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Role of Metallurgy in the Biodegradation of Metal

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

This Special Issue of *Sci* from MDPI focuses on the role of the metallurgical history of steel and other metallic alloys in their bioor regular degradation when these alloys are exposed to a corrosive environment.

Topics of particular interest include:

- Understanding the fundamentals of biocorrosion of materials;
- Role of the metallurgical history of metallic alloys in their bioor regular degradation;
- Dislocations and their detection in metals;
- Cold and hot rolling of steels and their role in localized corrosion;
- Applications of smart coatings to prevent corrosion;
- Next-generation steel manufacturing technologies;
- Bacterial colonization of steel and other metallic surfaces by pathogenic bacteria in food industries;
- Colonization of carbon steel and other metallic surfaces by bacteria and localized biodegradation of these surfaces;
- Next-generation antifouling agents;
- Rapid diagnostic methods to evaluate the propensity of steel and other surfaces towards localized corrosion;
- Rapid determination of the surface density of some inclusions, such as MnS, that contribute to localized corresion



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