

of feasible scheduling solution was saved in matrix coding, the population was initialized, and the algorithm steps were specified. Finally, the proposed model and algorithm were verified through a case study on emergency surgeries for 12 patients with bone fractures.

The results show that the proposed emergency surgery scheduling model can describe emergency surgeries well, while the IMFO can output a rational scheduling plan and outperform the classic MFO, PSO and CS. Of course, the proposed solution only applies to single-objective optimization problems. The future research will explore the emergency surgery scheduling with multiple objectives and resource constraints.

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