

عنوان مقاله:

Color metallography; a suitable method for characterization of martensite and bainite in multiphase steels

محل انتشار:

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خلاصه مقاله:

Color metallography is a useful method for characterizing microstructures of steels with multiple phases. In this paper, application of three different color etching techniques for a bainitic-martensitic steel is reported. Comparisons between the results showed that ۱۰% $\text{Na}_2\text{S}_2\text{O}_5$ aqueous solution was the best etchant for distinguishing martensite, bainite and ferrite phases. The obtained micrographs were clear and sharp. Nanoindentation test was also carried out in order to approve the results of color metallography.

کلمات کلیدی:

Color metallography, Multiphase steel, Microstructure

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