Special Issue

Advanced Ceramics for Energy Application

Message from the Guest Editor

The energy crisis can be shortly defined as the concern that the world's limited natural resources that are used to power an industrial society are diminishing as demand rises, thus causing in the near future a shortfall of energy for entire populations. In this scenario, Materials Science will play a crucial role in the forthcoming years, strongly influencing all the energy-related technologies (i.e., both for energy storage and energy production) currently under development for our future "carbon-free" society. Therefore, the discovery of new materials and/or of new/unexpected properties in the existing ones creates exciting research opportunities and possible novel technological breakthroughs. In fact, the identification and engineering of new materials, with improved properties, lower production costs, lower environmental impact, and/or higher environmental compatibility are crucial for further developments of the next generation of energy-related technologies. Keywords:

- Advanced/functional ceramics
- Fuel cells
- Energy storage
- Hydrogen production/storage
- Carbon capture/storage

Guest Editor

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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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