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Advanced Non-Destructive Testing in Steels

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Message from the Guest Editor

Dear Colleagues,

Non-destructive testing (NDT) is a major issue for industrial and bio-medical applications, with several tens of billions USD in annual turnover. The technology in NDT is rapidly improving due to the development of new technologies, e.g., sensors, electronics, communications, software applications, and integration processes. The NDT methods for steel applications are following this general trend. Year-by-year, the methods and processes become better and better, with the current state-of-the-art being the accurate detection of flaws and defects in steels in the order of microns.

The aim of this Special Issue is to present, on the one hand, the advances in non-destructive methods and instruments for steels in all aspects of steel production, manufacturing and use, and, on the other hand, the advances in the field of stress tensor distribution monitoring targeting the prediction of crack initiation and propagation.

Prof. Evangelos Hristoforou Guest Editor











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Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure - disciplines in metallurgical field the ranging from processing. mechanical behavior. phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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