

**عنوان مقاله:**

ADOMIAN DECOMPOSITION METHOD AND PADÉ APPROXIMATION TO DETERMINE FIN EFFICIENCY OF CONVECTIVE SOLAR AIR COLLECTOR IN STRAIGHT FINS

**محل انتشار:**

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**خلاصه مقاله:**

In this paper, the nonlinear differential equation for the convection of the temperature distribution of a straight fin with the thermal conductivity depends on the temperature is solved using Adomian Decomposition Method and Padé approximation(PADM) for boundary problems. Actual results are then compared with results obtained previously using digital solution by Runge–Kuttamethod and a differential transformation method (DTM) in order to verify the accuracy of the proposed method.

**کلمات کلیدی:**

Fin efficiency, Thermal conductivity, Adomian Decomposition Method (ADM), Differential TransformationMethod ((DTM), Numerical Solution (NS

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