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Sommario/riassunto	This book analyzes the impact of scientific computing in science and society over the coming decades. It presents advanced methods that can provide new possibilities to solve scientific problems and study important phenomena in society. The chapters cover Scientific computing as the third paradigm of science as well as the impact of scientific computing on natural sciences, environmental science, economics, social science, humanistic science, medicine, and engineering. Moreover, the book investigates scientific computing in high performance computing, quantum computing, and artificial intelligence environment and what it will be like in the 2030s and 2040s.