Medical Image Enhancement by Image Fusion in Wavelet Domain

Hojjati S. H., Hosseinizadae M., Reihanian A.

ABSTRACT: Owing to advances in medicine, with the increase

Key words: Wavelet transform, Medical image, Image fusion
ABSTRACT: In this paper a power electronic converter on the basis of asymmetrical Γ-Source inverter has been identified to control the ... performance of the designed control system.

Keywords: Power Electronic Converter, Asymmetrical Γ-Source Inverter.
Path-finding in multi-agent, unexplored and dynamic military environment using Genetic Algorithm

Original Research, C16
Saeedvand S, Razavi SN, Ansaroudi F.

ABSTRACT:

Keywords:
ABSTRACT: Optimal placement of dispersed generation in electrical distribution systems was carried out considering the voltage profile, losses, and reliability. A Particle Swarm Optimization (PSO) algorithm was used to determine the optimal positions for dispersed generation. The proposed algorithm was effective in reducing losses and improving the voltage profile compared to a position with no dispersed generation. The results indicated the competency of the proposed algorithm.

Keywords: Optimal Placement, Dispersed Generation, PSO Algorithm, Voltage Profile, Losses.
Modeling and Optimizing the Hardness of the Melted Zone in Submerged Arc Welding Process using Taguchi Method

Original Research, C19
Aghakhani M and Shahverdi Shahraki H.

ABSTRACT: Welding, as one of the most useful method for permanent joint of components, is of great importance in industry. Among the most important properties of welding is the hardness of the melted zone. In this research, the effect of welding parameters on the hardness of the melted zone was investigated. The Taguchi method was applied for modeling and optimizing this property. The analysis of variance showed that welding current and thickness of magnesium oxide nanoparticles had respectively the highest impact on the hardness of melted zone.

Keywords: Submerged Arc Welding, Hardness of Melted Zone, Taguchi Method, Analysis of Variance, Optimization
Discretization of Cuckoo Optimization Algorithm for Solving Quadratic Assignment Problems

Original Research, C20
Kazemi E and Dejam S.

ABSTRACT: Quadratic Assignment Problem (QAP) is one of the most important combinatorial optimization problems. Many meta-heuristic algorithms have been developed to solve this problem. In this paper, the authors propose a new approach to discretize the Cuckoo Optimization Algorithm (COA) for solving the QAP. The proposed algorithm is tested on several QAP benchmarks and the results show its effectiveness in finding good solutions.

Keywords: Quadratic Assignment Problem (QAP), Meta-Heuristic Algorithms, Discrete Cuckoo Optimization Algorithm (DCOA).