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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Product Design as Integration of Axiomatic Design and Design Structure Matrix -- Product Design Knowledge Management Based on Design Structure Matrix -- Matrix-based Conceptual Solution Generation Approach of Multifunction Product -- Matrix-based Computational Concept Design with Ant Colony Optimization -- Workload-based Change propagation Analysis in Product Design -- Matrix-based Engineering Change Management of Product Design Using MBD Technique -- Matrix-based Change Prediction Method Considering Multiple Change Requirements -- Product-oriented Change Propagation Approach in Product Family Design.
Sommario/riassunto	This book introduces state-of-the-art models and methods based on the matrix in the field of product design and change management. It develops several types of matrix models for a broad range of applications, with the goal of efficiently finding product design solutions and proactively analyzing design change propagation. The book offers readers an extensive introduction to design automation,

highlighting fundamental and innovative concepts, as well as cutting-edge technologies. Further, it familiarizes them with the latest advances in design change propagation and prediction. Lastly, the book puts forward design change-oriented matrix models and includes a proactive analysis of change propagation. The book offers a valuable resource for graduate students, researchers and engineers in the fields of product design and methodology, design automation and related areas.