

AN EFFICIENT ANT COLONY OPTIMIZATION ALGORITHM FOR MULTIPLE GRAPH ALIGNMENT

Trần Ngọc Hà, Đỗ Đức Đông, Hoàng Xuân Huấn

TÓM TẮT:

The Multiple Graph Alignment (MGA) is a new method to analyze the structure of biological molecules. This method allows detect functional similarities in the structure of biological systems. This article introduces an ant colony optimization algorithm combined with local search for optimal align multi-graph analysis of protein structures. Experiment results showed that the new algorithm outperformed the other heuristic approach and existing evolutionary computing.