

Gamal M. Dousoky

Professor, Minia Univ., Nahda Univ.

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PERSONAL INFORMATION

Full Name	Gamal Mahmoud Dousoky Ibrahim
Date of Birth	October 10, 1977
Nationality	Egyptian
Military Service	Completed
Marital Status	Married and having kids
Position(s)	Permanent: Professor, Faculty of Eng., Minia Univ., EGYPT Half-Time: Head of Mechatronics Eng. Dept., Nahda Univ. in Beni-Suef, EGYPT
Postal Address	318 Elect. Eng. Dept. Faculty of Engineering, Minia University, 61517, EGYPT
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EDUCATION

	Received B.Sc., M.Sc., and PhD degrees in Electrical and Electronic Engineering, in 2000, 2004, and 2010, respectively, as follows:
2007 – 2010 Oct Sept	Ph.D. in Electrical and Electronic Engineering , <i>Department of Electrical Engineering</i> , Kyushu University, Japan. Home: http://www.kyushu-u.ac.jp — DOCTOR OF PHILOSOPHY THESIS title <i>Electromagnetic Compatibility in Switching Power Converters with Digital Controllers</i> description It proposes and investigates the conducted-noise characteristics of many digital techniques, several of which are new, for conducted-noise reduction in dc-dc converters.
2000 – 2004 Oct Jul	M.Sc. in Electrical Engineering , <i>Department of Electrical Engineering</i> , Minia University, Egypt. Home: http://www.minia.edu.eg/English/Home.aspx — MASTER THESIS title <i>A Study on the Power Electronics for the Interface of Alternate/Renewable Energy Systems with Utility Grid</i> description It investigates an intelligent power electronic interface between photovoltaic power systems and the utility grid, focusing on the design, cost, and reliability issues.
1995 – 2000 Sept May	Bachelor of Electrical Engineering , <i>Minia University</i> , Egypt. Major in Electrical Power Engineering Overall years grade: Very good with honor's (84.7%), the top of the class — GRADUATION PROJECT title <i>Design of Wind Energy System to be interconnected with the Utility Grid</i> description Develop a wind energy system for feeding a remote area with the electrical power demand and for interacting with the local power distribution network.

PUBLICATIONS

Have authored and co-authored more than 90 publications, mainly published in first class journals and proceedings of first class conferences in Power Electronics and Industrial Technologies. **A list of publications is addressed in Appendix A.**

RESEARCH GRANTS

Primary investigator and co-leader in each of the following awarded research projects:

- "Stability and Reliability Issues of Smart Grid with Network Topology and Flow Controls", LPI: Garng Huang, Co-LPI: **Gamal M. Dousoky**, PIs: Chanan Singh, Omar Ellabban, Hoe Ooi, QNRF (NPRP 7-106-2-053), three years (2014-2016), **\$865,280**.
- "Smart PV Skin: Grid-Connected, Non-Planar Photovoltaic Systems", LPI: Robert Balog, Co-LPI: **Gamal M. Dousoky**, PIs: Rasit Turan, Ibrahim Karaman, Omar Ellabban, Hoe Ooi, QNRF (NPRP 7-299-2-124), three years (2014-2016), **\$705,672**.

HONORS AND AWARDS

- January, 2022 **Promoted to the Position of Professor - "A case of Scientific Excellence"**, Major: *Electrical Power and Machines Engineering*, Minor: *Power Electronics*, Electrical Power and Machines Committee, Universities Supreme Council, Egypt.
- Sept, 2019 **Postdoctoral Research Fellowship**, funded by the Egyptian government, executed at Kyushu University and extended on an external fund, Japan.
- June, 2019, May, 2018 **International Scientific Publication Award**, Minia University Research Office, Minia University, Egypt.
- March, 2017 **Promoted to the Position of Associate Professor**, *Electrical Power and Machines Committee*, Universities Supreme Council, Egypt.
- May, 2014 **Elevated to the grade of IEEE Senior member**, *IEEE Admission and Advancement Committee*, IEEE Senior Membership is an honor bestowed only to those who have made significant contributions to the profession, USA.
- March, 2013 **Offered an Assistant Research Scientist Position**, *Texas A&M University at Qatar*, due to outstanding record of research and academic achievements.
- Sept, 2011 **Postdoctoral Research Fellowship**, *Kyushu University*, (extendable to Five years), Japan.
- Oct, 2010 **Listed in Who's Who in Science and Engineering 2011-2012 (11th Edition)**, *Who's Who in America*, biography was selected for inclusion after a standard selection based on outstanding achievements, USA.
- Sept, 2010 **Designated Goodwill Ambassador of Kyushu University**, *President of Kyushu University*, for recognition of outstanding performance and successful completion of Ph.D. program, Japan.
- Feb, 2010 **The 2009 Excellent Student Award**, *The IEEE Fukuoka Section*, Japan.
Webpage: <http://www.ieee-jp.org/section/fukuoka/index.php?Awards>
- 2006 – 2010 **Scholarship to pursue Ph.D. overseas**, funded by the Egyptian government, executed in Japan.
- Jun, 2008 **EJISST2008 Award**, (*Culture, Education, and Science Bureau*), the Embassy of Egypt in Japan, for presentation at the First Egypt Japan International Symposium of Science and Technology 2008, Japan.

- Feb, 2006 **Excellence Award**, *President of Minia University*, for outstanding academic performance during Master research study, Egypt.
- Summer, 2001 **Outstanding Young Engineer Award**, *Egyptian Engineers Association*, Egypt.
- Summer, 2000 **Selected to Join the Top Forum**, *Minia University*, Egypt.
Minia University Leaders Meeting with the Top Students of their Classes
- Oct, 2000 **Assignment for the Job of Demonstrator**, *Minia University*, Egypt.
Demonstrator Position, in Minia University, is only offered to the Top-of-Class Candidate.
- Winter, 1998 **Distinguished Students Trip**, *Office of the Minister of Higher Education and Scientific Research*, Five days trip for excellent students of Minia University, Egypt.
- Summer, 1997 **Summer Camp**, *Ministry of Education*, One-Week Camp for Distinguished Performance in Community Service Activities, Egypt.
- Sept, 1995 **Selected to Join the Distinguished Students Class**, *Ministry of Education*, Egypt.
The students who achieved the top grades during their preparatory school study, and did well in the abilities test are selected to study their secondary school in this special class.

PROFESSIONAL EXPERIENCE

I. Tenure Track at Department of Electrical Engineering, Faculty of Engineering, Minia University, Egypt:

- Apr, 2022 Professor – Present
- Apr, 2017 Associate Professor
- Feb, 2011 Lecturer
- Aug, 2004 Assistant Lecturer
- Oct, 2000 Demonstrator and M.Sc. Student

II. Education and Research Activities at Department of Electrical Engineering, Faculty of Information Science and Electrical Engineering, Kyushu University, Japan

- 2019 – 2021 Visiting Associate Professor
Oct May
- 2015 – 2015 Research Assistant Professor
Feb Sept
- 2011 – 2013 Research Fellow
Sept Mar
- 2010 – 2011 Postdoctoral Researcher
Oct Jan
- 2007 – 2010 Ph.D. Student and Research Assistant
Oct Sept
- 2006 – 2007 International Research Student in the Field of Electrical and Electronic Systems Engineering and Japanese Language Study
Oct Sept

III. Research Activity at Department of Electrical and Computer Engineering, Texas A&M University at Qatar:

- 2013 – 2014 Assistant Research Scientist
Apr Jun

IV. Instructor and Administrative roles at Department of Communications and Computers Engineering, Faculty of Engineering, Nahda University in Beni-Suef, Egypt:

- 2022– Present Head of Mechatronics Engineering Department (half-time)
Jul
- 2017– 2019 Associate Professor (half-time)
Feb Sept

ADMINISTRATIVE ROLES AND FACULTY ACTIVITIES

Administrative Responsible of the following administrative commitments:

- Head of Mechatronics Engineering Department, Fac. of Eng., Nahda University
- Manager of the Electronic Services and Information Technology Unit, Fac. of Eng., Minia University
- Vice-Manager of the Quality Assurance Quality Assurance Office, Fac. of Eng., Minia University
- Administration Committee Member of the Minia University Center for Faculty members Development and University Leaders, Minia University
- Faculty Coordinator for Egyptian Government Excellence Award, Fac. of Eng., Minia University
- Quality Assurance Coordinator for the Standard of Scientific Research and Scientific Activities, Fac. of Eng., Minia University
- Elect. Eng. Dept. Council Registrar (year 2016/2017), Fac. of Eng., Minia University
- Founder and Supervisor of Industrial Electronics Laboratory, Elect. Eng. Dept., Fac. of Eng., Minia University

Faculty Works Member in the following Committees/Activities:

- Technical program and event leader of Minia International Conference on Environment and Engineering, MICEE 2022, Hurgada, Egypt, July 14 – 17, 2022
- Representative of Minia University in "Energy Efficiency–Accompanying Measures in Egyptian Universities" project by Supreme Council of Universities (SCU)
- Industrial and Engineering Institutes Performance Evaluation Committee, Ministry of High Education and Scientific Research
- Syllabus Development Committee (both graduate and undergraduate levels), Fac. of Eng., Minia University
- Head of Examination control System for undergraduate level, Fac. of Eng., Minia University
- Elect. Eng. Dept. Council, Fac. of Eng., Minia University
- Engineering Consultation Unit Council, Fac. of Eng., Minia University
- Faculty Council, Fac. of Eng., Nahda University, Egypt
- Serves as a Professional Trainer in the Minia University Center for Faculty members Development and University Leaders, Minia University
- Served as a volunteer judge in students innovation contests by IEEE Student Chapter, Fac. of Eng., Minia University

LANGUAGES

Arabic	Native
English	Fluent
Japanese	Intermediate
French	Basic

LICENSE

- Certified Associate Trainer by IBCT (International Board of Certified Trainers)

TEACHING EXPERIENCE

Lectures, laboratory experiments, and practice sessions of the following undergraduate and graduate courses:

Computing	Advanced Engineering Mathematics, Programming Languages, Parallel Computing, FPGA Programming, Power System Applications, MATLAB, Computer Skills
Laboratories	Electric Machines Laboratory, Electric Power Laboratory, Renewable Energy Laboratory, Power Electronics Laboratory, Control Laboratory
Engineering	Principle of Electric Engineering, Electric Circuits Theory, Electromagnetic Engineering, Electronic Engineering, Electric Power Engineering, Power System Analysis, Industrial Electronics, Power Electronics, Measurements and Electrical Testing, Energy Conversion, Introduction to Mechatronics
HRD	Project Management and Skills Development, Research Skills

TECHNICAL SKILLS

OS	Windows, DOS
programming	Fortran, Basic, Visual Basic, VHDL
scientific	MATLAB, Simulink, PSIM, AUTOCAD, Quartus II, Altium
typography	L ^A T _E X, Microsoft Office, Visio, Adobe Acrobat Professional, ICDL Certified (passed all the required modules for granting the International Computer Driving License)
embedded sys	Experience to design and to program TMS320F28xx DSPs using SIMULINK/Code Composer Studio Software Experience to develop Altera FPGAs using Quartus Software
circuits	Experience to design and to fabricate PCBs using CAD/CAM systems Electronic Circuits Assembly/Soldering
in-field	Fault Detection/Diagnosis In-Field Inspections/Debugging
edit	Technical writing and reviewing Responding to customer/reviewer's claims
leadership	Work planning, job distribution, following, trainer

MEMBERSHIPS

Member in the following organizations:

- Institute of Electrical and Electronics Engineers (Senior Member, IEEE), USA
- Electronics and Telecommunications Research Institute (ETRI), South Korea
- Japan Egypt Network (JEN), Egypt
- Rural Development Association, Egypt
- Egyptian Engineers Syndicate, Egypt

RESEARCH INTERESTS

- Artificial Intelligence, Parallel Processing
- Digital Control, FPGA-Based Implementations
- Power Electronics, Switching Power Supplies
- Electric Vehicles, Battery Management
- Energy Saving, Energy Efficiency
- Renewable Energy Applications, Energy Conversion
- Electromagnetic Interference, Electromagnetic Compatibility

REVIEWER

Serving as a reviewer of scientific papers for the following journals and conferences:

- IEEE Transactions on {Power Electronics, Industrial Electronics, Circuits and Systems, Sustainable Energy, Industrial Applications}
- Journal of Power Electronics, ETRI Journal
- Journal of IET Science, Measurement & Technology
- Journal of Electric Power Components and Systems
- IEEE Applied Power Electronics Conference and Exposition, APEC
- IEEE International Telecommunications Energy Conference, INTELEC
- IEEE International Conference on Power Electronics, ECCE-Asia
- IEEE International Power Electronics and Motion Control Conference, IPERC
- Annual Conference of the IEEE Industrial Electronics Society, IECON

SUPERVISOR

Supervisor of Master/Doctor graduate students under the following research themes:

- Energy management and control of electrical vehicles
- Improving Power Quality in Electrical Smart Grids
- Prototype Implementation of a Digitizer for Earthquake Monitoring System
- Design and Simulation of GaN-HEMT Used in Super-Regenerative Transceiver for Biomedical Applications
- Characteristics of LED Lamps in Different operating conditions
- Maximizing SCADA System Contribution to Electrical Distribution Grid Management
- Improving the performance of stand-alone PV system by using super-capacitors
- Failure Study and Analysis of Photovoltaic Power Systems
- Design and Implementation of a Digital Control System for Electric Vehicle Applications
- PV-Based Off-Grid Valve Drive System for Leakage Protection in Water Pipes

Supervisor of Senior graduation projects under the following titles:

- Photovoltaic Applications and a USB Power Bank Prototype Implementation
- Photovoltaic Applications and Eco-Friendly Replacement of Batteries with SMPSs in Home Appliances
- Design and Implementation of a Photovoltaic Power System that Employs "Inverter Technology" to Save Energy Consumed by Heavy-Duty Applications: Water Irrigation Pumps, Electric Vehicles, and Air Conditioners
- Feeding Electrical Power to Countryside Development Loads—Contributing to Egypt's 1.5 million-feddan Reclamation Project (West of Minia Region)

INVITED SPEECH, AND CHAIR ACTIVITIES

- Photovoltaics Workshop: Strategic alternative energy source for Egypt; from cell to grid connected PV arrays, sponsor: British Council, London South Bank University, London, UK, July 18-20, 2016.
- Paving the Way to Sustainable Energy Solutions in Qatar, invited talk, host: HEC Paris in Qatar, Tornado Tower, Doha, Qatar, May 15, 2014.
- International Standards, invited presentation to the senior design students, host: Texas A&M University at Qatar, Doha, Qatar, April 6, 2014.
- Doha Carbon & Energy Forum, discussing and helping to create a permanent record of the Energy-Efficiency workshop, sponsor: Qatar Petroleum & Qatar Foundation, QNCC, Doha, Qatar, November 11-13, 2013.
- Power Electronics and Energy Conversion, session chair, Sponsor: IEEE-ICIT2013 conference, Kape Town, South Africa, February 27, 2013.

TUTORIALS AND WORKSHOPS

Tutorials:

- FPGA Development in Quartus Environment, by Prof. Dr.-Ing. Jens Onno Krah , Sponsor: Texas A&M University at Qatar, Doha, Qatar, January, 2014.
- Art of Control of Advanced Power Semiconductors: From Theory to Practice, Sponsor: IPEMC2012-ECCE Asia, Harbin, China, June 2, 2012.
- Eco-Societies Power Semiconductor Device Technology, Sponsor: Mitsubishi Electric Inc., Fukuoka, Japan, May 13, 2010.
- High Efficiency Power Conversion through "Intelligent" Power Processing, Sponsor: Mesago PCIM GmbH, Nuremberg, Germany, May 3, 2010.
- Internationalization and standardization, privately and professionally , Sponsor: Kyushu University, Fukuoka, Japan, Feb 24, 2010.
- Controlling Conducted and Radiated EMI issues in Power Electronics Designs, Sponsor: European Power Electronics and Adjustable Speed Drives, Barcelona, Spain, Sept 7, 2009.

Workshops:

- Doha Carbon & Energy Forum, Doha, Qatar, November 11-13, 2013.
- Annual Research and Industry Forum of Texas A&M University at Qatar, Doha, Qatar, April 22, 2013.
- An Opportunity to Develop Your Future Career, Kyushu University, Japan, Apr 5, 2012.
- Power Electronics Symposium, Nagasaki University, Japan, Jan 11, 2012.
- Power Electronics Symposium, Nagasaki University, Japan, Feb 17, 2010.
- Summer Seminar, Kyushu University, Japan, Sept 4, 2009.

TRAINING COURSES

- Courses Sponsored by International Board of Certified Trainers Middle East and South Africa Headquarters, (IBCT MENA):**
 - Training of Trainers (TOT), five days course, Dec 10-15, 2014.
- Courses Sponsored by Texas A&M University, (TAMU):**
 - Emergency Evacuation Exercise - executed jointly by Global Rescue and the Office of Building Operations, Oct 2013.
 - Export Controls Training for TAMUQ, Oct 2013.
 - General Laboratory Safety Training for Working in an Electrical Engineering Laboratory, Sept 2013.
 - Export Controls & Embargo Training - Basic Course, Sept 2013.
 - Information Security Awareness, Apr 2013.
 - Reporting Fraud, Waste and Abuse, Apr 2013.
 - Creating a Discrimination-Free Workplace, Mar 2013.
 - Financial Conflicts of Interest in Research, Mar 2013.
- Courses Sponsored by Good Practice Project, (GP), Kyushu University, Japan:**
 - International Demonstration Techniques, Superior Level, Apr 2010 - Jul 2010.
 - International Demonstration Techniques, Intermediate Level, Dec 2009 - Mar 2010.
- Courses Sponsored by Faculty and Leadership Development Project, (FLDP), Minia University, Egypt:**
 - Personal Electronic Websites Establishing, December 26-27, 2021.
 - Dealing with Students with Special Needs, two days course, April 27-28, 2021.
 - Combating Corruption, two days course, Feb 16-17, 2021.
 - Credit Hours System, two days course, July 10-11, 2019.
 - Use of Technology in Teaching, two days course, May 15-16, 2019.
 - Student Assessment and Exams Preparation, two days course, May 29-30, 2017.
 - Financial and Legal Aspects, two days course, Dec 1-2, 2014.

- Strategic Planning, two days course, Feb 12-13, 2014.
 - Ethics of Scientific Research, two days course, Feb 17-18, 2014.
 - University Management, two days course, Feb 26-27, 2014.
 - International Scientific Publishing Skills, two days course, Marc 17-18, 2014.
 - Quality Standards in Teaching Process, three days course, Dec 13-14, 2010.
 - Effective Communication Skills, three days course, Jul 11-14, 2005.
 - Effective Presentation Skills, three days course, Jun 20-23, 2005.
 - Effective Teaching Skills, five days course, May 3-5 and 7-9, 2005.
 - Thinking Skills, three days course, Jul 11-14, 2005.
 - Ethics of Profession, three days course, Aug 15-17, 2005.
 - How to Use Technology in Teaching, one week course, Oct 14-23, 2002.
 - Teacher Preparation, two weeks course, Sep 28-Oct 13, 2002.
- E. **Courses Sponsored by Quality Assurance Office**, Minia University, Egypt:
- Accreditation of Educational Institutions, one day course, Dec, 2017.
 - Educational Programs and Courses Description, one day course, Dec, 2017.
- F. **Courses Sponsored by National Quality Institute**, Ministry of Planning and Economic Development, Egypt:
- Quality Management System (ISO 9001:2015), online course, March, 2022.
 - Governance System in the context of Government Excellence (ISO 37000:2021), online course, April, 2022.

HOBBIES

Sports (Squash, Cycling), Fishing

RELEVANT LINKS

Personal Profiles:

Google scholar	https://scholar.google.com.eg/citations?user=ecYGXQoAAAAJ&hl=en
ORCID	https://orcid.org/0000-0002-4737-4259
Scopus	https://www2.scopus.com/authid/detail.uri?authorId=26632824900
Researchgate	https://www.researchgate.net/profile/Gamal_Dousoky
LinkedIn	https://www.linkedin.com/in/dousoky/

Institutional Websites:

Kyushu Univ.	http://www.kyushu-u.ac.jp/en/
Minia Univ.	https://www.minia.edu.eg/Minia/EHome.aspx
Texas A&M	https://www.qatar.tamu.edu/

UPDATED

September 21, 2022

Appendix A: List of Publications

Peer Reviewed Indexed Journal Papers:

1. M. S. Hassan, T. Asano, M. Shoyama, and **G. M. Dousoky**, Performance Investigation of Power Inverter Components Submersed in Subcooled Liquid Nitrogen for Electric Aircraft, *Electronics*, ISSN: 2079-9292, Volume: 11, Issue: 5, Article Number: 826, pp. 1–13, March 2022.
2. M. R. M. Hassan, M. A. Mossa, and **G. M. Dousoky**, Evaluation of Electric Dynamic Performance of an Electric Vehicle System Using Different Control Techniques, *Electronics*, ISSN: 2079-9292, Volume: 10, Issue: 21, Article Number: 2586, pp. 1–34, October 2021.
3. M. S. Hassan, A. Abdelhakim, M. Shoyama, J. Imaoka, and **G. M. Dousoky**, Parallel Operation of Split-Source Inverters for PV Systems: Analysis and Modulation for Circulating Current and EMI Noise Reduction, *IEEE Transactions on Power Electronics*, Vol. 36, No. 8, pp. 9547–9564, August 2021.
4. Y. M. Esmail, A. H. K. Alaboudy, M. S. Hassan, and **G. M. Dousoky**, Mitigating Power Quality Disturbances in Smart Grid Using FACT Systems, *Indonesian Journal of Electrical Engineering and Computer Science*, Vol. 22, No. 3, pp. 1223–1235, June 2021.
5. M. S. Hassan, A. Abdelhakim, M. Shoyama, and **G. M. Dousoky**, On-the-Analysis and Reduction of Common-Mode Voltage of a Single-Stage Inverter through Control of a Four-Leg-Based Topology, *International Journal of Electrical Power and Energy Systems*, ISSN: 0142-0615, Vol. 127, No. 106710, pp. 1–24, May 2021.
6. E. B. Helal, O. M. Saad, A. G. Hafez, Y. Chen, and **G. M. Dousoky**, Seismic Data Compression using Deep Learning, *IEEE Access*, Vol. 9, pp. 58161–58169, DOI:10.1109/ACCESS.2021.3073090, April 2021.
7. S. Zhang, Q. Lin, Y. Noge, M. Shoyama, E. Takegami, and **G. M. Dousoky**, Developed Common Mode Noise Modeling Approach for DC-DC Flyback Converters, *IEEE Letters on Electromagnetic Compatibility Practice and Applications*, ISSN: 2637-6423, Volume: 2, Issue: 4, pp. 147–151, December 2020.
8. M. S. Hassan, A. Abdelhakim, M. Shoyama, J. Imaoka, and **G. M. Dousoky**, Three-Phase Split-Source Inverter-Fed PV Systems: Analysis and Mitigation of Common-Mode Voltage, *IEEE Transactions on Power Electronics*, Vol. 35, No. 9, pp. 9826–9840, September 2020.
9. S. Zhang, B. Zhang, Q. Lin, E. Takegami, M. Shoyama, and **G. M. Dousoky**, Modeling and Optimization of Impedance Balancing Technique for Common Mode Noise Attenuation in DC-DC Boost Converters, *Electronics*, ISSN: 2079-9292, Volume: 9, Issue: 3, Article Number: 480, pp. 1–16, March 2020.
10. M. A. Gaafar, **G. M. Dousoky**, Emad M. Ahmed, M. Shoyama, and M. Orabi, New Design Approach for Grid-Current-Based Active Damping of LCL Filter Resonance in Grid-Connected Converters, *Journal of Power Electronics*, Vol. 18, No. 4, pp. 1165–1177, July 2018.
11. **G. M. Dousoky**, and M. Shoyama, New Parameter for Current-Sensorless MPPT in Grid-Connected Photovoltaic VSIs, *Solar Energy Journal (Elsevier)*, Vol. 143, pp. 113-119, February 2017.
12. **G. M. Dousoky**, and M. Shoyama, An AC MPPT with Active/Reactive Power Control Feature for Single-Stage Three-Phase Grid-Connected Photovoltaic VSIs, *Electric Power Components & Systems Journal*, Vol. 45, No. 4, pp. 442-450, January 2017.
13. M. Ali, **G. M. Dousoky**, and M. Shoyama, An Overheating Tolerant Space Vector Modulation Algorithm for Multilevel Inverters, *IEEE Transactions on Electrical and Electronic Engineering-Industry Applications*, Vol. 11, No. S2, pp. S75–S83, December 2016.
14. H. Rezk, and **G. M. Dousoky**, Technical and economic analysis of different configurations of stand-alone hybrid renewable power systems – A case study, *Renewable and Sustainable Energy Reviews*, Vol. 62, pp. 941–953, September 2016.
15. **G. M. Dousoky**, A. El-Sayed, and M. Shoyama, Improved Orientation Strategy for Energy-Efficiency in Photovoltaic Panels, *Journal of Power Electronics*, Vol. 11, No. 3, pp. 335–341, May 2011.
16. **G. M. Dousoky**, M. Shoyama, and T. Ninomiya, FPGA-Based Spread-Spectrum Schemes for

Conducted-Noise Mitigation in DC-DC Power Converters: Design, Implementation, and Experimental Investigation, IEEE Transactions on Industrial Electronics, Vol. 58, No. 2, pp. 429–435, February 2011.

17. **G. M. Dousoky**, M. Shoyama, and T. Ninomiya, A Comparative Investigation of Several Frequency Modulation Profiles for Programmed Switching Controllers Targeted Conducted-Noise Reduction in DC-DC Converters, IEICE Transactions on Communications, Vol. E93-B, No. 09, pp. 2265–2272, September 2010.
18. **G. M. Dousoky**, M. Shoyama, and T. Ninomiya, A Double-Hybrid Spread-Spectrum Technique for EMI Mitigation in DC-DC Switching Regulators, Journal of Power Electronics, Vol. 10, No. 4, pp. 342–350, July 2010.
19. **G. M. Dousoky**, M. Shoyama, and T. Ninomiya, Conducted-Noise Characteristics of a Digitally-Controlled Randomly-Switched DC-DC Converter with an FPGA-Based Implementation, Journal of Power Electronics, Vol. 10, No. 3, pp.228–234, May 2010.

Peer Reviewed Non-Indexed Journal Papers:

20. O. M. Saad, E. B. Helal, A. G. Hafez, and **G. M. Dousoky**, Design and Implementation of a Trigger Digitizer for Earthquake Monitoring System, Journal of Advanced Engineering Trends (JAET), ISSN: 2682-2091, DOI 10.21608/jaet.2022.145073.1209, accepted for publication, September 2022.
21. **G. M. Dousoky**, F. M. Ali, M. A. Abdelghany, M. Abouelatta, and M. Shoyama, Improved Model of a Gallium Nitride HEMT for High Power Application, Journal of Advanced Engineering Trends (JAET), ISSN: 2682-2091, DOI 10.21608/jaet.2022.144591.1194, accepted for publication, August 2022.
22. M. R. M. Hassan, M. A. Mossa, and **G. M. Dousoky**, Dynamic Performance Analysis of An Electric Vehicle System Using Different Control Algorithms, Journal of Advanced Engineering Trends (JAET), ISSN: 2682-2091, DOI 10.21608/jaet.2022.138420.1202, accepted for publication, July 2022.
23. Y. M. Esmail, and **G. M. Dousoky**, Power Quality Improvement in Smart Distribution Grid Using Low-Cost Two-level Inverter DVR, Journal of Advanced Engineering Trends (JAET), ISSN: 2682-2091, Vol. 42, No. 1, pp 111–120, January 2022.
24. M. A. Ragab, A. A. Z. Diab, and **G. M. Dousoky**, Failure Analysis in Photovoltaic Power Systems Using an Artificial Neural Network, Journal of Advanced Engineering Trends (JAET), ISSN: 2682-2091, Vol. 41, No. 2, pp 205–218, July 2021.
25. **G. M. Dousoky**, Z. M. M. Ali, and A. M. El-Sawy, An Experimental Evaluation of Photometric Performance and Power Quality of LED Lamps in Different Operating Conditions, Journal of Advanced Engineering Trends (JAET), ISSN: 2682-2091, Vol. 39, No. 2, pp 157-166, July 2020.
26. **G. M. Dousoky**, O. K. Ahmed, and A. M. El-Sawy, SCADA-Based Methodology for Circuit Breaker Monitoring and Protection in Electrical Distribution Networks, Journal of Advanced Engineering Trends (JAET), ISSN: 2682-2091, Vol. 39, No. 2, pp 147-155, July 2020.
27. H. H. El-Tamaly, **G. M. Dousoky**, and M. Shoyama, Low-Harmonics Three-Phase Power Conditioner for Photovoltaic Integration, Research Reports on Information Science and Electrical Engineering of Kyushu University, ISSN: 1342-3819, Vol. 15, No. 2, pp. 71-76, September 2010.
28. **G. M. Dousoky**, M. Shoyama, and T. Ninomiya, Triple-Hybrid Switching Strategy for Conducted-Noise Level Reduction in DC-DC Converters, Research Reports on Information Science and Electrical Engineering of Kyushu University, ISSN: 1342-3819, Vol. 15, No. 1, pp. 25-30, March 2010.

Theses:

29. **Gamal Dousoky**, On Intelligent Power Electronic Interface for Renewable Energy Systems. Saarbrücken, Germany: VDM Verlag Publishing House Ltd., Book, ISBN: 9783639232110, February 2010.
30. **Gamal Dousoky**, Digital Techniques for EMC in Switching Power Converters. Saarbrücken, Germany: VDM Verlag Publishing House Ltd., Book, ISBN: 9783639266504, August 2010.

Peer Reviewed Proceedings of International Conferences:

31. H. Funaki, A. Mishima, M. Shoyama, Y. Noge, T. Kimura, T. Yamada, and **G. M. Dousoky**, A Condition to Get Rid of Slope-Compensation in Peak-Current-Mode Controllers, In proceedings of the IEEE Energy Conversion Congress and Exposition, ECCE2020, Detroit, Michigan, USA, pp. 3580- 3586, October 11-15, 2020.
32. M. S. Hassan, A. A. Diab, M. Shoyama, and **G. M. Dousoky**, Interleaved PWM Strategy for Common-Mode Leakage Current and EMI Noise Reduction of Paralleled Single-Stage DC-AC Converters, In proceedings of the IEEE Applied Power Electronics Conference & Exposition, APEC 2020, New Orleans, Louisiana, USA, pp. 768-774, March 15-19, 2020.
33. M. A. Gaafar, **G. M. Dousoky**, E. M. Ahmed, M. Shoyama, Systematic design of grid-current-based active damping for grid-connected LCL filters, In proceedings of the IEEE Applied Power Electronics Conference and Exposition, APEC 2017, FL, USA, pp. 2652-2657, March 26-30, 2017.
34. M. Aly, **G. M. Dousoky**, E. M. Ahmed, M. Shoyama, A Unified SVM Algorithm for Lifetime Prolongation of Thermally-Overheated Power Devices in Multi-Level Inverters, In proceedings of the IEEE Energy Conversion Congress and Exposition, ECCE2016, Milwaukee, WI, USA, pp. 1-6, September 18-22, 2016.
35. M. A. Gaafar, **G. M. Dousoky**, M. Shoyama, New Active Damping Method for LCL Filter Resonance Based on Two Feedback System, In proceedings of the IEEE Applied Power Electronics Conference and Exposition, APEC 2016, California, USA, pp. 2735-2741, March 20-24, 2016.
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