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Advances in High Temperature Materials: Manufacture, Characterization and Simulation

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Message from the Guest Editors

Dear Colleagues,

High temperature materials demonstrate a series of superior properties at high temperatures. Due to their 'super' performance, they have sustained wide applications in aircraft, industrial gas turbines, oil equipment, and vehicles for over seven decades. As we move through the third decade of the twenty-first century, higher requirements are put forward for the temperature-bearing capacity. These demands necessitate a Special Issue, "Advances in High Temperature Materials: Manufacture, Characterization and Simulation", to publish recent progress upon which new developments can be built.

- high temperature materials
- refractory metals
- high temperature ceramics
- new types of superalloy
- blade alloy behavior
- disk alloy manufacture
- environmental behavior
- alternative materials
- microstructure
- dislocation structure
- modeling and simulation
- constitutive modeling



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Special Issue



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Message from the Editor-in-Chief

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