



Small-Scale Thermoelectric Generators

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Message from the Guest Editors

Dear Colleagues,

With the development of technology and industry, the issue of energy consumption has become increasingly serious. The recovery and utilization of waste-heat energy have attracted increasing attention from multiple fields. Semiconductor thermoelectric generator technology is a new type of power generation technology, and its use in waste-heat energy recovery and utilization can improve energy efficiency. The working principle of a semiconductor thermoelectric generator is based on three basic concepts: the Seebeck, Peltier, and Thomson effects. Compared with other power generation methods, this process is noiseless and has no wear and medium leakage. In addition, the module has the advantages of small volume, light weight, convenient movement, and long service life. Thus, it is highly suitable for waste-heat energy recovery and utilization systems, especially for low-grade energy utilization. In this Special Issue, we aim to study the application and optimization of small-scale thermoelectric generators, as well as the combination and application of thermoelectric and cross-field technology.





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