
Optimal time control in orientation of a two-link body in the supportless phase of motion

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The paper investigates the motion of two joint bodies during the flight phase. The problem of minimization and maximization of the time necessary for their rotation from initial to final position has been solved. Non-zero angular momentum of the system concerning the center of mass is assumed. The problem under consideration is the simplest model of a hopping vehicle motion control in the supportless phase of hopping.

Keywords: motion optimal control, hopping vehicle.

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