Special Issue

Emerging Functional Nanomaterials for Microsystems and Devices

Message from the Guest Editors

Emerging function nanomaterials owning tunable properties offer a wide range of opportunities for the challenging development and improvement of microsystems and devices in various research areas, e.g., microfluidic systems, microsensors, batteries, supercapacitors, fuel cells, hydrogen production, carbon dioxide reduction, solar energy conversion, et al. However, there are still bottleneck challenges in tuning the functional properties, e.g., structures, band diagrams, surface, interface, stability, and compatibility, of materials in nanoscience and nanotechnology. Here, this Special Issue aims to reflect the tremendous world-wide attempts and achievements of emerging functional nanomaterials, including carbon-based materials, III-nitrides nanowires, transition metals, 2D materials, perovskite, porous materials, nano clusters, and so on, with their applications in various microsystems and devices. This special topic will present the recent attempts and demonstrations of nanomaterials fabrication technology, tunable structures and properties, and their applications, which may provide enormous information for the researchers working on nanomaterials-based applications.

Guest Editors

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