

Abstract Submitted
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Fabrication of Granular Aluminum Microbolometers – Solving the Contact Resistance Problem THOMAS WILSON, Marshall University — The fabrication of granular aluminum superconducting bolometers with a ~ 10 ns response time and an active area of 10 micron x 20 micron will be described. Photomask design, the photolithographic and sputtering processing steps will be discussed in detail. Reproducible bolometers with room temperature resistances of 10-Ohms are routinely obtained. In particular, the common problem of the oxidation of the granular aluminum prior to the deposition of the electrical contact pads has been solved by sputtering a thin (~ 50 angstroms) palladium protective layer over the aluminum prior to exposure to air.

Thomas Wilson
Marshall University

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