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Al/AlOx/Al Josephson junctions fabricated without double-angle evaporation KYLE SUNDQVIST, PRANAV SHARMA, MICHAEL BABB, JAE WOO SUH, H. RUSTY HARRIS, Texas A&M University — Superconducting circuits are a common means to produce quantum-mechanically coherent structures. It is possible to produce superconducting circuits which may sustain and even amplify coherent states of microwaves close to the quantum limit. To this end, work is underway at Texas A&M University to locally implement Josephson junctions in our research. We have developed our own process flow for Josephson junction fabrication. This technique does not rely on the commonly used Dolan-bridge double-angle evaporation technique, and is easily incorporated into the process flow of other solid-state devices at the AggieFab fabrication facility.

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