

## عنوان مقاله:

A New Hybrid PSO-GSA Algorithm for Solving Optimal Reactive Power Dispatch Problem

## محل انتشار:

فصلنامه بین المللی مهندسی مکاترونیک، برق و کامپیوتر، دوره 4، شماره 10 (سال: 1393)

تعداد صفحات اصل مقاله: 15

## نویسندگان:

k lenin - *Electrical and Electronics Engineering, Jawaharlal Nehru Technological University, Kukatpally, Hyderabad, India*

b Ravindranath Reddy - *Electrical and Electronics Engineering, Jawaharlal Nehru Technological University, Kukatpally, Hyderabad, India*

m Surya Kalavathi - *Electrical and Electronics Engineering, Jawaharlal Nehru Technological University, Kukatpally, Hyderabad, India*

## خلاصه مقاله:

In this paper, a new hybrid population-based algorithm (PSO-GSA) is proposed with the combination of Particle Swarm Optimization (PSO) and Gravitational Search Algorithm (GSA), is applied to solve the optimal reactive power dispatch (ORPD) Problem. The ORPD problem is formulated as a nonlinear constrained single-objective optimization problem where the real power loss and the bus voltage deviations are to be minimized separately. In order to evaluate the proposed algorithm, it has been tested on IEEE 30 bus system consisting 6 generator and compared other algorithms reported those before in literature. Results show that PSO-GSA is more efficient than others for solution of single-objective ORPD problem

## کلمات کلیدی:

Gravitational Search Algorithm (GSA), Particle Swarm Optimization (PSO), Function Optimization, optimal reactive Power dispatch, power system

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/443329>

