Record Nr. UNINA9910337785703321 Emerging technologies for economic development / / edited by Dirk Titolo Meissner, Leonid Gokhberg, Ozcan Saritas Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-04370-3 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (334 pages) Collana Science, technology and innovation studies, , 2570-1509 338.064 Disciplina 338.9 Soggetti Management Economic policy Engineering Macroeconomics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1: What do Emerging Technologies Mean for Economic Development? -- Part 1: MATERIALS AND MANUFACTURING -- Chapter 2: New Materials: the Case of Carbon Fibers -- Chapter 3: Nanotechnology for High-tech Industries: Light Emitting Diodes --Chapter 4: Technology Use in Traditional Industries - Catalysts for

Development? -- Part 1: MATERIALS AND MANUFACTURING -- Chapter 2: New Materials: the Case of Carbon Fibers -- Chapter 3: Nanotechnology for High-tech Industries: Light Emitting Diodes -- Chapter 4: Technology Use in Traditional Industries - Catalysts for Petroleum Refining -- Part 2: ENERGY AND TRANSPORT -- Chapter 5: Renewable Energy Technological Potential Assessment for Evidence-based Policy-making -- Chapter 6: Global Market Creationfor Fuel Cell Electric Vehicles -- Chapter 7: Technology Roadmaps: Emerging Technologies in the Aircraft and Shipbuilding Industries -- Part 3: LIVING SYSTEMS AND ENVIRONMENT -- Chapter 8: Water Treatment and Purification: Technological Responses to Grand Challenges -- Chapter 9: Emerging Technologies Identification in Foresight and Strategic Planning: Case of Agriculture and Food Sector -- Chapter 10: Technology Assessment for Container Closure Integrity Testing Technology for Biotech Industry -- Chapter 11: Emerging Technologies, Trends and Wild Cards in Human Enhancement -- Part 4: SECURITY -- Chapter 12: Illuminating the "Dark Side" of Emerging Technologies -- Chapter 13: Defence and Security: New Issues and Impacts -- Chapter

Sommario/riassunto

14: Defence 4.0: Internet of Things in Military -- Part 5: CHALLENGES TO STI POLICY -- Chapter 15: How to Stimulate Emergence and Convergence of Technologies? .

This book provides an impressive overview of emerging technologies, especially nanotechnologies and biotechnologies and their prospective applications. It identifies and describes existing and potential markets for emerging technology-based applications and projects scenarios for macroeconomic development based on these technologies. Integrated roadmaps for the development of a nano- and bioindustry are shown and policy measures and corporate strategies developed to advance these technologies. These measures are illustrated using roadmaps and policy case studies. The book combines a practical, comprehensive overview of the technical side of emerging technologies and their applications in various fields with an analysis of market developments and characteristics.