

## **Editorial:** **Welcome to the *Journal of Nanophotonics***

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The launch of a new research journal is a time for hope, not only for the future of that journal but also for the future of the research areas within its scope. Undoubtedly, nanoscience and nanotechnology constitute a major growth area of scientific and technological research in the new century, with the potential to transform the human condition so radically as to be barely imaginable today. The current explosive growth of nanoresearch coupled with the ever-expanding role of optics and photonics in human civilization for at least a century inspired SPIE leaders last year to undertake the publication of the *Journal of Nanophotonics*. Their hopes for the new journal are symbolized by its launch during Photonics West, the showcase research conference and trade show of SPIE that greets the world of optics and photonics at the beginning of each new year.

The new journal is published in a recently emerged format. The *Journal of Nanophotonics* is an online-only journal. Its publication underlines the societal transformation that information science and technology (IST), another current growth area but of somewhat older provenance, has already wrought. As IST has thus enabled the rapid, worldwide dissemination of nanoresearch, and as the products of nanoresearch enable new formats of information production, storage, and dispersal, the contours of a new world of global research are being created. How exhilarating for researchers in all traditional disciplines, at interdisciplinary boundaries, and in multidisciplinary spaces!

The *Journal of Nanophotonics* focuses on the fabrication and application of nanostructures that facilitate the generation, propagation, manipulation, and detection of light from the infrared to the ultraviolet regimes. Topics lying within its scope include: nanoparticles and nanoparticulate composite materials and thin films; quantum dots and other low-dimensional nanostructures; nanotubes, nanowires, and nanofibers; nanowaveguides and nanoantennas; sculptured thin films and nanostructured photonic crystals; quantum optics and spintronics; nanoscale optical electronics; surface plasmons and nanoplasmonics; ultrashort pulse propagation; light-harvesting materials and devices; nanoscale light sources; nanophotonic detectors; near-field optics, optical manipulation techniques, spectroscopies, and scattering techniques; molecular self-assembly and other nanofabrication techniques; nanobiophotonics; nanothermal systems; and nanophotonic concepts and systems that facilitate continued integration of various optical and/or electronic functions. The scope extends from theory, modeling and simulation, experimentation, and instrumentation to application.

On behalf of SPIE leaders as well as the editorial team of the *Journal of Nanophotonics*, I invite you to submit original manuscripts reporting on research and development in nanophotonics. Every manuscript is to be reviewed by the editorial team and anonymous peers. The journal also aims to publish focus issues containing invited papers. A book-review section is also planned.

Welcome to this new journal, in a recently emerged format, on an emerging research area!