Path-Finding in Multi-Agent, Unexplored and Dynamic Military Environment Using Genetic Algorithm

Original Research, D1
Saeedvand S, Naser Razavi S and Ansaroudi F.
ABSTRACT: Path-finding in multi-agent, unexplored and dynamic military environment is one of the most important issues for solving ... necessary constraints to find path in a dynamic and unexplored environment are considered and Genetic algorithm is used.

Keywords: Multi-Agent System, Path-finding, Chromosome

PII: S232251141500002-4

Optimal Design of Bearingless Permanent Magnet-Type Synchronous Motors for Generating Max...
Original Research, D2
Honarjou M., Faraji H. and Shirzadi A.

ABSTRACT: One maintenance task that still exist with conventional motors, are bearing lubrication and renewal. Bearingless motors, are a new type of motors that do not have any mechanical parts. In this research, the influence of rotor thickness on the levitation force of the Bearingless Permanent Magnet Synchronous Motor (BPMSM) is investigated. The simulation is done in Maxwell software.

Keywords: Bearingless Permanent Magnet Synchronous Motor, Maximum Levitation Force, Optimization, Thickness of PM.

PII: S232251141500003-4

Studying an Improved Interval-Only Algorithm for the De-Interleaving of Radar Pulses

Original Research, D3
Daryasafar N and Dehghani H.

ABSTRACT: In the electronic intelligence system (ELINT) technology, the radar signals are used both in the technical and tactical levels. The ELINT system includes the identification of the radar signals and their block diagrams and implementations steps as well as their ability in Deinterleaving of radar pulses are analyzed.
Direct Kinematics solution of 2-(6UPS) Hybrid Manipulator based on Neural Network

Original Research, D4
Rahmani A, Ghanbari A, Mahboubkhah M.

ABSTRACT: This contribution addresses forward kinematic
Keywords: 2-(6UPS) Manipulators, Stewart Mechanism,
Current Measurement with Optical Current Transformer

ABSTRACT:
Applying an optical current transformer (optical CT) to substations has several advantages, e.g. high accuracy and stability. The new design can be fabricated using standard telecommunication fibers contained in an insulator. As an application of the optical CT, a new fault location system has been developed.

Keywords:
OCT, Fiber Optic, Current Sensor, Protection

Reliability Constrained Energy and Reserve Scheduling of Microgrids Including High Penetration...
ABSTRACT:
Due to environmentally and economically advantages, high deployment of renewable energy sources (RES) such as wind or solar is highly recommended. However, the intermittency of RES has strong impact on the system reliability. Therefore, the optimal requirement reserve is determined by a tradeoff between reliability and economics.

Keywords: Microgrids, renewable energy sources (RES), energy and reserve scheduling, expected energy not supplied (EENS).

PII: S232251141500007-4

Optimal Charge-Discharge Scheduling of Electric Vehicles Considering Their Battery Lifetime

ABSTRACT:
Due to environmentally and economically advantages, high deployment of renewable energy sources (RES) such as wind or solar is highly recommended. However, the intermittency of RES has strong impact on the system reliability. Therefore, the optimal requirement reserve is determined by a tradeoff between reliability and economics.

Keywords: Microgrids, renewable energy sources (RES), energy and reserve scheduling, expected energy not supplied (EENS).

PII: S232251141500008-4

Introducing a New High-Order Chaotic System with an Equilibrium Point and Stabilizing It Using LQR Controller

ABSTRACT:
In this paper, a new high-order chaotic system is proposed. This system has an equilibrium point on center and its stability around the equilibrium point is guaranteed by a Linear Quadratic Regulator (LQR) controller. The Lyapunov Exponent is used to show the chaotic feature of the system.

Keywords: Chaotic System, High-Order Chaos, Lyapunov Exponent, Equilibrium Point, LQR Controller

PII: S232251141500009-4