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Special Session on

High Gain Converters: Advanced control strategies, topologies, fault tolerant operation and applications

Organized and co-chaired by:

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Call for Papers

Technical Outline of the Session and Topics:

High voltage gain converters are finding increased application in renewable systems, electric vehicles, etc. Several types of high gain converters such as Z-source, quasi Z-source, interleaved, switched capacitor, isolated, non-isolated are reported in literature. These are either isolated or non-isolated, unidirectional, or bidirectional. Reducing the number of switches, increasing efficiency, improving the dynamic response, achieving common ground, bidirectional features are the challenges in this area. Other new areas emerging are developing advanced control strategies, reducing the sensors, increasing power density and fault tolerant operation. So, a special session in this area to discuss the developments on above issues is planned.

Topics of the Session include, but are not limited to:

- High voltage gain DC-DC converters and DC-AC inverters
- Bidirectional and unidirectional high gain converters
- Isolated and non-isolated high gain converters
- Non-linear control strategies for High Gain converters
- Multilevel High gain converter topologies
- SiC and GaN based High gain converter with special emphasis on compactness
- Application of Artificial Intelligence and other advanced control strategies in high gain converter
- High gain converter for Solar driven water Pump, Motors etc.
- High gain converter for EV power train
- Selection criterion for high gain converter for specific application
- Fault tolerant operation for high gain converters
- Reliability of high gain converter
- Material for high gain converters

Author's schedule:

Deadline for submission of special session papers	April 15, 2024
Notification of acceptance	June 10, 2024
Deadline for submission of final manuscript	July 01, 2024
Early submission is highly encouraged for early decision notifications!	

All the instructions for paper submission are included in the conference website:

www.iecon-2024.org



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