



## Multiscale Modelling and Crystal Plasticity of Metals

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### Message from the Guest Editor

The following fields are of high-interest to the progress of multiscale modelling: 1) the development of algorithms for the accurate generation of synthetic microstructures, i.e., based on microstructure geometrical descriptors, statistics, or artificial intelligence; 2) the development of multiscale bridging and optimization methods to speed up the numerical computation of statistical and high-resolution synthetic microstructures as well as to enable the application to component scale; 3) the understanding and proper management of material properties needed in multiscale modelling (i.e., constitutive behaviour of the individual phases and their mechanical interactions) with respect to the microstructural characteristics resulting from the applied thermal processing; and 4) smart strategies to compare simulations output results with experimental results at different length-scales.

For all the above-described aspects, this Special Issue aims to present the latest research findings in the field of multiscale modelling of metallic alloys for structural applications.





# crystals



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## Editor-in-Chief

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## Message from the Editor-in-Chief

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