

Supplementary Materials

On the formation of antiphase boundaries in $\text{Fe}_4\text{Al}_{13}$ intermetallic during high temperature annealing

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This file includes supplementary Fig. S1 and Fig. S2.

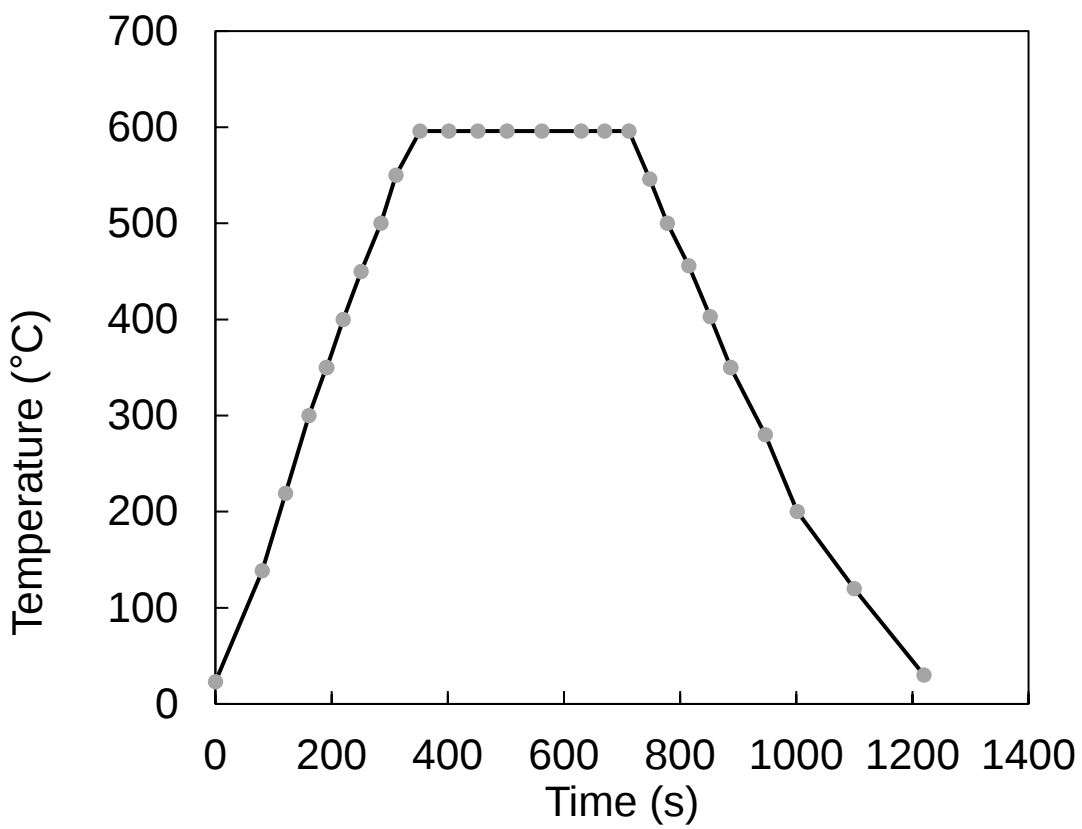


Fig. S1. Temperature-time evolution during heat treatment up to 596°C.

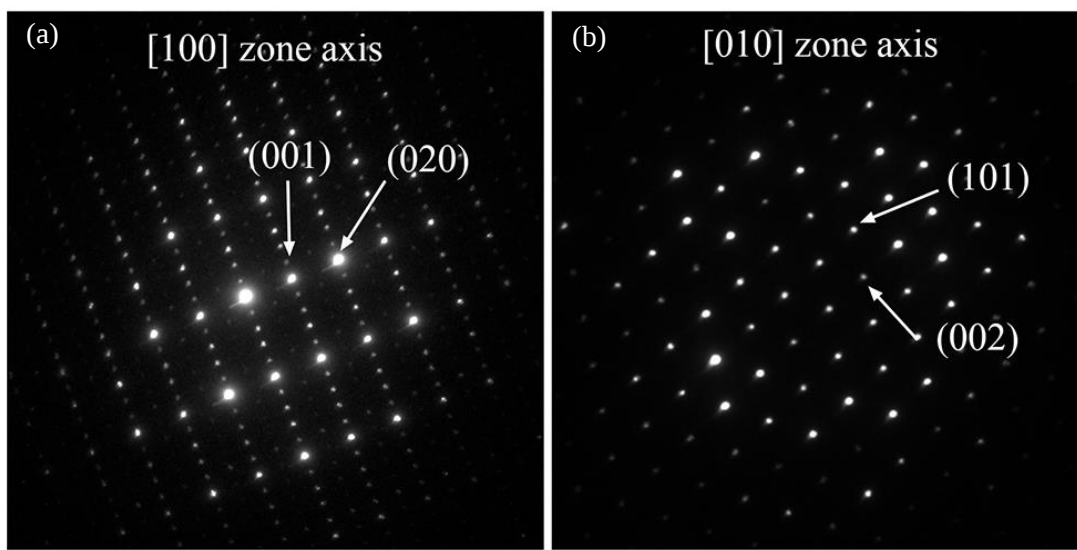


Fig. S2 SAED patterns of the $\text{Fe}_4\text{Al}_{13}$ taken along (a) [100] and (b) [010] zone axes, respectively.

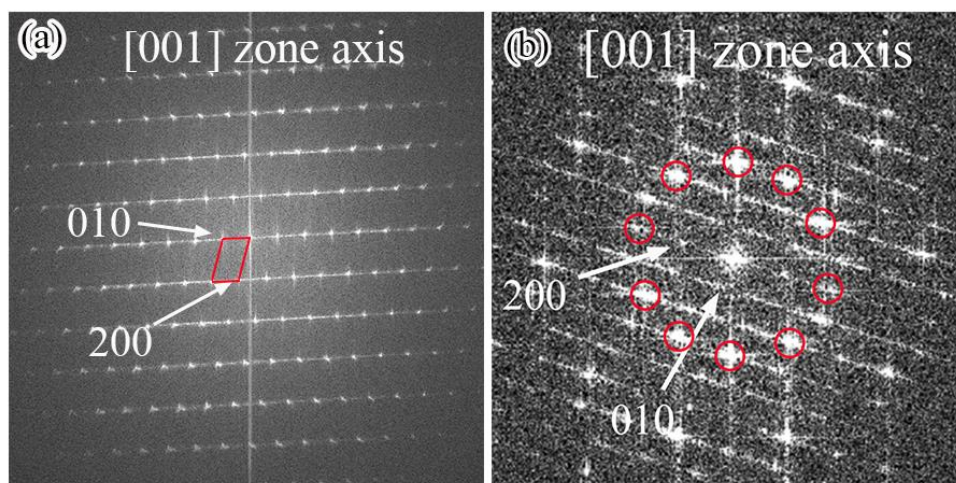


Fig. S3 (a) FFT pattern of Fe₄Al₁₃ intermetallic without APB, (b) FFT pattern of Fe₄Al₁₃ with APBs (obtained in the region shown in Fig. 3(a)). The 5-fold symmetry is marked by the red circles in the FFT pattern

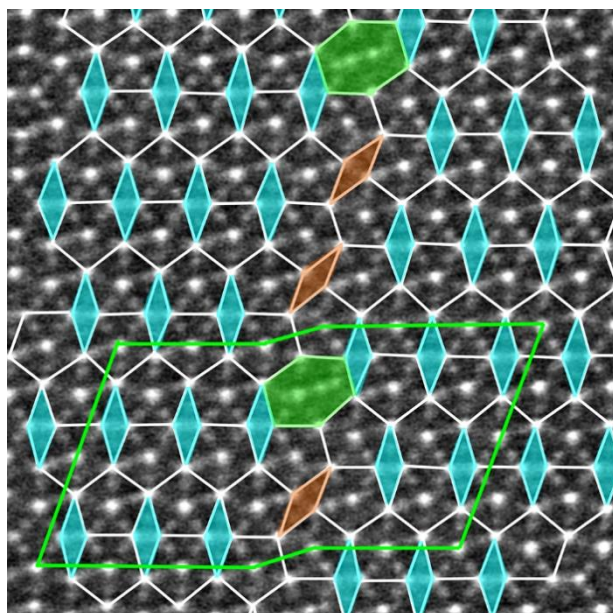


Fig. S4. High resolution HAADF-STEM images of APBs in the Fe₄Al₁₃ phase. Burgers circuit is marked by green lines.