Nanowire Field-Effect Transistor (FET)

Guest Editors:

Prof. Antonio García-Loureiro
CITIUS, Universidade de Santiago de Compostela, 15782 Santiago de Compostela, Galicia, Spain
antonio.garcia.loureiro@usc.es

Prof. Karol Kalna
Nanoelectronic Devices Computational Group, College of Engineering, Bay Campus Swansea University, Fabian Way, Crymlyn Burrows, SA1 8EN, United Kingdom
k.kalna@swansea.ac.uk

Dr. Natalia Seoane
CITIUS, Universidade de Santiago de Compostela, 15782 Santiago de Compostela, Galicia, Spain
natalia.seoane@usc.es

Deadline for manuscript submissions:
30 November 2019

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.
Editor-in-Chief

Prof. Dr. Maryam Tabrizian
Professor of Biomedical Engineering, Professor of Bioengineering, Professor of Experimental Surgery, Associate Dean—Research and Graduate Studies, Department of Biomedical Engineering, Faculty of Medicine/Faculty of Dentistry, Duff Medical Science Building, Room 313, 3775 University Street, Montreal, QC, H3A 2B4, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers fourteen comprehensive topics: Biomaterials; Energy Materials; Composites; Structure Analysis; Porous Materials; Manufacturing Processes; Advanced Nanomaterials; Smart Materials; Thin Films; Catalytic Materials; Carbon Materials; Materials Chemistry; Materials Physics; Optics and Photonics; Corrosion; Building Materials. The distinguished and dedicated editorial board and our strict peer-review process ensure the highest degree of scientific rigor and review of all published articles.

Materials provides an unique opportunity to contribute high quality articles and to take advantage of its large readership.

Author Benefits

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

High visibility: indexed by the Science Citation Index Expanded (Web of Science), Ei Compendex and other databases. Citations available in PubMed, full-text archived in PubMed Central.

CiteScore (2018 Scopus data): 3.26, which equals rank 97/439 (Q1) in 'General Materials Science'.

Contact Us

Materials
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland
Tel: +41 61 683 77 34
Fax: +41 61 302 89 18
www.mdpi.com
materials@mdpi.com
@Materials_Mdpi