Special Issue

Advanced High-Strength Steels (AHSS) Prepared as Bulk and Powder Metal

Message from the Guest Editor

Advanced High Strength Steels (AHSS) are characterized by selected chemical composition, final microstructures, and physical properties that can be formed in bulk or powdered steel materials.

This Special Issue aims to present the latest works in the research and development of AHSS steels. We invite you to submit a manuscript to this Special Issue. Full papers, communications, and reviews are welcome for submission.

Potential topics include, but are not limited to:

- (a) Materials base: AHSS steels prepared in bulk and PM form (introduction and characterization);
- (b) Experimental techniques: controlled rolling and cooling, additive manufacturing, SPD techniques, plastic deformations at cryogenic temperatures, and heat treatment:
- (c) Strengthening mechanisms to increase mechanical properties;
- (d) New trends to increase mechanical properties;
- (e) Application of AHSS.

Guest Editor

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Deadline for manuscript submissions

closed (20 July 2025)



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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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