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Name	Ming-Jia Li	
Affiliation	Beijing Institute Technology	
<h2 style="color: red;">Invited Keynote Lecture</h2>		
Presentation Title	Study and application of storage technology in the “generation-grid load-storage” type integrated systems with its energy management method	
Abstract (Approximately 200 words)	<p>The development of a “generation-grid-load-storage” type integrated system with heterogeneous energy flows is necessary to improve the consumption level of renewable energy. Nowadays, the transformation and upgrading process of the energy system is speeding up in China. Compared to the conventional energy system, the new type of integrated system with heterogeneous energy flows is more complex. Besides, the development of stable, reliable and efficient energy storage systems in the microgrid can achieve the goal of flexible access to a high proportion of renewable energy with the implication of peak load shifting. In this study, the “generation-grid-load-storage” type integrated system is introduced primarily. Second, the applied thermal storage technology and electrical energy storage technology are analyzed. Finally, high-efficient energy conversion analysis of the heterogeneous energy flow, dynamic response characteristics of systems under real-time microgrid load, and the optimized energy management method are investigated.</p>	
Biographical Sketch (Approximately 200 words)	<p>Dr. Ming-Jia Li is a professor of School of Mechanical Engineering, Beijing Institute of Technology. She was awarded international awards and national awards such as the Asian Young Scientist Award etc. She serves as the associate editor of the journal of Applied Thermal Engineering. She is also, amounts other, on the editorial boards of other 5 international journals, and the secretary general of the International Conference on Supercritical CO₂ Power Systems. She is the Junior Commission Member of B2 Professional Committee of International Institute of Refrigeration, the deputy director of Youth Committee of Heat and Mass Transfer of Chinese Society of Engineering Thermophysics, and a member of Youth Committee of the 10th Council of Chinese Refrigeration Society. She was granted her bachelor’s degree from the University of Liverpool (U.K) and a master’s degree from the University of Nottingham (U.K.). She obtained a doctoral degree from Xi’an Jiaotong University with a joint program cooperated by Columbia University (U.S). She mainly focuses on Energy-saving theories & new methods for efficient energy utilization, Supercritical CO₂ power system, and Biomass carbon sequestration. As a principle investigator, she hosts many national research programs. She published journal papers in international journals with an h-index of 43. She also delivered more than 30 plenary / invited talks and served as session chair at international conferences.</p>	