



IEEE 4th Global Power, Energy and Communication Conference

Cappadocia/TURKEY

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Special Session on Multi-Level DC-AC Converters: Emerging Structures, Advanced Modulation Techniques and Applications

In recent years, the multi-level DC-AC converters have become a very popular research-topic in academic and industrial centres, which mainly originates from their novel properties like: stair-case output voltage waveform, high output voltage quality, low dv/dt stress on the load, few components and drivers, reduced-size output filter, low Electromagnetic Interference (EMI), high efficiency and low voltage stress on switching devices. These brilliant features have caused to benefit from Multi-Level Inverters (MLIs) in variety of applications like renewable energy systems, on or off-grid applications, FACTS devices, hybrid electric vehicles, AC drives and so on. The key objectives on design of new MLI structures are to provide voltage boosting ability, reactive power support, reduced device-count, and decreased stress on semiconductors. The modulation schemes, voltage balancing techniques and control strategies are other topics of high interest in MLIs. This special session focuses on the latest development in topologies, control and modulation techniques of multi-level DC-AC converters.

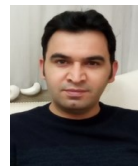
Topics of interest include, but are not limited to:

- Emerging Multilevel DC-AC Converter Topologies
- Switched-Capacitor Multilevel DC-AC Converter Topologies
- Advanced Modulation, Control and Charge-Balancing Techniques
- Stand-Alone or Grid-Connected Multilevel DC-AC Converters
- Fault Tolerant Control and Operation of Multilevel DC-AC Converters
- Reliability Investigation of Multilevel DC-AC Converters

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Deadlines of the special session:

Full paper submission (maximum 6 pages):	April 25th, 2022
Notification of acceptance:	May 05th, 2022
Final submissions due:	May 15th, 2022

All the instructions for paper submission are included at the conference website.
<https://gpecom.org/2022/guidelines/>