

Author: Assoc. Prof. Șerban Ioan

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Domain: Electrical Engineering

PUBLICATIONS LIST

RELEVANT PAPERS

- [1] I. Șerban, "A control strategy for microgrids: Seamless transfer based on a leading inverter with supercapacitor energystorage system", *Applied Energy* (FI=7.9), vol. 221, July 2018, pp. 490-507.
- [2] I. Șerban, C.P. Ion, "Microgrid Control Based on a Grid-Forming Inverter Operating as Virtual Synchronous Generator with Enhanced Dynamic Response Capability", *International Journal of Electrical Power and Energy Systems* (FI=3.6), vol. 89, July 2017, pp. 94-105.
- [3] I. Șerban, "Active Load Control for dynamic frequency support and harmonic compensation in autonomous microgrids", *ASCE's Journal of Energy Engineering* (FI=1.34), vol. 144, no.2, Apr. 2018.
- [4] I. Șerban, "Power Decoupling Method for Single-Phase H-Bridge Inverters With No Additional Power Electronics," *IEEE Transactions on Industrial Electronics* (FI=7.05), vol. 62, no. 8, pp. 4805-4813, Aug. 2015.
- [5] I. Șerban, C. Marinescu, "Control Strategy of Three-Phase Battery Energy Storage Systems for Frequency Support in Microgrids and with Uninterrupted Supply of Local Loads", *IEEE Transactions on Power Electronics* (FI=6.81), vol. 29, no. 9, Sept. 2014, pp. 5010-5020.
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I. Șerban, "Contributions to the development of hybrid power systems with renewable energy sources", *Transilvania University of Brasov*, 2008, coordinator prof. Corneliu Marinescu.

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- [2] I. Șerban, "Method for harmonic current compensation with active load", application no. A/00881/27.10.2017.
- [3] I. Șerban, "Circuit and decoupling method of the pulsating power for single-phase inverters", RO-130090/A0, application no. A/00611/11.08.2014, patent pending;

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- [1] I. Șerban, "A control strategy for microgrids: Seamless transfer based on a leading inverter with supercapacitor energystorage system", *Applied Energy*, vol. 221, July 2018, pp. 490-507.
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- [1] **I. Șerban**, C. Marinescu, "Flexible solution for grid-connected operation of microgrids, based on a leading inverter with supercapacitor energy storage," 2018 IEEE International Energy Conference (ENERGYCON), Limassol, 2018, pp. 1-6.
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- [3] A. Marinescu, **I. Șerban**, "A Smart Residential Microgrid Based on Renewable Energy Sources with Integrated Electric Vehicle Charging Station", *International Symposium on Fundamentals of Electrical Engineering 2018 (ISFEE)*, Bucharest, 2018.
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Assoc. Prof. Șerban Ioan