

Publications

Electrical Engineering Department

Year 2016

Journals

1. Faiq Khan Lodhi, Syed Rafay Hasan, Osman Hasan, and **Falah Awwad**, "Analyzing Vulnerability of Asynchronous Pipeline to Soft Errors: Leveraging Formal Verification". *Journal of Electronic Testing: Theory and Applications*, accepted, Sep 6, 2016.
2. Uzma Mushtaq, Osman Hasan, and **Falah Awwad**, "NoC based Implementation of Free Form Deformations in Medical Imaging Registration". *Journal of Circuits, Systems, and Computers*, accepted, September 4, 2016.
3. **Faycal Saffih**, Asma Ayari-Kanoun, Ferhat Aydinoglu, Bo Cui, "*Silicon nanostructures with very large negatively tapered profile by ICP-RIE*", *Journal of Vacuum Science & Technology B*, American Institute of Physics (AIP), 2016 (In press).
4. M. S. Ahmed, A. Mohamed, R.Z. Homod, **H. Shareef**, K. Khalid, Awareness on Energy Management in Residential Buildings: A Case Study in Kajang and Putrajaya, *Journal of Engineering Science and Technology*, 2016,XX(Y):pp.1-15. Abs./Ind.: Scopus Pages:15
5. M. S. Ahmed, A. Mohamed, R.Z. Homod, H. Shareef, K. Khalid, Modeling of Electric Water Heater and Air Conditioner for Residential Demand Response Strategy, *International Journal of Applied Engineering Research*, 2016,11(16):pp. 9037-9046. Abs./Ind.: Scopus Pages:10
6. **Mahmoud Al Ahmad**, Reham M Milhem, Neena G Panicker, Tahir A Rizvi and Farah Mustafa, "Electrical characterization of DNA supported on nitrocellulose membranes". *Scientific Reports*, published, Jul 12, 2016.
7. . O. Saeed, A. Wahyudie, and M. Jama, "Robust Hierarchical Control Strategy for Heaving Wave Energy Converters" *International Journal of Robotics and Mechatronics*, Vol. 2, No. 3, pp. 87-92.2016.
8. A. Wahyudie, O. Saeed, M. Jama, H. Noura and K. Harib, "Maximising Power Conversion in Oscillating Wave Energy Converters via a Reference-based Control Technique", *IET Journal of Renewable Power Generation* (In Press).
9. A. Wahyudie, M. A. Jama, O. Saeed, C. Nandar, K. Harib, "Simple Bottom-up Hierarchical Control Strategy for Heaving Wave Energy Converters", *Elsevier Journal of International Journal of Electrical Power and Energy Systems* (In Press).
10. M. M. Islam, H. Shareef, A. Mohamed, and A. Wahyudie, "A Binary variant of lighting search algorithm: BLSA", *Springer Journal of Soft Computing*.
11. **Mohammad Shakeel Laghari**, "*Knowledge Based Course Planning System for EE Students at UAE University*", *Journal of Computers (JCP)*, Vol. 11, No. 6, pp. 455-463, 2016.

12. Zidan, Mutaz Khairalla, A. M. Abdrabou, T. Khalifa, K. Shaban, **Atef Abdrabou**, R. El Shatshat and A. M. Gaouda. "Fault Detection, Isolation and Service Restoration in Distribution Systems: State-of-the-art and Future Trends" accepted, to appear, *IEEE Transaction on Smart Grids*, 2016.
13. M. Gaouda, **Atef Abdrabou**, Khaled Shaban, Mutaz Khairalla, A. M. Abdrabou,
14. Ramadan El Shatshat, M.M.A. Salama and Mohamed Mannan "A Smart IEC 61850 Merging Unit for Impending Fault Detection in Transformers ," accepted, to appear, *IEEE Transaction on Smart Grids*, 2016.
15. **Atef Abdrabou** and Hosam Hittini, "Teaching Wireless Communication Basics: Inductive Methods with Their Assessment and Evaluation" *Journal of 21st Century Education*, Jan. 2016.
16. Shuaib, K.; Barka, E.; Al Hussien, N.; Abdel-Hafez, M.; Alahmad, M. Cognitive Radio for Smart Grid with Security Considerations. *Computers* 2016, 5, 7.

Conferences

1. Mohammad Baba, Otmane Ait Mohamed, Mohammad Daoud, and **Falah Awwad**, "A Low-Cost Camera-Based Transducer Tracking System for Freehand Three-Dimensional Ultrasound," **IEEE 14th International NEWCAS Conference**, Vancouver, Canada, June 26-29, 2016.
2. F. K. Lodhi, I. Abbasi, F. Khalid, O. Hasan, **F. Awwad**, and S. R. Hasan, "A Self-learning Framework to Detect the Intruded Integrated Circuits," **IEEE International Symposium on Circuits & Systems (ISCAS 2016)**, Montreal, Quebec, Canada, May 22-25. 2016.
3. Mohammad Aldaoud, Ayman Atallah, **Falah Awwad**, and Mahasen Al-Najjar, "Accurate and Fully Automatic Segmentation of Breast Ultrasound Images by Combining Image Boundary and Region Information," **International Symposium on Biomedical Imaging (ISBI'16)**, Prague, Czech Republic, April 13-16, 2016.
4. **Faycal Saffih**, Wan A. Tajuddin, Zainol Ibrahim, "Precoding and testing technique for interfacing neural networks associative memory", 13th International Symposium on Neural Networks, ISNN 2016, St. Petersburg, Russia, July 6–8, 2016
5. **H. Shareef**, W. L. Ai, A. H. Mutlag, Optimum Placement of Battery Storage Systems for Mitigating Voltage Fluctuation Using Binary Firefly Algorithm, International Conference on Power Systems Technology (POWERCON 2016), 28 Sep-1Oct 2016, Wollongong, Australia: IEEE. 2016. Pp. 1-6. Pages:6
6. H. Mutlag, A. Mohamed, **H. Shareef**, A comparative study of artificial intelligent-based maximum power point tracking for photovoltaic systems. Proceedings of the International Conference on Advances in Renewable Energy and Technologies (ICARET 2016). 23-25 February 2016, Bangi, Malaysia: IOP Publishing. 2016. Pp.1-4. Pages:4

7. K. Khalid, A. Mohamed, **H. Shareef**, Nonintrusive Load Monitoring Using TT-transform and Neural Networks, Proceedings of the 10th International Power Engineering and Optimization Conference 2016 (PEOCO 2016), 26 March 2016, Shah Alam, Malaysia: UITM. 2016. Pp.1-5. Pages:5
8. R. Verayiah, A. Mohamed, I.H.Z. Abidin, **H. Shareef**, Assessment of Critical Loads Instigating Voltage Instability in Transmission Network using Novel Load Tracing Capable Index LQP_LT and PSS/E Tools, Proceedings of the 10th International Power Engineering and Optimization Conference 2016 (PEOCO 2016), 26 March 2016, Shah Alam, Malaysia: UITM. 2016. Pp.1-5. Pages:5
9. **Mahmoud Al Ahmad** and Shereen Hasan, "Stretchable ruthenium oxide nanoparticles coated electrodes," **18th Mediterranean Electrotechnical Conference (MELECON)**, Cyprus, April 18-20, 2016.
10. Z Al-Kassim, Q Memon, "Investigating camera calibration for eye tracking of the physically challenged", ICFST 2016, MATEC Web of Conferences, DOI: 10.1051/mateconf/20165908003
11. M. I. Hussein, Ali Hakam, Mohamed Ouda, Raed Shubair, "Compact Low-Profile Planar Elliptical Antenna for UWB Applications", The 10th European Conference on Antennas and Propagation (Eucap 2016), Davos, Switzerland, 10-15 April 2016.
12. Ali Hakam, M. I. Hussein, Mohamed Ouda, Raed Shubair, Elham Serria, "Novel Circular Antenna with Elliptical Rings for Ultra-Wide-Band," The 10th European Conference on Antennas and Propagation (Eucap 2016), Davos, Switzerland, 10-15 April 2016.
13. M. I. Hussein, Ali Hakam, Mohamed Ouda, "Planar Ultra-Wideband Elliptical Antenna for Communication Applications," IEEE Wireless Communications and Networking Conference (WCNC'16), Doha, Qatar, 3-6 April 2016.
14. Al-Tous, I. Barhumi and N. Al-Dhahir, "Mitigation of narrow-band interference in two-way AF-OFDM relaying systems using compressive sensing," IEEE Wireless Communications and Networking Conference, WCNC 2016, Doha, Qatar, 3-6 April, 2016, pp. 819-824, doi: 10.1109/WCNC.2016.7564853.
15. U. Mahrukh, H. Al-Tous, and I. Barhumi, "Breast Tumor Reconstruction Using Photoacoustic Imaging and Compressive Sensing Framework", The Second UAE Graduate Students Research Conference, UAE University, UAE. 27-28, April, 2016.
16. H. Al-Tous, I. Barhumi, "Compressive Sensing Theory for Narrow-Band Interference Mitigation in OFDM Systems" The Fifth Palestinian Conference on Modern Trends in Mathematics and Physics, Arab American University of Jenin, Palestine, 31 July-2 Aug., 2016.
17. H. Al-Tous, I. Barhumi and N. Al-Dhahir, "Atomic-Norm for Joint Data Recovery and Narrow-Band Interference Mitigation in OFDM Systems", IEEE 27th International Symposium on Personal, Indoor and Mobile Radio Communications, PIRMC 2016, Valencia, Spain, 4-7 Sep., 2016, pp. 979-983.
18. H. Al-Tous, I. Barhumi and N. Al-Dhahir, "Narrow-band Interference Mitigation Using Compressive Sensing for AF-OFDM Systems", The 12th IEEE International Conference on

Wireless and Mobile Computing, Networking and Communications, WiMob 2016, New York, USA, 17-19, Oct., 2016, Accepted.

19. H. Al-Tous, I. Barhumi, A. Kalbat and N. Al-Dhahir, "Joint Data Recovery and Narrow-band Interference Mitigation of OFDM Systems", The sixteenth IEEE International Conference on Ubiquitous Wireless Broadband, ICUWB 2016, Nanjing, China 16-19, Oct, 2016, Accepted.
20. Mohammad Shakeel Laghari, Ahlam K. Salem Zahmi, Abdulla H. Omar Al Bariki, Nasser A. Ali Abdulla Al Kaabi, "*Electrical Engineering Academic Advising & Course Planning System*", Conference Proceedings, **4th International Conference on Electrical, Computer, Mechanical and Mechatronics Engineering (ICE2016), Dubai, February 4-5, 2016.**
21. M. S. Laghari, "*Next Semester Course Planner for Electrical Engineering Students*", Conference Proceedings, **3rd International World Symposium on Web Applications & Networking (WSWAN'2016) co-located with the International Conference on Communications, Computer Science and Information Technology (ICCCSIT'2016), Dubai, March 12-14, 2016.**
22. **Atef Abdrabou**, Hosam Hittini, and Khaled Shaban, "Wireless Multihoming for Smart Grid High Data Rate Applications", *Proc. of Wireless Telecommunication Symposium WTS 2016 (IEEE Comm. Society)*.
23. **Atef Abdrabou** and Monika Prakash, "Experimental Performance Study of Multipath TCP Over Heterogeneous Wireless Networks," accepted to appear, IEEE LCN 2016.
24. Mohammed Abdel-Hafez and Nadir Adam, "Spectrum Sharing with QoS Awareness in Cognitive Radio Networks" 12th International Wireless Communications & Mobile Computing Conference (IWCMC) 2016 Conference, September 5-9, 2016, Paphos, Cyprus.
25. Nedaa Al Hussien, Ezedin Barka, Mohammed Abdel-Hafez, Khaled Shuaib, "Secure Spectrum Sensing in Cognitive-Radio-Based Smart Grid Using Role-Based Delegation", 8th International Conference on Information Management and Engineering (ICIME 2016), Istanbul, Turkey.

Book Chapters

Patents

1. **Mahmoud Al Ahmad** et al., "VIBRATIONAL ENERGY HARVESTING SYSTEM" US- Patent Application No 14/537277 – Publication date: May 12, 2016.