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On the boundedness of solution of the second order ordinary
differential equation with dumping term and involution

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In the present paper, the initial value problem for the second order ordinary differential equation with dumping term and involution is investigated. We establish equivalent initial value problem for the fourth order ordinary differential equations to the initial value problem for second order linear differential equations with dumping term and involution. Theorem on stability estimates for the solution of the initial value problem for the second order ordinary linear differential equation with dumping term and involution is proved. Theorem on existence and uniqueness of bounded solution of initial value problem for second order ordinary nonlinear differential equation with dumping term and involution is established.

Keywords: Involution; Boundedness; Existence and uniqueness
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