

1. Record Nr.	UNINA9910845101203321
Autore	Sumesh M
Titolo	2nd International Conference on Smart Sustainable Materials and Technologies (ICSSMT 2023) [[electronic resource]] : Innovations in Engineering and Smart Sustainable Technologies (Volume 2) // edited by M. Sumesh, João Manuel R. S. Tavares, S. C. Vettivel, Mario Orlando Oliveira
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-50024-5
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (202 pages)
Collana	Advances in Science, Technology & Innovation, IEREK Interdisciplinary Series for Sustainable Development, , 2522-8722
Altri autori (Persone)	TavaresJoão Manuel R. S VettivelS. C OliveiraMario Orlando
Disciplina	620.11
Soggetti	Materials science Sustainability Materials Materials Science Materials Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Synergistic Modelling and Analysis: Unravelling Optimal Ammonia Manufacturing via the Haber Process using DWSIM and Microsoft Excel for Material Balance Integration -- Comparison of Fins in IC Engine Using CFD Analysis -- Influence of Mechanical Properties on Natural Frequency and Mode Shapes of Multi-Storey Storage Rack used in Cargo Vehicles -- Effect of Exhaust Gas Recirculation on the Performance and Emissions of a Common Rail Diesel Engine Powered By B20 Mix Waste Cooking Oil Methyl Ester using CFD -- An Efficient Finite Element Approach Using A, B, and D Matrices for Buckling Analysis of Functionally Graded Material (FGM) Plates -- Characterisation on the Mechanical Properties and Chemical Durability of Eco Paving Blocks with Silica Fume and Hypo Sludge -- Mechanical Properties of Concrete with Partial Replacement of Natural Sand By Fly Ash -- Feasibility Study

of Materials on Developing Green Materials to Achieve Sustainability in Building Construction -- Application of Microsurfacing Technique for Optimizing Maintenance Cost of Rigid Pavements in India -- FLEXURAL BEHAVIOUR OF CONCRETE BEAMS EMBEDDED WITH PVC PIPE SANDWICHED WITH WASTE CRUMBED RUBBER.

Sommario/riassunto

Sustainable materials science and engineering is one of the important characteristics of the existing high-tech revolution. The advances of materials science pave way for technical advancements in materials science and industrial technologies throughout the world. Materials are regarded as critical component in all emerging industries. Exquisite preparation and manufacturing must be carried out before a new material may be used. Nevertheless, electronic materials are undeniably important in many aspects of life. Smart materials and structures is a multi-disciplinary platform dedicated to technical advances in smart materials, systems and structures, including intelligent materials, sensing and actuation, adaptive structures, and active control. Recently, sustainable materials and technologies reshape the electronics industry to build realistic applications. At present, without the impact of sustainability, the electronics industry faces challenges. Researchers are now more focused on understanding the fundamental science of nano, micro, and macro-scale aspects of materials and technologies for sustainable development with a special attention toward reducing the knowledge gap between materials and system designs. The main aim of this international conference is to address the new trends on smart sustainable materials field for industrial and electronics applications. The main purpose of this conference is to assess the recent development in the applied science involving research activity from micro- to macro-scale aspects of materials and technologies for sustainable applications. In such a context, particular emphasis is given to research papers tailored in order to improve electronic and industrial applications and market extension of sustainable materials.
