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Abstract

This paper presents the modelling of three links rigid manipulator (TRLM) deriving its dynamic equations depending on Lagrange/Euler (L-E) method, the manipulator design and implementation has a complexity, uncertainty and instability dynamic features which lead to a non-linear characteristics, so controlling the manipulator means controlling multi-body multi-input multi-output (MIMO) non-linear and coupled system, the second part of this paper introduce a precise modified Proportional Integral Derivative (PID) controller to control the manipulator under applying different scenarios for the reference signal according to manipulator applications.

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Index Terms

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Keywords

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