



an Open Access Journal by MDPI

# Material Interconnections and Microstructure Control-Related

Guest Editor:

# Message from the Guest Editor

Prof. Dr. Katsuaki Suganuma

Osaka University, Institute of Scientific and Industrial Research, 8-1 Mihogaoka, Ibaraki, Osaka 567-0047, Japan

Deadline for manuscript submissions: closed (31 March 2019) Dear Colleagues,

The advancement of electronic devices requires new interconnection materials, which should possess excellent electric/thermal conductivity as well as high robustness. New interconnection materials/technologies and their control methods must be established based on scientific understanding of hetero-interface phenomena.

This Special Issue will focus on the current researches in interconnections and their microstructural control for advancing electronic devices, including soldering, sinter joining, conductive adhesive, alternative interconnects, metallization, substrates, 3D packaging, quality, reliability, and failure analysis.

We will assess how certain interconnect features (device metallization, interconnects, substrates, design, etc.) can influence the performance and reliability of devices. Your contributions will provide considerable impact on new electronic/optical devices.

Prof. Katsuaki Suganuma *Guest Editor* 









an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
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 iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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.

# **Author Benefits**

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

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

# **Contact Us**

*Materials* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials\_Mdpi