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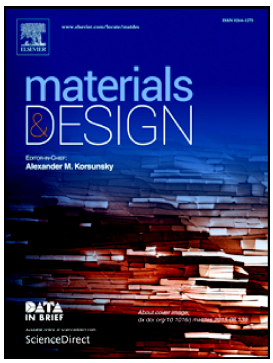

Compositional analysis on the reverted austenite and tempered martensite in a Ti-stabilized supermartensitic stainless steel: Segregation, partitioning and carbide precipitation

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Compositional analysis on the reverted austenite and tempered martensite in a Ti-stabilized supermartensitic stainless steel: segregation, partitioning and carbide precipitation

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KEY WORDS: Atom Probe Tomography, Austenite reversion, Isothermal tempering treatments, Synchrotron diffraction.

Abstract: Controlling the amount of reverted austenite at room temperature allows for tailoring of mechanical properties in supermartensitic stainless steels. The austenite reversion and stabilization occurs during inter-critical tempering through partitioning of