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Descrizione fisica	1 online resource (266 pages)
Collana	Management and Industrial Engineering, , 2365-0540
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Soggetti	Industrial engineering Production engineering Industrial and Production Engineering
Lingua di pubblicazione	Inglese
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Nota di contenuto	1. Generative Design in Architecture:From Mathematical Optimization to Grammatical Customization -- 2. Augmented Reality-driven prototyping for error elimination during computational design and digital fabrication -- 3. Design of gesture controlled interface for mechatronic systems: A computational approach -- 4. Topology Optimization Utilizing Density-based Approach for Additive Manufactured Components: A Case Study of an Automotive Brake Caliper -- 5. Rethinking the Brick: developing a file to fabrication framework for mortar-free, robotic masonry wall assembly -- 6. Knowledge-Based Design: A Function-Knowledge Reasoning Model for Product Conceptual Design -- 7. Equation driven micro-milling of 2D free form models and off-line G-code generation for variable feed machining -- 8. Study of the topography of face milled surfaces using CAD-based simulation -- 9. Study on Design and Manufacturing of an Engine Block Using Digital Tools -- 10. Automatization of CAD model development of Slewing Bearing using Solid Edge -- 11. CAD-based Application in VBA for Tool's Profiling.
Sommario/riassunto	This book presents the latest advances in computational and parametric design engineering, as well as digital tools related to manufacturing. It covers design and manufacturing process such as

CAD-based design/manufacturing, parametric design, algorithmic design and process automation, and several digital tools and applications.

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