

Editorial

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The race for continuous scaling has been fuelling the electronics industry for the last half a century, allowing unprecedented innovations and achievements. Undoubtedly, silicon and, to some extent, III-V semiconductors have been the front runners of the ever-shrinking electronic devices used in integrated circuits. However, with the recent advances in material synthesis, processing at the nanoscale allowed demonstration of nanoscale devices of previously unimagined materials. With their inherently advantageous properties, nanoscale materials and devices have already been used in numerous applications in diverse fields, including but not limited to bio/chemical sensing, imaging, displaying, quantum computation, communication, energy harvesting and storage, environmental protection, brain-machine interfaces, neural stimulation and prosthetics, theranostics and artificial organs.

The future seems even brighter, with a plethora of potential applications waiting to be realized. Rapidly growing personalized health-monitoring and medicine, the Internet of Things and virtual and augmented realities require even more advanced devices with multifunctionality, smaller form factors, lower power requirements, lower costs and seamless integration, which could only be made possible by nanodevices. Recent developments in 3D printing and rapid manufacturing also present unique opportunities for the fabrication and integration of nanodevices. Naturally, there are challenges in the ways in which such issues might be addressed by interdisciplinary studies, involving both researchers and engineers from diverse fields of expertise.

The *Nanomaterials and Nanotechnology Journal* has been publishing high quality research papers since its inception in 2011. We are proud to be an open access journal making these high quality research findings available to a much broader audience free of charge. The large number of downloads of the published papers, exceeding 8,000 for some, within the journal's relatively short lifetime attests to the advantages of its open access policy.

At the dawn of a new year, we are opening a new chapter by expanding our editorial board to include dedicated Topic Editors-in-Chief for eight distinct topics. The nanodevices topic covers theoretical and experimental studies of all types of electrical, optical, mechanical and chemical devices at the nanoscale for any application. High quality review papers on specific subjects will also be considered for publication.

I personally invite everyone in the nanodevices community to join our rapidly growing family by submitting manuscripts, as well as by contributing to the review process, which ultimately benefits us all.

Wishing a happy and productive New Year to all!

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Nanodevices, Topic Editor-in-Chief