## عنوان مقاله:

Experimental investigation of a heat pipe solar collectorUsing water-ethanol solutions as the working fluid

# محل انتشار:

چهارمین کنفرانس بین المللی اقتصاد سبز (سال: 1396)

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### خلاصه مقاله:

In this paper heat pipes have been constructed and tested using solutions of ethanol and water at different concentrations as the working fluid. Testswere carried out to investigate the effects of ethanol concentration as well as thepipe evacuation and the use of a wick inside the pipe to ensure a continuousperformance of the system. It was concluded that the evacuation of a heat pipe orusing a wick do not add much effect to the enhancement of a heat pipe performance. A comparison of the experimental results with those obtained from a previously developed model reveals .a good agreement between the experiments and the modelpredictions

**کلمات کلیدی:** heat pipe , solar energy , water heater

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