

Call for Book Chapters



School of
Engineering

Edited Book on Advances in Processing of Lightweight Metal Alloys and Composites

Dear Professors and Researchers,

We have been privileged to edit a book on "Advances in Processing of Lightweight Metal Alloys and Composites" that would be published by Springer Nature (Springer). This book would cover practically the most important aspects of lightweight metal alloys including history, physical metallurgy, overview of production technologies, alloy development, compositing, post-processing (heat treatment, surface engineering, bulk-deformation), and joining methodologies.

We invite you to contribute a book chapter to the edited book in the above-mentioned areas of research. The chapters are expected to copiously present with detailed descriptions covering microstructural evolution, fractography, corroded and worn surface morphology to enable an easy understanding of the mechanism.

Editors



Dr. R. Vaira Vignesh



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Important Dates

Submission of Manuscript	31-10-2021
Notification of Reviewer Comments	15-11-2021
Submission of Revised Manuscript	31-12-2021
Notification of Acceptance	02-02-2022

No Publication Fee

Submission Link

<https://easychair.org/conferences/?conf=materials2022>

Format

1. Format: A4, Single Space, Times New Roman, 12 pt
2. Manuscript should include all author details



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No	Tentative Chapter Titles
1	Introduction to Lightweight Metallic Materials
2	Instrumental Characterization of Light Weight Metal Alloys and Composites
3	Severe plastic deformation processing of aluminum alloys
4	Solid-state welding of aluminum alloys
5	Aluminum metal matrix composite for automotive and aircraft applications (liquid-state process)
6	Aluminum metal matrix composite for automotive and aircraft applications (solid-state process)
7	Heat treatment of aluminum metal matrix composites
8	Surface engineered (coating or modification) aluminum alloys for automotive, aircraft, and industrial applications
9	Severe plastic deformation processing of magnesium alloys
10	Solid-state welding of magnesium alloys
11	Magnesium metal matrix composite for automotive, biomedical, aircraft, and aerospace applications (liquid-state process)
12	Magnesium metal matrix composite for automotive, biomedical, aircraft, and aerospace applications (solid-state process)
13	Heat treatment of magnesium metal matrix composites
14	Surface engineered (coating or modification) magnesium alloys for automotive, biomedical, aircraft, aerospace, and industrial applications
15	Microstructural texture evolution in hot-rolled of Ti alloys
16	Brazing of Ti alloy and Ceramics
17	Additive manufacturing of Titanium alloys
18	Machinability / Formability studies on light-weight metallic materials (alloys)
19	Machinability / Formability studies on light-weight metallic materials (composites)
20	Soft-Computing Methodologies for correlating the process parameters and properties of lightweight metallic materials