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**MARCH 14-18, 2021 • ORLANDO WORLD CENTER MARRIOTT
ORLANDO, FLORIDA, USA**
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SUBMIT AN ABSTRACT TO:

NANOSTRUCTURED MATERIALS

PLASMONICS IN NANOCOMPOSITE MATERIALS

This symposium will cover recent achievements in the design, fabrication and application of plasmonic nanocomposites in different fields of science including material science, medicine, and industry, and it will cover their significant impact on global society. We expect to have sessions that focus on the design and development of nanoparticle-based materials that have applications ranging from sensing and optics to bio-diagnostic and therapeutic implications. Topics of interest include, but are not limited to:

- Theoretical understanding, synthesis and optical properties of noble metal nanostructures and their application in surface chemistry
- Computational and experimental methods used to design novel nanomaterials, such as 2D semiconductors
- Theoretical and experimental methods used to design two-dimensional plasmonic composite materials with for thermoplasmonics, biosensing, detection, solar cells and energy storage
- Plasmonics' properties and applications of 2D nanomaterials
- Advances and developments in techniques for ultrafast detection of trace levels of chemical and biological analytes, e.g. surface plasmon resonance and near-field scanning optical microscopy
- Advances and developments of plasmonic semiconductor materials for potential use in the standard telecommunications fiber-optics windows

The scope of the focused sessions will cover plasmonic nanocomposite synthesis, characterization and use in various applications, such as:

- Innovative synthetic routes of plasmonic nanocomposite materials, such as metal-polymers, metal-metal oxides, metal-graphene, metal-semiconductors, etc.
- Fundamental properties and applications of plasmonic composite nanomaterials, such as ultrafast sensing, electronics, optics, environmental, chemical and bio-chemical applications, etc.
- Computational and experimental methods used to augment experimental studies in this field

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Abstract Deadline is July 1, 2020. Submit online at
www.programmaster.org/TMS2021.

Questions?
Contact programming@tms.org