1. Record Nr. UNINA9910299719403321 Proceedings of the 8th International Symposium on Heating, Ventilation Titolo and Air Conditioning. Volume 2 HVAC&R component and energy system / / Angui Li, Yingxin Zhu, Yuguo Li, editors Heidelberg, Germany:,: Springer,, 2014 Pubbl/distr/stampa **ISBN** 3-642-39581-3 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (xix, 850 pages): illustrations (some color) Lecture Notes in Electrical Engineering, , 1876-1100 ; ; 262 Collana Disciplina 658.25 697/.00151 Soggetti Heating Ventilation Air conditioning Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "ISSN: 1876-1100." Includes bibliographical references and index. Nota di bibliografia Nota di contenuto ""Preface""; ""International Scientific Committee""; ""Organizing Committee""; ""Contents""; ""Part IEnergy System""; ""1 Net-Zero Energy Technical Shelter""; ""Abstract""; ""1.1a€?Introduction""; ""1.2a€? Performance Investigation by Full-Scale Experiment""; ""1.2.1 Experimental Method""; ""1.2.2 Experimental Results""; ""1.2.2.1 Performance of Ventilative Cooling System""; ""1.2.2.2 Temperature Gradient"": ""1.2.2.3 Energy Balance of the Technical Shelter"": ""1.3a€? Performance Optimization by Numerical Simulation"; ""1.3.1 Simulation Method"": ""1.3.2 Simulation Results"" ""1.3.2.1 Impact of Envelope Insulation"""1.3.2.2 Cooling Strategies"": ""1.4a€?Alternative Power Solutions for a Technical Shelter""; ""1.5a€? Conclusion""; ""References""; ""2 The Study on Paraffin-Water Emulsion PCM with Low Supercooling Degree""; ""Abstract""; ""2.1a€? Introduction""; ""2.2a€?Experiment""; ""2.2.1 Materials""; ""2.2.2 Modification of MWCNT Particles""; ""2.2.3 Preparation of PCM Slurry and PCM-Water Emulsion""; ""2.2.4 Characterization and Analysis of Emulsion Droplets and the Nanoparticles""; ""2.2.5 Thermal Analysis""; ""2.3a€?Results and Discussion"" ""2.3.1 The Particle Size Distribution of Modified MWCNT Particles"""

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Sommario/riassunto

Proceedings of the 8th International Symposium on Heating, Ventilation and Air Conditioning is based on the 8th International Symposium of the same name (ISHVAC2013), which took place in Xi'an on October 19-21, 2013. The conference series was initiated at Tsinghua University in 1991 and has since become the premier international HVAC conference initiated in China, playing a significant part in the development of HVAC and indoor environmental research and industry around the world. This international conference provided an exclusive opportunity for policy-makers, designers, researchers, engineers and managers to share their experience. Considering the recent attention on building energy consumption and indoor environments. ISHVAC2013 provided a global platform for discussing recent research on and developments in different aspects of HVAC systems and components, with a focus on building energy consumption, energy efficiency and indoor environments. These categories span a broad range of topics, and the proceedings provide readers with a good general overview of recent advances in different aspects of HVAC systems and related research. As such, they offer a unique resource for further research and a valuable source of information for those interested in the subject. The proceedings are intended for researchers, engineers and graduate students in the fields of Heating. Ventilation and Air Conditioning (HVAC), indoor environments, energy systems, and building information and management. Angui Li works at Xi'an University of Architecture and Technology, Yingxin Zhu works at Tsinghua University and Yuguo Li works at The University of Hong Kong.

""5.4.2.1 The Experiment Device""