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## Semiconductor Nanowire Devices and Applications

Guest Editors:

### Dr. Francesco Rossella

Scuola di Ingegneria,  
Dipartimento di Scienze Fisiche,  
Informatiche e Matematiche,  
Università di Modena e Reggio  
Emilia, via Campi 213/a, 41125  
Modena, Italy

### Prof. Giovanni Pennelli

Dipartimento di Ingegneria  
dell'Informazione, Università di  
Pisa, Via Caruso 16, I-56122 Pisa,  
Italy

### Prof. Dr. Antonio Polimeni

Dipartimento di Fisica, Sapienza  
Università di Roma, 00185 Roma,  
Italy

Deadline for manuscript  
submissions:

**closed (31 March 2022)**

### Message from the Guest Editors

Dear Colleagues,

This special issue of *Materials* focuses on semiconductor nanowires, hosting a manuscripts collection on different aspects of nanowire physics and technology.

The unique properties of nanowires, including large aspect ratio and surface area, strain relaxation allowing for uncharted material combinations, crystal phase engineering and facile quantum confinement, make these nanomaterials of rising interests for applications.

Semiconductor nanowires bear in fact enormous potential as building blocks for next generation devices in different fields including electronics, optoelectronics, energy harvesting and sensing at the nanoscale.

Nanowire researchers are invited to contribute with original research paper as well as review-style articles on technological and scientific aspects - both experimental and theoretical - of semiconductor nanowires.

Main topics include:

nanowire synthesis and growth modeling;  
advanced microscopies/spectroscopies;  
study of structure-properties relation;

phonon engineering;  
electronic and optoelectronic devices;

gated devices based on nanowires;

transport phenomena;  
sensing and chem-FETs.





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## Editor-in-Chief

### Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

## 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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## Contact Us

Materials Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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