Special Issue

Nanowire Field-Effect Transistor (FET)

Message from the Guest Editors

In the last few years, the main semiconductor industries have introduced multi-gate non-planar transistors in their core business with applications to memories and logical integrated circuits in order to achieve a larger integration on chip, increase performance, and reduce energy consumption. There is intense research underway to keep developing these devices and address their limitations in order to continue transistor scaling while further improving performance. Nanowire Field-Effect Transistors (NW-FETs) are nowadays one of the strongest contenders to replace Fin Field-Effect Transistors (FinFETs) in the following technological nodes, because of their superior electrostatic control of the channel transport via a gate-all-around gate. This Special Issue represents a good opportunity for researchers around the world to disseminate their recent progress related to NW-FETs, from three different points of view: Physics, technology and modelling. Therefore, of particular interest for this Special Issue are material properties, fabrication, design optimization, characterization, numerical and analytical modelling, and variability and circuit design.

Guest Editors

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Deadline for manuscript submissions

closed (29 February 2020)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/17060

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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