

CURRICULUM VITEA (CV)



PERSONAL DETAILS

1. Name : Zainal bin Salam
2. Gender : Male
3. Date of birth : 23rd May 1963
4. I.C. No. : 630523-05-5489
5. Nationality : Malaysian
6. Marital Status : Married with five children
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EXPERTISE

Power electronics, Solar photovoltaic, Renewable energy, Power engineering, Soft Computing, Control System

ACADEMIC QUALIFICATIONS

1. BSc (Electronics Engineering), California State University, Chico, California, USA. 1985
2. MEE (Electrical Engineering), Universiti Teknologi Malaysia, Kuala Lumpur. 1989
3. PhD (Power Electronics), University of Birmingham, UK. 1997

PROFESSIONAL MEMBERSHIP

1. Member, the Institution of Engineering and Technology (IET).
2. Senior Member, the Institute of Electrical and Electronics Engineers (IEEE, USA).
3. Member, IEEE (Malaysia Section).
4. Member, IEEE Power Electronics, Industrial Electronics, Industry Application Joint Chapter Malaysia Section.
5. Member, Malaysia Greentech (Formerly Malaysian Energy Centre (PTM)).

INTERNATIONAL APPOINTMENTS

1. Vice Chair: IEEE Power Electronics, Industrial Electronics and Industry application Joint Chapter, Malaysia Section, 2011-2013.
2. Vice Chair: IEEE Industrial Electronics and Industry application Joint Chapter, Malaysia Section, 2016.
3. Editor, IEEE Transaction on Sustainable Energy 2011-2014.
4. Editorial Board of The Scientific World Journal, Hindawi Publishing Corporation (2013-present)
5. Malaysian Expert Representative for International Energy Agency, IEA PVPS Task 13, 2010-2014.
6. Malaysian Expert Representative (extension) for International Energy Agency, IEA PVPS Task 13, 2014-2017.
7. Organizing Chairman for the 5th IEEE International Power Electronics and Drives Systems (PEDS'05) Conference, November 2005, Kuala Lumpur.
8. Co-organizing Chairman for the 2nd IEEE International Power and Electronics and Energy (PECon 08) Conference, November 2008, Johor Bahru.

9. Co-Chairman for the IEEE International Energy Conversion Conference (CENCON 2014), November 2014, Johor Bahru.
10. Chairman for the IEEE International Energy Conversion Conference (CENCON 2016), November 2016, Johor Bahru.

MAJOR ADMINISTRATIVE APPOINTMENTS

1. Dean of Research, Energy Research Alliance, UTM (March 2011- February 2015)
2. Senate Member, UTM (March 2011- February 2015)
3. Head Department of Energy Conversion Engineering, Faculty of Electrical Eng. (Sept. 2002- Sept. 2006)
4. Director and founder, Inverter Quality Control Centre (IQCC) (A photovoltaic inverter testing center funded by United Nation Development Program) (May 2007-present)
5. Head, Power Electronics Research Group (under Energy RA) (2009-2011)
6. Head, Power Electronics Lab, Faculty of Electrical Engineering (2000-2002)
7. Chairman, Final Year Student's Project Committee, Faculty of Electrical Eng. (2001-2002)

OTHER ADMINISTRATIVE CONTRIBUTIONS

1. Member, Task Force eLPPT (2011- present)
2. Member, Select Committee for Contract Appointed Teachers (2013-present)
3. Head, "Photovoltaic Research Group" under the Energy Focus Group (2005-2007)
4. Moderator for the undergraduate course "Power electronics and drives" (2002-2006)
5. Moderator for the postgraduate course "Power electronics systems" (2002-2007)
6. Moderator for the postgraduate course "Electronics Power Conversion" (2000-2003)
7. Moderator for the "Malaysia Military Academy (ATMA)" course (2001-2002).
8. Member, the Faculty of Electrical Engineering Administration Committee (2004-2006).
9. Member, the Faculty of Electrical Engineering Academic Committee (2004-2006).
10. Member, the Faculty of Electrical Engineering Postgraduate Studies Committee (2004-2006).
11. Member, the Faculty of Electrical Engineering Examination Board Committee (2001-2003).
12. Member, the Faculty of Electrical Engineering Quality Assurance Documentation Committee (2001-2003).
13. Member, the University Energy Focus Group (2000-present).

MAJOR AWARDS RECEIVED

1. Highly Cited Researcher 2017 (by Clarivate Analytic, Web of Science)
2. Highly Cited Researcher 2018 (by Clarivate Analytic, Web of Science)
3. Malaysia Rising Star Award 2016 (by Ministry of Higher Education, Malaysia)
4. Malaysia Research Star Award 2018 (by Ministry of Education, Malaysia)
5. Malaysia Research Star Award 2019 (by Ministry of Education, Malaysia)

TEACHING

Postgraduate Teaching (Masters by Coursework)

Power Electronics Systems, Research Methodology

Undergraduate Teaching

Circuit and Systems, Circuit Theory, Basic Electronics, Advanced Electronics, Digital Circuits, Microprocessors, Power Electronics and Drives

POSTGRADUATE SUPERVISION

PhD—Graduated (as Main Supervisor)

1. Shahrin Md. Ayob (2005-2009): "Single Input Fuzzy PI Controller for Inverter Regulation"

2. Mochammad Facta (2008-2012): "Ozone Generation with Dielectric Barrier Discharge using Single Switch Resonant Converter"
3. Kashif Ishaque (2009-2012): "Deterministic Particle Swarm Optimization Method for Maximum Power Point Tracking of Photovoltaic System"
4. Muhammad Amjad (2009-2013): "Transformerless Resonant Converter Driving Multiple Ozone Chambers for High Flow Rates"
5. Jubaer Ahmed (2012-2016): "Modified Adaptive Perturb and Observe Maximum Power Point Tracking Algorithm for Higher Efficiency in Photovoltaic System"
6. SK Moin Ahmed (2013-2016): "Improved Space Vector Modulation with Reduced Switching Vectors for Multi-Phase Matrix Converter"
7. Abdul Rauf Bhatti (2013-2017): "A rule-based energy management scheme for uninterrupted electric vehicles charging at constant price using photovoltaic-grid system"
8. Zulkifli Ramli (2011-2017): "An Energy Recovery Scheme to Enhance the Performance of Photovoltaic System Under Partial Shading Condition"
9. Chin Yun Jack (2014-2018): "An Improved Hybrid Computational Method for the Two-Diode Model in Photovoltaic Simulation Applications"
10. Ratil H. Ashique (2015-2018): "Development of High Efficiency and High Gain Non-Isolated Bidirectional DC-DC Converter with Soft Switching Capability"

PhD—Graduated (as Co-Supervisor)

11. Yasir Saleem (2005-2008): "Ripple free torque operation in switched reluctance motor", graduated from University of Engineering and Technology, Lahore).
12. Mohd Muhridza Yaacob (1999-2005): "The behavior of Surge arrester devices under the application of multiple lightning impulses".
13. Amin Mirzaei (2010-2012): "Bidirectional DC-DC converter with ZVT".
14. Faridun Naim (2011-2015): "MPPT for PV using Differential Evolution".
15. Mostefa Kermadi (2016-2018): "Contribution to improve the maximum Power Point Tracking for PV systems", (graduated from Ecole Nationale Polytechnique, Algiers, Algeria).
16. Nahla Shahnan (2014-2016): "PV Cell Modeling", (graduated from Universiti Teknologi Petronas)

PhD—On-going (as Main Supervisor)

17. Azhan Abdul Rahman (2012-2018): "Tropical Efficiency of PV Inverter".
18. Norazlan Hashim (2012-2018): "MPPT for PV using Evolutionary Programming".
19. Bashar Othman (2017-2020): "Design of observers for state-of-charge-estimation of Li-ion battery".
20. Muhammd Paend Bakht (2017-2020): "Application of PV for load shedding problems".
21. Muhammad Nageh Okily (2017-2020): "Partial shading in PV systems".

PhD—On-going (as Co-Supervisor)

22. M Saad Ariff (2014-2017): "Power electronics converters for PV".

Master of Engineering (by full-time research)

(Graduated—as Main Supervisor)

1. Khosru Mohammad Salim (1998-2000): "Development of Power Conditioner Unit (PCU) for Fuel Cell".
2. Bakri bin Hassan (1999-2001): "Performance of Solar Charging for Rechargeable Alkaline Manganese (RAMTM) Battery in Cellular Phone Application".
3. Badaruddin Muhammad (1999-2001): "A study to improve the charging performance of the rechargeable alkaline-manganese (RAM) battery".
4. Mohd Junaidi bin Abdul Aziz (2000-2002): "A digital pulse width modulation for the modular structured multilevel inverter".

5. Mohd Zulkifli Ramli (2001-2003): "Design of a 1-kW bidirectional inverter using center-tapped transformer".
6. Nge Chee Lim (2003-2005): "Application of natural commutation technique to an improved cycloconverter type high frequency link inverter with center-tapped transformer".
7. Toh Leong Soon (2003-2005): "Deadbeat controller for bidirectional high frequency link inverter".
8. Tan Perng Cheng (2003-2006): "A single-phase hybrid active power filter with photovoltaic application".
9. Abdul Moeed Amjad (2012-2014): "Harmonics Elimination Pulse Width Modulation for multilevel inverter".
10. Ahmed Majed Ahmed Saif (2015-2017): "Direct Control of D-STATCOM based on 23-Level Cascaded Multilevel Inverter using Harmonics Elimination Pulse Width Modulation".

Master of Engineering (by coursework).

(Graduated—as Main Supervisor)

1. Kamyar Mehranzamir (2010): "MPPT Control of Z-Converter".
2. Nur Hafeiza Ramly (2010): "A critical and comprehensive study on HEPWM".
3. Fazl Taeed (2011): "Single Input FLC for boost converter".
4. Norhazalina Bahari (2009): "The application of differential evolution method to solve harmonics elimination problem in voltage source inverter".
5. Mohammad Shahril b. Adrianshah (2009): "The study to optimize the payback period for PV installation in Malaysia".
6. Aziddin b. Mohamad Razali (2003): "Analysis of natural sampled PWM switching strategy for a modular structured multilevel inverter using double Fourier integral method".
7. Shahrin b. Md Ayob (2003): "Trapezoidal PWM method applied in cascaded multilevel inverter".
8. Abu Khairi A'ain (1992): "Modeling and Simulation of Op Amp".

THESIS EXAMINATION

PhD—as External Examiner

1. Dr. Syed Abdul Rahman Kashif (UET, Lahore Pakistan—March 2014)
2. Dr. Meshwari A. Meshwari (Universiti Malaya—Dec. 2013)
3. Dr. Shahril Izwan b. Sulaiman (University Teknologi MARA —Nov 2011)
4. Dr. Esraa Mousa Abdel Rahman Ali (Universiti Teknologi Petronas—2018)

PhD—as Internal Examiner

5. Dr. Naziha Ahmad Azli (UTM—Oct 2001)
6. Dr. Nik Rumzi Nik Idris (UTM—March 2000)
7. Dr. Refdinal Nazir (UTM—September 1999)
8. Dr. Rodhi Sahid (UTM—Nov. 2012)
9. Dr. Ahmad Saudi Samosir (UTM—April 2010)
10. Dr. Auzani b. Jidin (UTM—April 2011)
11. Mohamed A.M. Almaktar (UTM—Oct 2014)
12. Muhammad Akram Bhayo (UTM—April 2018)
13. Nor Dalilah Nordin (UTM—December 2018)

Masters—as External Examiner

1. Khalid Ali Madi A. Ahmed (University Putra Malaysia—2006)
2. Ahmad Shukri Abu Hasim (University Teknologi MARA—2007)
3. Mohamed Huzam (Nottingham University, Malaysia Campus—2014)
4. Fariah binti Shariff (Universiti Malaya—2014)

Masters—as Internal Examiner

5. Toh Cheun Lung (UTM—2005)

RESEARCH

Summary of Research Contributions

Number of grants secured: 37

Number of projects as project leader (Principal Investigator): 17

Total accumulated funds: RM 7,148,422

Contract Research Projects

1. Project title: Photovoltaic Inverter Quality Control Center (IQCC) : For Malaysian Building Integrated PV (MBIPV) Project.
Source of Funding: Global Environment Facility (GEF)/United Nations Development Program (UNDP) and Malaysian Energy Centre
Vot No.68704 (R.J130000.7623.3C012)
Duration: May 2007 to Dec 2010
Amount of Funding: RM 1,466,395
Role: Project Leader
2. Project title: International Energy Agency (IEA) PVPS Task 13 Program : Performance and Reliability of Photovoltaic (PV) Power System
Source and amount of Funding: International Energy Agency/Ministry of Green Energy
Duration: May 2010 to May 2014
Vot No. R.J130000.7623.3C055
Amount of Funding: RM 200,000
Role: Project Leader
3. Project title: Rechargeable Alkaline Manganese (RAM™) Battery – R&D on cycle life and improvement (Contract research).
Duration: August 1999 to May 2001
Source of Funding: IGS-MOSTE, RMK-7
Vot No. 68831
Amount of Funding: RM 800,000
Role: Contract Researcher.

Government Funded Projects (MOSTI/MOHE/MOA)

4. Project Title: Soft Computing Approach to Formulate a New Photovoltaic Inverter Efficiency for System Installed in Tropical Region
Source of Funding: Ministry of Higher Education (Malaysia Rising Star Award)
Vot No. R.J130000.7823.4F919
Duration: June 2017 to May 2019
Amount of Funding: RM 178,000
Role: Project Leader
5. Project Title: Design, Development and Construction of Power Converter for PV Grid Charging System for Electric Vehicle
Source of Funding: Ministry of Science, Technology and Innovation (MOSTI) Science Fund
Vot No. R.J130000.7909.4S119 (03-01-06-SF1399)
Duration: April 2015 to March 2017
Amount of Funding: RM 168,000
Role: Project Leader

6. Project Title: Development of a PV-Based Bidirectional DC-DC Charger for Plug-In Electric Vehicle
Source of Funding: Ministry of Higher Education (MOHE) (GUP) Flagship
Vot No. Q.J130000.2409.03G11
Duration: March 2015 to Feb 2016
Amount of Funding: RM 150,000
Role: Project Leader

7. Project Title: Modified Perturb and Observed (P&O) Maximum Power Point Tracker (MPPT) for Photovoltaic Application
Source of Funding: Ministry of Higher Education (MOHE) (GUP) Tier 1
Vot No. Q.J130000.2509.06H78
Duration: April 2014 to March 2016
Amount of Funding: RM 81,667.35
Role: Project Leader

8. Project Title: Investigation on the impact of cloud-induced transients on grid-connected PV system (GCPV) on the Malaysian Distribution grid
Source of Funding: Ministry of Higher Education (MOHE) (GUP) Under RACE Program
Duration: May 2014 to April 2016
Vot No. Q.J130000.3009.00M38
Amount of Funding: RM 25,000
Role: Project Leader

9. Project Title: Photovoltaic-Based Charging Station for Electric Vehicle
Source of Funding: Ministry of Higher Education (MOHE) (GUP) Flagship
Vot No. Q.J130000.2423.00G40
Duration: Aug 2011 to July 2015
Amount of Funding: RM 231,000
Role: Project Leader

10. Project Title: Maximum Power Point Tracking (MPPT) of PV System Using Differential Evolution (DE) Method
Source of Funding: MOHE (GUP) Tier 1
Duration: April 2011 to June 2013
Vot No. Q.J130000.2523.00H18
Amount of Funding: RM 146,000
Role: Project Leader

11. Project Title: Online Harmonics Elimination Pulse Width Modulation (HEPWM) for Multilevel Voltage Source Inverter Using Differential Evolution (DE) Method
Source of Funding: MOHE (ERGS)
Duration: Aug 2011 to Jan 2014
Vot No. R.J130000.7823.4L005
Amount of Funding: RM 140,000
Role: Project Leader

12. Project Title: Water Enrichment Using Solar-Driven Ozone Generation Technique for Hydroponic Applications
Source of Funding: Ministry of Agriculture (MOA Science Fund)
Vot No. 77491 (R.J130000.7923.3S407)

Duration: July 2010 to June 2012
Amount of Funding: RM 129,000
Role: Project Leader

13. Project Title: Design and Development of a High Frequency Power Supply for Ozone Gas Generation.
Source of Funding: MOSTI (Science Fund)
Vot No. 79129 (R.J130000.7923.3S128)
Duration: Dec 2007 to Nov 2009.
Amount of Funding: RM 130,000
Role: Project Leader
14. Project title: Design and Development of High-Performance Resonant Type Inverter for Rooftop, Grid-Connected PV Application.
Duration: 1 Nov 2002 to 31 Oct 2004
Source of Funding: MOSTI, RMK-8 (IRPA)
Vot No. 74104
Amount of Funding: RM 200,000
Role: Project Leader
15. Project title: Static VAR Compensator and Active Power Generator Using Photovoltaic Inverter for Industrial Application.
Duration: Nov 2002 to Oct 2005
Source of Funding: MOSTI RMK-8 (IRPA)
Vot No. 74102
Amount of Funding: RM 277,000
Role: Project Leader
16. Project title: High Performance Grid-Connected Inverter for (Solar) Photovoltaic (PV) Application.
Duration: Dec 2000 to Nov 2002
Source of Funding: MOSTI, RMK-7 (IRPA)
Vot No. 72342
Amount of Funding: RM 165,000
Role: Project Leader
17. Project title: Impact Of Soiling And Vegetation On Photovoltaic Systems Performance And Reliability
Source of Funding: MOHE (GUP) Tier 1
Vot No. Q.J130000.2509.07H54
Duration: Apr 2014 to June 2016.
Amount of Funding: RM 75,941.10
Role: Researcher
18. Project title: Regulation of System Frequency Using Synchrophasors under High Penetration of Wind Energy in Smart Grids
Source of Funding: MOHE (GUP) Tier 1
Vot No. Q.J130000.2509.08H66
Duration: July 2014 to June 2015.
Amount of Funding: RM 20,000
Role: Researcher

19. Project title: Development of a Smart Micro grid Energy Management System
Source of Funding: MOSTI (Science Fund)
Vot No. R.J130000.7923.4S068
Duration: Nov 2013 to Feb 2016.
Amount of Funding: RM 160,789
Role: Researcher

20. Project title: Maximum Power Point Tracking (MPPT) of Solar Photovoltaic (PV) System based on Evolutionary Algorithms (EAs)
Source of Funding: MOHE (GUP Tier 1)
Vot No. Q.J130000.2523.04H61
Duration: Jan 2013 to Dec 2016.
Amount of Funding: RM 120,591
Role: Researcher

21. Project title: Photovoltaic Based Power Converter for Distributed Generation System
Source of Funding: MOSTI (Science Fund)
Vot No. R.J130000.7923.4S023
Duration: May 2012 to April 2014.
Amount of Funding: RM 120,000
Role: Researcher

22. Project title: Evaluation Study on the Impact of Hybrid Photovoltaic-Wind System in a Micro-Grid System
Source of Funding: MOHE (GUP Tier 1)
Vot No. Q.J130000.2523.04H79
Duration: Dec 2012 to Jan 2014.
Amount of Funding: RM 160,789
Role: Researcher

23. Project title: Active Damping in PV System Driving Constant Power Load
Source of Funding: MOHE (GUP Tier 2)
Vot No. Q.J130000.2623.02J46
Duration: April 2011 to Sept 2012.
Amount of Funding: RM 40,000
Role: Researcher

24. Project title: Power Quality Study of PV Inverter System for Distributed Generation Connected to a Network of Adjustable Speed Drives
Source of Funding: Science Fund, MOSTI 2007
Vot No. 79140
Duration: August 2007 to June 2009.
Amount of Funding: RM 171,500
Role: Researcher

25. Project title: Power Electronics Converter Control Based on Fuzzy Logic (FL)
Duration: Jan 2007 to Nov 2008
Source of Funding: Science Fund, MOSTI 2007
Vot No. 79020
Amount of Funding: RM 200,000

Role: Researcher

26. Project title: Solar PV Air Conditioning For Resedential Applications
Duration: Sept 1996 to Aug 1998
Source of Funding: Science Fund, MOSTI 1996
Vot No. 72350
Amount of Funding: RM 156,750
Role: Researcher
27. Project title: PC-based Uninterruptable Power Supply (UPS)
Duration: Aug 1992 to Aug 1995
Source of Funding: Government - GOV 1992
Vot No. 71088
Amount of Funding: RM 20,000
Role: Researcher
28. Project title: Development of Fuel Cell Powered Automotive Thermal Comfort for Refrigeration System, under 'Proton Exchange Membrane Fuel Cell' IRPA Prioritized Research Program.
Duration: May 2002 to March 2007
Source of Funding: IRPA, RMK-8
Vot No. 74535
Amount of Funding: RM 400,000
Role: Researcher
29. Project title: Design and Development of a High Performance Induction Motor Drives System.
Duration: Dec 1998 to June 2003
Source of Funding: IRPA, RMK-7
Vot No. 72235
Amount of Funding: RM 250,000
Role: Researcher

Institutional Funded Projects (UTM)

30. Project title: Advance Technology Regulator (DC-DC Converter) Circuit for BIPV System
Duration: Sept 2006 to August 2007
Source of Funding: UTM Institutional Research Fund
Vot No. 77008
Amount of Funding: RM 65,000
Role: Researcher and principal technical advisor
31. Project title: Grid-connected Photovoltaic Inverter
Duration: Sept 2006 to August 2007
Source of Funding: UTM Institutional Research Fund
Vot No. 77007
Amount of Funding: RM 65,000
Role: Researcher and principal technical advisor
32. Project title: Nano Material for Building Integrated Photovoltaic
Duration: Sept 2006 to August 2007
Source of Funding: UTM Institutional Research Fund
Vot No. 77006
Amount of Funding: RM 500,000

Role: Researcher and principal technical advisor

Short term Projects (UTM)

33. Project title: Application of New Power Electronics Devices in the Design of a High Voltage, Multi Pulse Impulse Generator.

Duration: Feb 1998 to Jan 2000

Source of Funding: UTM Short term Grant

Vot No. 71260

Amount of Funding: RM 15,000

Role: Project Leader

34. Project title: Application of Multi Objective Genetic Algorithm (MOGA) in Economic Dispatch and Scheduling Problem.

Duration: May 1998 to April 1999

Source of Funding: UTM Short term Grant

Vot No. 71283

Amount of Funding: RM 15,000

Role: Researcher

35. Project title: The Behavior of Electronic Circuit for Teaching Purpose

Duration: Sept 1996 to Aug 1999

Source of Funding: UTM Short term Grant

Vot No. 61252

Amount of Funding: RM 15,000

Role: Project Leader

36. Project title: Development of High Efficiency Induction Motor Drives Systems Based on Direct Torque Control (DTC) Method.

Duration: March 1999 to March 2001

Source of Funding: UTM Short term Grant

Vot No. 71430

Amount of Funding: RM 15,000

Role: Researcher

CONSULTANCY WORK

37. Project title: On-board Battery Charger for Electric Vehicle.

Duration: Dec 1998 to Jan 2000

Source of Funding: SIRIM Berhad; in collaboration with Tenaga Nasional Research and Development (TNRD) on the "Perusahaan Otomobil Elektrik Malaysia (POEM)"

Vot No. : UTSB 193

Amount of Funding: RM 75,000

Role: Head of Consultant/Principal designer

RESEARCH OUTPUTS/PRODUCTS

1. Solaria 1000 – 1kW high frequency link inverter for stand-alone PV applications; won Bronze medal at the "2005 IPTA R&D Expo, Kuala Lumpur", Dec 2005.
2. Solaria 3000 – 3kW grid connected PV inverter - UTM's showcase product at the Pusat Tenaga Malaysia/ Ministry of Energy's "Suria 1000 Launching Day", June 2007.
3. Solaria 5000 – 5kW grid connected PV inverter; UTM's showcase product at the PECIPTA '07 Expo, Kuala Lumpur, August 2007.

4. 5kW on-board fast battery charger for electric vehicle, designed for SIRIM Berhad, Jan 2000.

INTELLECTUAL PROPERTY

Zainal Salam, "Power Converting Apparatus and Method Using a High Frequency Cycloconverter System", Malaysian Patent Application No. PI 20081517, 9th May 2008.

PUBLICATIONS:

Summary of Publications (as of August 2019)

Number of Journal Papers in ISI-indexed Journals (Web of Science): 87
Number of Papers in Scopus-indexed Journals: 23
Number of Papers in Non-indexed Journals: 21
Total Number of Conference Paper: 113

Summary of Citations (as of August 2019)

Number of Citations (SCOPUS)	: 5200
Number of Citations (Google Scholar)	: 7755
h-Index (SCOPUS)	: 34
h-Index (Google Scholar)	: 41

JOURNAL—ISI Indexed (Web of Science by Clarivate Analytics)

(Note: The Quartile (Q) and Impact factor (IF) is for the year when the paper is published).

1. N. Prabakaran, Z. Salam, C. Cecati, K. Palanisamy, "Design and implementation of new multilevel inverter topology for trinary sequence using unipolar pulse width modulation", Accepted for publication in IEEE Transactions on Industrial Electronics (Q1: IF=7.503)
2. Azhan Ab. Rahman, Zainal Salam, Sulaiman Shaari and Mohd Zulkifli Ramli, "Methodology to Determine Photovoltaic Inverter Conversion Efficiency for the Equatorial Region", Appl. Sci. 2020, 10, 201; doi:10.3390/app10010201
3. MZ Ramli, Z Salam, "Analysis and experimental validation of partial shading mitigation in photovoltaic system using integrated dc-dc converter with maximum power point tracker", Accepted for publication in IET Renewable Power Generation, Vol. 13 Issue 13, 2019, pp. 2356-2366. (Q1: IF=3.605)
4. Mostafe Kermadi, Zainal Salam, Jubaer Ahmed, El Berkouk, "An Effective Hybrid Maximum Power Point Tracker of Photovoltaic Arrays for Complex Partial Shading Conditions," IEEE Transaction on Industrial Electronics, Vol. 66(9), 2019, pp. 6990-7000, DOI: 10.1109/TIE.2018.287720 (Q1: IF=7.503).
5. V.J Chin, Z. Salam, "Cayote Optimization Algorithm for Parameter Extraction of Photovoltaic Cell", Solar Energy, Vol 194, Dec 2019, pp. 656-670 (Q1: IF=4.674).
6. MZ Ramli, Z Salam, "Performance evaluation of dc power optimizer (DCPO) for photovoltaic (PV) system during partial shading", Renewable Energy 139 (2019), 1336-1354. (Q1: IF=5.439).
7. V.J Chin, Z. Salam, "A New Three-point-based Approach for the Parameter Extraction of Photovoltaic Cells", Applied Energy 237, 219, 519-533. (Q1: IF=8.426).

8. Abdul Rauf Bhatti, Zainal Salam, Beenish Sultana, Nadia Rasheed, Ahmed Bilal Awan, Umbrin Sultana, Muhammad Younas, "Optimized sizing of photovoltaic grid-connected electric vehicle charging system using particle swarm optimization", *International Journal of Energy Res.* *International Journal of Energy Research*, Vol. 43, Issue 1, 2018, pp. 1–24 (DOI: 10.1002/er.4287. (Q1: IF=3.343).
9. Hussain Mohammad Bassi, Zainal Salam, "A New Hybrid Multilevel Inverter Topology with Reduced Number of Switch Count and dc Voltage Sources", *Energies* **12** (6), 977, 2019 (Q2: IF=2.707).
10. Ratil Hasnat Ashique, Zainal Salam, "A High Gain High Efficiency Non-isolated Bidirectional DC-DC Converter with Sustained ZVS Operation", *IEEE Transaction on Industrial Electronics*, Vol 65, No. 10, Oct. 2018, pp. 7829-7840. (Q1: IF=7.503).
11. Abdul Rauf Bhatti, Zainal Salam, "A Rule-Based Energy Management Scheme for Uninterrupted Electric Vehicles Charging at Constant Price Using Photovoltaic-Grid System", *Renewable Energy*, 125(2018), pp. 384-400.
12. Jubaer Ahmed, Zainal Salam, "An Enhanced Adaptive P&O MPPT for Fast and Efficient Tracking under Varying Environment Conditions", *IEEE Transactions on Sustainable Energy*, Vol. 9, Issue 3, 2018, pp. 1487-1496 (Q1: IF=7.650).
13. J. Ahmed, Z. Salam, "An Accurate Method for MPPT to Detect the Partial Shading Occurrence in PV System", *IEEE Transactions on Industrial Informatics*, Vol.13, No. 5, Oct 2017, pp. 2151-2161. (Q1: IF=6.764).
14. J. Vun, Z. Salam, K. Ishaque " An Accurate and Fast Computational Algorithm for the Two-diode Model of PV Module Based on Hybrid Method", *IEEE Transaction on Industrial Electronics*, Vol 64, Issue 8 (2017), pp. 6212-6222. (Q1: IF=7.168).
15. A. Maged, Z. Salam, A. M. Amjad, "Harmonics Elimination PWM Based Direct Control for 23-level Multilevel Distribution STATCOM Using Differential Evolution Algorithm", *Electric Power Systems Research*, 152(2017), pp. 48-60 (Q2: IF=2.688).
16. Ratil Ishaque, Zainal Salam, "A Family of True Zero Voltage Zero Current Switching (ZVZCS) Non-isolated Bidirectional DC-DC Converter with Wide Soft Switching Range", *IEEE Transaction on Industrial Electronics*, Vol. 64, Issue 7, July 2017, pp. 5416-5427. (Q1: IF=6.500).
17. Ratil H. Ashique, Zainal Salam, Mohd Junaidi Bin Abdul Aziz, Abdul Rauf Bhatti, "Integrated photovoltaic-grid dc fast charging system for electric vehicle: A review of the architecture and control, *Renewable & Sustainable Energy Reviews*, 69(2017), pp. 1243–1257 (Q1; IF=5.901).
18. Veeramuthu Ashokkumar, Mohd Razman Salim, Zainal Salam, Pandiyan Sivakumar, Cheng Tung Chong, S. Elumalai, Veeraperumal Suresh, Farid Nasir Ani, "Production of liquid biofuels (biodiesel and bioethanol) from brown marine macroalgae *Padina tetrastromatica*", *Energy Conversion and Management*, 67(2017), pp. 876-891. DOI/10.1016/j.enconman.2016.12.054. (Q1; IF=4.38).
19. Jubaer Ahmed, Zainal Salam, "A Modified P&O Maximum Power Point Tracking Method with Reduced Steady State Oscillation and Improved Tracking Efficiency", *IEEE Transaction on Sustainable Energy*, Vol. 7, No. 4, Oct 2016, pp. 1506-1512, DOI/10.1109/TSTE.2016.2568043. . (Q1; IF=3.737).

20. J. Vun, Z. Salam, K. Ishaque "An accurate modelling of the two-diode model of PV module using a hybrid solution based on differential evolution", *Energy Conversion and Management*, 124(2016) 42-50. (Q1; IF=4.38).
21. Nur Juzaili, A. Rahman, Z. Salam, S. Shaari, "Performance Degradation of Photovoltaic Power System: Review on Mitigation Methods" *Renewable & Sustainable Energy Reviews*, 135(2017), pp. 351-361 (Q1; IF=5.901).
22. Abdul Rauf Bhatti, Zainal Salam, Mohd Junaidi Bin Abdul Aziz, Kong Pui Yee, "A critical review of electric vehicle charging using solar photovoltaic", *Int. Journal of Energy Research*, 2016; 40:439–461 (Q1; IF=2.84).
23. R. Bhatti, Z. Salam, J. Aziz, K.P Yee, Kong, R. Hasanah, "Electric Vehicles Charging Using Photovoltaic: Status and Technological Review", *Renewable & Sustainable Energy Reviews*, 54 (2016) 34–47 (Q1; IF=5.6).
24. Sk Moin, Z. Salam, H. Abu-Rub, "An Improved Space Vector Modulation for a Three-to-Seven-Phase Matrix Converter With Reduced Number of Switching Vectors", *IEEE Transaction on Industrial Electronics*, Vol. 62, Issue 6, 2015, pp 3327-3337. (Q1; IF=6.498).
25. M. Mokhtari, Z. Abdul-Malek, Z. Salam, "An Improved Circuit-Based Model of a Grounding Electrode by Considering the Current Rate of Rise and Soil Ionization Factors", *IEEE Transaction on Power Delivery*, Vol. 30, Issue 1, pp. 211-219. (Q2; IF=1.733)
26. Sk Moin, H. Abu-Rub, Z. Salam "Common-mode Voltage Elimination in a Three-to-Five Phase Dual Matrix Converter Feeding a Five Phase Open-end Drive Using Space Vector Modulation Technique", *IEEE Transaction on Industrial Electronics*, Vol. 6, Issue 10, pp 6051-6063. (Q1; IF=6.498).
27. J. Ahmed, Z. Salam, "An Improved Method to Predict the Positions of Maximum Power Point during Partial Shading for PV Arrays" *IEEE Transactions on Industrial Informatics*, Vol. 11, Issue 6, pp. 1138-1387. (Q1; IF=8.72).
28. M. Mokhtari, Z. Abdul-Malek, Z. Salam, "The Effect of Soil Ionization on Transient Grounding Electrode Resistance in Non-Homogeneous Soil Conditions", *International Transactions on Electrical Energy Systems*, 2016; Vol 26, Issue 7, pp. 1462–1475. (Q3; IF=1.085).
29. Veeramuthu Ashokkumar, Zainal Salam, Farid Nasir "An integrated approach for biodiesel and bioethanol production from *Scenedesmus bijugatus* cultivated in a vertical tubular photobioreactor", *Energy Conversion and Management*, 101 (2015), pp 778–786. (Q1; IF=4.38).
30. Makbul A.M. Ramli, Kashif Ishaque, Faizan Jawaid, Yusuf A. Al-Turki, Zainal Salam, "A modified differential evolution based maximum power point tracker for photovoltaic system under partial shading condition" *Energy and Buildings*, 103(2015), pp 175-184. (Q1; IF=2.884).
31. N. Shannan, Z. Yahaya, B. Singh, Z. Salam, "Two-diode model for parameters extraction of photovoltaic module under temperature variation", *IEICE Electronics Express (ELEX)*, Vol. 12, Issue. 19. (Published online: DOI: 10.1587/elex.12.20150492) (Q4; IF=0.32).

32. J. Ahmed, Z. Salam, "A Critical Evaluation on Maximum Power Point Tracking Mitigation Methods for Partial Shading in PV Systems" *Renewable and Sustainable Energy Reviews*, 47(2015), pp. 933–953 (Q1; IF=5.901).
33. Abdul Moeed Amjad, Zainal Salam, Ahmed Maged, "Application of Differential Evolution for Cascaded Multilevel VSI with Harmonics Elimination PWM Switching", *International Journal of Electrical Power and Energy Systems*, 64(2015), pp. 447-456. (Q1; IF=3.432).
34. F. Naim, S.M. Ayob, Z. Salam, M Saad Arif, "Pertubative Methods for Maximum Power Point Tracking (MPPT) of Photovoltaic (PV) Systems: A Review " *International Journal of Energy Research* 2015; 39:1153–1178 (Q1; IF=2.418).
35. Palanivel Sathishkumar, Mani Arulkumar, Veeramuthu Ashokkumar, Abdull Rahim Mohd Yusoff, Kumarasamy Murugesan, Thayumanavan Palvannan, Zainal Salam, Farid Nasir, Anicand Tony Hadibarata, "Modified phyto-waste Terminalia catappa fruit shells: a reusable adsorbent for the removal of micropollutant diclofenac", *RSC Advances*, 2015, 5, 30950 (Q1; IF=3.84).
36. J. Ahmed, Z. Salam, "An Improved Perturb and Observe (P&O) Maximum Power Point Tracking (MPPT) Algorithm for Higher Efficiency", *Applied Energy*, (2015) 97–108 (Q1; IF=5.613).
37. Veeramuthu Ashokkumar, Zainal Salam, Palanivel Sathishkumar, Tony Hadibarata, Abdull Rahim Mohd Yusoff, Farid Nasir Ani, "Exploration of fast growing Botryococcus sudeticus for upstream and downstream process in sustainable biofuels production" *Journal of Cleaner Production*, 92 (2015) 162-167 (Q1; IF=3.844).
38. J. Vun, Z. Salam, K. Ishaque, "Cell Modelling and Model Parameters Estimation Techniques for Photovoltaic Simulator Application: A Review", *Applied Energy*, 154 (2015) 500–519 (Q1; IF=5.613).
39. Muhammad Abu Bakar Sidik, Hamizah Binti Shahroom, Zainal Salam, Zainuddin Nawawi, Hussein Ahmad, Muhammad Irfan Jambak, Yanuar Zulardiansyah Arief, Zokafle Buntat", *Lightning Monitoring System for Sustainable Energy Supply": A Review*", *Renewable and Sustainable Energy Reviews*, 48 (2015) 710–725 (Q1; IF=5.901).
40. Zainal Salam, Ahmed Saif, Moeed Amjad, "Design and Implementation of Fifteen Level Cascaded MVSI with Harmonics Elimination PWM Using Differential Evolution Method" *IET Power Electronics*, Vol. 8 Issue, 2015, pp. 1740-1748 (Q2; IF=1.683).
41. Veeramuthu Ashokkumar, Elango Agila, Zainal Salam, Pandiyan Sivakumar, Ramasamy Rengasamy, Farid Nasir Ani, "Optimization and characterization of biodiesel production from microalgae Botryococcus grown at semi-continuous system", *Energy Conversion and Management* 88 (2014) 936–946 (Q1; IF=3.60).
42. Veeramuthu Ashokkumar, Elango Agila, Zainal Salam, Mohanadoss Ponra, Mohd Fadhil Md Din, Farid Nasir Ani "A study on large scale cultivation of Microcystis aeruginosa under open raceway pond at semi-continuous mode for biodiesel production" *Bioresource Technology*, 172 (2014) 186–193 (Q1; IF=5.05).
43. M. Amjad, Z. Salam, "Design and Implementation of a High-Frequency Half-Bridge Resonant Converter for DBD Ozone Generator, *IET Power Electronics*, Vol. 7, Issue. 9, pp. 2403–2411, 2014. (Q2; IF=1.519).

44. Ramli, Z., Salam, Z., "Simple Energy Recovery Scheme to Maximize Photovoltaic Output Power During Partial Shading Condition", IEEE Transactions on Power Electronics, Vol. 29, No. 12, Dec 2014, pp. 6458-6471 (Q1; IF=4.080).
45. Saad Mekhilef, Meghdad Barimani, Azadeh Safari, Zainal Salam, "Malaysia's renewable energy policies and programs with green aspects" Renewable & Sustainable Energy Review, 40 (2014), pp. 497-504 (Q1; IF=5.627).
46. Z. Salam, M. Facta M. Amjad , "Dielectric Barrier Discharge Ozonizer Using the Transformerless Single Switch Resonant Converter, IEEE Transactions on Industry Applications, Vol. 40, No. 3, May 2014, pp. 2107-2206. (Q1; IF=1.672)
47. M. Amjad, Z. Salam, K. Ishaque, "A Model Parameter Extraction Method for Dielectric Barrier Discharge Ozone Chamber using Differential Evolution", Measurement Science Review, Vol. 14, No. 2, 2014; 78-86 (Q2; IF=1.233)
48. N. A. M. Jamail, M. A. M. Piah, N. A. Muhamad, Z. Salam, N. F Kasri, R. A. Zainir, Q. E. Kamarudin, "Effect of Nanofillers on the Polarization and Depolarization Current Characteristics of New LLDPE-NR Compound for High Voltage Application," Advances in Materials Science and Engineering, Vol. 2014, Article ID: 416420, pp 1-7. (Q3; IF=0.897)
49. Abdul Moeed Amjad, Zainal Salam, "A Review of Soft Computing Methods for Harmonics Elimination PWM for Inverters in Renewable Energy Conversion Systems, Renewable & Sustainable Energy Review, 33 (2014), 141–153. (Q1; IF=5.627)
50. J. Ahmed, Z. Salam, "A Maximum Power Point Tracking (MPPT) for PV system Using Cuckoo Search with Partial Shading Capability", Applied Energy, 2014(119); 118-130. (Q1; IF=5.261)
51. Kashif Ishaque, Z. Salam, George Lauss, "The Performance of Perturb & Observe and Incremental Conductance Maximum Power Point Method under Dynamic Weather Condition", Applied Energy, 2014(119); 228-236. (Q1; IF=5.261)
52. Muhammad Amjad, Zainal Salam, "Analysis, Design and Implementation of Multiple Parallel Ozone Chambers for High Flow Rate", IEEE Transactions on Industrial Electronics, Vol. 61, No. 2, Feb 2014, pp. 753-765. (Q1; IF=5.165)
53. Z. Salam, M. Facta, M. Amjad, "Design and Implementation of a Low Cost, High Yield DBD Ozone Generator Based on the Single Switch Resonant Converter", IET Power Electronics, Vol. 6, Issue 8 (2013), 1583–1591. (Q2; IF=1.519)
54. Mohammad Faridun Naim Tajuddin, Shahrin Md Ayob, Zainal Salam, Mohd Sazli Saad, "Evolutionary based maximum power point tracing technique using Differential Evolution Algorithm, Energy and Building, 67 (2013), 245–252. (Q1; IF=2.679)
55. Muhammad Abu Bakar Sidik, Hussein Ahmad, Zainal Salam, Zolkafle Buntat, Ong Lai Mun, Nouruddeen Bashir, Zainuddin Nawawi, "Study on the effectiveness of lightning rod tips in capturing lightning leaders", Electrical Engineering, Springer-Verlag Berlin, Vol 95. No. 4 (2013) 367–381; ISSN 0948-7921. (Q3; IF=0.303)

56. M. Amjad, Z. Salam, M. Facta, S. Mekhilef, "Analysis and Implementation of Transformerless LCL Resonant Power Supply for Ozone Generation," IEEE Transactions on Power Electronics, Vol. 28, No. 2, pp. 650-660, Feb. 2013. (Q1; IF=4.080)
57. Kashif Ishaque, Zainal Salam, "A Review of Maximum Power Point Tracking Techniques for PV System for Uniform Insolation and Partial Shadings Conditions", Renewable & Sustainable Energy Review, 19 (2013), pp. 475-488. (Q1; IF=5.627)
58. S. Mekhilef N. Abdul Kadir, Z. Salam, "Digital Control of Three phase three-stage hybrid Multilevel Inverter" IEEE Transactions on Industrial Informatics, Vol. 9, No. 5, pp. 719-727, May 2013. (Q1; IF=3.381)
59. Z. Salam, S.Y. Soon, Y. Saleem, "An Improved Newton Raphson Iteration Method to Compute the Selective Harmonics Elimination Pulse Width Modulation Angles for Cascaded Multilevel Inverters with Equal and Non-equal DC sources", The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, COMPEL, Vol. 32, No. 3, 2013, pp. 901-922; ISSN: 0332-1649.(Q3; IF=0.281)
60. Amin Mirzaei, Awang Jusoh, Zainal Salam, "Design and implementation of high efficiency non-isolated bidirectional zero voltage transition pulse width modulated DC-DC converters, Energy, 47 (2012) 358-369. (Q1; IF=3.651)
61. S. Mekhilef S, S.Z Faramarzi, R. Saidur, Zainal Salam, "The application of solar technologies for sustainable development of Agricultural Sector", Renewable & Sustainable Energy Review, 8(2013), pp. 583-594. (Q1; IF=5.627)
62. Z. Salam, J. Ahmed, B. S. Merugu, "The Application of Soft Computing Methods for MPPT of PV System: a Technological and Status Review", Applied Energy, Vol. 107, July 2013, pp. 135-148. (Q1; IF=5.261)
63. Kashif Ishaque, Zainal Salam, "A Deterministic Particle Swarm Optimization Maximum Power Point Tracker for Photovoltaic System under Partial Shading Condition", IEEE Transactions on Industrial Electronics, Vol. 60, No. 8, Aug. 2013, pp. 3195-3206. (Q1; IF=5.165)
64. Fazel Taeed, Zainal Salam, Shahrin Md Ayob, "FPGA Implementation of a Single Input Fuzzy Logic Controller for Boost Converter with the Absence of an External Analog to Digital Converter" IEEE Transactions on Industrial Electronics, Vol. 59, No. 2, Feb. 2012, pp. 1208-1217. (Q1; IF=5.165)
65. K. Ishaque, Z. Salam, M. Amjad, S. Mekhilef, "An Improved Particle Swarm Optimization (PSO)-Based MPPT for PV With Reduced Steady-State Oscillation", IEEE Transactions on Power Electronics, vol. 27, pp. 3627-3638, 2012. (Q1; IF=4.080)
66. Muhammad Amjad, Zainal Salam, M. Facta, Kashif Ishaque, "A Simple and Effective Method to Estimate the Model Parameters of Dielectric Barrier Discharge Ozone Chamber", IEEE Transactions on Instrumentation and Measurements, Vol. 61, No. 6, pp 1676-1684, June 2012. (Q2; IF=1.357)
67. M. Amjad, Z. Salam, M. Facta, K. Ishaque, "Design and Development of a High-Voltage Transformer-less Power Supply for Ozone Generators Based on a Voltage-fed Full Bridge Resonant Inverter", Journal of Power Electronics, vol. 12, pp. 387-398, May 2012. (Q3; IF=0.783)

68. Kashif Ishaque, Zainal Salam, Saad Mekhilef, Amir Shamsudin, "Parameter Extraction of Photovoltaic Modules Using Penalty Based Differential Evolution", *Applied Energy*, 99 (2012) pp. 297–308. (Q1; IF=5.261)
69. Kashif Ishaque, Zainal Salam, Amir Shamsudin, Muhammad Amjad, "A direct control based maximum power point tracking method for photovoltaic system under partial shading conditions using particle swarm optimization algorithm", *Applied Energy*. 99 (2012) pp. 414–422. (Q1; IF=4.781)
70. Kashif Ishaque, Zainal Salam, Hamed Taheri, "Simple, fast and accurate two-diode model for photovoltaic modules", *Solar Energy Materials & Solar Cells*, 95 (2011) 586–594. (Q1; IF=4.630)
71. Kashif Ishaque, Zainal Salam, Syafaruddin, "A comprehensive MATLAB Simulink PV system simulator with partial shading capability based on two-diode model", *Solar Energy*, Vol. 85, Issue 6 (2011), Pages 2217-2227. (Q1; IF=2.952)
72. Kashif Ishaque, Zainal Salam, "An improved modeling method to determine the model parameters of photovoltaic (PV) modules using differential evolution (DE)", *Solar Energy*, Vol. 85, Issue 6(2011), pp. 2349-2359. (Q1; IF=2.952)
73. Kashif Ishaque, Zainal Salam, Hamed Taheri, Amir Shamsudin, "A critical evaluation of EA computational methods for Photovoltaic cell parameter extraction based on two diode model", *Solar Energy*, Vol. 85, Issue 6(2011), pp. 1768-1779. (Q1; IF=2.952)
74. Kashif Ishaque, Zainal Salam, Hamed Taheri, Syafaruddin, "Modeling and simulation of photovoltaic (PV) system during partial shading based on a two-diode model", *Simulation Modeling Practice and Theory*, 19 (2011) 1613–1626. (Q2; IF=1.159)
75. Amin Mirzaei, Awang Jusoh, Zainal Salam, Ehsan Adib, Hosein Farzanehfard, "Analysis and design of a high efficiency bidirectional DC–DC converter for battery and ultracapacitor applications", *Simulation Modeling Practice and Theory*, 19 (2011) 1651–1667. (Q2; IF=1.159)
76. Z. Salam, A. Jusoh, "Bidirectional high-frequency link inverter with regenerative snubber and deadbeat control", *International Journal of Electronics*, Vol. 98, No. 3, March 2011, 339–355. (Q4; IF=0.509)
77. Amin Mirzaei, Hosein Farzanehfard, Ehsan Adib, Awang Jusoh, Zainal Salam, " A Fully Soft Switched Two Quadrant Bidirectional Soft Switching Converter for Ultra Capacitor Interface Circuits", *Journal of Power Electronics*, Vol. 11, No. 1, January 2011, 1-9. (Q3; IF=0.783)
78. K. Ishaque, S.S.Abdullah, S.M.Ayob, Z. Salam, "A simplified approach to design fuzzy logic controller for an underwater vehicle", *Ocean Engineering* 38 (2011) 271–284. (Q1; IF=1.161)
79. Zainal Salam, Fazel Taeed, and Shahrin Md. Ayob, "Design and Implementation of a Single Input Fuzzy Logic Controller for Boost Converters", *Journal of Power Electronics*, Vol. 11, No. 4, July 2011, pp. 542-550. (Q3; IF=0.783)
80. Zainal Salam, Nge Chee Lim, Shahrin Md. Ayob, "Analysis and Design of a Bidirectional Cycloconverter-type High Frequency Link Inverter with Natural Commutation Phase Angle Control", *Journal of Power Electronics*, Vol. 11, No. 5, September 2011, pp. 677-687. (Q3; IF=0.783)

81. Z. Salam, "An On-line Harmonic Elimination Pulse Width Modulation Scheme for Voltage Source Inverter", *Journal of Power Electronics*, Vol. 10, No. 1, pp. 43-51, 2010. (Q3; IF=0.783)
82. Kashif, S.S Abdullah, S.M. Ayob, Z. Salam, "Single Input Fuzzy Logic Controller for Unmanned Underwater Vehicle", *Journal of Intelligent and Robotic Systems*: Vol. 59, No.1, pp. 87, 2010. (Q3; IF=0.827)
83. Z. Salam, "A simple On-line Harmonics Elimination PWM Algorithm for a Three-phase Voltage Source Inverter Based on Quadratic Curve Fittings", *The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, COMPEL*, Vol. 29, No.3, pp. 727-744, 2010. (Q3; IF=0.281)
84. Shahrin Md. Ayob, Zainal Salam, Naziha Ahmad Azli, "A New Optimum Design for a Single Input Fuzzy Controller Applied to DC-DC Converters", *Journal of Power Electronics*, Vol. 10, No. 3, pp.306-312, 2010. (Q3; IF=0.783)
85. Z. Salam, "An On-line Harmonic Elimination Pulse Width Modulation Scheme for Voltage Source Inverter" *Journal of Power Electronics*, Vol. 10, No. 1, Jan. 2010. (Q3; IF=0.783)
86. Shahrin Md. Ayob, Naziha Ahmad Azli, Zainal Salam, "PWM DC-AC Converter Regulation Using a Multi-Loop Single Input Fuzzy PI Controller", *Journal of Power Electronics*, Vol. 9, No. 1, pp.124-131, Jan 2009. . (Q3; IF=0.783)
87. Zainal Salam, "Bidirectional High-Frequency Link Inverter with Deadbeat Control", *Journal of Power Electronics*, Vol. 9, No. 5, pp.726-735, Sept 2009. (Q3; IF=0.783)
88. J. A. Aziz, Z. Salam, "A New Pulse-width modulation (PWM) Scheme for Modular Structured Multilevel Voltage Source Inverter", *International Journal of Electronics*, Vol. 91, No. 4, April 2004 pp. 211 – 226. (Q4; IF=0.509)

JOURNAL—SCOPUS Indexed

1. N Hashim, Z Salam, "Critical evaluation of soft computing methods for maximum power point tracking algorithms of photovoltaic systems", *International Journal of Power Electronics and Drive Systems* 10 (1), 548-561.
2. N Hashim, Z Salam, D Johari, NFMN Ismail, "DC-DC boost converter design for fast and accurate MPPT algorithms in stand-alone photovoltaic system", *International Journal of Power Electronics and Drive Systems* 9 (3), 1038-1050
3. M. S. Arif, S. M. Ayob, Z. Salam, "Asymmetrical Nine-Level Inverter Topology with Reduce Power Semiconductor Devices", *Telkomnika*, 2018 (Article in Press).
4. M. S. Arif, S. M. Ayob, Z. Salam," Review on the Decomposed Fuzzy PID structure for Power Inverter Regulation", *Jurnal Teknologi*, 78:7 (2016), pp. 35–42 eISSN 2180–3722.
5. Abdul Rauf Bhatti, Zainal Salam, Mohd Junaidi Bin Abdul Aziz, Kong Pui Yee, "A Comprehensive Overview of Electric Vehicle Charging using Renewable Energy", *Int. Journal of Power Electronics and Drive System (IJPEDS)* Vol. 7, No. 1, March 2016, pp. 114-123.

6. Abdul Rauf Bhatti, Zainal Salam, Ratil H. Ashique, "Electric Vehicle Charging Using Photovoltaic based Microgrid for Remote Islands", *Energy Procedia*, 103(2016), pp. 213-218.
7. C. Y. Lau, C. K. Gan, Z. Salam, M. F. Sulaima, "Impact of solar PV system on transformer on-load tap changer (OLTC) in LV distribution network, *Energy Procedia* 103(2016), pp. 58-63.
8. Z. Salam, Z. Ramli, J. Ahmed, M. Amjad, "Partial Shading in Building Integrated PV System: Causes, Effects and Mitigating Techniques", *International Journal of Power Electronics and Drive Systems (IJPEDS)*, Vol. 6, No. 4, Dec. 2015, pp. 712-722
9. M. Facta, Z. Salam, Z. Buntat, "A New Type of Planar Chamber for High Frequency Ozone Generator System" *Advanced Materials Research*, Vol. 896 (2014) pp 726-729.
10. Sk Moin Ahmed, Haitham Abu-Rub, Zainal Salam, "Carrier Based Pulse Width Modulation Control of a Non-Square Direct Matrix Converter with Seven-phase Input and Three-phase Output", *International Journal of Power Electronics and Drive System (IJPEDS)* Vol.3, No.3, Sept. 2013, pp. 344-350; ISSN: 2088-8694.
11. Mochammad Facta, Tole Sutikno, Zainal Salam, "The Application of FPGA in PWM Controlled Resonant Converter for an Ozone Generator", *International Journal of Power Electronics and Drive System (IJPEDS)* Vol.3, No.3, September 2013, pp. 336-343; ISSN: 2088-8694.
12. Shahrin Md Ayob; Zainal Salam; Abdul Halim Mohamed Yatim, "Non-sinusoidal PWM method for cascaded multilevel inverter", *Telkomnika*. 2012; 10(4):670-679.
13. Z. Salam, "A Simple On-line Selective Harmonics Elimination Pulse Width Modulation Scheme for Voltage Source Inverter", *Australian Journal of Electrical & Electronics Engineering*, Vol. 7, No. 2, 2010, pp.133-145, 2010.
14. Z. Salam, CL Nge, "Natural Commutation Technique to Reduce Voltage Surges and Switching Losses in a Cycloconverter-type High Frequency Link Inverter", *Australian Journal of Electrical & Electronics Engineering*, Vol. 7, No. 2, pp. 153-163, 2010.
15. AM Noghlbary, H. Frazanehfard, E. Adib, A.Jusoh and Z. Salam, "Analysis and design of a fully soft-switched buck boost converter for ultra-capacitor and battery combined interface circuit", *Australian Journal of Electrical & Electronics Engineering* Vol. 7, No. 2, pp. 183-193, 2010.
16. S.M. Ayob, N.A.Azli, Z. Salam, "A simple and Fast PI-Fuzzy Controller for PWM DC/AC Converter", *Journal of Control and Intelligent System*, Vol. 38, No. 3, pp 148-156, 2010.
17. Salam, Z. "A Fast and Efficient On-line harmonics elimination PWM for Voltage Source Inverter Using Polynomials Curve Fittings", *International Journal of Engineering, Transactions A: Basics*, Vol. 23, No. 1, Feb 2010, pp. 53-68, 2010
18. S.M. Ayob, N.A. Azli and Z. Salam, "Single Input PI-Fuzzy Controller for Single Phase Inverter System", *International Review of Electrical Engineering (IREE)*, Vol. 3. No.3, May-June 2008, pp. 418-425.
19. Z. Salam, S. M. Ayob, L. S. Toh, "A Compact High-Frequency Link Inverter for UPS Application", *International Review of Electrical Engineering*, Vol. 1 No.3, August 2006, pp 381-390, ISSN 1827-6660.

20. Awang Jusoh, Zainal Salam, "Analysis and Control of the Unloaded Bi-Directional DC/DC Converter to Perform An Active Damping Function" *Jurnal Teknologi*, No. 44(D), Jun 2006, pp. 65-84.
21. Zainal Salam, Zulkifli Ramli, "A bi-directional UPS Inverter Utilising High-Frequency Center-tapped Transformer", *Jurnal Teknologi*, No. 40(D), June 2004, pp. 59-76.
22. Aziz, J.A, Salam, Z., "Harmonics Analysis of a Five-Level Cascaded Multilevel Inverter Using a New Modulation Scheme, *Jurnal Teknologi*, 40(D), August 2003, pp.59-76
23. Zainal Salam and Chew Tit Lynn, "A New Near Optimal Harmonics Elimination PWM Algorithm for AC Traction Drives", *Jurnal Teknologi*, No. 36(D), June 2002, pp. 111-128.
24. Badaruddin Muhammad, Zainal Salam, Abdul Halim Mohd Yatim, Abu Khairi A'ain, "Teknik Pengecasan Baru Untuk Bateri Alkali Cas Semula (RAM™), Techniques to charge the Rechargeable Alkaline-Manganese Battery-RAM™ ", *Jurnal Teknologi*, 36(D), June 2002, pp. 83-98.
25. Zainal Salam, Khosru Mohammad Salim: "Generation of Pulse Width Modulation (PWM) Signals for Three-phase Inverter Using a Single-chip Micro controller, *Jurnal Teknologi*, No. 34(D), June 2001, pp. 1-12.

JOURNAL—Non-Indexed

1. Nor Akmal, N.A Mohamed, A.M. Piah, Z. Salam., " Effects of nonofillers on the polarization and depolarization current characteristics of LLDPE-NR compound for High Voltage Application" *Int. Journal of Research in Engineering and Technology*, IJRET Vol. 02 Issue 8.
2. Abdul Rauf Bhatti, Abdul Ghafoor Bhatti, Rehan Liaqat, Saima Noreen, Erum Rehman, Zainal Salam, "Selection of Power System on the Basis of Best Combination of Power Source and Busbar Scheme", *International Journal of Electrical and Electronics*, 118 (2013) 160-165.
3. Zainal Salam, Tan Perng Cheng and Awang Jusoh, " A hybrid active power filter connected to a photovoltaic array", *Journal – the Institution of Engineers, Malaysia*, Vol. 69, No. 1, March 2008, pp 45-51.
4. Zainal Salam and Junaidi Aziz, "Derivation of Switching Angles of the Cascaded Multilevel Voltage Source Inverter Subjected to a New Pulse Width Modulation Scheme ", *Journal – the Institution of Engineers, Malaysia*.
5. Salam, Z., "A simple On-line Harmonics Elimination PWM Algorithm for a Three-phase Voltage", *Journal – the Institution of Engineers, Malaysia*.
6. Zainal Salam, Tan Perng Cheng, Awang Jusoh, "Review of active power filter technologies", *Jurnal-the Institution of Engineers, Malaysia*, Vol. 68. No. 2, June 2007, pp. 38-46.
7. Zainal Salam, Toh Leong Soon, Mohd. Zulkifli Ramli, "An improved controller design for high frequency link inverter using deadbeat method", *Jurnal Sains dan Teknologi*, Vol. 1 No.1, June 2007 pp 17-36.

8. Zainal Salam, Tan Perng Cheng, Awang Jusoh, "Application of extension p-q theorem to construct the compensation current reference of a single-phase two-wired hybrid active filter" *Jurnal Sains dan Teknologi*, Vol. 1 No.1, June 2007 pp 95-113.
9. Z. Salam, J. Aziz, S.S. Ahmed, Digital implementation of a new switching scheme for modular structured multilevel voltage source inverter, *Journal of Energy and Environment*, Vol. 5, May 2006, pp. 57-76, ISSN 1563-1362.
10. Zainal Salam, Nge Chee Lim, Toh Leong Soon, Mohd. Zulkiflli Ramli, "Cycloconverter-type high frequency link inverter for photovoltaic application", *Journal-The Institution of Engineers, Malaysia*, Vol.67, No.1, March, 2006, pp 49-56.
11. MM Yaacob, AB Darus, Z. Salam, HB Ahmad, "A multipulse impulse generator (MIGE), *Elektrika-Journal of Electrical Engineering* , Vol. 8, No.1, June 2006, pp.68-74.
12. Zainal Salam, Toh Leong Soon, Mohd Zulkifli Ramli. "On the hardware implementation of a novel high frequency link inverter", *Elektrika-Journal of Electrical Engineering*, June 2006, Volume 8, No. 1, pp. 45-57.
13. Zainal Salam, Toh Leong Soon, Mohd. Zulkifli Ramli, "Application of Decoupling Networks in Deadbeat Controller for High-Frequency Link Inverter", *Journal the Institution of Engineers, Malaysia (Jurnal IEM)* Vol. 67. No. 3, Sept 2006, pp. 38-46.
14. Awang Jusoh, Zainal Salam, Lim Aik Jin, "Analysis, Design and Simulation of RC Passive Damping Network in a Simple Distributed DC Power System using PSpice", *Elektrika-Journal of Electrical Engineering*, Volume 9, No. 1, pp. 14-18, Dec 2006, pp. 14-18.
15. Zainal Salam, Tan Perng Cheng, Awang Jusoh, "Harmonics mitigation using active power filter: A technological review", *Elektrika-Journal of Electrical Engineering*, Volume 9, No. 1, Dec 2006, pp. 14-18.
16. Zainal Salam, Toh Leong Soon, Mohd. Zulkifli Ramli, "On the hardware implementation of a novel high frequency link inverter", *Elektrika-Journal of Electrical Engineering*, Vol. 8, No.1, June 2006, pp.45 – 57.
17. Zainal Salam, Azidin Mohamad Razali, "A Closed-form Solution for the Harmonics of a Five Level Cascaded Inverter with the Single Carrier Modulation: The Double Integral Fourier Series Approach", *Jurnal Sains&Teknologi*, Vol. 3, No.1, July 2005, pp. 1-21. ISSN 1823-1698.
18. Zainal Salam, Junaidi Aziz, "Digital Implementation of a new PWM Switching Scheme for Cascaded Multilevel Voltage Source Inverter", *Elektrika-Journal of Electrical Engineering*, Dec. 2005, pp. 36-46.
19. Zainal Salam, Khosru Mohammad Salim, Faridah Taha: "Design and Development of a Three-phase, 5kW Power Conditioning Unit for Fuel Cell System", *Journal the Institution of Engineers, Malaysia (Jurnal IEM)*, Vol. 61, No. 2, June 2000, pp 71-77.
20. Zainal Salam, "On the Practical Implementation of the Volt-Second Equalization Method to Compensate for the Low-frequency Beat Current in Traction Inverter Drives", *Elektrika- Journal of Electrical Engineering*, Vol. 1. No.2, March 1999, pp 8-14.

21. Zainal Salam, "Control of a Single-phase PWM Rectifier Using the Fixed-band Hysteresis Controller", *Elektrika- Journal of Electrical Engineering*, Vol. 2. No.2, Sept. 1999, pp. 6-11.

CONFERENCE PROCEEDINGS

1. N Tutkun, K Gegin, N Sarma, Z Salam. "Comparison of Typical PV Module Performances Based on the Circuit Models", 2018 IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC), Kota Kinabalu, Malaysia pp. 206-211.
2. V.J Chin, Z. Salam, "Modifications to Accelerate the Iterative Algorithm for the Two-diode Model of PV Module", 2018 IEEE PES Asia-Pacific Power and Energy Engineering Conference (APPEEC), Kota Kinabalu, Malaysia, pp. 200-205, pp. 35-40.
3. Muhammad Paend Bakht, Zainal Salam, Abdul Rauf Bhatti, " Investigation and Modelling of Load Shedding, and its Mitigation Using hybrid Renewable Energy System, 2018 IEEE 7th International Conference on Power and Energy (PECon 2018), Kuala Lumpur, Malaysia.
4. M Kermadi, Z Salam, EM Berkouk, "A Rule-based Power Management Controller using Stateflow for Grid-Connected PV-Battery Energy System supplying Household load", 2018 9th IEEE International Symposium on Power Electronics for Distributed Generation Systems (PEDG), Charlotte, NC, pp. 1-6.
5. J Ahmed, Z Salam, YL Then, S Kashem, "A fast MPPT technique based on IV curve characteristics under partial shading", TENCON 2017-2017 IEEE Region 10 Conference, Penang, Malaysia, pp. 1696-1701
6. H Ahsan, Z Salam, SA Lone, "Modeling and simulation of an energy storage based multi-machine power system for transient stability study", 2017 IEEE Conference on Energy Conversion (CENCON 2017), UTM Kuala Lumpur, 30-31 Oct 2017, pp. 78-83.
7. ZEA Kherroubi, M Kermadi, EM Berkouk, Z Salam, "Real time implementation of space vector pulse width modulation for three level neutral point clamped (NPC) inverter using Arduino DUE board", 2017 IEEE Conference on Energy Conversion (CENCON 2017), UTM Kuala Lumpur, 30-31 Oct 2017, pp. 259-264.
8. N Prabakaran, Z Salam, K Palanisamy, "A hybrid multilevel inverter with reduced power electronic components with unipolar trapezoidal pulse width modulation", 2017 IEEE Conference on Energy Conversion (CENCON 2017), Kuala Lumpur, 30-31 Oct 2017, pp. 283-287.
9. NM Shannan, NZ Yahaya, B Singha, Z Salam, KY Ahmed, "Theoretical analysis of the series parasitic resistance in photovoltaic cell", 2017 IEEE 8th Control and System Graduate Research Colloquium (ICSGRC), pp. 73-76.
10. MS bin Arif, SM Ayob, A Iqbal, S Williamson, Z Salam, "Nine-level asymmetrical single phase multilevel inverter topology with low switching frequency and reduce device counts", 2017 IEEE International Conference on Industrial Technology (ICIT), pp. 1516-1521.
11. M Facta, Hermawan, Z Salam, Z Buntat, IR Smith, "Theoretical analysis for ozone yield of a high frequency silent discharge", AIP Conference Proceedings (2017) Vol. 1818 (1), pp. 020073.

12. AR Bhatti, Z Salam, "Charging of Electric Vehicle with Constant Price Using Photovoltaic Based Grid-connected System", 2016 IEEE International Conference on Power and Energy (PECon), Melaka, Malaysia, pp. 268-273.
13. RH Ashique, Z Salam, MJA Aziz, "A high gain soft switching non-isolated bidirectional DC-DC converter", 2016 IEEE International Conference on Power and Energy (PECon), Melaka, Malaysia pp. 417-422.
14. MS bin Arif, SM Ayob, Z Salam, "Asymmetrical multilevel inverter topology with reduced power semiconductor devices", 2016 IEEE Industrial Electronics and Applications Conference (IEACon), Kota Kinabalu, Malaysia, pp. 20-25.
15. M Facta, Z Salam, Z Buntat, "Piezoelectric transformer with pulse dropping technique for high voltage generation", 2016 IEEE International Conference of Industrial, Mechanical, Electrical, and Chemical Engineering (ICIMECE), pp. 10-13.
16. M Saad Bin Arif, Shahrine Md Ayob, Zainal Salam, "A new asymmetrical multilevel inverter topology with reduced device counts", 2016 IEEE International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES), pp. 1-6.
17. Vun Jack Chin, Z. Salam, K. Ishaque , "An Accurate Two Diode Model Computation for CIS Thin Film PV Module Using the Hybrid Approach", Fourth International Conference On Electric Power And Energy Conversion Systems (EPECS'15), Sharjah, UAE 24-26 Nov 2015, pp. 1-6.
18. Vun Jack Chin, Z. Salam, K. Ishaque , "An Improved Method to Estimate the Parameters of the Single Diode Model of Photovoltaic Module Using Differential Evolution", Fourth International Conference On Electric Power And Energy Conversion Systems (EPECS'15), Sharjah, UAE 24-26 Nov 2015, pp. 1-6.
19. MS Arif, SM Ayob, Z Salam, "Decomposed Fuzzy PID controller for power inverters regulation: An overview", 2015 2nd International Conference on Knowledge-Based Engineering and Innovation (KBEI), pp. 1-7.
20. Ahmed Majed, Zainal Salam, "Multilevel D-STATCOM for Sag and Swell Mitigation Using Modulation Index Control", 2015 IEEE Conference on Energy Conversion (CENCON 2015), Johor Bahru, Malaysia 19-20 Oct 2015, pp. 187-192.
21. Ratil H Ashique, Zainal Salam, Jubaer Ahmed, "An Adaptive P&O MPPT Using a Sectionalized Piece-wise Linear P-V Curve", 2015 IEEE Conference on Energy Conversion (CENCON 2015), Johor Bahru, Malaysia 19-20 Oct 2015, pp. 474-479.
22. Ratil H Ashique, Zainal Salam, Mohd Junaidi Abdul Aziz, "A High Power Density Soft Switching Bidirectional Converter Using Unified Resonant Circuit", 2015 IEEE Conference on Energy Conversion (CENCON 2015), Johor Bahru, Malaysia 19-20 Oct 2015, pp. 165-170.
23. Z. Salam, Jubaer Ahmad, M.Z. Ramli, "Comparative Study of Software and Hardware Solutions for Partial Shading in PV System", 2015 IEEE Conference on Energy Conversion (CENCON 2015), Johor Bahru, Malaysia 19-20 Oct 2015, pp. 480-485.

24. Sertac Bayhan, Haitham Abu-Rub, Zainal Salam, "An autonomous frequency and voltage controller for standalone doubly fed induction generator", 2015 IEEE Conference on Energy Conversion (CENCON 2015), Johor Bahru, Malaysia 19-20 Oct 2015, pp. 138-142.
25. Maoxing Li, Haitham Abu-Rub, Yushan Liu, Baoming Ge, Zainal Salam, "SiC power devices and applications in quasi-z-source converters/inverters", 2015 IEEE Conference on Energy Conversion (CENCON 2015), Johor Bahru, Malaysia 19-20 Oct 2015, pp. 331-336.
26. Mochammad Facta, Ngurah Ayu Ketut Umiati, Zainal Salam, Zolkafle Buntat, "Implementation of photovoltaic and simple resonant power converter for high frequency discharge application", 2015 2nd International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE), pp. 193-196.
27. Z. Salam, Z. Ramli, "Distributed maximum power point tracker for additional energy harvesting during partial shading of PV system", 2015 First IEEE Workshop on Smart Grid and Renewable Energy, Doha 22-23 March 2015, pp. 1-5.
28. N. Hashim, Z. Salam, S.M. Ayob, "Maximum Power Point Tracking for Stand-Alone Photovoltaic System Using Evolutionary Programming", The 2014 IEEE 8th International Power Engineering and Optimization Conference (PEOCO2014), Langkawi, Malaysia. 24-25 March 2014, pp. 7-13.
29. Salam, Z, Ahmed, J., "The application of soft computing techniques to improve the performance of maximum power point tracker for PV system during partial shading", The 2014 IEEE 8th International Power Engineering and Optimization Conference (PEOCO), Langkawi, Malaysia. 24-25 March 2014, Page(s): 237 - 242.
30. Facta, M, Hermawan, Karnoto, Salam, Z, Buntat, Z, "Double dielectric barrier discharge chamber for ozone generation", 2014 1st International Conference on Information Technology, Computer and Electrical Engineering (ICITACEE 2014), pp. 409 – 412.
31. Ahmed, Sk Moin; Abu-Rub, Haitham; Salam, Zainal;, "Model predictive control of a direct three-to-seven phase matrix converter", 2014 IEEE Energy Conversion Congress and Exposition (ECCE 2014), Pittsburgh, USA, pp. 1059 – 1063.
32. Ahmed, S.M., Abu-Rub, H., Salam, Z., Iqbal, A. "Dual matrix converters based seven-phase open-end winding drive", 2014 IEEE 23rd on International Symposium Industrial Electronics (ISIE 2104), Istanbul, Turkey, pp. 2105 – 2110.
33. Tajuddin, M.F.N., Ayob. S.M., Salam, Z.; "Global maximum power point tracking of PV system using dynamic population size differential evolution (DynNP-DE) algorithm" 2014 IEEE Conference on Energy Conversion (CENCON 2104), Johor Bahru, Malaysia, pp. 254 – 259.
34. Salam, Z., Ramli, M.Z., Zainal, T., "A low cost solar array simulator using halogen tungsten bulb with temperature control capability", 2014 IEEE Conference on Energy Conversion (CENCON 2014), Johor Bahru, Malaysia, pp.170 – 174.
35. Ahmed, Sk Moin; Abu-Rub, Haitham; Salam, Zainal; "Space vector control of dual matrix converters based five-phase open-end winding drive", 2014 IEEE Conference on Energy Conversion (CENCON 2014), Johor Bahru, Malaysia, pp. 348– 353.

36. Majed, Ahmed; Salam, Zainal; Amjad, Abdul Moeed, "HEPWM implementation for fifteen level cascaded inverter using field programmable gate array", 2014 IEEE Conference on Energy Conversion (CENCON 2014), Johor Bahru, Malaysia, pp. 331– 335.
37. Ahmed, Sk Moin; Salam, Zainal; Abu-Rub, Haitham, "Common-mode voltage elimination in a three-to-seven phase dual matrix converter feeding a seven phase open-end induction motor drive", 2014 IEEE Conference on Energy Conversion (CENCON 2014), Johor Bahru, Malaysia, pp. 207-212.
38. Salam Zainal, Rahman Azhan, "Efficiency for photovoltaic inverter: A technological review", 2014 IEEE Conference on Energy Conversion (CENCON 2014), Johor Bahru, Malaysia, pp. 175-180.
39. Sk Moin Ahmed, Haitham Abu-Rub, Zainal Salam, Abdellah Kouzou, "Space Vector PWM Technique for a Novel Three-to-Seven Phase Matrix Converter", Proc. of the 39th Annual Conference IEEE Industrial Electronics Soc. (IECON 2013), Vienna, Nov. 2013, pp. 4941-4947.
40. Sk Moin Ahmed, Haitham Abu-Rub, Zainal Salam, Atif Iqbal, "Space Vector PWM Technique for a Direct Five-to-Three-Phase Matrix Converter", 39th Annual Conference of the IEEE Industrial Electronics Society (IECON 2013), Vienna, Nov. 2013, pp. 4911-4917.
41. Zainal Salam, Abdul Moeed Amjad, Ahmed Majed, "Using Differential Evolution to solve the Harmonic Elimination Pulse Width Modulation for Five Level Cascaded Multilevel Voltage Source Inverter", IEEE First International Conference on Artificial Intelligence, Modeling and Simulation (AIMS 2013), Kota Kinabalu, Dec 2013, pp. 35-41.
42. J. Ahmed, Z. Salam. "A Soft Computing MPPT for PV System Based on Cuckoo Search Algorithm", IEEE International Conference on Power Engineering, Energy and Electrical Drives, 14-17 May 2013, Istanbul Turkey, pp. 558 – 562; ISSN :2155-5516.
43. Z. Salam, M. Facta, Amjad, "Design and Implementation of a Highly Efficient DBD Ozonizer Using the Single Switch Resonant Converter with Piezoelectric Transformer", Proc. of the 28th Annual IEEE Applied Power Electronics Conference and Exposition (APEC 2013), Long Beach, USA, pp. 1596-1600.
44. Z. Salam, M. Facta, M. Amjad, "Transformerless Power Supply based on Single Switch Resonant Inverter for Ozone Generation", Proc. of the 28th Annual IEEE Applied Power Electronics Conference and Exposition, (APEC 2103), Long Beach, USA, pp. 3330-3333.
45. Salam, Z. ; Ramli, M.Z., "A simple circuit to improve the power yield of PV array during partial shading", IEEE Energy Conversion Congress and Exposition (ECCE 2012), Raleigh, North Carolina, pp. 1622 – 1626.
46. Tajuddin, M.F.N. ; Ayob, S.M. ; Salam, Z., "Tracking of maximum power point in partial shading condition using differential evolution (DE)", IEEE International Conference on Power and Energy (PECon 2012), Kota Kinabalu, Malaysia, pp. 384 – 389.
47. Taheri, S. ; Taheri, H. ; Salam, Z. ; Ishaque, K. ; Hemmatjou, H. . "Modified Maximum Power Point tracking (MPPT) of grid-connected PV system under partial shading conditions", 25th IEEE Canadian Conference on Electrical & Computer Engineering (CCECE 2012), pp. 1 – 4

48. Jannati, M. ; Idris, N.R.N. ; Salam, Z., "A new method for modeling and vector control of unbalanced induction motors, " IEEE Energy Conversion Congress and Exposition (ECCE 2012), Raleigh, North Carolina, 2012, pp. 3625 – 3632.
49. Ishaque, K. ; Salam, Z. ; Shamsudin, A. , "Application of particle swarm optimization for maximum power point tracking of PV system with direct control method", 37th IEEE Annual Conference on Industrial Electronics Society (IECON 2011), Melbourne, Australia, pp. 1214 – 1219.
50. Mirzaei, A. ; Jusoh, A. ; Salam, Z. ; Adib, E. ; Farzanehfard, H.. "A novel soft switching bidirectional coupled inductor Buck-Boost converter for battery discharging-charging', IEEE Applied Power Electronics Colloquium (IAPEC 2011), Johor Bahru, Malaysia, pp. 195 – 199.
51. Ramli, M.Z. ; Salam, Z.. "A retrofit circuit to increase output power of PV system during partial shading condition", IEEE PES Conference on Innovative Smart Grid Technologies - Middle East (ISGT Middle East 2011), Jeddah, KSA, pp. 1 – 6.
52. Ishaque, K. ; Salam, Z. ; Taheri, H. ; Shamsudin, A.. "Maximum Power Point Tracking for PV system under partial shading condition via particle swarm optimization", IEEE Applied Power Electronics Colloquium (IAPEC 2011), Johor Bahru, Malaysia, pp. 5 – 9.
53. Ishaque, K. ; Salam, Z. ; Taheri, H. ; Shamsudin, A., "Parameter extraction of photovoltaic cell using differential evolution method", IEEE Applied Power Electronics Colloquium (IAPEC 2011), Johor Bahru, Malaysia pp.10 - 15 .
54. Amjad, M.; Ishaque, K.; Abdullah, S.S.; Salam, Z.; "An alternative approach to design a Fuzzy Logic Controller for an autonomous underwater vehicle" 2010 IEEE Conference on Cybernetics and Intelligent Systems (CIS 2010), Kuala Lumpur, Malaysia, pp. 195 – 200.
55. Taeed, F.; Salam, Z.; Ayob, S. M.; "Implementation of Single Input Fuzzy Logic Controller for Boost DC to DC power converter", 2010 IEEE International Conference on Power and Energy (PECon 2010), Kuala Lumpur, Malaysia, pp. 797 – 802.
56. Mirzaei, A.; Jusoh, A.; Salam, Z.; Adib, E.; Farzanehfard, H.; "Analysis and design of a high efficiency bidirectional DC-DC converter for battery and ultracapacitor applications", 2010 IEEE International Conference on Power and Energy (PECon 2010), Kuala Lumpur, Malaysia pp. 803 – 806.
57. Bahari, N.; Salam, Z.; Taufik; "HEPWM angles of a three phase voltage source inverter", 36th Annual Conference on IEEE Industrial Electronics Society (IECON 2010), Phoenix, USA, pp. 2683 – 2688.
58. Ayob, S. M.; Salam, Z.; Azli, N. A.;" Inverter control using a simplified Fuzzy PI controller", 5th IET International Conference on Power Electronics, Machines and Drives (PEMD 2010), Dublin, Ireland, pp. 1 – 6.
59. Taheri, H.; Salam, Z.; Ishaque, K.; Syafaruddin, "A novel Maximum Power Point tracking control of photovoltaic system under partial and rapidly fluctuating shadow conditions using Differential Evolution', 2010 IEEE Symposium on Industrial Electronics & Applications (ISEA 2010), Langkawi, Malaysia, pp. 82 – 87.

60. Zainal Salam, N. Bahari, "Selective Harmonics Elimination PWM (SHEPWM) Using Differential Evolution Approach", Joint International Conference on Power Electronics, Drives and Energy Systems, (PEDES 2010 & Power India), New Delhi, pp. 1-5.
61. Facta, M., Salam, Z., Buntat, Z., Silent discharge ozonizer for colour removal of treated palm oil mill effluent using a simple high frequency resonant power converter", IEEE Int. Conf. Power and Energy (PEcon 2010), Kuala Lumpur, Malaysia, pp. 39 – 44.
62. Zainal Salam, Kashif Ishaque, and Hamed Taheri, "An Improved Two-Diode Photovoltaic (PV) Model for PV System" Joint International Conference on Power Electronics, Drives and Energy Systems, (PEDES & 2010 Power India), New Delhi, pp. 6-10.
63. Facta, M., Salam, Z., Buntat, Z., "The development of ozone generation with low power consumption", IEEE Conf. on Innovative Technologies in Intelligent Systems and Industrial Applications, 2009. (CITISIA 2009), Kuala Lumpur, Malaysia, pp. 440 - 445
64. M. Ayob, Z. Salam, N.A. Azli, "DSP-Based Single Input PI-Fuzzy Controller for Inverter System", The 39th IEEE Power Electronics Specialist Conference (PESC 2008), Rhode Island, Greece, 15-19 June 2008, pp. 579-584.
65. S. M. Ayob, N. A. Azli, Z. Salam, "PWM Inverter Regulation Using Single Input Fuzzy Logic Controller", Proc. 2nd IEEE International Conference on Power and Energy Conference 2008 (PECon 2008), Johor Bahru, Malaysia, 1-3 Dec. 2008, pp. 635-639.
66. S. M. Ayob, N. A. Azli, Z. Salam, "Review on Controllers of PWM Inverters", Proc. 2nd IEEE International Conference on Power and Energy Conference 2008 (PECon 2008), Johor Bahru, Malaysia, 1-3 Dec. 2008, pp. 589-593.
67. Facta Mochammad, Zainal Salam, Zolkafle Buntat, "Low Voltage High Frequency Power Converter for Dielectric Barrier Discharge Chamber in Ozone Generation", Proceeding 6th Regional Annual Fundamental Science Seminar 2008 (RAFSS 2008), Johor Bahru, Malaysia, 27-29 May 2008.
68. Facta, Mochammad; Zainal Salam, Zolkafle Buntat, "Modified Dielectric Barrier Discharge Chamber to Produce Lower Power Consumption for Ozone Gas Generation", IEEE 14th Asian Conference on Electric Discharge 2008 (ACED 2008), Bandung, Indonesia, 23-25 Nov. 2008.
69. Facta Mochammad, Zainal Salam, Awang Jusoh, Zolkafle Buntat, "Improvement in Ozone Generation with Low Voltage High Frequency Power Converters", Proc. 2nd IEEE International Conference on Power and Energy Conference 2008 (PECon 2008), Johor Bahru, Malaysia, 1-3 Dec. 2008, pp. 1446-1450.
70. Naziha Ahmad Azli, Awang Jusoh, Zainal Salam, "MPPT Performance of a Grid-connected PV Inverter under Malaysian Conditions", Proc. 2nd IEEE International Conference on Power and Energy Conference 2008 (PECon 2008), Johor Bahru, Malaysia, 1-3 Dec. 2008, 460-462.
71. Naziha Ahmad Azli, Awang Jusoh, Zainal Salam, "Effect of Fill Factor on the MPPT Performance of a Grid-connected Inverter under Malaysian Conditions", Proc. 2nd IEEE International Conference on Power and Energy Conference 2008 (PECon 2008), Johor Bahru, Malaysia, 1-3 Dec. 2008, pp. 635-637.

72. M. Imran Hamid, Makbul Anwari, Z. Salam, Taufik, "Load Sharing of Single Phase PV Inverter Connected to the Grid", Proc. 2nd IEEE International Conference on Power and Energy Conference 2008 (PECon 2008), Johor Bahru, Malaysia, 1-3 Dec. 2008, pp. 1672-1676.
73. S. N. F. Mohamed, N. A. Azli, Z. Salam, S.M. Ayob, "Sugeno-type Fuzzy Logic Controller (SFLC) for a Modular Structured Multilevel Inverter (MSMI)", Proc. 2nd IEEE International Conference on Power and Energy Conference 2008 (PECon 2008), Johor Bahru, Malaysia, 1-3 Dec. 2008, pp. 599-603.
74. Zainal Salam, Awang Jusoh, Naziha Ahmad Azli; "Grid connected Inverter testing facility in Malaysia", Proceeding Seminar on Progress of Solar Energy Research and Development, Bangi, Malaysia, 21-22 Oct. 2008, pp. 95-100.
75. Naziha Ahmad Azli, Pakharuddin Mohd Samin, Awang Jusoh, Zainal Salam "Building Integrated Photovoltaic (BIPV) Research and Development at UTM", Proceeding Seminar on Progress of Solar Energy Research and Development, Bangi, Malaysia, 21-22 Oct. 2008, pp. 87-93.
76. Ayob, S.M., Salam, Z., Azli, N.A., "Analysis of Double Loops Discrete Single Input PI Fuzzy for Single phase Inverter", 7th International Conference on IEEE Power Electronics and Drive Systems, 2007. (PEDS 07), Bangkok, pp. 1174 – 1178.
77. Salam, Z., Ayob, S.M., Ramli, Z. Azli, N.A., "An Improved DC-DC Type High Frequency Transformer-Link Inverter by Employing Regenerative Snubber Circuit", the 7th International Conference on IEEE Power Electronics and Drive Systems, 2007. (PEDS 07), Bangkok, pp. 1081 - 1084.
78. Ayob, S.M., Salam, Z., Azli, N.A., "Piecewise Linear Control Surface for Single Input Nonlinear PI-Fuzzy Controller", the 7th International Conference on IEEE Power Electronics and Drive Systems, 2007. (PEDS 07), Bangkok, pp. 1533 – 1536.
79. Salam, Z., Toh, L.S., Ramli, Z, "Deadbeat Controller for Bidirectional High-frequency Link Inverter", IEE Conference on Power Electronics and Machine Drives (PEMD 06-Dublin, Ireland) 4-6 April 2006, pp. 152-156.
80. Salam, Z. Toh, L.S., Ramli, Z, "Spike Suppression in a Bi-directional High Frequency Transformer-Link Inverter Using a Regenerative Snubber", IEEE Conference on Power Electronics and Machine Drives (PEMD 06), Dublin, Ireland, 4-6 April 2006, pp. 157-161.
81. Salam, Z. Tan, P.C, and Jusoh, A., "A Single-Phase Hybrid Active Power Filter Connected to a Photovoltaic Array", IEE Conference on Power Electronics and Machine Drives (PEMD 06), Dublin, Ireland, 4-6 April 2006, pp. 85-89.
82. L. S. Toh, M. Z. Ramli, Z. Salam, "AC Voltage Regulation of a Bidirectional High-Frequency Link Converter Using a Deadbeat Controller", Proc. IEEE / IAS 41st Annual Meeting, October 8 - 12, 2006, Tampa, Florida, pp. 1045-1052.
83. Zainal Salam, Toh Leong Soon and Mohd. Zulkifli Ramli, "Hardware implementation of the High Frequency Link Inverter Using the dSPACE DS1104 Digital Signal Processing Board", 1st IEEE Intl. Conf on Power and Energy, (PECon 06), Putrajaya, Malaysia, Nov 2006, pp. 348-352

84. Ayob, S.M., Salam, Z.; Azli, N.A, "Simple PI Fuzzy Logic Controller Applied in DC-AC Converter", Proc of the IEEE International Power and Energy Conference, (PECon 06), Putrajaya, Malaysia, Nov. 2006 pp. 393 - 398.
85. Jusoh, A. Ayob, S.M., Salam, Z. "Operation and Modelling of the Unloaded Bi-Directional DC/DC Converter Performing as an Active Damping Function in a Simple DC System", Proc of the IEEE International Power and Energy Conference (PECon 06), Putrajaya, Malaysia, Nov. 2006, pp. 388 - 392.
86. Ayob, S.M, Salam, Z., "Trapezoidal PWM scheme for cascaded multilevel inverter", Proc of the IEEE International Power and Energy Conference (PECon 06), Putrajaya, Malaysia, Nov. 2006,, pp 368-372.
87. Nge Chee Lim, Zainal Salam, "Modified Natural Commutated Switching Technique for HF Link DC/AC Converter" Proc. of 11th European Conference on Power Electronics and Applications, (EPE 2005), Dresden, Germany, 11-14 Sept. 2005, pp. P1-P7
88. P. C. Tan, Z. Salam, A. Jusoh, " A Single-Phase Hybrid Active Power Filter using Extension p-q Theorem for Photovoltaic Application" , Proc. of the Sixth IEEE Power Electronics and Drives Systems (PEDS 05), Kuala Lumpur, Malaysia, Nov 28-Dec 1, 2005, pp. 1250-1255
89. L. S. Toh, Z. Salam, and M.Z. Ramli, "High-Frequency Transformer-Link Inverter with Regenerative Snubber", Proc. of the Sixth IEEE Power Electronics and Drives Systems (PEDS 05), Kuala Lumpur, Malaysia, Nov 28-Dec 1, 2005, pp. 642-647.
90. Nge, C.L., Salam, Z., "Application of Natural Commutation Technique to Center-Tapped HF Link Inverter", Proc. of the Sixth IEEE Power Electronics and Drives Systems (PEDS 05), Kuala Lumpur, Malaysia, Nov 28-Dec 1, 2005, pp 90-94.
91. A. M. Razali, Salam, Z, "Analysis Of Natural Sampled PWM Switching Strategy For A Cascaded Multilevel Inverter Using Double Integral Fourier Method", Proc. of the Sixth IEEE Power Electronics and Drives Systems (PEDS 05), Kuala Lumpur, Malaysia, Nov 28-Dec 1, 2005, pp. 1468-1473.
92. A. Jusoh, Z. Salam, S. M. Ayob, M. R. Sahid, "Simulation and experimental results of the bidirectional DC-DC converter operating as an active damping device in a simple system", Proc. of the Sixth IEEE Power Electronics and Drives Systems (PEDS 05), Kuala Lumpur, Malaysia, Nov 28-Dec 1, 2005, pp 378-382.
93. Ayob, S. and Salam, Z., "A new PWM control scheme for cascaded multilevel inverter using multiple trapezoidal modulation signal", 2nd IEE Int. Conf. on Power Electronic, Machine and Drives (PEMD 04), Edinburgh, March 2004, pp. 242-246.
94. Salam, Z, Ramli, Z. L.S Toh and C.L Nge, "An Isolated Bidirectional Inverter Using High Frequency Center-tapped Transformer." 2nd IEE Int. Conf. on Power Electronic, Machine and Drives (PEMD 04), Edinburgh, March 2004, pp. 644-649.
95. Salam, Z., "An on-line Harmonics Elimination PWM Scheme for Three-Phase Voltage Source Inverter Using Quadratic Curve Fitting" Proc. of the 30th IEEE Industrial Electronics Conf. (IECON 04), Busan, Korea, Nov 2004, Vol.1 pp.704-708.

96. Salam Z, Ramli Z, "A DC-DC Type Bidirectional High Frequency Link Inverter Using Center-Tapped Active Rectifier", Proc. of the 30th IEEE Industrial Electronics Conf. (IECON 04), Busan, Korea, Nov. 2004, Vol. 1, pp. 47-50.
97. Z. Salam, M. Z. Ramli, L. S. Toh and C. L. Nge, "A Bidirectional High-frequency Link Inverter Using Center-tapped Transformer", Proc of Power Electronics Specialist Conference (PESC 04), Aachen, Germany, June 2004, pp. 3883-3888.
98. P.C Tan and Zainal Salam, " A New Single Phase Two-wire Hybrid Active Power Filter Using Extension p-q Theorem for Photovoltaic Application", IEEE National Power and Energy Conference (PECon 04), Kuala Lumpur, Malaysia, 29-30 Nov 2004, pp. 126-131.
99. Chee Lim Nge and Zainal Salam, "Unipolar SPWM HF LINK Soft Switching DC/AC Converter", IEEE National Power and Energy Conference (PECon 04), Kuala Lumpur, Malaysia, 29-30 Nov 2004, pp. 116-120.
100. Leong Soon Toh, Zainal Salam, Mohd Zulkifli Ramli, " Analysis and Design of a Closed loop Controller for bidirectional High Frequency Link Inverter", IEEE National Power and Energy Conference (PECon 04), Kuala Lumpur, Malaysia, 29-30 Nov 2004, pp. 67-72.
101. Aziz, J. and Salam, Z., "A New Pulse-width Modulation (PWM) Scheme for Modular Structured Multilevel Voltage Source Inverter", European Power Electronics Conference (EPE'03), Toulouse, France, Sept. 2003, pp. P.1-P.8
102. J.A. Aziz, Salam, Z., Safie, S.I., "Analytical Approach to Obtain the Harmonics Spectra of a Five Level Cascaded Inverter Subjected to a New Modulation Scheme", Proc. of the 5th IEEE Int. Conf of Power Electronic and Drives Systems, (PEDS 03), Singapore, Nov 2003, Vol.1, pp. 157-161.
103. Salam, Z., Aziz, J.A, Ahmed, S.S., "Single carrier PWM Scheme for Cascaded Multilevel Voltage Source Inverter", Proc. of the 5th IEEE Int. Conf of Power Electronic and Drives Systems, (PEDS 03), Singapore, Nov 2003, Vol.1, pp. 406 – 410.
104. Salam, Z., Safie, S.I., and Yap, L.J., "An On-line Harmonics Elimination PWM Scheme for Three-Phase Voltage Source Inverters", Proc. of the 5th IEEE Int. Conf of Power Electronic and Drives Systems, (PEDS 03), Singapore, Nov 2003, Vol.1, pp. 821-824.
105. Sim, P.K., and Salam, Z. "Some Issues on the Design of a Voltage Regulator Module (VRM) for Microprocessor Power Supply", Proc. of the IEEE Nat. Conf of Power and Energy (PECon 03), Bangi, Malaysia, Dec 2003, pp. 110-116.
106. J. Aziz, Z. Salam, " An alternative PWM Scheme for Multilevel Voltage Source Inverter", Proc. of the IEEE Nat. Conf of Power and Energy (PECon 03), Bangi, Malaysia, Dec 2003, pp. 83-87.
107. M.Z. Ramli, Z. Salam, L.S Toh and C.L Nge, "A bidirectional Inverter with High Frequency Isolated Transformer", Proc. of the IEEE Nat. Conf of Power and Energy (PECon 03), Bangi, Malaysia, Dec 2003, pp. 71-75.
108. Salam, Z., Lynn, C.T, "Algorithm for Near Optimal Harmonics Elimination PWM Based on Quadratic Approximation Method", Proc. of IEEE Conf. on Industrial Electronics (IECON '02), Sevilla, Spain, Nov. 2002, pp. 1306-1311.

109. Bakri Hassan, Abdul Halim Mohd. Yatim, Zainal Salam, "A Study on The Performance of Solar Charging for Rechargeable Alkaline Manganese (RAM™) Battery in Cellular Phone Application", Technical Proceeding of the VIII, IEEE International Power Electronics Congress, 2002 (CIEP '02), Mexico, Oct 2002, pp.129-133.
110. Aziz, J.A, Salam, Z., "A PWM Strategy for the Modular Structured Multilevel Inverter Suitable for Digital Implementation", Technical Proceeding of the VIII, IEEE International Power Electronics Congress, 2002 (CIEP '02), Mexico, Oct 2002, pp. 160-164.
111. Badaruddin Muhammad, Zainal Salam, Abdul Halim Mohd Yatim, Abu Khairi A'ain' "Development of a New Charging Method for Rechargeable Alkaline Manganese (RAM) Battery", Proc. of IEEE Power Electronics and Drive System (PEDS '01), Bali, Indonesia, Oct. 2001, Vol.1, pp. 311-314.
112. Khosru Mohammad Salim, Zainal Salam, Faridah Taha, Abdul Halim Mohammad Yatim, "Development of a Fuel Cell Power Conditioner System", Proc. Of World Engineering Congress (WEC'99), Subang, Malaysia, July 1999. pp.125-129.
113. Khosru Mohammad Salim, Salam, Z. Faridah Taha, Abdul Halim Mohammad Yatim, "Development of a Fuel Cell Power Conditioner System", Proc. of IEEE Power Electronics and Drive System (PEDS 99), Hong Kong, July 1999, Vol.2, pp. 1153-1156.
114. Salam,Z., Goodman, C.J., "Compensation of fluctuating DC link voltage for traction inverter drive" Proc. IET Power Electronics and Drive Systems (PEDS 1996), Nottingham, UK, pp. 390 – 395.

RESEARCH MONOGRAPH

1. Zainal Salam, "Active Filter", Lambert Publication, Germany.

STANDARDS DOCUMENTS

1. Malaysian Standard MS 62257-1:2009; Recommendations for small renewable energy and hybrid systems for rural electrification-Part 1: General introduction to rural electrification; Department of Standards, Malaysia.
2. Malaysian Standard MS 62257-2:2009; Recommendations for small renewable energy and hybrid systems for rural electrification-Part 2: From requirements to a range of electrical systems; Department of Standards, Malaysia.
3. Malaysian Standard MS 62257-3:2009; Recommendations for small renewable energy and hybrid systems for rural electrification-Part 3: Project development and management, Department of Standards, Malaysia.
4. Malaysian Standard MS 62257-4:2009; Recommendations for small renewable energy and hybrid systems for rural electrification-Part 4: System selection and design, Department of Standards, Malaysia.
5. Malaysian Standard MS 1837:2005 Installation of Grid-Connected Photovoltaic, 2003-2005, Department of Standards, Malaysia.

CHAPTER IN BOOKS

1. Zainal Salam , Toh Leong Soon. "Design of Bidirectional High Frequency Inverter Utilising Center-Tapped Transformer" in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 1-16, ISBN 978-983-52-0647-4.
2. Zainal Salam , Mohd. Zulkifli Ramli, "A Modified DC-DC Type High Frequency Transformer-Link Inverter Incorporating a Regenerative Snubber", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 17-29, ISBN 978-983-52-0647-4.
3. Zainal Salam , Nge Chee Lim, "Cycloconverter-type High Frequency Link Inverter", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 30-52, ISBN 978-983-52-0647-4.
4. Zainal Salam , Toh Leong Soon. "Closed-Loop Control Techniques for Inverters" in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 52-75, ISBN 978-983-52-0647-4.
5. Zainal Salam , Toh Leong Soon and Mohd. Zulkifli Ramli, "Deadbeat Controller for High Frequency Link Inverter", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 76-97, ISBN 978-983-52-0647-4.
6. Md. Shahrin Ayob, Zainal Salam and Naziha Ahmad Azli, "Inverter Regulation Using Single Input Fuzzy-PI Controller", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 98-114, ISBN 978-983-52-0647-4.
7. Zainal Salam , Toh Leong Soon and Mohd. Zulkifli Ramli, "DSP Implementation of High Frequency Link Inverter", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 115-133, ISBN 978-983-52-0647-4.
8. Zainal Salam, Khosru Mohammad Salim, "Design of a Three- phase Inverter Using Single-chip Microcontroller", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 134-150, ISBN 978-983-52-0647-4.
9. Zainal Salam, Chew Tit Lynn, "An On-line, Real-time Harmonics Elimination PWM (HEPWM) for Inverters", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 151-165, ISBN 978-983-52-0647-4.
10. Junaidi Abdul Aziz and Zainal Salam, "Multilevel Inverter Topologies", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 166-181, ISBN 978-983-52-0647-4.
11. Zainal Salam, Junaidi Abdul Aziz and Ahmed, S.Shahnawaz, " Digital Implementation of a New SPWM Switching Scheme for Modular Structured Multilevel Voltage Source Inverter", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 182-213, ISBN 978-983-52-0647-4.
12. Junaidi Abdul Aziz and Zainal Salam "Harmonic Analysis of Five-Level Inverter", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 214-237, ISBN 978-983-52-0647-4.
13. Zainal Salam, Azzidin Mohamad Razali and Junaidi Aziz, "Closed-form Solution for the Harmonics of a Five Level Cascaded Inverter with the Single-Carrier Modulation: the Double Integral Fourier Series Approach", in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 238-269, ISBN 978-983-52-0647-4.

14. Shahrin Md. Ayob and Zainal Salam, "Trapezoidal PWM Scheme for Multilevel Inverter" in Recent Advances in Power Inverters, Penerbit UTM Press, 2008, pp. 270-284, ISBN 978-983-52-0647-4.
15. Awang Jusoh, Naziha Ahmad Azli and Zainal Salam, 'Development of a 5 kW Inverter for AC Power Supply Applications", in Recent Trends in Renewable Energy and in Power Electronics, Penerbit UTM Press, 2008, pp. 84-96, ISBN 978-983-52-0639-9.

EXPERT TECHNICAL REPORTS

1. Testing of Fronius IG/15.4.200.001 PV Inverter: (Fronius GmbH); Report No. 8/2009,; Client: PVMC, Universiti Teknologi Mara, Shah Alam, Selangor, Malaysia, 28th Dec 2009
2. Testing of Power Master PM-3000GT PV Inverter (Power Master Tech. Co. Ltd.); Report No. 8/2009,; Client: Kemuning Structures Sdn. Bhd.,Shah Alam, Selangor, 28th Dec 2009
3. Testing of MIMI 1000, PV Inverter. Report No. 3/2009; Client: UMPEDAC, Universiti Malaya, Kuala Lumpur, 18th Feb 2009
4. Testing of Carlo Gavazzi ISMG 1 60 IT PV Inverter; Report No. 4/2009; Client: Carlo Gavazzi Automation (M) Sdn. Bhd. Petaling Jaya, Selangor, 22nd July 2009.
5. Testing of UM-2 PV Inverter; Report No. 5/2009; Client: UMPEDAC, Universiti Malaya, Kuala Lumpur, and 11th Nov 2009.
6. Testing of UM-3 PV Inverter Report No. 6/2009; Client: UMPEDAC, Universiti Malaya, Kuala Lumpur, 18th Nov 2009.
7. Testing of SolarMax 6000Cx PV Inverter; Report No. 5/2009 Client: Laurenz Leistung Sdn. Bhd., Beranang, Selangor, 25th Sept 2009.
8. Testing of SolarMax 6000Cx PV Inverter; Report No. 5/2009 Client: Laurenz Leistung Sdn. Bhd., Beranang, Selangor, 25th Sept 2009.
9. Testing of KACO POWADOR 4501xi-GR PV Inverter; Report No. 1/2009. Client: Laurenz Leistung Sdn. Bhd., Beranang, Selangor, 29th Sept 2009.
10. Test Report: Grid-connected PV inverter SUNNY BOY SB700; Report No. 7/2009, Client: Dept. of Energy Conversion, Universiti Teknologi Malaysia, 15th Dec 2009.
11. Testing of FRONIUS IG/15 4.200.001PV Inverter Report No. 1/2010; Client: Eco-Gallery, Sdn. Bhd., 15th April 2010.
12. Testing of POWER MASTER PM-3000GT PV Inverter;; Report No. 3/2010; Client: Kemuning Structures Sdn. Bhd., 30th Sept 2010
13. Testing of POWER MASTER PM-4000GT PV Inverter; Report No. 4/2010; Client: Kemuning Structures Sdn. Bhd., 15th Dec 2010.
14. Testing of AURORA PVI-6000-OUTD-S-AU PV Inverter; Report No. 4/2010; Client: Power-One Energy Solutions Sdn. Bhd., 31st Dec 2010.

15. Testing of SANUPS P61A302 (3kW) (Sanyo Denki), Grid Connected Inverter, Test Report No 2/2011; Client: Eco Gallery Sdn. Bhd, Ulu Tiram, Johor; 20th April 2011.
16. Testing of PV Inverter MPP Solar MPI 3000 Grid Connected Inverter; Test Report 1/2011; Client: Arus Spektrum Sdn. Bhd. Shah ALam, Selangor, 20th April 2011.
17. Testing of SANUPS P61A302 (5kW) (Sanyo Denki) Grid Connected Inverter, Test Report No 3/2011; Client: Eco Gallery Sdn. Bhd, Ulu Tiram, Johor; 19th May 2011.
18. Testing of Solar River SR4K4TLA1 (4kW) Grid Connected Inverter, Technical Report no 4/2011 Client: Eco Gallery Sdn. Bhd, Ulu Tiram, Johor; 7th Sept 2011.
19. Testing of 4HE-t (ELTEK VELERE) (5kW) Grid Connected Inverter, Test Report No. 5/2011, Client: Eltek Velere, Petaling Jaya, Selangor, 3rd Oct 2011
20. Technical (Test) Report for 4HE-t (ELTEK VELERE) (5kW) -- SAMPLE 2, Test Report No. 6/2011: Client: Eltek Velere, Petaling Jaya, Selangor, 8th Oct 2011

KEYNOTE SPEECH

- 1 Keynote Speech at the 8th IEEE Power Engineering and Optimization Conference (PEOCO 2014), Langkawi, Malaysia, 24th March 2014. Title: "The Application of Soft Computing Techniques to Improve the Performance of Maximum Power Point Tracker for PV System During Partial Shading".
- 2 Keynote Speech at the IEEE 2014 Power and Energy Conference (PECon 2014), Kuching, Sarawak 2nd Dec 2014. Title: Soft Computing-Based Harmonic Elimination PWM Techniques for Multi-Level Voltage Source Inverter.
- 3 Panelist/Keynote Speech for the First Workshop on Smart Grid and Renewable Energy (SGRE 2015), 22-25 March 2015, Doha, Qatar. Title: Solar Photovoltaic Charging for Electric Vehicles.
- 4 Keynote Speech at the IEEE International Conferences on Signal Processing, Communications, Power and Embedded System (SCOPEs 2016), Centurion University of Technology and Management, Paralakhemundi, India, 3-5 Oct. 2016.
- 5 Keynote Speech at the IEEE International Conference on Innovations in Power and Advanced Computing Technologies, (i-PACT-2017), Vellore Institute of Technology, VIT University, Vellore, Tamil Nadu, India, 21-22nd April 2017.
- 6 Keynote at the International Seminar on Photovoltaic, at the Aligarh Muslim University, India, 26th April 2017.
- 7 Keynote at the 2018 International Conference in Electrical Electronics, Communication and Control (ICEECC 2018); Johor Bahru, Malaysia, 5 Dec 2018; Title: Solar PV: Prospects and Challenges
- 8 Keynote Speech at the IEEE International Conference, Computer, Electrical and Control Systems, Batam, Indonesia (ICECOS 2019), 2-3rd October 2019.

- 9 Keynote Speech at the ICW-Telkomnika Conference, Jogjakarta, Indonesia (ICECOS 2019), 21-23rd November 2019

INVITED SPEECH/RESOURCE PERSON

1. Invited speaker for the IEEE National Lecture Program (NLP) 2012 at the Faculty of Engineering, Universiti Putra Malaysia, 25th April 2012. Title: "MPPT for Partial Shading Conditions".
2. Invited speaker for the Seminar and Colloquium on R&D Activities and Quality Control for PV Products, 20th May 2008 in Kuala Lumpur, Malaysia: Title: "IQCC—Inverter Quality Control in Malaysia".
3. Invited speaker for the Seminar at the Ain Shams University, Cairo, 7th Dec 2014. Title: "The Application of Soft Computing Techniques for Maximum Power Point Tracker of PV System".
4. Invited speaker for the Seminar at Arab Academy of Science and Technology., Alexandria, Egypt, 9th Dec 2014. Title: "Research Activities in Electrical Engineering UTM, Johor Bahru".
5. Invited speaker for the A half-day seminar at Faculty of Electrical Engineering Universiti Malaysia Perlis, 24th Feb. 2016; Title: "Solar Photovoltaic: Prospects and Challenges in Malaysia".
6. Invited Speaker for the IEEE National Lecture Program, UiTM Shah Alam, 25th May 2016; Title: "Techniques to Enhance Energy Output for PV System During Partial Shading".
7. Invited speaker for the a half-day seminar at Faculty of Electrical Engineering, Universiti Teknikal Malaysia, Melaka, 18th May 2016; Title: "Solar Photovoltaic: Prospects and Challenges of this Industry in Malaysia"
8. Resource person for the half-day seminar at Faculty of Electrical Engineering Universiti Teknikal Malaysia, Melaka, 19th May 2016, Title: "Publishing in High Impact Journal".
9. Resource person for the one-day seminar at Advance Information System, Universiti Teknologi Malaysia, Kuala Lumpur, 26th May 2015, Title: "Publishing in High Impact Journal".
10. Resource person for the half-day Post Graduate Seminar, Faculty of electrical Engineering, Universiti Teknologi Malaysia, Johor Bahru, 5st June 2015, Title: "Publishing in IEEE Journals"
11. Resource person for the half-day seminar at Faculty of Electrical Engineering, Universiti Teknologi Malaysia, Johor Bahru, 1st June 2016, Title: "Publishing in High Impact Journal".
12. Resource person for the half-day seminar at Institute of Future Energy, Universiti Teknologi Malaysia, Johor Bahru, 16st March 2016, Title: "Writing a winning Science Fund Proposal".
13. Resource person for one-day workshop at MJIT Research Department, UTM Kuala Lumpur, 7th Feb 2017, Title: "Research Grant Workshop".
14. Resource person for two-day seminar at University Sriwijaya, Palembang, Indonesia 13-14th Feb 2017, Title: "Publishing in High Impact Journal".

15. Resource person for two-day seminar at University Andalas, Sumatera, Indonesia 13-14th Feb 2017, Title: "Publishing in High Impact Journal".
16. Resource person for one-day seminar at Aligarh Muslim University, India, 25th April 2017, Title: "Publishing in High Impact Journals".
17. Resource person for one-day seminar at National Institute of Technology, Srinagar, India, 29th April 2017, Title: "Solar Photovoltaic: Clean and Green Source of Energy".
18. Resource person for one-day seminar at National Institute of Technology, Srinagar, India, 2nd May 2017, Title: "Publishing in High Impact Journals".
19. Resource person for conducting workshop at Faculty of Engineering, Duzce University, Turkey, 25-26th July 2017, Title: "Publishing in High Impact Journal".
20. Resource person for one-day seminar at Faculty of Engineering, Duzce University, Turkey, 31st July 2017, Title: "Increasing the performance of PV system during partial shading and module mismatches".
21. Resource person for the half-day seminar at Faculty of Electrical Engineering, Universiti Teknologi Malaysia, Johor Bahru, 23rd Nov 2017, Title: "Important Issues Related to Publishing in High Impact Journals".
22. Resource person for 2 days program at Universiti Malaysia Pahang (UMP), Gambang, 4-5th Dec 2017, Title: "Writing an Impactful Research Publications 2017 (Engineering, Technology & Social Science)".
23. Resource speaker of a workshop at Faculty of Engineering - King Abdulaziz University, Rabigh, Saudi Arabia, 29-30th Jan 2018, Title: "Important Issues Related to Publishing in High Impact Journals".
24. Resource speaker of the seminar at Faculty of Engineering - King Abdulaziz University, Rabigh, Saudi Arabia, 6th Feb 2018, Title: "Solar Photovoltaic: Potential and Application as Renewable Energy Resources".
25. Resource person for 2 days program at Ecole Nationale Polytechnique Algiers, Algeria, 5-6 Nov 2018, Title: "Publishing in High Impact Journals".
26. Invited speaker for one-day program at Eloued University, Algeria, Dec 2017, 7 Nov 2018, Title: "Important Aspects of Publishing in High Impact Journals"

OTHER CONTRIBUTIONS TO PROFESSIONAL BODIES AND SOCIETIES

1. Reviewer: IEEE Transaction Ind. Electronics (2012-2013)
2. Reviewer: IEEE Transaction Power Electronics (2014).
3. Reviewer: IEEE Transaction Sustainable Energy (2011-2013).
4. Reviewer: IEEE Transaction Energy Conversion (2014)

5. Reviewer: Journal of Applied Energy (Elsevier) (2012-2014)
6. Reviewer: Kuwait Journal of Engineering Research (2013)
7. Reviewer for the 5th IEEE Int. Power Electronics and Drives Systems (PEDS 05) and the IEEE International Power and Electronics and Energy (PECon 06) Conference.
8. Member of the Working Group on Embedded Generation in Low Voltage Networks Standards, SIRIM, Malaysia. (July 2006 to June 2007)
9. Member of the Working Group on Solar Photovoltaic System SIRIM, Malaysia. July (2003 - 2009).
10. Member of the development of the Malaysian Standard (MS 1837:2005) Installation of Grid-Connected Photovoltaic, (May 2003-Sept 2005).
11. Member: for the development of the Draft Malaysian Standard (DMS 05E034R0), Crystalline silicon terrestrial photovoltaic module-design qualification and type approval, (March 2005-March 2006).
12. Member for the development of the Draft Malaysian Standard (DMS 05E035R0), Thin film terrestrial photovoltaic module-design qualification and type approval, (March-2005-March 2006).
13. Member: for the development of the Draft Malaysian Standard (DMS 05E036R0), Electrical Installations of buildings–Part 7-712: requirements for special installations or locations- Solar photovoltaic power supply systems, (March 2005-March 2006).

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