



Nanofabrication of Superconducting Circuits

Guest Editor:

Prof. Dr. Michael I. Faley

Forschungszentrum Jülich,
Jülich, Germany

m.faley@fz-juelich.de

Deadline for manuscript
submissions:

30 April 2022

Message from the Guest Editor

Superconducting circuits exhibit unique characteristics that are not attainable by conventional semiconductor electronics: quantum limited low noise detection and amplification, dispersion- and losses-free interconnections, as well as the energy efficient ultra-high frequency operation of analog and digital circuits, and the realization of a scalable quantum computer.

The objective of this Special Issue is to present studies in the field of nanoscale superconducting devices, with emphasis on their nanofabrication, testing and theoretical modelling. Therefore, researchers are invited to submit their manuscripts to this Special Issue and contribute their theoretical models, technology development, reviews, and studies.

Keywords

- nanostructuring
- Josephson junctions
- SQUIDs
- superconducting single photon detectors
- SIS detectors, superconducting bolometers
- qubits

