Erratum to: Characterization of Dendritic Microstructure, Intermetallic Phases, and Hardness of Directionally Solidified AI-Mg and AI-Mg-Si Alloys



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THE authors regret that numerical errors were identified in Figures 10(a, right graph) and (b, right graph) and 12. In the calculation of the growth rate of the Al-3.0 wt pct Ni alloy, a mistake has been found. The corrected figures and their respective legends are

reproduced below. The error does not change the main discussions and conclusions of the work. In addition, a sentence containing the discussion associated with Figure 12 has been rewritten as follows.

As can be observed in Figure 12, the BK model roughly matches the experimental tendency of evolution of the secondary dendrite arm spacing with the growth rate.

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Fig. 10—Correlations between dendrite arm spacings and solidification thermal parameters: (a) λ_1 evolution as a function of tip cooling rate and tip growth rate and (b) λ_2 evolution as a function of tip cooling rate and tip growth rate; and (c) evolution of the tertiary dendritic spacing, λ_3 , for the ternary Al-3.0 wt pct Mg-1.0 wt pct Si alloy as a function of tip cooling rate and tip growth rate.



Fig. 12—Comparison of experimental and theoretical λ_2 as a function of V_L for the Al-3.0 wt pct Mg alloy.