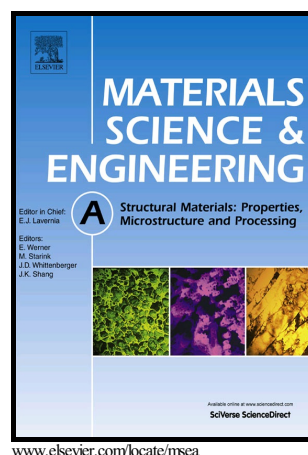


Al_{0.5}FeCoCrNi high entropy alloy prepared by selective laser melting with gas-atomized pre-alloy powders

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**Al_{0.5}FeCoCrNi high entropy alloy prepared by selective laser melting
with gas-atomized pre-alloy powders**

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Abstract

The Al_{0.5}FeCoCrNi HEA was fabricated by selective laser melting (SLM) with gas-atomized pre-alloy powders. The BCC phase in the powders transforms to FCC phase in the SLM-processed sample. The SLM-processed sample has excellent tensile properties with the yield strength and ultimate tensile strength of 579 MPa and 721 MPa, respectively.

Keywords: Selective laser melting; High entropy alloy; Phase transformation; Mechanical properties

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