Special Issue

Born Qualified Advanced Manufacturing—Modeling, Monitoring, Control, and Al for Rapid Part Quality Qualification in Advanced Manufacturing Processes

Message from the Guest Editor

Advanced manufacturing processes are inherently complex and expensive, and are aligned for high-performance applications. Therefore, in advanced manufacturing, qualifying part quality based on extensive build-and-test characterization is not economically tenable. The aim is to achieve born-qualified advanced manufacturing, i.e., monitoring, predicting, and controlling part quality without the need for extensive trial-and-error testing, characterization, and experimentation. This Special Issue, "Born Qualified Advanced Manufacturing—Modeling, Monitoring, Control, and Al for Rapid Part Quality Qualification in Advanced Manufacturing Processes", is targeted at this aim.

Guest Editor

Dr. Prahalada Rao

Grado Department of Industrial and Systems Engineering, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA

Deadline for manuscript submissions

15 January 2026



Journal of Manufacturing and Materials Processing

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 5.2



mdpi.com/si/234582

Journal of Manufacturing and Materials Processing Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 jmmp@mdpi.com

mdpi.com/journal/immp





Journal of Manufacturing and Materials Processing

an Open Access Journal by MDPI

Impact Factor 3.3 CiteScore 5.2



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 .IMMP.

Editor-in-Chief

Prof. Dr. Steven Y. Liang

George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, GA 30332-0405, USA

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, CAPlus / SciFinder, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2 (Mechanical Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.2 days after submission; acceptance to publication is undertaken in 3.6 days (median values for papers published in this journal in the first half of 2025).

