Special Issue

Robotics in Manufacturing Processes

Message from the Guest Editors

Industrial robots play an important role in various manufacturing processes, often replacing machine tools. Indicative applications concern the following:

- Welding
- Painting and coating
- Machining
- Additive manufacturing
- Assembly
- Inspection

Current issues are expected to be addressed in relation to the application of robots in manufacturing processes, the following being indicative:

- Advancements in sensors, vision systems, actuators, grippers and robot structures
- Advanced control algorithms, e.g., real-time adaptive strategies for enhancing manufacturing process precision and efficiency
- Machine learning and AI in robot control
- Novel fast and intuitive programming of robots for manufacturing operations
- Human–robot interaction and collaboration in performing manufacturing tasks
- Integration of industrial robots into cyber–physical systems and Industry 4.0
- Microrobots in micro-manufacturing
- Impact of robotics on sustainable and eco-friendly manufacturing practices

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Message from the Editor-in-Chief

Journal of Manufacturing and Materials Processing (*JMMP*)(ISSN 2504-4494) is a new MDPI peer-reviewed, open access venue with a focus on the scientific fundamentals and engineering methodologies of manufacturing and materials processing. We offer an online platform facilitating effective exchange of innovative scientific and engineering ideas and the dissemination of recent, original, and significant research and developmental findings. On behalf of the Editorial Board, I extend an invitation to our scientific and engineering colleagues to contribute high-quality, innovative, and ground-breaking research articles to *JMMP.*

Editor-in-Chief

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