

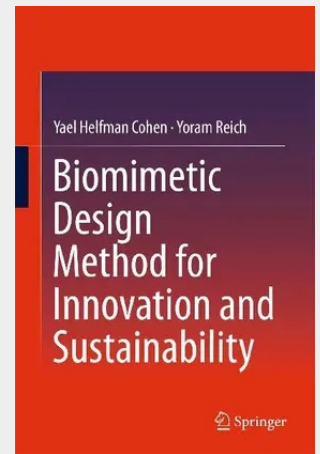
Biomimetic Design Method for Innovation and Sustainability

Presenting a novel biomimetic design method for transferring design solutions from nature to technology, this book focuses on structure-function patterns in nature and advanced modeling tools derived from TRIZ, the theory of inventive problem-solving. The book includes an extensive literature review on biomimicry as an engine of both innovation and sustainability, and discusses in detail the biomimetic design process, current biomimetic design methods and tools. The structural biomimetic design method for innovation and sustainability put forward in this text encompasses (1) the research method and rationale used to develop and validate this new design method; (2) the suggested design algorithm and tools including the Find structure database, structure-function patterns and ideality patterns; and (3) analyses of four case studies describing how to use the proposed method. This book offers an essential resource for designers who wish to use nature as a source of inspiration and knowledge, innovators and sustainability experts, and scientists and researchers, amongst others.

Presenting a novel biomimetic design method for transferring design solutions from nature to technology, this book focuses on structure-function patterns in nature and advanced modeling tools derived from TRIZ, the theory of inventive problem-solving. The book includes an extensive literature review on biomimicry as an engine of both innovation and sustainability, and discusses in detail the biomimetic design process, current biomimetic design methods and tools.

The structural biomimetic design method for innovation and sustainability put forward in this text encompasses (1) the research method and rationale used to develop and validate this new design method; (2) the suggested design algorithm and tools including the Find structure database, structure-function patterns and ideality patterns; and (3) analyses of four case studies describing how to use the proposed method.

This book offers an essential resource for designers who wish to use nature as a source of inspiration and knowledge, innovators and sustainability experts, and scientists and researchers, amongst others.



139,09 €

129,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783319339962

Medium: Buch

ISBN: 978-3-319-33996-2

Verlag: Palgrave Macmillan

Erscheinungstermin: 07.07.2016

Sprache(n): Englisch

Auflage: 1. Auflage 2017

Produktform: Gebunden

Gewicht: 5502 g

Seiten: 254

Format (B x H): 160 x 241 mm

