عنوان مقاله:

ENTROPY ANALYSIS OF MIXED CONVECTION MHD FLOW OF NANOFLUID OVER STRETCHING INCLINED SHEET WITH THERMAL RADIATION

محل انتشار:

هفدهمین کنفرانس دینامیک شاره ها (سال: 1396)

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خلاصه مقاله:

Entropy generation for mixed convection flow, heat and mass transfer of nanofluid over a linearly stretching inclined permeable sheet in the presence of uniform magnetic field, viscous dissipation, thermal radiation, heat generation/absorption and chemical reaction is numerically studied. The nanofluid model is considered by using the Brownian motion and thermophoresis effects. The boundary layer equations namely continuity, momentum, energy and concentration conservations are transformed by using proper similarity transformations to a system of three nonlinear ordinary differential equations (ODEs). Then the ODEs are solved by applying a numerical implicit Keller's box technique. The effects of various governing parameters on entropy generation number are plotted and analyzed

کلمات کلیدی:

mixed convection; heat source/sink; chemical reaction; thermal radiation; entropy analysis