

عنوان مقاله:

Design of Optimized Trajectory for Flexible Robotic Arms

محل انتشار:

اولین کنفرانس بین المللی و هفتمین کنفرانس ملی مهندسی ساخت و تولید (سال: 1384)

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نویسندگان:

Yaser Maddahi - Islamic Azad University, Saveh Branch, Mechanical Engineering Department

Ali Maddahi - Amir Kabir University of Technology, Mechanical Engineering Department

J Reza Esfandiyari - Islamic Azad University, Saveh Branch, Mechanical Engineering Department

خلاصه مقاله:

This article presents an improved method with a combination of energy methods and the concepts of differential relationships to more accurately calculate the static deflection at the end-effector. A systematic approach to deflection calculation through Jacobian matrix is presented. The theoretical deflection analysis is verified by simulation results. Also a two-link robot is used for numerical illustration and calculation procedure and the total deflection analysis of the end-effector is calculated with respect to base. Finally, the deflection statements and the endeffector positioning errors are minimized considering that the deflection functions are differentiable.

کلمات کلیدی:

Trajectory Optimization, Flexible Arm, Deflection Analysis Methods

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