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Advances in Thermoelectric Materials-II

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

In recent years, major efforts have been made in the development of novel and innovative materials and techniques for efficient, renewable, and environmentally friendly energy conversion into useful electricity. Thermodynamics, enabling the direct energy conversion of heat into electricity.

Various classes of novel narrow-gap semiconductors showing a high thermoelectric potential were discovered which exhibited decent thermoelectric figure of merit, ZT, and values of no more than 1. Although these values were sufficient to develop practical thermoelectric power generators, their heat-to-electricity conversion efficiency was very limited. Because not enough practical thermoelectric generators with equivalently enhanced conversion efficiency values are being reported, recent efforts have also been made toward the design and development of such highly efficient practical conversion devices.

This Special Issue is dedicated but not limited to both theoretically and experimentally optimizing the *ZT* values of various material classes, as well as experimental and theoretical methods for approaching practical power generation devices.

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Message from the Editor-in-Chief

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