

ZAKARIYA ALHAMOUZ

PUBLICATIONS

Patents

1. “Contamination Monitoring of High Voltage Insulators”, Patent No. US20110242313 A1, **Issued, November 24, 2012**
2. “System and Method for Estimating Corona Power Loss in a Dust-Loaded Electrostatic Precipitator”, US Patent # US 8,521,455 B2, , **Issued, August 27, 2013**
3. "Method of Modeling Fly Ash Collection Efficiency in Wire-Duct Electrostatic Precipitators", Patent No US 8608826, **Issued, Dec. 2013.**
4. “Sliding Mode AGC Controller and Method”, Patent No. US 8,626,350, **Issued on July 2016.**
“Contamination level estimation method for high voltage insulators”, Patent No US9384560B2, **Issued on July 2016.**
5. “Ranking Method for Hybrid Renewable Distributed Generation Systems”, **Published**, Patent No. USPTO 20150339266, **November 2015.**
6. “System and Method for Non-Linear Model Predictive Control of Multi-Machine Power Systems”, **Published**, Patent No. USPTO 20160170429, **July 2016.**

Journal Papers

2020

1. L. Maraaba, T. Ssennoga, Memon A. and **Al-Hamouz Z.**, “Recognition of Stator Winding Inter-Turn Fault in Interior-Mount LSPMSM Using Acoustic Signals”, *Symmetry*, pp. 1-12, 2020 **(ISI).**

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2. L. Maraaba, **Al-Hamouz Z.**, A. Mulhim, and T. Ssennoga, “Comprehensive Parameters Identification and Dynamic Model Validation of Interior-Mount Line-Start Permanent Magnet Synchronous Motors”, *Machines*, pp. 1-22, 2019 **(ISI).**
3. L. Maraaba, **Al-Hamouz Z.**, A. Mulhim and M.A. Abido, “Neural Network-Based Diagnostic Tool for Detecting Stator Inter-Turn Faults in Line Start Permanent Magnet Synchronous Motors”, *IEEE Access*, Vol.7, pp. 89014 - 89025 , 2019 **(ISI).**
4. L. Maraaba, **Al-Hamouz Z.**, and M.A. Abido, “An Accurate Tool for Detecting Stator Inter-Turn Fault in LSPMSM”, *IEEE Access*, pp. 88622- 88634, 2019 **(ISI).**

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5. Hussein I., **Al-Hamouz Z.**, Abido M and A. Milhem, “On the Mathematical Modeling of Line-Start Permanent Magnet Synchronous Motors under Static Eccentricity”, *Energies*, 11, 197, 2018. **(ISI).**
6. M. Mamdouh, Mohammad Ali Abido, **Al-Hamouz Z.**, “Weighting Factor Selection Techniques for Predictive Torque Control of Induction Motor Drives: A Comparison Study”, *AJSE*, pp. 433-445, 2018. **(ISI).**
7. M. Shafiul Alam, M. Abido, **Al-Hamouz Z.**, “Model predictive control approach for bridge type-fault current limiter in VSC-HVDC system”, *AJSE*, pp. 1-11, May 2018. **(ISI).**
8. L. Maraaba, **Al-Hamouz Z.**, and M.A. Abido,” An Efficient Stator Inter-Turn Fault Diagnosis Tool for Induction Motors”, *Energies* 2018, 11(3), 653; doi:10.3390/en11030653 **(ISI).**
9. L. Maraaba, **Al-Hamouz Z.**, M. Abido and A. Mulhim, “Novel Modelling of Interior r-Mount LSPMSM under Asymmetrical Stator Winding”, *IET Electric Power Applications*, DOI: [10.1049/iet-epa.2017.0525](https://doi.org/10.1049/iet-epa.2017.0525), May 2018, p. 693 – 700 **(ISI).**

10. K. Baradieh and **Al-Hamouz Z.**, “Modelling and Simulation of Line Start Permanent Magnet Synchronous Motors with Broken Bars”, *J. of Electrical and Electronic Systems*, DOI: 10.4172/2332-0796.1000259, 2018.
11. L. Maraaba, **Al-Hamouz Z.**, and M. Abido “Mathematical Modeling, Simulation, and Experimental Testing of Interior-Mount LSPMSM Under Stator Inter-Turn Fault”, *IEEE Transactions on Energy Conversion*, DOI: 10.1109/TEC.2018.2886137, December 2018 (ISI).
12. Samy Faddel, Abdulrahman Aldeek, Ali T. Al-Awami, E. Sortomme, and **Al-Hamouz Z.**, ‘Ancillary Services Bidding for Uncertain Bidirectional V2G Using Fuzzy Linear Programming,’ *Energy*, pp. 986-999, 2018 (ISI).
13. Makbul A., Ssennoga T., **Al-Hamouz Z.**, “Analyzing the potential and progress of distributed generation applications in Saudi Arabia: The case of solar and wind resources”, *Renewable & Sustainable Energy Reviews*, pp. 287-297, 2017, (ISI).
14. L. Maraaba, **Al-Hamouz Z.**, and H. Al-Duwaish, “A Neural Network-Based Estimation of the Level of Contamination on High-Voltage Porcelain and Glass Insulators”, *Electrical Engineering*, pp.1-10, August 2017. (ISI).

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16. L. Maraaba, **Al-Hamouz Z.** and H. Al-Duwaish, “Prediction of the Levels of Contamination of HV Insulators Using Image Linear Algebraic Features and Neural Networks”, *AJSE*, pp. 2609–2617, 2015 (ISI).

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