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Autore	Chang Donald C.
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Sommario/riassunto

This book presents a new approach to understanding the foundation of quantum physics through the "quantum wave model" hypothesis. It addresses some of the key challenges in the current quantum theory, including the conflict between quantum mechanics and relativity, and offers a comprehensive solution to many of the existing mysteries in the field. By proposing that the vacuum is a dielectric medium and quantum particles are quantized excitation waves of the vacuum, the book provides a clear physical interpretation of wave-particle duality and explains the physical basis of energy, momentum, and mass. With topics ranging from the physical foundation of quantum mechanics to the derivation of the quantum wave equations and the resolution of the conflict between quantum physics and relativity, this book offers a comprehensive overview of the most pressing issues in the field. Written at a level accessible to undergraduate students and senior researcher scientists alike, this book offers a valuable resource for anyone seeking a deeper understanding of quantum mechanics and its fundamental role in shaping our understanding of the physical world.