

## عنوان مقاله:

Mathematical Modeling of Micropolar Blood Flow in a Stenosed Artery Under the Body Acceleration and Magnetic Field

## محل انتشار:

مجله بین المللی ریاضیات صنعتی, دوره 11, شماره 1 (سال: 1398)

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## خلاصه مقاله:

Blood flow is modeled as non-Newtonian micropolar fluid. The non-linear governing equations of continuum and momentum in the cylindrical coordinate are being discretized using a finite difference approach and have been solved iteratively ,through Crank-Nicolson method. The blood velocity distribution, volumetric flow rate and Resistance to blood flow at the stenosis throat are computed for various values of angle of tapering, amplitudes of body acceleration and Hartman number.

## کلمات کلیدی:

Stenosed artery, Micropolar fluid, Body acceleration, Magnetic field, Crank- Nicolson method

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1887029>

