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Enthalpies of Formation of Equiatomic Binary Hafnium Transition Metal Compounds HfM (M=Co, Ir, Os, Pt, Rh, Ru)

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Abstract : In order to investigate Hafnium transition metal alloys HfM (M= Co, Ir, Os,Pt, Rh, Ru) phase diagrams in the region of 50/50% atomic ratio, we performed ab initio Full-Potential Linearized Augmented Plane Waves calculations of the enthalpies of formation of HfM compounds at B2 (CsCl) structure type. The obtained enthalpies of formation are discussed and compared to some of the existing models and available experimental data.

Keywords : enthalpy of formation, transition metal, binarry compunds, hafnium
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