



CALL FOR PAPERS

ICSSNBA 2022
Apr 08-09, 2022
Athens, Greece

The International Research Conference is a federated organization dedicated to bringing together a significant number of diverse scholarly events for presentation within the conference program. Events will run over a span of time during the conference depending on the number and length of the presentations.

ICSSNBA 2022 : International Conference on Semiconducting Silicon Nanowires for Biomedical Applications is

the premier interdisciplinary forum for the presentation of new advances and research results in the fields of Semiconducting Silicon Nanowires for Biomedical Applications. The conference will bring together leading academic scientists, researchers and scholars in the domain of interest from around the world. Topics of interest for submission include, but are not limited to:

Semiconducting silicon nanowires (SiNWs) for biomedical applications
Growth and characterization of semiconducting silicon nanowires for biomedical applications
Synthesis methods for silicon nanowires and characterization methods
Synthesis of semiconductor SiNWs by the chemical vapor deposition method
Surface modification of semiconducting silicon nanowires for biosensing applications
Methods for fabricating silicon nanowires
Chemical activation/passivation of SiNWs
Modification of native oxide layer
Modification of hydrogen-terminated silicon nanowires (H-SiNW)
Site-specific immobilization strategy of biomolecules on SiNWs
Biocompatibility of semiconducting silicon nanowires
In vitro biocompatibility of silicon nanowires (SiNWs)
In vivo biocompatibility of SiNWs

Silicon nanowires for tissue engineering and delivery applications
Functional semiconducting silicon nanowires for cellular binding and internalization
Non-linear optical characterization and surface functionalization of silicon nanowires (SiNWs)
In vivo imaging and in vitro cellular interaction of functional SiNWs
Functional semiconducting silicon nanowires and their composites as orthopedic tissue scaffolds
Nanowire surface etching processes to induce biomineralization
Nanowire surface functionalization strategies to induce biomineralization
Construction of silicon nanowire (SiNW)-polymer scaffolds: mimicking trabecular bone
Mediated differentiation of stem cells by engineered semiconducting silicon nanowires
Methods for fabricating silicon nanowires (SiNWs)
Regulated differentiation for human mesenchymal stem cells (hMSCs)
SiNWs fabricated by the electroless metal deposition (EMD) method and their controllable spring constants
Mediated differentiation of stem cells by engineered SiNWs

