Record Nr. UNINA9910554212603321 Ethics in nanotechnology Emerging technologies aspects. Volume I / / **Titolo** edited by Marcel Van de Voorde and Gunjan Jeswani Pubbl/distr/stampa Berlin; ; Boston:,: Walter de Gruyter GmbH,, [2021] ©2021 **ISBN** 3-11-070188-X Descrizione fisica 1 online resource (xl, 323 pages, 1 unnumbered page): illustrations (chiefly colour), colour portraits Collana Ethics in Nanotechnology;; Volume I Disciplina 174.96205 Nanotechnology - Moral and ethical aspects Soggetti Technological innovations - Moral and ethical aspects Nanotechnology - Social aspects Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Preface: Converging technologies from the nanoscale require enhanced ethics -- Introduction: Overall vision of ethics in nanotechnology developments -- Embedding ethics in nanomedicine: Europe acted promptly --; Part I: Nanotechnology challenges - implications for philosophy, ethics, and society -- Nanoethics: Giving orientation to societal reflection / Frans W.A. Brom, Rinie van Est and Bart Walhout --Is there a new technological imperative? / John Weckert --; Part II: Advancing nanoscience initiatives and ethical concerns --Nanotechnology: Societal impact and ethical considerations / Marcel Van de Voorde and Michael Vlerick -- The nanotechnology transition / Christian NGÔ -- Technological revolution, societal counter-revolution? / Jean-François Hochepied -- The evolution of nanoscale research: Lessons learned and questions asked / Kenneth A. Dawson -- The synergistic ethics interaction with nanoengineering, dentistry, and dental engineering / Leszek A. Dobrzaski, Lech B. Dobrzaski, Anna

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Sommario/riassunto

"With nanotechnology being a relatively new field, the questions regarding safety and ethics are steadily increasing with the development of the research. This book aims to give an overview on the ethics associated with employing nanoscience for products with everyday applications. The risks as well as the regulations are discussed, and an outlook for the future of nanoscience on a manufacturer's scale and for the society is provided. Ethics in nanotechnology is a valuable resource for, philosophers, academicians and scientist, as well as all other industry professionals and researchers who interact with emerging social and philosophical ethical issues on routine bases. It is especially for deep learners who are enthusiastic to apprehend the challenges related to nanotechnology and ethics in philosophical and social education. This book presents an overview of new and emerging nanotechnologies and their societal and ethical implications. It is meant for students, academics, scientists, engineers, policy makers, ethicist, philosophers and all stakeholders involved in the development and use of nanotechnology. Examines risks as well as benefits of nanoscience and technology. Discusses the current rules and regulations. Introduction to the topic written by experts in the field."--Provided by publisher.