ranking of 20kV Feeders in Saari Distribution System for Automation and Optimal Utilization Studies*”, 9-th Electric Power Distribution Conference, 28-29 April, 2004, Zanjan, Iran (in Persian)
- [89] M. Sadeghian, G.B. Gharehpetian, M. Shafee, S.O. Moosavi, “*Saari Town Distribution System Automation and System Outage Time Energy Estimation*”, 9-th Electric Power Distribution Conference, 28-29 April, 2004, Zanjan, Iran (in Persian)
- [90] K. Rahmani, G.B. Gharehpetian, M. Karrari, “ *H_{∞} Robust Structure Controller Design to Improve Dynamic Stability of AC/DC Power System*”, 12-th Iranian Conference on Electrical Engineering, 11-13 May 2004, Mashhad, Iran (in Persian)
- [91] N. Taghizadegan, G.B. Gharehpetian, “*Transient Over-voltages of Industrial Loads, Problems and Solutions*”, 12-th Iranian Conference on Electrical Engineering, 11-13 May 2004, Mashhad, Iran (in Persian)
- [92] S. Ghahghaezadeh, G.B. Gharehpetian, “*AC and DC Arc Comparison based on Physical Models*”, 12-th Iranian Conference on Electrical Engineering, 11-13 May 2004, Mashhad, Iran (in Persian)
- [93] M. Sadeghian, J. Poshtan, R. Ghassemi, G.B. Gharehpetian, “*Sensor-less On-line Parameter Estimation of Induction Motor Using Kalman Filter*”, 12-th Iranian Conference on Electrical Engineering, 11-13 May 2004, Mashhad, Iran (in Persian)
- [94] A. Khoshoui, J. Moghani, G.B. Gharehpetian, “*Modeling and Simulation of VSC-HVDC systems Using Switching Functions*”, 12-th Iranian Conference on Electrical Engineering, 11-13 May 2004, Mashhad, Iran (in Persian)
- [95] M. Sadeghian, M. Shafiee, G.B. Gharehpetian, M. Mardaneh and M. Hosseini, “*Estimation of Transient Parameters of Transformer HV Winding Using Artificial Neural Networks*”, 4-th WSEAS Int. Conference on Power Systems and Electromagnetic Compatibility, ICOPEMC2004, Izmir, Turkey, September 14-16, 2004
- [96] M. Nafar M. Abedi G.B.Gharehpetian S.Taghipour B. Yousefpour, ”Locating Partial Discharge in Transformer by Wavelet”, 4-th WSEAS Int. Conference on Power Systems and Electromagnetic Compatibility, ICOPEMC2004, Izmir, Turkey, September 14-16, 2004
- [97] M. Mohammadi, G.B. Gharehpetian, “*Thyristor Controlled Interphase Power Controller Modeling for Power System*”, IEEE Region 10 Int. Conference on Computers, Communications, Control and Power Engineering, IEEE TENCON 2004, 21-24 Nov. 2004, Chiang Mai, Thailand

- [98] M. Mardaneh, G.B. Gharehpetian, “*Siting and Sizing of DG Units Using GA and OPF Based Technique*”, IEEE Region 10 Int. Conference on Computers, Communications, Control and Power Engineering, IEEE TENCON 2004, 21-24 Nov. 2004, Chiang Mai, Thailand
- [99] M. Sadeghian, G.B. Gharehpetian, M. Shafiee and M. Mardaneh, “*Parameters Estimation of Transformer Winding Using Neural Networks*”, 2nd IEEE GCC Conference, Manama, Kingdom of Bahrain, 23-25 November 2004
- [100] M. Nafar, M. Abedi, G.B. Gharehpetian and B. Yousefpour, “*Partial Discharge Modeling in Transformer Winding*”, 2nd IEEE GCC Conference, Manama, Kingdom of Bahrain, 23-25 November 2004
- [101] S.H. Hosseini, G.B. Gharehpetian and B. Vahidi, “*IPC Transformer Winding VFTO Control by Using Closing Resistance*”, 19-th International Power System Conference, 22-24 Nov. 2004, Tehran, Iran (in Persian)
- [102] A. Nekahi, S. Farokhi and G.B. Gharehpetian, “*Determination of Probability Distribution Function of Single-Phase Transformer Inrush Current by Monte Carlo Method*”, 19-th International Power System Conference, 22-24 Nov. 2004, Tehran, Iran (in Persian)
- [103] K. Rahmani, G.B. Gharehpetian and M. Karrari, “*Design of Robust Modulation Controller Based on μ Synthesis for Dynamic Stability Improvement of AC/DC Power System*”, 19-th International Power System Conference, 22-24 Nov. 2004, Tehran, Iran
- [104] M. Mohammadi, G.B. Gharehpetian and M. Karrari, “*TC-IPC Modeling for Low Frequency Oscillation Studies*”, 19-th International Power System Conference, 22-24 Nov. 2004, Tehran, Iran (in Persian)
- [105] A. Rouhbakhsh, M. Nafar, G.B. Gharehpetian and M. Abedi, “*PD Locating in Transformers Using Signal Energy Index*”, 19-th International Power System Conference, 22-24 Nov. 2004, Tehran, Iran (in Persian)
- [106] M. Nafar, M. Abedi, G.B. Gharehpetian and B. bahmani, “*Locating Partial Discharge in Transformer by Wavelet*”, 19-th International Power System Conference, 22-24 Nov. 2004, Tehran, Iran (in Persian)
- [107] L. Zahedi, M. S. Naderi and G.B. Gharehpetian, “*A New Method to Reduce Unbalanced Load Current in Residential and Commercial Distribution Networks*”, 19-th International Power System Conference, 22-24 Nov. 2004, Tehran, Iran (in Persian)
- [108] M. Mohammadi and G.B. Gharehpetian, “*Study of Power System Stability Using Thyristor Controlled – Interphase Power Controller*”, 7-th WSEAS Int. Conference on Automatic Control, Modeling and Simulation, ACMOS’05, Praugue, Czech Republic, March 13-15, 2005

- [109] R. Noroozian, G.B. Gharehpetian, M. Abedi and S.H. Fathi, “*Performance Studies of Custom Power Devices in Industrial Networks*”, 10-th Electric Power Distribution Conference, 4-5 May, 2005, Tabriz, Iran (in Persian)
- [110] M.R. Bank Tavakoli and G.B. Gharehpetian, “*Voltage Injection Method Improvement for Mitigation of DC-Side Harmonics in HDVC systems*”, 13-th Iranian Conference on Electrical Engineering, 10-13 May 2005, Zanjan, Iran (in Persian)
- [111] M. Sabahi, P. Karimi Fard and G.B. Gharehpetian “*Transformer Transient Parameters Estimation based on RLS Method Using Networks Disturbances*”, 13-th Iranian Conference on Electrical Engineering, 10-13 May 2005, Zanjan, Iran (in Persian)
- [112] B. Yousefpour, G.B. Gharehpetian, R. Noroozian and M. Nafar, “*Control of Micro-turbine in Distribution System using Voltage and Power Controls*”, 13-th Iranian Conference on Electrical Engineering, 10-13 May 2005, Zanjan, Iran (in Persian)
- [113] M. Mardaneh and G.B. Gharehpetian, “*DG Allocation in Distribution Systems Using OPF and GA Combination*”, 13-th Iranian Conference on Electrical Engineering, 10-13 May 2005, Zanjan, Iran (in Persian)
- [114] R. Noroozian, G.B. Gharehpetian, M. Abedi and S.H. Fathi, “*Feasibility Studies of Custom Power Devices Using Distribution System Measurements in Tehran*”, 13-th Iranian Conference on Electrical Engineering, 10-13 May 2005, Zanjan, Iran (in Persian)
- [115] S. E. Jafarabadi and G.B. Gharehpetian, “*A New Method to Determine Snubber Circuits Losses of HVDC Thyristor Valves*”, 13-th Iranian Conference on Electrical Engineering, 10-13 May 2005, Zanjan, Iran (in Persian)
- [116] B. Yousefpour, G.B. Gharehpetian, R. Noroozian and M. Nafar ”*Simultaneous Control of Voltage and Power of Micro-Turbine in Distribution Network*”, 18th International Conference & Exhibition on Electricity Distribution (CIRED 2005), 6-9 June 2005, Turin, Italy
- [117] S.M.H. Hosseini, M. Vakilian and G.B. Gharehpetian, “*Modeling of IPC Transformer Windings for Fast Transient Studies*”, 6th International Conference on Power Systems Transients (IPST), 19-23 June 2005 Montreal, Canada
- [118] M. G. Hosseini Aghdam and G.B. Gharehpetian, “*Modeling of Switching and Conduction Losses in Three-Phase SPWM VSC Using Switching Function Concept*”, 2005 IEEE St. Petersburg PowerTech Conference, 27-30 June 2005, St. Petersburg, Russia
- [119] K. Rahmani, G.B. Gharehpetian and M. Karrari, “*Robust Design of a Damping Controller for AC/DC Power System Using μ -Synthesis*”, 2005 IEEE St. Petersburg PowerTech Conference, 27-30 June 2005, St. Petersburg, Russia
- [120] K. Sheshyekani and G.B. Gharehpetian, “*A Wavelet-Based Energy Profile Approach for*

Discrimination Between Fault and Inrush Current”, 2005 IEEE St. Petersburg PowerTech Conference, 27-30 June 2005, St. Petersburg, Russia

[121] M. Mohammadi, A. Rahimi-Kian and G.B. Gharehpetian, “*A Fuzzy-Logic Based Modeling of Strategic Bidding in Double-Sided Electricity Auctions*”, 9th Spanish Portuguese Congress on Electrical Engineering (9CHLIE), 30 June- 2 July 2005, Marbella, Spain

[122] H.R. Akbari and G.B. Gharehpetian, “*A Modified Modulation Technique for Multilevel Converters With a Wide Range of Modulation Indexes and Minimized Harmonic Distortion at Low Indexes*”, 9th Spanish Portuguese Congress on Electrical Engineering (9CHLIE), 30 June- 2 July 2005, Marbella, Spain

[123] S.M.H. Hosseini, M. Vakilian and G.B. Gharehpetian, “*Effect of Closing Resistance on VFTOs of IPC Transformer Windings*”, 14-th International Symposium on High Voltage Engineering (ISH), 25-29 August 2005, Beijing, China

[124] M.H. Nazemi and G.B. Gharehpetian, “*Influence of Mutual Inductance Between HV and LV Windings on Transferred Overvoltages*”, 14th International Symposium on High Voltage Engineering (ISH), August 25-29, 2005, Beijing, China

[125] S.Taghipour Boroujeni and G.B. Gharehpetian , “*Transmission System Planning Improvement Using Sensitivity Coefficient Application in GA* ”, 20-th International Power System Conference, 14-16 Nov. 2005, Tehran, Iran (in Persian)

[126] D. Nazarpour, S.H. Hosseini and G.B. Gharehpetian , “*A New UPFC Model for Dynamic Studies and Power System Oscillation Damping*”, 20-th International Power System Conference, 14-16 Nov. 2005, Tehran, Iran (in Persian)

[127] K. Kamiar and G.B. Gharehpetian , “*Distribution Transformers Outage Reduction Considering Failure Statistics*”, 20-th International Power System Conference, 14-16 Nov. 2005, Tehran, Iran (in Persian)

[128] A. Shirvani Borojeni and G.B. Gharehpetian , “*Impact of HV and LV Winding Capacitive and Inductive Couplings on lightning and Switching Overvoltages*”, 20-th International Power System Conference, 14-16 Nov. 2005, Tehran, Iran (in Persian)

[129]] S.M.H. Hosseini and G.B. Gharehpetian, “*Powerformer and Its economical feasibility studies in Mazandaran Namarsetagh Power Plant*”, 14-th Iranian Conference on Electrical Engineering, 16-18 May 2006, Tehran, Iran (in Persian)

[130] M. Monfared and G.B. Gharehpetian, “*Cable Application and its Impact on Indirect Stroke Overvoltages of Distribution Transformer*”, 14-th Iranian Conference on Electrical Engineering, 16-18 May 2006, Tehran, Iran (in Persian)

- [131] M. Karami, A. Gholami, and G.B. Gharehpetian, “*PD Detection and Localization in Power Transformers using Wavelet Transform and Energy of Voltage Signal*”, 14-th Iranian Conference on Electrical Engineering, 16-18 May 2006, Tehran, Iran (in Persian)
- [132] F .Shahniaand and G.B. Gharehpetian, “*Distributed Generation and Short Circuit Studies of Distribution Systems*”, 14-th Iranian Conference on Electrical Engineering, 16-18 May 2006, Tehran, Iran (in Persian)
- [133] F .Shahniaand and G.B. Gharehpetian, “*Lightning Transient Studies of Traction Systems*”, 14-th Iranian Conference on Electrical Engineering, 16-18 May 2006, Tehran, Iran (in Persian)
- [134] M. Nourolahi, R. Hosseini Abardeh and G.B. Gharehpetian, “*Determination of Power Transformer Cooling Parameters based on Transformer Thermal Modeling*”, 14-th Annual (International) Conference of Mechanical Engineering, 16-18 May 2006, Isfahan, Iran (in Persian)
- [135] F .Shahniaand and G.B. Gharehpetian, “*Lightning and Switching Transient Overvoltages in Power Distribution Systems Feeding DC Electrified Railways*”, 3-rd International Conference on Technical and Physical Problems in Power Engineering (TPE-2006), May 29-31, 2006, Ankara, Turkey.
- [136] F .Shahnia and G.B. Gharehpetian, “*Short Circuit Fault Transient Studies of Power Distribution Systems Including Dispersed Generation*”, 3-rd International Conference on Technical and Physical Problems in Power Engineering (TPE-2006), May 29-31, 2006, Ankara, Turkey.
- [136] M.S. Naderi, G.B. Gharehpetian, M. Abedi, and T.R. Blackburn, “*An Experimental investigation and Wavelet Based Detection of Arc Characteristics During Impulse Test*”, 8-th International Conference on Properties and Application of Dielectric Materials (ICPADM) , June 26-30, 2006, Bali, Indonesia
- [137] M.S. Naderi, G.B. Gharehpetian, M. Abedi, and T.R. Blackburn, “*Application of Soft-Threshold Wavelet De- Noising Method in the Characterization of Single Arc Discharge During Impulse Test*”, 8-th International Conference on Properties and Application of Dielectric Materials (ICPADM) , June 26-30, 2006, Bali, Indonesia
- [138] M.H. Nazemi, and G.B. Gharehpetian, “*Reduced Order Model of Power Transformers for Power System Transient Studies*”, Modern Electric Power Systems (MEPS’06), Sep. 6-8, 2006, Wroclaw, Poland.
- [139] E. Babaei, S.H. Hosseini, G.B. Gharehpetian and M. Sabahi, “*A New Switching Strategy for 3-Phase to 2-Phase Matrix Converters*“, SICE - ICASE International Joint Conference 2006 (SICE - ICCAS 2006), October 18-21, 2006, Busan, Korea
- [140] M. Farmad, S. Farhangi, S. Afsharnia and G.B. Gharehpetian “*An Efficient Algorithm for Determining the Values of elements of Interphase Power Controller as a Fault Limiter*“, 2006

Power Systems Conference and Exposition (PSCE 2006), October 29 - November 1, 2006, Atlanta, Georgia, U.S.A

[141] E. Goodarzi, G.B. Gharehpetian, M. Ghorat and B. Moradzadeh “*Effects of ZnO Application in Circuit Breakers for TRV Reduction*”, 21-th International Power System Conference, Nov. 13-15, 2006, Tehran, Iran (in Persian)

[142] M.B. Abolhassani Jabali, M. Mohammadi, M. Abedi and G.B. Gharehpetian, “*Method and Index Suggestion for Power System Events Security Ranking* ”, 21-th International Power System Conference, Nov. 13-15, 2006, Tehran, Iran (in Persian)

[143] M. Karami Ghezeli, A. Gholami and G.B. Gharehpetian “*A New Method for Detection of PD in 2 main insulations of Power Transformers*”, 21-th International Power System Conference, Nov. 13-15, 2006, Tehran, Iran (in Persian)

[144] A. Ajami, S.H. Hosseini, and G.B. Gharehpetian, “*Application of New FACTS Device (CUPFC) In the Transient Stability Enhancement of AC Transmission Systems*”, 21-th International Power System Conference, Nov. 13-15, 2006, Tehran, Iran

[145] S.M.H. Hosseini, M. Vakilian, and G.B. Gharehpetian, “*Frequency Dependent Dielectric Constant and Losses Modeling in Power Transformers* ”, 21-th International Power System Conference, Nov. 13-15, 2006, Tehran, Iran (in Persian)

[146] M. Mahmoodi, G.B. Gharehpetian, M. Abedi and R. Noroozian “*Voltage Sag Elimination in DC Parallel Distribution System without Using Custom Power Devices*”, 21-th International Power System Conference, Nov. 13-15, 2006, Tehran, Iran (in Persian)

[147] M. Akhavan Hejazi, G.B. Gharehpetian, A. Mohammadi, “*A New Method for Axial Displacement Detection in Transformers Using Electromagnetic Waves*”, 21-th International Power System Conference, Nov. 13-15, 2006, Tehran, Iran (in Persian)

[148] M. Akhavan Hejazi, G.B. Gharehpetian, and A. Mohammadi, “*Effect of Oil on Transformer Monitoring Using Electromagnetic Waves*”, 21-th International Power System Conference, Nov. 13-15, 2006, Tehran, Iran (in Persian)

[149] B. Vahidi M.R. Bank Tavakoli G.B. Gharehpetian and S.H. Hosseinian, “*An Algorithm for Evaluating Inrush Current in Transformers Using Jiles-Atherton Theory of Ferromagnetic Hysteresis*”, IEEE Region 10 Int. Conference on Computers, Communications, Control and Power Engineering, IEEE TENCON 2006, Nov. 14-17, 2006, Hong Kong

[150] M. Mahmoodi, G.B. Gharehpetian, M. Abedi, and R. Noroozian “*A Powerful Control Strategy for Source Converters and a Novel Load-Generation Voltage Control Scheme for DC Voltage Determination in DC Distribution System*”, First International Power and Energy Conference (PECon 2006), Nov. 28-29, 2006, Putra Jaya, Malaysia.

- [151] M. Mahmoodi, G.B. Gharehpetian M. Abedi, and R. Noroozian “*Novel and Simple Control Strategies for Fuel Cell and Source Converters of DC Distribution Systems*“, First International Power and Energy Conference (PECon 2006), Nov. 28-29, 2006, Putra Jaya, Malaysia.
- [152] M. Mahmoodi, G.B. Gharehpetian M. Abedi, and R. Noroozian “*Control Systems for Independent Operation of Parallel Connected DG Units in Distribution DC Systems*“, First International Power and Energy Conference (PECon 2006), Nov. 28-29, 2006, Putra Jaya, Malaysia.
- [153] J. Olamaei, G.B. Gharehpetian and T. Niknam, "An Approach Based on Particle Swarm Optimization for Distribution Feeder Reconfiguration Considering Distributed Generators", Power Systems 2007 Conference, March 13-16, 2007, Clemson, SC, USA
- [154] N. Moadabi M. Mahmoodi and G.B. Gharehpetian, "Control Systems of Distributed Generation Modules Aggregated by Cascaded Boost Converters", International Conference on Renewable Energies and Power Quality, ICREPQ'07 , March 28-30, 2007, Seville, Spain
- [155] S. Esmaeli and G.B. Gharehpetian, "A New ISPWM Switching Technique for THD Reduction in Custom Power Devices", International Conference on Renewable Energies and Power Quality ICREPQ'07 , March 28-30, 2007, Seville, Spain
- [156] J. Olamaei, G.B. Gharehpetian and T. Niknam, "An Approach Based on Particle Swarm Optimization for Distribution Feeder Reconfiguration Considering Distributed Generators", 19-th International Conference on Electricity Distribution, CIRED 2007, Vienna, May 21-24, 2007
- [157] Z. Ghofrani Jahromi, M. Abedi and G.B. Gharehpetian, “*Weighting Factor Selection for Contingency Ranking Associated with Voltage Security in Power Systems using AHP Method*”, 15-th Iranian Conference on Electrical Engineering, 15-17 May 2007, Tehran, Iran
- [158] A. Damaki, G.B. Gharehpetian, M. Ghadami and A. Ghaempanah, “*A New Method for Synchronous Generator Modeling*”, 15-th Iranian Conference on Electrical Engineering, 15-17 May 2007, Tehran, Iran (in Persian)
- [159] M. Farmad, S. Farhangi, S. Afsharnia and G.B. Gharehpetian, “*Design and Selection of Interphase Power Controller as a Fault Limiter for Iran Electric Grid*”, 15-th Iranian Conference on Electrical Engineering, 15-17 May 2007, Tehran, Iran (in Persian)
- [160] M. B. Abolhasani, A. Mohseni, H. Modaghegh, M. Abedi and G.B. Gharehpetian, “*Assessment of Ancillary Services in Iran Grid*”, 15-th Iranian Conference on Electrical Engineering, 15-17 May 2007, Tehran, Iran (in Persian)
- [161] M. G. Hosseini Aghdam, S.H. Fathi and G.B. Gharehpetian, "Elimination of Harmonics in a Multi-Level Inverter with Unequal DC Sources Using the Homotopy Algorithm" 2007 IEEE International Symposium on Industrial Electronics, ISIE2007, June 4-7, 2007, Vigo, Spain.

- [162] S.M.H. Hosseini, M. Vakilian and G.B. Gharehpetian, "*An Improved MTL Modeling of Transformer Winding*", 7th International Conference on Power Systems Transients, June 4-7, 2007, Lyon, France
- [163] M.Hojabri, M.A. Tavakoli and G.B. Gharehpetian, "*DC Distribution Networks for Home*", 9th International Congress on Energy, Ecology Economy, June 7-9, 2007, Baku, Azerbaijan
- [164] M. Hejazi, G. B. Gharehpetian and A. Mohammadi, "*Characterization of On-line Monitoring of Transformer Winding Axial Displacement Using Electromagnetic Waves*", 15th International Symposium on High Voltage Engineering, ISH 2007, Aug. 27-31, 2007, Ljubljana, Slovenia
- [165] M. Hejazi, G. B. Gharehpetian and A. Mohammadi, "*On-line Monitoring of the Radial Deformation of Transformer Winding using Radar Cross Section*", 15th International Symposium on High Voltage Engineering, ISH 2007, Aug. 27-31, 2007, Ljubljana, Slovenia
- [166] S. M. H. Hosseini, M. Vakilian and G.B. Gharehpetian, "*Effect of Frequency Dependent Modeling of Loss Factor on Transformer Winding Overvoltages*", 15th International Symposium on High Voltage Engineering, ISH 2007, Aug. 27-31, 2007, Ljubljana, Slovenia
- [167] M.S. Naderi, G.B. Gharehpetian, T.R. Blackburn and M. Abedi, "*CWT Application for Transformers Winding Incipient Faults Localization during Impulse Test*", 15th International Symposium on High Voltage Engineering, ISH 2007, Aug. 27-31, 2007, Ljubljana, Slovenia
- [168] P. Karimifard and G.B. Gharehpetian, "*On-Line Parameter Estimation of Transformers Using Power System Transients*", 15th International Symposium on High Voltage Engineering, ISH 2007, Aug. 27-31, 2007, Ljubljana, Slovenia
- [169] H. Akbari and G.B. Gharehpetian, "*Harmonic Distortion Minimization in Multilevel Converters for a Wide Range of Modulation Indexes*", ACEMP'07 and ELECTROMOTION'07 Joint meeting, 10-12 September 2007 Bodrum Turkey
- [170] M. G. Hosseini Aghdam, S. H. Fathi and G. B. Gharehpetian, "*Comparison of OMTHD and OHSW Harmonic Optimization Techniques in Multi-Level Voltage-Source Inverter with Non-Equal DC Sources*" 7-th International Conference on Power Electronics, ICPE'07, 22-26 Oct. 2007, Daegu, Korea.
- [171] A. Sakhavati, G.B. Gharehpetian, S.H. Hosseini, G. Zarei and S. Shojaee "*Load – Frequency Improvement Controller for Two –Area Power Systems using a Novel Approach based on Genetic Algorithm*", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [172] N. Ghafarzadeh and G.B. Gharehpetian "*A New Method to Fault Location in Transmission Lines using Wavelet Transform*", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)

- [173] M. S. Naderi, G.B. Gharehpetian, M. Abedi and L. Zahedi "Arc Discharge Measurement and Investigation Across a Static Gap using Wavelet Transform", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [174] M. Mahmoodi, R. Noroozian, G.B. Gharehpetian and M. Abedi "Design of a Suitable Control System for DC/DC Converter Interconnecting Two DC Microgrids", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [175] G. H. Makarani, S.H. Hosseini and G.B. Gharehpetian "Power Quality Improvement using VSC-based HVDC multiterminal system", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [176] A. Amiri, G.B. Gharehpetian, S. Raie, M. Farmad and P. Karimifard, "Phase Shifting Transformer, As an alternative for a New Transmission Line", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [177] A. Damaki Aliabad, G.B. Gharehpetian, M. Karrari and M. Mohammadi, "A Simple Method to Allocate IPC in Tie-Lines with Consideration of Fault Current Limitation ", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [178] I. Rahimi Pardanjani, G.B. Gharehpetian, H. Askarian Abyaneh and A. Damaki, "Impact of TCSC on Transient Instability Risk of Power Plant ", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [179] S.M. M. Mir Talaie, M. Janati, A. Nasr Azadani and G.B. Gharehpetian "A Simple and New method for TCSC and TCPAR Allocation using Sensitivity Coefficients in order to Increase Power System Security", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [180] A. Damaki Aliabadi, G.B. Gharehpetian, M. Karrari and M. Mohammadi, "Inter-Area Oscillation Damping Improvement using TC-IPC ", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [181] M. Monfared and G.B. Gharehpetian "Application of Boost Converter and Superconductive Coil Combination in Variable Speed Wind Energy System", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [182] H. Yazdanpanahi, M. A. Hejazi and G.B. Gharehpetian "Non-linear Modeling of Transformer Using Hammerstein Method ", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)
- [183] M. Choopani, M. A. Hejazi , G.B. Gharehpetian and G. R. Moradi, "Determination of the Antenna Position for Detection of Transformer LV Winding Axial Displacement Using Electromagnetic Wave ", 22-th International Power System Conference, Nov. 19-21, 2007, Tehran, Iran (in Persian)

- [184] B. Abdi, A.H. Ranjbar, J. Milimonfared, and G.B. Gharehpetian, “*Reliability Calculation of DC-DC Converters and Determination of Optimum Topology Compliant with Fuel Cell Application*”, Seventh Int. Conf. on Power Electronics and Drive Systems (PEDS 2007), 27-30 November, 2007, Bangkok, Thailand
- [185] A. Shirvani Broujeni and G.B. Gharehpetian, “*A New Approach to Winding Displacement Detection of Power Transformer Using FRA Method and Electrical Forces Distribution*”, 5-th Int. Conf. on Electrical and Electronics Engineering (ELECO 2007), 5-9 December, 2007, Bursa, Turkey
- [186] A. H. Ranjbar and G.B. Gharehpetian, “*Transient Stability of Synchronous Generator in Out of Phase Synchronization*”, 5-th Int. Conf. on Electrical and Electronics Engineering (ELECO 2007), 5-9 December, 2007, Bursa, Turkey
- [187] M. Mohammadi and G.B. Gharehpetian, “*Modeling the Strategic Bidding in Competitive Electricity Markets Based on Fuzzy Logic*”, 5-th Int. Conf. on Electrical and Electronics Engineering (ELECO 2007), 5-9 December, 2007, Bursa, Turkey
- [188] M. Monfared and G. B. Gharehpetian, “*Application of Boost Converter and Superconductive Coil Combination in Variable Speed Wind Energy System*”, International Conference on Power System (ICPS 2007), 12-14 December, 2007, Bangalore, India
- [189] H. Yazdanpanahi, M. A. Hejazi G. B. Gharehpetian and M. Karrari, “*Non-linear Modeling of Transformer Using Hammerstein Method*”, International Conference on Power System (ICPS 2007), 12-14 December, 2007, Bangalore, India
- [190] I. Rahimi Pordanjani, H. Askarian Abyanehand, G. B. Gharehpetian and A. Damaki Aliabadi, “*The Effect of TCSC on Transient Instability Risk*”, International Conference on Power System (ICPS 2007), 12-14 December, 2007, Bangalore, India
- [191] E. Nasr Azadani, G. B. Gharehpetian and G. H. Riahy, “*Offshore Wind Farm Based on Multiterminal HVDC*”, International Conference on Power System (ICPS 2007), 12-14 December, 2007, Bangalore, India
- [192] M. Mahmoodi, R. Noroozian, G. B. Gharehpetian and M. Abedi, “[*A Suitable Power Transfer Control System for Interconnection Converter of DC Microgrids*](#)”, International Conference on Renewable Energies and Power Quality, ICREPQ'08 , March 12-14, 2008, Santander, Spain
- [193] H.R. Baghaee, M. Mirsalim, .M.Ale-Emran, M. Abedi and G.B. Gharehpetian, “[*Power Factor Improvement of DC/DC Converter of Micro-Turbines*](#)”, International Conference on Renewable Energies and Power Quality, ICREPQ'08 , March 12-14, 2008, Santander, Spain

- [194] B. Abdi, A.H. Ranjbar, K. Malekian, J. Milimonfared and G.B. Gharehpetian, "[A Method to Improve Parallel Performance of High Current Semiconductor Switches](#)", International Conference on Renewable Energies and Power Quality, ICREPQ'08 , March 12-14, 2008, Santander, Spain
- [195] H. Ranjbar, B. Abdi, J. Milimonfared and G.B. Gharehpetian, "[Reliability Enhancement of Fuel Cell DC-DC Converter in High Power Applications](#) ", International Conference on Renewable Energies and Power Quality, ICREPQ'08 , March 12-14, 2008, Santander, Spain
- [196] S. A. Ale-Emran, M. Forghani, M. Abedi and G.B. Gharehpetian, "[Combined Operation of UPQC and Fuel Cell with Common DC Bus](#) ", International Conference on Renewable Energies and Power Quality, ICREPQ'08 , March 12-14, 2008, Santander, Spain
- [197] S. M. Ale-Emran, H. R. Baghaee, M. Abedi and G. B. Gharehpetian, "[Analysis the Islanding Mode of Combined Operation of DG and UPQC in Unbalanced Distribution System](#)", International Conference on Renewable Energies and Power Quality, ICREPQ'08 , March 12-14, 2008, Santander, Spain
- [198] M. G. Hosseini Aghdam, S. H. Fathi and G. B. Gharehpetian, "[A Novel Carrier-Based PWM Method for THD Reduction in Asymmetric Multi-Level Inverter](#)", International Conference on Renewable Energies and Power Quality, ICREPQ'08 , March 12-14, 2008, Santander, Spain
- [199] N. Ghasemi, M. Abedi, H. Rastegar and G.B. Gharehpetian, "[Hybrid Distributed Generation Units PEM Fuel Cell and Microturbine](#)", IEEE International Conference on Industrial Technology, ICIT 2008, , 21-24 April 2008, China
- [200] S.M. Ale Emran, M. Abedi, and G.B. Gharehpetian, "*Modeling and Simulation of Dynamic behavior of On-Grid Photo-Voltaic Systems*", 13-th Electric Power Distribution Conference, 30 April-1 May, 2008, Zibakenar, Iran (in Persian)
- [201] E. Nasr, G.B. Gharehpetian, M. Janati and M.M. Mirtalae "*Off-Shore Wind Farm Using Multiterminal HVDC Based on Voltage Source Convertors*", 16-th Iranian Conference on Electrical Engineering, 13-15 May 2008, Tehran, Iran (in Persian)
- [202] M. J. Sanjari, M. Mohammadi and G.B. Gharehpetian "*Static Security Assessment in Power System Using SVM*", 16-th Iranian Conference on Electrical Engineering, 13-15 May 2008, Tehran, Iran (in Persian)
- [203] H.R. Baghaee, S. Jazebi and G.B. Gharehpetian "*Optimal Multi-Type FACTS Allocation using Differential Evolution Algorithm to Improve Power System Security*", 16-th Iranian Conference on Electrical Engineering, 13-15 May 2008, Tehran, Iran (in Persian)
- [204] F. Mahmoodian Fard , M. Mohammadi and G.B. Gharehpetian "*Static Security Assessment of Power System Using Decision Trees*", 16-th Iranian Conference on Electrical Engineering, 13-15 May 2008, Tehran, Iran (in Persian)

- [205] A. Sakhavat, G.B. Gharehpetian, S. H. Hosseini, S. Shojayee, S. Jalilzadeh and G. Zareie Govar "*Improvement of Load- Frequency Controller for decentralized Power Systems Using a Novel Approach based on PSO Algorithm*", 16-th Iranian Conference on Electrical Engineering, 13-15 May 2008, Tehran, Iran (in Persian)
- [206] S. H. Hosseini, M. B. Bana Sharifian, M. Sabahi, A. Yazdanpanah and G. B. Gharehpetian, "*Bi-directional Power Electronic Transformer for Induction Heating Application*", Canadian Conference on Electrical and Computer Engineering 2008, May 4 - 7, 2008, Niagara Falls, Ontario, Canada.
- [207] M. G. Hosseini Aghdam, S. H. Fathi and G. B. Gharehpetian, "*Analnsis of Multi_Carrier PWM Methods for Asymmetric Multi-Level Inverter*", 3rd IEEE Conf. on Industrial Electronics and Applications, ICIEA 2008, June 3-5, Singapore
- [208] B. Abdi, A.H. Ranjbar, J. Milimonfared and G.B. Gharehpetian, "*Reliability Comparison of Boost PFC Converter in DCM and CCM Operating Modes* ", 19-th International Symposium on Power Electronics, Electrical Drives, Automation and Motion, 11-13 June 2008, Ischia, Italy
- [209] B. Abdi, A.H. Ranjbar, K. Malekian, J. Milimonfared and G.B. Gharehpetian, "*Problems Associated with Parallel Performance of High Current Semiconductor Switches and Their Remedy* ", 19-th International Symposium on Power Electronics, Electrical Drives, Automation and Motion, 11-13 June 2008, Ischia, Italy
- [210] S.M. Ale-Emran, M. Abedi, G.B. Gharehpetian and R. Noroozian, "*Dynamic Operation of a Photovoltaic System Connected to Distribution System*", 19-th International Symposium on Power Electronics, Electrical Drives, Automation and Motion, 11-13 June 2008, Ischia, Italy
- [211] A.H. Ranjbar, B. Abdi, J. Milimonfared and G.B. Gharehpetian, "*Reliability Considerations for Full-Bridge DC-DC Converter in Fuel-Cell Applications*", 19-th International Symposium on Power Electronics, Electrical Drives, Automation and Motion, 11-13 June 2008, Ischia, Italy
- [212] A. H. Ranjbar, B. Abdi, S. A. Nabavi-Niaki, G. B. Gharehpetian, J. Milimonfared and L. Yazdanparast, "*Reliability Comparison of Fuel-Cell DC-DC Converter in Two Cases of Using IPM Switch and Paralleling MOSFETs*", 9th IEEE Power Electronics Specialists Conference (PESC), June 15-19, 2008, Rhodes, Greece.
- [213] H. R. Baghaee, M. J. Sanjari, S. M. Mirsalim, G. B. Gharehpetian "*Power Control Strategy of a Parallel Inverter Interfaced Distributed Generation Unit Connected to a Polluted Grid*", 13th International Power Electronics and Motion Control Conference, EPE-PEMC 2008, Poznan-Poland, 1-3 September 2008
- [214] Hamid Reza Baghaee, M. J. Sanjari, S. M. Mirsalim, G. B. Gharehpetian "*Effects of the Types of Distributed Generation Units and Their Interconnections on the Fault Current Level of Networks*", 13th International Power Electronics and Motion Control Conference, EPE-PEMC 2008, Poznan-Poland, 1-3 September 2008

- [215] Hamid Reza Baghaee, M. J. Sanjari, S. M. Mirsalim, G. B. Gharehpetian " *Fault Current Limiting in Distribution System with Penetration of DG Units using A New Dual Functional Series Compensator*", 13th International Power Electronics and Motion Control Conference, EPE-PEMC 2008, Poznan-Poland, 1-3 September 2008
- [216] A. Sakhavati, G.B. Gharehpetian and S. H. Hosseini, " *Decentralized Power System Load-Frequency Control using a Novel Cost Function based on Particle Swarm Optimization (PSO)*", Technical and Physical Problems of Power Engineering, TPE-2008, University of Pitesti, 4-6 September 2008, Pitesti, Romania
- [217] Hamid Reza Baghaee, S. Jazebi, G. B. Gharehpetian and B. Vahidi " *Power System Security Improvement by Using Differential Evolution Algorithm Based FACTS Allocation*", IEEE Power India Conference, POWERCON 2008, New Delhi, India, d, 12-15 October 2008
- [218] M. Choopani, M. A. Hejazi , G.B. Gharehpetian and S.H.H. Sadeghi, " *NDT Modeling of Transformer Winding using Simplified Three Phase Core Type Transformer* ", 2-th International Conference on Technical Inspection and NDT (TINDT 2008), Oct. 2008, Tehran, Iran (in Persian)
- [219] H. Nafisi, A.H. Aghakhani, M. Abedi, G.B. Gharehpetian and A.H. Hessaminia, " *Detection of Partial Discharge Location in Power Transformers Using Fuzzy ATRmap Neural Network*", 2-ed International Conference on Modern Power Systems MPS 2008, 12-14 Nov. 2008, Cluj-Napoca, Romania
- [220] S.M. M. Mirtalaei, G.B. Gharehpetian and R. Saraf, " *Simulation of PD Propagation in HV Cables with FDTD*", 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)
- [221] H. Hashemi Dezaki, M. A. Hejazi and G.B. Gharehpetian, " *Determination of Antenna Excitation Installed on Transformer Tank to Detect Axial Displacements*", 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)
- [222] A. Vahabzadeh F. Separi and G.B. Gharehpetian, " *Effects of Different Loading Conditions on Distribution Transformers Aging*", 23-th International Power System Conference, 30 Nov.- 2 Dec., 2008, Tehran, Iran (in Persian)
- [223] H. Nafisi, A.H. Aghakhani, M. Abedi and G.B. Gharehpetian, " *Application of Fuzzy ATRmap Neural Network for Detection of Partial Discharge Location in Power Transformers*", 23-th International Power System Conference, 30 Nov.- 2 Dec., 2008, Tehran, Iran (in Persian)
- [224] S.M. H. Hosseini M. Ghafarian Niassar M. Vakilain and G.B. Gharehpetian, " *MTL Model Application to Power Transformers for PD Studies*", 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)
- [225] K. Kamyar and G.B. Gharehpetian, " *Research on AEG TRO 230/63kV Transformers Core Screen Problems in Iranian Grid and Suggestion of Guidelines*", 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)

- [226] H. Yazdanpanahi, M. Davari, S.H. Hosseini and G.B. Gharehpetian, "A Simple Approach to Determine Optimum Reserve Capacity in Deregulated Power Systems", 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)
- [227] M. Davari, H. Yazdanpanahi, O. Alizadeh Mousavi G.H. Riahy and G.B. Gharehpetian, "Comparison of Different Wind Farms Structures with AC and DC Connection, Overvoltage Point of View Due to Lightning", 23-th International Power System Conference, 30 Nov.- 2 Dec., 2008, Tehran, Iran (in Persian)
- [228] S.M. Farashbashi Astane, O. Alizadeh Mousavi G.B. Gharehpetian and H.R. Mohammadzadeh, "Black-out Risk Assessment in Transmission and Subtransmission Network of Khorasan using Monte Carlo Simulation ", 23-th International Power System Conference, 30 Nov.- 2 Dec., 2008, Tehran, Iran (in Persian)
- [229] M. Shafie, M. Rostami and G.B. Gharehpetian, "Transient Stability Improvement of AC-DC Systems by Proper Design of VSC-HVDC Power Controller", 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)
- [230] B. Asadzadeh, S.H. Hosseini and G.B. Gharehpetian, "Allocation of UPFC in Azerbaijan Grid to Increase Steady State Security", 23-th International Power System Conference, 30 Nov.- 2 Dec., 2008, Tehran, Iran (in Persian)
- [231] N. Farokhnia, S.H. Fathi, G.B. Gharehpetian, R. Noroozian and H. Ghane, "A New Method for Nonlinear Control of DSTATCOM due to Power Quality Improvement", 23-th International Power System Conference, 30 Nov.- 2 Dec., 2008, Tehran, Iran (in Persian)
- [232] H. Toodeji, S.H. Fathi and G.B. Gharehpetian, "New Power Management in Integrated System of UPQC and DG", 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)
- [233] M. Nasiri, M. Pishvaei and G.B. Gharehpetian, "A New Compensation Method for Nonlinear Unbalanced Loads", 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)
- [234] S. Jazebi, H.R. Baghae and G.B. Gharehpetian, "Design of UPFC Controller Based on Differential Evolution Algorithm and Neural Networks to Improve Power System Stability", 23-th International Power System Conference, 30 Nov.- 2 Dec., 2008, Tehran, Iran (in Persian)
- [235] M. Gholami, H. Yazdanpanahi and G.B. Gharehpetian, "An approach to Find Most Flexible Plan among Solutions of Transmission Expansion Planning Problem", 23-th International Power System Conference, 30 Nov.- 2 Dec., 2008, Tehran, Iran (in Persian)
- [236] M. Sargangzadeh S.H. Hosseini, M. B. B. Sharifian and G.B. Gharehpetian, "Using Photovoltaic Arrays at Distributed networks to Supply Local Loads and Decrease Power Quality

Problems”, 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)

[237] A. Sakhavati G.B. Gharehpetian and S.H. Hosseini, ”*Decentralized Load-Frequency Control of Power System based Quantitative Feedback Theory using Particle Swarm Optimization*”, 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)

[238] H. Afshar, G.B. Gharehpetian, F. Darabi and S.M. Mousavi Sangdehi, ”*Dynamic Voltage Restorer with Sliding Mode Control at Medium Voltage Level*”, 23-th International Power System Conference, 30 Nov. - 2 Dec., 2008, Tehran, Iran (in Persian)

[239] H. Yazdanpanahi, M.A. Hejazi, G.B. Gharehpetian and M. Karrari, ”*Non-linear Modeling of Transformer using Hammerstein Model* ”, 2nd IEEE International Conference on Power and Energy 2008 (PECon 2008), 1-3 December 2008, Johor Bahru, Malaysia.

[240] M. Heydari Aragh,H. Yazdanpanahi, M. Abedi and G.B. Gharehpetian , ”*A Comparison Amongst Sub-Optimal Ordering Schemes for Power Systems*”, 2nd IEEE International Conference on Power and Energy 2008 (PECon 2008), 1-3 December 2008, Johor Bahru, Malaysia.

[241] A. H. Ranjbar, H. Omranpour, M. Abedi and G.B. Gharehpetian, ”*A Novel Approach for Z-matrix Building Process using Genetic Algorithm* ”, 2nd IEEE International Conference on Power and Energy 2008 (PECon 2008), 1-3 December 2008, Johor Bahru, Malaysia.

[242] M.A. Hejazi , M. Choopani, M. Dabir and G.B. Gharehpetian ,”*Effect of Antenna Position of Transformer Winding Axial Displacement Measurement Using Electromagnetic Waves* ”, 2nd IEEE International Conference on Power and Energy 2008 (PECon 2008), 1-3 December 2008, Johor Bahru, Malaysia.

[243] P. Alemi and G.B. Gharehpetian, ”*DG Allocation Using an Analytical Method to Minimize Losses and to Improve Voltage Security*”, 2nd IEEE International Conference on Power and Energy 2008 (PECon 2008), 1-3 December 2008, Johor Bahru, Malaysia.

[244] M. Davari, F. Toorani, H. Nafisi, M. Abedi and G.B. Gharehpetian, ”*Determination of Mean and Variance of LMP Using Probabilistic DCOPF and T-PEM* ”, 2nd IEEE International Conference on Power and Energy 2008 (PECon 2008), 1-3 December 2008, Johor Bahru, Malaysia.

[245] M. Davari, B. Abdi, H. Nafisi and G. B. Gharehpetian, ”*State Feedback Control of Boost Converter Using S1-Sigma Delta PWM Method*”, 2nd IEEE International Conference on Power and Energy 2008 (PECon 2008), 1-3 December 2008, Johor Bahru, Malaysia.

[246] B. Majidi, H. R. Baghaee, G. B. Gharehpetian, J. Milimonfared and M. Mirsalim, ”*Harmonic Optimization in Multi-Level Inverters using Harmony Search Algorithm* ”, 2nd IEEE

International Conference on Power and Energy 2008 (PECon 2008), 1-3 December 2008, Johor Bahru, Malaysia.

[247] H. R. Baghaee, M. J. Sanjari, M. Mirsalim and G.B. Gharehpetian, “*Fault Current Limiting in Distribution System with Penetration of DG Units using A New Dual Functional Series Compensator*”, 2nd IEEE International Conference on Power and Energy 2008 (PECon 2008), 1-3 December 2008, Johor Bahru, Malaysia.

[248] M. J. Sanjari, H. R. Baghaee G. B. Gharehpetian and S. M. Mirsalim, ”*Sliding Mode Control of SSSC in order to Limit Fault Current of Transmission Networks*”, 3-th Power System protection and Control Conference, PSPC 2009, 13-14 Jan., 2009, Tehran, Iran (in Persian)

[249] M. Davari, S. M. Aleemran, A. R. Mobarhani, H. Nafisi, I. Salabeigi and G. B. Gharehpetian, “*A Novel Approach to VFTO Analysis of Power Transformers Including FVL, based on Detailed Model*”, IEEE International Conference on [Industrial Technology, ICIT 2009](#), 10-13 Feb. 2009, Churchill, Victoria, Australia

[250] M. Davari, S. M. Aleemran, H. Nafisi, I. Salabeigi and G. B. Gharehpetian, “*Modeling the combination of UPQC and photovoltaic arrays with Multi-Input Single-Output DC-DC converter*”, IEEE International Conference on [Industrial Technology, ICIT 2009](#), 10-13 Feb. 2009, Churchill, Victoria, Australia

[251] A. Roghani Araghi, G. B. Gharehpetian and M. Abedi , “*Improvement of Dynamic Oscillations in Wind-Thermal Two Area System using TCPS*”, 1st Electric Power Generation Conference, EPGC 2009, 3-4 March, 2009, Ghazvin, Iran (in Persian)

[252] M. Mahmoodi and G. B. Gharehpetian, “*Simple Electrical Circuit for Large Signal Modeling of DC Microgrids*”, International Conference on Renewable Energies and Power Quality, ICREPQ'09 , April 15-17, 2009, Valencia, Spain

[253] M. Firouzi, M. Pishvaie, G.B.Gharehpetian and F. Razavi, “*System Studies of DC Reactor Type Fault Current Limiter in Distribution Grid*”, International Conference on Renewable Energies and Power Quality, ICREPQ'09 , April 15-17, 2009, Valencia, Spain

[254] R. Noroozian, M. Abedi, G. B. Gharehpetian and S. H. Hosseini, “*Modeling and Simulation of Microturbine Generation System for on-grid and off-grid Operation Modes*”, International Conference on Renewable Energies and Power Quality, ICREPQ'09 , April 15-17, 2009, Valencia, Spain

[255] H. Toodeji, S.H. Fathi and G. B. Gharehpetian, “*Power Management and Performance Improvement in Integrated System of Variable Speed Wind Turbine and UPQC*”, International Conference on Clean Electrical Power, ICCEP 2009, 9-11 June, 2009, Capri, Italy

[256] M. J. Sanjari, H. R. Baghaee, G. B. Gharehpetian and M. Mirsalim, “*Study of Operation of Combination of Line Series Compensators and Fault Current Limiters in Transmission System*”, 17-th Iranian Conference on Electrical Engineering, 12-14 May 2009, Tehran, Iran (in Persian)

- [257] M. J. Sanjari, H. R. Baghaee, M. Mirsalim and , G. B. Gharehpetian, “ *Fault Current Limiting in Distribution System Including DG units by sliding mode controlled DVR* ”, 17-th Iranian Conference on Electrical Engineering, 12-14 May 2009, Tehran, Iran (in Persian)
- [258] G. R. Zareie Govar, A., Sakhavati, V. Nbie, S. Jalilzadeh, G.B. Gharehpetian and S.H. Hosseini, “ *Governor and Turbine Limitations Effect on Load Frequency PID Controller Design*”, 17-th Iranian Conference on Electrical Engineering, 12-14 May 2009, Tehran, Iran (in Persian)
- [259] N. Salimi , M. Pishvaei and G. B. Gharehpetian, “ *Combination Of UPQC and SMES to Improve Power Quality of Distribution System*”, 17-th Iranian Conference on Electrical Engineering, 12-14 May 2009, Tehran, Iran (in Persian)
- [260] A. H. Ranjabr, B. Abdi, G. B. Gharehpetian and B. Fahimi, “*Reliability Assessment of Single-Satge/Two Satge PFC Converters*”, 6th International Conference-Workshop Compatibility and Power Electronics (CPE 2009), May 20 - 22, 2009, Badajoz, Spain
- [261] M. Mahmoodi, G. B. Gharehpetian, M. Hamed and A. Ashraf Modarres, “*Integration of Aggregated Distributed Energy Resources and Loads*”, POWER-GEN Europe, May 26-28, 2009, Cologne, Germany
- [262] H. Nafisi, M. Davari, M. Abedi and G. B. Gharehpetian, “*Using Fuzzy ARTmap Neural Network for Determination of Partial Discharge Location in Power Transformers*”, IEEE Power Tech 2009, 28 June - 2 July 2009, Bucharest, Romania
- [263] F. Mahmoodianfard, M. Mohammadi, G. B. Gharehpetian and H. Askarian Abyaneh, “*Optimal PMU Placement for Voltage Security Assessment using Decision Tree*”, IEEE Power Tech 2009, 28 June - 2 July 2009, Bucharest, Romania
- [264] M. Gholami, H. Yazdanpanahi and G. B. Gharehpetian, “*An Approach to Find Most Flexible Plan among Solutions of Transmission Expansion Planning (TEP) Problem*”, 11th Spanish Portuguese Congress on Electrical Engineering (11CHLIE), 1-4 July, 2009, Zaragoza, Spain
- [265] M. Davari, I. Salabeigi, G. B. Gharehpetian, S.H. Fathi and J. Milimonfared, “*Application of Sigma-Delta Modulation in Multifunction Current Controller for Inverter-Based Distributed Generation*”, 11th Spanish Portuguese Congress on Electrical Engineering (11CHLIE), 1-4 July, 2009, Zaragoza, Spain
- [266] H. Yazdanpanahi G. B.Gharehpetian and S. H. Hosseinian, “*Application of FACTS Devices in Transmission Expansion Planning to Overcome Problems of Projects Delays*”, 11th Spanish Portuguese Congress on Electrical Engineering (11CHLIE), 1-4 July, 2009, Zaragoza, Spain

- [267] M. Firouzi, M. Pishvaie, G.B.Gharehpetian and F. Razavi, “*Inter- Line Dynamic Voltage Restore and Fault Current Limiter (IDVR-FCL)* “, 11th Spanish Portuguese Congress on Electrical Engineering (11CHLIE), 1-4 July, 2009, Zaragoza, Spain
- [268] M. Davari, I. Salabeigi, G. B. Gharehpetian, S.H. Fathi and J. Milimonfared, “*Multifunction Current Controller for Inverter-Based Distributed Generation using Combined PI-Sliding Mode Controller via Sigma-Delta Modulation*”, IEEE International Symposium on Industrial Electronics, ISIE 2009, 5-8 July, 2009, Seoul, Korea
- [269] Mohammad Nasiri, Mojtaba Pishvaei and G. B. Gharehpetian, “*Parallel Active Filter Controlling Based on Instantaneous Compensation of Reactive Power*”, IEEE International Symposium on Industrial Electronics, ISIE 2009, 5-8 July, 2009, Seoul, Korea.
- [270] Mohammad Nasiri, Mojtaba Pishvaei and G. B. Gharehpetian, “*New Compensation Method for Generic Load and Source Conditions*”, IEEE International Symposium on Industrial Electronics, ISIE 2009, 5-8 July, 2009, Seoul, Korea.
- [271] S .H .Hosseini, A. Khoshkbar Sadigh, A. Farshchi Tabrizi and G. B. Gharehpetian, “*Flying Capacitor Multicell Converter Based DVR with Energy Minimized Compensation Strategy*”, 6-th International Conference on Electrical and Electronics Engineering, 5-8 November 2009, Bursa, Turkey
- [272] M. Gholami, M. Abedi and G.B. Gharehpetian, “*A Novel Approach for Z-Matrix Building Process Using Harmony Search Algorithm*”, International Conference on Electric Power and Energy Conversion Systems, EPECS’09, November 10-12, 2009, Sharjah, United Arab Emirates
- [273] M. Niaz Azari, R. A. Naghizadeh, G. Mokhtari, J. M. Monfared and G. B. Gharehpetian, “*Effect of System Parameters on Overvoltages During DC Line Fault in Bipolar HVDC System*”, International Conference on Electric Power and Energy Conversion Systems, EPECS’09, November 10-12, 2009, Sharjah, United Arab Emirates
- [274] O. Alizadeh Mousavi, G. B. Gharehpetian and M. S. Naderi, “*Estimating Risk of Cascading Blackout Using Probabilistic Methods,* ”, International Conference on Electric Power and Energy Conversion Systems, EPECS’09, November 10-12, 2009, Sharjah, United Arab Emirates
- [275] A. Rahimi Nezhad, G. Mokhtari, M. Davari, A. Roghani Araghi, S. H. Hosseinian and G.B. Gharehpetian, “*A New High Accuracy Method for Calculation of LMP as a Random Variable*” International Conference on Electric Power and Energy Conversion Systems, EPECS’09, November 10-12, 2009, Sharjah, United Arab Emirates
- [276] M. Davari, A.R. Pourshoghi, I. Salabeigi, G.B. Gharehpetian, S.H. Fathi, “*A New Nonlinear Controller Design Using Average State Space Model of the Inverter-Based Distributed Generation to Mitigate Power Quality Problems* ”, International Conference on Electric Machines and Systems (ICEMS2009), Tokyo, Japan, 15-18 November, 2009.

- [277] K. Rahmani, G.B. Gharehpetian, M. Karrari and M.S. Naderi, "*Design of LQG/LTR Controller for Dynamic Stability Improvement of AC/DC Power System*", 24-th International Power System Conference, 16-18 Nov. 2009, Tehran, Iran
- [278] G. Zarei Govar, A. Sakhavati, G.B. Gharehpetian, H. Sheieghi, and S.H. Hosseini, "*Load Frequency PID controller Design using PSO Algorithm and Considering two Area Power System Uncertainties and Governor and Turbine Limitations*", 24-th International Power System Conference, 16-18 Nov. , 2009, Tehran, Iran (in Persian)
- [279] J. Ebrahimi Jozani, G. Mokhtari, J.S. Moghani, and G.B. Gharehpetian, "*Suggestion of Switching Algorithm of Tree Phase Asymmetrical multilevel Inverters to Reduce Low Order Harmonics Using OMTD Method*", 23-th International Power System Conference, 16-18 Nov. , 2009, Tehran, Iran (in Persian)
- [280] R. Alaie, H. Yazdanpanahi, G.B. Gharehpetian, S.H. Hosseinian and M. S. Naderi, "*A New Approach for Selection of DC lines in Transmission Expansion Planning* ", 23-th International Power System Conference, 16-18 Nov. , 2009, Tehran, Iran (in Persian)
- [281] H. Ale Hossini, M. Davari, G.B. Gharehpetian and H. Askarian, "*Effect of Wind Turbine Connection Method to AC Network on Lightning Overvoltages*", 23-th International Power System Conference, 16-18 Nov. , 2009, Tehran, Iran (in Persian)
- [282] M. Eslamian and G.B. Gharehpetian, "*TCPST Optimal Allocation Using Bacteria Foraging Algorithm (BFA) Algorithm* ", 23-th International Power System Conference, 16-18 Nov. , 2009, Tehran, Iran (in Persian)
- [283] G. Mokhtari, J. Ebrahimi Jozani, M. Niaz Azari and G.B. Gharehpetian, "*Transmission Expansion Plans Evaluation in Order to find Flexible Plans Using Multi Criteria Decision Making Methods* ", 23-th International Power System Conference, 16-18 Nov. , 2009, Tehran, Iran (in Persian)
- [284] R. Khorminia, M. Abedi and G.B. Gharehpetian, "*UPFC with AC Link and Four Winding Phase Shifting Transformer* ", 23-th International Power System Conference, 16-18 Nov. , 2009, Tehran, Iran (in Persian)
- [285] J. Ebrahimi, G. Mokhtari, M. Abedi, G.B. Gharehpetian and M.S. Naderi, "*A New Algorithm for Power System Impedance Matrix Building using Islanding Technique* ", 23-th International Power System Conference, 16-18 Nov. , 2009, Tehran, Iran (in Persian)
- [286] M. Firouzi Abhari, M. Pishvaei ,G. B. Gharehpetian and F. Razavi, "*UPFC Application as a Fault Current limiting Device During faults* ", 23-th International Power System Conference, 16-18 Nov. , 2009, Tehran, Iran (in Persian)
- [287] M. Davari, A. Kashafi Kaviani, I. Salabeigi, G.B. Gharehpetian, S.H. Fathi, "*Optimal Tuning of Multifunction Current Controller for Sigma Delta Modulation Inverter-Based Distributed Generation with Particle-Swarm Optimization Method* ", Int. Conf. on Computers,

Communications, Control and Power Engineering, IEEE TENCON 2009, Singapore, 23-26 November, 2009.

[288] M. Firouzi¹, G.B. Gharehpetian, M. Pishvaei, “*Proposed New Structure for Fault Current Limiting and Power Quality Improving Functions*”, International Conference on Renewable Energies and Power Quality (ICREPQ’10), Granada (Spain), 23-25 March, 2010

[289] N. Farokhnia, R. Khoraminia and G.B. Gharehpetian, “*Optimization of PI Controller Gains in Nonlinear Controller of STATCOM Using PSO and GA*”, International Conference on Renewable Energies and Power Quality (ICREPQ’10), Granada (Spain), 23-25 March, 2010

[290] N.Yousefpoor, G.B. Gharehpetian, S.H. Fathi, “*Optimization of Current Total Harmonic Distortion in Series-Connected Rectifiers*”, International Conference on Renewable Energies and Power Quality (ICREPQ’10), Granada (Spain), 23-25 March, 2010

[291] B. Asadzadeh, V. Asadzadeh, S. H. Hosseini and G. B. Gharehpetian, “*Allocation of UPFC in North West Grid of Iran to Increase Power System Security*”, IEEE PES Transmission and Distribution Conference and Exposition, New Orleans, LA, USA, 19-22 April, 2010

[292] M. Firouzi Abhari, M. Pishvaei , G. B. Gharehpetian and F. Razavi, “*Combination of DVR and FCL to Improve the power Quality and Limit Fault Current*”, 15-th Electric Power Distribution Conference, 4-5 May, 2010, Tehran, Iran (in Persian)

[293] M. Janatti, G. B. Gharehpetian, B. Vahidi, S.H. Hosseinian “*A New Method to Reduce Reclosing Dead Time of HV Transmission Lines with TCR*”, 18-th Iranian Conference on Electrical Engineering, 11-13 May 2010, Isfahan, Iran (in Persian)

[294] M. S. Naderi , G. B. Gharehpetian, K. Rahmani, MB. Abolhasani and N. Mansoubi “*Application of IPC to Control and Limit Short Circuit Current*”, 18-th Iranian Conference on Electrical Engineering, 11-13 May 2010, Isfahan, Iran (in Persian)

[295] K. Rahmani, G. B. Gharehpetian, M. S. Naderi “*Damping of Low Frequency Oscillations in AC-DC Interconnected Power System Using Robust Modulation Controller*”, 18-th Iranian Conference on Electrical Engineering, 11-13 May 2010, Isfahan, Iran

[296] R. Noroozian, M. Abedi, G. B. Gharehpetian and A. Bayat “*On-grid and Off-grid Operation of Multi-Input Single-Output DC/DC Converter based Fuel Cell Generation System*”, 18-th Iranian Conference on Electrical Engineering, 11-13 May 2010, Isfahan, Iran

[297] G. Zareiegovar, A. Sakhavati, V. Nabaei and G. B. Gharehpetian, “*A New Approach for Tuning PID Controller Parameters of Load Frequency Control Considering System Uncertainties*”, 9-th International Conference on Environment and Electrical Engineering (EEEIC 2010), 16 May - 19 May 2010, Prague, Czech Republic

[298] G. Mokhtari, A. Rahiminezhad, A. Behnood, J. Ebrahimi, and G. B. Gharehpetian “*Probabilistic DC Load-Flow Based on Two-Point Estimation (T-PE) Method*”, 4th

International Power Engineering and Optimization Conf. (PEOCO2010), 23-24 June 2010, Shah Alam, Selangor, Malaysia

[299] G. Mokhtari, A. Behnood , J. Ebrahimi, and G. B. Gharehpetian, “LMP Calculation, Considering Network Topology Uncertainty”, 4th International Power Engineering and Optimization Conf. (PEOCO2010), 23-24 June 2010, Shah Alam, Selangor, Malaysia

[300] M. Fekri Moghadam , G. B. Gharehpetian, H. Askarian Abyaneh, “*Optimized Regulation of DC Voltage in Interline Power Flow Controller (IPFC) Using Genetic Algorithm*”, 4th International Power Engineering and Optimization Conf. (PEOCO2010), 23-24 June 2010, Shah Alam, Selangor, Malaysia

[301] M. Daryabak, J. Milimonfared, G. B. Gharehpetian, I. Salabeigi, “*PFC Pre-regulator Controller with Fast Dynamic Response and Low Input Current THD*”, IEEE Region 8 SIBIRCON-2010, July 11-15, 2010, Irkutsk Listvyanka, Russia

[302] I. Salabeigi, J. Milimonfared, G. B. Gharehpetian, M. Daryabak and M. Davari, “*Improvement of Dynamic Response of SDM-Based PFC Converter Using Digital Controller*”, IEEE Region 8, SIBIRCON-2010, July 11-15, 2010, Irkutsk Listvyanka, Russia

[303] M. A. Hejazi, J. Ebrahimi, G. B. Gharehpetian, R. Faraji-Dana and M. Dabir, “*Feasibility Studies on On-line Monitoring of Transformer Winding Mechanical Damage Using UWB Sensors*”, XIX International Conference on Electrical Machines, ICEM 2010, September 6-8, 2010, Rome, Italy

[304] G. Mokhtari, M. A. Hejazi and G. B. Gharehpetian, “*Simulation of On-line Monitoring of Transformer Winding Axial Displacement Using UWB Waves*”, XIX International Conference on Electrical Machines, ICEM 2010, September 6-8, 2010, Rome, Italy

[305] J. Ebrahimi, G. Mokhtari, J. S. Moghani and G. B. Gharehpetian, “*A Novel Switching Technique for Reduction of WTHD in Three-Phase Asymmetrical Multilevel Inverters*”, The First Power Quality Conference, PQC 2010, Sep. 21-22, 2010, Tehran, Iran

[306] A. Tavanbakhsk, M. Niaz Azari, J. M. Monfared and G. B. Gharehpetian, “*Mother Wavelet Function Selection for Fault Detection Analysis in HVDC Transmission Lines*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran (in Persian)

[307] A. Rahiminejad, S. H. Hosseinian, B. Vahidi and G. B. Gharehpetian, “*Assessment of Effect of HVDC Transmission Lines on Generation Cost and Grid Losses by Using Optimal AC-DC Load Flow*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran (in Persian)

[308] S. Mosavi and G. B. Gharehpetian, “*Improvement of Incremental Conduction Method in Tracing MPP of PVs*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran (in Persian)

- [309] G. Mokhtari, G. B. Gharehpetian, R. Faraji Dana, H. A. Ale Hosseini and M.A. Hejazi “*Modeling and Detection of Axial Displacement of Transformer Winding Using UWB Sensors and Determination of Displacement Extent Using ANN*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran (in Persian)
- [310] J. Ebrahimi, G. B. Gharehpetian, H. R. Amindavar and M. A. Hejazi “*Application of DWT for on-line Detection of Transformer Winding Radial Deformation Based on Measurements Using UWB Sensors*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran (in Persian)
- [311] M. A. Hejazi, H. A. Ale Hosseini, G. B. Gharehpetian, “*Index Suggestion for Transformer Winding Axial Displacement by Using Scattering Parameters*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran (in Persian)
- [312] K.Pourhossein, G. B. Gharehpetian and E.Rahimpour, “*Discrimination of Axial Displacement and Radial Deformation in Power Transformer Windings Using Manhattan Distance Function*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran
- [313] K.Pourhossein, G. B. Gharehpetian and E.Rahimpour, “*Axial Displacement Extent Determination in Power Transformer Windings Using an Adjustable Index*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran
- [314] K. Rahmani, M. S. Naderi and G. B. Gharehpetian, “*Multiobjective Damping Controller Design of Power System Oscillations by HVDC Link Using Genetic Algorithm*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran
- [315] M. Sarhangzadeh, S. H. Hosseini, M.B.B. Sharifian, G.B. Gharehpetian and M. Najari Asl, “*Dynamic Analysis of Bidirectional Multi-Input DC-DC Converter Based on Nonlinear Control by IOFL*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran
- [316] K. Pourhossein and G. B. Gharehpetian, “*Cost-Effective Design of Fuzzy-Controlled Shunt Resistor Array to Mitigate Switching Overvoltages Using Taguchi’s Optimization Method*”, 25-th International Power System Conference, 8-10 Nov. 2010, Tehran, Iran
- [317] M. S. Golsorkhi, H. Binandeh, J. S. Moghani, G. B. Gharehpetian and S. H. Hosseinian, “*Harmonic Current Compensation by a Single-Phase Shunt Active Power Filter Based on Least Compensation Current Control Method*”, 3rd International Power and Energy Conference (PECon), Nov. 29- Dec. 1, 2010, Kuala Lumpur, Malaysia
- [318] M. A. Hejazi, H. A. Ale Hoseini and G. B. Gharehpetian, “*Detection of Transformer Winding Axial Displacement Using Scattering Parameter and ANN*”, 3rd International Power and Energy Conference (PECon), Nov. 29- Dec. 1, 2010, Kuala Lumpur, Malaysia
- [319] J. Ebrahimi, G. B. Gharehpetian, H. Amindavar and M. A. Hejazi, “*Antennas Positioning for On-line Monitoring of Transformer Winding Radial Deformation Using UWB Sensors*”, 3rd

International Power and Energy Conference (PECon), Nov. 29- Dec. 1, 2010, Kuala Lumpur, Malaysia

[320] J. Ebrahimi, G. B. Gharehpetian, H. Amindavar and M. A. Hejazi, “*Detection of Transformer Winding Radial Deformations by Using UWB Pulses and DWT*”, 3rd International Power and Energy Conference (PECon), Nov. 29- Dec. 1, 2010, Kuala Lumpur, Malaysia

[321] H. A. Alehoseini, M. A. Hejazi and G. B. Gharehpetian, “*Transformer Winding Radial Deformation Detection Using Scattering Parameters*”, 3rd International Power and Energy Conference (PECon), Nov. 29- Dec. 1, 2010, Kuala Lumpur, Malaysia

[322] G. Mokhtari, G. B. Gharehpetian, R. Faraji-Dana and M. A. Hejazi, “*Modelling of On-line Monitoring of Transformer Winding Radial Deformation Using UWB Sensors*”, 3rd International Power and Energy Conference (PECon), Nov. 29- Dec. 1, 2010, Kuala Lumpur, Malaysia

[323] H. A. Hejazi, M. A. Hejazi, G. B. Gharehpetian and M. Abedi, “*Distributed Generation Site and Size Allocation Through a Techno Economical Multi-objective Differential Evolution Algorithm*”, 3rd International Power and Energy Conference (PECon), Nov. 29- Dec. 1, 2010, Kuala Lumpur, Malaysia

[324] R. Noroozian, A. Jalilvand, G. B. Gharehpetian, “*Hybrid SFS and Q-f Islanding Detection Method for Inverter-Based DG*”, 3rd International Power and Energy Conference (PECon), Nov. 29- Dec. 1, 2010, Kuala Lumpur, Malaysia

[325] A. Ashrafian, M. Rostami, G. B. Gharehpetian and M. Gholamghasemi, “*Application of Discrete S-Transform for Differential Protection of Power Transformers*”, International Conference on Electrical Energy and Networks (ICEEN 2011), Mumbai, India. January 7-9, 2011

[326] A. Ashrafian, M. Rostami, G. B. Gharehpetian and S. S. Shafiee Bahnamiri, “*Improving Transformer Protection by Detecting Internal Incipient Faults*”, International Conference on Electrical Energy and Networks (ICEEN 2011), Mumbai, India. January 7-9, 2011

[327] H.R. Baghaee, A. Kashefi Kaviani, M. Mirsalim and G.B. Gharehpetian, “*Fault Current Limiting by Allocating TCSC and UPFC using Particle Swarm Optimization*”, 5-th Power System Protection and Control Conference, PSPC 2011, Jan. 11-12, 2011, Tehran, Iran

[328] M. Gholami, G. B. Gharehpetian, B. Fahimi and M. J. Sanjari, “*Voltage Magnitude State Estimation By ANNs with Reduction of PMUs*”, International Conference on Renewable Energies and Power Quality, ICREPQ'11, Las Palmas de Gran Canaria, Spain, 13-15 April, 2011

[329] Mehdi S. Naderi, Mohammad S. Naderi, K. Rahmani, G.B. Gharehpetian, L. Zahedi, “*Quantitative Assessment of Distributed Generation Benefits to Improve Power System Indices*”, International Conference on Renewable Energies and Power Quality, ICREPQ'11, Las Palmas de Gran Canaria, Spain, 13-15 April, 2011

- [330] L. Zahedi, Mehdi S. Naderi, Mohammad S. Naderi, G. B. Gharehpetian, E. Babaei, “*Interphase Power Controller Application to Mitigate Transmission Network Short Circuit Level*”, International Conference on Renewable Energies and Power Quality, ICREPQ’11, Las Palmas de Gran Canaria, Spain, 13-15 April, 2011
- [331] M. Gholami, G. B. Gharehpetian, B. Fahimi and M. J. Sanjari, “*Using ANN to Estimate the Voltage of Unobservable Buses When One PMU or its Communication Fails*”, International Conference on Renewable Energies and Power Quality, ICREPQ’11, Las Palmas de Gran Canaria, Spain, 13-15 April, 2011
- [332] M. Gholami, G. B. Gharehpetian, B. Fahimi and M. J. Sanjari, “*Voltage State Estimation By ANNs with Reduction of PMUs*”, International Conference on Renewable Energies and Power Quality, ICREPQ’11, Las Palmas de Gran Canaria, Spain, 13-15 April, 2011
- [333] M. Kohansal, M. J. Sanjari, G. B. Gharehpetian, “*A Novel Approach to Frequency Control in an Islanded Microgrid by Load Shedding Scheduling*”, International Conference on Renewable Energies and Power Quality, ICREPQ’11, Las Palmas de Gran Canaria, Spain, 13-15 April, 2011
- [334] M. Firouzi Abhari, G. B. Gharehpetian and A. Jalilvand, “*Effect of Diode Bridge Type Fault Current Limiter on Induction Motor Starting Condition*”, 16-th Electric Power Distribution Conference, 19-20 April, 2011, Bandar Abbas, Iran (in Persian)
- [334] M. Firouzi Abhari, G. B. Gharehpetian and A. Jalilvand, “*Effect of Diode Bridge Type Fault Current Limiter on Induction Motor Starting Condition*”, 16-th Electric Power Distribution Conference, 19-20 April, 2011, Bandar Abbas, Iran (in Persian)
- [335] P. Nezamabadi and G. B. Gharehpetian, “*Electric Energy Management of Virtual Power Plants in Distribution Networks Using Renewable Distributed Generation and Energy Storage Systems*”, 16-th Electric Power Distribution Conference, 19-20 April, 2011, Bandar Abbas, Iran (in Persian)
- [336] A. Bayat, R. Noroozian, A. Jalilvand and G.B. Gharehpetian, “*Optimal Operation of Fuel Cell Distributed Generation Systems for Islanded Operation Mode*”, 19th Iranian Conference on Electrical Engineering, Tehran, Iran, 17-19 May 2011 (in Persian)
- [337] M. Jannati, G.B. Gharehpetian, B. Vahidi and S.H. Hosseinian, “*Suggestion of New Method in Order to Reduce Dead Time of Reclosers in HV Transmission Lines with TCR*”, 19th Iranian Conference on Electrical Engineering, Tehran, Iran, 17-19 May 2011 (in Persian)
- [338] H. Mohammadi, R. Noroozian, A. Jalilvand and G.B. Gharehpetian, “*Hybrid Operation of Islanded DC Distribution Systems and PV Systems for Supplying Unbalanced Load*”, 19th Iranian Conference on Electrical Engineering, Tehran, Iran, 17-19 May 2011(in Persian)

- [339] M. Eslamian, G.B. Gharehpetian and M. Morady, “*A new method for dynamic modeling of corona in overhead lines*”, 19th Iranian Conference on Electrical Engineering, Tehran, Iran, 17-19 May 2011(in Persian)
- [340] H.R. Baghaee A. Kashefi Kaviani, M. Mirsalim and G.B. Gharehpetian, “*Fault Current Limiting by Allocating TCSC and UPFC using Particle Swarm Optimization*”, 19th Iranian Conference on Electrical Engineering, Tehran, Iran, 17-19 May 2011
- [341] K. Rahmani, M.S. Naderi and G.B. Gharehpetian “*Damping of Parallel AC-DC Power System Oscillations Using LQG/LTR Controller Approach*”, 19th Iranian Conference on Electrical Engineering, Tehran, Iran, 17-19 May 2011
- [342] G. Mokhtari, G. B. Gharehpetian, R. Faraji-Dana and M. A. Hejazi, “*Modelling of Tank Effect in Transformer Winding Radial Deformation Monitoring Using UWB Sensors*”, 19th Iranian Conference on Electrical Engineering, Tehran, Iran, 17-19 May 2011
- [343] M. Sarhangzadeh, S.H. Hosseini, M.B.B. Sharifian, G.B. Gharehpetian and M. Najari Asl, “*Three Phase Bi-directional DC/AC Converter*”, 19th Iranian Conference on Electrical Engineering, Tehran, Iran, 17-19 May 2011
- [344] K. Pourhossein, G.B.Gharehpetian and E. Rahimpour, “*Buckling Severity Diagnosis in Power Transformer Windings Using Euclidean Distance Classifier*”, 19th Iranian Conference on Electrical Engineering, Tehran, Iran, 17-19 May 2011
- [345] P. Hasanpor Divshali, G.B. Gharehpetian, S.H. Hosseinian and E. Nasr Azadani, “*VSC-HVDC Controller Parameter Tuning based on Optimization*”, 19th Iranian Conference on Electrical Engineering, Tehran, Iran, 17-19 May 2011
- [346] M. Rahmatian, J. Sh. Moghani, B. Abdi and G. B. Gharehpetian, “*Operation Analysis of an AC/DC Converter with Quasi-Active Power Factor Correction*“, International Aegean Conference on Electric Machines and Power Electronics (ACEMP’11) 08-10 September 2011, Istanbul, Turkey
- [347] M. Kohansal, J. S. Moghani, B. Abdi and G. B. Gharehpetian, “*A Control Method to Enhance Dynamic Performance of Parallel Inverters in Islanded Microgrid*”, International Aegean Conference on Electric Machines and Power Electronics (ACEMP’11) 08-10 September 2011, Istanbul, Turkey
- [348]A. Kavousi, N. Farokhnia, A. Vahabzadeh, M. Nazari and G. B. Gharehpetian, “*Comparison between Two Stand-Alone PV Configurations: Series PVs Versus Series VSCs*”, 11-th IEEE International Conference of Electrical Power Quality and Utilization (EPQU), 17-19 Oct. 2011, Lisbon, Portugal
- [349] Hossein Nezamabadi, Parastoo Nezamabadi, Mehrdad Setayeshnazar and G.B. Gharehpetian, “*Participation of Virtual Power Plants in Energy Market with Optimal Bidding*”

Based on Nash-SFE Equilibrium Strategy and Considering Interruptible Load", 3rd Conference on Thermal Power Plants (CTPP), 18-19 Oct., 2011, Tehran, Iran

[350] E. Ebrahimi, M. J. Sanjari, G. B. Gharehpetian , "*Suggestion of Algorithm based on Z-Impedance Matrix for Fault detection in 4-Wire Distribution Systems*", 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)

[351] N. Amirshakari, G.B. Gharehpetian, M. S. Naderi, "*Domestic Load Modeling of Bandar Abas City using Statistic Method for Load Management Process and Suggestion of Solutions*", 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)

[352] H. Nezamabadi, P. Nezamabadi, M. Setayeshnazar and G. B. Gharehpetian, "*Optimal Bidding of Virtual Power Plants Based on Nash-SFE Equilibrium Strategy*", 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)

[353] M. Nafdar, G.B. Gharehpetian and T. Niknam, "*A New Method for Parameter Estimation of Different Surge Arrester Models*", 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)

[354]D. Solati Alkaran, M.S. Naderi, G.B. Gharehpetian and H. Karami Parzani, "*Citing and Sizing of Small Scale Generators in Distribution Systems using Combination of GA and Analytical Methods*", 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)

[355] H. Moarefi, G. B. Gharehpetian, M. M. Ardehali, F. Ghaemi and M. S. Naderi, "*Effect of GDs on Reliability of Overload Feeders of Bandar Abas*", 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)

[356] A. Bayat, R. Noroozian, A. Jalilvand and G. B. Gharehpetian, "*FC based DG systems for Load Supplying and Active Filtering*", 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)

[357] Y. Kabiri Rnani, H. Hashemi Dezaki, G. B. Gharehpetian, S. H. Fathi and H. Askarian Abianeh, "*Suggestion a Proper Control Method for Improvement of Transient Stability of HVDC Systems*", 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)

[358]A. Ranjbar, G.B. Gharehpetian and M. S. Vojdani, "*Feasibility Studies on 100 MW Tidal Power Plant in South of Iran*", 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)

[359] Y. Kabiri Rnani, G.B. Gharehpetian, H. Askarian Abianeh and S. H. Fathi, "*Losses Reduction and Voltage Profile Improvement Using PV/FC Hybrid System Considering Load and Irradiation Variations*", 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)

- [360] H. Mohammadi, R. Noroozian, A. Jalilvand and G. B. Gharehpetian, “*Efficient Utilization of Isolated DC Networks and PV Systems for Supplying Unbalanced AC loads*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)
- [361] S. Derikvand, J. Milimonfared and G. B. Gharehpetian, “*Comparison of Common Mode Voltage Reduction Modulation Methods in Transformerless On-Grid 3-Phase PV System*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)
- [362] M. H. Etesami, M. M. Ardehali and G. B. Gharehpetian, “*Design of Isolated Renewable Power Plants Using Imperialist Competitive Algorithm*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)
- [363] F. Ghaemi, G.B. Gharehpetian M.M. Ardehali, H. Moarrefi and M. S. Naderi, “*DG Modeling and Determination of Cost of ENS in Bandar Abbas Distribution Network*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)
- [364] M.S. Golsorkhi Esfahani, M.A. Hejazi and G. B. Gharehpetian, “*Determination of Radial Deformation Extent of Power Transformer Winding Using Radar Imaging*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)
- [365] M.A. Hejazi, J. Ebrahimi and G. B. Gharehpetian, “*Determination of Radial Deformation Location in Power Transformer Winding Using UWB Antennas and Hyperbolic Method*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran (in Persian)
- [366] M. Sarhangzadeh, S.H. Hosseini, M. B. B. Sharifian and G. B. Gharehpetian, “*Using FC in DVR and Dynamic Analysis of it Based on Nonlinear Control by IOFL*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran
- [367] Arash Khoshkbar Sedigh, Ehsan Mokhtarpour, G. B. Gharehpetian, “*Voltage Sag Compensation with New Configuration of Transformerless DVR Based on Asymmetrical Cascade Multilevel Converter*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran
- [368] G. B. Gharehpetian M. Mirsalim Hamid Reza Baghaee, “*Assessment on the effect of Optimally-Allocated Multi-type FACTS on Short Circuit Level, Voltage Stability and Voltage and Power Security*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran
- [369] K. Pourhossein, G.B. Gharehpetian, E. Rahimpour, “*Extracting Indices to Detect Mechanical Fault Extent in Transformers: A Probabilistic Approach*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran
- [370] K. Pourhossein, G.B. Gharehpetian, E. Rahimpour, “*Determining Intensity of Radial Deformation and Axial Displacement of Transformer Winding Using Angular Proximity Index*”, 26-th International Power System Conference, 31 Oct.-2 Nov. 2011, Tehran, Iran

- [371] Jafar Ghafouri, Aidin Sakhavati, Ramin Jovari and G. B. Gharehpetian, “*PI Controller for Quarter Vehicle Active Suspension System with Optimized Gains Using PSO Algorithm*”, 2nd International Conference on Control, Instrumentation and Automation, (ICCIA 2011), 27-29 Dec., 2011, Shiraz, Iran
- [372] Mahdi Kohansal, J. S. Moghani, Matin Rahmatian, and G. B. Gharehpetian, “*Multi-Objective Optimization to Improve Transient Performance of VSI in an Off-Grid Micro-Grid Using Imperialist Competitive Algorithm*”, 2nd International Conference on Control, instrumentation and Automation, (ICCIA 2011), 27-29 Dec., 2011, Shiraz, Iran
- [373] Mahdi Kohansal, J. S. Moghani, Matin Rahmatian, and G. B. Gharehpetian, “*An Approach to Improve Dynamic Response of VSIs in Off-Grid Microgrids*”, 2nd International Conference on Control, Instrumentation and Automation, (ICCIA 2011), 27-29 Dec., 2011, Shiraz, Iran
- [374] Mahdi Kohansal, G. B. Gharehpetian M. Abedi and Matin Rahmatian, “*An Innovative Controller for Improvement of Voltage Fluctuations Following Huge Disturbances in an Autonomous Microgrids*”, 6th Power Systems and Protection and Control (PSPC 2012) 3-4 Jan, 2012, Tehran, Iran
- [375] Mahdi Kohansal, G. B. Gharehpetian and M. Abedi, “*A Novel Controller for Frequency Protection of an Islanded Microgrids*”, 6th Power Systems and Protection and Control (PSPC 2012) 3-4 Jan, 2012, Tehran, Iran
- [376] H.R. Baghaee, A. Kashefi Kaviani, M. Mirsalim¹, and G.B. Gharehpetian, “*Harmonic Optimization in Single DC source Multi-Level Inverters using RBF Neural Networks*”, 3-rd Power Electronics, Drive Systems and Technologies Conference (PEDSTC), Feb. 15-16, 2012, Tehran, Iran
- [377] S. Derikvand, J. Milimonfared and G. B. Gharehpetian, “*CSI Modulation technique Improvement in Transformerless 3-Phase Grid-Connected Single Stage PV System to Reduce Common Mode Voltage*”, Second Iranian Conference on Renewable Energy and Distributed Generation (ICREDG 2012), March 7-8, 2012, Tehran, Iran (in Persian)
- [378] H. Karami Porzani, M. S. Naderi, G. B. Gharehpetian and D. Solati Alkaran, “*Voltage Unbalance Reduction in Distribution Systems using Single Phase DGs and Balancing Controller*”, Second Iranian Conference on Renewable Energy and Distributed Generation (ICREDG 2012), March 7-8, 2012, Tehran, Iran (in Persian)
- [379] S. M. Sadeghi Ghiasi, G. B. Gharehpetian, M. Abedi and S.H. Hosseinian, “*Decoupled Control Of Active and reactive Powers in DFIG Wind Turbine*”, Second Iranian Conference on Renewable Energy and Distributed Generation (ICREDG 2012), March 7-8, 2012, Tehran, Iran (in Persian)
- [380] Farhad Fathollahi, M. Ahmadian and G. B. Gharehpetian, “*Load Compensation in Isolated Microgrids using Smart Switches*”, Second Iranian Conference on Renewable Energy and Distributed Generation (ICREDG 2012), March 7-8, 2012, Tehran, Iran (in Persian)

- [381] H.R. Baghaee, G.B. Gharehpetian, A. Kashefi Kaviani, “*Three Dimensional Pareto Optimal Solution to Design a Hybrid Standalone Wind/PV Generation System with Hydrogen Energy Storage using Multi-Objective Particle Swarm Optimization*”, Second Iranian Conference on Renewable Energy and Distributed Generation (ICREDG 2012), March 7-8, 2012, Tehran, Iran
- [382] H.R. Baghaee, A. Mazloomzadeh, M. Mirsalim and G. B. Gharehpetian, “*Optimized Harmonic Estimation in Bus Transfer Systems from Polluted Grid to DG Unit using Wavelet Transform and Radial Basis Functions Neural Networks*”, Second Iranian Conference on Renewable Energy and Distributed Generation (ICREDG 2012), March 7-8, 2012, Tehran, Iran
- [383] M. Kohansal, G. B. Gharehpetian and M. Abedi, “*An Optimization to Improve Voltage Response of VSI in Islanded Microgrid Considering Reactive Power Sharing*”, Second Iranian Conference on Renewable Energy and Distributed Generation (ICREDG 2012), March 7-8, 2012, Tehran, Iran
- [384] M. Kohansal, G. B. Gharehpetian, M. Rahmatian, M. Abedi and M. J. Sanjari, “*Effect of Load Condition on Dynamic Stability in Isolated Microgrid*”, Second Iranian Conference on Renewable Energy and Distributed Generation (ICREDG 2012), March 7-8, 2012, Tehran, Iran
- [385] M. Firouzi, S. Aslani, G. B. Gharehpetian and A. Jalilvand, “*Effect of Superconducting Fault Current Limiters on Successful Interruption of Circuit Breakers*”, International Conference on Renewable Energies and Power Quality, ICREPQ’12, Santiago de Compostela, Spain, 28-30 March, 2012
- [386] H. Jouybari-Moghaddam, G. B. Gharehpetian and S. H. Hosseinian, “*Performance of Power-Line-Signaling Based Detection Algorithms for Islanding Protection of Distributed Generators in Interharmonic Polluted Systems*”, International Conference on Renewable Energies and Power Quality, ICREPQ’12, Santiago de Compostela, Spain, 28-30 March, 2012
- [387] M. Nasiri, G. B. Gharehpetian and J. Milimonfared, “*Comparison of Multicarrier PWM Strategies for Five-level Z-Source Diode-Clamped Inverter for On-Grid Renewable Energies Applications*”, International Conference on Renewable Energies and Power Quality, ICREPQ’12, Santiago de Compostela, Spain, 28-30 March, 2012
- [388] Nazanin Abdolghani, J. Milimonfared and G. B. Gharehpetian, “*A Direct Torque Control Method for CSC Based PMSG Wind Energy Conversion Systems*”, International Conference on Renewable Energies and Power Quality, ICREPQ’12, Santiago de Compostela, Spain, 28-30 March, 2012
- [389] M. Kohansal, G. B. Gharehpetian, M. Aghaei and M. J. Sanjari, “*An Approach to Decrease Transient Circulating Current of VSIs in Islanded Microgrid*”, International Conference on Renewable Energies and Power Quality, ICREPQ’12, Santiago de Compostela, Spain, 28-30 March, 2012

- [390] M. Kohansal, G. B. Gharehpetian, M. Abedi and M. J. Sanjari, "*Determination of Controllers Constraints for Frequency Stability in Islanded Microgrid*", International Conference on Renewable Energies and Power Quality, ICREPQ'12, Santiago de Compostela, Spain, 28-30 March, 2012
- [391] M. Kohansal, G. B. Gharehpetian, M. Abedi and M. J. Sanjari , "*Droop Controller Limitation for Voltage Stability in Islanded Microgrid*", International Conference on Renewable Energies and Power Quality, ICREPQ'12, Santiago de Compostela, Spain, 28-30 March, 2012
- [392] A. Ghafouri, G. B. Gharehpetian, J. Milimonfared, "*Fuzzy Coordinated Control of TCSCs to Improve Power System Stability*", International Conference on Renewable Energies and Power Quality, ICREPQ'12, Santiago de Compostela, Spain, 28-30 March, 2012
- [393] E. Ebrahimi, G. B. Gharehpetian and J. Milimonfared, "*A Novel Scheme to Protect Distribution Networks in Presence of Inverter-Based Distributed Generation*", International Conference on Renewable Energies and Power Quality, ICREPQ'12, Santiago de Compostela, Spain, 28-30 March, 2012
- [394] M. Kohansal, G. B. Gharehpetian, M. Rahmatian and M. J. Sanjari, "*Multi-Objective Optimization of Microgrid Frequency and Energy Storage Capacity*", International Conference on Renewable Energies and Power Quality, ICREPQ'12, Santiago de Compostela, Spain, 28-30 March, 2012
- [395] E. Ebrahimi, A. J. Ghanizadeh, M. Rahmatian and G. B. Gharehpetian, "*Impact of Distributed Generation on Fault Locating Methods in Distribution Networks*", International Conference on Renewable Energies and Power Quality, ICREPQ'12, Santiago de Compostela, Spain, 28-30 March, 2012
- [396] H. Molavi, M. M. Ardehali, G. B. Gharehpetian, M. J. Sanjari, E. Ebrahimi, "*A New Control Method for Operation of D-STATCOM under Unbalanced Conditions* ", International Conference on Renewable Energies and Power Quality, ICREPQ'12, Santiago de Compostela, Spain, 28-30 March, 2012
- [397] Mehdi Saadatmand, M. J. Sanjari and G. B. Gharehpetian , "*ACF Index Application for Estimation of Effect of DG Units Connection on Fault Level of Distribution Networks*", 17-th Electric Power Distribution Conference, EPDC 2012, Tehran, Iran, May 1-2, 2012 (in Persian)
- [398] H. Karami B. Vahidi M. S. Naderi G. B. Gharehpetian and M. R. Vatani, "*A Novel and Practical Solution to Mitigate Voltage Unbalance in LV Networks by Connection and On-line Control of a Single Phase DG*", 17-th Electric Power Distribution Conference, EPDC 2012, Tehran, Iran, May 1-2, 2012
- [399] M. Rahmatian, M. J. Sanjari, M. Gholami and G. B. Gharehpetian, "*Optimal control of distribution line series compensator in microgrid considering fault current limitation function*", 17-th Electric Power Distribution Conference, EPDC 2012, Tehran, Iran, May 1-2, 2012

- [400] G. B. Gharehpetian, "On-line Monitoring of Power Transformer Mechanical Defects Using UBW Electromagnetic Waves", Invited paper, 20th Iranian Conference on Electrical Engineering, Tehran, Iran, 15-17 May 2012 (in Persian)
- [401] A. Khaledian, M. Abedi and G. B. Gharehpetian, "Distributed Generation Units Optimal Generation Planning in Microgrids Considering Stochastic Condition of Load Consumption", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012 (in Persian)
- [402] A. Khaledian, M. Abedi and G. B. Gharehpetian, "Stability Assessment of Microgrid with Droop Characteristic Based Controller", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012 (in Persian)
- [403] G. B. Gharehpetian, M.J. Sanjari and A. Nasiri, "Operation Optimization of CHP systems in Smart Grids", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012 (in Persian)
- [404] M. Rahmatian, E. Ebrahimi, A. J. Ghanizadeh and G. B. Gharehpetian, "Optimal Sizing and Sizing of DG Units Considering Islanding Operation Mode of Sensitive Loads", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012
- [405] Mohsen Bakhshi, R. Noroozian and G. B. Gharehpetian, "Passive Anti-Islanding Scheme Based on Reactive Power in the Smart Grids", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012
- [406] Morteza Ariany and G. B. Gharehpetian, "A Hierarchical Approach for Frequency Regulation in Islanded Inverter-based Microgrids", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012
- [407] S. Mortazavian, H. Hashemi, M. M. Shabestary and G. B. Gharehpetian, "Voltage Indices Improvement Using UPFC Based on Specific Coefficients Algorithm", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012
- [408] M. Khodaparastan, A. S. Mobarake, G. B. Gharehpetian and S. H. Fathi, "Smart Fault Classification in HVDC System Based on Optimal Probabilistic Neural Networks", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012
- [409] M. J. Sanjari, S. H. Fathi, G. B. Gharehpetian and A. Tavakoli, "HSA-Based Optimal Placement of Shunt FACTS Devices in the Smart Grid Considering Voltage Stability", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012
- [410] A. Tavakoli, M. J. Sanjari, M. Kohansal and G. B. Gharehpetian, "Innovative Power Calculation Method to Improve Power Sharing in Islanded Micro Grid", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012

- [411] H. Rahbari Magham, M. J. Sanjari, B. Zaker and G. B. Gharehpetian, "*Voltage Profile Improvement in a Microgrid Including PV Units Using Genetic Algorithm*", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012
- [412] M. R. Vatani, M. J. Sanjari, G. B. Gharehpetian, M. Noroozian, "*A New Fast and Reliable Method for Islanding Detection Based on Transient Signal*", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012
- [413] R. Jafari, H. Askarian Abyaneh, G. B. Gharehpetian and A. J. Ghanizadeh, "*Multi-Agent Based Fault Location for Smart Microgrids with Distributed Generators*", 2nd Iranian Conference on Smart Grids, ICSG 2012, Tehran, Iran, May 23-24, 2012
- [414] H. Fallahzadeh, G.B. Gharehpetian and S.H. Hosseinian, "*Management and Control of On-Grid Microgrid Load Flow Using Back-To-Back Convertors*", 15-th Iranian Students Conference on Electrical Engineering, 28-30 August 2012, Kashan, Iran (in Persian)
- [415] G. B. Gharehpetian, "*Smart Distribution Systems*", Invited paper, First Isfahan Electrical Engineering National Conference (IECC), Isfahan, Iran, 3-4 Oct. 2012 (in Persian)
- [416] Lale Mohammadifar, G. B. Gharehpetian, S.H. Hosseinian and M. J. Sanjari, "*Studies of Effects of Wind and Solar DGs on Kerman State Electrical Grid*", Iran Wind Energy Conference (IWEC), Tehran, Iran, 9-10 Oct. 2012 (in Persian)
- [417] G. B. Gharehpetian, "*Real-Time Simulation*", Invited paper, Modeling and Simulation of Power Plant Equipments, Karaj, Iran, 24 Oct. 2012 (in Persian)
- [418] M.A. Chitsazan, G.B. Gharehpetian, M. Arbabzadeh, "*Application of Voltage Source Converter in Interphase Power Controller*", World Congress on Engineering and Computer Science, 2012 Vol. II, WCECS 2012, Oct. 24-26, 2012, San Francisco, USA
- [419] M. Rahmani, G.B. Gharehpetian, S.H. Hosseinian, M. Kohansal, "*A New Control Design to Overcome Transient Problems of Inverters in a Stand-Alone Micro-Grid*", 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran
- [420] Mohammad Javad Kalani, S.H. Hosseinian and G.B. Gharehpetian, "*Effects of PV Arrays on Power Quality of Electrical Distribution Networks*", 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran
- [421] Mohsen Bakhshi, Reza Noroozian and G.B. Gharehpetian, "*Proposal of New Anti-Islanding Method for Synchronous Distributed Generations to reduce Non-Detection Zone Frequency Relays*", 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran (in Persian)
- [422] Hamed Hashemi Dezaki H. Askarian Abiane, Masoud Mohammadalizadeh Shabestary and G.B. Gharehpetian, "*Optimal Allocation of SSSCs using GA and its Comparison with Sensitivity*

Analysis Based Methods”, 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran (in Persian)

[423] Mohammad Amin Chitsazan, G.B. Gharehpetian and Mariam Arbabzadeh, “*A New Method to Control Active Power using VSC based IPC*”, 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran (in Persian)

[424] Hamed Shabani, G.B. Gharehpetian and B. Vahidi, “*Effect of Off-Shore Wind Power Plant HDVC Link on Power System Stability*”, 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran (in Persian)

[425] Hesam Rahbari Magham M.A. Hejazi M. S. Naderi and G.B. Gharehpetian, “*Radial Deformation Location Determination in Axial Direction of Power Transformer Winding using UWB Static Antennas and Hyperbolic Method*”, 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran (in Persian)

[426] Matin Rahmatian, M.S. Naderi, G.B. Gharehpetian and Ahmad Javid Ghanizadeh, “*A New Method to Discriminate Electrical Short Circuits and Mechanical Defects in Power Transformer Winding using Correlation Difference and ANN Methods*”, 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran (in Persian)

[427] Reza Zeynali, Ahmad Javid Ghanizadeh, Masoud Mohammadalizadeh Shabestary and G.B. Gharehpetian, “*Transformer Winding Frequency Dependent Insulation Losses Approximate Model and Its Effect on Frequency Response*”, 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran (in Persian)

[428] Hossein Karami Parzani, M.A. Hejazi, M.S. Naderi and G.B. Gharehpetian, “*3D Simulation for PD Allocation in Power Transformer based on Received Signals of UWB Antennas*”, 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran (in Persian)

[429] Masoud Mohammadalizadeh Shabestary, M. Mirsalim, G.B. Gharehpetian, Ahmad Javid Ghanizadeh and Parisa Mohammadalizadeh Shabestary “*Behavior Improvement of Transformer Winding Ladder Network Equivalent Model Considering Non-Dominant Resonances Obtained from Frequency Domain Measurements*”, 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran (in Persian)

[430] Ahmad Javid Ghanizadeh, G.B. Gharehpetian and Milad Eyvazi Hesar, “*Application of Characteristic Impedance Method in Separation of Mechanical Defects of Transformer Winding*”, 27-th International Power System Conference, Nov. 12-14, 2012, Tehran, Iran (in Persian)

[431] Shayan Hosseini, G.B. Gharehpetian, Freshte Farzianpour, Shadi Hosseini and Seyed Shahab Hosseini, “*Foreseeing and Investment Risk Assessment in Constructing Power Plants Different Types using AHP*”, 2ed International Conference on Management of Technology, Dec. 16-17, 2012, Tehran, Iran (in Persian)

- [432] S. Mortazavian, G. B. Gharehpetian, M. Akhavan Hejazi, M. S. Golsorkhi, and H. Karami, “*A Simultaneous Method for Detection of Radial Deformation and Axial Displacement in Transformer Winding Using UWB SAR Imaging*”, 4th Conference on Thermal Power Plants (Gas, Combined Cycle, and Steam), Dec. 18-19, 2012, Tehran, Iran
- [433] H. Rahbari Magham, M.S. Naderi, G.B. Gharehpetian, M.A. Hejazi and H. Karami Porzani, “*A Novel Method for Exact Determination to Localize Radial Deformation along the Transformer Winding Height*”, 4th Conference on Thermal Power Plants (Gas, Combined Cycle, and Steam), Dec. 18-19, 2012, Tehran, Iran
- [434] H. Karami, M.S.A. Hejazi, M.S. Naderi, G.B. Gharehpetian, S. Mortazavian, “*Three-dimensional Simulation of PD Source Allocation Through TDOA Method*”, 4th Conference on Thermal Power Plants (Gas, Combined Cycle, and Steam), Dec. 18-19, 2012, Tehran, Iran
- [435] Farideh Doosmohammadi, Zahra Khatami, G.B. Gharehpetian, S. H. H. Sadeghi and Mehrdad Abedi, “*Comparing Effects of Series and Parallel FACTS/BESS Devices on Voltage Stability of a Grid-Connected Wind Farm During Fault*”, Conference on Smart Electric Grids Technology (SEGT2012), Dec. 18-19, 2012, Tehran, Iran
- [436] H. Rahbarimagham, , M. J. Sanjari, A. Tavakoli, G.B. Gharehpetian, R. Jafari, “*Emission Reduction in a Micro Grid Including PV Considering Voltage Profile Improvement*”, Conference on Smart Electric Grids Technology (SEGT2012), Dec. 18-19, 2012, Tehran, Iran
- [437] H. Rahbarimagham, M. Kohansal, B. Zaker and G. B. Gharehpetian, “*Investigating 3-Phase Induction Motor in Islanded VSI-based Micro Grid* ”, Conference on Smart Electric Grids Technology (SEGT2012), Dec. 18-19, 2012, Tehran, Iran
- [438] M. R. Vatani, M. J. Sanjari, G. B. Gharehpetian, J. S. Moghani, “*A New Fast Approach for Islanding Detection in the Distribution Networks with High Penetration of Distributed Generation*”, Conference on Smart Electric Grids Technology (SEGT2012), Dec. 18-19, 2012, Tehran, Iran
- [439] Mehdi Firozi Abhari, Mojtaba Khederzadeh, G.B. Gharehpetian, “*Effect of UPFC on Distance Relay Operation in Fault Current Limiting Mode*”, 7th Power Systems Protection and Control Conference, Jan. 1-2, 2013, Tehran, Iran (in Persian)
- [440] Alireza Ashourizadeh, N. Moaddabi, G.B. Gharehpetian, “*Distance Relay Third Zone Malfunction Compensation in Oscillations of Smart Grid*”, 7th Power Systems Protection and Control Conference, Jan. 1-2, 2013, Tehran, Iran (in Persian)
- [441] M. Ariany, G. B. Gharehpetian, “*Frequency Stability Assessment of Islanded Microgrid Including DGs by Decision Tree*”, 5th Electric Power Generation Conference, Feb. 12-13, 2013, Ahwaz, Iran (in Persian)

- [442] E. Rasouli, E. Morad, E. Pourbaferani, G. B. Gharehpetian and G. Riahy Dehkordi, *"Modeling and Simulation of PV Arrays and MPPT for a Grid-connected PV"*, 5th Electric Power Generation Conference, Feb. 12-13, 2013, Ahwaz, Iran (in Persian)
- [443] A. Tavakoli, M. J. Sanjari, M. Kohansal, H. Karami, G. B. Gharehpetian, *"A Novel Adaptive Control Method to Reduce Fluctuation of VSIs Power in an Islanded Micro Grid"*, 5th Electric Power Generation Conference, Feb. 12-13, 2013, Ahwaz, Iran
- [444] Hadi Moradi, G. B. Gharehpetian, J. Milimonfared, Meghdad Taheri and Sina Salehi Dobakhshari, *"An Interleaved High Step-Up Converter By A Transformer With Low Turn Ratio"*, 4th Power Electronics, Drive Systems & Technologies Conference, PEDSTC'13, Feb. 13-14, 2013, Tehran, Iran.
- [445] Hamid Seyed Saeid Heidari Yazdi, G. B. Gharehpetian and Erfan Ma'ali, *"Regulation of DC Link voltage in VSC-HVDC to Prevent DC Voltage Instability Based on Accurate Dynamic Model"*, 4th Power Electronics, Drive Systems & Technologies Conference, PEDSTC'13, Feb. 13-14, 2013, Tehran, Iran.
- [446] Sina Salehi Dobakhshari, G. B. Gharehpetian, J. Milimonfared, Meghdad Taheri, Hadi Moradi, *"Analysis and Design of Current-Fed High Step Up Quasi-Resonant DC-DC Converter for Fuel Cell Applications"*, 4th Power Electronics, Drive Systems & Technologies Conference, PEDSTC'13, Feb. 13-14, 2013, Tehran, Iran.
- [447] M. Saadatmand, G. B. Gharehpetian and S. H. Hosseinian, *"Effect of Micro-CHP and AAAC conductors on Energy Balance of Iran in Year 1408"*, 9th International Energy Conference, Feb. 20-21, 2013, Tehran, Iran. (in Persian)
- [448] H. Karami, M. S. A. Hejazi, G. B. Gharehpetian, *"Simulation of Transformer Oil Effect on PD Source Allocation"*, 4th Conference on Partial Discharge in Electrical Apparatus (PDC'13), 26-27 Feb. 2013, Tehran, Iran
- [449] A.R. Motavalian, N. Moadabi and G. B. Gharehpetian, *"Reliability Assessment of Power System Backup Protection in Smart Grid Control Center Using Phasor Measurement Units (PMU)"*, International Conference on Renewable Energies and Power Quality
- [450] H. Karami, M. J. Sanjari, A. Tavakoli and G. B. Gharehpetian, *"HSA-Based Optimal Allocation of DGs Considering Cable Aging Constraint"*, Third Iranian Conference on Renewable Energies and Distributed Generation (ICREDG 2013), April 10-11, 2013, Isfahan, Iran
- [451] E. Maali Amiri, B. Zaker, H. Rahbarimagham, M. Abedi and G. B. Gharehpetian, *"Optimal Placement and Sizing of STATCOM to Improve Power Quality Considering Wind Generation"*, Third Iranian Conference on Renewable Energies and Distributed Generation (ICREDG 2013), April 10-11, 2013, Isfahan, Iran

- [452] M. R. Vatani, M. J. Sanjari, G. B. Gharehpetian and J. S. Moghani, "*Islanding Detection in Distribution System with Penetration of VSI-based DGs Using Wavelet Energy Spectrum Analysis*", Third Iranian Conference on Renewable Energies and Distributed Generation (ICREDG 2013), April 10-11, 2013, Isfahan, Iran
- [453] Akbar Moradi, Mohamad Esmail Nazari and G. B. Gharehpetian , "*Economic Comparison between Installation of Electric Grid and PV System For Unelectrified Villages*", 18-th Electric Power Distribution Conference, EPDC 2013, Tehran, Iran, April 30-May 1, 2013 (in Persian)
- [454] Nafise Houshyar, Ehsan Rasooli, Arash Farzane, Elnaz Pourbaferani and G. B. Gharehpetian , "*GSA Application for Cost Optimization of Induction Motor Operation Improvement Filter*", 18-th Electric Power Distribution Conference, EPDC 2013, Tehran, Iran, April 30-May 1, 2013 (in Persian)
- [455] Hadi Tarimoradi, Hossein Karami, H. Askarian Abyane and G. B. Gharehpetian , "*ICA-based Optimal Coordination of Overcurrent and Distance Relays*", 18-th Electric Power Distribution Conference, EPDC 2013, Tehran, Iran, April 30-May 1, 2013 (in Persian)
- [456] G. B. Gharehpetian, "*Smart Microgrids*", Invited paper, 21st Iranian Conference on Electrical Engineering, Mashhad, Iran, 14-16 May 2013 (in Persian)
- [457] Masoud Mohammadalizadeh Shabestary, Ahmad Javid Ghanizadeh, Parviz Najafi, M. A. Mirsalim, G.B. Gharehpetian and J. S. Moghani, "*Novel Method for Estimation of Transformer Winding Parameters based on Ladder Network Model*", 21st Iranian Conference on Electrical Engineering, Mashhad, Iran, 14-16 May 2013 (in Persian)
- [458] M. Esmaili, M. Rostami and G.B. Gharehpetian, "*The Effect of Various Types of DG Interconnection Transformer on Ferroresonance*", 21st Iranian Conference on Electrical Engineering, Mashhad, Iran, 14-16 May 2013
- [459] B. Zaker, G. B. Gharehpetian, M. Mirsalim and N. Moaddabi, "*PMU-Based Linear and Nonlinear Black-Box Modelling of Power Systems*", 21st Iranian Conference on Electrical Engineering, Mashhad, Iran, 14-16 May 2013
- [460] H. Rahbari Magham, M. A. Hejazi, H. Karami Porzani, M. S. Naderi and G. B. Gharehpetian, "*Exact Determination of a Winding Disk Radial Deformation Location Considering Tank Effect Using an Analytical Method*", 21st Iranian Conference on Electrical Engineering, Mashhad, Iran, 14-16 May 2013
- [461] Zahra Khatami, Mehrdad Abedi and G.B. Gharehpetian, "*Two-Area Frequency Control in Overloaded Conditions by Using HVDC Transmission*", 21st Iranian Conference on Electrical Engineering, Mashhad, Iran, 14-16 May 2013

- [462] Rahim Jafari, M. S. Naderi, G. B. Gharehpetian, N. Moaddabi, *"Compensation of DGs Impact on Overcurrent Protection System of Smart Micro-Grids"*, 22nd International Conference on Electricity Distribution (CIRED), Stockholm, Sweden, 10-13 June 2013
- [463] M. Alipasandi, G. B. Gharehpetian, M. Ardehali *"VPP Units Energy Generation Management using PSO"*, 3rd National Conference of Fuel, Energy & Environment, Tehran, Iran, 17-18 Sep 2013
- [464] A.J. Ghanizadeh, M. Ghorat, M. S. Naderi, G. B. Gharehpetian and Farshad Adinepour, *"Insulation Coordination Studies in Hormozgan Regional Electric Company from Lightning Overvoltages Point of View"*, 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran (in Persian)
- [465] M. Ghorat, G. B. Gharehpetian, M. S. Naderi, and Kourosch Imanali Salari, *"Practical Solutions for Reduction of Effects of Ferroresonance Phenomenon during Remote Switching of Azarbaijan Subtransmission Substation in Tehran Regional Electric Company"*, 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran (in Persian)
- [466] Salman Darskhan and G. B. Gharehpetian, *"Management of GDs as a VPP in Bandar Moalem Feeder of Bandar Lenge Province"*, 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran (in Persian)
- [467] G. B. Gharehpetian, M. A. Hejazi and J. Ebrahimi Jozdani, *"UWB Wave Propagation Channel Transfer Function Estimation for Transformer Winding Radial Deformation Detection"*, 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran (in Persian)
- [468] H. Rahbari Magham, M. A. Hejazi and G. B. Gharehpetian, *"Radial Deformation Defect Exact Localization in Transformer Winding Surface in Noisy Case"*, 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran (in Persian)
- [469] M. Rahmatian, A.J. Ghanizadeh, M. S. Naderi and G. B. Gharehpetian, *"A New Algorithm for Localization and Determination of Extent of Disk Space Variation in Transformer Windings Based on Principal Component Analysis and DT"*, 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran (in Persian)
- [470] M. Bashooki, P. Saboori and G. B. Gharehpetian, *"Gas Power Plants NOX Reduction Implementing DLN System- Case Study of Fars Gas Power Plant"*, 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran (in Persian)
- [471] S. P. Mousavi Mobarake, G. B. Gharehpetian and H. Askarian, *"Prediction of Active Capacity of Electric Vehicles in Smart Grid Connected Mode Using Bayesian Neural Network"*, 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran (in Persian)

- [472] Arman Safaie, G. B. Gharehpetian, S. H. Hosseiniian, H. Askarian, "*Improvement of Fault Ride-Through Capability of DFIG Wind Turbine Using SVC*", 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran (in Persian)
- [473] A. Gholamalipour Arani, G. B. Gharehpetian, H. Askarian, S. H. Hosseiniian, Hojat Aghaamooie Arani and S. A. Taher, "*CHP Optimal Allocation in Distribution System Using MOPSO Algorithm*", 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran (in Persian)
- [474] H. Karami, G. B. Gharehpetian, M. S. A. Hejazi, "*Oil Permittivity Effect on PD Source Allocation Through Three-dimensional Simulation*", 28-th International Power System Conference, Nov. 2-4, 2013, Tehran, Iran
- [475] A. A. Khodadoost Arani, S. Hadavi, G. B. Gharehpetian, M. Seydali Seyf Abad and Amir Hossein Nazeri Ardekani, "*Presentation of new Primary and Secondary Controller for Inverters Dynamic Behavior Improvement in Isolated Microgrids*", Smart Grid Conference, SGC 2013, Tehran, Iran, Dec. 17-18, 2013 (in Persian)
- [476] E. Maali Amiri, M. Abedi, G. B. Gharehpetian and P. Karimyan "*Determination and Isolation of Faulted Section in Asymmetrical Microgrid in Off-grid and On-grid Modes*", Smart Grid Conference, SGC 2013, Tehran, Iran, Dec. 17-18, 2013 (in Persian)
- [477] N. Moaddabi Pirkalachaie and G. B. Gharehpetian, "*Smart Grid On-line Self-healing from Transient Stability Point of View using Convex Very Fast Optimization*", Smart Grid Conference, SGC 2013, Tehran, Iran, Dec. 17-18, 2013 (in Persian)
- [478] A. Tavakoli, G. B. Gharehpetian, J. S. Moghani, H. R. Karshenas, M. J. Sanjari and M. Ariany "*Isolated Microgrid Frequency Stability Assessment Using Decision Tree*", Smart Grid Conference, SGC 2013, Tehran, Iran, Dec. 17-18, 2013 (in Persian)
- [479] M. R. Vatani, M. J. Sanjari and G. B. Gharehpetian, "*Detection of Islanding Conditions in Distribution Network with Penetration of DGs Based on Wavelet Analysis*", Smart Grid Conference, SGC 2013, Tehran, Iran, Dec. 17-18, 2013
- [480] A. Tavakoli, G. B. Gharehpetian, J. S. Moghani, H. R. Karshenas and M. J. Sanjari, "*A New Control Approach to Improve Frequency Response of Voltage Source Inverters*", Smart Grid Conference, SGC 2013, Tehran, Iran, Dec. 17-18, 2013
- [481] A. A. Khodadoost, A. Tavakoli, G. B. Gharehpetian, M. Seydali Seyf Abad., "*Improving Power Sharing and Reduction Circulating Current in Parallel Inverters of Isolated Microgrids*", Smart Grid Conference, SGC 2013, Tehran, Iran, Dec. 17-18, 2013
- [482] Kamran Ramezani Talabari, G. B. Gharehpetian, S. H. Hosseiniian M. Abedi, and S. H. Fathi, "*Energy Generation Using Thermoelectric Solid State Generators and Application in Distributed Generation*", 2nd Regional CIRED Conference and Exhibition on Electricity Distribution, Tehran, Iran, Jan. 14-15 2014 (in Persian)

- [483] Saied Esmaili, G. B. Gharehpetian, B. Vahidi and Mehdi Parvizi Mosaed, "*Residential Microgrid Energy Shroort Time Planning to reduce Losses and Polution*", 2nd Regional CIRED Conference and Exhibition on Electricity Distribution, Tehran, Iran, Jan. 14-15 2014 (in Persian)
- [484] Mohammad Jazini, S. M. Mousavi G., G. B. Gharehpetian and Mohssen Rafie, "*Increasing of Contact Strength with Nano-materials in Electrical Breakdown*", 2nd Regional CIRED Conference and Exhibition on Electricity Distribution, Tehran, Iran, Jan. 14-15 2014
- [485] H. Karami, H. Tari Moradi, H. Askarian Abiane and G. B. Gharehpetian, "*Distance and Overcurrent Relays Optimal Coordination Considering Relay Type and Variable Current Base Using ICA*", 8th Power Systems Protection and Control Conference, Tehran, Iran, Jan. 15-16 2014 (in Persian)
- [486] Mohsen Ghorat, M. S. Naderi, G. B. Gharehpetian and Masoud Masoum, "*Remote Switching Overvoltages of Ayat Subtransmission Substation of Tehran Regional Electric Company*", 8th Power Systems Protection and Control Conference, Tehran, Iran, Jan. 15-16 2014 (in Persian)
- [487] H. Karami, M. A. Hejazi, H. Rahbari Magham, M. J. Sanjari and G. B. Gharehpetian, "*Power Transformers Reliability Enhancment in Power Grid Using UWB Antennas*", 3rd International Reliability Engineering Conference, Tehran, Iran, Feb 4-5, 2014 (in Persian)
- [488] H. Rahbari Magham, M. A. Hejazi, H. Karami, , M.S. Naderi and G. B. Gharehpetian, "*Reliability Enhancement with Radial Deformation Localization in Power Transformer Winding Using Electromagnetic Waves and based on matched Filters*", 3rd International Reliability Engineering Conference, Tehran, Iran, Feb 4-5, 2014 (in Persian)
- [489] Iman Lorzadeh, Ebrahim Farjah, Hossein Askarian Abyaneh, G. B. Gharehpetian, and Omid Lorzadeh, "*Four-Leg Fault-Tolerant Indirect Modulation Strategy for Three-Phase Matrix Converter Based Drives*", 5th Annual International Power Electronics, Drive Systems and Technologies Conference (PEDSTC), Tehran, Iran, Feb. 5-6, 2014
- [490] E. Maali Amiri, J. Shokrollahi Moghani, G.B. Gharehpetian and S.S. Heidary Yazdi, "*Novel Two Stage Buck-Boost Converter with Zero-Voltage Transition Operation* ", 5th Annual International Power Electronics, Drive Systems and Technologies Conference (PEDSTC), Tehran, Iran, Feb. 5-6, 2014
- [491] A. Shahinpour, J. S. Moghani, G. B. Gharehpetian and B. Abdi, "*High Gain High-Voltage Z-source Converter for Offshore Wind Energy Systems*", 5th Annual International Power Electronics, Drive Systems and Technologies Conference (PEDSTC), Tehran, Iran, Feb. 5-6, 2014
- [492] G. B. Gharehpetian, "*Transformation of Ordinary Grids to Smart Grids through Mcrogrids*", Invited Speaker, Engineering Day, Tabriz, Iran, Feb. 24, 2014 (in Persian)

- [493] K. Ramezani Talabari and G. B. Gharehpetian, "*Application of TEG Technology in Thermal to Electric Energy Conversion and Its Active and Reactive Power Injection as Isolated DG*", 3rd Emerging Trends in Energy Conservation (ETEC) , Tehran, Iran, March 2-3, 2014 (in Persian)
- [494] M. R. Vatani, D. Solati Alkaran, M. J. Sanjari and G. B. Gharehpetian, "*A Practical Method for Optimized Reactive Power Sharing Among Passive Filters*", International Conference on Renewable Energies and Power Quality, ICREPQ'14, Cordoba, Spain, 8-10 April, 2014
- [495] H. Karami, M.J. Sanjari, A. Tavakoli, G.B. Gharehpetian, M.S.A. Hejazi, "*HSA-Based Optimal Allocation and Sizing of Shunt Compensators Considering Cable Aging Constraint and Load Variations*", International Conference on Renewable Energies and Power Quality, ICREPQ'14, Cordoba, Spain, 8-10 April, 2014
- [496] R. Jafari, M.S. Naderi, G.B. Gharehpetian, "*An Adaptive Protection Scheme based on Fault Location for Smart Micro-Grids*", International Conference on Renewable Energies and Power Quality, ICREPQ'14, Cordoba, Spain, 8-10 April, 2014
- [497] B. Zaker, G. B. Gharehpetian, and N. Moaddabi, "*Parameter Identification of Heffron-Phillips Model Considering AVR Using On-Line Measurements Data*", International Conference on Renewable Energies and Power Quality, ICREPQ'14, Cordoba, Spain, 8-10 April, 2014
- [498] S. H. Hosseini, F. Sedaghati, M. Sabahi, G. B. Gharehpetian, "*A New Configuration of Modular Isolated Bidirectional DC-DC Converter*", Canadian Conference on Electrical and Computer Engineering, CCECE 2014, Toronto, Ontario, Canada, May 4-7, 2014
- [499] S. H. Hosseini, F. Sedaghati, M. Sabahi, G. B. Gharehpetian, "*Zero Voltage Switching Analysis of Modular Isolated Bidirectional DC-DC Converter*", Canadian Conference on Electrical and Computer Engineering, CCECE 2014, Toronto, Ontario, Canada, May 4-7, 2014
- [500] Akbar Bayat, Reza Noroozian, Abolfazl Jalilvand and G. B. Gharehpetian, "*Control and Utilization of Multi-Level Inverters for Fuel Cells*", 19-th Electric Power Distribution Conference, EPDC 2014, Tehran, Iran, May 6-7, 2014 (in Persian)
- [501] Efran Maali M. Abedi, G. B. Gharehpetian and Peyman Karimyan, "*Fault Classification in Smart Distribution Networks with High Penetration of Distributed Generation Resources*", 19-th Electric Power Distribution Conference, EPDC 2014, Tehran, Iran, May 6-7, 2014 (in Persian)
- [502] Mohsen Fazli, M.A. Hejazi, G. B. Gharehpetian and H. R. Baghaee, "*New Hierarchical Control in Microgrids with VSI-based DGs*", 19-th Electric Power Distribution Conference, EPDC 2014, Tehran, Iran, May 6-7, 2014 (in Persian)
- [503] A. Tavakoli, M. J. Sanjari and G. B. Gharehpetian, "*DC Link effect in a Hierarchical Approach for Frequency Regulation in Islanded Inverter-based Microgrids*", 19-th Electric Power Distribution Conference, EPDC 2014, Tehran, Iran, May 6-7, 2014

- [504] Matin Rahmatian, Morteza Hossein Pourarab, Mostafa Gholami and G. B. Gharehpetian, "*Optimal Coordination of Distance and Over-Current Relays Using ICA*", 19-th Electric Power Distribution Conference, EPDC 2014, Tehran, Iran, May 6-7, 2014
- [505] N. Amouzegar Ashtiani, Mostafa Gholami and G. B. Gharehpetian, "*Optimal Allocation of Energy Storage Systems in Connected Microgrid to Minimize the Energy Cost* ", 19-th Electric Power Distribution Conference, EPDC 2014, Tehran, Iran, May 6-7, 2014
- [506] Seyed Mohammad Sadat Kiaee, G. B. Gharehpetian, S. H. Hosseinian, and M. Abedi, "*Home Load and Solar Power Management under Real-Time Prices*", 14th International Conference on Environment and Electrical Engineering, Krakow, Poland, 10-12 May, 2014
- [507] Sina Beydaghi, Ahmad Javid Ghanizadeh and G. B. Gharehpetian, "*Disc-to-Disc Fault Detection and Localization in Power Transformer Winding Using Normalized Fault Function*", 22ed Iranian Conference on Electrical Engineering, Tehran, Iran, 20-22 May 2014 (in Persian)
- [508] Mehran Esmaeili, Mehrdad Rostami and G.B. Gharehpetian, "*The Effect of Various Types of Distributed Generations on Ferroresonance*", 22ed Iranian Conference on Electrical Engineering, Tehran, Iran, 20-22 May 2014
- [509] Reza Zeinali, Ahmad Javid Ghanizadeh, Rasul Tarvirdilu Asl and G. B. Gharehpetian, "*Transformer High Frequency Modelling Based on Lumped Parameter Model by Consideration of Core Losses*", 22ed Iranian Conference on Electrical Engineering, Tehran, Iran, 20-22 May 2014
- [510] Naime Ghasemkhani and G. B. Gharehpetian, "*Optimal Allocation of DGs in Radial Distribution Systems to Increase Loadability, Decrease Losses and Improve Voltage Profile*", 4-th Annual Clean Energy Conference, Kerman, Iran, 25-26 June 2014 (in Persian)
- [511] Seyed Hossein Hosseini, Farzad Sedaghati, Mehran Sabahi and G. B. Gharehpetian, "*A Modular DC-DC Converter with Zero Voltage Switching Capability*", 14th International Conference on Control, Automation and Systems (ICCAS 2014), KINTEX, Gyeonggi-do, Korea, Oct. 22-25, 2014
- [512] J. Pourhossein, G. B. Gharehpetian and S. H. Fathi, "*Static Inter-Phase Power Controller Modeling and Its Comparison with IPC and SSSC*", 6th Iranian Conference on Electrical Electronics and Engineering (ICEEE 2014), Gonabad, Iran, Aug. 19-21, 2014
- [513] S. Hadavi, B. Zaker, G. B. Gharehpetian and N. Ghasemkhani, "*Optimal Distributed Generation Placement Considering Voltage Profile Improvement and Loss Reduction: Case Study on Iranian Distribution Network*", 1st International Conference and Project Meeting on Advanced Science and Technologies for Sustainable Development in Iran (STSD 2014), Berlin, Germany, 21-22 August 2014

- [514] Mohammad Reza Poursistani, Nesa Hajilu, G. B. Gharehpetian and M. Shafiei, " *CHP Systems in Iranian Industry and Its Comparison with CHP Application in Europe: A Case Study*", 1st International Conference and Project Meeting on Advanced Science and Technologies for Sustainable Development in Iran (STSD 2014), Berlin, Germany, 21-22 August 2014
- [515] F. Safdarian, G.B. Gharehpetian, M.M. Ardehali, M.R. Poursistani, M. Shafiei, " *Comparison of Effect of Energy Prices in Iran and USA on Short-term Planning of an Industrial Microgrid*", 1st International Conference and Project Meeting on Advanced Science and Technologies for Sustainable Development in Iran (STSD 2014), Berlin, Germany, 21-22 August 2014
- [516] F. Safdarian, G.B. Gharehpetian, M.M. Ardehali, M.R. Poursistani, " *Optimization of an Industrial Microgrid for Short-Term Planning Considering Effect of Energy Prices in Iran*", 1st Joint Iran & Germany Conference on Renewable Energy (IGCRE 2014), Tehran, Iran, September 9-10, 2014
- [517] F. Safdarian, M.M. Ardehali, G.B. Gharehpetian, M.R. Poursistani, " *Short-Term Planning of a Microgrid Considering Uncertainty of Wind Generation*", 1st Joint Iran & Germany Conference on Renewable Energy (IGCRE 2014), Tehran, Iran, September 9-10, 2014
- [518] M. A. Hejazi and G. B. Gharehpetian, " *A Review on Power Transformer Winding Monitoring for Detection of Axial Displacement and Radial Deformation Using Electromagnetic Waves*", 1st International Transformer Conference and Exhibition, Tehran, Iran, 16-17 Sep. 2014 (in Persian)
- [519] F. Safdarian, M. M. Ardehali, G. B. Gharehpetian, " *Ramp Rate Effect on Maximizing Profit of a Microgrid Using Gravitational Search Algorithm*", 4th International IAJC/ISAM conference, Orlando, Florida, USA, September 25-27, 2014
- [520] F. Safdarian, M. M. Ardehali, G. B. Gharehpetian, " *Performance of Optimal Controller of VSC-HVDC Systems in Weak Networks*", 4th International IAJC/ISAM conference, Orlando, Florida, USA, September 25-27, 2014
- [521] Sajjad Hadavi, Mohammad Javad Sanjari, A. H. Yatim and G.B. Gharehpetian, " *Small Signal Stability Assessment of Islanded VSI-based Microgrids Considering Load Variations*", IEEE Conference on Energy Conversion (CENCON 2014), Johor Bahru, Malaysia, 13–15 October 2014
- [522] Sajjad Hadavi, Mohammad Javad Sanjari, A. H. Yatim and G.B. Gharehpetian, " *A Novel Approach for Interleaved Buck Step- Down Converter Switching Using Sigma-Delta Method*", IEEE Conference on Energy Conversion (CENCON 2014), Johor Bahru, Malaysia, 13–15 October 2014
- [523] A. A. Khodadoost Arani, H. R. Mohammad Yousefi, H. Askarian Abyane and G. B. Gharehpetian, " *Frequency Control Performance Improvement in Smart Islanded Microgrids*

Using Flywheel Storage”, 29-th International Power System Conference, Oct. 27-29, 2014, Tehran, Iran (in Persian)

[524] A. Hovanesian, M. R. Haghifam and G. B. Gharehpetian, “*Islanding Detection in Presence of Different DG Technologies Using Wavelet Transform*”, 29-th International Power System Conference, Oct. 27-29, 2014, Tehran, Iran (in Persian)

[525] M. A. Hejazi, M. Sabaghpour Arani, G. Mokhtari and G. B. Gharehpetian, “*Measurement of Tank Effect on Transformer Winding Radial Deformation Detection Method Using Electromagnetic Waves*”, 29-th International Power System Conference, Oct. 27-29, 2014, Tehran, Iran (in Persian)

[526] Siamak Bahari, P. Karimyan, B. Zaker, H. Askarian Abyane, G. B. Gharehpetian and M. Abedi, “*Fault Current Limiter Optimal Sizing Using Harmony Search Algorithm (HAS)*”, 29-th International Power System Conference, Oct. 27-29, 2014, Tehran, Iran (in Persian)

[527] Mehrdad Mallaki, M. S. Naderi and G. B. Gharehpetian, H. Abdi and F. Adinepour, “*Kaveh 63/20 Substation relays Coordination in Hormozgan Regional Electric Company in Presence of DGs and Considering Subtransmission Network Coordinations*”, 29-th International Power System Conference, Oct. 27-29, 2014, Tehran, Iran (in Persian)

[528] Nesa Hajilu, M. R. Poursistani, G. B. Gharehpetian and M. Abedi, “*Subsidies Effect on CHP Systems Profitability in Iranian Industry*”, 29-th International Power System Conference, Oct. 27-29, 2014, Tehran, Iran (in Persian)

[529] F. Adinepour, M. Mallaki, M. S. Naderi and G. B. Gharehpetian, “*Kaveh 63/20kV Substation Frequency Protection Performance in Gheshm Network of Hormozgan Regional Electric Co. in Islanded State of DGs Considering Loads Different Models (Case Study)*”, 29-th International Power System Conference, Oct. 27-29, 2014, Tehran, Iran (in Persian)

[530] Ali Akbar Ahmadi, Shahpour Ebrahimi and G. B. Gharehpetian, “*Multi-Agent Optimization Method Improvement to Design Load Frequency Improved Controller*”, 29-th International Power System Conference, Oct. 27-29, 2014, Tehran, Iran (in Persian)

[531] Habib Sheykh Kolahi, and G. B. Gharehpetian, “*Scenario Based Siting and Sizing of DG in 20kV Feeder of Malekan Province Considering Voltage Profile, Losses and Short Circuit Level Variations*”, 29-th International Power System Conference, Oct. 27-29, 2014, Tehran, Iran (in Persian)

[532] H. Ale Hosseini, G. B. Gharehpetian, M. A. Hejazi and M. Sabaghpour Arani, “*Pattern Recognition Methods Comparison for Interpretation of Measurements Results of Power Transformer Winding Model to Detect Radial and Axial Defects*”, 29-th International Power System Conference, Oct. 27-29, 2014, Tehran, Iran (in Persian)

[533] Mohammad Pichan, G.B. Gharehpetian, Hasan Rastegar, Mohammad Monfared, “*A Model-Based Direct Power Control of Doubly Fed Induction Generator with Improved*

Performance at Steady State Condition", 4th International Conference on Computer and Knowledge Engineering (ICCKE 2014), 29-30 Oct. 2014, Mashhad, Iran

[534] A. Tavakoli, M. J. Sanjari, G. B. Gharehpetian, "*DC Link Modelling Effect on Hierarchical Frequency Control in Islanded Inverter-Based Microgrids*", 40th Annual Conference of IEEE Industrial Electronics Society (2014 IECON14), Dallas, Texas, USA, October 29 - November 1

[535] G. B. Gharehpetian, "*Microgrids, Entering Port to Smart Grids*", Invited Paper, First International Congress on Technology, Communication and Knowledge, ICTCK 2014, (ICCECSG 2014), 26-27 Nov. 2014, Mashhad, Iran (in Persian)

[536] M. R. Poursistani, M. Abedi, N. Hajilu, G. B. Gharehpetian, "*Impacts of Plug-in Electric Vehicles Smart Charging on Distribution Networks*", First International Congress on Technology, Communication and Knowledge, ICTCK 2014, (ICCECSG 2014), 26-27 Nov. 2014, Mashhad, Iran

[537] M. R. Poursistani, M. Abedi, N. Hajilu, and G. B. Gharehpetian, "*Smart Charging Of Plug-In Electric Vehicle Using Gravitational Search Algorithm*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014

[538] N. Hajilu, G. B. Gharehpetian, S. H. Hosseinian and M. Kohansal "*Stability Analysis in Autonomous VSC-based Microgrid in the Presence of Disturbances*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014

[539] A. A. Khodadoost Arani, and G. B. Gharehpetian, "*Enhancement of Microgrid Frequency Control Subsequent to Islanding Process Using Flywheel Energy Storage System*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014

[540] A. A. Khodadoost Arani and G. B. Gharehpetian, "*A New Control Method for Improving Transient Response of Parallel VSIs in Islanded Microgrids*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014

[541] A. A. Khodadoost Arani, A. H. Nazeri Ardekani and G. B. Gharehpetian, "*Improving Power Sharing Between Parallel Voltage Source Inverters Using Enhanced Droop Controller*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014

[542] A. A. Khodadoost Arani, H. R. Zaferani, M. J. Sanjar and G. B. Gharehpetian, "*Using Genetic Algorithm and Simulated Annealing for 27-level PV Inverter THD Minimization*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014

[543] A. A. Khodadoost Arani, S. H. Hosseinian and G. B. Gharehpetian, "*Application of Flywheel Storage System for Variable Speed Wind Turbine Generators Output Power Characteristic Improvement in Microgrid*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014 (in Persian)

- [544] Naimeh Ghasemkhani and G. B. Gharehpetian, "*Introducing a Heuristic Index for Determination of DGs Effects on Non-Radial Distribution System Protection System*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014 (in Persian)
- [545] Zaynab Ghazi, Ali Doostmammadi and G. B. Gharehpetian, "*Modeling, Monitoring and Fault Diagnosis in Smart Grid Using Hybrid Petri Net Theory*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014 (in Persian)
- [546] Amin Yazdani Nejadi, M. S. Naderi and G. B. Gharehpetian, "*Optimal Overcurrent Protection Coordination in Smart Subtransmission Networks with DG Units for Off-grid and On-grid Operation*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014 (in Persian)
- [547] Mohsen Ebrahimi, G. B. Gharehpetian and Hedayat Sabouri, "*Techno-Economic Comparison Between Supplying Load in Impassable Regions of Kurdistan by Network or Hybrid Renewable System Based on Real Data*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014 (in Persian)
- [548] Behname Ojaghlou, A. A. Khodadoost Arani, Milad Nasiri and G. B. Gharehpetian, "*Comparison of Application of Aggregated and Distributed Flywheel Energy Storage Systems for Frequency Performance Improvement in Off-Grid Microgrid*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014 (in Persian)
- [549] Mohammad Ali Baherifard and G. B. Gharehpetian, "*Effect of Considering Microgrid Dynamics on PHEVs Contribution in Frequency Control of Off-grid Microgrid*", Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014 (in Persian)
- [550] G. B. Gharehpetian, "*Missed Elements of Smart Microgrids*", Invited paper, Smart Grid Conference 2014 (SGC'14), Tehran, Iran, Dec. 9-10, 2014 (in Persian)
- [551] B. Zaker, A. A. Khodadoost Arani and G. B. Gharehpetian, "*Investigating Battery Energy Storage System for Frequency Regulation in Islanded Microgrid*", 3rd Regional CIRED Conference and Exhibition on Electricity Distribution, Tehran, Iran, Jan. 13-14, 2015
- [552] Hamed Dehghani, Sina Salehi Dobakhshri, G. B. Gharehpetian, B. Vahidi, S. H. Fathi, "*Inductive Fault Current Limiter Effect Analysis on Distance Relay Protection First Zone and Fault Detection Using DC Component method*", 9th Power Systems Protection and Control (PSPC 2015), 14-15 Jan, 2015, Tehran, Iran (in Persian)
- [553] Amin Yazdani Nejadi, M. S. Naderi and G. B. Gharehpetian, "*Overcurrent Protection Improvement in Microgrid Using Adaptive Relays*", 9th Power Systems Protection and Control (PSPC 2015), 14-15 Jan, 2015, Tehran, Iran (in Persian)
- [554] Behnam Mahdavi Hamidabadi, Rahim Jafari and G. B. Gharehpetian, "*Fault Detection in Microgrids Using Multi-Agent Supervisory Protection in a Smart Microgrid Based on Energy*"

Flow Path in Feeders", 9th Power Systems Protection and Control (PSPC 2015), 14-15 Jan, 2015, Tehran, Iran (in Persian)

[555] Erfan Maali, G. B. Gharehpetian, B. Vahidi, "*Fault Classification in Distribution Networks with High Penetration of DGs*", 9th Power Systems Protection and Control (PSPC 2015), 14-15 Jan, 2015, Tehran, Iran (in Persian)

[556] Hamed Dehghani, G. B. Gharehpetian, B. Vahidi "*Study of Effect of Wind DGs Place and Uncertainty on Reliability Indexes in Distribution Network*", 9th Power Systems Protection and Control (PSPC 2015), 14-15 Jan, 2015, Tehran, Iran (in Persian)

[557] G. B. Gharehpetian, "*Electrical Energy Storage System Application in Power System*", Electrical Energy Storage System Technology Development Seminar, 18 Jan, 2015, Tehran, Iran (in Persian)

[558] M. Mahmoudi, J. Moghani, A. Khoshsaadat, G. B. Gharehpetian and K. Davoodi, "*THD Minimization of Multilevel Inverter's Output Voltage Waveform Using IHBMO Algorithm*", Power Electronics Drive Systems and Technologies Conference (PEDSTC), Tehran, Iran, Feb. 3-4, 2015

[559] Hamid Radmanesh, S. H. Fathi, G. B. Gharehpetian and Amin Radmanesh, "*Reconstruction of Aircraft Electrical Power Distribution System Using Solid State Fault Current Limiter*", Iranian Conference on Avionics Systems (ICAS 2015), Isfahan, Iran, Feb. 3-4 2015

[560] A. Khodadoost Arani, G. B. Gharehpetian, B. Zaker, "*Frequency Improvement in Islanded Microgrid by Using Battery Energy Storage System Considering Dynamic Loads*", 2nd National Conference on Applied Researches in Electrical, Mechanical and Mechatronics Engineering, Tehran, Iran, Feb. 19, 2015

[561] A. Khodadoost Arani, G. B. Gharehpetian, B. Zaker, "*Field Oriented Proposal for Flywheel Storage System To Regulate Isolated Microgrid Frequency*", 2nd National Conference on Applied Researches in Electrical, Mechanical and Mechatronics Engineering, Tehran, Iran, Feb. 19, 2015 (in Persian)

[562] S. Hadavi, B. Zaker, A. Khodadoost Arani, G. B. Gharehpetian, "*Optimal DGs Placement and Sizing Considering Static Voltage Stability in Smart Distribution Systems*", 2nd National Conference on Applied Researches in Electrical, Mechanical and Mechatronics Engineering, Tehran, Iran, Feb. 19, 2015 (in Persian)

[563] N. Hajilu, G.B. Gharehpetian, S. H. Hosseinian, M. R. Poursistani, M. Kohansal, "*Power Control Strategy in Islanded Microgrids Based on VF and PQ Theory Using Droop Control of Inverters*", 3rd International Congress on Electric Industry Automation (ICEIA2015), Shiraz, Iran, February 24 and 25, 2015

- [564] Seyed Alireza Ahmadi, H. Karami, H. Tari Moradi, M. J. Sanjari, G. B. Gharehpetian, *"Overcurrent Relays Optimal Coordination Considering Relay Different Characteristics based on HSS Algorithm"*, 20-th Electric Power Distribution Conference, EPDC 2015, Zahedan, Iran, April 28-29, 2015 (in Persian)
- [565] Sajad Madadi Yegane, R. Noroozian, G. B. Gharehpetian, *"Novel Power Electronic Multi-Port Converter Control and Modeling for Renewable Energy Resources and Storage Systems"*, 20-th Electric Power Distribution Conference, EPDC 2015, Zahedan, Iran, April 28-29, 2015 (in Persian)
- [566] Bahram Pournazarian, Peyman Karimyan, G. B. Gharehpetian, M. Abedi, *"New Index Presentation for Sizing and Localization of Distributed generation Units in Distribution Systems with Voltage Stability Improvement Approach"*, 20-th Electric Power Distribution Conference, EPDC 2015, Zahedan, Iran, April 28-29, 2015 (in Persian)
- [567] Mahsa Kazemi, G. B. Gharehpetian, Alireza Fereidounian *"Synchronous DG Generator Generation Management in Distribution Systems Using Smart Meters Data"*, 20-th Electric Power Distribution Conference, EPDC 2015, Zahedan, Iran, April 28-29, 2015 (in Persian)
- [568] Jammaledin Hosseini, G. B. Gharehpetian , *"Appropriate Distributed Generations Selection in Kurdistan Province Distribution System in order to Reduce Peak Power Considering Load Condition "*, 20-th Electric Power Distribution Conference, EPDC 2015, Zahedan, Iran, April 28-29, 2015 (in Persian)
- [569] Marjan Sarvar Taherabadi, G. B. Gharehpetian, Alireza Fereidounian, *"Classification and Fault Factors Analysis based on Assembling Technique in Electric Distribution Network"*, 20-th Electric Power Distribution Conference, EPDC 2015, Zahedan, Iran, April 28-29, 2015 (in Persian)
- [570] Hojatollah Ghorbani, G. B. Gharehpetian, Farivar Fazelpour, Mohammad Jazini, *"Study on Fluids Improved by Nanomaterials In Power Industry"*, 20-th Electric Power Distribution Conference, EPDC 2015, Zahedan, Iran, April 28-29, 2015 (in Persian)
- [571] Mirhadi Athari, G. B. Gharehpetian and Hamid Reaz Sadeghian, *"Optimal Fuzzy Controller Design Using PSO Algorithm for Charging Process Control of PHEVs Connotted to Distribution Systems"*, 23rd Iranian Conference on Electrical Engineering, Tehran, Iran, 10-14 May 2015 (in Persian)
- [572] Hamid Reaz Sadeghian, G. B. Gharehpetian and Mirhadi Athari, *"Improved Multiagent System for Energy Smart Management in Microgrid Considering EVs"*, 23rd Iranian Conference on Electrical Engineering, Tehran, Iran, 10-14 May 2015 (in Persian)
- [573] Morteza Asgharpour Hasaan Kiadeh, Farhad Abbasi, G. B. Gharehpetian and S. H. Hosseinian, *"One Residential Unit PV System Optimal Sizing in Tehran Based on Real Load"*, 23rd Iranian Conference on Electrical Engineering, Tehran, Iran, 10-14 May 2015 (in Persian)

- [574] Mohammad Jazini, S. M. Mousavi G., Gevork B. Gharehpetian, "*The Nano-Contacts in Improving the Performance of Circuit Breakers*", 3rd Conference of Nano Technology in Power and Energy Industry, Tehran, Iran, May 19-20, 2015
- [575] Hojatollah Ghorbani, G. B. Gharehpetian, Farid Fazelpour, Mohammad Jazini, "*Nano-Fluids Effects on Systems under Thermal Stress in Power Industry*", 3rd Conference of Nano Technology in Power and Energy Industry, Tehran, Iran, May 19-20, 2015 (in Persian)
- [576] M. Firouzi Abhari and G. B. Gharehpetian, "*Improving LVRT of DFIG Using Bridge-Type Superconducting Limiter*", 3rd Iran Wind Energy Conference (IWEC), Tehran, Iran, 15-16 June 2015 (in Persian)
- [577] Mohammad Saied Mahdavi, S. H. Hosseinian and G. B. Gharehpetian "*Using Flowers Pollination Algorithm for Unit Commitment of Thermal and Wind Units Considering Wind Power Generation and Network Load Consumption Uncertainty*", 3rd Iran Wind Energy Conference (IWEC), Tehran, Iran, 15-16 June 2015 (in Persian)
- [578] J. Pourhossein, G. B. Gharehpetian and S. H. Fathi, "*Static Inter-Phase Power Controller (SIPC) and Inter-line Power Controller (IPFC) Comparison*", 7th Iranian Conference on Electrical Electronics and Engineering (ICEEE 2015), Gonabad, Iran, Aug. 19-20, 2015
- [579] Seyed-Alireza Ahmadi, H. Karami, M. J. Sanjari, B. Zaker and G. B. Gharehpetian, "*Cable Aging and Loadability Consideration in HSA-Based DG Placement*", 7th Iranian Conference on Electrical Electronics and Engineering (ICEEE 2015), Gonabad, Iran, Aug. 19-20, 2015
- [580] H. Karami, Seyed-Alireza Ahmadi, M. J. Sanjari, B. Zaker and G. B. Gharehpetian, "*Optimal DSTATCOM Placement by Considering Cable Aging Constraint and Voltage Profile Improvement*", 7th Iranian Conference on Electrical Electronics and Engineering (ICEEE 2015), Gonabad, Iran, Aug. 19-20, 2015
- [581] M. Saadatmand, S.H. Hosseinian and G. B. Gharehpetian, "*Security of Smart Energy Grids*", 7th Iranian Conference on Electrical Electronics and Engineering (ICEEE 2015), Gonabad, Iran, Aug. 19-20, 2015
- [582] M. Saadatmand, S.H. Hosseinian and G. B. Gharehpetian, "*Harmonics management in Distribution Networks Using Allocation of Harmonics Injection Share*", 7th Iranian Conference on Electrical Electronics and Engineering (ICEEE 2015), Gonabad, Iran, Aug. 19-20, 2015
- [583] H. Karami Porzani, G. B. Gharehpetian, Y. Norouzi, M. S. Akhavan Hejazi, "*Feasibility Study on On-line and Simultaneous Transformer Winding Radial Deformation and PD Localization Using Electromagnetic Waves*", Invited paper, 2nd International Transformer Conference and Exhibition, ITCE 2015, Tehran, Iran, 1-2 Sep., 2015 (in Persian)
- [584] Behrooz Ahmadzadeh, G. B. Gharehpetian, and Saied Ahmadzadeh, "*Distribution Transformers with Reduced AB' Losses*", 2nd International Transformer Conference and Exhibition, ITCE 2015, Tehran, Iran, 1-2 Sep., 2015 (in Persian)

- [585] Mohammad Jazini, Seyed Mohammad Mousavi, G. B. Gharehpetian and Mehdi Jazini, "*Transformers Tap-Changers Contacts Optimal Operation Improvement Using Nano-Structure Design*", 2nd International Transformer Conference and Exhibition, ITCE 2015, Tehran, Iran, 1-2 Sep., 2015 (in Persian)
- [586] J. Nosratian Ahoor, Saied Seyedtabaie and G. B. Gharehpetian, "*Air-Core Transformer Frequency Dependent Model Improvement for Transients Studies*", 2nd International Transformer Conference and Exhibition, ITCE 2015, Tehran, Iran, 1-2 Sep., 2015 (in Persian)
- [587] M. Ghorat, B. Zaker, G. B. Gharehpetian, "*Advanced Technologies for Iran Future Power System*", Invited paper, 2nd International Conference and Project Meeting on Advanced Science and Technologies for Sustainable Development in Iran (STSD 2015), Berlin, Germany, 8-12 Sep. 2015
- [588] Omid Zhoulai Bakhoda, M. B. Menhaj, G. B. Gharehpetian, "*MPPT for a Three-Phase Grid-Connected PV System (Fuzzy Logic Controller vs. PI Controller)*", 4th Iranian Joint Conference on Fuzzy and Intelligent Systems, Zahedan, Iran, 9-11 Sep., 2015
- [589] S. H. Hosseini, M. Sabahi, F. Sedaghati, G. B. Gharehpetian, "*A New Extended Topology for Dual Active Bridge DC-DC Converter*", IEEE Canada Electrical Power and Energy Conference (EPEC 2015), London, Ontario, Canada, October 26-28, 2015
- [590] A. Teymouri, S. H. Fathi, G. B. Gharehpetian, "*An Advanced Fuzzy Control Method to Improve Dynamic Stability of Power System with PV Units*", 5-th International Conference on Computer and Knowledge Engineering (ICCKE), 29 Oct. 2015, Mashhad, Iran
- [591] Sina Vahid, Hassan Rastegar, S. Hamid Fathi, and G. B. Gharehpetian, "*Improving the Performance of PV Grid Interface Inverter Using the Adaptive Hysteresis Band Current Controller*", 5-th International Conference on Computer and Knowledge Engineering (ICCKE), 29 Oct. 2015, Mashhad, Iran
- [592] Amirreza Hassani Ahangar, Hossein Askarian Abyaneh, G. B. Gharehpetian, "*Negative Effects of Cyber Network (Control, Monitoring, and Protection) on Reliability of Smart Grids Based on DG Penetration*", 5-th International Conference on Computer and Knowledge Engineering (ICCKE), 29 Oct. 2015, Mashhad, Iran
- [593] S. Hosseini, G. B. Gharehpetian, S.B. Mozafari and F. Farzianpour, "*AHP-based Performance and Efficiency Study of Different Passages and Outdoor Lighting Systems*", 10th National Conference of Quality and Efficiency, 18 Nov. 2015
- [594] M. Jahani, G. B. Gharehpetian, J. Milimonfared, A. Khoshsaadat, "*Performance Analysis, Small Signal Modeling and Controller Design for Single Switch Buck-Boost*", 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran (in Persian)

- [595] J. Nosratiyan Ahour, S. Seyed Tabaei and G. B. Gharehpetian, “*Practical Recommendations in Order to Achieve Accurate Winding Equivalent Model*”, 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran (in Persian)
- [596] A. A. Khodadoost Arani, and G. B. Gharehpetian, “*Modeling and Simulation of Flywheel for Peak Shaving Applications in Power Systems*”, 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran (in Persian)
- [597] A. A. Khodadoost Arani, H. R. Zafarani, G. B. Gharehpetian, “*Flywheel Optimal Size Determination to Improve Frequency Considering Economic Considerations*”, 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran (in Persian)
- [598] H. Karami, G. B. Gharehpetian, Y. Noroozi, M. A. Hejazi, “*Application of GLRT Method for On-line and Simultaneous Detection of Radial Deformation and Localization of PD in Transformer Winding Using Electromagnetic Waves*”, 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran (in Persian)
- [599] H. Bahramian Hubeal, G. B. Gharehpetian and H. Askarian Abyaneh, “*A New Method for Optimal Localization of SFCL in Order to Restore Distance and Overcurrent Relays Coordination*”, 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran (in Persian)
- [600] A. Foroughi Nematollahi, O. Askari Ghasht Roudkhani, G. B. Gharehpetian and B. Vahidi, “*Analytic- Iterative Method for Determination of DGs Size and Location in Distribution Network in order to Reduce Losses*”, 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran (in Persian)
- [601] Touraj Ghanatir, G. H. Riahy, G. B. Gharehpetian and I. Ghazavi Shariatpanah, “*Design of Hybrid System Including Wind and Solar Resources and Battery as Storage*”, 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran (in Persian)
- [602] M. A. Noroozy, J. Olamaei and G. B. Gharehpetian, “*Techno-Economic Evaluation of Neka Power Plant Turbo Expander Starting Improvement using Static Synchronous Compensator*”, 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran (in Persian)
- [603] Bahram. Poornazaryan, Mehrdad. Abedi, G.B. Gharehpetian, Peyman. Karimyan, “*Application of PHEVs in Controlling Voltage and Frequency of Autonomous Microgrids*”, 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran
- [604] Mohammad Jazini, Gevork B. Gharehpetian, S. M. Mousavi G., Mahdi Jazini and Mohsen Jazini, “*Improved Performance of The Nano-Contacts on Arc Break Down*”, 30-th International Power System Conference, Nov. 23-25, 2015, Tehran, Iran
- [605] Kumars Rouzbehi, Jiebei Zhu, Weiyi Zhang, G.B. Gharehpetian, Alvaro Luna and Pedro Rodriguez, “*Voltage Source Converter with Inertia Mimicry Capability for Multi-terminal*

HVDC Grids", International Conference on Renewable Energy Research and Applications, ICRERA-2015 Palermo, Italy, November 22-25, 2015

[606] Mahdi Bayati, Amirhossein Salmani, Mehrdad Abedi, G. B. Gharehpetian, "*A Novel Technique for Optimization of Power Systems Implemented in Simulink (Case Study: Multi-Area Frequency Control)*", International Conference on POWER, INSTRUMENTATION, COMPUTING AND CONTROL (PICC), Dec. 9-11, 2015, Thrissur, India

[607] Mahdi Bayati, Amirhossein Salmani, Mehrdad Abedi, G. B. Gharehpetian, "*Control of EV/PHEV Bidirectional Battery Chargers in AC Microgrids*", International Conference on POWER, INSTRUMENTATION, COMPUTING AND CONTROL (PICC), Dec. 9-11, 2015, Thrissur, India

[608] M. Mostafayi, G. B. Gharehpetian, M. Abedi, G.H. Riahy, "*Power Consumption Optimal Scheduling for Demand Response in Home Energy Management Systems*", IEA Second International Conference on Technology and Energy 15-16 Dec. 2015, Tehran, Iran (in Persian)

[609] A. Amiri, M. M. Ardehali, G. B. Gharehpetian, "*Supply of a Rural Area Using Optimal Design and Hybrid Systems Analysis*", IEA Second International Conference on Technology and Energy 15-16 Dec. 2015, Tehran, Iran (in Persian)

[610] N. Ghasemkhani, S.H. Hosseinian, G. B. Gharehpetian and B. Zaker, "*DGs and SVCs Allocation in Distribution System to Reduce Losses and Improve Voltage Profile using Harmony Search Algorithm*", Smart Grid Conference (SGC2015), Tehran, Iran, Dec. 22-23, 2015 (in Persian)

[611] A.A. Khodadoost Arani and G. B. Gharehpetian, "*Presentation of Improved Droop Controller Equipped with Virtual Impedance to Improve Dynamics of Inverters in Islanded Microgrid*", Smart Grid Conference (SGC2015), Tehran, Iran, Dec. 22-23, 2015 (in Persian)

[612] Mohammad Kamran, Mehdi Salay Naderi, Mehrdad Mallaki and G. B. Gharehpetian, "*Effect of Penetration level and Charging Method of EV on Generation Expansion Planning of power System*", Smart Grid Conference (SGC2015), Tehran, Iran, Dec. 22-23, 2015 (in Persian)

[613] Mohammad Kamran, Mehdi Salay Naderi, Mehrdad Mallaki, and G. B. Gharehpetian, "*Effect of Electric Vehicle Load and Charging Pattern on Generation Expansion Planning*", Smart Grid Conference (SGC2015), Tehran, Iran, Dec. 22-23, 2015

[614] Mahdi Bayati, Hesam Ghasempour Aghamaleki , Mehrdad Abedi , and G. B. Gharehpetian, "*Battery Charging Systems for Electric Vehicles Based on Reflex Technique*", Smart Grid Conference (SGC2015), Tehran, Iran, Dec. 22-23, 2015

[615] M. Ghorat, A. Layeghi, M. Ghafari, M. S. A. Hejazi, G. B. Gharehpetian, H. Latifi, "*Denosing of Partial Discharge Acoustic Signal Using Dual-Tree Complex Wavelet Transformation*", 6-th Conference on Thermal Power Plants, CTPP2016 (Gas, Combined-Cycle, Steam), 19-20 January 2016, Tehran Iran (in Persian)

- [616] H. Karami, G. B. Gharehpetian, Y. Noroozi, M. S. A. Hejazi, "*Study on Being Simultaneous and On-line for Axial Displacement and Partial Discharge Detection in Power Transformer Windings Using Electromagnetic Waves*", 6-th Conference on Thermal Power Plants, CTPP2016 (Gas, Combined-Cycle, Steam), 19-20 January 2016, Tehran Iran (in Persian)
- [617] H. Karami, M. Ghorat, G. B. Gharehpetian, M. S. A. Hejazi, Y. Noroozi and A. Rajoli, "*Implementation of Radar Imaging Using Electromagnetic Waves to Detect Radial Deformation in 30MVA Repaired Transformer*", 6-th Conference on Thermal Power Plants, CTPP2016 (Gas, Combined-Cycle, Steam), 19-20 January 2016, Tehran, Iran (in Persian)
- [618] Milad Nasirii, A. A. Khodadoost Arani, B. Ojaghloo, G. B. Gharehpetian, "*Flywheel Energy Storage Optimal Allocation in Microgrid to Improve Frequency Control Performance*", 4th Regional CIRED Conference and Exhibition on Electricity Distribution, Tehran, Iran, Jan. 13 2016 (in Persian)
- [619] B. Mahdavi, R. Jafari, A. A. Khodadoost Arani, G. B. Gharehpetian, "*Presentation of New Adaptive Protection Scheme Based on Proper Regulation of Recloser and Sectionalizer*", 4th Regional CIRED Conference and Exhibition on Electricity Distribution, Tehran, Iran, Jan. 13 2016 (in Persian)
- [620] Amir Hossein Nazeri Ardekani, M. B. Menhaj, A.A. Khodadoost Arani, M. Karrari and G. B. Gharehpetian, "*PI Controller for Quarter Vehicle Active Suspension System with Optimized Gains Using PSO Algorithm*", 4th International Conference on Control, Instrumentation and Automation, (ICCIA 2016), 27-28 Dec., 2016, Ghazvin, Iran (in Persian)
- [621] H. Karami, G. B. Gharehpetian, Y. Noroozi, M. A. A. Hejazi, "*Noise Effect in Using GLRT for On-line and Simultaneous Detection of Radial deformation and PD in Transformer Winding Using Electromagnetic Waves*", Electric Power Generation Conference, EPGC 2016, 16-17 Feb., 2016, Tehran, Iran (in Persian)
- [622] M. S. Mahdavi, G. B. Gharehpetian, Z. Mahdavi, "*Reduction of Fuel Consumption, Spinning Reserve and Losses of Smart Grid Using Optimal Utilization of Renewable Energy Resources and Demand Response*", 5th edition of Emerging Trends in Energy Conservation (ETEC 2016), Tehran, Iran, February 22 and 23, 2016 (in Persian)
- [623] Kamran Ramezani Talabari, Javad Basirati, Mohammad Ojani and G. B. Gharehpetian, "*Electrical Energy Gain from Output of General and Vehicles Paint Cooking Furnace using TEG and its Usage in Lighting*", 5th edition of Emerging Trends in Energy Conservation (ETEC 2016), Tehran, Iran, February 22 and 23, 2016 (in Persian)
- [624] Mehdi Jadidi, Sadighe Moazeni, G. B. Gharehpetian, "*Study on Optimal Communication Infrastructure for Remote Protection System*", 4rd International Congress on Electric Industry Automation (ICEIA2016), Tabriz, Iran, February 23 and 24, 2016 (in Persian)

[625] G. B. Gharehpetian, "*Novel Methods of Power Transformer Monitoring, Interdisciplinary Techniques*", Invited paper, Future Horizons of Electrical and Computer Engineering, Seminar of The Academy of Sciences of Iran, Tehran, Iran, 29 Feb. 2016 (in Persian)

[626] Mohsen Nikanjam, M. S. Naderi, G. B. Gharehpetian, Mohammad Reza Karimi, "*Hybrid AC/DC Microgrid Control Using Renewable Generations with Structure Coupled in AC Side*", 4th Iranian Conference on Renewable Energies and Distributed Generation (ICREDG 2016), March, 2- 3, 2016, Mashhad, Iran (in Persian)

[627] Hamid Reza Ghasemzadeh, G. B. Gharehpetian, M. Abedi, P. Karimyan, "*A New Method for Optimization of Reconfiguration and DG Allocation in Distribution Network*", 4th Iranian Conference on Renewable Energies and Distributed Generation (ICREDG 2016), March, 2- 3, 2016, Mashhad, Iran (in Persian)

[628] Reza Ghanizadeh, M. Ebadian, G. B. Gharehpetian, "*A New Control Method for Voltage Harmonics Compensation in Islanded Microgrid*", 4th Iranian Conference on Renewable Energies and Distributed Generation (ICREDG 2016), March, 2- 3, 2016, Mashhad, Iran

[629] Saman Shahbazi, Hadi Tarimoradi and G. B. Gharehpetian, "*FRA and Its Application for Online Monitoring of Transformer Using Time Domain Transients Theory and Wavelet Transform*", 21-th Electric Power Distribution Conference, EPDC 2016, May 1-2, 2016, Karaj, Iran

[630] S. Sajjad Seyedalipour and G. B. Gharehpetian, "*A Control Method for Stable Operation of Converter-Based Distributed Generation Resources with Power Quality Improvement Capability*", 21-th Electric Power Distribution Conference, EPDC 2016, May 1-2, 2016, Karaj, Iran

[631] S. Sajjad Seyedalipour and G. B. Gharehpetian, "*A Lyapunov-Function-Based Control Strategy for Stable Operation of a Grid-Connected DC Microgrid with Variable Generations and Energy Storage*", 21-th Electric Power Distribution Conference, EPDC 2016, May 1-2, 2016, Karaj, Iran

[632] S. Sajjad Seyedalipour, Monir Sadat Hosseini and G. B. Gharehpetian, "*Grid Interconnection of Distributed Generation Units at Distribution Level Using Feedback Linearization Technique*", 21-th Electric Power Distribution Conference, EPDC 2016, May 1-2, 2016, Karaj, Iran

[633] Hossein Karami, Seyed-Alireza Ahmadi, G. B. Gharehpetian, Vahid Vahidinasab, "*Loadability Improvement in Distribution Network using DG Units by Application of Biogeography Based Optimization Algorithm Considering Cable Aging Constraint*", International Conference on Renewable Energies and Power Quality, ICREPQ'16 , May 4-6, 2016, Madrid, Spain

[634] Seyed-Alireza Ahmadi, Hossein Karami, Vahid Vahidinasab, G. B. Gharehpetian, "*Application of Biogeography Based Optimization Algorithm in Voltage Profile Improvement of Distribution Network by using DSTATCOM Considering Cable Aging Constraint*", International

Conference on Renewable Energies and Power Quality, ICREPQ'16 , May 4-6, 2016, Madrid, Spain

[635] G. B. Gharehpetian, "*Flywheel Application for Frequency Regulation of Microgrids: Opportunities and Challenges*", Invited paper , 24th Iranian Conference on Electrical Engineering, 10-12 May 2016, Shiraz, Iran

[636] Soheil Malekshah, Arin Hovanessian and G. B. Gharehpetian, "*Combined Heat and Power Sizing in Residential Building Using Mixed Integer Nonlinear Programming Optimization Method*", 24th Iranian Conference on Electrical Engineering, Shiraz, Iran, 10-12 May 2016

[637] Arezoo Hasankhani and G. B. Gharehpetian, "*Virtual Power Plant Management in Presence of Renewable Energy Resources*", 24th Iranian Conference on Electrical Engineering, Shiraz, Iran, 10-12 May 2016

[638] J. Nosratian Ahour, S. Seyedtabai and G. B. Gharehpetian, "*Valuable Tips for Transformer Ladder Network Parameters Estimation* ", 24th Iranian Conference on Electrical Engineering, Shiraz, Iran, 10-12 May 2016

[639] Arezoo Hasankhani, Mahsa Sadooghi Pour and G. B. Gharehpetian, "*Effect of Electric Vehicle Charging in Smart Grid on Residential Demand*", 24th Iranian Conference on Electrical Engineering, Shiraz, Iran, 10-12 May 2016 (in Persian)

[640] M. Ghorat, A. Layeghi, M. Ghafari Asl, M. A. Hejazi, G. B. Gharehpetian and H. Latifi, "*Fiber Optic Sensor Design for Partial Discharge Detection*", 24th Iranian Conference on Electrical Engineering, Shiraz, Iran, 10-12 May 2016 (in Persian)

[641] Hossein Shahinzadeh, Mohammadreza Matin, Seyed-Saeed Seyed-Barzani, G. B . Gharehpetian, Ali Asghar Khodadoost Arani, "*[Integrated Operation of Thermal Power Plants and Wind Resources using Glowworm Swarm Optimization Algorithm](#)*", 1st International Conference on New Research Achievements in Electrical and Computer Engineering (ICNRAECE), Tehran, Iran, 13 May 2016

[642] Mahdi Jedari Zare Zadeh ,S. Hamid Fathi ,G. B. Gharehpetian, Sina Vahid, "*[A Novel Study on Combined Operation of Active Power Filter with Photovoltaic Systems under Highly Unbalanced and Non-linear Loads in 3P4W Distribution Networks](#)*", 1st International Conference on New Research Achievements in Electrical and Computer Engineering (ICNRAECE), Tehran, Iran, 13 May 2016

[643] S. M. Ale-Emran, M. Farzaneh, and G. B. Gharehpetian, "*Experimental and Simulation Study of Partial Arc Activities on Post Insulators with Booster Sheds under Heavy Icing Conditions*", CIGRE-IEC Colloquium on EHV and UHV (AC & DC), Montreal, Canada, 9-11, May 2016

[644] M. H. Nazari, M. Bagheri Sanjareh, G. B. Gharehpetian and S. H. Hosseini, "*New method Suggestion for Out-of- Synchronism Detection and Decision for Microgrid Islanding*",

1st International Conference on New Research Achievements in Electrical and Computer Engineering (ICNRAECE), Tehran, Iran, 13 May 2016 (in Persian)

[645] M. H. Nazari, A. Khodadadi, G. B. Gharehpetian and S.H. Hosseinian, “*D-STATCOM Mult-Objective Optimal Allocation for Simultaneously Reduction of Installation and Utilization Costs and Network Harmonics Level*”, 1st International Conference on New Research Achievements in Electrical and Computer Engineering (ICNRAECE), Tehran, Iran, 13 May 2016 (in Persian)

[646] M. Dehghani, M. Abedi and G. B. Gharehpetian, “*Drilling Systems Modeling and Simulation and Effect of Parallel Compensation on Their Performance*”, 1st International Conference on New Research Achievements in Electrical and Computer Engineering (ICNRAECE), Tehran, Iran, 13 May 2016 (in Persian)

[647] M. Hamzeh, G. B. Gharehpetian and B. Vahidi, “*Assessment of Effect of PHEV Charging Different Scenarios on Smart Grid Reliability Indexes Using Monte Carlo Simulation*”, 1st International Conference on New Research Achievements in Electrical and Computer Engineering (ICNRAECE), Tehran, Iran, 13 May 2016 (in Persian)

[648] M. Asgharpour Hasankiadeh, F. Abbasi, G. B. Gharehpetian and S. H. Hosseinian, “*Feasibility Study on Application of PV Arrays in Residential Areas of Tehran, Economic Approach*”, 9th Conference on Renewable, Clean and Efficient Energies, Tehran, Iran, 29 May 2016 (in Persian)

[649] S. Eskini, A. Khodadoost Arani, G. B. Gharehpetian, “*Overcurrent Protection of Fixed Speed Wind Generator in Presence of SVC and Different Operation Conditions*”, 4th Iran Wind Energy Conference, Tehran, Iran, 30-31 May 2016 (in Persian)

[650] W. Zhang, K. Rouzbehi, I. Candela, G. B. Gharehpetian, A. Luna, P. Rodriguez, “*Autonomous Inertia-Sharing Control of Multi-Terminal VSC-HVDC Grids*”, 2016 IEEE Power & Energy Society General Meeting (PESGM), July 17-21, 2016, Boston, MA, USA.

[651] J. Nosrati Ahoor, S. Seyedtabaie and G. B. Gharehpetian, “*Transformer Winding Inductance Matrix Estimation for Transient Studies*”, 3rd International Transformer Conference and Exhibition, September 6-7, 2016 (in Persian)

[652] M. Ghorat, M. Ghafari, A. Layeghi, G. B. Gharehpetian and H. Latifi, “*Fiber Optic Sensor Application for PD Detection*”, Invited paper, 3rd International Transformer Conference and Exhibition, September 6-7, 2016 (in Persian)

[653] [Mahdi Jedari](#), [S. Hamid Fathi](#), [G. B. Gharehpetian](#), [Sina Vahid](#), “*An Adaptive InCon MPPT Algorithm Considering Irradiance Slope Tracking for PV Application*”, 4th International Symposium on Environmental Friendly Energies and Applications (EFEA), 14-16 Sept. 2016, Belgrade, Serbia

- [654] S. S. Seyedalipour and G. B. Gharehpetian, “*Connecting DERs to Distribution Networks in Order to Enhance Power Quality Using Feedback Linearization Method*”, 31-st International Power System Conference, Oct. 24-26, 2016, Tehran, Iran (in Persian)
- [655] H. Karami, G. B. Gharehpetian, Y. Norouzi, M. S. A. Hejazi, “*Study on GLRT Method for On-line and Simultaneous Detection of Axial Displacement and PD in Transformer Winding Using Electromagnetic Waves*”, 31-st International Power System Conference, Oct. 24-26, 2016, Tehran, Iran (in Persian)
- [656] J. Nosratian Ahour, S. Seyedtabaie and G. B. Gharehpetian, “*Disc-to-Disc Short Circuit Location Detection in Transformer Winding Using Frequency Response Analysis*”, 31-st International Power System Conference, Oct. 24-26, 2016, Tehran, Iran (in Persian)
- [657] Rasoul Heshmati and G. B. Gharehpetian, “*Consumers Contribution in Smart Electric Grids in Order to Reduce Effect of Renewable Energy Resources Uncertainty on Distribution Networks*”, 31-st International Power System Conference, Oct. 24-26, 2016, Tehran, Iran (in Persian)
- [658] E. Karami, G. B. Gharehpetian and Pejman Khazaie, “*Modeling of Phase Shift Due to Transformer Fault in Balanced Tree-Phase Network during Transients and Using Developed Harmonic Domain Theory*”, 31-st International Power System Conference, Oct. 24-26, 2016, Tehran, Iran (in Persian)
- [659] H. Barahmandpour, G. B. Gharehpetian, S. M. Kouhsari and H. Rastegar, “*Stochastic Method Suggestion for Wind Turbine Units Connection Economic Assessment Using Line Dynamic Loadability*”, 31-st International Power System Conference, Oct. 24-26, 2016, Tehran, Iran (in Persian)
- [660] H. R. Tabarsa, M. S. A. Hejazi, H. Karami and G. B. Gharehpetian, “*Radial Deformation Defect Detection Using Frequency Response Analysis Methods and Radar Imaging with Electromagnetic Waves Along with Test on 30MVA Repaired Transformer*”, 31-st International Power System Conference, Oct. 24-26, 2016, Tehran, Iran (in Persian)
- [661] A. A. Khodadoost Arani, M. S. Mahdavi, G. B. Gharehpetian, “*Modelling and Simulation of Electrical Load Emulator for Dynamic Studies in Microgrids*”, 31-st International Power System Conference, Oct. 24-26, 2016, Tehran, Iran
- [662] I. Babaei Yazdi, A. A. Khodadoost Arani, G. B. Gharehpetian , “*Optimal Sizing of Flywheel Energy Storage System for Enhancement of Frequency Considering Investment Cost*”, 31-st International Power System Conference, Oct. 24-26, 2016, Tehran, Iran
- [663] Pourya Ahmadi,Alireza Lorestani, S. Hossein Hosseinian, M. M. Ardehali, G. B. Gharehpetian, “*Optimal Resources Planning of Residential Building Energy System*”, 31-st International Power System Conference, Oct. 24-26, 2016, Tehran, Iran

- [664] I. Babaei Yazdi, A. A. Khodadoost Arani, G. B. Gharehpetian, "*Determining Optimal Capacity of FESS Using PSO to Enhance Stability of Microgrid After Islanding Mode, Considering Investment Costs*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016
- [665] Mohammad Jahani, AmirHosein Akbari, Jafar Milimonfared and G.B. Gharepatian, "Small Signal Modeling, Controller Design and Simulation of Four-Phase Interleaved DC-DC Converter Used in PHEVs", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016
- [666] Mahdi Zolfaghari, Ali Asghar Khodadoost Arani, G. B. Gharehpetian, Mehrdad Abedi, "*A Fractional Order Proportional-Integral Controller Design to Improve Load Sharing between DGs in Microgrid*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016
- [667] Hossein Shahinzadeh, Majid Moazzami, S. Hamid Fathi and G. B. Gharehpetian, "*Optimal Sizing and Energy Management of a Grid-Connected Microgrid using HOMER Software*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016
- [668] Alireza Lorestani, Mostafa Mohammadian, Seyed Saeed Aghae, Morteza M. Ardehali, G. B. Gharehpetian, "*A Novel Analytical-Heuristic Approach for Placement of Multiple Distributed Generator in Distribution Network*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016
- [669] Alireza Lorestani, M. M. Ardehali, G. B. Gharehpetian, "*Optimal Resource Planning of Smart Home Energy System under Dynamic Pricing Based on Invasive Weed Optimization Algorithm*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016
- [670] A. A. Khodadoost, S. H. Hosseinian, G. B. Gharehpetian, "*27 Level Inverter-Based DVR Modeling and Simulation to Improve Distribution Networks Power Quality*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016 (in Persian)
- [671] A. A. Khodadoost, B. Zaker, G. B. Gharehpetian, "*Single Phase Inverters Dynamics Improvement in Off-grid Microgrids Using Improved Droop Control and Virtual Impedance*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016 (in Persian)
- [672] M. Malekizadeh Sabet, A. A. Khodadoost, G. B. Gharehpetian, "*Feasibility Study and Long-Term Scheduling of Simultaneous Heat and Power Supply of Hospitals Using CHP*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016 (in Persian)
- [673] Seyed Mahoor Ebrahimi, G. B. Gharehpetian, G. H. Riahy Dehkordi, A. A. Hadizadeh and Seyed mahan Ebrahimi, "*Smart Home Energy Management System Performance Improvement Considering Residents Satisfaction In presence of EVs*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016 (in Persian)
- [674] M. Zarei Tazekand, B. Zaker, G. B. Gharehpetian, "*Effect of Simultaneous DGs Optimal Allocation and Reconfiguration on Smart Distribution Networks Characteristics Improvement*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016 (in Persian)

[675] M. Dehghani, P. Karimyan, M. Abedi and G. B. Gharehpetian, "*DFIG Wind Turbines Dynamic Response Improvement Using DC Link Capacitor and DVR in Smart Grid*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016 (in Persian)

[676] M. Ghaljei, Z. Soltani, S. H. Hosseinian, M. A.A. Golkar, G. B. Gharehpetian, "*Flexible Multi-Objective Function Suggestion in Electricity Market in Order to Reduce Transmission Lines Congestion and Increase Reactive Power Reserve Considering Uncertainty of Renewable Resources and Consumed Load*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016 (in Persian)

[677] Z. Soltani, M. Ghaljei, M. M. Ardehali, G. B. Gharehpetian, Saideh Jahangir, "*Energy Long Term Scheduling Based on Demand Forecast Using ANN-PSO in Order to Benefit Solar Energy Resources in Demand and Supply Sectors*", Smart Grid Conference, SGC 2016, Kerman, Iran, Dec. 20-21, 2016 (in Persian)

[678] G. B. Gharehpetian "*Application of Flywheel Storage System for Frequency Control of Wind Turbines and Microgrids*", Invited paper, 3rd National Conference on Energy New Technologies, Mashhad, Iran, Jan. 4-5, 2017

[679] Morteza Nazari-Heris, Behnam Mohammadi-Ivatloo, G. B. Gharehpetian, "*Optimal Short-term Scheduling of Combined Heat and Power Systems Considering Electrical Energy Storage*", Third International Conference of IEA on Technology and Energy Management, Tehran, Iran, 28 Feb and 1st March 2017

[680] Majid Moazzami, Hossein Shahinzadeh, G. B. Gharehpetian and S. H. Hosseinian, "*Optimal Locating and Sizing of DG and D-STATCOM Using Modified Shuffled Frog Leaping Algorithm*", 2nd Conference on Swarm Intelligence and Evolutionary Computation (CSIEC2017), 7-9 March, 2017, Kerman, Iran

[681] Sayed Jamal al-Din Hosseini, Majid Moazzami, Hossein Shahinzadeh and G. B. Gharehpetian, "*Iran's Long-Term Energy Planning Based on Ground Source Heat Pumps (GSHP) Scenario*", 5th Iranian Conference on Renewable Energy & Distributed Generation (ICREDG2017), 8-9 March, 2017, Rasht, Iran

[682] AmirHosein Akbari, Mohammad Jahani, Pourang Ardalan, G.B. Gharehpetian, "*A New Seven-Level Modified Full Bridge Inverter With Reduced Number of the Switches for PV Applications*", 5th Iranian Conference on Renewable Energy & Distributed Generation (ICREDG2017), 8-9 March, 2017, Rasht, Iran

[683] B. Ojaghloo, G. B. Gharehpetian, "*Power Hardware In The Loop Realization, Control and Simulation of Synchronous Generator Using Three Phase VSI for Microgrid Studies*", International Conference on Renewable Energies and Power Quality, ICREPQ'17, Malaga, Spain, 4-6 April, 2017

[684] M. A Hejazi, Ali Khorrami, G. B. Gharehpetian, “*Operation and Maintenance Cost Effect on Optimal Sizing of PV Array and Battery for a Grid-Connected House*”, International Conference on Renewable Energies and Power Quality, ICREPQ’17, Malaga, Spain, 4-6 April, 2017

[685] R. Ghanizadeh, M. Ebadian and G. B. Gharehpetian, “*Compensation of Voltage Harmonics for LCL-Filtered Inverters in Islanded Microgrids*”, International Conference on Renewable Energies and Power Quality, ICREPQ’17, Malaga, Spain, 4-6 April, 2017

[686] M. Mokhtari and G. B. Gharehpetian, “*CN Tower Modeling Using EMTP and Taking into Account Frequency Dependent Grounding*”, 5th Iranian Conference on Engineering Electromagnetics, ICEEM 2017, Tehran, Iran, 19-20 April 2017

[687] M. R. Nassaj Toroghi, Saman Mehrnia, G. B. Gharehpetian, H. Rastegar, M. Abedi, “*Connecting Renewable Resources in Response to Demand for Day Ahead Market Hourly Planning and Its Effect on Consumers’ Bus Nodal Price*”, 22nd Electric Power Distribution Conference, EPDC 2017, Semnan, Iran, 19-20 April 2017

[688] Ali Arjomandi Nezhad, Behrooz Zaker, Ali Asghar Khodadoost Arani, G. B. Gharehpetian, “*Impact of Non-MPPT Operation Mode of PV System Considering Inverter Fault Current Limiting*”, 22nd Electric Power Distribution Conference, EPDC 2017, Semnan, Iran, 19-20 April 2017

[689] M. Firouzi and G. B. Gharehpetian, “*A Modified Transformer-Type Fault Current Limiter for Enhancement Fault Ride-Through Capability of Fixed Speed-Based Wind Power Plants*”, 22nd Electric Power Distribution Conference, EPDC 2017, Semnan, Iran, 19-20 April 2017

[690] S. Hadavi, B. Zaker, H. Karami, A. A. Khodadoost Arani and G. B. Gharehpetian, “*Optimal Placement and Sizing of DGs Considering Static Voltage Stability*”, 22nd Electric Power Distribution Conference, EPDC 2017, Semnan, Iran, 19-20 April 2017

[691] Mahdi Bayati, M. Abedi and G. B. Gharehpetian, “*A New Electric Vehicle Charging Station Based on Pulse Current Charging Method*”, 25th Iranian Conference on Electrical Engineering, ICEE 2017, Tehran, Iran, 2-4 May, 2017

[692] Mahdi Bayati, M. Abedi and G. B. Gharehpetian, “*A New Control System for Grid-Feeding Power Converters of Solid Oxide Fuel Cells*”, 25th Iranian Conference on Electrical Engineering, ICEE 2017, Tehran, Iran, 2-4 May, 2017

[693] Majid Dehghani, Peyman karimyan, M. Abedi and G. B. Gharehpetian, “*Multi-Machine Power System Dynamic Stability Improvement Using Fuzzy Controlled STATCOM and PSS*”, 25th Iranian Conference on Electrical Engineering, ICEE 2017, Tehran, Iran, 2-4 May, 2017 (in Persian)

Books

- [1] G. B. Gharehpetian, H. Tadeousion “*Basic and Numerical Mathematic*”, Book, Persian Translation (from English text), 1991, Tehran, Iran
- [2] G. B. Gharehpetian, “*Modellierung von Transformatorwicklungen Zur Untersuchung Schnellveränderlicher Transienter Vorgänge*”, Dissertation, Publication of University of Tehran, 1996, ISBN 964-0309355-X
- [3] H. Alipour, G.B. Gharehpetian, “*Power System Transient Studies Using EMTP*”, Book, Amirkabir University Publication, 1-st Edition 1999, 2-ed Edition 2001, ISBN: 964-463-051-3 (in Persian)
- [4] M. Jourabian, G.B. Gharehpetian and D. Mirabassi “*Flexiable AC Transmission Systems, Concepts and Applications*”, Book, Chamran University Publication, 1-st Edition 2006, ISBN: 978-964-8659-48-1, 2-ed Edition 2010, ISBN: 978-600-141-000-0 (in Persian)
- [5] G. B. Gharehpetian, A. Ghanizadeh, “*Using EMTP-RV*”, Nahr Danesh Publication, 1-st Edition 2012, 2-ed Edition 2013, 3-rd edition 2014, ISBN: 978-600-5714-13-5 (in Persian)
- [6] H. R. Baghaee, M. Mirsalim and G. B. Gharehpetian, “*Application of Harmony Search Algorithm in Power Engineering*”, in “*Search Algorithms for Engineering Optimization*”, Taufik Abrão, Publication of InTech, 2013, pp. 201-220, ISBN 978-953-51-0983-9
- [7] M. Jourabian, G. B. Gharehpetian and H. Ghasemi “*Microgrids and Active Distribution Networks*”, Book, Persian Translation (from English text), Chamran University Publication, 2013, ISBN: 978-964-8659-48-1(in Persian)

[8] M. Jourabian, G. B. Gharehpetian and M. Khalili Fard, “*Concepts and Applications of Flexible AC Transmission Systems (FACTS) in Transmission and Distribution Systems*”, Book, Niaz Danesh Publication, 1st Edition 2015, ISBN: 978-600-7724-08-8 (in Persian)

[9] M. Mokhtari and G. B. Gharehpetian, "*Grounding Systems Transients*", LAMBERT Academic Publishing, 2017, ISBN 978-3-659-88273-9

[10] G. B. Gharehpetian and S. Mohammad Mousavi Agah, "*Distributed Generation Systems, Design, Operation and Grid Integration*", Butterworth-Heinemann Publishing, 2017, ISBN 978-0-12-804208-3

Industrial Founded Projects

[1] “Transmission Losses Reduction Using Phase Shifting Transformers with Load Balancing in Parallel Lines”, Tehran Regional Electric Company, Energy Ministry, Iran, 1998-2000, (Project manager).

[2] “Optimization of Electrical Energy Consumption in Auxiliary Service System of Steam Power Plants”, NIROO Research Institute, Energy Ministry, Iran, 1998-2000, (Project manager).

[3] “Electrical Lab. Planning for Power Plants”, NIROO Research Institute, Energy Ministry, Iran, 2000-2001, (Project consultant).

[4] “National and Optimal Design of Auxiliary Service Systems for Iran’s Steam Power Plants”, NIROO Research Institute, Energy Ministry, Iran, 2000-2002, (Project manager).

[5] “Technical and Economical Evaluation of Different Flow Control Methods of Power Plants Electro-pumps, Basic Studies”, NIROO Research Institute, Energy Ministry, 2001-2001, (Project consultant).

[6] “PST Locating in Iranian Transmission System for Transmission Losses Reduction Under Off-peak Steady State Condition”, Tehran Regional Electric Company, Energy Ministry, Iran, 2000-2002, (Project manager).

[7] “Comparison of Custom Power Devices Considering Tehran Distribution System Specifications”, Tehran Regional Electric Company, Energy Ministry, Iran, 2002-2003, (Project manager).

[8] “Determination of Important Indexes for X7 Body Shop, Power Quality Point of View”, Iran-Khodro Company, Industrial Ministry, Iran, 2002, (Project manager).

[9] “Reduction of Electrical Energy Consumption in Auxiliary Service System of Bisotoon Steam Power Plants”, Gharb Regional Electric Company, Energy Ministry, Iran, 2002-2003, (Project consultant).

[10] “Study on Voltage Problems of Yazd1 and Yazd2 Buses and Suggestion of Improvement methods”, Yazd Regional Electric Company, Energy Ministry, Iran, 2002, (Project manager).

[11] “Best Design of Parallel Disks of High Current Transformer Winding, Considering Current Distribution in Parallel Disks”, Research Deputy of Amirkabir University of Technology, Tehran, Iran, 2002, (Project manager).

[12] “Diversity Management for Different Flow Control Methods of Power Plants Pumps and Fans”, Tavanir Company, Energy Ministry, 2004-2006, (Project consultant).

[13] “PST Locating in Transmission System, Considering Normal and Contingency Operation Conditions”, Tehran Regional Electric Company, Energy Ministry, Iran, 2004-2006, (Project manager).

[14] “Feasibility Study of On-line Measurement of Transformer Winding Displacement Using UHF waves”, Iranian Research Organization for Science and Technology, Ministry of Higher Education, Iran, 2005, (Project manager).

[15] “Feasibility, Technical and Economical Study of Amorphous Distribution Transformer Production in Iran”, Tavanir Company, Energy Ministry, Iran, 2005, (Project consultant)

[16] “Short Cable Application Impact on Power Transformer Transients”, Tavanir Company, Energy Ministry, Iran, 2005, (Project manager)

[17] “AUT Internship Research Projects”, Iran Khodro Co., Iran, Industries Ministry 2005, (Project manager)

[18] Consulting in the Field of Secure Operation of Iranian Power Systems, Iran Grid Management Company (IGMC), Energy Ministry, Iran 2005-present , (Project Manager)

[19] “AUT Small Business Development Center (SBDC) Establishment”, Iranian Industries Development and Renovation Organization (IMIDRO), Industries Ministry 2006, (Project manager)

[20] “Feasibility Study of PST application on Dogonbadan-Kazeroon-Malekmakan Transmission Linel”, Iran Grid Management Company (IGMC), Energy Ministry, Iran 2007-2008, (Project Manager)

[21] “Determination of Strategic Sub-Regions of Transmission and Sub-Transmission Network of Tehran Regional Electric Company in order to Limit the Short Circuit Current Level”, Iran Grid Management Company (IGMC), Energy Ministry, Iran 2009, (Project Manager)

[22] “CHP-DG Development Studies for Power Sources Greater Than 1MW”, Iran Energy Efficiency Organization (IEEO - SABA), Energy Ministry, Iran 2010, (Project Manager)

[23] "Measurement of Radial Deformation and Axial Displacement of Transformer Winding On Prototype Using Electromagnetic Waves", Tehran Regional Electric Company (TREC), Energy Ministry, Iran, 2009-2011, (Project manager).

[24] "Transmission System Transients Studies of Hormozgan Regional Electric Company ", Hormozgan Regional Electric Company (HREC), Energy Ministry, Iran, 2009-2011, (Project manager).

[25] "Techno-Economical Studies of HVDC System for Iranian Transmission System", Iran Grid Management Company (IGMC), Energy Ministry, Iran, 2010-2012, (Project manager).

[26] "Research on Azarbayjan and Ayat Substations Transients and Suggestion of Solutions to Reduce Side-Effects on Transformers and Solution Extending for Substations of TREC", Tehran Regional Electric Company (TREC), Energy Ministry, Iran, 2011-2013, (Project manager).

[27] "Simulation Studies of Protection System of Kaveh Substation in Steady State and Transient Conditions and Suggestion of Solutions to Improve Protection System of Existing 20/63kV Kaveh Substation after Connection of 2x25MVA DGs", Hormozgan Regional Electric Company (HREC), Energy Ministry, Iran, 2011-2012, (Project manager).