Solar Ammonia Refrigeration System

The in-depth analysis of the effect of the ammonia (NH3) mass concentration on the performance of the single-effect solar absorption refrigeration system (using the NH3-H2O binary pair) has revealed ...

The main objective of this paper is to simulate solar absorption cooling systems that use ammonia mixture as a working fluid to produce cooling.

Increased demand for summer comfort due to heat waves is driving the adoption of absorption refrigeration systems. These systems use free solar energy and environmentally friendly ...

The objective of this paper is to design and study of an environment friendly solar powered ammonia- water absorption refrigeration system. This system does away with reliance on an electric grid, at the ...

A solar-driven, single-effect ammonia absorption refrigeration system is proposed.

Abstract:A steady state computer simulation model has been developed to predict the performance of an absorption refrigeration system using NH. 3-H. 2O as a working pair and driven by solar energy. It ...

Abstract-A solar driven ammonia absorption refrigeration system was designed, constructed and tested. It was an intermittent system where ammonia and calcium chloride were used as refrigerant and ...

References Diawara, B.; Dufour, L.C.; De Hartoulari, R. 1986: Solid-ammonia systems and affinity thermal machines. A microscale study of the ability of the CaClo8NH3-NH3-CaCl2o4NH3 system to ...

The goal of the present investigation is the energetic, exergetic and economic analysis of a solar-driven refrigeration system. The solar technology of this work is the parabolic trough solar ...

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