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Disciplina	620
Soggetti	Buildings - Design and construction Mechanics, Applied Solids Architecture Buildings Computer-aided engineering Energy policy Energy and state Building Construction and Design Solid Mechanics Building Types and Functions Computer-Aided Engineering (CAD, CAE) and Design Energy Policy, Economics and Management
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Modelling Aggregate Behaviour -- A Multiscale Adaptive Mesh Refinement Approach to Architected Steel Specification in the Design of a Frameless Stressed Skin Structure -- Topology Optimisation for Steel Structural Design with Additive Manufacturing -- Challenges of Scale Modelling Material Behaviour of Additive-Manufactured Nodes -- Form-finding and Design Potentials of Bending-active Plate Structures -- Form-Finding of Architectural Membranes in a CAD-Environment Using the AiCAD-Concept -- Balancing Behaviours --Designing with

combinatorial equilibrium models -- Hybrid Tower, designing soft structures -- Integrating Differentiated Knit Logics and Pre-Stress in Textile Hybrid Structures -- Thermal Responsive Envelope: Computational Assembling Behavioural Composites by Additive and Subtractive Processes -- Formations of Energy: modelling toward an understanding of open thermodynamic systems -- Thinking Massively Parallel : Design Modelling Thermoactive Architecture -- The Architecture of the Ill-tempered Environment -- Designing the Desert revised.

Sommario/riassunto

This book reflects and expands on the current trend in the building industry to understand, simulate and ultimately design buildings by taking into consideration the interlinked elements and forces that act on them. This approach overcomes the traditional, exclusive focus on building tasks, while posing new challenges in all areas of the industry from material and structural to the urban scale. Contributions from invited experts, papers and case studies provide the reader with a comprehensive overview of the field, as well as perspectives from related disciplines, such as computer science. The chapter authors were invited speakers at the 5th Symposium "Modelling Behaviour", which took place at the CITA in Copenhagen in September 2015.
