



Supplementary Material Effect of Processing Route on Microstructure and Mechanical Properties in Single-Roll Angular-Rolling

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[Tensile sample and isotropic hardening model used in the FEM]



Figure S1. (a) Photographs for the tensile samples, (b) The plastic true stress-strain curves fitted by the Swift's hardening model. The inset is a photograph of the as-annealed tensile specimen.

[Grain boundary misorientation map]



Figure S2. Grain boundary misorientation maps in the core region of the (**a**) as-annealed and (**b**–**f**) SRAR-processed copper sheets.

Table S1. Grain boundary fractions according to the number of passes and processing routes.

Samples	0p	1p	2pA	6pA	2pC	6pC
Fraction of HAGBs	0.948	0.393	0.184	0.285	0.190	0.101
Fraction of LAGBs	0.052	0.607	0.816	0.715	0.810	0.899



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