

Abstract Submitted
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Magnetic Field Dependent Phase Boundaries in Al-Cu alloys up to 35 Tesla JASON COOLEY, SETH IMHOFF, Los Alamos National Laboratory, MARTHA KATZ, None — We report on the magnetic field dependence of the liquid-solid phase boundary in the Al-Cu alloy system between 0 and 17 at. % Cu at fields up to 35 Tesla. Melting/freezing point measurements were performed using a purpose built Differential Thermal Analysis instrument capable of operating in the 32 mm bore of a 35T Bitter magnet at the National High Magnetic Field Laboratory DC Field facility in Tallahassee Florida. In general the application of field increases the melting point by approximately 10 degrees Celsius.

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