

Innovative Global Maximum Power Point Tracking based on Genetic Algorithm

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Abstract

This paper is about studying Genetic Algorithms (GA) and the influence brought by changing several parameters of a GA such as: number of genes and random number generation function to optimize the system's response. The algorithm is applied to a photovoltaic system with four solar panels and partial shading phenomenon in order to find the global maximum power point (GMPP). Results are given for the conditions mentioned above.

Biography

My name is Vlad Borza and I'm from Abrud (ALBA). I'm a student of Electronics, Telecommunications and Information Technology faculty, final year. I followed the courses of Applied Electronics specialization because I found it very challenging and it was what I planned to do even from high school.

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