

Supplementary Material

Effect of Thermomechanical Treatment of Al-Zn-Mg-Cu with Minor Amount of Sc and Zr on the Mechanical Properties

Azam Beigi Kheradmand^{1,*}, Shamseddin Mirdamadi², Zahra Lalegani³ and Bejan Hamawandi^{4,*}

¹ Department of Mechanical Engineering, Shahrekord Branch, Islamic Azad University, 88137-33395 Shahrekord, Iran

² Department of Materials Engineering, Science and Research Branch, Islamic Azad University, 82448-65179 Tehran, Iran; mirdamadi@iust.ac.ir

³ Young Researchers and Elite Club, Shahrekord Branch, Islamic Azad University, 88137-33395 Shahrekord, Iran; z.lalegani@ut.ac.ir

⁴ Department of Applied Physics, KTH Royal Institute of Technology, SE-10691 Stockholm, Sweden

* Correspondence: kheradmand@iaushk.ac.ir (A.B.K.); bejan@kth.se (B.H.)

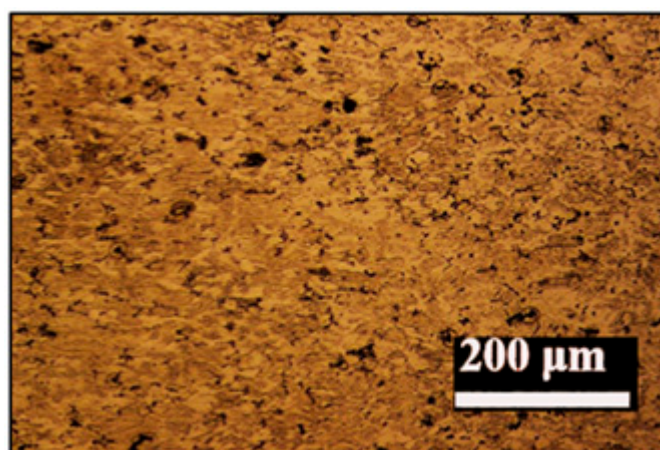


Figure S1. Metallographic image of alloy containing 0.1% Sc under thermomechanical treatment with conventional dissolution, after dissolution, and 50% deformation.

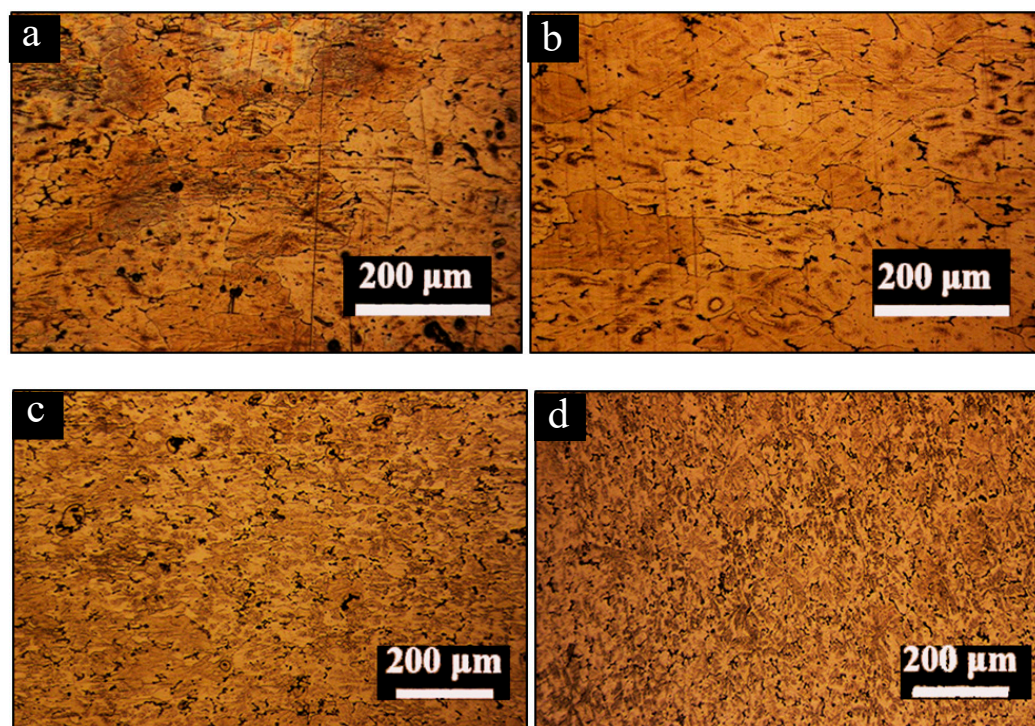


Figure S2. Metallographic image of alloy containing 0.1% Sc under thermomechanical treatment with controlled quenching: (a) after dissolution and 30% deformation, (b) ageing at 130°C, (c) after dissolution and 50% deformation, and (d) ageing at 120°C.

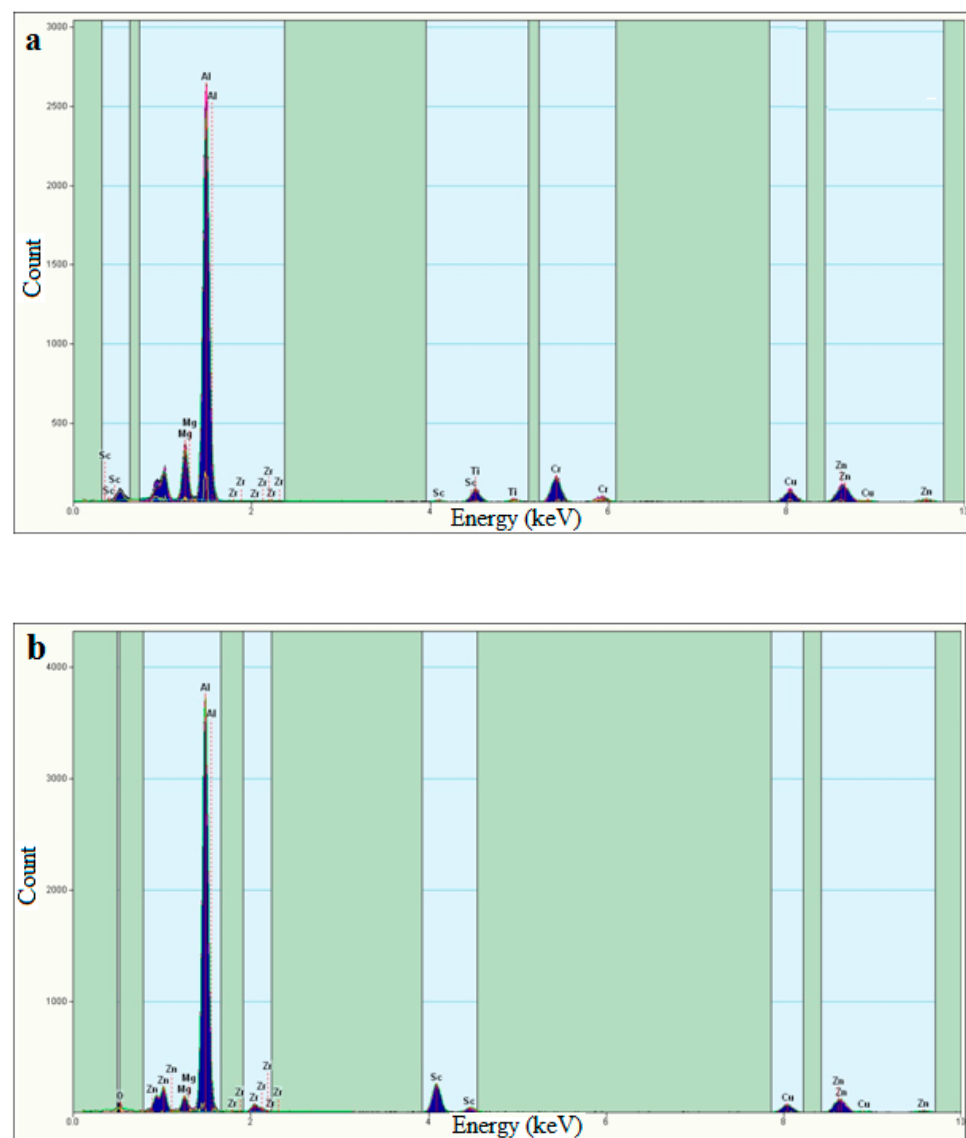


Figure S3. EDS analysis of dispersoids in the TEM micrograph given in figure 12: (a) spherical particles, and (b) rod particles.