

Special Issue

Applied Neural Networks and Fuzzy Logic in Power Electronics, Motor Drives, Renewable Energy Systems and Smart Grids

Message from the Guest Editors

Dear colleagues, The objective of this Special Issue is to address and disseminate the latest results on various aspects of artificial intelligent techniques, such as expert systems, fuzzy logic, and artificial neural networks in important areas in advanced high-tech electronics, such as applications in Power Electronics, Motor Drives, Renewable Energy Systems and Smart Grids. There is a multidisciplinary relevant to all of those. Fuzzy, neural, and neuro-fuzzy techniques have become efficient tools in modeling and control applications. There are several benefits in optimizing cost-effectiveness, because fuzzy logic is a methodology for the handling of inexact, imprecise, qualitative, fuzzy, and verbal information systematically and rigorously. A neuro-fuzzy controller generates or tunes the rules or membership functions of a fuzzy controller with an artificial neural network approach. There are new instantaneous power theories that may address several challenges in power quality, power electronics, and the integration of renewable energy when associated with artificial intelligence.

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Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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