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Processing, Microstructure and Property Relationships in Advanced Manufacturing of Alloys

Guest Editor:

Prof. Dr. Yong-Cheng Lin

School of Mechanical and
Electrical Engineering, Central
South University, Changsha
410083, China

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Message from the Guest Editor

Dear Colleagues,

In the hot forming process, materials often undergo a series of plastic deformation. The hot forming parameters, including strain rate, strain, and deformation temperature, greatly impact the hot deformation behavior and deformation mechanisms of alloys. Meanwhile, complex microstructure evolution is induced, which greatly affects the properties of components. In order to further optimize the microstructures and properties, heat treatment of the hot formed components is a necessary procedure. Thus, it is of great importance to investigate the processing–microstructure–property relationships in advanced manufacturing of alloys.

It is my pleasure to invite you to submit research articles and review papers to this Special Issue on advanced forming technologies and heat treatments of aluminum alloys, nickel-based superalloys, titanium alloys, and magnesium alloys as well as their components. I believe that this Special Issue can inspire many scientists who have been pursuing greater understanding of the processing–microstructure–property relationships in the advanced manufacturing of alloys.

Prof. Dr. Yong-Cheng Lin
Guest Editor



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Special Issue



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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

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