

Abstract Details

Title: Nanoindentation in high entropy alloys– a review

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Abstract: This the focused research on high entropy alloys due their unique configurational design and phase formation makes nanoindentation a efficient tool and innovative method for precise calculation of the mechanical properties of high entropy alloys on micro scale and nano scale. The nanoindentation technique is now widely implemented to evaluate the mechanical characterization, inter molecular interaction, young's modulus, fracture toughness and hardness of the heterogeneous and homogeneous materials. The indenter size effects on elastic and plastic deformations of metals and high entropy composite materials from nano to micro sizes can be explored with nanoindentation.

Keywords: *nanoindentation; high entropy alloys; mechanical properties; design strategy.*