Special Issue

Process-Oriented Mechanical and Formability Characterization of Materials

Message from the Guest Editors

The evolution of advanced materials demands innovative approaches to the characterization and optimization of formability under real-world processing conditions. This Special Issue focuses on process-oriented material and formability characterization, emphasizing the interplay between material behavior and manufacturing processes. The scope of this Special Issue includes, but is not limited to, the following topics:

- Process-oriented material testing and characterization;
- In-situ formability assessment and real-time monitoring;
- Advanced experimental techniques for process-specific mechanical characterization;
- Formability of additively manufactured and composite materials;
- Defect formation and mitigation in non-traditional forming processes;
- Constitutive and damage modeling for process optimization;
- Multiscale simulations linking material behavior to process parameters;
- Sheet, tube, and bulk forming;
- Hybrid and non-traditional manufacturing processes;
- Warm, hot, and dynamic forming characterization;
- Process monitoring, control, and data-driven optimization;
- Industrial case studies and process validation.

Guest Editors

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About the Journal

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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