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Abstract

In this research, we suggest a new way of manipulating magnetic frictions by a set of fixed boundary conditions and numerically investigated. It was found that only in *one-dimensional* region the boundary condition affects on the friction. We also verified that it becomes drastically unable to manipulate the friction with the size-driven dimensional crossover from one-dimension to two-dimension. This way gives a new framework for reducing or enhancing frictional heats on solids.