Special Issue

Advanced Microwave Technology for Processing

Message from the Guest Editors

Microwave processing represents a technology that can be applied to various domains, such as material sintering, waste treatment, materials joining, surface treatment and cleaning, and many more. However, microwave processing has proven to be unstable and to have a low rate of process reproducibility. In addition, thermal runaway phenomena must be studied in order to avoid damage to the materials. This Special Issue intends to address all these issues by publishing original scientific articles that can provide knowledge related to material processing in the field of microwaves. Topics of interest include, but are not limited to:

- Microwave heating mechanism;
- Thermal runaway phenomenon;
- Modeling and simulation of thermal field;
- Modeling and simulation of electrical field at microwave heating;
- Microwave soldering, microwave–plasma welding;
- Surface treatment in microwave field;
- Domestic and industrial waste treatment/incineration in microwave field.

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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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