Special Issue

Quantum Fiber Transmission: Securing Next-Generation Optical Networks

Message from the Guest Editor

Quantum computers have made it rather challenging to use traditional cryptography architectures; for instance, the widely used cryptographic technique, RSA, can potentially be decrypted using Shor's fast algorithm for factoring on a quantum computer. Quantum Key Distribution (QKD) is currently the most valuable solution to this problem, offering intrinsically secure techniques for transmitting cryptographic keys over optical networks. The study of optical quantum information, in the presence of noise or eavesdropping, has emerged as a topic of crucial importance, garnering the interest of the scientific community. This Special Issue "Quantum Fiber Transmission: Securing Next-Generation Optical Networks", aims to collate papers illustrating the most advanced quantum techniques that can be used to secure optical networks. We welcome submissions of both original research articles and reviews.

Guest Editor

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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