

1. Record Nr.	UNINA9910768163303321
Titolo	Automation and Innovation with Computational Techniques for Futuristic Smart, Safe and Sustainable Manufacturing Processes // Arturo Realyvasquez Vargas, Suchismita Satapathy, and Jorge Luis Garcia Alcaraz, editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2024] ©2024
ISBN	3-031-46708-6
Edizione	[First edition.]
Descrizione fisica	1 online resource (369 pages)
Disciplina	338.064
Soggetti	Manufacturing industries - Technological innovations Sustainable engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Innovation, Safe and Smart Sustainable Manufacturing - A Bibliometric Review -- Review of the Challenges in Implementing Industry 4.0 Technologies in the Context of Sustainable Supply Chains -- Impact of Human Error Prevention and Automation on Social Sustainability -- The Barriers Related to Smart Manufacturing Systems and an Application for the Selection of Innovation Management Model: The Case of Samsun Province Study -- Predictor Model for Six Sigma Deployment and Its Sustainable Benefits -- Assessment and Evaluation of the Effects of Hazardous Noise Produced by the Manufacturing Industry on the Workers -- Assessment of Industrial Workers' Discomfort Level by Simulation Annealing -- Using the WASPAS and SA Techniques to Analyze Risks in a Noisy Environment Qualitatively - A Case Study of Different Manufacturing Industries Near Bhubaneswar -- Need of Ergonomics for Autonomous Vehicles -- Design and Simulation of a Mechanical Device to Reduce the Ergonomic Postural Risk Levels of Workers During the Installation of Panelled Walls -- Identification and Classification of Design Attributes for a Product to Verify Ergonomic Factors in Office Chairs -- Food Safety and Tractability with IoT -- System Dynamic: An Intelligent Decision-Support System for Manufacturing Safety Intervention Program Management -- University-

Sommario/riassunto

This book explores sustainability and innovation in manufacturing, encompassing three distinct parts. The first section delves into Sustainability in Manufacturing, where it analyzes topics like intelligent manufacturing, Industry 4.0 challenges, structural equation modeling for social sustainability, barriers to intelligent manufacturing systems, and critical success factors in Six Sigma deployment. The second part of the book, comprising Chapters 6-11, focuses on Ergonomics and Safety in manufacturing, examining cases related to health issues caused by factors like noise, high-temperature working conditions, ergonomic posture, and design attributes for ergonomic products. Lastly, Part III, consisting of Chapters 12-14, explores computational techniques applied in manufacturing, addressing issues such as vegetable waste in India, technology transfer models for university-industry collaboration, and the application of System Dynamics in safety management systems. Together, these chapters provide a comprehensive overview of sustainability, ergonomics, safety, and computational techniques in the manufacturing industry.
