



Mathematical Techniques and New ITs for Smart Manufacturing Systems

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Message from the Guest Editors

Dear Colleagues,

Smart manufacturing, as the theme of Industry 4.0, has drawn much attention from both academics and practitioners. Mathematical techniques (e.g., algebra, probability and statistics, programming, matrix operations, queueing theory) and new information technologies (e.g., digital twin, cloud-edge computing, deep learning, blockchain) have empowered manufacturing systems into smart systems. Considering a manufacturing system covers design, simulation, production planning, monitoring, scheduling, optimization, quality assurance, lean logistics, human-robot collaboration, and many other domains, there is still much work to discuss on the mathematical techniques and new IT-driven configuration and operations management of smart manufacturing systems. This Special Issue welcomes cutting-edge technologies and multi-disciplinary research with respect to the above domains, in the form of technical papers or review papers.





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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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