Special Issue

Non-diffractive Beams for the State of the Art Applications

Message from the Guest Editors

Dear colleagues, It is my pleasure to invite you to submit your highly valued work to a Special Issue of the Journal *Micromachines* on "Non-diffractive Beams for State-of-the-Art Applications." In acoustics, Bessel beams are generally used in applications such as ultrasound imaging systems. Their extended depth of focus and slender beam-width provide a precise scanning of the transmitted beam, whereas their self-recovering properties contribute toward extraordinary robustness to tissue scattering. Moreover, its diffraction-free feature provides perpetual deep imaging resolution. Recently, Bessel beams have gathered a lot of interest because of their distinctive properties for particle trapping; particle manipulation; material processing; tight focusing; and free-space, long-distance, self-healing beams, among others. This Special Issue will cover recent developments and the latest advances in the generation and utilization of these beams in distinctive applications. Original work, letters and review papers based on theoretical and experimental data are welcomes in this Special Issue.

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You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

Editor-in-Chief

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