

# Publications

## Electrical Engineering

Year 2019

### Journals

1. Marwan Alakhras, Mousa Hussein, Mourad Oussalah, "Fuzzy Sets and Game Theory in Green Supply Chain: An Optimization Model: An Optimization Model," *Intelligent Computing. Advances in Intelligent Systems and Computing*, vol 997. Springer, Cham, 2019.
2. Mousa I. Hussein, Dwija Jithin, Indu Jiji Rajmohan, Arjun Sham, Esam Eldin Saeed, and Synan F. AbuQamar, "Microwave Characterization of Hydrophilic and Hydrophobic Plant Pathogenic Fungi using Open-ended Coaxial Probe." *Access Journal, IEEE*. Vol. 7, pp 4584, March 2019, DOI 10.1109/ACCESS.2019.2908061
3. Mousa I. Hussein, Falah Awwad, Dwija Jithin, Husain El Hasasna, Khawlah Athamneh and Rabah Iratni, "Characterization of breast cancer-specific dielectric signature in vitro using the open-ended coaxial probe technique from 200 MHz to 13.6 GHz." *Scientific Reports* 9(1):4681 · March 2019, DOI: 10.1038/s41598-019-41124-1.
4. Asma Wasfi, Falah Awwad, and Ahmad I. Ayesh. "Electronic Signature of DNA Bases via Z-shaped Graphene Nanoribbon with a Nanopore." *Biosensors and Bioelectronics (Elsevier): X*, accepted March 22, 2019.
5. Mousa Hussein, Falah Awwad, Dwija Jithin, Husain El Hasasna, Khawlah Athamneh, and Rabah Iratni. "Breast cancer cells exhibits specific dielectric signature in vitro using the open-ended coaxial probe technique from 200 MHz to 13.6 GHz." *Scientific Reports*, *Scientific Reports*, published online March 18, 2019; Publisher: Nature Publishing Group.
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9. Md Islam, H. Shareef, M. Nagrial, J. Rizk, A. Hellany, S.N. Khalid, Performance Comparison of Various Probability Gate Assisted Binary Lightning Search Algorithm, *IAES International Journal of Artificial Intelligence*, 2019, 8(3), pp. 228-236, DOI: <http://doi.org/10.11591/ijai.v8.i3.pp%25p>, Pages:9
10. S.S. Khan, H. Shareef, A.H.Mutlag, Dynamic temperature model for proton exchange membrane fuel cell using online variations in load current and ambient temperature , *International Journal of Green Energy* , 2019, 16 (5), pp. 361-370 ,DOI: 10.1080/15435075.2018.1564141, Abs./Ind.: ISI. impact factor: 0.44, Q3 (2017 JCR). Pages:9
11. M. Asna, H. Shareef, S.N. Khalid, A. Al Dosari, B. Hamad, M. Alhammadi, N. Aldarmaki, Analysis and Design of Single Phase Voltage-Frequency Converter with Optimized PI Controller, *International Journal of Power Electronics and Drive System*, 2018, 10(1), pp. 522-529, DOI: 10.11591/ijpeds.v10.i1.pp522-529, Abs./Ind.: Scopus Pages: 7
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13. S.S. Khan, H. Shareef, A. Wahyudie, S.N Khalid, R. Sirjani, Influences of Ambient conditions on the Performance of Proton Exchange Membrane Fuel Cell Using Various Models, *Energy & Environment*, 2019,

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15. Addy Wahyudie, "Impact of Using e-textbook for the Teaching of Control Systems Engineering in the United Arab Emirates University", *International Research Journal of Engineering and Technology*, Vol. 6, Issue 3, 2019.
16. H. M. Alkhoori, A. Lakhtakia, J. K. Breakall, and C. F. Bohren, "Plane-wave scattering by an ellipsoid composed of an orthorhombic dielectric-magnetic material with arbitrarily oriented constitutive principal axes," *J. Opt. Soc. Am. B* 8, F60-F71 (2019).
17. H. M. Alkhoori, A. Lakhtakia, J. K. Breakall, and C. F. Bohren, "Sufficient conditions for zero backscattering by a uniaxial dielectric-magnetic scatterer endowed with magnetoelectric gyrotropy," *IEEE Trans. Antennas Propagat.* (accepted).
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21. Mohammed Abdel Hafez, Khaled Shuaib, and Omkalthoum Hamad, "Impact of Collaborative Spectrum Sensing and Nakagami-m Fading on the Transmission Capacity of Cognitive Radio Networks," accepted in *Journal of Communications*, 2019.
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23. Ahmad Hassan, Abdel-Hamid Mourad, Yasir Rashid, Najif Ismail, & Mohammad Laghari, "Thermal and Structural Performance of Geopolymer Concrete Containing Phase Change Material Encapsulated in Expanded Clay", *Energy and Buildings*, Vol. 191, pp. 72-81, 2019.

### *Conferences*

1. Syed S. Jehangir, Mousa I. Hussein, I. J. Rajmohan, Y. Haik, Q. Clément and N. Vukadinovic, "Polyurethane-Based Functionalized CNT Composites as Absorbers for Microwave Applications," *IEEE MTT-S International Microwave Workshop Series on Advanced Materials and Processes 2019 conference (IMWS-AMP 2019, Bochum, Germany)*, July 16-18, 2019.
2. Nadeem Iqbal, Osman Hasan, Umair Siddique and Falah Awwad. "Formalization of Asymptotic Notations in HOL4." *The 4th International Conference on Computer and Communication Systems (ICCCS 2019)*, February 23-25, 2019, Singapore.
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7. M. Al Darei, A. Abdrabou, and M. Prakash, "Incoming Traffic Characterization of WiFi-based Internet of Things Gateways," Proc. of Wireless Telecommunication Symposium 2019.
8. A. Hijazi, A. El Moutaouakil, "Study of MoS<sub>2</sub> nanoribbons for THz Applications," The 12th UK/Europe-China Workshop on Millimetre-Waves and Terahertz Technologies (UCMMT) 2019 20-22 August 2019 | Queen Mary University of London, UK
9. A. Hijazi, A. El Moutaouakil, "Graphene And MoS<sub>2</sub> Structures For THz Applications," 44th International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz'19), Paris, France, September 1-6, 2019
10. M. Alakhras, M. I. Hussein, M. Oussalah, "Fuzzy Sets and Game Theory in Green Supply Chain: An Optimization Model", Computing Conference 2019, 16-17 July 2019, London, United Kingdom.
11. M. S. Laghari & A. Hassan, "Wear Particle Texture Analysis", IEEE 3rd International Conference on Imaging, Signal Processing and Communication (ICISPC'2019), paper will indexed in IEEE Xplore, Singapore, July 27-29, 2019.
12. Hussain Shareef, Mohammad Shakeel Laghari, Saad Saleem Khan, & Khairuddin khalid, "Effectiveness of Online Student Advising System within the Electrical Engineering Department at UAE University", 3rd Progress in Continuing Engineering Education and Life Long Learning International Conference 2019 (CELLIC 2019), Kuala Lumpur, Malaysia, September 13-15, 2019.

#### Book Chapters

1. Fuzzy Sets and Game Theory in Green Supply Chain: An Optimization Model, in the Book: Intelligent Computing, Springer, Vol. 1, 149-164, 2019. DOI 978-3-030-22871-2\_12, © 2019, Dr. Mousa Hussein.
2. M. Al-tekreeti, S. Naik, A. Abdrabou, M. Zaman, and P. Srivastava, "A Methodology for Generating Tests for Evaluating User-Centric Performance of Mobile Streaming Applications," (Book Chapter) in Model-Driven Engineering and Software Development, Springer Book, 2019, DOI 978-3-030-11030-7\_18.

#### Patents

1. Falah Awwad, et al., "PROCESS AND DEVICE FOR DIRECT MEASUREMENTS OF PLANT STOMATA" US-Patent Application No 14/968,954 - Filing Date: 15 December 2015. Projected publication date: June 15, 2017. Granted/Awarded: June 12, 2019.
2. Rashad Ramzan, Muhammad Amin, Omar Farooq Siddiqui, Nabil Bastaki. "Microstrip circuits exhibiting electromagnetically induced transparency and fano resonance." US Patent No. 10186743, January 22, 2019.
3. Rashad Ramzan, Azam Beg, Nabil Bastaki. "Temperature Monitoring of Subject Bodies Using Wireless Energy Transfer." US Patent No. 10222270, Mar. 5, 2019.
4. Rashad Ramzan, Omar Farooq Siddiqui, Nabil Bastaki. "Fuel Quality Sensor.". US Patent Application No. 20190145922A1, May 16, 2019.
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