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Special Session on

"Z-Source Converters; Topologies, Modulation and Control Strategies, and their Applications"

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Call for Papers

Z-SOURCE CONVERTERS provide efficient means for electric power conversion (dc–dc, dc–ac, ac–dc, ac–ac) between source and load in a wide range of applications. Z-source converters have been experiencing, in terms of research and applications, a constant growth during the last 15 years. The efforts of research have led to a rapid development of different Z-source converter topologies, modulation techniques, and control strategies. Nevertheless, many interesting aspects, such as efficiency improvement, optimized parameters, and new applications, still require more investigation. We encourage all researchers working in this area to submit papers to this Special Session.

Topics of interest include, but are not limited to:

- New Z-source converter topologies;
- Z-source based (dc-dc, dc-ac, ac-dc, matrix, multilevel, …) converters;
- New modulation and control strategies for Z-Source converters;
- Industrial applications of Z-Source converters;
- Application of Z-Source converters in renewable energy and grid connected systems;
- Z-Source converters for electric vehicles and motor drives applications;
- Parameters optimization;
- Loss analysis and losses minimization methods;
- Reliability issues;
- Review and challenges on Z-Source converters;
- Design Consideration of Z-Source converters.