Special Issue

Synthesis, Characterization and Applications of Thermoelectric Materials

Message from the Guest Editor

Efficiency in electricity production and application have been the topic of many investigations in recent years. Dissipation from primary energy in the form of heat is very high at around 70%. A large amount of useful energy is unfortunately lost as waste heat, and thus, relevance has been given to the development and production of possible solutions to recover that heat waste. Thermoelectric materials, for example, can reuse this lost energy by converting it into electricity. In recent decades, the exploration of thermoelectric materials with high performance has attracted attention with the goal of commercial solutions/applications. In this Special Issue, we will collect the newest advances in thermoelectric research, including new processing techniques, material designs, thermoelectric characterization, etc.

- thermoelectric devices
- thermoelectric modules
- thermoelectric materials
- structural defects on thermoelectric performance
- transport properties of thermoelectrics
- mechanical and thermal properties of thermoelectrics
- conventional and unconventional synthesis techniques for thermoelectric processing
- energy conversion efficiency

Guest Editor

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Deadline for manuscript submissions

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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