Abstract

Linear antennas are used as an alternative solution for large dimensioned antennas such as paraboloidal cylinders, offset focus paraboloids. This paper presents a review of various algorithms used for optimization of linear array such as Genetic Algorithm (GA), Particle swarm Optimization Algorithm (PSO), Accelerated Particle Swarm Optimization Algorithm (APSO), Simulated Annealing Algorithm (SA), Cuckoo Search Optimization Algorithm (CS), Flower Pollination Algorithm (FPA), Ant-Lion Optimization Algorithm (ALO), Invasive Weed Optimization Algorithm (IWO), Grey Wolf Optimization Algorithm (GWO), from the review it was observed that ant-lion Algorithm (ALO) is better for optimizing antenna currents.

References

1. Antennas and wave propagation-4th edition-John D Kraus, Ronald J Marhefka, Ahmad S Khan
CH-8.


10. P Victoria Florence, Prof. GSN Raju, “optimization of linear dipole antenna array for side lobe minimization” IOSR, NOV-DEC-14, PP-17-27


18. Padhy, N.P., Artificial intelligence and intelligent systems, Oxford University Press, ch.10, 2005


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