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Sommario/riassunto

Nanoscience has explored new modelling and new devices in the applied sciences and technologies, e.g., in health and life sciences. This includes work on structures, nano-machines, communications, environment and materials science, closing the gap for society toward a sustainable civilization. Feynman's Plenty of Room (1959; 1960) opened a new perspective/science in society debate: how can we handle the applications—and—implications of nanoscience? What is the human factor in the 21st century?. This volume offers both the state-of-the-art in the field and the corresponding research with discussion of exciting developments in nanoscience technologies, including historical and societal aspects. For the first time, in a unique volume, it brings together cutting-edge chapters in a multi-disciplinary and historical context; by considering specific case studies which exams how applied sciences-experiences have been expressed in, and trained by ideas and technologies, within cultural, fundamental, technological, historical and educational frameworks. It describes the ways it differently accounted for variation in unlike countries and consequently how its results remain, still nowadays, a debated question, as well as due to constraints preventing an extensive exploration of its remarkable historiography. The book, written by leading authoritative scholars working in the various respective fields, covers several branches and multi-disciplines in nanoscience & nanotechnology, as well. The contributors explain results and methods in which these sciences allowed advanced modelling on the one hand, and the development of new technological ideas on the other hand, including historical and historiographical investigations. This book is ideal for scientists, historians and scholars interested in nanoscience and its historical-societal ramifications.