1. Record Nr. UNINA9910863116303321 Advances in Air Conditioning and Refrigeration: Select Proceedings of Titolo RAAR 2019 / / edited by Maddali Ramgopal, Sachindra Kumar Rout, Sunil Kr Sarangi Springer Singapore, 2021 Pubbl/distr/stampa Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2021 **ISBN** 981-15-6360-8 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XIV, 436 p. 298 illus., 216 illus. in color.) Collana Lecture Notes in Mechanical Engineering, , 2195-4364 Disciplina 621.56 Soggetti Thermodynamics Heat engineering Heat transfer Mass transfer Buildings - Environmental engineering Fluid mechanics **Energy policy** Energy and state Engineering Thermodynamics, Heat and Mass Transfer Building Physics, HVAC **Engineering Fluid Dynamics** Energy Policy, Economics and Management Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto

Modelling and Simulation of Photovoltaic Thermal Cooling System using Different Types of Nanofluids -- Enhancement of Cooling Rate using Biodegradable MgO Nanoparticles during a Cryopreservation Process -- Numerical Simulation of an Inertance Pulse Tube Refrigerator using a Mixture of Refrigerant -- Structural and Thermal Analysis of Cold Head Cylinder of a GM Cryocooler -- Performance Assessment of a Solar Still using Blackened Surface -- Heat Transfer Analysis of Clay Pot Refrigerator Adopting Curvature Effect -- Thermoelectric Systems for Sustainable Refrigeration -- Waste Heat Recovery from Walls of the

Combustion Chamber of a New Portable Jaggery Plant to Dry Bagasse.

Sommario/riassunto

This book presents selected peer-reviewed papers from the International Conference on Recent Advancements in Air Conditioning and Refrigeration (RAAR) 2019. The focus is on current research in a very topical area of HVAC technology, which has wide-ranging applications. The topics covered include modern air conditioning and refrigeration practices, environment-friendly refrigerants, high-performance components, computer-assisted design, manufacture, operations and data management, energy-efficient buildings, and application of solar energy to heating and air conditioning. This book is useful for researchers and industry professionals working in the field of heating, air conditioning and refrigeration.