Special Issue

Advances in Transformers and Their Applications

Message from the Guest Editors

The invention of the electrical transformer at the end of the 19th century made the transmission of electrical energy over long distances possible, thereby achieving the massive use of electricity in industrial, commercial. and domestic applications. Today its applications range from power generation, transmission, and distribution systems to lighting, audio, integrated micro transformers, etc. During the last decades, transformer technologies have evolved considerably to meet the emerging requirements of society and adapt to the changing advances. In addition, the development of modern technologies such as superconductivity, nanotechnologies, I4.0, information technologies, power electronics, alternative insulating liquids, and electric transport has driven new designs and features. These have impacted their design, diagnosis, maintenance, application, and modern manufacturing. This Special Issue addresses new advances in transformers, design optimization, new insulation material, solid-state transformers, innovative condition assessment techniques, non-conventional designs, etc.

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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