On the Fatigue Performance of Friction-Stir Welded Aluminum Alloys

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Supplementary Materials

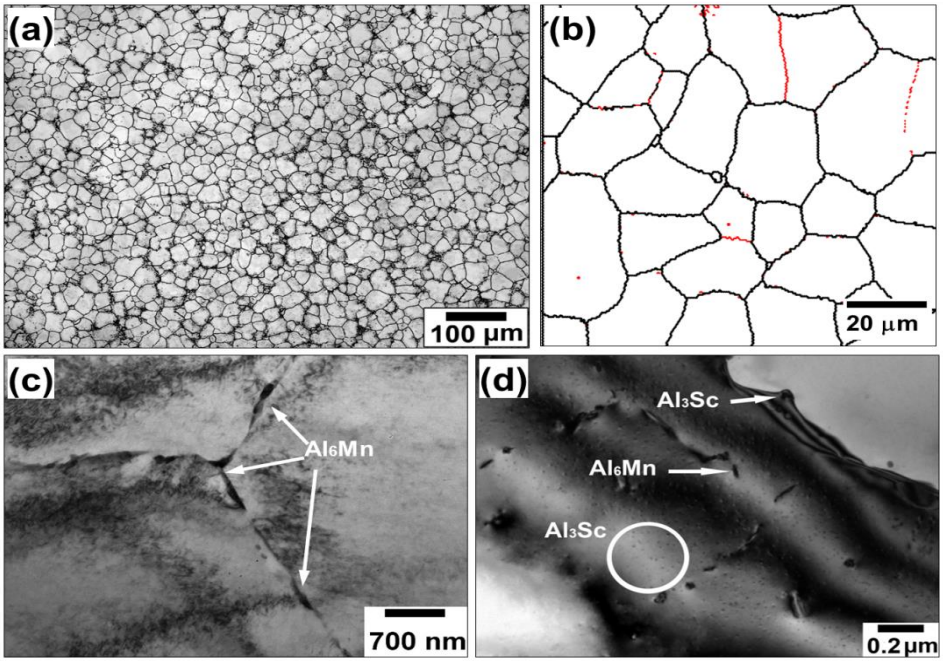

Figure S1. Initial microstructure of the cast Al-Mg-Sc alloy: optical micrograph (**a**), EBSD grain-boundary map (**b**) and TEM images (**c, d**). In (b), low-and high-angle boundaries are depicted as red and black lines, respectively.

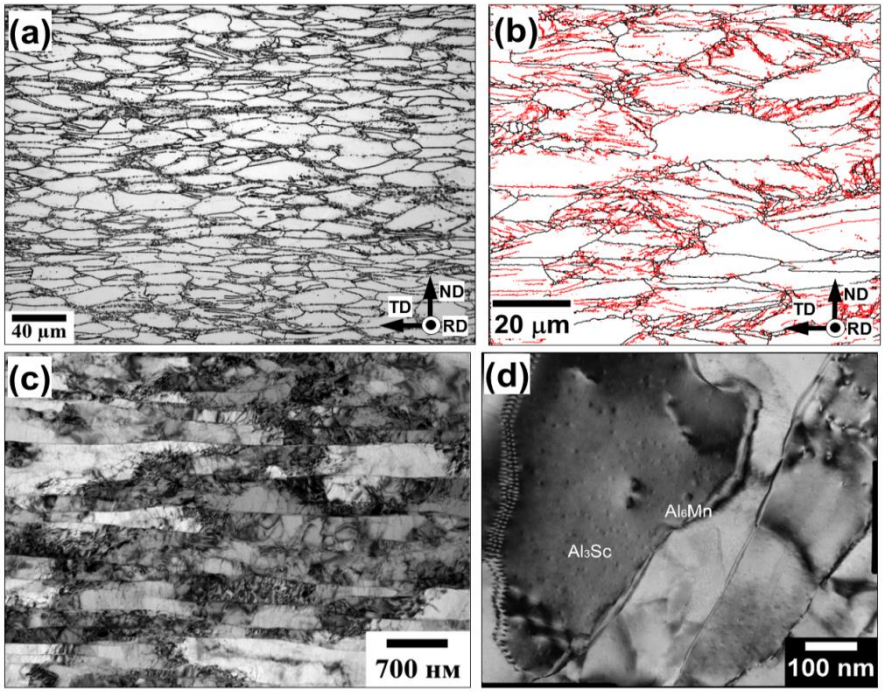

Figure S2. Initial microstructure of the hot-rolled Al-Mg-Sc alloy: optical micrograph (**a**), EBSD grain-boundary map (**b**) and TEM images (**c), (d**). In (**b**), low- and high-angle boundaries are depicted as red and black lines, respectively.

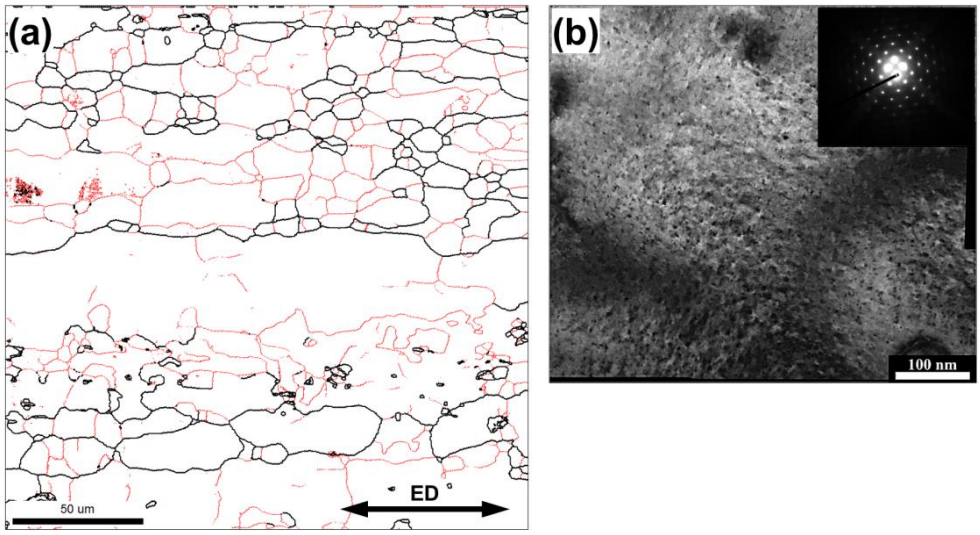

Figure S3. Initial microstructure of 6061 alloy: (**a**) EBSD grain-boundary map and (**b**) TEM image. ED is extrusion direction. In (**a**), low-and high-angle boundaries are depicted as red and black lines, respectively.

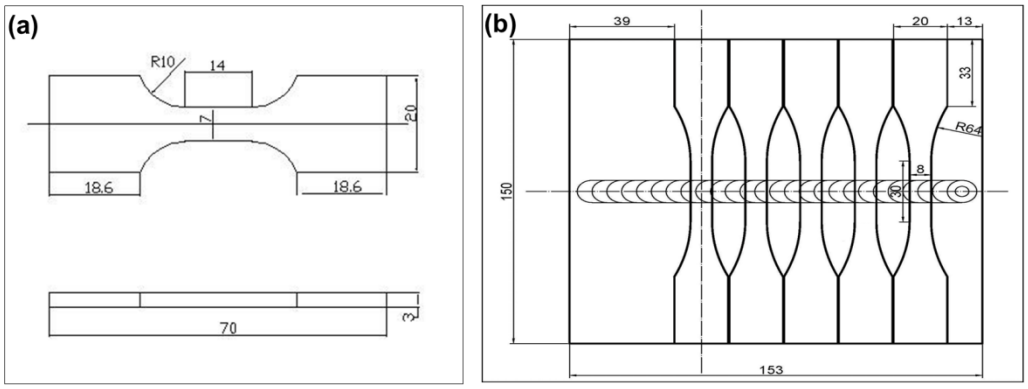

Figure S4. Design of the fatigue specimens machined from the welded sheets of Al-Mg-Sc alloy (**a**) and 6061 alloy (**b**). In all cases, units are mm. Not in scale.