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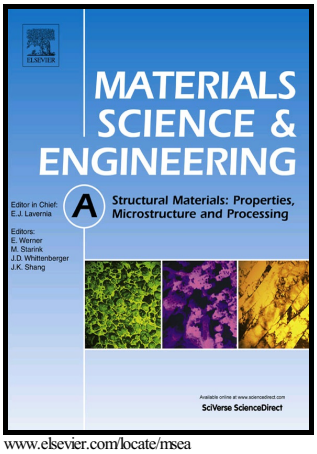

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ABSTRACT

The effect of pre-strain on the resistance to gaseous hydrogen embrittlement of CoCrFeMnNi high-entropy alloy (HEA) was investigated through mechanical testing and thermal desorption analysis. The results reveal that prior plastic deformation does not affect either the hydrogen contents or the excellent hydrogen embrittlement resistance of the HEA.

Keywords: High-entropy alloy; hydrogen embrittlement; pre-strain effect; thermal desorption spectroscopy.