

عنوان مقاله:

Particle Swarm Optimization and Genetic Algorithm to Optimizing the Pole Placement Controller on Cuk Converter

محل انتشار:

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نویسندگان:

M. R. Yousefi - Electrical Engineering Department, Islamic Azad University, Najafabad Branch, Iran

M Bayati Poudeh - Electrical Engineering Department, Islamic Azad University, Najafabad Branch, Iran

خلاصه مقاله:

In this paper a novel method to the design of pole placement controller for Cuk converters is presented This optimized method can control the voltage of DC-DC converter. In this method, average model of converter is employed and it is possible to approximate the system by a linear system and then linear control methods can be used. Pole Placement Control as one of these methods is designed by a systematic methodology based on Genetic Algorithm (GA) and Particle Swarm Optimization (PSO). The proposed controllers were simultaneously designed and they have provided a coordinated control action and a satisfactory performance for the Cuk converter, as shown in the results

کلمات کلیدی:

Cuk Converter; Pole Placement; Genetic Algorithm; Particle Swarm Optimization

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