



Silicon Nanowires and Their Applications

Guest Editors:

Prof. Dr. Qing-Tai Zhao

Peter Grünberg Institute 9,
Forschungszentrum Jülich, 52425
Jülich, Germany

Prof. Dr. Steffen Strehle

Microsystems Technology,
Technische Universität Ilmenau,
Germany (Image: © E. Eberhardt,
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Deadline for manuscript
submissions:

closed (30 June 2019)

Message from the Guest Editors

Dear Colleagues,

We invite you to contribute to a Special Issue of the journal *Applied Sciences*, “Silicon Nanowires and Their Applications”, which aims to present recent advances in the investigation silicon nanowires (SiNWs) and SiNW-based devices including also fabrication strategies, SiNW characterization, and theoretical studies.

SiNWs provide a unique set of material and morphological properties comprising 1D transport phenomena and a high surface to volume ratio that enable a broad spectrum of applications. The enhanced electrostatics in SiNW devices offers for instance the possibility to scale field effect transistors (FETs) down to <10 nm following Moor’s law. Multiple applications were also demonstrated in the fields of chemical, biochemical and biological sensing ranging from ion-sensitive FETs and vertical electrode arrays to nanoscale injectable probes. Other aspects and applications of SiNWs, besides the examples listed above, are also very welcome.

Keywords: Si nanowire; Fabrication; Quantum computing; Sensor; Thermo-electrics; Battery; Photovoltaics

Prof. Qing-Tai Zhao

Prof. Steffen Strehle





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Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

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.

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