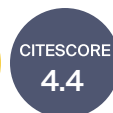




metals



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Advanced Applications of Artificial Intelligence in Metallic Materials Processing

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Deadline for manuscript
submissions:

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Message from the Guest Editor

Dear Colleagues,

For the last 50 years, manufacturing processes have been relying on automation and information technologies, thereby exhibiting an inter-disciplinary nature, to solve the ongoing challenge of optimizing productivity, quality and cost. However, artificial intelligence techniques have re-emerged and can now be found at the core of the latter due to their abilities to reveal underlying interactions and patterns as well as to support optimal decision-making strategies.

This Special Issue aims to highlight such advanced applications of artificial intelligence in metallic materials processing covering process modeling and simulation, process planning, real-time process monitoring and fault detection, in-process quality control, automated part handling and inspection. Real-world case studies that provide insights into the associated challenges, implementations and achieved benefits are especially welcome.



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Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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