Special Issue

Advances in Optical Orbital Angular Momentum in Channel Environment

Message from the Guest Editor

Employing optical orbital angular momentum (OAM) in laser communication networks can provide better candidates to realize multi-channel information transmission, which brings in advantages such as larger channel capacity and higher spectral efficiency. The intended use of OAM for point-to-point optical links has illuminated a range of interesting new challenges, where novel interactions of optical OAM with the turbulent and scattering environment have highlighted the need for new technology to overcome the distorting effects. Inspired by these advances in laser communication with OAM is the use of these unique optical interactions of OAM with the channel environment that has instigated novel sensor technologies and could be a new frontier for optical OAM. The scope of this Special Issue is to provide an overview of recent advances in the developments and application of optical OAM in the channel environment. The scope encompasses fundamental research, interaction mechanisms, technology development, optical communication, and remote sensing applications of optical OAM. Both original research articles and comprehensive reviews are welcome.

Guest Editor

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