

EFFICIENCY OF ENERGY
CONVERSION BY A BROWNIAN
MOTOR WITH A FLUCTUATING
DOUBLE-WELL POTENTIAL

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S u m m a r y

The efficiency of a Brownian motor with a periodic double-well potential, which undergoes the random shifting by half a period, has been analyzed in the framework of the thermodynamics of nonequilibrium processes, which provided the energy conversion from one form into another. An introduced measure of coupling between corresponding processes has been determined in terms of the difference between the potential barrier heights. The larger the difference, the stronger the coupling between processes, with the efficiency of the Brownian motor approaching unity.