



Free-Space Optical Communication: Physics and Applications

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Message from the Guest Editors

Dear Colleagues,

Free space optical (FSO) communication has recently received significant attention because of its advantages over its main competitors (i.e., fiber-based and RF/microwave communications), including unlicensed spectrum, much higher transmission rate, simplicity of setup, etc. FSO communication is also a highly attractive candidate for solving the 'last-mile' problem. The development of FSO communication will be beneficial to our daily lives, and will also assist us in intersatellite and deep space explorations. Research in FSO communication is a multidisciplinary field usually involving a wide range of areas, from physics, for instance the influence of environmental disturbance (fog, rain, snow turbulence, etc.), to the structures of optical beams (vortex/nondiffracting beams, manipulation of beam propagation, etc.) and application, such as FSO devices (receiver, transmitter, etc.) and communication networks (channel models, modulation and signal processing, etc.). We believe that advances in these research fields will push this technology forward.

Kind regards,

Dr. Xiaoyan Pang

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Guest Editors

