1. Record Nr. UNINA9910483297503321

Titolo	3rd international conference on innovative technologies for clean and sustainable development : itcsd 2020 / / edited by Deepankar Kumar Ashish, Jorge de Brito, Sanjay Kumar Sharma
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-51485-4
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XXVII, 586 p. 250 illus., 199 illus. in color.)
Collana	RILEM Bookseries, , 2211-0844 ; ; 29
Disciplina	691.0286
Soggetti	Sustainable construction Sustainable buildings - Design and construction Building materials - Environmental aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Embodied energy and cost of load bearing masonry with alternative binders and units - case study -- Assessing efficiency of protective treatment materials for brick structures -- Structural Performance of Timber-Framed Joints for Sustainable Civil Engineering Construction -- Enhancement of Sub-Grade Soil Strength with Additives: Cement & Molasses -- Development of innovative green self-compacting concrete with partial replacement of fine and coarse aggregate by using slag -- Utilization of industrial wastes in concrete mixes - A review -- Precious Recycling of Reclaimed Asphalt as Hot Mix Asphalt by Use of Rejuvenator -- Thermal properties of foamed concrete; a review -- Influence of Bacillus megaterium on crack healing and mechanical properties of concrete -- Re-interpreting and Adapting the Site Specific Vernacular Passive House Architectural Strategies for Reducing Building Energy Demand -- A comparative study on the sustainability of public and private road transportation systems in an urban area: Current and future scenarios -- Structural Property Assessment of GFRP Reinforced Concrete Beams -- Concrete with Encapsulated Self-Healing Agent: A Critical Review -- Effect of masonry infills on seismic response of RC framed buildings -- Role of FRP in developing sustainable infrastructure - A review -- Applications of Fiber Reinforced Polymer

Laminates in Strengthening of Structures -- Behaviour of RC Beam-Column Joint subjected to Opening Moments: Test & Numerical Validation -- Reduction of annual energy consumption of Multifamily dwellings using BIM and Simulation Tools -- Evaluating the effect of speed variation on vehicular emission using an integrated modelling approach -- Cold-formed Steel Concrete Composite Slab: Structural Performance Evaluation through Experimental Study -- Investigation of Critical Factors Influencing Cost Overrun in Highway Construction Projects -- Use of Char Derived from Waste Plastic Pyrolysis for Asphalt Binder Modification -- Development of sustainable masonry blocks using industrial rejects and alkali activation -- Self-Compacting Concrete – Optimization of Mix Design Procedure by the Modifications of Rational Method -- Corrosion characteristics of rebar induced in different types of fibre reinforced concrete -- Physical and microstructural properties of Construction and Demolition Waste based masonry units -- Waste Recycled PET as A Binder in Polymer Mortar -- A Study on Performance of Carbon based Nano-enabled Cement Composites and Concrete -- Cost and Feasibility Analysis of Chromium Removal from Water using Agro and Horticultural Wastes as Adsorbents -- Influence of the packing density of fine particles in ternary, quaternary and quinary blends on High Performance Concrete -- Experimental Investigation of Rheological Properties of Recycled Aggregate Concrete -- Management of sustainable infrastructure projects: A scientometric analysis -- Utilization of stone dust as an effective alternative for sand replacement in concrete -- Design of new green building using Indian Green Building Council rating system -- Characterization and Optimization of Polyurethane Based Bituminous Waterproofing Membrane -- An overview on utilization of stone waste in construction industry.

Sommario/riassunto

This book gathers peer-reviewed contributions presented at the 3rd International Conference on Innovative Technologies for Clean and Sustainable Development, held in Chandigarh, India, on February 19-21, 2020. The respective papers focus on sustainable materials science and cover topics including the durability and sustainability of concrete, green materials in construction, economics of cleaner production, environmental impact mitigation, innovative materials for sustainable construction, performance and sustainability of special concrete, renewable energy infrastructure, sustainability in road construction, sustainable concrete, sustainable construction materials, waste minimization & management, prevention and management of water pollution, and zero-energy buildings.