SUBMIT AN ABSTRACT BY JULY 1

FEBRUARY 27-MARCH 3, 2022
ANAHEIM CONVENTION CENTER & ANAHEIM MARRIOTT
ANAHEIM, CALIFORNIA, USA
#TMSAnnualMeeting

SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2022 SYMPOSIUM:

NANOSTRUCTURED MATERIALS

Functional Nanomaterials: Functional Low-Dimensional (0D, 1D, 2D) Materials 2022

Low-dimensional (0D, 1D, 2D) materials are a broad class of materials with emergent properties originating from their reduced physical dimensions and (sub)nanoscale structures and morphologies. These low-dimensional materials offer exciting new opportunities for innovations in the technological frontiers critical for the sustainable future advancement of society, such as nano-optoelectronics, sustainable energy, high-performance sensors, and advanced environmental and healthcare technologies.

The 2022 Symposium on Functional Nanomaterials will address all aspects of low-dimensional nanomaterials, encompassing: two-dimensional (2D) nanofilms, nanosheets, and monolayers, one-dimensional (1D) nanofibers, nanotubes, and nanowires, zero-dimensional (0D) nanoparticles and quantum dots, as well as their hierarchical assemblies, heterostructures, frameworks, and organic-inorganic hybrids. Along with sessions for conventional nanomaterials, focused sessions will be dedicated to unique design/synthesis/fabrication/manufacturing/characterization strategies, novel integration routes for emerging functionalities, and advanced device applications.

Examples of welcomed session topics include, but are not limited to:

- Interrogation of low-dimensional materials and their fundamental properties via in situ, in operando methods towards development of emergent functionalities
- Theoretical frameworks and computational/learning/data-intensive methods for modelling, predicting, understanding, and designing low-dimensional materials and their derivative systems
- Large-area/volume synthesis/processing/manufacturing and integration/application of low-dimensional materials and instrumentation/methods to achieve the same
- Hierarchical multi-scale structures and architectures consisting of low-dimensional materials
- Applications, functional devices, and engineered systems derived from low-dimensional materials

Joint sessions will be held with the symposium Self-organizing Nano-architectured Materials.

ORGANIZERS
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QUESTIONS?
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