

Development of an 8×8 Microwave Kinetic Inductance Detector Array at 850μm

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Microwave Kinetic Inductance Detectors (MKIDs) are rather promising for astrophysical observations in the THz regime. We are developing a terahertz superconducting imaging array (TeSIA) for the DATE5 telescope to be constructed at Dome A, Antarctic. Here we report on the design, fabrication and characterization of a prototype array for TeSIA, namely an 8×8 MKIDs array at 850μm. Detailed experimental results and analysis will be presented.