
- This study will describe models and results for both exothermic and endothermic chemical based storage materials and will be compared to the DOE Technical Targets for light duty vehicles.

Low Cost, High Performance Metal Hydride Hydrogen Storage System for Forklift Applications - Craig Jensen, Hawaii Hydrogen Carriers, LLC

- Bringing low pressure hydrogen technology to the mobile fuel cell market place.

Analysis of Adsorbent-Based Hydrogen Storage for Fuel Cell Vehicles - David Tamburello, Savannah River National Laboratory

- Numerical models for the evaluation of adsorbent-based hydrogen storage systems for fuel cell vehicles were developed and validated against experimental data.

Cost Trade-Offs in H2 Storage Design Space - Cassidy Houchins, Strategic Analysis, Inc.

- Newly developed tools that are being used to explore cost trade-offs in a multi-dimensional hydrogen storage design space.

Assessment of a Cryogenic Cycle System for Improved Hydrogen Liquefaction through Heisenberg Vortex Separation - Zhiwen Ma, NREL

- This analysis identifies driving factors that are critical to quality in reaching the cost and performance goals for a hydrogen-liquefaction plant.

Palladium Supported on Reduced Graphene Oxide as a High-performance Catalyst for the Dehydrogenation of Dodecahydro-N-ethylcarbazole - Bin Wang, Xi’an Jiaotong University

- A liquid organic hydrogen carrier (LOHC) strategy to store hydrogen energy in unsaturated double bonds has been proposed, but incomplete dehydrogenation under mild conditions has been a bottleneck. Researchers have prepared a catalyst with excellent dehydrogenation performance and performed a more accurate kinetic calculation.

Transient Impurity Concentration of Absorption and Desorption in Metal Hydride - Saori Ashida, Tokyo University of Science

- Potential use of metal hydride for the purification and storage of biomass-derived hydrogen (Bio-H2).