

عنوان مقاله:

Study Of Heat Transfer in a Channel Obstructed by a Method of Lattice Boltzmann Type

محل انتشار:

سومین همایش ملی تحقیقات نوین در شیمی و مهندسی شیمی (سال: 1390)

تعداد صفحات اصل مقاله: 7

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خلاصه مقاله:

A numerical study of two-dimensional laminar flow and heat transfer in a horizontal channel in the presence of three heated obstacles mounted on the wall and bottom, is made. A partition is inserted upstream of the barriers to control the flow of air assumed to be incompressible when the Prandtl number equals 0.71. Two values of the Reynolds number are considered ($Re = 100$ and 600). A hybrid scheme, based on the lattice Boltzmann method (LBM) and the finite difference method is used. The analysis of results shows the effect of the presence of the partition on the flow and heat transfer between the fluid and obstacles

کلمات کلیدی:

heat transfer, flow, Boltzman, Channel

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/130317>

