Special Issue

Novel Trends in Thermoelectricity

Message from the Guest Editors

Intense research in conventional bulk thermoelectric materials has brought about significant advances. Successful approaches to high ZT have been developed, such the phonon-glass electron-crystal concept, nanostructuration, Zintl chemistry, and band engineering. Simultaneously, high-throughput screening by theoretical predictions can identify many promising materials.

Accordingly, reports on high efficiency have raised expectations for waste heat recovery, co-generation, cooling, and thermal sensors. Also of crucial importance is reducing the errors measurements of thermoelectric transport properties.

Thus, the scope of this Special Issue “New Trends in Thermoelectricity” encompasses original work on new preparation methods of nanostructured thermoelectric materials, detailed structural characterization, thermoelectric transport properties of promising candidates, improvement of the Figure of Merit by novel approaches in well-known materials, potential applications for novel thermoelectric materials and development and refinement of measurement techniques for thermoelectricity.....

Guest Editors

Dr. Federico Serrano-Sánchez

Instituto de Ciencia de Materiales de Madrid (ICMM), Consejo Superior de Investigaciones Científicas (CSIC), Sor Juana Inés de la Cruz 3, 28049 Madrid, Spain

Prof. Dr. Jesús Prado-Gonjal

Departamento de Química Inorgánica, Universidad Complutense de Madrid, E-28040 Madrid, Spain

Deadline for manuscript submissions

closed (28 February 2019)

Physics

an Open Access Journal by MDPI

Impact Factor 1.8
CiteScore 3.1

mdpi.com/si/18068

Physics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
physics@mdpi.com

mdpi.com/journal/physics

Physics

an Open Access Journal by MDPI

Impact Factor 1.8
CiteScore 3.1

mdpi.com/journal/physics

MDPI

About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Edward Sarkisyan-Grinbaum
1. Experimental Physics Department, CERN, 1211 Geneva 23, Switzerland
2. Department of Physics, The University of Texas at Arlington, Arlington, TX 76019, USA

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, INSPIRE, Astrophysics Data System, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 25.9 days after submission; acceptance to publication is undertaken in 20.7 days (median values for papers published in this journal in the first half of 2025).