Personal Data

• Name: Almoataz Youssef Abdelaziz • Date of Birth: September 14, 1963.

• Place of Birth: Cairo, Egypt.

• Nationality: Egyptian. • Marital Status: Married.

• Military Service: Completed.

Office Address:

Ain Shams University, Faculty of Engineering, Electrical Power & Machines Department, Abbasia, Abdo Basha Square, Cairo, Egypt

Mobile: (+20100)-1372930 E-mail: almoatazabdelaziz@hotmail.com, almoataz_abdelaziz@eng.asu.edu.eg



9 Shams Eldin Elzahaby Street Heliopolis, Cairo, Egypt

Tel.: Home (+202)-24715355

Education

• Ph. D. in Electrical Engineering (Electric Power & Machines Department), Faculty of Engineering, Ain Shams University, Cairo, Egypt. May 1996. Research was carried out at Brunel University, England. Work was jointly supervised by professors of Ain Shams University, Egypt and Brunel University, England.

Thesis Title: "Application of Artificial Neural Networks in the Analysis of Adaptive Protection for Out-of-Step Relaying".

• M. Sc. in Electrical Engineering (Electric Power & Machines Department), Faculty of Engineering, Ain Shams University, Cairo, Egypt. February 1990.

Thesis Title: "Pattern Recognition Technique for Out-of-Step Protection in Electrical power Systems".

• B. Sc. in Electrical Engineering (Electric Power & Machines Department), Faculty of Engineering, Ain Shams University, Cairo, Egypt. June 1985.

First place in a group of one Hundred and eighty students with a general grade of **Excellent.**

Research Area Interest

- Applications of Artificial Intelligence to Power Systems and Protection.
- Applications of New Optimization Techniques in Power Systems Operation and Planning.

Academic Experience

Position Held	Place	From - To
Professor	Electric Power & Machines Department, Faculty of	March 2007 -
	Engineering, Ain Shams University, Cairo, Egypt	Date
Associate Professor	General Directorate for Projects & Maintenance, King	January 2006 –
	Saud University, Riyadh, KSA	January 2007
Associate Professor	Electric Power & Machines Department, Faculty of	December 2001
	Engineering, Ain Shams University, Cairo, Egypt	– January 2006
Assistant Professor	Electric Power & Machines Department, Faculty of	June 1996 -
	Engineering, Ain Shams University, Egypt	December 2001
Research Assistant	Department of Electrical Engineering and Electronics,	January 1994 -
	Brunel University, London, England	January 1996
Assistant Lecturer	Electric Power & Machines Department, Faculty of	March 1990 -
	Engineering, Ain Shams University, Cairo, Egypt	January 1994



Demonstrator	Electric Power & Machines Department, Faculty of	January 1987 -
	Engineering, Ain Shams University, Cairo, Egypt	March 1990
Demonstrator	Electrical Power Engineering Department, Military	September 1985
	Technical College, Cairo, Egypt (Military Service)	– January 1987
Professor	Electrical Engineering Department, Future University,	September 2012
(part time)	Cairo, Egypt	– Date
Professor	Electrical Engineering Department, Arab Academy for	September 2001
(part time)	Science, Technology and Maritime Transport, Cairo, Egypt	- Date
Professor	Electrical Power Engineering Department, Military	January 2002 –
(part time)	Technical College, Cairo, Egypt	Date
Professor	Electrical Power Engineering Department, Higher Institute	September 2004
(part time)	of Engineering, Al-Shorouk Academy, Egypt	- Date
Associate Professor	Electrical Technology Department, Industrial Education	January 2002 -
(part time)	College, Cairo, Egypt	January 2006
Associate Professor	Electrical Engineering Department, High Technical	January 2003 –
(part time)	Institute, 10 th of Ramadan City, Egypt	June 2004
Assistant Professor	Electrical Engineering Department, High Institute of	February 1997 -
(part time)	Productivity, Zagazig University, Egypt	July 2000
Assistant Professor	Mechatronics Department, High Institute of Engineering,	February 1997 -
(part time)	Six of October City, Egypt	July 1998

Teaching Experience

* Lectures and Tutorials for Under Graduate Students:

- (1) Switchgear and Protection Engineering.
- (2) Transmission and Distribution of Electrical Power.
- (3) Power System Analysis.
- (4) Electrical Power Engineering.
- (5) Electrical Measuring Instruments.
- (6) Automatic Control & Linear Systems Dynamics.
- (7) Electrical Energy Utilization.
- (8) Electric Power Quality.
- (9) Theory of Electrical Machines.
- (10) Electrical Circuit Theory.
- (11) Electric Installations in Buildings.
- (12) Introduction to Computers & Programming (FORTRAN and QBASIC Languages).
- (13) Computer Applications in Electrical Engineering and Power Systems (MATLAB).
- (14) Electrical Laboratory Tests.
- (15) Technical Reports Writing.
- (16) Contracts and Legislation.
- (17) Engineering Law.
- (18) Engineering Profession, Practice and Responsibilities.
- (19) Engineering Management.
- (20) Engineering Economy.

* Lectures for Post Graduate Students:

- (1) Stability, Control and Dynamics of Power Systems.
- (2) Power System Analysis (Load Flow and Short Circuit Calculations).
- (3) Computer Relaying of power Systems.
- (4) Protection of Electrical power Systems.
- (5) Computer Applications in Power Systems.

* Supervision Research Work Leading to M. Sc. and Ph. D. Degrees in the Following Subjects:

M. Sc. Theses (59 finished + 15 running)

- 1. Adaptive Coordination of Overcurrent Relays in Power Distribution Networks. (July 1999)
- 2. Effect of Recent Equipment of Electrical Power Systems on Load Reliability. (May 2001)
- 3. Artificial Intelligence for Loss Reduction of Distribution Systems. (September 2002)
- 4. Voltage Stability Assessment in Electric Power Systems. (November 2002)
- 5. Adaptive Intelligent Distance Protection in Electrical Power Systems. (February 2003)
- 6. Dynamic Load Modeling in Electric Power System Stability Studies. (January 2004)
- 7. Fault Diagnosis of Power Transformers Using Artificial Neural Networks. (February 2004)
- 8. Power System Stability Enhancement Using Adaptive Fuzzy Techniques. (December 2005)
- 9. Load Modeling Effect on Voltage Stability of Large Scale Power Systems Using Energy Function Technique. (January 2006)
- 10. Optimal Unit Commitment for Thermal Generating Units using Intelligent Techniques. (September 2007)
- 11. Distribution Systems Planning with Reliability Modeling. (December 2007)
- 12. Voltage Control of Radial Distribution Systems using Fuzzy Logic Techniques. (February 2008)
- 13. Fault Detection and Classification of Double Circuit Transmission Lines using Artificial Neural Networks. (July 2008)
- 14. Intelligent Optimization Techniques for Distribution Networks Reconfiguration. (August 2008)
- 15. Design of Grid Grounding Network for Substations. (January 2009)
- 16. Allocation of FACTS Devices using New Optimization Techniques. (August 2010)
- 17. Power Factor Correction in Electrical Distribution Systems using Fuzzy Logic Technique. (December 2010)
- 18. Analysis of Power Quality Disturbances using New Intelligent Techniques. (January 2011)
- 19. Voltage Control of Radial Distribution Systems using Artificial Intelligence Techniques. (February 2011)
- 20. Transmission Lines Fault Detection and Classification using Support Vector Machines. (May 2011)
- 21. Coordination of Overcurrent Relays using New Optimization Techniques. (October 2011)
- 22. Investigation of the Effect of Current Transformer Saturation on Power Transformer Protection using Artificial Neural Networks. (December 2011)
- 23. Optimal Mix Selection of Hybrid Electric Power Systems (HPS). (February 2012)
- 24. Distribution Network Reconfiguration using Modern Heuristic Optimization Technique. (June 2012)
- 25. Adaptive Distance Protection of Double Circuit Transmission Lines. (July 2012)
- 26. Simulation of Load Shedding as a Corrective Action Against Voltage Collapse. (September 2012)
- 27. Protection of Multi-terminal Transmission Lines. (October 2012)
- 28. Protection of Transformers using Wavelets Approach. (November 2012)
- 29. Protection of Generators using Artificial Neural Networks and Wavelets Techniques. (December 2012)
- 30. Harmonics in Industrial Electrical Power Systems: Analysis and Mitigation. (January 2013)
- 31. Power System Small Signal Stability Enhancement Based on SVC Control Design. (May 2013)
- 32. Out-of-Step Detection Using Phasor Measurement Unit. (June 2013)
- 33. Optimal Phasor Measurement Unit (PMU) Placement for Full Power System Observability. (June 2013)

- 34. Application of Geographic Information System (GIS) for Appropriate Site Selection of Wind Farms. (September 2013)
- 35. Blackout Mitigation using Wide Area Protection (WAP). (October 2013)
- 36. Recognition of Power Quality Events using Artificial Neural Networks. (December 2013)
- 37. New Technique for Maximum Power Point Tracking on Photovoltaic Systems. (January 2014)
- 38. Applications of Wavelets in Power System Protection. (April 2014)
- 39. Power Quality Analysis of Grid Connected Photovoltaic Systems. (August 2014)
- 40. Protection Coordination for Distribution Systems Containing Distributed Generating Units. (September 2014)
- 41. Artificial Intelligence Techniques for Short Term Wind Power Forecasting. (December 2014)
- 42. Site and Size Allocation of Distributed Generation in Electrical Distribution Systems. (February 2014)
- 43. Demand Response Effect on Deregulated Power Market. (April 2015)
- 44. Integration of Large Wind Farms into the Egyptian Power System. (May 2015)
- 45. Design of Off-shore Wind Farm Power Transmission Lines. (August 2015)
- 46. Artificial Intelligence Technique for Protective Relays Coordination. (October 2015)
- 47. Analysis and Control of Wind Energy System. (November 2015)
- 48. Mitigation of Distributed Generation Impact on the Coordination of Protection Systems in Distribution Networks using Fault Current Limiters. (December 2015)
- 49. Optimization of Hybrid Renewable Energy Systems using New Techniques. (December 2015)
- 50. Advanced Intelligent Islanding Detection and Protection Technique. (January 2016)
- 51. Improved Hybrid Technique for Anti-Islanding Protection of Grid Connected Photovoltaic Systems. (March 2016)
- 52. Adaptive Network Protection for Micro Grids. (July 2016)
- 53. Application of New Optimization Techniques for Fault Section Estimation in Power Systems. (October 2016)
- 54. Economic Dispatch using New Optimization Methods. (November 2016)
- 55. Adaptive Coordination of Overcurrent Relays in Microgrids. (May 2017)
- 56. Application of Optimization Techniques on Economic Dispatch. (August 2017)
- 57. Energy Hub Optimization Using Modified Firefly Algorithm. (August 2017)
- 58. Modern Approaches for Optimal Power Flow. (August 2017)
- 59. Optimal Design of Controller for AVR Performance Enhancement. (November 2017)
- 60. Fault Location Estimation in Smart Grids. (January 2018)
- 61. Optimal Design and Management of Photovoltaic and Energy Storage Systems.
- 62. Electric Power System Distortions Mitigation Using Power Filter Compensator.
- 63. An Effective Adaptive Overcurrent Protection Scheme for Microgrids.
- 64. Optimal Allocation of Energy Storage Systems (ESS) for Load Management Applications.
- 65. Economic valuation of HVDC transmission lines.
- 66. Optimal placement of phasor measurement units in electrical power systems.
- 67. Time-varying Cost-effective Primary Distribution Network Reconfiguration.
- 68. Demand Side Management with Renewable Energy Sources.
- 69. Performance Enhancement of Variable Speed Wind Energy Conversion System.
- 70. Photovoltaic Array Reconfiguration for Partial Shading Loss Reduction.
- 71. Impact of Wind Farm Disturbance on Power System Performance.
- 72. Optimal Reactive Power Control using Artificial Intelligence Methods.
- 73. Intelligent Control for Hybrid Microgrid.
- 74. Modified Model Predictive Control for Hybrid Microgrid.

Ph. D. Theses (12 finished + 14 running)

- 1. Optimal Transmission Congestion using FACTS. (June 2009)
- 2. Subsynchronous Resonance Control and Protection. (Septmber 2009)

- 3. Adaptive Protection Strategies for Distribution Systems with Distributed Generation. (September 2011).
- 4. Applications of Phasor Measurement Units (PMUs) in Power System Protection. (August 2012).
- 5. Electrical Power Systems Security Assessment and Enhancement (December 2012).
- 6. Configuration Management of Electric Distribution Networks with Distributed Generation (June 2013).
- 7. Electric Energy Management in Power Delivery Systems using Virtual Power Plant Concept (December 2014).
- 8. Application of FACTS to Enhance the Performance of Power System with Growing Wind Power Penetration. (April 2015)
- 9. Adaptive Automated Fault Identification for Enhancing Smart Network Operation. (November 2016)
- 10. Optimal Control of Micro Grids for Fault Tolerant Operation. (January 2017)
- 11. Optimal Multi-Criteria Design of Hybrid Power Generation Systems. (March 2017)
- 12. Enhancement of Voltage Stability and Reactive Power Control using Modern Optimization Methods. (December 2017)
- 13. Coordination of the Synchronous Generator Protection with Generator Capability Charts.
- 14. Investigation and Enhancement of Microgrids Performance and Protection.
- 15. Generation Expansion Planning of the Egyptian Power System Considering High Penetration of Renewable Energy Resources.
- 16. Improvement of Power System Operation Using New Optimization Techniques
- 17. Security Constrained Optimal Power Flow by New Optimization Techniques
- 18. Impact on the Power System with a Large Penetration of Photovoltaic and Wind Generations.
- 19. Provisory Microgrid Performance for Flexible Power System Operation.
- 20. Optimal Control of Microgrid Operation under Different Conditions.
- 21. Enhancement of the Electrical Distribution Systems Performance from a Holistic Perspective.
- 22. Electrical Distribution Systems Hosting Capacity: Assessment and Enhancement.
- 23. Operation and Control of Offshore Wind Farm Connected to High Voltage Direct Current Transmission Systems.
- 24. Optimal Allocation of Energy Storage Systems for Improving Performance of Microgrids.
- 25. Grid Connected PV Plants with Energy Storage Systems: Impact and Solutions.
- 26. Power System Stability Enhancement using the Distributed Hybrid Power Generation Systems (HPGS).

* External Examiner for the Following Theses:

<u>Ph. D.</u>

- 1. Enhancement of Power System Voltage Stability by using FACTS Devices. (January 2008)
- 2. Artificial Intelligence Applications for Load Forecasting. (July 2008)
- 3. Optimal Power System Operation and Planning using Different Heuristic Optimization Techniques. (India February 2010).
- 4. An Economical Stochastic Study of Electrical Load Pattern for Energy Management. (August 2010)
- 5. Modeling, Operation and Control of Fuel Cells used as Distribted Generation. (September 2012)
- 6. Fault Prediction of Electric Power System Elements Using an Artificial Technique. (November 2012)
- 7. Improving the Performance of the Egyptian Second Testing Nuclear Research Reactor by Using a Type 2 Fuzzy Logic Controller Tuned by a Novel Evolutionary Algorithm. (July 2013)
- 8. Study of Economic Load Dispatch, Optimal Power Flow and their Related Topics along with FACTS Devices using Evolutionary Optimization Techniques. (India August 2013)
- 9. Optimization of Solar Energy Generation Based on Artificial Intelligence. (November 2013)

- 10. On-line Solution to Alleviate the Voltage Collapse in Electrical Power Systems (November 2013)
- 11. Reliability Analysis of Power System Network Incorporating Phasor Measurement Units (India April 2014)
- 12. Optimum Network Reconfiguration and DG Placement Based on Maximization of System Loadability using Modified Bee Colony Algorithm (Malaysia August 2014).
- 13. Control Strategies for Power Grid Interface of Large Scale Wind Farms (March 2015)
- 14. Optimal Penetration of Distributed Generation without Modifying Protection Coordination in Distributed Networks (November 2015)
- 15. Protective Devices Coordination and Fault Location in Smart Grid (January 2016)
- 16. Optimal Generation Expansion Planning with FACTS Devices/HVDC Systems and Security Constraints (India March 2016)
- 17. Optimal Operation of Electric Power Systems Considering Wind Power Uncertainty Incorporating Energy Storage System and Demand Side Management (June 2016)
- 18. Proposed Schemes for Restoring Protective Relays Coordination in Networks Incorporating Distributed Generation (May 2017).
- 19. Power Systems Stabilization Using Flexible AC Transmission Systems (FACTS) Controlled by Advanced Control Techniques (July 2017)
- 20. Reactive Power Control for Voltage fluctuations Mitigation and Power Loss Reduction under High Photovoltaic Penetration in the Egyptian Distribution Networks (January 2018)
- 21. Phasor Measurement Unit based Wide Area Backup Protection Scheme for Transmission Lines

M. Sc.

- 1. Adaptive Control of Power System using FACTS Devices. (April 2008)
- 2. Impact of Distributed Generation Technology on Distribution Systems Reliability. (May 2008)
- 3. Investigation, Estimation and Methods of Loss Reduction in Electrical Distribution Systems. (October 2009)
- 4. Coordination of Overcurrent Voltage Controlled Protection using Particle Swarm Optimization Technique. (March 2010)
- 5. Reliability Analysis of Different Configuration of Transmission Substation using Analytical Techniques. (July 2010)
- 6. Distance Relaying under Arcing Fault Conditions. (Septemer 2010)
- 7. Prototype Model for Power Transformer Protection System. (October 2010)
- 8. Switching Overvoltages Analysis in High Voltage Substations (April 2012)
- 9. Generation Expansion Planning for the Egyptian Power System Considering the Role of the Nuclear Energy (May 2012)
- 10. Power Transformer Protection Technique Based on Transient Components (June 2012)
- 11. Thermal Protection for Successively Starting Three Phase Induction Motors using Particle Swarm Optimization Technique (September 2012)
- 12. Optimal Planning of Electrical Distribution Networks Integrating DG using Mathematical Optimization Methods (January 2013)
- 13. Over and Under Reach Correction of Distance Protection (May 2013)
- 14. Optimal Transmission Lines Switching in Smart Grid Environment (June 2013)
- 15. Application of Optimal Hybrid PMUs and Conventional Meters for Fault Location Observability in Transmission Networks (July 2013)
- 16. Voltage Stability in Electric Distribution Network with Rigorous Load Modeling. (December 2013)
- 17. Maximum Power Point Tracking of PV System using Fuzzy Logic Controller (December 2013)
- 18. Modeling of Solar Power Generators for Reliability Studies. (January 2014)
- 19. Fault Location for Distribution Systems Containing Distributed Generators (February 2014)
- 20. Enhancing Distance Relay Performance for Transmission Line Protection (March 2014)
- 21. Digital Protection of Electrified Railways Network System. (May 2014)

- 22. Adaptive Distance Protection for Power Networks with FACTS (June 2014)
- 23. Demand Side Management Strategies in Deregulated Market (June 2014)
- 24. Improving the Performance of Distribution Systems with the Aid of Intelligent Cooperative Agents (June 2014)
- 25. Modeling and Operation of Smart Grid (July 2014)
- 26. Coupling Wind Farm with Nuclear Power Plant (July 2014)
- 27. Investigation of Resonance and Ferro-resonance Overvoltages due to Cable Transformer Interaction (August 2014)
- 28. Function Based Optimized Protection Schemes for Distribution Substations (November 2014)
- 29. Enhancement of Electric Distribution Networks Reliability (December 2014)
- 30. Protection of AC Feeding System for Electrified Railways (January 2015)
- 31. Implementation of an Economical Multifunctional Digital Relay for Three Phase Induction Motors (March 2015)
- 32. Enhancing of Distribution System Performance using Distributed Generation (April 2015)
- 33. Hybrid Classifier for PQ Disturbances using S-Transform and AI Techniques (May 2015)
- 34. Analysis of Multifunction DSP-based Numerical Relay for Distribution Systems with Distributed Generators (May 2015)
- 35. Proposed Digital Differential Protective Algorithm for Synchronous Generators using TACS Models of ATP Program (June 2015)
- 36. Demand Side Management of Smart Grid (June 2015)
- 37. Simulation of Renewable Energy System using MATLAB (June 2015)
- 38. Protection of Power Systems with Distributed Generation Considering Variation of Operating Condition (June 2015)
- 39. Fault location Determination Technique Independent of Line Constants for Power Transmission Systems (June 2015)
- 40. Analysis and Control of Overvoltages on Vacuum Circuit Breaker Switched Large Induction Motors using Wavelet Technique (July 2015)
- 41. Analytical Study for Determining the Harmonic Distortion Responsibility in Distribution Systems (July 2015)
- 42. Energy Management and Operational Planning in Micrgrids (August 2015)
- 43. Advanced Control of Modern Aircraft Electric Power Systems (August 2015)
- 44. Islanding Detection & Operation in Smart Grid Systems (September 2015)
- 45. Improvement Performance of Some Tapes Insulation in High Voltage Application (November 2015)
- 46. Allocation and Sizing of Distribution Transformers and Feeders for Optimal Integrated Planning of MV/LV Distribution Networks using Biogeography Based Optimization Method (December 2015)
- 47. Power Transformer Protection using Artificial Intelligence Methods for Pattern Recognition of 3D Images (February 2016)
- 48. A Transient Protection Technique for Multi-Terminals HVDC Transmission Lines (March 2016)
- 49. Analysis and Control of Integrated Distribution Networks based on Distributed Generation Systems (April 2016).
- 50. New Approaches for Out-of-step Detection (June 2016).
- 51. Impact of Including Distributed Generation Units on the Performance of Electrical Power Distribution Systems (July 2016).
- 52. Control of Active and Reactive Power of a Three Phase Grid Connected PV Inverters (September 2016).
- 53. A Proposed Busbar Protection Scheme Immune to the Impact of Outflow Current during Internal Faults (November 2016).
- 54. Microgrid Performance with Integrated Renewables Supported by Energy Storage Systems (June 2017).

- 55. Optimal Sizing of Different Configurations of Renewable Distributed Generation Systems for a Green Building (July 2017)
- 56. Capacitors Allocation to Optimally Improve the Electric Distribution System Performance with Distributed Energy Resources (July 2017)
- 57. Use of Optimization Techniques to Enhance Power Systems Performance (August 2017)
- 58. Modeling and Simulation of Photovoltaic System and Performance Evaluation of Maximum Power Point Tracking (September 2017)
- 59. Stability of Power System using Robust Control (September 2017)
- 60. Transformer Fault Diagnosis Using Dissolved Gas Analysis Techniques Under Measurement Uncertainties (October 2017)
- 61. Short circuit calculation for full converter based wind power plants (November 2017)
- 62. Optimal Placement of Dispatchable and Non-dispatchable Distributed Generation of Different Technologies (January 2018)
- 63. Multiple-Arm Passive Filters Design based on Different Reactive Power Division Approaches (February 2018)
- 64. Implementation of Artificial Intelligent based Controller for Industrial Process (March 2018)
- 65. Impact of Defective DG on Distribution System Performance (April 2018)
- 66. Enhancing the Performance of Renewable Energy Systems via Energy Storage Capabilities

* Supervision of High Diploma Projects in the Following Subjects:

- Short Circuit Calculations using Digital Computers.
- Power System Grounding.
- Applications of Fuzzy Logic in Power Systems.
- Coordination of Protective Devices in Distribution Systems.
- Performance of Protective Relays in HV Substations.

* Supervision of B.Sc. Projects in Electric Power Engineering in the Following Topics:

- Design of Interior Electric Wiring for Residential, Commercial and Educational Buildings.
- Design of Secondary and Primary Distribution Systems.
- Planning of an Urban Area.
- Protection Coordination in Electric Power Systems.
- Implementation and Coordination of Digital Protective Relays.
- Microprocessor-Based Power System Protection & Simulation.
- Applications of Artificial Neural Networks and Wavelets in Power System Protection.
- Design of Protective Grounding Systems for Different Types of Electrical Systems.

Training and Continuous Education Activities

- 1- Giving Lectures in Different Electric Power Engineering Subjects (as a Part of the Continuous Education Activities of the Faculty of Engineering, Ain Shams University).
- 2- Preparing Lecture Notes and Teaching the Following Training and Continuous Education Courses to Electrical Engineers and Technicaians in Egypt and Gulf area:
- "Distribution Energy Resources (DER) Technologies, Reconfiguration, and Integration with the Grid" African engineers
- "Integration of Distributed Generation and Energy Storage with the Grid" African engineers
 - South Cairo Electricity Distribution Company Egypt February 14, 2017.
- "Emergency Power Supplies, Electrical Distribution System Design, Installation and Commissioning"
 - Jeddah Saudi Arabia October 8-12, 2011.
- "Electric Safety" Iraqi engineers
 - South Cairo Electricity Distribution Company Egypt December 12, 2010.
- "Instrument Transformers and Their Applications in Protective Relaying Systems" African engineers

- South Cairo Electricity Distribution Company Egypt January 20 21, 2010.
- South Cairo Electricity Distribution Company Egypt February 23 24, 2010.
- "Advanced Protective Relays for Electrical Power System"
 - Jeddah Saudi Arabia January 9 13, 2010.
- "Power Quality: Problems and Solutions"
 - Jeddah Saudi Arabia June 23, 2009.
- "Power System Quality, Monitoring and Harmonics"
 - Jeddah Saudi Arabia June 6 10, 2009.
 - Medina Saudi Arabia December 12 16, 2009.
- "Power System Reliability"
 - Jeddah Saudi Arabia May 2 6, 2009.
- "Power System Protection Theory & Applications"
 - Muscat Oman April 18 22, 2009.
- "Substation Protection and Troubleshooting"
 - Medina Saudi Arabia December 27 31, 2008.
- "Lightning and Surge Arresters"
 - South Cairo Electricity Distribution Company Egypt November 20, 2008 & January 5, 2009.
- "Voltage Stability in Electrical Power Systems Problems and Solutions"
 - Jeddah Saudi Arabia November 15 19, 2008.
- "Power Systems Protection General Concepts"
 - South Cairo Electricity Distribution Company Egypt November 4 6, 2008.
 - South Cairo Electricity Distribution Company Egypt December 29 30, 2010.
- "Power System Stability"
 - Egyptian Electricity Association Cairo Egypt October 2008.
- "Protective Relaying & Equipment Protection"
 - Jeddah Saudi Arabia May 24 28, 2008.
 - Jeddah Saudi Arabia June 20 24, 2009.
- "Protection of Power Systems with Practical Case Study"
 - Abha Saudi Arabia April 12 16, 2008.
- "Electrical Power Systems Transients Investigation"
 - Riyadh Saudi Arabia March 29 April 2, 2008.
- "Electrical Distribution Systems Protection"
 - Cairo Egypt February 17 21, 2008 & April 19 23, 2008.
- "Harmonics in Power Systems: Causes, Effects and Methods of elimination"
 - Kuala Lumpur Malaysia October 28 November 1, 2007.
- "Mechanical Applications in Overhead Transmission Lines"
 - Dammam Saudi Arabia July 15 19, 2007.
- "Electrical Safety and Precautions"
 - Dubai UAE June 12 16, 2005.
- "Power System Protection and Relaying"
 - Riyadh ABB in Saudi Arabia, June 5 16, 2004.
 - Riyadh Saudi Arabia, September 20 24 & September 27 October 1, 2003.
 - Riyadh Saudi Arabia, June 12 16, 2003.
- "Electrical Load Forecasting"
 - Delta Electricity Distribution Company Egypt April 2003.
- "Electrical Switchgear: Applications and Principle of Operation"
 - Enppi Petroleum Company Cairo Egypt March 2002.
- "Application of Artificial Intelligence in Power Systems"
 - IEEE Committee in Egypt Cairo December 2001.

- "Illumination and Design of Interior Electric Wiring for Residential, Commercial and Educational Buildings"
- "Design of Secondary and Primary Distribution Systems"
 - Educational Buildings Association Cairo Egypt November 2000.
- "Load Flow and Short Circuit Calculations Using Digital Computers"
- "Disturbances in Power Systems"
 - Egyptian Electricity Association Cairo October 1999.
- "Electrical Measuring Instruments"
 - Continuous Education Center, Ain Shams University Cairo May 1998.

Attending Training Courses

- Modern Trends in Teaching (Egypt June 2005).
- Time and Stress Management (Egypt July 2005).
- Teaching Evaluation Methods (Egypt January 2006).
- Economic and Marketing Aspects for Scientific Researches (Egypt October 2006).
- Using Technology in Teaching (Egypt January 2007).
- Qualifications of Head Department. (Egypt April 2016).

Other Academic Activities:

- Chairman of IEEE Education Society Chapter in Egypt (Since March 2014).
- Editor of Electric Power Components and Systems Journal (EPC&S).
- Senior Editor of Ain Shams Engineering Journal (ASEJ).
- Associate Editor of International Journal of Electrical Engineering Education (IJEEE).
- Associate Editor of the International Journal of Education and Management Engineering (IJEME).
- Member of the Advisory Board of Renewable Energy and Sustainable Development Journal.
- Guest Editor, Special Issue on New Optimization Techniques for Electrical Power Systems Problems, Journal of Electrical and Computer Engineering.
- Guest Editor, Special Issue on Intelligent Control in Electric Power Systems, Journal of Bioinformatics and Intelligent Control.
- Member of the Editorial Board of the following journals:
 - International Journal of Power System Optimization (IJPSO).
 - International Journal of Engineering, Science and Technology (IJEST).
 - International Journal of Electrical and Power Engineering (IJEPE).
 - International Journal of Innovations in Electrical Power Systems (IJIEPS).
 - International Journal of Electrical Energy Systems (IJEES).
 - The Online Journal on Electronics and Electrical Engineering (OJEEE).
 - The International Journal on Power Engineering and Energy (IJPEE).
 - International Journal of Power and Energy Conversion (IJPEC).
 - Journal of Energy and Power Engineering (JEPE).
 - International Journal of Intelligent Systems and Applications (IJISA).
 - International Journal of Engineering, Science and Applied Research (ETASR).
 - International Journal of Electrical and Electronic Engineering (IJEEE).
 - Journal of Advanced Science and Engineering Research (JASER).
 - International Journal of Intelligent Systems and Applications in Engineering (IJISAE).
 - International Journal of Advances in Power Systems (IJAPS).
 - Emerging Trends in Electrical, Electronics & Instrumentation Engineering: An international Journal (EEIEJ).
 - International Journal of Engineering Research in Electrical & Electronic Engineering (IJEREEE)
 - International Journal of Computational Science, Information Technology and Control Engineering (IJCSITCE)

- Renewable and Sustainable Energy: An International Journal (RSEJ)
- i-manager's Journal on Circuits and Systems
- i-manager's Journal on Instrumentation and Control Engineering
- Reviewer of technical papers in the following journals:
 - IEEE Transactions on Power Systems
 - ❖ IEEE Transactions on Power Delivery
 - ❖ IEEE Transactions on Neural Networks
 - * IEEE Transactions on Smart Grid
 - * IET Proceedings Generation, Transmission and Distribution
 - Electric Power Systems Research (EPSR)
 - International Journal of Electrical Power and Energy Systems (IJEPES)
 - International Journal of Emerging Electric Power Systems (IJEEPS)
 - European Transactions on Electrical Power (ETEP)
 - Applied Soft Comuting
 - International Journal of Engineering Intelligent Systems (IJEIS)
 - Journal of Electrical Systems (JES)
 - World Journal of Modeling and Simulation (WJMS)
 - WSEAS Transactions on Power Systems
 - Electrical and Electronic Engineering Journal
 - * Journal of the International Measurement Confederation
 - Journal of Biotechnology and Pharmaceutical Research
 - Scientific Research and Essays (SRE)
 - Indian Journal of Engineering & Materials Sciences (IJEMS)
 - * International Journal of Bio-Inspired Computation (IJBIC).
 - Electrical and Electronic Engineering (SAP)
 - Journal of Renewable and Sustainable Energy (JRSE)
 - * Scientia Iranica
 - Indian Journal of Science and Technology
 - Transactions on Systems, Signals & Devices
- Reviewer of Proposals of Scientific Projects:
 - Science and Technology Development Fund (STDF), Egypt
 - Qatar National Research Fund, Qatar
 - Engineering and Applied Science Research Center, Majmaa University, KSA
- Co-chairman of the Egyptian Universities Promotion Committee Committee 54 (March 2013 May 2015).
- Member of the reviewers of the Egyptian Universities Promotion Committees (2008-present).
- Member of Steering Committee of Middle East Power Systems Conference (MEPCON).
- Chairman of sessions and reviewer of many international and local conferences.
- Chairman of Egyptian Sub-Committee of the International Electrotechnical Commission: IEC-No. 44 (Safety of Machinery Electrotechnical Aspects)
- Member of the Egyptian Sub-Committees of the International Electrotechnical Commission: IEC-No. 27 (Industrial Electoheating and Electromagnetic Processing), IEC-No. 73 (Short Circuit Currents), IEC-No. 65 (Industrial-Process Measurement and Control Automation) & IEC-No. 114 (Marine Energy – Wave, Tidal and Other Water Current Converters).
- Member of the Egyptian CIGRE` Sub-Committee D1 (Materials and Emerging Technologies).
- Senior Member in IEEE.
- Member in IET (formerly IEE).
- Member in Elsevier Science Topics.
- Member of the Renewable Energy latest news (Elsevier).
- Member in Egyptian Engineering Syndicate and Egyptian Engineers Committee.

- Member of the Post-Graduate Studies Committee in Faculty of Engineering, Ain Shams University since October 2007.
- Member of examiners committee of more than 60 M. Sc. and 15 Ph. D. theses.
- Coordinator of scientific seminars in Electric Power and Machines Department, Faculty of Engineering, Ain Shams University.
- Sharing of the renewal of laboratories of the Electrical Power and Machines Department in Faculty of Engineering, Ain Shams University and Industrial Education College in Cairo and the Construction of sever al laboratory experiments for under graduate and post graduate labs.
- Writing several lecture note text books for under graduate students.
- Participating in the university-level Quality Assurance and Accreditation Program (QAAP). [Electrical power program: course specifications, reports, and workshops]
- Participating in construction and upgrading the Curriculum Plan for under-graduate Program 2008-2013 for the Faculty of Engineering, Ain Shams University.
- Participating in the university-level Continuous Improvement and Qualifying Accreditation Program (CI QAP) project.
- Participating in the activities of local and international conferences (Presenter, International Program Committee Member, Session Chairman, Program Chair):

Consultation and Technical Field Experience

From March 1997 - November 1997: worked as a consultant engineer for Misr Engineering Office (μ), Cairo, Egypt.

From **January 1997** – **November 1999:** worked as a designer and consultant engineer for G.S. Electrical Contracting & Suppliers, Cairo, Egypt.

From March 1999 – present: worked as a consultant engineer with the Electrical Power Engineering Consultation Unit, Engineering Consultancy Center, Faculty of Engineering, Ain Shams University, Cairo, Egypt.

From **January 2006 – January 2007 :** worked as a head of consultant engineers of the electrical group in the General Directorate for Projects & Maintenance, King Saud University, Riyadh, Kingdom of Saudi Arabia.

- Evaluating technical offers for Gabel El Zayt 220/22 kV GIS Substation for Wind Farm in Egypt. (January October 2011)
- Designing and Supervising the Construction of the Electrical Systems (Illumination, Electric Power Distribution Systems, Telephone Systems, Fire Alarm Systems, Closed-Circuit TV systems, and/or Sound Systems) for the following Projects:
 - Extensions of Buildings of Faculty of Medicine, Ain Shams University, Abbassia, Cairo, Egypt. (2014 2015)
 - Third Stage of Extension of Emergency Building of King Kkalid University Hospital, King Saud University, Riyadh, KSA. (2006 2007)
 - Extensions of Buildings of Faculty of Engineering, Ain Shams University, Abbassia, Cairo, Egypt. (1999 2000)
 - State Security Headquarters in the 6th of October City, Egypt. (2002)
 - Zizinia Housing Complex, Al-Tagammo Al-Khames, New Cairo Satellite, Cairo, Egypt. (2003)
 - National Association of Social Insurance in Egypt. (2004)
- Renewal and Designing of Primary and Secondary Electric Power Distribution Systems and /or Telephone Networks for:
 - Faculty of Commerce, Ain-Shams University, Abbassia, Cairo. (1999 2000)
 - Faculty of Medicine, Ain-Shams University, Abbassia, Egypt. (1999 -2000)
 - Faculty of Nurture, Ain-Shams University, Heliopolis, Egypt. (2000 2001)
- Redesign, testing and commisioning of Power Factor Correction Board for:
 - Central Association for Organization & Management Building, Nasr City, Cairo. (2004)

- Supervising the Construction of the Electrical Systems for the following Projects:
 - Faculty of Architecure and Planning, King Saud University, Riyadh, KSA. (2006)
 - Faculty of Applied & Medical Science, King Saud University, Riyadh, KSA. (2006)
 - Faculty of Computer Science, King Saud University, Riyadh, KSA. (2006)
 - High Constitution Court Building, Maadi, Cairo. (1998)
 - Neama Gulf Village -Sharm El-Sheikh. (1999)
 - Al-Nouran Building Heliopolis. (1998)
 - Large cermony hall for workers association, Cairo. (1997)
 - Metal industrial center, Demiat. (1998)
 - Islamic Library, Nasr City, Cairo. (1998)
 - Forosia Village, Hurghada. (1997)
 - Artoc group, Cairo. (1997)
 - Gupco petroleum workers housing towers, Maadi, Cairo. (1997)
 - Commercial International Bank (CIB), Abbas El-Akkad, Nasr City, Cairo. (1997)
 - Royal Hills Village 6th of October city. (1997)
 - Mrs. Penneti villa 6th of October city. (1997)
 - Hilton Nabk Sharm El-Sheikh. (1996)
 - Mermaid Beach Resort Hurghada. (1996)
 - Misr Bank Sadat City. (1996)
 - Al-Boustan residential and administration building, Cairo. (1996)
 - Roxi Garage, Cairo. (1996)
 - Belkas Public Hospital, Mansoura. (1996)
 - Egyptian Saudian Financial Bank Mirghani, Heliopolis, Cairo. (1996)
 - Gulf Clothing Company Factory New Cairo City. (1996)
 - Pastry Factory 6th of October city. (1996)

Awards

- Egyptian Government Undergraduate Scholarship, October 1980 June 1985.
- 1985 Distinction Award from Faculty of Engineering, Ain Shams University.
- University of Ain-Shams Graduate Scholarship, 1986 1990.
- 1994 1996 Channel Grant in Brunel University, England from the Egyptian Government.
- Winner of Ain Shams University Prize for Distinct Researches in 2002.
- Prize of Ain Shams University for international publishing in 2010, 2011, 2012, 2013, 2014 and 2015.
- Acknowledgement letter for the top ten cited papers in Electric Power Components and Systems Journal for the 2008-2010 time period.
- Prize of best researcher in Electrical Power and Machines Department, Faculty of Engineering, Ain Shams University for the period 2009-2012.
- Listed in Who's Who in the World® 2016 (33rd Edition).

List of Journal Papers

- [1] Sandeep Biswal, Monalisa Biswal, **A. Y. Abdelaziz**, 'An Adaptive Algorithm to Prevent Distance Relay Overreach during CCVT Transient', Electric Power Systems Research, Vol. 160, July 2018, pp. 362-371.
- [2] **A. Y. Abdelaziz,** M. Ezzat, Mahmoud M. Othman and Ahmed M. Mahmoud, 'Optimal Planning and Operation of Energy Storage Systems for Minimizing Cost of Energy Losses and Maximizing Arbitrage Benefit in Presence of Wind Generation', Accepted for publication in Electric Power Components and Systems Journal.
- [3] Farag K. Abo-Elyousr, Ali M. Youssef and A. Y. Abdelaziz, 'Multi Area Hydrothermal Interconnected Load Frequency Control with Double Fed Induction Generator Based Wind Turbine via Improved Harmony Algorithm', Accepted for publication in Electric Power Components and Systems Journal.

- [4] M. M. Abdelzaher, H. M. Mahmoud, A. Y. Abdelaziz, S. F. Mekhamer and M. A. L. Badr, 'Impact of Generation Mix Flexibility on the Integration of Variable Renewable Energies', International Journal of Engineering, Science and Technology, Vol. 10, No. 3, 2018, pp. 1-16.
- [5] Mostafa A. Algabalawy, **A. Y. Abdelaziz**, Said F. Mekhamer and Shady H. E. Abdel Aleem, 'Considerations on Optimal Design of Hybrid Power Generation Systems Using Whale and Sine Cosine Optimization Algorithms', Journal of Electrical Systems and Information Technology (Elsevier).
- [6] Mohamed A. Tolba, Ahmed A. Z. Diab, Vladimir N. Tulsky and A. Y. Abdelaziz, 'LVCI Approach for Optimal Allocation of Distributed Generations and Capacitor Banks in Distribution Grids based on Moth-Flame Optimization Algorithm', Accepted for publication in Electrical Engineering (Springer).
- [7] Ahmed Fathy and **A. Y. Abdelaziz**, 'Single and Multi-Objective Operation Management of Micro-Grid Using Krill Herd Optimization and Ant Lion Optimizer Algorithms', International Journal of Energy and Environmental Engineering, Vol. 9, Issue 2, June 2018.
- [8] Mahmoud Elsadd and A. Y. Abdelaziz, 'Unsynchronized Fault-Location technique for Twoand Three-Terminal Transmission Lines', Electric Power Systems Research, Vol. 158, May 2018, pp. 228-239.
- [9] Mohamed Abd-El-Hakeem Mohamed and A. Y. Abdelaziz, 'Accurate modeling and maximum power point detection of photovoltaic module using a few collected data', International Journal of Engineering, Science and Technology, Vol. 10, No. 2, 2018, pp. 1-9.
- [10] E. S. Ali, S. M. Abd Elazim and A. Y. Abdelaziz, 'Optimal allocation and sizing of renewable distributed generation using ant lion optimization algorithm', Electrical Engineering (Springer), Vol. 100, Issue 1, March 2018, pp. 99-109.
- [11] S. F. Mekhamer, A. Y. Abdelaziz, M. A. Algabalawy, 'Design of Hybrid Power Generation Systems Connected to Utility Grid and Natural Gas Distribution Network: A New Contribution', Engineering Review, Vol. 38, Issue 2, 204-214, 2018.
- [12] Mohamed A. Tolba, Ahmed A. Zaki Diab, Vladimir N. Tulsky, and A. Y. Abdelaziz, 'VLCI Approach for Optimal Capacitors Allocation in Distribution Networks based on Hybrid PSOGSA Optimization Algorithm', Accepted for publication in Neural Computing and Applications.
- [13] Ahmed Fathy and **A. Y. Abdelaziz**, 'Single-Objective Optimal Power Flow for Electric Power Systems Based on Crow Search Algorithm', Archives of Electrical Engineering Journal, Vol. 67, No. 1, March 2018, pp. 123–138.
- [14] A. Sanad Ahmed, Mahmoud A. Attia, Nabil M. Hamed, A. Y. Abdelaziz, 'Modern Optimization Algorithms for Fault Location Estimation in Power Systems', Accepted for publication in Engineering Science and Technology, an International Journal (Elsevier).
- [15] Mohamed A. Tolba, Hegazy Rezk, Vladimir N. Tulsky, Ahmed A. Z. Diab, **A. Y. Abdelaziz** and Artem Vanin, 'Impact of Optimum allocation of Renewable Distributed Generations on Distribution Networks based on Different Optimization Algorithms', Energies, Volume 11, Issue 1, 2018.
- [16] Mohamed Awaad, S. F. Mekhamer, A. Y. Abdelaziz, 'Design of an adaptive overcurrent protection scheme for microgrids', International Journal of Engineering, Science and Technology, Vol. 10, No. 1, 2018, pp. 1-12.
- [17] Yazan M. Alsmadi, Vadim Utkin, Mohammed Haj-Ahmed and Longya Xu and A. Y. Abdelaziz, 'Sliding Mode Control of Power Converters: AC/DC Converters & DC/AC Inverters', Accepted for publication in International Journal of Control.
- [18] Amany M. El-Zonkoly, **A. Y. Abdelaziz**, and Alaa M. Eladl, 'Double Layer Firefly Algorithm for Simultaneous Optimal Sizing and Operation of Energy Hubs', Electric Power Components and Systems Journal, Vol. 45, Issue 16, December 2017, pp. 1846-1857.
- [19] Ragab A. El Sehiemy, Shady H.E. Abdel Aleem, **A. Y. Abdelaziz** and Murat E. Balci, 'A New Fuzzy Framework for the Optimal Placement of Phasor Measurement Units Under Normal and

- Abnormal Conditions', Resource-Efficient Technologies (Elsevier), Vol. 3, Issue 4, December 2017, pp. 542-549.
- [20] Ahmed M. Kasem and A. Y. Abdelaziz, 'Firefly Optimization Algorithm for the Reactive Power Control of an Isolated Wind Diesel System', Electric Power Components and Systems journal, Vol. 45, Issue 13, December 2017, pp. 1413-1425.
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- [23] Ahmed R. Adly, Ragab A. El Sehiemy and A. Y. Abdelaziz, An Optimal/Adaptive Reclosing Technique for Transient Stability Enhancement under Single Pole Tripping', Electric Power Systems Research, Vol. 151, October 2017, pp. 348-358.
- [24] Bhupendra Kumar, Anamika Yadav and **A. Y. Abdelaziz**, 'A Synchrophasors Assisted Protection Scheme for the Shunt-Compensated Transmission Line', IET-GTD, Vol. 11, Issue 13, October 2017, pp. 3406-3416.
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- [26] Z. G. Hassan, M. Ezzat and A. Y. Abdelaziz, 'Solving unit commitment and economic load dispatch problems using modern optimization algorithms', International Journal of Engineering, Science and Technology, Vol. 9, No. 4, 2017, pp. 10-19
- [27] Aleena Swetapadma, Praveen Mishra, Anamika Yadav and A. Y. Abdelaziz, 'A Non-Unit Protection Scheme for Double Circuit Series Capacitor Compensated Transmission Lines', Electric Power Systems Research, Vol. 148, July 2017, pp. 311-325.
- [28] Hegazy Rezk, Ahmed Fathy and A. Y. Abdelaziz, 'A Comparison of Different Global MPPT Techniques Based on Meta-heuristic Algorithms for Photovoltaic System subjected to Partial shading Conditions', Renewable & Sustainable Energy Reviews Journal, Vol. 74, July 2017, pp. 377-386.
- [29] Mohamed Zellagui, and **A. Y. Abdelaziz**, 'A new hybrid optimization algorithm CRO-DE for optimal coordination of overcurrent relays in complex power systems', Mediterranean Journal of Modeling and Simulation, Vol. 8, Issue 1, June 2017, pp. 1-18.
- [30] Ahmed R. Adly, Ragab A. El Sehiemy and A. Y. Abdelaziz, 'A Novel Single End Measuring System Based Fast Identification Scheme for Transmission Line Faults', Measurement (Elsevier), Vol. 103, June 2017, pp. 263-274.
- [31] **A. Y. Abdelaziz** and Ahmed Fathy, 'A Novel Approach Based on Crow Search Algorithm for Optimal Selection of Conductor Size in Radial Distribution Networks', Engineering Science and Technology, an International Journal, Vol. 20, Issue 2, April 2017, pp. 391-402.
- [32] Reham H. Salem, M. Ezzat, A. Y. Abdelaziz, 'Security constrained optimal power flow by modern optimization tools', International Journal of Engineering, Science and Technology, Vol. 9, No. 3, 2017, pp. 21-29.
- [33] Ahmed Fathy and **A. Y. Abdelaziz**, 'Grey Wolf Optimizer for Optimal Sizing and Siting of Energy Storage System in Electric Distribution Network', Electric Power Components and Systems Journal, Vol. 45, Issue 6, 2017, pp. 601-614.
- [34] M. M. Othman, Y. G. Hegazy and A. Y. Abdelaziz, 'Electrical Energy Management in Unbalanced Distribution Networks using Virtual Power Plant Concept', Electric Power Systems Research, Vol. 145, April 2017, pp. 157-165.
- [35] Fatma Moustafa, Niveen Badra and **A. Y. Abdelaziz**, 'Evaluation of the performance of different firefly algorithms to the economic load dispatch problem in electrical power systems', International Journal of Engineering, Science and Technology, Vol. 9, No. 2, April 2017, pp. 1-14.

- [36] Ahmed M. Ibrahim, Mahmoud A. Attia, M. M. Othman, and A. Y. Abdelaziz, 'A Survey on Demand Side Management in Electrical Power Systems', i-manager's Journal on Power Systems Engineering, Vol. 5, No. 1, February April 2017, pp. 40-50.
- [37] **A. Y. Abdelaziz**, Metwally A. El-Sharkawy and Mahmoud A. Attia, 'Effect of System Topology on Wind Generators Penetration Maximization with TCSCs Insertion', i-manager's Journal on Power Systems Engineering, Vol. 5, No. 1, February April 2017, pp. 1-10.
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- [39] Amr K. Khamees, Ahmed El-Rafei, N. M. Badra and A. Y. Abdelaziz, 'Solution of Optimal Power Flow using Evolutionary-Based Algorithms', International Journal of Engineering, Science and Technology, Vol. 9, No. 1, March 2017, pp. 55-68.
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- [44] M. A. Algabalawy, S. F. Mekhamer and A. Y. Abdelaziz, 'Optimal Design of a New Configuration of the Distributed Generation Units using Grey Wolf and Dragonfly Optimizers', MASK International Journal of Science and Technology, Vol. 2, No. 1, January 2017, pp. 17-25.
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- [47] Mohamed Zellagui, Heba A. Hassan and A. Y. Abdelaziz, 'Non-Dominated Sorting Gravitational Search Algorithm for Multi-Objective Optimization of Power Transformer Design', Engineering Review Journal, Vol. 37, Issue 1, January 2017, pp. 27-37.
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- [49] Sahar Gamaa, Abdelazeem Abdelsalam and A. Y. Abdelaziz, 'Power System Distortions Mitigation Using Switched Filter Compensator', American Journal of Electrical Power and Energy Systems, Vol. 5, No. 6, December 2016, pp. 76-80.
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- [53] **A. Y. Abdelaziz**, Mohamed Ezzat and Walid Sameh, Improved Hybrid Islanding Detection Technique for Grid Connected PV Distributed Generators', Electrical Engineering Research Journal, Vol. 4, October 2016, pp. 1-9.
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