Special Issue

Design and Application of Cold-Electron Bolometers

Message from the Guest Editors

Bolometers have been extensively developed in recent years. The major pathway lowers the operating temperature to reach higher sensitivities. On-chip electron cooling by SIN (superconductor-insulator-normal metal) tunnel junctions decreases the electron temperature of the absorber, thus improving performance.

In this Special Issue, we invite submissions exploring the development of electron cooling, cold-electron bolometers, thermoelectric bolometers, and electron cooling platforms. Contributions can focus on different concepts and a vatiety of applications. Survey papers and reviews are also welcome.

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Deadline for manuscript submissions

closed (30 October 2021)



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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.

Editor-in-Chief

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