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Erratum to the Paper "The Mechanic and Lattice Dynamical Properties on Stability of REMg (RE=Dy, Ho, Er) Alloys"

Yasemin ÖZTEKİN CİFTCİ[1,♠], Belgin KOCAK[1]

[1]*Gazi University, Department Of Physics, Teknikokullar, 06500, Ankara, TURKEY*

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ABSTRACT

We would like to correct the inaccurancy in Table 3 for the our paper "The mechanic and lattice dynamical properties on stability of REMg (RE=Dy, Ho, Er) alloys", *Gazi University Journal of Science,* 27(2):761-769 (2014).

Key Words: *Wave velocities, Debye temperature, melting tempearture*

In section 3.2 on page 767, in numerical calculations there is density (ρ) in equations of debye temperature, longitudinal and transverse elastic wave velocities. Actually we used density as follows:

$$\rho = \frac{M\,Z}{N_A\,V} \quad (1)$$

here M molecular mass, NA Avogodro's number, V is volume (V= a^3, a lattice parameter), Z= 1. But in calculations we used Z=4 by mistake. By using Z=1 we obtained correct numerical values for Table 3 as given following.

Table 3. The longitudinal, transverse, average elastic wave velocities, Debye temperature and melting temperature for REMg (RE= Dy, Ho, Er) in B2 structure.

Material	v_l (m/s)	v_t (m/s)	v_m (m/s)	θ_D (K)	*Tm (K)*
DyMg	3440.18	1913.84	2131.3	211.65	862.27±300
HoMg	3381.5	1873.03	2086.58	207.8	860.32±300
ErMg	3354.1	1853.2	2064.9	206.25	861.45±300

♠Corresponding author, e-mail: *yasemin@gazi.edu.tr*

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REFERENCES

[1] Öztekin Ciftci, Y., Kocak, B., "The mechanic and lattice dynamical properties on stability of REMg (RE=Dy, Ho, Er) alloys", ***Gazi University Journal of Science,*** 27(2):761-769 (2014).