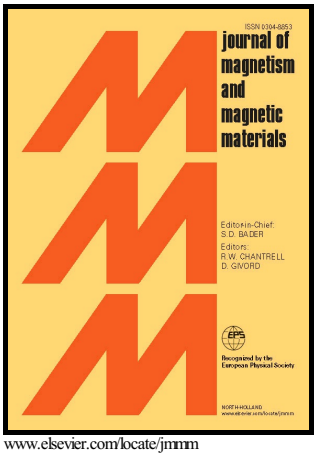

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MHD heat and mass transfer flow over a permeable stretching/shrinking sheet with radiation effect

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Abstract.

The steady two-dimensional magnetohydrodynamic (MHD) flow past a permeable stretching/shrinking sheet with radiation effects is investigated. The similarity transformation is introduced to transform the governing partial differential equations into a system of ordinary differential equations before being solved numerically using a shooting method. The results are obtained for the skin friction coefficient, the local Nusselt number and the local Sherwood number as well as the velocity, temperature and the concentration profiles for some values of the governing parameters, namely, suction/injection parameter S, stretching/shrinking parameter λ, magnetic parameter M, radiation parameter R, heat source/sink Q and chemical rate parameter K. For the