1. Record Nr. UNICASRML0294889

Autore	Jahn, Johannes
Titolo	Introduction to the theory of nonlinear optimization / Johannes Jahn
Pubbl/distr/stampa	Berlin, : Springer, 1994
ISBN	3540583203
Descrizione fisica	viii, 250 p. ; 23 cm.
Disciplina	519.7
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9911018976403321

Autore	Andre Jean-Claude
Titolo	Knowledge Production Modes Between Science and Applications 2 : Applications
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2024 ©2024
ISBN	9781394284115 139428411X 9781394284122 1394284128 9781394284108 1394284101
Edizione	[1st ed.]
Descrizione fisica	1 online resource (260 pages)
Collana	Systems and industrial engineering series
Disciplina	303.48/3
Soggetti	Technological innovations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

Nota di contenuto	Cover -- Title Page -- Copyright Page -- Contents -- Foreword: Additive Manufacturing: From 3D Printing to Bio-printing -- Introduction to Volume 2 -- Chapter 1. Socially Responsible Research (SRR) -- 1.1. Introduction -- 1.2. Setting the scene -- 1.2.1. Decision-making and ethics -- 1.2.2. Technological progress: the researcher and the risks -- 1.2.3. Scapegoating -- 1.3. Modes of action -- 1.3.1. The project framework: socially responsible research -- 1.3.2. Other considerations -- 1.3.3. Socially responsible research -- 1.3.4. A few examples -- 1.3.5. Authoritarian constraint -- 1.4. Provisional conclusion -- 1.5. Conclusion: from the 12 "Labors of Hercules" to the 12 "death valleys" -- 1.6. References -- Chapter 2. 3D, 4D and Bio-printing Innovations and Additive Manufacturing -- 2.1. Introduction -- 2.2. Additive manufacturing or 3D printing -- 2.2.1. Invention of the additive manufacturing concept -- 2.2.2. "In-house" activities -- 2.3. Reaching out to society -- 2.4. Consequences -- 2.5. 4D printing -- 2.5.1. Reminders about 4D printing -- 2.5.2. Gaps between paradigms -- 2.5.3. Conclusion -- 2.6. Bio-printing -- 2.6.1. Principle of bio-printing -- 2.7. Discussion -- 2.8. Conclusion -- 2.9. References -- Chapter 3. Creativity and Additive Manufacturing -- 3.1. Toward a Big Bang of creativity -- 3.1.1. Background and theoretical considerations -- 3.1.2. Introduction -- 3.1.3. Just before the idea -- 3.1.4. Clarification -- 3.1.5. The question of finalized knowledge integration -- 3.1.6. What interdisciplinarity to call upon? -- 3.1.7. Grains of sand in the clarification process -- 3.1.8. Conclusion -- 3.2. A comparison with 3D, 4D and bio-printing -- 3.2.1. Additive manufacturing -- 3.2.2. 4D printing -- 3.2.3. Bio-printing -- 3.3. Conclusion -- 3.4. References -- Conclusion -- Index -- EULA.
Sommario/riassunto	"Inventing isn't easy! After identifying and presenting the 12 ""valleys of death"", the real obstacles limiting the transition from an original idea to an innovative one, including the notion of socially responsible research, Knowledge Production Modes between Science and Applications 2 applies the concepts introduced in Volume 1. The book starts off with 3D printing, which has essentially broken through all barriers by offering remarkable advantages over existing mechanical technology. The situation is different for 4D printing and bio-printing. First of all, we need to tackle the complexity inherent in these processes, and move away from disciplinarity to find robust, applicable solutions, despite the obstacles. This is possible in niche areas, but currently, low profitability still limits their general applicability and the willingness of researchers to embrace interdisciplinary convergence....".