عنوان مقاله:

An improved imperialist competitive algorithm for solving an inverse form of the Huxley equation

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خلاصه مقاله:

In this paper, we present an improved imperialist competitive algorithm for solving an inverse form of the Huxley equation, which is a nonlinear partial differential equation. To show the effectiveness of our proposed algorithm, we conduct a comparative analysis with the original imperialist competitive algorithm and a genetic algorithm. The improvement suggested in this study makes the original imperialist competitive algorithm a more powerful method for function approximation. The numerical results show that the improved imperialist competitive algorithm is an efficient algorithm for determining the .unknown boundary conditions of the Huxley equation and solving the inverse form of nonlinear partial differential equations

کلمات کلیدی:

Huxley equation, Imperialist Competitive Algorithm, Partial differential equations, Meta-heuristic algorithms, Genetic algorithm