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Quantum Fiber Transmission: Securing Next-Generation Optical Networks

Guest Editor:

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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.



