

Investigation of time-temperature relationships of surface segregations forming under internal adsorption of solved elements in α -Fe alloys, using Auger-spectroscopy

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Temperature mechanisms of the surface segregations development in α -Fe alloys were experimentally investigated, using Auger-spectroscopy method. It was shown that there are certain temperature intervals of solved elements surface segregations forming in α -Fe alloys during isothermal exposing in vacuum. The temperature scale positions of the solved elements surface segregations in low-carbon steels and ferrous-based alloys found to correlate with the activation energy values of the volume diffusion.

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