1. Record Nr. UNINA9910595075303321

Autore	Djordjevic Ivan B
Titolo	Physical-Layer Security, Quantum Key Distribution and Post-quantum Cryptography
Pubbl/distr/stampa	Basel, : MDPI Books, 2022
Descrizione fisica	1 electronic resource (210 p.)
Soggetti	Technology: general issues History of engineering & technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	The growth of data-driven technologies, 5G, and the Internet place enormous pressure on underlying information infrastructure. There exist numerous proposals on how to deal with the possible capacity crunch. However, the security of both optical and wireless networks lags behind reliable and spectrally efficient transmission. Significant achievements have been made recently in the quantum computing arena. Because most conventional cryptography systems rely on computational security, which guarantees the security against an efficient eavesdropper for a limited time, with the advancement in quantum computing this security can be compromised. To solve these problems, various schemes providing perfect/unconditional security have been proposed including physical-layer security (PLS), quantum key distribution (QKD), and post-quantum cryptography. Unfortunately, it is still not clear how to integrate those different proposals with higher level cryptography schemes. So the purpose of the Special Issue entitled “Physical-Layer Security, Quantum Key Distribution and Post-quantum Cryptography” was to integrate these various approaches and enable the next generation of cryptography systems whose security cannot be broken by quantum computers. This book represents the reprint of the papers accepted for publication in the Special Issue.