Abstract

A numerical investigation have been executed for improving the efficiency of a photovoltaic cell by using two types of fins (rectangular and triangular) at the rear of the cell to increasing the area for losing heat. The study has been executed under a certain circumstances, the variation of a fluid velocity, fin length, fin thickness and fin spacing taken into account. Under a certain circumstances the triangular fin shows a higher ability for losing heat and higher performance than the rectangular fin. The MATLAB program used in this research to ensure the results.

References


Improving of Photovoltaic Cell Performance by Cooling using Two different Types of Fins

Index Terms

Computer Science

Applied Sciences

Keywords

Photovoltaic cell, extended surface, triangular fin, cooling panel,