

High Entropy Alloys/multi-principal element alloys: some results on structure and properties for some CoFeNi-based systems

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The term “high entropy alloys” (HEA) was introduced in 2004 to designate alloys consisting of 5 or more principal elements in equi- or near-equi-molar amounts with a simple crystalline structure. Overview of structure and properties (especially hardness and magnetization) of some CoFeNi-XYZ based alloys (with X, Y, Z = Cr, Pd, Al, Cu, Ru, Ti) in as-cast condition and after annealing treatments.

A classification according to the determined phases will be discussed.