



Advances in Robust Control for Automated Manufacturing System

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Message from the Guest Editors

Dear Colleagues,

The construction of smart factories is a hot issue in the global manufacturing industry. German Industry 4.0 and American Industrial Internet both focus on the construction of smart factories in order to transform, upgrade and innovatively develop the manufacturing industry. Since there resource sharing in smart factories is common, deadlocks may occur without proper control, which may shortcut their performance. Thus, it is important to develop efficient methods to avoid deadlocks, while optimizing the performance of smart factories.

Although many control policies and scheduling methods have been proposed, only a few of them have been applied in smart factories due to their performance defects. This Special Issue is aimed at addresses the analysis, design and implementation of control policies and optimization algorithms in smart factories. This includes:

- Robust control policies;
- Scheduling algorithms;
- Planning algorithms;
- Routing planning algorithms;
- Deadlock control policies;
- Packing algorithms;
- Performance analysis algorithms;
- Digital twin technologies;
- Energy saving control;
- Maintenance decision making.





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Message from the Editor-in-Chief

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