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Abstract

The equiatomic CoCrFeMnNi alloy is now regarded as a model face-centered cubic single-phase high-entropy alloy. Therefore, determination of its intrinsic properties such as the temperature dependencies of elastic moduli and thermal expansion coefficient are important to improve understanding of this new class of material. These temperature dependencies were measured over a large temperature range (200 – 1270 K) in this study.

Keywords: Metals and alloys; Entropy; Microstructure; Thermal expansion coefficient; Elasticity