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ISBN	9783658367510 9783658367503
Descrizione fisica	1 online resource (xi, 40 pages) : color illustrations
Collana	Essentials
Disciplina	006.3843
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Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Intro -- Preface -- What You Can Find in This essential -- Contents -- About the Author -- 1: Introduction -- 2: Quantum Revolution -- 2.1 Quantum Mechanics in Our Everyday Life -- 2.2 Towards Unimaginable Computing Power -- 3: The Basic Building Blocks of Quantum Computing -- 3.1 From Bits to Quantum Bits -- 3.2 Quantum Advantage Through Entanglement -- 3.3 Quantum Gates and Algorithms -- 4: Quantum Computing Today and Tomorrow -- 4.1 The Search for the Optimal Hardware -- 4.2 The Decoherence Problem -- 4.3 The Future of Quantum Computing -- 5: Summary -- What You Learned from This essentials -- Glossary -- References.
Sommario/riassunto	This essential creates a lively and vivid understanding of the processes in quantum computers. It explores the quantum phenomena of entanglement and superposition and how they can be used for computing. Coding of information, explanation of simple algorithms, and possible applications are shown. A glossary at the end of the essentials explains the most important terms.