Curriculum Vitae – Ali Q. Al-Shetwi

Assistant Professor Electrical Engineering Department & Department of Renewable Energy Engineering Fahad Bin Sultan University Tabuk, KSA E-mail: aalshetwi@fbsu.edu.sa

Specialization: Electrical Engineering & Renewable Energy

Google Scholar: <u>https://scholar.google.com/citations?user=PaMi9rwAAAAJ&hl=en&oi=ao</u> **Linkedin:** <u>https://www.linkedin.com/in/ali-al-shetwi-</u> <u>8b224171/?trk=people_directory&originalSubdomain=my</u>

Research Gate: <u>https://www.researchgate.net/profile/Ali_Al-Shetwi</u> **ORCID**: <u>https://orcid.org/0000-0002-6581-9629</u>

Academic Qualification:

2019 Faculty of Electrical & Electronic Engineering, University Malaysia Pahang (UMP), Malaysia PhD in Electrical Engineering
 Research Title: Design and Control of Grid-Connected Photovoltaic Power Plant with Fault Ride-Through
 2013 Electrical Power Engineering Department, Hijjawi Faculty for Engineering Technology, Yarmouk University, Jordan M.Sc. Degree in Electrical Power Engineering (Mix Mode)
 2009 Electrical and Computer Engineering, Faculty of Engineering, The Hashemite University, Jordan B.Sc. Degree in Electrical and Computer Engineering

Work Experiences:

01/01/2021-Present

Position: Assistant Professor (Full time).

<u>Company/Job Location</u>: Electrical Engineering Department & Department of Renewable Energy Engineering, College of Engineering, Fahad bin Sultan University, 47721 Tabuk, Saudi Arabia. *Courses taught*:

Bachelor – [ELEE 360: Electric Machines, REE 472: Energy and Environment, ELEE 462: Power Electronics, ELEE 461: Fundamentals of Power Systems Analysis, ELEE 468: Renewable Energy Systems, REE 320: Fundamental of Renewable Energy, and ELEE 469: Power System Protection].



Master – [ELEE 504: Advance Power System Analysis, ELEE 512: Power System Planning, ELEE 514: Environmental Impacts of Energy Systems, ELEE 513: Renewable Energy, ELEE 516: Power Electronics Systems and Applications, ELEE 610: Research Thesis, and ELEE 611 Engineering Design Project (NonThesis Program only)].

01/05/2019-31/12/2020

Position: Post-Doctoral Research Fellow (Full time).

<u>Company/Job Location</u>: Institute of Sustainable Energy, Department of Electrical Power Engineering, College of Engineering, The Energy University (Universiti Tenaga Nasional), Kajang, Malaysia. *Courses taught:* (EPEB 443: Energy conversions)

05/10/2016-07/09/2018

<u>Position:</u> Research and Teaching Assistant (part time). <u>Company/Job Location</u>: Faculty of Electrical & Electronic Engineering, University Malaysia Pahang, Pahang, Malaysia: *Courses taught:* (*BEE3333: Energy Systems, BEE3133: Electrical Power Systems*).

08/09/2013-30/06/2014

<u>Position:</u> Lecturer (part time). <u>Company/Job Location</u>: Department of Electronic Engineering and Automatic Control, University of Science and Technology, Yemen. *Courses taught* (*BEL003: Engineering mathematics*)

01/09/2013-31/12/2014

<u>Position:</u> Lecturer (part time). <u>Company/Job Location</u>: Department of power engineering, Modern Technology College,: *Courses taught* (*Physics, Electrical Machine, and Electrical Circuits*)

07/07/2013-31/01/2015

<u>Position:</u> Electrical Engineer (Full time). <u>Company/Job Location</u>: General Electricity Corporation, Ministry of Electricity and Energy,.

Research Interests:

- Renewable energy integration
- Power system stability
- Microgrid systems
- > Power quality
- Renewable Energy and sustainable development
- Power electronics
- Energy conversion

Awards and Scholarships:

- 1. Best Researcher awards, College of Engineering, Fahad bin Sultan University, May-2022.
- 2. Best paper award, 2021 IEEE 6th International Conference on Computing, Communication and Automation (ICCCA).

- 3. Holds second place of the Postdocs Monitoring Workshop, UNITEN, Malaysia-2020.
- 4. UNITEN postdoctoral hangout day (UPhD), Sliver Prize, 30-Sep.2019.
- **5. Postgraduate Research Grants Scheme (PGRS1703106)** University Malaysia Pahang (UMP) from March 2017 – Jan 2019.
- 6. Ph.D. Fellowship Awards: Doctoral Research Scheme (DRS) University Malaysia Pahang (UMP) from Oct. 2016 – Oct. 2018.
- 7. Three-minute (3-MT) thesis competition 2^{nd} place- University Malaysia Pahang (UMP) 2018.
- 8. Master Project Fund

World Federation of Scientists (WFS) scholarship to fund my thesis, Switzerland & Jordan, 2012.

9. M.Sc. Fellowship Awards

Ministry of Higher Education and Scientific Research, Yemen for studying Master of Electrical Power Engineering at Yarmouk University, Jordan, 2010-2013.

10. B.Sc. Fellowship Awards

Ministry of Higher Education and Scientific Research-Yemen for studying Bachelor degree of Electrical Engineering at Hashemite University, Jordan, 2004-2009.

Professional Affiliation/Membership/Contribution:

- A committee member and organizer of the 5th International Conference on Energy and Environment 2019 (ICEE). 10-11 July 2019 at Bangi-Putrajaya, Malaysia.
- Judge committee member of the postgraduate competition, UNITEN, Malaysia, 2019.
- Academic organizer with International Student Association academic workshops, Malaysia, University Malaysia Pahang, 2015-2018.
- Renewable Energy organization (REO), Yemen, deputy head of planning sector, 2013-2015.
- Union of Electrical Engineers (UEE), Yemen, member, 2013-2015.
- World Federation of Scientists (WFS), Switzerland &Jordan, member, Local Research Activities, 2012.
- The head of international Yemeni student in Hashemite University, Jordan. 2008-2009.
- Human Right Organization (HRO), Supreme Council for Youth, Jordan, trainer, 2006.

Workshops, Training and Classes:

- The Global Status of Renewables, webinar, 13-June-2020.
- How to publish a scientific paper: Online. Organized YSU)-Malaysia, 11 & 12 June 2020.
- Academic writing: Online. Organized by YSU-Malaysia, 9 & 10 June 2020.
- Microgrid Knowledge. The HOMER Energy presentation on the Benefits and Challenges of Integrating Energy Storage and Renewable Energy, Virtual Conference, 1-3 June 2020.
- International solar energy society. Webinar series focusing on solar energy related topics of high relevance in science, technology development, market and industrial implementation. 12-15 May 2020.

- Incorporating Renewable Energy in Electricity Grids. Imperial College London: online learning platform, taught by Ajay Gambhir. March to April 2020.
- Sustainable Energy Lab, UNITEN, Training on programmable AC/DC loads along with PV Emulator, 02-March-2020
- Bangi resort, Colloquium on Power System Simulation, 2-3 November, 2019.
- University Tenaga Nasional, workshop on Satellite Remote Sensing, 30th July 2019.
- Library of University Malaysia Pahang, E-Resource Training Workshop: Web of Science, Endnote, and JCR, 4 October 2017.
- Library of University Malaysia Pahang, Information skill class: Taylor and Francis, Elsevier, Malaysia, 4 April 2017.
- University Malaysia Pahang, Publisher Take Class: Online Database Emerald, 26 April 2017.
- University Malaysia Pahang, Online Database Class: Web of science & Journal Citation Report, 3 November 2016.
- University Malaysia Pahang, Information Skill Workshop: Online Database EMERALD, 2 November 2016.
- University Malaysia Pahang, Online Database Springer Workshop, 19 October 2016.
- University Malaysia Pahang, Online Database MS Online Workshop, 5 October 2016.
- University Malaysia Pahang, Technical writing using latex Workshop, 30 September 2016.
- University of Malaya, Endnote and Mendeley Workshop, 22 August 2016.
- University Malaysia Pahang, Technical Writing Course, 4&5 June 2016.
- University Malaysia Pahang, Wiley Online Library Workshop, 20 April 2016.
- University Malaysia Pahang, Viva-Voce Presentation Skill Course, 19 April 2016.
- University Malaysia Pahang, Taylor & Francis Online Database, 30 March 2016.
- University Malaysia Pahang, Information Skill (Access Dunia) Workshop: ACM, ACS, ASME, EBRARY and Springer Link, 23 march 2016.
- University Malaysia Pahang, Research Methodology Course, 10&11 December 2015
- Dhahban center for training and industrialization, Power System Simulator (PSS2), Yemen, 9-2014.
- Dhahban center for training and industrialization, Power System Simulator (PSS1), Yemen 2-2014.

Postgraduate supervision

| No | Name | Title | Role | Mode of study | Level | Status |
|----|---------------------------------------|---|---------|------------------|--------|-----------|
| 1 | Walid K. Issa | Active power control for frequency ride-through in grid- connected PV system | Main SV | Thesis | Master | Graduated |
| 3 | Youssef Obaid A Alharbi | design and sizing of stand-alone PV system to electrify rural area in Saudi Arabia: techno-economic assessment | Main SV | Project | Master | Graduated |
| 4 | Moubark Joumah A Alderaa | Protection of the inverter-based grid-connected photovoltaic power plant during faults | Main SV | Project | Master | Graduated |
| 5 | Muhammad Waslallah Al- Thobaiti | An assessment of the harmonic distortion in grid connected PV system | Main SV | Project | Master | Graduated |

| 6 | Rakan Talal | Evaluation of the voltage unbalance of grid connected PV system based on the recent | Main SV | Project | Master | Graduated |
|---|---------------------|---|---------|---------|--------|-----------|
| 7 | Saleh Alkhaibari | Modeling of PV wind hybrid grid connected power system | Main SV | Project | Master | Graduated |

Reviewer (at least one time) with:

- IEEE transactions on power delivery, IEEE,
- International Journal of Power and Energy Systems, Elsevier, Online ISSN: 0142-0615. ISI-Q1. Have Certificate of Outstanding reviewer.
- Solar Energy Journal, Elsevier, Online ISSN: 0038-092X. ISI-Q1. Have Certificate of Outstanding reviewer.
- IEEE journal of Photovoltaic-IEEE, Online ISSN: 2156-3381. ISI-Q1
- Sustainable Energy Technologies and Assessments, Elsevier, Online ISSN: 2213-1388. ISI-Q2.
- International Transactions on Electrical Energy Systems- Wiley, Online ISSN: 2050-7038. ISI-Q3
- IEEJ Transactions on Electrical and Electronic Engineering-Wiley, Online ISSN: 1931-4981. ISI-Q4
- International Journal of Electronics- Taylor & Francis, Online ISSN: 2050-7038. ISI-Q4
- IEEE Industry Applications Magazine IEEE IAS, Online ISSN: 1077-2618.
- International Journal of Renewable Energy Research (IJRER), Turkey. Online ISSN: 1309-0127. WoS.
- 5th International Conference on Energy and Environment 2019 (ICEE2019).
- International Conference on Electrical, Control and Computer Engineering (InECCE 2015), 2015.
- International Journal of Emerging Electric Power Systems, Online ISSN: 2194-5756, 1553779X.

Publications:

Journals:

- 1. Ali Q. Al-Shetwi. (2022). Sustainable development of renewable energy integrated power sector: Trends, environmental impacts, and recent challenges". *Science of the Total Environment*, Vol. 822, No. 5, p.153645, 2022. https://doi.org/10.1016/j.scitotenv.2022.153645 (*ISI Indexed, IF=7.963*)
- Ali Q. Al-Shetwi, Walid K. Issa, Raed F. Aqeil, Taha Selim Ustun, Hussein MK Al-Masri, Khaled Alzaareer, Maher GM Abdolrasol, and Majid A. Abdullah. (2022). "Active Power Control to Mitigate Frequency Deviations in Large-Scale Grid-Connected PV System Using Grid-Forming Single-Stage Inverters". *Energies*, Vol. 15, No. 6, p. 2035, 2022. https://doi.org/10.3390/en15062035 (*ISI Indexed*, *IF=3.004*)
- 3. Alzaareer, K., Saad, M., Mehrjerdi, H., Al-Masri, H.M., Ali Q. Al-Shetwi, Asber, D. and Lefebvre, S.. (2022). "New voltage sensitivity analysis for smart distribution grids using analytical derivation: ABCD model". *International Journal of Electrical Power & Energy*

Systems, Vol. 137, No. 5, p. 107799, 2022. https://doi.org/10.1016/j.ijepes.2021.107799 (*ISI Indexed*, *IF* = 4.630)

- Abdullah, M.A., Ali Q. Al-Shetwi, Mansor, M., Hannan, M.A., Tan, C.W. and Yatim, A.H.M., (2022). "Linear quadratic regulator controllers for regulation of the dc-bus voltage in a hybrid energy system: Modeling, design and experimental validation". *Sustainable Energy Technologies and Assessments*, Vol. 50, No. 3, p. 101880, 2022. https://doi.org/10.1016/j.ijepes.2021.107799 (*ISI Indexed*, *IF*= 5.535)
- Hannan, M.A., Mollik, M.S., Ali Q. Al-Shetwi, Rahman, S.A., Mansor, M., Begum, R.A., Muttaqi, K.M. and Dong, Z.Y., (2022). "Vehicle to grid connected technologies and charging strategies: Operation, control, issues and recommendations". *Journal of Cleaner Production*, Vol. 339, No. 3, p. 130587, 2022. https://doi.org/10.1016/j.jclepro.2022.130587 (*ISI Indexed, IF*= 9.273)
- Arsad, A.Z., Hannan, M.A., Ali Q. Al-Shetwi, Mansur, M., Muttaqi, K.M., Dong, Z.Y. and Blaabjerg, F., (2022). "Hydrogen energy storage integrated hybrid renewable energy systems: A review analysis for future research directions". *International Journal of Hydrogen Energy*, Early access, 2022. https://doi.org/10.1016/j.ijhydene.2022.03.208 (*ISI Indexed*, *IF*= 5.816)
- Sebastian, G., Hannan, M.A., Ali Q. Al-Shetwi, Ker, P.J., Rahman, M.S.A., Mansur, M. and Muttaqi, K.M., (2022). "A Novel PSO based Fuzzy Controller for Robust Operation of Solid-State Transfer Switch and Fast Load Transfer in Power Systemss". *IEEE Access*, Vol. 10, pp. 37369 - 37381, 2022. https://doi.org/10.1109/ACCESS.2022.3165021 (*ISI Indexed*, *IF*=3.75).
- Al-Masri, H.M., Al-Sharqi, A.A., Magableh, S.K., Ali Q. Al-Shetwi, Abdolrasol, M.G. and Ustun, T.S., (2022). "Optimal Allocation of a Hybrid Photovoltaic Biogas Energy System Using Multi-Objective Feasibility Enhanced Particle Swarm Algorithm". *Sustainability*, Vol. 14, No. 2, p. 685, 2022. https://doi.org/10.3390/su14020685 (*ISI Indexed*, *IF*=3.251).
- Alzaareer, K., Salem, Q., El-Bayeh, C.Z., Harasis, S., Aldaoudeyeh, A.M.I., Malkawi, A.M.A., Ali Q. Al-Shetwi, (2022). "Development of New Admittance Matrix for Newton-Raphson Power Flow in Distribution Networks". *Mathematical Modelling of Engineering Problems*, Vol. 9, No. 1, pp. 168-177, 2022. https://doi.org/10.18280/mmep.090121 (Scopus Indexed).
- Al-Ogaili, A.S.; Ali Q. Al-Shetwi Sudhakar Babu, T.; Hoon, Y.; Abdullah, M.A.; Alhasan, A.; Al-Sharaa, A. (2021). "Electric Buses in Malaysia: Policies, Innovations, Technologies and Life Cycle Evaluations." *Sustainability* 2021, 13, 11577. https://doi.org/10.3390/su132111577 (*ISI Indexed*, *IF*=3.251)
- 11. Al-Ogaili, A.S.; Ali Q. Al-Shetwi.; Al-Masri, H.M.K.; Babu, T.S.; Hoon, Y.; Alzaareer, K.; Babu, N.V.P. (2021). "Review of the Estimation Methods of Energy Consumption for Battery Electric Buses". *Energies* 2021, 14, 7578. https://doi.org/10.3390/en14227578 (*ISI Indexed*, *IF*=3.004).
- Hannan, M. A., Ali Q. Al-Shetwi, Pin Jern Ker, R.A. Begum, M. Mansor, S.A. Rahman, Z.Y. Dong, S.K. Tiong, T.M. Indra Mahlia, K.M. Muttaqi, (2021) "Impact of renewable energy utilization and artificial intelligence in achieving sustainable development goals." *Energy Reports:* 7 (2021): pp. 5359-5373. DOI: https://doi.org/10.1016/j.egyr.2021.08.172 (*ISI Indexed, IF=6.870*).
- 13. Hannan, M. A., Ali Q. Al-Shetwi, R. A. Begum, Pin Jern Ker, S. A. Rahman, M. Mansor, M. S. Mia, K. M. Muttaqi, and Z. Y. Dong. (2021) "Impact assessment of battery energy storage

systems towards achieving sustainable development goals." *Journal of Energy Storage:* 42 (2021): 103040. DOI: https://doi.org/10.1016/j.est.2021.103040 (*ISI Indexed, IF*=6.583).

- 14. MA Hannan, Maher GM Abdolrasol, Ramizi Mohamed, Ali Q Al-Shetwi, Pin Jern Ker, RA Begum, Kashem M Muttaqi. (2021) "ANN based Binary Backtracking Search Algorithm for VPP Optimal Scheduling and Cost-Effective Evaluation," *IEEE Transactions on Industry Applications*, DOI: https://doi.org/10.1109/TIA.2021.3100321 (ISI Indexed, IF=3.654).
- Alfalahi, Saad TY, Ammar Ahmed Alkahtani, Ali Q. Al-shetwi, Ali Saadon Al-Ogaili, Afaneen A. Abbood, Muhamad Bin Mansor, and Yousef Fazea. (2021) "Supraharmonics in Power Grid: Identification, Standards, and Measurement Techniques." *IEEE Access*, vol. 9, No. 11, pp. 103677 103690. DOI: https://doi.org/10.1109/ACCESS.2021.3099013 (*ISI Indexed*, *IF*=3.75).
- 16. Parvin, Khadija, Ali Q. Al-Shetwi, M. A. Hannan, and Ker Pin Jern. "Modelling of Home Appliances Using Fuzzy Controller in Achieving Energy Consumption and Cost Reduction." *Elektronika ir Elektrotechnika*. vol. 27, No. 3 (2021): pp. 15-25. DOI: https://doi.org/10.5755/j02.eie.27000 (*ISI Indexed*, *IF*=1.128).
- Ali Q. Al-Shetwi, Ali Q., M. A. Hannan, Majid A. Abdullah, M. S. A. Rahman, and K. M. Muttaqi (2021). "Utilization of Renewable Energy for Power Sector in Yemen: Current Status and Potential Capabilities." *IEEE Access*, vol. 36, No. 11, pp. 12151 12157, 2021, DOI: https://doi.org/10.1109/ACCESS.2021.3084514 (*ISI Indexed, IF=3.75*).
- Abdolrasol, M. G., Mohamed, R., Hannan, M. A., Ali Q. Al-Shetwi., Mansor, M., & Blaabjerg, F. (2021). Artificial Neural Network Based Particle Swarm Optimization for Microgrid Optimal Energy Scheduling. *IEEE Transactions on Power Electronics*. vol. 9, pp. 79278 - 79292, 2021, DOI: 10.1109/TPEL.2021.3074964 (*ISI Indexed*, *IF*=6.153).
- 19. Noman, Fuad, Gamal Alkawsi, Ammar Ahmed Alkahtani, Ali Q. Al-Shetwi, Sieh Kiong Tiong, Nasser Alalwan, Janaka Ekanayake, and Ahmed Ibrahim Alzahrani. (2021) "Multistep short-term wind speed prediction using nonlinear auto-regressive neural network with exogenous variable selection." *Alexandria Engineering Journal. Elsevier*, DOI: https://doi.org/10.1016/j.aej.2020.10.045 (*ISI Indexed*, *IF*=3.732).
- Ali Q. Al-Shetwi, MA Hannan, KP Jern, M Mansur, TMI Mahlia. (2020) "Grid-connected renewable energy sources: the recent integration requirements and control methods." *Journal of Cleaner Production. Elsevier*, V. 253, 119-135. DOI: https://doi.org/10.1016/j.jclepro.2019.119831 (*ISI Indexed*, *IF*=9.273).
- Roslan, M. F., Ali Q. Al-Shetwi, Hannan, M. A., Ker, P. J., & Zuhdi, A. W. M. (2020). Particle swarm optimization algorithm-based PI inverter controller for a grid-connected PV system. Plos one, 15(12), e0243581, DOI: https://doi.org/10.1371/journal.pone.0243581 (ISI Indexed, IF=3.42).
- 22. K Parvin, M A Hannan, Ali Q. Al-Shetwi, Pin Jern Ker, M F Roslan, and TM Indra Mahlia. (2020) "Fuzzy based Particle Swarm Optimization for Modelling Home Appliances towards Energy Saving and Cost reduction under Demand Response Consideration." *IEEE Access*, vol. 8, pp. 210784 210799, 2020, DOI: 10.1109/ACCESS.2020.3039965 (*ISI Indexed*, *IF*=3.75).
- 23. Parvin, K., Firdaus, M., Ali Q. Al-Shetwi, Jern, K. P., Hoque, M., & Hannan, M. A. (2020). Fuzzy Logic Control based Optimization Algorithms for Heating Ventilation and Air Condition System Performance Evaluation. Journal of Energy and Environment.

- 24. M A Hannan, Shun Y. Tan, Ali Q. Al-Shetwi, Ker Pin Jern, and R. A. Begum. (2020) "Optimized controller for renewable energy sources integration into microgrid: Functions, constraints and suggestions". *Journal of cleaner production*, Elsevier, V. 256, 120419. DOI: https://doi.org/10.1016/j.jclepro.2020.120419 (ISI Indexed, IF=9.273).
- 25. Ali Q. Al-Shetwi, M A Hannan, Ammar A. Alkahtani, Ker Pin Jern. (2020) "Power Quality Assessment of Grid-Connected PV System in Compliance with the Recent Integration Requirements". *Electronics*. 2020, 9, 366. DOI: https://doi.org/10.3390/electronics9020366 (*ISI Indexed*, *IF*=2.397).
- 26. Ali Q. Al-Shetwi, Muhamad Zahim Sujod, M. A. Hannan, Majid A. Abdullahd, Ali Saadon Al-Ogaili, and Ker Pin Jern. (2020) "Impact of Inverter Controller-Based Grid-Connected PV System in the Power Quality," *International Journal of Electrical and Electronic Engineering & Telecommunications*. Vol.9, No. 6, pp: 462-469. http://www.ijeetc.com/uploadfile/2020/1014/20201014023749779.pdf (SCOPUS Indexed).
- 27. MA Hannan, Ali Q. Al-Shetwi, RA Begum, SE Young, MM Hoque, Pin Jern Ker, M Mansur, Khaled Alzaareer. (2020) "The value of thermal management control strategies for battery energy storage in grid decarbonization: Issues and recommendations." *Journal of Cleaner Production*. *Elsevier*, V. 276, 124223. DOI: https://doi.org/10.1016/j.jclepro.2020 (*ISI Indexed, IF=9.273*).
- 28. M A Hannan, R A Begum, Ali Q. Al-Shetwi, P J Ker, Aini Hussain, M A Al Mamun, Hassan Basri, and T M I Mahlia. (2020) "Route optimization model for Solid waste collection improvement, cost-saving and emission reduction toward achieving sustainable development goals" *Sustainable Cities and Society*. Elsevier. DOI: https://doi.org/10.1016/j.scs.2020.102393 Vol.62 (ISI Indexed, IF=5.268)
- 29. Ammar A. Alkahtani, Saad T.Y. Alfalahi, Abedalgany A. Athamneh, Ali Q. Al-Shetwi, M Mansur, M A Hannan, and Vassilios G. Agelidis. (2020) "Power Quality in Microgrids Including Supraharmonics: Issues, Standards, and Mitigations," *IEEE Access*, vol. 8, pp. 127104-127122, 2020, DOI: https://doi.org/10.1109/ACCESS.2020.3008042 (*ISI Indexed*, *IF*=3.75).
- Alzaareer, K., Ali Q. Al-Shetwi, El-bayeh, C. Z., & Taha, M. B. (2020). Automatic Generation Control of Multi-area Interconnected Power Systems Using ANN Controller. *Revue d'Intelligence Artificielle*, 34(1), 1-10. DOI: https://doi.org/10.18280/ria.340101 (SCOPUS Indexed).
- Ali Q. Al-Shetwi, Muhamad Zahim Sujod, Frede Blaabjerg, and Yongheng Yang. (2019). "Fault ride-through capability control of grid-connected photovoltaic power plants: A review". Solar Energy. Elsevier, Vol. 180 (2019): 340-350. DOI: https://doi.org/10.1016/j.solener.2019.01.032, (ISI Indexed, IF=4.608).
- 32. Ali Q. Al-Shetwi, and Muhamad Zahim Sujod. "Voltage Sag Detection in Grid-Connected Photovoltaic Power Plant for Low Voltage Ride-Through Control." *Recent Advances in Electrical & Electronic Engineering (Formerly Recent Patents on Electrical & Electronic Engineering)* 12, no. 4 (2019): 384-392, DOI: https://doi.org/10.2174/2352096511666180626151223 (SCOPUS Indexed).
- 33. Ali Q. Al-Shetwi, Muhamad Zahim Sujod, and Frede Blaabjerg. (2018). "Low voltage ridethrough capability control for single-stage inverter-based grid-connected photovoltaic power plant." *Solar Energy. Elsevier*, Vol. 159 (2018): 665-681. DOI: https://doi.org/10.1016/j.solener.2017.11.027, (*ISI Indexed*, *IF*=4.608).

- 34. Ali Q. Al-Shetwi, and Muhamad Zahim Sujod. (2018). "Modeling and Control of Grid-Connected Photovoltaic Power Plant with Fault Ride-Through Capability." Transaction of ASME, *Journal of Solar Energy Engineering*. Vol. 140, No. (2) (2018): 021001-021001-8. DOI: https://doi.org/10.1115/1.4038591, (ISI Indexed, IF=3.348).
- 35. Ali Q. Al-Shetwi, and Muhamad Zahim Sujod. (2018). "Grid-connected photovoltaic power plants: A review of the recent integration requirements in modern grid codes." *International Journal of Energy Research*. Vol. 42, No. (5). (2018): 1849-1865. DOI: https://doi.org/10.1002/er.3983, (*ISI Indexed, IF=3.741*).
- 36. Ali Q. Al-Shetwi, and Muhamad Zahim Sujod. (2018). "Modeling and Design of Photovoltaic Power Plant Connected to the MV Side of the Malaysian Grid with TNB Technical Regulation Compatibility." *Electrical Engineering*. Vol. 100, No. (4). (2018): 2407-2419. DOI: https://doi.org/10.1007/s00202-018-0726-4, (*ISI Indexed*, *IF*=1.180).
- Ali Q. Al-Shetwi, and Muhamad Zahim Sujod. (2018). "Harmonic Distortion and Voltage Unbalance Study of Photovoltaic Power Plant Connected to the Malaysian Grid." *Journal of Telecommunication, Electronic and Computer Engineering (JTEC)*. Vol. 10, No. (1-2) (2018): 1-6. http://journal.utem.edu.my/index.php/jtec/article/view/3311 (SCOPUS Indexed).
- 38. Ali Q. Al-Shetwi, Muhamad Zahim Sujod, A. Al Tarabsheh and Ibrahim A. Altawil. (2016). "Design and Economic Evaluation of electrification of Small Villages in Rural Area in Yemen Using Stand-Alone PV System," *International Journal of Renewable Energy Research-IJRER*, Vol. 6, No. (1). (2016):289-298. https://www.ijrer.org/ijrer/index.php/ijrer/article/view/3212, (Web of Science Indexed).
- 39. Ali Q. Al-Shetwi, and Muhamad Zahim Sujod. (2016). "Modeling And Simulation of Photovoltaic Module with Enhanced Perturb and Observe MPPT Algorithm Using MATLAB" *ARPN Journal of Engineering and Applied Sciences*. Vol. 11, No. (20). (2016): 12033-12038. http://www.arpnjournals.org/jeas/research_papers/rp_2016/jeas_1016_5189.pdf (SCOPUS Indexed).
- 40. Ali Q. Al-Shetwi, and Muhamad Zahim Sujod. (2015). "A review of the fault ride through requirements in different grid codes concerning penetration of PV system to the electric power network." *ARPN Journal of Engineering and Applied Sciences.* Vol. 10, No. (21) (2015): 9906-9912. www.arpnjournals.org/jeas/research_papers/rp_2015/jeas_1115_3003.pdf (SCOPUS Indexed).
- Ali Q. Al-Shetwi, and Alomoush, Muwaffaq I. (2016). "A New Approach to the Solution of Economic Dispatch Using Genetic Algorithm." *Journal of Engineering and Technology*, Vol. 7, No. (1): 40-48. http://journal.utem.edu.my/index.php/jet/article/view/532

Conferences:

- Ali Q. Al-Shetwi, Abdullah, M.A., Hannan, M.A., Babu, T.S., Satpathy, P.R. and Sharma, R., 2021, October. Thermal Comfort for a Green Office Building: Current Status and Future Direction. In 2021 International Conference in Advances in Power, Signal, and Information Technology (APSIT) (pp. 1-6). IEEE . DOI: https://doi.org/10.1109/APSIT52773.2021.9641424
- Ali Q. Al-Shetwi, Abdullah, M.A., Babu, T.S., Mansor, M.B., Satpathy, P.R. and Alzaareer, K., 2021, October. Visual Comfort for a Green Office Building: An Overview. In 2021 International Conference in Advances in Power, Signal, and Information Technology (APSIT) (pp. 1-5). IEE. DOI: https://doi.org/10.1109/APSIT52773.2021.9641401

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Computer Skills:

- Power System simulator
 Windows 98/2000/XP/Vista
- Neplan power software MS Office, Adobe Acrobat, Visio
- Paython (beginner)
 PSCAD Software
 MS-Power Point, Adobe Photo Shop, Visio, and Painter AutoCAD, C++, Matlab Programming, PSpice Pro., Simulink Pro., Multisum
- MATLAB/Simulink
 EndNote, Turnitin, Latex

Major Completed Undergraduate/Master/Ph.D Courses:

- Power Conversion
- Engineering Math's (1,2,and advance)
- Ordinary differential Equations
- Power Systems Engineering and Economics
- Principle of Electrical & Electronics Eng.
- Engineering numerical Methods
- Electrical circuits (1&2)
- Electronic Circuits (1,2, and 3)
- Distribution System
- Research Methodology

- Power system & control system
- Power electronics
- Technical writing
- Power system operation and control
- Power system protection
- Power system quality
- Power system analysis
- Advance High voltage Engineering
- Transmission power System
- Renewable Energy Sources

Languages:

- English
 Arabic
 A little of Malay

References:

Reference available upon request