عنوان مقاله:

DEPENDENCE OF TEMPERATURE ON THERMODYNAMIC PROPERTIES OF Zn5Al-Be AND Zn55Al-Be ALLOYS

محل انتشار:

سومین کنفرانس بین المللی عملیات حرارتی مواد (سال: 1391)

تعداد صفحات اصل مقاله: 8

نویسندگان: Reza Amini - Department of material science and engineering , isalmic azad university , majlesi branch, Isfahan , Iran

z Nizomov - Physics department , Tajikestan national university, Dushanbe

maryam Razazi - Department of material science and engineering, isalmic azad university, mailesi branch, Isfahan, Iran

I. N. Ganiev - Chemistry Institute, Tajikistan Academy of Sciences, Dushanbe

خلاصه مقاله:

According to cooling law of Newton and studied experimental results, enthalpy, entropy and energy of Gibbs of Zn5Al and Zn55Al alloys were achieved and Special heat capacity of the alloys with Be were studied. Experimental research showed that increasing temperature due to increase enthalpy and entropy of Zn5Al and Zn55Al original alloys but energy of Gibbs decreases. After 500 °K, increasing temperature due to soft increasing entropy. After adding small amounts of Beryllium to the original alloy, it is observed that increasing temperature due to increase the Special heat capacity of them, but about 520-530 °K, a transition is observed which is explained by recrystallization of grains

كلمات كليدى:

Zn5Al, Zn55Al, Beryllium, thermodynamic properties, enthalpy, entropy, energy of Gibbs, heat capacity

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/153032

