

Ahmed G. Abokhalil,
Associate Professor, Sustainable and renewable energy
engineering department, University of Sharjah

Education:

BSc, Electrical Engineering Department, Assiut University, Egypt (1987-1992)

MSc Electrical Engineering Department, Assiut University, Egypt (1992-1996)

Ph.D. Electrical Engineering Department, Yeungnam University, South Korea(2003-2007)

Academic experience:

- Department of Electrical Engineering, Majmaah University, KSA 2012-2021.
- Electrical Engineering Department, Assiut University, Egypt from 2010-2012.
- Korea Institute of Energy Research KIER, South Korea 2008-2010.
- Renselaer Polytechnic Institute 2007-2008.

Service and Career Development:

- Member of High Quality Committee, College of Engineering, Majmaah University, 2013~2015.
- Chairman of Electrical Engineering department, College of Engineering, Majmaah University, 2013~2015.
- Executive Director of Bridging Program, Electrical Engineering department, College of Engineering, Majmaah University, 2015~2021.
- Head of e-learning unit in College of Engineering, Majmaah University, 2015~2021.
- Member of Curriculum Planning Committee for Electrical Engineering department, College of Engineering, Majmaah University, 2017~2021.

Membership of Professional Associations

- Editorial Board of KPE Journal of Korean Power Electronics, Since 2006.
- Editorial Board, Journal of Applied Science and Engineering, Faculty of Energy Engineering, Assiut University.
- Scientific Committee for Promotion of Associate Professors, Majmaah University 2016~2021.

- IEEE-Member of Power Electronics Society.
- IEEE-Member of Power and Energy Systems Society.

Scholarly Activities

Reviewer (Transactions/Journals)

- IEEE Transactions on Power Electronics
- IEEE Transactions on Industrial Electronics
- IEEE Access
- Journal of IET Renewable Power Generation
- Journal of IET Power Electronics

Awards & Funds

- Ph. D. Scholarship from Korea Science and Engineering Foundation, KOSEF, 2003-2007.
- Research funding 100000 US\$, Korea research Foundation KRF, 2004.
- Postdoctoral fellowship, Rensselaer Polytechnic institute, NY, USA, 2007.
- Postdoctoral fellowship, Korean Institute of Energy Research, KIER, South Korea, 2008.
- Research funding from Scientific Research Deanship, Majmaah University, KSA, 2013.
- Research funding from Scientific Research Deanship, Majmaah University, KSA, 2014.
- Research funding from Scientific Research Deanship, Majmaah University, KSA, 2016.
- Research funding from Scientific Research Deanship, Majmaah University, KSA, 2017.
- Research funding from Scientific Research Deanship, Majmaah University, KSA, 2018.
- Research funding from Scientific Research Deanship, Majmaah University, KSA, 2019.
- Research funding from Ministry of Education, Institutional fund, 2020~2021.

Related Publications:

Books

1. **Ahmed G. Ab-Khalil** "Control system of DFIG for Wind Power Generation Systems" LAP LAMBERT Academic Publishing, ISBN-10: 3659649813, ISBN-13: 978-3659649813, January 23, 2015.
2. Ali Eltamaly, Almoataz Abdulaziz, **Ahmed G. Abo-khalil,**" Control and Operation of Grid-Connected Wind Energy Systems", Green Energy and Technology, Springer, 2021.

Book Chapters

1. **Ahmed G. Abo-Khalil** " Impacts of Wind Farms on Power System Stability " in " Wind Farm" book, ISBN 980-953-307-562-9, 2013.
2. **Ahmed G. Abo-khalil,** Ali Eltamaly, Khairy Sayed ,” Different Approaches for Efficiency Optimization of DFIG Wind Power Generation Systems” in Energy and Technology, Springer, 2021.
3. **Ahmed G. Abo-khalil,** Ali Eltamaly,” Voltage Source Converter Control Under Unbalanced Grid Voltage” in Energy and Technology, Springer, 2021.
4. Ali Eltamaly, Ahmed A. Zaki Diab, **Ahmed G. Abo-khalil,** ” Robust Control Based on H_{∞} and Linear Quadratic Gaussian of Load Frequency Control of Power Systems Integrated with Wind Energy System” in Energy and Technology, Springer, 2021.
5. Ali M. Eltamaly, Yehia Sayed Mohamed, Abou-Hashema M. El-Sayed, Amer Nasr A. Elghaffar, **Ahmed G. Abo-Khalil,**” D-STATCOM for Distribution Network Compensation Linked with Wind Generation,” in Energy and Technology, Springer, 2021.
6. Khairy Sayed, **Ahmed G. Abo-Khalil,** and Ali M. Eltamaly,” Wind Power Plants Control Systems Based on SCADA System”, in Energy and Technology, Springer, 2021.
7. Ali Eltamaly, Mohamed A. Mohamed, **Ahmed G. Abo-khalil,** ” Maximum Power Point Tracking Strategies of Grid-Connected Wind Energy Conversion Systems” in Energy and Technology, Springer, 2021.

Papers in Refereed Journals

1. Ibrahim M. Alarifi, **Ahmed G. Abo-Khalil,** Abdel-Rahman Al-Qawasmi, Walied Alharbi, Mohammad Alobaid, On the effects of nanomaterials on the

- performance of solar distillation systems-A comprehensive review, *Solar Energy*, Volume 218, 2021, Pages 596-610.
2. Ahmed G Abo-Khalil, Walied Alharbi, Abd-Elrahman Al-Qawasmi, Mohamed Alobaid, Ibrahim Alarifi “Modeling and control of unbalanced and distorted grid voltage of grid-connected DFIG wind turbine ,” *International Transaction on Electrical Energy Systems*, 2021. <https://doi.org/10.1002/2050-7038.12857>
 3. Ahmed G Abo-Khalil, Ali S. Alghamdi, “MPPT of Permanent Magnet Synchronous Generator in Tidal Energy Systems Using Support Vector Regression,” *Sustainability* 13 (4), 2021.
 4. Ahmed G Abo-Khalil, Walied Alharbi, Abd-Elrahman Al-Qawasmi, Mohamed Alobaid, Ibrahim Alarifi “Maximum Power Point Tracking of PV Systems under Partial Shading Conditions Based on Opposition-Based Learning Firefly Algorithm,” *Sustainability* 13 (5), 2021.
 5. Ahmed G Abo-Khalil, Ali M. Eltamaly, Mamdooh S. Alsaud, K. Sayed, Ali S. Alghamdi, “Sensorless control for PMSM using model reference adaptive system,” *International Transaction on Electrical Energy Systems*, 2021; <https://doi.org/10.1002/2050-7038.12733>
 6. Zhang Bo, Leonardus WW Mihardjo, Mahidzal Dahari, Ahmed G Abo-Khalil, Abde Rahman Al-Qawasmi, Abdeliazim Mustafa Mohamed, Towhid Parikhani,”Thermodynamic and exergoeconomic analyses and optimization of an auxiliary tri-generation system for a ship utilizing exhaust gases from its engine,” *Elsevier, Journal of Cleaner Production*, 125012.
 7. A. Almutairi, Ahmed G Abo-Khalil, K. Sayed, N. Albagami,” MPPT for a PV Grid-Connected System to Improve Efficiency under Partial Shading Conditions,” *Sustainability* 12 (24), December, 2020.
 8. Ahmed G Abo-Khalil,” Maximum Power Point Tracking for a PV System Using Tuned Support Vector Regression by Particle Swarm Optimization,” *Journal of Engineering Research*, 8 (4), 139-152, 2020.
 9. K. Sayed, A. Kassem, H. Saleeb, A.S. Alghamdi, Ahmed G. Abokhalil,” Energy-Saving of Battery Driving Cycles Electric Vehicle Powertrain and Efficiency Improvement during Different Standard,” *Sustainability* 12 (24), December, 2020.
 10. R. P. Praveen, V. Keloth, Ahmed G Abo-Khalil, Ali S Alghamdi, Ali M Eltamaly, I. Tlili,” An insight to the energy policy of GCC countries to meet renewable energy targets of 2030”, *Energy Policy*, 147, 2020.

11. Ahmed G. Abo-Khalil, Ali M Eltamaly, P. R. Praveen, Ali S. Alghamdi, I. Tlili " A Sensorless Wind Speed and Rotor Position Control of PMSG in Wind Power Generation Systems", Sustainability 12 (20), 8481, October, 2020. Impact Factor : 2.59
12. Paul C Okonkwo, E. Barhoumi, S. Murugan, M. Zghaibeh, C. Otor, Ahmed G Abo-Khalil, Adel M. A. Mohamed," Economic analysis of cross-breed power arrangement for Salalah region in the Al-Khareef season," International Journal of Sustainable Energy, pp. 1-19, 2020.
13. Ali M Eltamaly, MS Al-Saud, Ahmed G Abokhalil," A novel scanning bat algorithm strategy for maximum power point tracker of partially shaded photovoltaic energy systems", Ain Shams Engineering Journal, Elsevier, 2020. [Impact Factor : 3.09](#)
14. A. M. Eltamaly, H. Farah, Ahmed G. Abo-Khalil "A novel PSO strategy for improving dynamic change partial shading photovoltaic maximum power point tracker" Journal of Energy Sources Part A Recovery Utilization and Environmental Effects, 2020. [Impact Factor : 0.95](#)
15. A. M. Eltamaly, M. S. Al-Saud, Khairy Sayed, Ahmed G. Abo-Khalil," Sensorless Active and Reactive Control for DFIG Wind Turbines Using Opposition-Based Learning Technique", Sustainability 12 (9), 3583, April, 2020. [Impact Factor : 2.59](#)
16. Ahmed G. Abo-khalil, Abdel-Rahman Al-Qawasmi, Ali M. Eltamaly, B. G. Yu," Condition Monitoring of DC-Link Electrolytic Capacitors in PWM Power Converters Using OBL Method", Sustainability 12 (9), 3719, May 2020. [Impact Factor : 2.59](#)
17. Naveed Ashraf, Tahir Izhar, Ghulam Abbas, Ahmed Bilal Awan, Ali S. Alghamdi, Ahmed G Abo-Khalil, Khairy Sayed, Umar Farooq, Valentina E Balas," A new single-phase direct frequency controller switch count without zero-crossing detector for induction heating system', MDPI Electronics, 9(3), 2020, 430.
18. A. M. Eltamaly, M. S. Al-Saud, Ahmed G. Abo-Khalil," Dynamic Control of a DFIG Wind Power Generation System to Mitigate Unbalanced Grid Voltage," IEEE Access, February 2020. [Impact Factor : 4.098](#)
19. A. M. Eltamaly, M. S. Al-Saud, Ahmed G. Abo-Khalil, H. Farah," Simulation and Experimental Validation of Fast Adaptive Particle Swarm Optimization Strategy for Photovoltaic Global Peak Tracker under Dynamic Partial

- Shading,” Renewable & Sustainable Energy Reviews, Elsevier, Vol. 124, Feb. 2020. [Impact Factor : 11.239](#)
20. Ahmed G. Abo-Khalil, P. R. Praveen, M. Salah, “Wind speed characteristics and energy potential for selected sites in Saudi Arabia”, Journal of King Saud University Engineering Sciences”, December 2019.
 21. Khairy sayed, Ahmed Kassem, Hydra Saleb, Ali S. Alghamdi, Ahmed G. Abo-khalil,” Energy-Saving of Battery Electric Vehicle Powertrain and Efficiency Improvement during Different Standard Driving Cycles,” Sustainability 12 (9), 3719, 12(24), 2020.
 22. A. M. Eltamaly, M. S. Al-Saud, **Ahmed G. Abo-Khalil**,” A Novel Bat Algorithm Strategy for Maximum Power Point Tracker of Photovoltaic Energy Systems Under Dynamic Partial Shading,” IEEE Access, Vol. 8, pp. 10048-1006, January 2020. [Impact Factor : 4.098](#)
 23. R. P. Praveen, Jose Therattil, Jenson Jose, Ahmed Abo-Khalil, Ali Alghamdi, GR Bindu, “ Hybrid Control of a Multi Area Multi Machine Power System with FACTS Devices using Non-linear Modelling,” IET Generation, Transmission & Distribution, Feb. 2020. [Impact Factor : 4.1](#)
 24. A. M. Eltamaly, M. S. Al-Saud, **Ahmed G. Abo-Khalil**,” Performance Improvement of PV Systems’ Maximum Power Point Tracker Based on a Scanning PSO Particle Strategy,” Sustainability 12 (3), 1185, Feb. 2020. [Impact Factor : 2.59.](#)
 25. **Ahmed G. Abo-Khalil**, A. Alghamdi, I. Tlili, A. Eltamaly, “A. Current Controller Design for DFIG-based Wind Turbines Using State Feedback Control,” IET Renewable Power Generation, 13 (11), pp. 1938-1949, 2019. [Impact Factor : 3.649.](#)
 26. **Ahmed G. Abo-Khalil**, A. S. Alghamdi, A. M. Eltamaly, M. S. Al-Saud, P. R. Praveen, K. Sayed,” Design of State Feedback Current Controller for Fast Synchronization of DFIG in Wind Power Generation Systems,” Energies 12 (12), pp. 2427, 2019. [Impact Factor : 2.707.](#)
 27. **Ahmed G. Abo-Khalil**, Saeed Alyami, Khairy Sayed, Ayman Alhejji ,” Dynamic Modeling of Wind Turbines Based on Estimated Wind Speed under Turbulent Conditions,” Energies, 12(10), PP. 1907, 2019. [Impact Factor : 2.707.](#)
 28. **Ahmed G. Abo-Khalil**, Saeed Alyami, A. B. Awan, Ayman Alhejji ,”Real-Time Reliability Monitoring of DC-Link Capacitors in Back-to-Back Converters,” Energies, 12(12), PP. 2396, 2109. [Impact Factor : 2.707.](#)

29. Ali M. Eltamaly, Mamdooh S Al-Saud, **Ahmed G. Abo-Khalil**, “Photovoltaic maximum power point tracking under dynamic partial shading changes by novel adaptive particle swarm optimization strategy” Transactions of the Institute of Measurement and Control, August, 2019. [Impact Factor : 1.96.](#)
30. MM Salah, **Ahmed G. Abo-Khalil**, RP Praveen, “ Wind Speed Characteristics and Energy Potential for Selected Sites in Saudi Arabia,” Journal of King Saud University-Engineering Sciences, Elsevier, 2019.
- 31.
32. I. M. Alarifi, **Ahmed G. Abo-Khalil**, M Osman, LA Lund, MB Ayed, H Belmabrouk,”MHD flow and heat transfer over vertical stretching sheet with heat sink or source effect,” Symmetry 11 (3), 297, 2019. [Impact Factor : 1.456.](#)
33. I. Tlili, M. Osman, E. M. Barhomi, Praveen R. P., **Ahmed G. Abo-khalil**,”Performance enhancement of a humidification–dehumidification desalination system: A thermodynamic investigation,” Journal of Thermal Analysis and Calorimetry, 2019. [Impact Factor : 2. 209.](#)
34. A. G. Abokhalil,” Grid Connection Control of DFIG for Variable Speed Wind Turbines under Turbulent Conditions,” International Journal of Renewable Energy Research (IJRER) 9 (3), pp. 1260-1271, 2019.
35. **Ahmed G. Abo-Khalil**, Ahmed B. Awan, and M. Zubair,” Performance analysis of various hybrid renewable energy systems using battery, hydrogen, and pumped hydro-based storage units”, International Journal of Energy Research, 1-26, 2018. [Impact Factor : 3.343.](#)
36. **Ahmed G. Abo-Khalil**, Khairy Sayed,” A new soft switching PV module-integrated boost DC-DC converter”, the International Journal of Power Electronics, 1-17, July 2018.
37. Khairy Sayed, Ahmed G. Abokhalil, Ali S. Alghamdi ,” Control DC Microgrid Based Electric Vehicles Charging Station Powered by Renewable Energy Sources,” Energies, 12(22), 2019.
38. **Ahmed G. Abo-Khalil** et.al, " Comparative Study of Passive and Active Islanding Detection Methods for PV Grid-Connected Systems” Sustainability 10 (6), 1-15, 2018. [Impact Factor : 2.075.](#)
39. A Malik, Z Ali, AB Awan, **Ahmed G. Abo-Khalil**, GAS Sidhu “Achieving Cost Minimization and Fairness in Multi-Supplier Smart Grid Environment”, Energies 11 (6), 1367, 2018. [Impact Factor : 2.707.](#)

40. AB Awan, M Zubair, **Ahmed G. Abo-Khalil**, " Solar energy resource analysis and evaluation of photovoltaic system performance in various regions of Saudi Arabia", *Sustainability* 10 (4), 1129, 2018. [Impact Factor : 2.075.](#)
41. Muhammad Zubair , Ahmed Bilal Awan , Abdullah Al-Ahmadi, **Ahmed G. Abo-Khalil**" NPC Based Design Optimization for a Net Zero Office Building in Hot Climates with PV Panels as Shading Device", *energies* 11, 20, 2018.
42. E. Barhomi, **Ahmed G. Abo-Khalil**, Y Berrouche, F Wurtz , " Analysis and comparison of end effects in linear switched reluctance and hybrid motors", *Journal of Electrical Engineering* 68 (2), 138-142, 2017.
43. **Ahmed G. Abo-Khalil**, M, Abdalbasser, " Multivariable State Feedback Control of Three-Phase Voltage Source-PWM Current Regulator", *Middle-East Journal of Scientific Research* 24 (3), 10, 2016.
44. **Ahmed G. Abo-Khalil** et.al, " A Low-cost PMSG Topology and Control Strategy for Small-Scale Wind Power Generation Systems" *International Journal of Engineering Sciences & Research Technology, IJESRT*, pp. 585- 592, October 2016.
45. Ahmed-Bilal Awan, Taher Shaftichi and **Ahmed G. Abo-Khalil** " Feasibility and estimation of technical potential and calculation of payback period of roof-top solar PV system in the city of Majmaah, Province of Riyadh, K.S.A " *Journal of Energy and Natural Resources*, Vol. 1, pp. 12-18, January 2016.
46. **Ahmed G. Abo-Khalil** and Muhammed Abdalbasser, " Multivariable State Feedback Control of Three-Phase Voltage Source-PWM Current Regulator" *Middle-East Journal of Scientific Research*, Vol. 3, No. 24, pp. 571-580, April 2016.
47. Muhammed Abdalbasser, **Ahmed G. Abo-Khalil** and Siva Agora "Positioning and adjusting the frequencies of the rotor in permanent magnet synchronous machine to achieve high performance" *International Journal of Applied Engineering Research*, Vol. 10, No.59, pp. 379- 386, October 2015.
48. Youcef Berrouche, **Ahmed. G. Abo-khalil**, Abdullah Almuhaissen " Quebec: a source of more than 5000MW of clean sustainable energy using Salinity Gradient Power technology" *IEEE 2015 International Conference on Sustainable Mobility Applications, Renewables and Technology (SMART), Kuwait*. Vol.1, No. 1. Nov. 2015.
49. **Ahmed G. Abo-Khalil** " Sensorless Gradient Approximation Controller for Maximum Power point Tracking of Grid Connected PV System " *Middle East Power System Conference MEPCON 2015*, Vol. 1, ID 4006, Dec. 2015.
50. **Ahmed G. Abo-Khalil** and Byunggyu Yu, "A Current Sensor-less Maximum

- Power Point Tracking Method for PV System," International Journal of Advancements in Computing Technology (IJACT), Volume 5, Number 11, July 2013, doi : 10.4156/ijact.vol5.issue11.42.
51. **Ahmed G. Abo-Khalil** and Hammad Ab-Zied, " Design and Control of Large Scale Photovoltaic System for High Power applications," International Journal of Control, Automation and Systems, Vol. 1, No. 2, April 2013.
52. **Ahmed G. Abo-Khalil** " Current Injection-Based DC-link Capacitance Estimation Using Support Vector Regression " IET Journal of Power Electronics, Vol. 5, No. 1, Jan. 2012, PP. 53-58. [Impact Factor : 2.839.](#)
53. **Ahmed G. Abo-Khalil** " Synchronization of DFIG Output Voltage to Utility Grid in Wind Power System" Elsevier Journal of Renewable Energy, Vol. 44, Sept. 2012, PP. 193-198. [Impact Factor : 5.439.](#)
54. **Ahmed G. Abo-Khalil** and D. C. Lee, "Maximum Power Point Tracking Based on Sensorless Wind Speed Using Support vector Regression," IEEE Transactions on Industrial Electronics, Vol. 55, No. 3, March 2008. [Impact Factor : 7.5.](#)
55. **Ahmed G. Abo-Khalil** and D. C. Lee, " DC-Link Capacitance Estimation in AC/DC/ACPWM Converters using Voltage Injection," IEEE Transactions on Industrial Applications, Vol. 44, No. 5, Sept. 2008. [Impact Factor : 3.347.](#)
56. **Ahmed G. Abo-Khalil** and D. C. Lee, " DC-Link Capacitance Estimation using Support Vector Regression in AC/DC/AC PWM Converters ," Korean Institute of Electrical Engineering Journal, vol.56, no.1, pp. 81-87. Jan. 2007.
57. **Ahmed G. Abo-Khalil**, D. C. Lee, J. W. Choi, and S. G. Kim, " Maximum Power Point Tracking Controller Connecting PV System to Grid," Korean Institute of Power Electronics Journal, Vol. 6. No. 3, July 2006.
58. **Ahmed G. Abo-Khalil**, Y. S. Kim, and D. C. Lee, "Maximum Output Power Control of Wind Generation System Using Fuzzy Control," Korean Institute of Electrical Engineering Journal, Vol 54B, No. 10, Oct. 2005.
59. Ahmed G. Abo-Khalil, D. C. Lee," Optimal efficiency control of induction generators in wind energy conversion systems using support vector regression," Journal of Power Electronics, vol. 8, No. 4, pp. 345-353, Oct. 2008.

Papers in International Conference Proceedings (Refereed)

60. Khairy Sayed, Ahmed M Kassem, Ismail Aboelhassan, Abdelmaged M Aly, Ahmed G. Abo-Khalil," Energy Management and Control Strategy of DC Microgrid Including Multiple Energy Storage Systems", 21st International Middle

East Power System Conference, 2019, 736-741.

- 61.
62. Muhammed Abdulbasser, **Ahmed G. Abo-Khalil** and Siva Agora "Positioning and adjusting the frequencies of the rotor in permanent magnet synchronous machine to achieve high performance" International Journal of Applied Engineering Research, Vol. 10, No.59, pp. 379- 386, October 2015.
63. Youcef Berrouche, **Ahmed. G. Abo-khalil**, Abdullah Almuhausen " Quebec: a source of more than 5000MW of clean sustainable energy using Salinity Gradient Power technology" IEEE 2015 International Conference on Sustainable Mobility Applications, Renewables and Technology (SMART), Kuwait. Vol.1, No. 1. Nov. 2015.
64. **Ahmed G. Abo-Khalil** " Sensorless Gradient Approximation Controller for Maximum Power point Tracking of Grid Connected PV System " Middle East Power System Conference MEPCON 2015, Vol. 1, ID 4006, Dec. 2015.
65. **Ahmed. G. Abo-khalil** et. al, "A novel islanding detection method for three-phase photovoltaic generation systems", IEEE Applied Electrical Engineering and Computing Technologies (AEECT) , Jordan, Dec. 2013 , pp: 1-5.
66. **Ahmed G. Abo-Khalil** and Hammad Abo-Zied " Effect of the driver Parameters on the Switching Losses of the IGBT Switch at High Frequency High Power Applications ," Middle East power conference Mepcon, Egypt, Dec. 2012.
67. **Ahmed G. Abo-Khalil** and Hammad Ab-Zied, " Sensorless Control for DFIG Wind Turbines Based on Support Vector Regression," Industrial Electronics Conference IECON, Canada, Oct. 2012.
68. **Ahmed G. Abo-Khalil** , Sameh Saad" A New Approach to improve the Energy Efficiency of Middle-East Buildings" Future of Energy in Arab World Conference, Assiut, Egypt, March, 2013.
69. **Ahmed G. Abo-Khalil** and Byunggyu Yu, " Current Estimation-based Maximum Power point Tracker of Grid Connected PV," Power Electronics and Drives Systems (PEDS), Japan, 2013.
70. **Ahmed G. Abo-Khalil** "A New Wind Turbine Simulator using a Squirrel-Cage Motor for Wind Power Generation Systems " The Power Electronics and Drive Systems Conference PEDS, December 2011, Singapore.
71. **Ahmed G. Abo-Khalil** "Gradient Approximation Based Maximum Power Point Tracking for PV Grid Connected System " The Power Electronics and Drive Systems Conference PEDS, December 2011, Singapore.

57. H. G. Park, Ahmed G. Abo-Khalil, D. C. Lee, "Wind turbine simulators considering turbine dynamic characteristics," *The Transactions of The Korean Institute of Electrical Engineers* 57 (4), pp. 617-624, 2008.

58. Ahmed G. Abo-Khalil "Maximum Power Point Tracking Based on Sensorless Wind Speed Using Support Vector Regression " *The Middle East Power Conference MEPCON*, December 2010, Egypt.

1. **Ahmed G. Abo-Khalil** "Dynamic Modelling of Grid-Connected Variable Speed Wind Turbines " *World Wind Exhibition and Conference WVEC*, November 2011, Egypt.
2. Byunggyu YU, Mikihiko Matsui, **Ahmed G. Abo-Khalil**, Gwonjong Yu, "A Correlation-Based Islanding Detection Method Using Current Disturbance for PV System" *The International Conference on Electrical Machines and Systems ICEMS*, November 2009, Japan.
3. Byunggyu YU, **Ahmed G. Abo-Khalil**, Mikihiko Matsui, Gwonjong Yu, "Sensorless Fuzzy Logic Controller for Maximum Power Point Tracking of Grid-Connected PV system" *The International Conference on Electrical Machines and Systems ICEMS*, November 2009, Japan.
4. Byunggyu YU, **Ahmed G. Abo-Khalil**, Mikihiko Matsui, Gwonjong Yu, "Support Vector Regression Based Maximum Power Point Tracking for PV Grid-Connected System" *Photovoltaic Specialists Conference PVSC 34th*, June 2009 Philadelphia USA.
5. **Ahmed G. Abo-Khalil** and D. C. Lee, "SVR-based wind speed estimation for power control of wind energy generation system ," *Proc. Power Conversion Conferenc*, Nagoya, Japan, April 2007.
6. H.-G. Park, **Ahmed G. Abo-Khalil**, D. C. Lee and K. M. Son, "Torque Ripple Elimination for Doubly-Fed Induction Motors under Unbalanced Source Voltage," *Proc Power electronics and Drive Systems PEDS,07*, pp. 1301 - 1306, Nov. 2007.
7. **Ahmed G. Abo-Khalil**, H.-G. Park and D. C. Lee and "Loss Minimization Control for Doubly-Fed Induction Generators in Variable Speed Wind Turbines," *Proc. IECON'07*, pp. 1109 - 1114, Nov. 2007.
8. **Ahmed G. Abo-Khalil** and D. C. Lee, "Dynamic Modeling and Control of Wind Turbines for Grid-Connected Wind Generation System," *Proc. Power Electronics Specialests Conference*, Korea 2006.
9. **Ahmed G. Abo-Khalil**, D. C. Lee, and S. P-Ryu, "Synchronization of DFIG Output Voltage to Utility Grid in Wind Power System," *Proc. IASTED*, Greece, June 2006.

10. **Ahmed G. Abo-Khalil** and D. C. Lee, " Grid Connection of Doubly-Fed Induction Generators in Wind Energy Conversion," Proc. IPEMC, China, August 2006.
11. **Ahmed G. Abo-Khalil** and D. C. Lee, " DC-Link Capacitance Estimation using Support Vector Regression in AC/DC/AC PWM Converters," Proc. IAS, USA, Oct. 2006.
12. **Ahmed G. Abo-Khalil**, H. G. Kim, D. C. Lee and J. K. Seok, " Maximum Output Power Control of Wind Generation System Considering Loss Minimization of Machines ," Proc. IECON'04, pp. 1676 - 1681, 2004.
13. **Ahmed G. Abo-Khalil**, D. C. Lee, J. K. Seok, J. W. Choi and H. G. Kim , " Maximum Power Point Tracking Controller Connecting PV System to Grid ," Proc. International Conference of Power Electronics'04, pp. II-36 - II-40, 2004.
14. **Ahmed G. Abo-Khalil**, D. C. Lee, J. K. Seok, " Variable Speed Wind Power Generation System Based on Fuzzy Logic Control for Maximum Output Power Tracking ," Proc. Power Electronics Specialists Conference'04, pp. 2039-2043, 2004.
15. **Ahmed G. Abo-Khalil** and D. C. Lee "Loss Minimization Control for Induction Generator in Wind Power Systems using Support Vector Regression", Proc. of Korean Institute of Power Electronics Conf., pp. 341-344, April 2006.
16. **Ahmed G. Abo-Khalil** and D. C. Lee "Online Capacitance Estimation of DC-Link Capacitors using AC Voltage Injection in AC/DC/AC PWM Converters", Proc. of Korean Institute of Power Electronics Conf., pp. 381-384, June 2006.
17. **Ahmed G. Abo-Khalil** and D. C. Lee "Output Power Control of Wind Generation System using Estimated Wind Speed by Support Vector Regression", Proc. of Korean Institute of Power Electronics Conf., pp. 345-348, June 2006.
18. **Ahmed G. Abo-Khalil** and D. C. Lee, "Implementation of Grid-Connection of DFIG for Wind power Generation system," Proc. Korean Institute of Electrical Engineering Conf. Oct. 2006.
19. **Ahmed G. Abo-Khalil** and D. C. Lee, " Development of Wind Turbine Simulators Using PSCAD," Proc. POWER ELECTRONICS AND INTELLIGENT CONTROL FOR ENERGY CONSERVATION (PELINCEC), 2005.
20. **Ahmed Abo-Khalil** and D. C. Lee, "Wind Turbine Simulator Including Pitch Angle Control, Shaft Torsional Vibration and Tower Effect ", Proc. Korean Institute of Electrical Engineering Conf., pp. 411-413, 2005.
21. **Ahmed G. Abo-Khalil** and D. C. Lee "Optimal Efficiency Control of Wind

Generation System Using Fuzzy Logic Control,” Proc. Korean Institute of Electrical Engineering Conf., July 2005.

22. **Ahmed G. Abo-Khalil** and D. C. Lee “Synchronization of Wind power Generation System using DFIG to Utility Grid”, Proc. of Korean Institute of Power Electronics Conf., pp. 91-95, Nov. 2005.
23. H. K. Kim, **Ahmed Abo-Khalil**, D. C. Lee, and J. K. Seok, " Grid-Connected Wind Power Generation System Using Cage-Type Induction Generators ," Proc. of Korean Institute of Power Electronics Conf., pp. 73-76, 2003.
24. **Ahmed Abo-Khalil**, D. C. Lee, J. K. Seok, J. W. Choi, and H. K. Kim, " Maximum Output Power Control for PV Generation System based on fuzzy logic algorithm, " Proc. of Korean Institute of Power Electronics Conf., pp. 69-72, 2003.
25. **Ahmed Abo-Khalil**, D. C. Lee, J. K. Seok, J. W. Choi, and H. K. Kim, "Maximum power point tracking for photovoltaic system using fuzzy logic controller," Proc. of Korean Institute of Power Electronics Conf., pp. 503-506, 2003.
26. H. K. Kim, **Ahmed Abo-Khalil**, D.C. Lee, and J. K. Seok, "CVCF Control of Stand-Alone Wind Power System," Proc. of Korean Institute of Power Electronics Conf., pp. 379-382, 2003.

Conferences Attendance and Presentations:

1. The 2019 International Conference on Innovative Trends in Computer Engineering (ITCE), February, 20-22, 2019, Aswan, Egypt.
2. The Annual Meeting of the International Nuclear Security Education Network, Vienna, Austria, July, 9-13, 2018.
3. The 2018 International Conference on Innovative Trends in Computer Engineering , Faculty of Engineering, Aswan University, Aswan, Egypt, Feb,19-21,2018.
4. The 4th International Conference on energy Engineering, Faculty of Energy Engineering, Aswan University, Egypt, 26-28, Dec.,2017.
5. The 19th Int. Middle East Power System Conference, Menoufia University, Egypt, Dec.,19-21, 2017.
6. The 1st International Conference on "Women in Sciences", March, 21-23, 2017.
7. The International Conference on Oil Shale and Unconventional Energy Resources for Sustainable Development in Africa", March, 5-9, 2017, Famenco Resort, Quseir, Egypt.
8. The 18th International Middle East Power Conference, Helwan University, Cairo,

Egypt, 27-29 Dec., 2016.

9. 1st Int. Conf. on New Energy and Environment Engineering, Future University, Cairo, Egypt, 11-14, April, 2016.

10. The 17th Middle East International Power Conference, Faculty of Engineering, Mansoura University, Egypt, 15-17, December, 2015.

11. IEEE int. Conf. on Fuzzy Systems, Istanbul, 2-5, August, 2015.

12. Int. conf. on Artificial Intelligence, Electrical and Electronics Engineering, (AIEE'15), May, 13-14, 2015, Kuala Lumpur, Malaysia.

13. Asia Pacific Conference on Electrical Engineering and Computer Science, Kuala Lumpur, Malaysia, Nov.,7-9,2014.

14. The 112th International Middle East Power Conference, South Valley University, Aswan, Egypt, 12-15 March, 2008.

15. IEEE 7th International conference on Intelligent Systems Engineering Systems, INES Assiut, Luxor, Egypt, March 4-6, 2003.