عنوان مقاله:

THERMAL PERFORMANCE ANALYSIS OF POROUS ELECTRICAL HEATERS

محل انتشار:

اولین همایش ملی فناوری های نوین در شیمی و مهندسی شیمی (سال: 1392)

تعداد صفحات اصل مقاله: 5

نویسندگان:

Iman Zahmatkesh - *Department of Mechanical Engineering, Mashhad Branch, Islamic Azad University, Mashhad, Iran*

Behzad Zamanian Yazdi

Mojtaba Ramezany - *Department of Mechanical Engineering, Mashhad Branch, Islamic Azad University, Mashhad, Iran*

خلاصه مقاله:

The application of porous materials for the construction of electrical heaters is getting continuing interest. Although general trends in porous electricalheaters can be deduced from characteristics of porous medium, the matter for certain geometries is not well studied yet. For this reason, in the present paperattention is focused on the analysis of thermal performance of some configurations of porous electrical heaters (i.e., with circular, rectangular,triangular, and trapezoidal cross-sections). To this aim, the conservation equations of the porous heat generating medium in conjunction with the corresponding boundary conditions are solved for these configurations and their results are compared

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا: