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Corrosion and Crack Behavior of Metallic Materials in High-Temperature Environment

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Message from the Guest Editors

Dear Colleagues,

For a continuous building of social infrastructure and economic development, environmental compatibility is a crucial requirement for the metallic structure materials used in industrial fields with high-temperature environments, such as energy conversion system, gas turbines industry, chemical industry, etc. It is essential to validate metallic materials against high-temperature applications. In order to prevent corrosion degradation and oxidation processes, new corrosion-resistant alloys and protective coatings are needed to serve an extended lifetime for structural materials; it is important to understand the corrosion and cracking mechanism of materials performed in such extreme environments.

I am pleased to invite and welcome you to contribute to this Special Issue. The aim of this Issue is to discuss the corrosion and cracking behavior of metallic materials and coatings applied in high-temperature environments. Articles which focus on material design, modification, treatment, protection, corrosion test technique, and corrosion simulation, which are relevant to the corrosion and prevention of materials, are also welcomed.



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Special Issue



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Message from the Editor-in-Chief

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