



Application of Atom Probe Tomography in Metallic Materials

Guest Editor:

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Message from the Guest Editor

Atom probe tomography (APT) belongs to a family of techniques under the umbrella term “atom probe microscopy”. APT has been traditionally used to study metals and metal alloys, although its applications now include geological and biological materials. Important insights into the nanoscale structure of metal alloys, such as precipitates, grain boundaries, grain misorientation, solute clustering, and ordering, are all made possible with the information from APT.

In this Special Issue, we welcome contributions (original research articles or review articles) relating to the use of APT data in the study of metallic materials. The contribution could include new instrumentation or specimen preparation procedures enabling the study of metallic materials previously inaccessible by APT; a new analysis technique to interpret APT data; a new metallurgical or structure–property relationship insight gained from APT; or a study of previous literature to provide future directions for APT.





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Message from the Editor-in-Chief

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 the metallurgical field 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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