

Supplemental Electronic Information for Gallium Oxide-Stabilized Oil in Liquid Metal Emulsions

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S1. LM-in-oil droplet size distribution for various mixing times

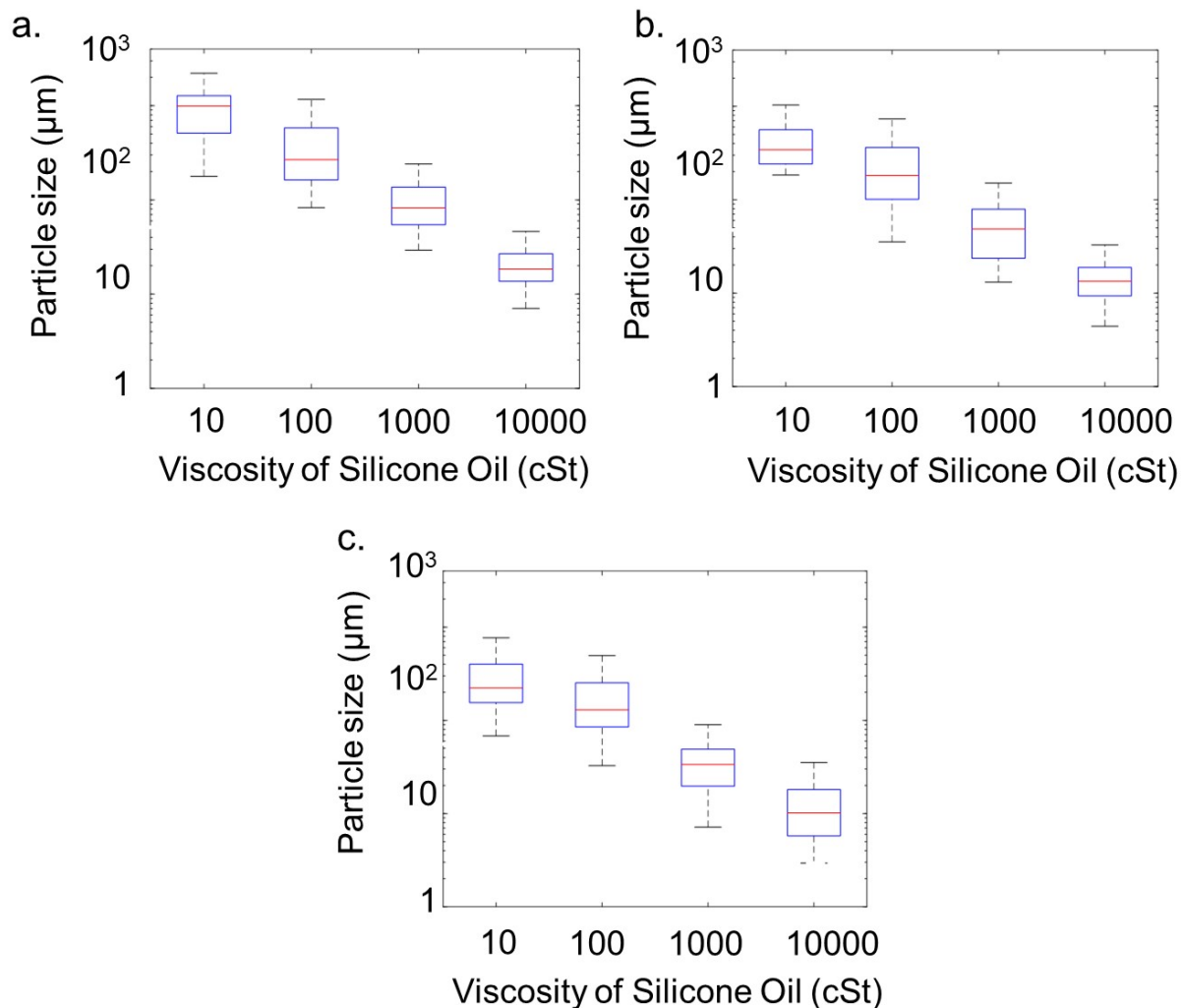


Figure S1. Size distribution of LM particles in LM-in-oil emulsion at 20:80 SO:LM volume ratio against the viscosity of used silicone oil (SO) after manual mixing 120 minutes for (a) 10 minutes, (b) 30 minutes and (c) 60 minutes. In the box plots, red bar correspond to median, blue box represents inter-quartile range (Q1-Q3) and the black extending lines (whiskers) represent the range of particle size.

S2. 7-day corrosion test results

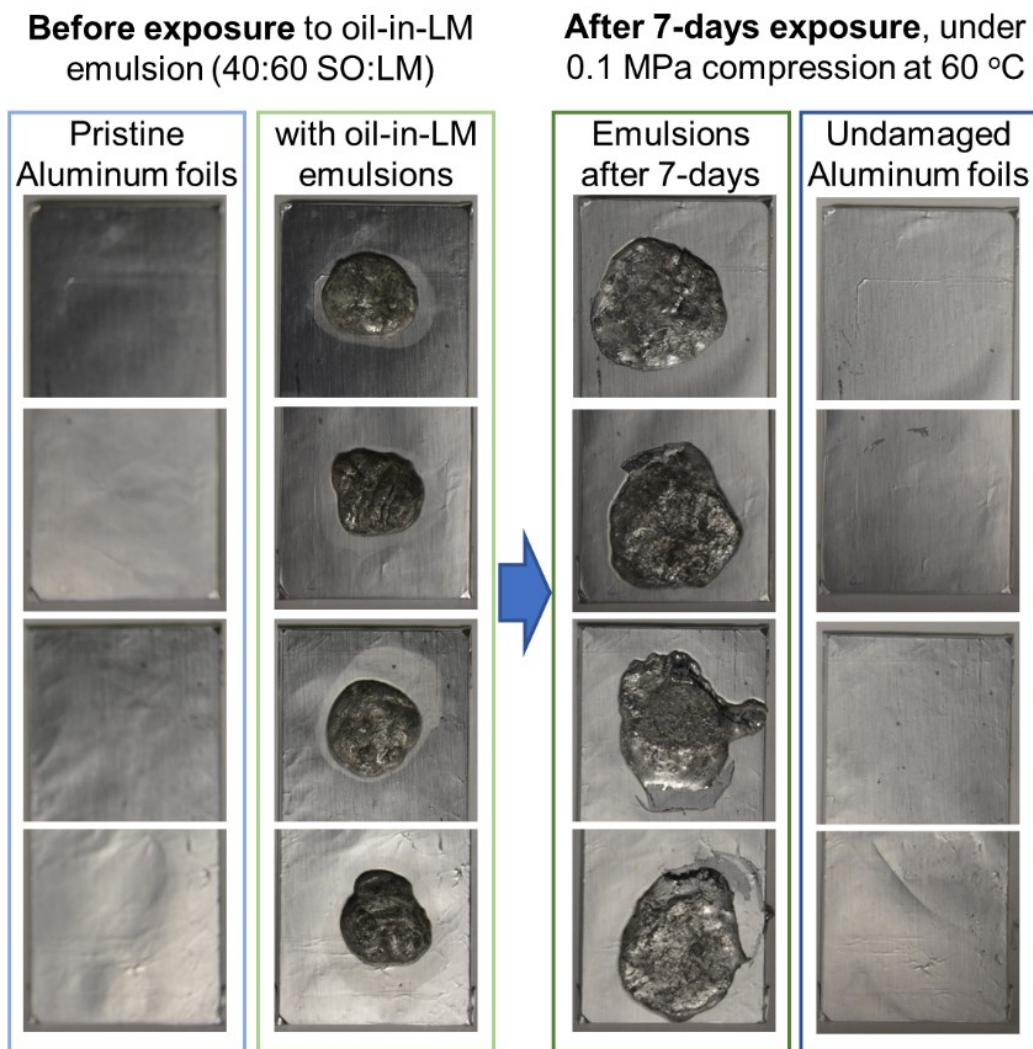


Figure S2. Corrosion resistance characteristic of the oil-in-LM emulsion (40:60 SO:LM) illustrated by exposing aluminum foil to the emulsion samples for 7-days under 0.1 MPa applied pressure and at 60 °C.