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Nota di contenuto	1 What is Unclear? -- 2 Essentials of Basic Mathematical Tools -- 3 Essentials of Electromagnetism -- 4 Key Points of Mechanics -- 5 Outlined introduction to Quantum Mechanics -- 6 Overview of Relativistic Theory -- 7 Field Transformations and Spin.-8 Quantum Annealing -- 9 Appendix.
Sommario/riassunto	This textbook provides a self-contained basic tutorial to help readers confidently understand and comprehend the fundamental element of quantum computing, that is, the "quantum state (spin) represented by the Bloch sphere." The primary target audience includes readers from information technology or business fields who are entering the quantum computing domain without prior experience in physics courses. Additionally, the content is designed to be a valuable refresher for those already familiar with physics or those teaching quantum

physics. This volume overcomes the difficulties of existing quantum computing tutorials by providing a solution that demonstrates how, given a semester's worth of time, readers with a high school level of mathematics can be introduced to the concept of spinors without any top-down explanations. Avoiding top-down explanations entirely, the book explains the necessary minimum mathematics and physics in a logically natural progression to help readers understand why we think in such ways. The focus is on understanding the interrelationships between theories—what knowledge is needed to understand what concepts. Everything extraneous to understanding the logical flow has been meticulously removed. The goal is to efficiently bring readers to a level where they can approach quantum computing without any background knowledge anxieties.