

Current Natural Sciences

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Diffusion, Segregation and Solid-State Phase Transformations

Course Reminders and Solved Problems



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Cover illustration:

The legend of cover image 1 is: 3D reconstruction of a boron enriched Cottrell atmosphere in ordered FeAl alloys analysed by atom probe tomography [24]. Boron atoms are in red whereas Al atoms are in green (iron is omitted for the sake of clarity). Al-rich (001) planes of the ordered structure are evidenced. A close examination shows the presence of an edge dislocation. Boron is shown to segregate along the dislocation line (courtesy E. Cadel, GPM, [24]).

The legend of cover image 2 is: 3D reconstruction of a model nickel base superalloy exhibiting 7 nm in size aluminium enriched precipitates finely dispersed in the chromium enriched parent phase (courtesy A. Azzam, GPM, [44]).

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