Special Issue

Progress in OAM Beams: Recent Innovations and Future Perspectives

Message from the Guest Editors

In 1992, Allen et al. introduced orbital angular momentum (OAM) when they showed a connection between the helical phase structure of light and its OAM. Due to this helical phase structure, the OAM beams show a donut-shaped intensity profile with a phase singularity in the middle. Since the publication of this paper, interest in OAM beams has increased enormously, resulting in different types of OAM beams in which spatial or spatio-temporal structures have been utilized to manipulate light in different applications, like optical communication and optical micromanipulation (trapping and tweezing). OAM beams are also used in sensing and imaging applications to probe and condition optical channels in a turbulent or turbid environment. This Special Issue aims to publish selected contributions on recent research on OAM beams, innovative applications using OAM beams, and future perspectives.

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