Record Nr. UNINA9910427674903321 Recent trends in materials and devices: proceedings of ICRTMD 2019 / **Titolo** / Vinod Kumar Jain, Sunita Rattan, Abhishek Verma, editors Pubbl/distr/stampa Gateway East, Singapore:,: Springer,, [2021] ©2021 981-15-8625-X **ISBN** Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XV, 258 p. 144 illus., 107 illus. in color.) Collana Springer Proceedings in Physics, , 0930-8989; ; 256 Disciplina 620.11 Materials Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia

Nota di contenuto

Improved thermal conductivity and energy storage properties of graphitized carbon black based magnesium nitrate hexahydrate composite -- Effect of additional heat treatment in fabrication line of n-PERT bifacial solar cell to improve the surface passivation --Chitosan/Nanographiteplatlets (NGP)/ Tungsten trioxide (WO3) Nanocomposites for Visible Light Driven Photocatalytic Applications --Ciprofloxacin Loaded Chitosan/Alginate/PEO Nanofibers for Their Application in Antimicrobial Wound Dressing -- Preparation and Optoelectronic Properties of Iridium (III) Complexes Based on 1, 3, 4-Oxadiazole and -diketones -- Fabrication of Reduced Graphene Oxide Conductive Thin Films using Doctor Blade Technique -- Design & Optimization of Solar Photovoltaic Power Plant in case of Agrivoltaics --Synthesis and Characterisation of a Nanoalloy for Thermal Applications -- Liquid crystal-based biosensor to detect plant pathogen --Synthesis And Characterization Of GaO(OH)-FeO(OH) Nanorod Composite Prepared Via Hydro-thermal Method -- Modelling and analysis of heat waves for excessive heat factor (EHF) over some tropical regions of India -- Thermodynamic Characteristics of Liquid Crystal-Nanocomposites -- Production of superposition of coherent states using Kerr Non Linearity -- Nanoparticles of statins synthesized from mushroom using two different solvents and evaluating their cytotoxic potential using HepG2 cell lines -- Thermal and Electrical Characteristics of Nematic Liquid Crystal and Gold Nanoparticle

Composites -- GPS device based Equatorial Plasma Bubbles (EPB) analysis on radio wave propagation over low latitude -- Magneto Tunable Defect Modes in One-Dimensional Photonic Crystal Based on Magnetic Fluid Film -- Changes in the Thermodynamic Parameters of an Achiral Liquid Crystalline Material due to Li Ion Beam Irradiation -- Thermal Analysis of Cu Doped Sodium Hexa-Titanate (Na2Ti6O13) -- Nonlinear Optical Susceptibilities of a Piezoelectric Semiconductor Magneto-plasma -- Moving Ahead towards Sustainable Development-AHWR, an Amicable Approach for Nuclear Reactors -- Review article on density functional theory -- Preparation and Characterization of Influenza virosomes using nonionic, dialyazble phospholipid for efficient membrane solubilization and reconstitution -- Studies on Rheological Properties of Magneto-rheological Fluid as a Function of Particle Size and Concentration -- Graphene Doped Ferric Oxide Nanoparticles as a competent adsorbent for water purification.

## Sommario/riassunto

This book presents the proceedings of the International Conference on Recent Trends in Materials and Devices (ICRTMD 2019) held in India. It brings together academicians, scientists and industrialists from various fields for the establishment of enduring connections to solve the common global challenges across a number of disciplines. The conference provides a platform to tackle complex problems from a range of perspectives, thereby modeling integrated, solution-focused thinking and partnerships.