

# Swarm Optimization Algorithm Inspired in the Behavior of the Social-Spider for Microwave Filters Optimization

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**Abstract :** In this paper, a recent swarm optimization algorithm on the simulation of the cooperative behavior of social spiders, called the Social Spider Optimization (SSO) is proposed for the optimization of microwave filters. In order to illustrate the proficiency and robustness of this optimization, it is compared to other literature of evolutionary algorithms, particle swarm optimization (PSO) and teaching learning-based optimization (TLBO). The outcome shows a high performance of the proposed method.

**Keywords :** optimization, microwave filter, social spider optimization