

## عنوان مقاله:

Identification and PSO-PI based position control for a practical DC Servo System

# محل انتشار:

سومین کنفرانس بین المللی مهندسی برق (سال: 1397)

تعداد صفحات اصل مقاله: 9

نویسندگان: Rojin Zandi - Electrical Engineering Department, Imam Khomeini International University, Qazvin, Iran

Mehdi Rahmani - Electrical Engineering Department, Imam Khomeini International University, Qazvin, Iran

Elham Javanfar - Electrical Engineering Department, Imam Khomeini International University, Qazvin, Iran

### خلاصه مقاله:

The aim of this paper is to design a position controller of a practical DCmotor by selection of a PID parameters using the PSO algorithm. The model of the DCmotor is identified as a seventh order system. This paper identifies the model and compares two tuning methods for parameters of the PID controller. At first, the coefficients have been tuned by PID Tuning Toolbox, and then the controller has beendesigned by the PSO algorithm. It was found that the proposed .PID parametersadjustment by the PSO algorithm is better than the existing PID Tuning toolboxmethod

**کلمات کلیدی:** Practical DC Motor, Identification, PID Controller, PSO Algorithm

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/831894

