1. Record Nr. UNINA9910299767803321

Titolo	Future City Architecture for Optimal Living / / edited by Stamatina Th. Rassia, Panos M. Pardalos
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-15030-8
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (276 p.)
Collana	Springer Optimization and Its Applications, , 1931-6828 ; ; 102
Disciplina	307.1216
Soggetti	Mathematics Mathematical optimization Mathematical models Mathematics in Art and Architecture Optimization Mathematical Modeling and Industrial Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1. If robots conquer airspace: The Architecture of The Vertical City (J. Willmann, F. Gramazio, M.Kohler) -- 2. Smart cities in a smart world (B. Murgante, G. Barruso) -- 3. Understanding the context (R. Nicholson) -- 4. Architectural mithridatism? (C. Blanchet) -- 5. The heat is on, Now we must act (W. S. W. Lim) -- 6. Hollistic approach to shape future cities (R. Tsui, S. Wu, A. Siu) -- 7. Can dense cities really be livable? (L. Hee) -- 8. Building resilient cities to climate change (M. Santamouris, C. Cartalis) -- 9. Evaluation and reliability of shape grammars for urban planning and network design (B. J. Vitins, K. W. Axhausen) -- 10. Using policy instruments to drive optimal living and sustainable consumption in the built and natural environment (T. Ibn-Mohammed, A. Acquaye, R. Greenough, S. Taylor, L. Ozawa-Meida) -- 11. Hidden surface effects: Radiant temperature as an urban and architectural comfort culprit (F. Meggers) -- 12. Weather data and solar orientations (M. Samimi) -- 13. Analysis and classification of public spaces using convex and solid-void models (J. Beirão, A. Chaszar and L. avi).
Sommario/riassunto	This book offers a wealth of interdisciplinary approaches to

urbanization strategies in architecture centered on growing concerns about the future of cities and their impacts on essential elements of architectural optimization, livability, energy consumption and sustainability. It portrays the urban condition in architectural terms, as well as the living condition in human terms, both of which can be optimized by mathematical modeling as well as mathematical calculation and assessment. Special features include: · new research on the construction of future cities and smart cities · discussions of sustainability and new technologies designed to advance ideas to future city developments Graduate students and researchers in architecture, engineering, mathematical modeling, and building physics will be engaged by the contributions written by eminent international experts from a variety of disciplines including architecture, engineering, modeling, optimization, and related fields.