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Descrizione fisica	1 online resource (770 pages)
Disciplina	621.382
Soggetti	Telecommunication Engineering mathematics Engineering - Data processing Spintronics Computer networks Communications Engineering, Networks Mathematical and Computational Engineering Applications Computer Communication Networks Microwaves, RF Engineering and Optical Communications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Information theory and coding fundamentals -- Conventional cryptography fundamentals -- Physical-layer security (PLS) -- Quantum information processing and quantum information theory fundamentals -- Quantum key distribution (QKD) fundamentals -- Discrete-variable (DV) QKD Schemes -- Continuous-variable (CV) QKD Schemes -- Recent QKD schemes -- Covert, stealth, and low probability of intercepting -- (LPI) communications -- Postquantum cryptography -- Conclusion.
Sommario/riassunto	This book introduces the reader to the most advanced topics of physical-layer security (PLS), cryptography, covert/stealth communications, and quantum key distribution (QKD), also known as the quantum cryptography, and post-quantum cryptography (PQC). So far, these topics have been considered as separate disciplines, even though they are targeting the same security problems we are facing

today. The book integrates modern cryptography, physical-layer security, QKD, covert communication, PQC, and cyber security technologies. The book is intended for a very diverse group of readers in communications engineering, optical engineering, wireless communications, free-space optical communications, optical wireless communications, mathematics, physics, communication theory, information theory, photonics, as well as computer science. Unifies conventional cryptography, physical-layer security, QKD, and PQC; Requires no prerequisite material; all background material is provided in the Appendix chapter; Prepares readers to perform independent research in any of the areas listed above. .
