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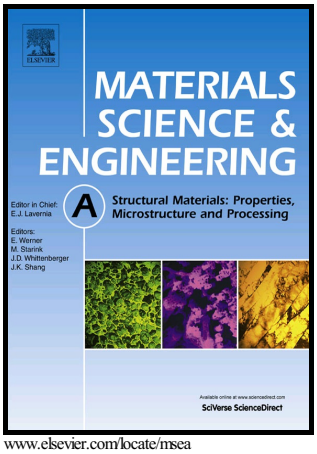

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Abstract

High-ratio differential speed rolling was applied to a non-equiatomic $Fe_{41}Mn_{25}Ni_{24}Co_8Cr_2$ high entropy alloy. After subsequent annealing, the processed alloy exhibited a superior combination of high strength and high uniform elongation compared with the alloy processed by conventional rolling, which was achieved through the development of a bimodal grain size distribution.

Keywords: stress-strain measurement; high entropy alloys; plasticity method; grains and interface