

Documents

Li, Z., Sheikholeslami, M., Shafee, A., Saleem, S., Chamkha, A.J.

Effect of dispersing nanoparticles on solidification process in existence of Lorenz forces in a permeable media
(2018) *Journal of Molecular Liquids*, 266, pp. 181-193. Cited 17 times.

Abstract

In current article, Lorenz forces influence on NEPCM solidification phenomena in a storage porous unit is reported with numerical method via FEM. Nanotechnology and magnetic field are employed to expedite this unsteady process. Roles of Hartmann number, Rayleigh number and volume fraction of NEPCM have been reported. Outputs reveal that solid fraction rises in presence of Lorenz forces. Full discharging time reduces with augment of volume fraction of CuO-water and Hartmann number. © 2018 Elsevier B.V.

2-s2.0-85048890596

Document Type: Article

Publication Stage: Final

Source: Scopus