Record Nr. UNINA9910784999603321 Nanotechnology challenges [[electronic resource]]: implications for Titolo philosophy, ethics, and society // editors, Joachim Schummer & Davis Baird Pubbl/distr/stampa River Edge, NJ,: World Scientific, c2006 **ISBN** 1-281-91921-7 9786611919214 981-277-397-5 Descrizione fisica 1 online resource (476 p.) Altri autori (Persone) SchummerJoachim BairdDavis 303.48/3 Disciplina Soggetti Nanotechnology - Philosophy Nanotechnology - Moral and ethical aspects Nanotechnology - Social aspects Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto **CONTENTS** ; Introduction ; Part 1: Philosophical ; I. The Drexler Challenge Issues ; (1) Two Cultures of Nanotechnology? ; (2) The Drexler-Smalley Debate on Nanotechnology Incommensurability at Work? ; II. The Metaphysics of Nanotechnology (3) Noumenal Technology: Reflections on the Incredible Tininess of Nano (4)Nanotechnology and Nature: On Two Criteria for Understanding their Relationship (5) Small but Determined: Technological Determinism in Nanoscience ; III. The Truth of Nanoscopic Images (6) When is an Image Not an Image? (7)Changes in the Design of Scanning Tunneling Microscopic Images from 1980 to 1990 ; IV. Dealing with Complexity ; (8) Analyzing the Complexity of Nanotechnology

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## Sommario/riassunto

Nanotechnology is an emerging and rapidly growing field whose dynamics and prospects pose many great challenges not only to scientists and engineers but also to society at large. This volume includes the state-of-the-art philosophical, ethical, and sociological reflection on nanotechnology, written by leading scholars from the humanities and social sciences in North America and Europe. It unravels the philosophical underpinnings of nanotechnology, its metaphysical and epistemological foundations, and its conceptual complexity. It explores the ethical issues of nanotechnology, its impact on hu