



Fig S1. Aluminum parts made by laser sintering and infiltration. The ball and claw weighs approximately 950 g.



Fig S2. A laser sintered and infiltrated aluminum part with hollow sections. Photo courtesy of K. Newall, 3D Systems, Inc.

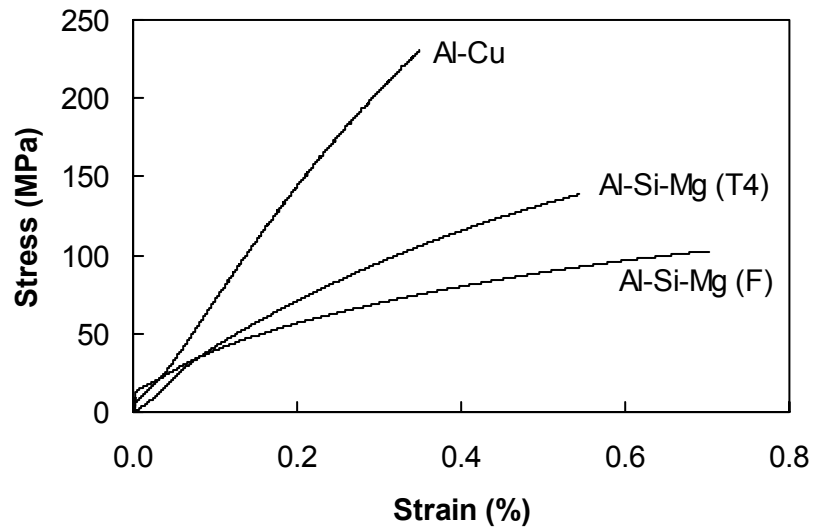


Fig. S3. Tensile curves for aluminum alloy 6061-2Mg infiltrated with Al-33Cu and Al-13.8Si-4.7Mg in the as fabricated condition (F) and solution treated and naturally aged condition (T4). The tensile samples had gauge dimensions of 40 mm x 12.5 mm x 6.5 mm and were tested in an Instron 1026 screw machine at a cross head speed of 0.6 mm/min.

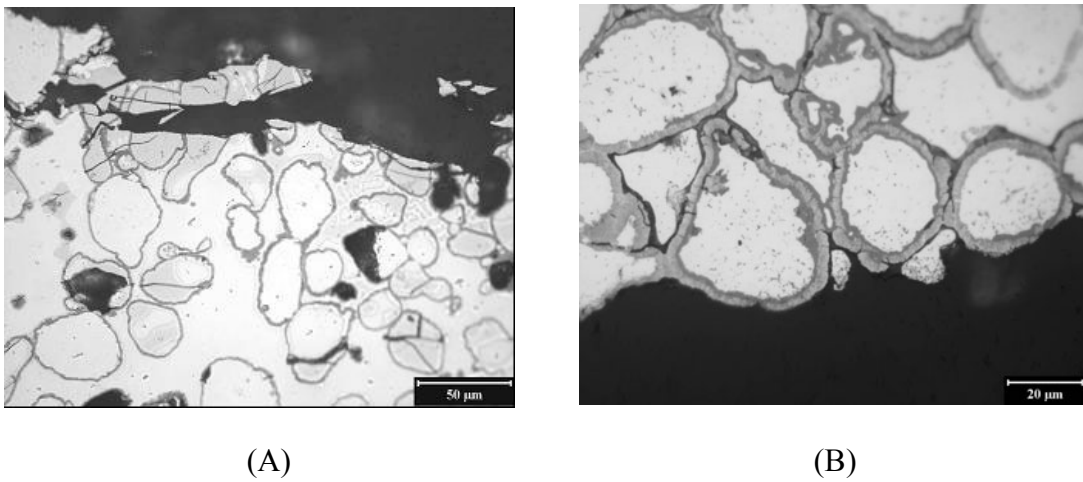


Fig S4. Fracture paths of 6061-2Mg powder infiltrated with (A) Al-33Cu and (B) Al-13.8Si-4.7Mg. The crack propagates through the CuAl<sub>2</sub> phase in (A) but along the AlN interface in (B).