

## عنوان مقاله:

MHD Free Convection Flow and Heat Transfer of Non-Newtonian power-law Fluids over a Vertical porous Plate

## محل انتشار:

سومین کنفرانس ملی و اولین کنفرانس بین المللی پژوهش هایی کاربردی در مهندسی برق، مکانیک و مکاترونیک (سال: 1394)

تعداد صفحات اصل مقاله: 9

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## خلاصه مقاله:

In this study, we present a numerical analysis of free convection flow and heat transfer is presented for non-Newtonian power-law fluids with MHD effects over a vertical porous plate, the surface of which is exposed to a constant wall temperature. For analysis, the Continuity, Momentum and Energy equations are solved by the implicit finite difference scheme of Crank–Nicolson's type. Velocity and temperature of the flow have been presented for various parameters such as Prandtl number, flow behavior index ( $n$ ), porous plate parameter and magnetic parameter. The local Nusselt number and skin friction coefficient is also presented graphically

## کلمات کلیدی:

Magnetohydrodynamic flow, free convection flow, Non-Newtonian power-law fluids, Vertical porous plate

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/479667>

