1. Record Nr. UNINA9911011645603321

Autore	Dobjani Etleva
Titolo	Sustainable Living Solutions: Renewable Energy and Engineering / / edited by Etleva Dobjani, Ivan A. Parinov, Enkelejda Kucaj, Vincenzo Paolo Bagnato, Antonio Labalestra, Hasim Altan, Ilaria Pigliautile, D. Jude Hemanth
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-031-76837-X
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (649 pages)
Collana	Advances in Science, Technology & Innovation, IEREK Interdisciplinary Series for Sustainable Development, , 2522-8722
Altri autori (Persone)	ParinovIvan A KucajEnkelejda BagnatoVincenzo Paolo LabalestraAntonio AltanHasim PigliautileIlaria HemanthD. Jude
Disciplina	304.2
Soggetti	Sustainability Sustainable architecture Landscape architecture Sustainable Architecture/Green Buildings Landscape Architecture
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. The Values Trilogy Design Philosophy: Integrating Sustainability, Cost-Effectiveness, and Artistic Expression in Architectural Design -- Chapter 2.DIGIT-ACCESS: DIGITal gateway for low ACCESSible heritage architectures -- Chapter 3.Influences of Biomimicry and Biophilia on Sustainable Urban Planning: A Conceptual Framework -- Chapter 4. The Use of Biomimetic Approaches to Enhance Sustainability in The Design of Smart Cities -- Chapter 5. An Exploration of Biomimicry in Traditional Design and Architecture in Saudi Arabia: A study of the Asir region -- Chapter 6. Analytical study to examine opportunities for applying zero-energy concepts in high

buildings in dense and non-dense urban areas -- Chapter 7. Contrasting the Thermal Performance of Four Insulation Systems Retrofitted to a Multi-storey Heritage Building in Hot-Desert Climate -- Chapter 8. The Role of Interior Design in Performance Arts Academies for Fostering Creativity, Collaboration, and Cultural Enrichment -- Chapter 9.User perception & Experience towards Tamil Nadu Housing Board (TNHB) Low Income housing Schemes – An architectural appraisal -- Chapter 10. Peak Average Power Ratio Reduction in OFDM System with Smart Jamming for Cognitive Radio -- Chapter 11. Nonlinear buckling analyses of double corrugated steel plate shear walls -- Chapter 12.Accelerated marine atmospheric corrosion testing of S235 grade carbon steel: Predicting material behaviour for sustainability -- Etc...

Sommario/riassunto

This book includes topics that explore diverse and innovative aspects of architectural design, urban planning, infrastructure, and engineering. The "Values Trilogy Design Philosophy" emphasizes the harmonious integration of sustainability, cost-effectiveness, and artistic expression in architectural projects. "DIGIT-ACCESS" explores a digital gateway to enhance accessibility to heritage architectures. The influence of biomimicry and biophilia on sustainable urban planning is examined, along with the application of biomimetic approaches in smart city design and traditional architecture in Saudi Arabia's Asir region. An analytical study investigates zero-energy concepts in high-rise buildings, while another contrasts the thermal performance of various insulation systems in hot-desert climates. The role of interior design in fostering creativity and cultural enrichment in performance arts academies is highlighted, alongside an architectural appraisal of user perceptions toward Tamil Nadu Housing Board (TNHB) low-income housing schemes. In the realm of electrical, mechanical engineering, and fabrication, this book covers advanced topics such as reducing peak average power ratio in OFDM systems for cognitive radio, nonlinear buckling analyses of corrugated steel plate shear walls, and accelerated corrosion testing of carbon steel. The mechanical characteristics of sustainable rigid pavement using sintered fly ash aggregate are explored, as well as the impact of fiberglass reinforced concrete on sustainable design. Additional studies include the evaluation of water resistance in glass-modified concrete, the effects of laser treatment on waste poly(aramid) fiber for 3D printed composites, and the polymerization of copperas into polyferric sulfate for leachate treatment. Lastly, a thermogravimetric evaluation and kinetic study of pyrolysis in commercialized timber species in Peru provide insights into sustainable material behavior.