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Advanced Nanomaterials for Soft and Wearable Electronics

Guest Editors:

Dr. Chien-Chung Shih

Department of Chemical &
Materials Engineering, National
Yunlin University of Science and
Technology, Yunlin, Taiwan

Dr. Donglai Zhong

Department of Chemical
Engineering, Stanford University,
Stanford, CA, USA

Dr. Deyu Liu

School of Materials Science and
Engineering, Ocean University of
China, Qingdao, China

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Message from the Guest Editors

Skin-inspired electronics are promising technologies for the next generation of wearable devices and biomedical systems. New nanomaterials and processing technologies could contribute significantly to the design and implementation of stretchable conductors and semiconductors.

This Special Issue will attempt to cover the most recent advances in stretchable and conductive nanomaterials, concerning not only their molecular design, synthesis and characterization, but especially their processability and compatibility to be applied in soft and wearable electronics:

- Advanced nanomaterials for the application of stretchable transistors, diodes, memories and displays.
- Advanced nanomaterials for stretchable energy generation, harvest and storage applications, triboelectric nanogenerators, wireless power transmission, solar cells, supercapacitors and batteries.
- Advanced nanomaterials for on-skin sensors, including pressure sensors, strain sensors, temperature sensors, light sensors, gas sensors, chemical sensors and bioelectrodes.
- Advanced nanomaterials for implantable medical devices, human-machine interfaces, haptics, prosthesis, smart drug delivery, and health care systems.



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Special Issue



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Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and
Environmental Science,
University of Birmingham,
Birmingham B15 2TT, UK

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

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Nanomaterials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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