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Soggetti	Physics Quantum computers Spintronics Electrical engineering Application software Computer software Popular Science in Physics Quantum Information Technology, Spintronics Communications Engineering, Networks Information Systems Applications (incl. Internet) Quantum Computing Professional Computing
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introductory remarks -- The quantum digital future -- The quantum internet -- For deeper understanding.
Sommario/riassunto	The internet can look forward to a fantastic future! With new quantum technology, hacker-proof exchange of information and ultrafast data processing will become possible. The basis for these is Albert Einstein's "quantum spook". We are not dealing here with sorcery, but with hard-core science. This book undertakes a fascinating journey through the world of our quantum future - from the first "quantum satellite" to high-security internet, the quantum cloud and beyond, to partly futuristic applications. The author guides the reader through the basic

ideas of quantum physics, explains the concepts of quantum computers, quantum cryptography, and quantum teleportation, and then establishes their relationship to the quantum Internet. Special attention is paid not only to the technical challenges involved, but also to the likely effects on society. Alongside examples of implementation, the author intersperses delightful anecdotes, which bring the story to life. With this book you will learn how quantum physics can revolutionize the internet! "... in lively prose the author presents the current state of research in its whole breadth and splendour – valuable and entertaining reading!" Rupert Ursin, Group Leader and Vice Director of the Institute for Quantum Optics and Quantum Information, Vienna.
