

Special Issue

Advances in Duplex Stainless Steels (Second Volume)

Message from the Guest Editors

Duplex stainless steels (DSSs) were developed in the 1930s, and gradually found an increasing number applications thanks to their high strength, good weldability, good toughness and resistance to stress corrosion cracking. Although the use of DSSs is well-established in many industrial sectors, the research and innovations in the field are always growing. In particular, the recent research has focused on the development of new high-grade DSSs (the so-called hyper-duplex steels) and on the production of components through technologies based on the additive manufacturing concept, mainly laser-based ones.

In all cases, a strong correlation between the microstructural characterization and the investigated properties was the key point of the performed research.

The purpose of this Special Issue is to correlate the microstructure of DSSs with their mechanical and corrosion properties, with special attention to novel DSS grades or novel production technologies such as AM.

I invite you to submit both original contributions and review works on this topic, with papers that deal both with the characterization and with the mechanical and corrosion resistance evaluation of different DSS grades.

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Deadline for manuscript submissions

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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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