

Tytuł publikacji:

Distributed Quantum Annealing on D-Wave for the Single Machine Total Weighted Tardiness Scheduling Problem

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DOI:

10.1007/978-3-031-08760-8_1

Abstrakt:

In the work, we are proposing a new distributed quantum annealing method of algorithm construction for solving an NP-hard scheduling problem. A method of diversification of calculations has been proposed by dividing the space of feasible solutions and using the fact that the quantum annealer of the D-Wave machine is able to optimally solve (for now) small-size subproblems only. The proposed methodology was tested on a difficult instance of a single machine total weighted tardiness scheduling problem proposed by Lawler.

Opublikowano w:

ICCS 2022: Computational Science – ICCS 2022, str. 171-178

https://link.springer.com/chapter/10.1007/978-3-031-08760-8_15

