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Autore	Chua Ernest Kian Jon
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Soggetti	Energy policy Energy and state Buildings—Environmental engineering Environmental management Materials Catalysis Force and energy Thermodynamics Heat engineering Heat transfer Mass transfer Sustainable architecture Energy Policy, Economics and Management Building Physics, HVAC Environmental Management Materials for Energy and Catalysis Engineering Thermodynamics, Heat and Mass Transfer Sustainable Architecture/Green Buildings
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Nota di contenuto	Present State of Cooling, Energy Consumption and Sustainability -- Future of Air Conditioning -- Dew Point Evaporative Cooling Systems

-- Adsorbent Coated Heat and Mass Exchanger -- Liquid Desiccant Air-conditioning Systems -- Membrane Air Dehumidification -- Dissipative Losses in Cooling Cycles -- Efficacy Comparison for Cooling Cycles -- Thermo-economic analysis for cooling cycles.

Sommario/riassunto

This book highlights key recent developments in air conditioning technologies for cooling and dehumidification with the specific objectives to improve energy efficiency and to minimize environmental impact. Today, air conditioning, comprising cooling and dehumidification, is a necessity in commercial and residential buildings and even in many industrial processes. This book provides key update on recent developments in air conditioning systems, cooling cycles and innovative cooling/dehumidification technologies. Key technologies related to cooling include heat-driven absorption and adsorption cooling and water-based dew point evaporative cooling. Technologies connected with dehumidification involve new generations of adsorbent-desiccant dehumidifiers, liquid-based desiccants and membranes that sieve out water vapor from air. Losses in cooling cycles and thermo-economic analysis for a sustainable economy are also judiciously documented. .
