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Scanning capacitance microscopy using a relaxation oscillator MARIE PAHLMEYER, ANDREW HANKINS, SAM TUPPAN, WOO-JOONG KIM, Seattle University — We have performed scanning capacitance microscopy using a relaxation oscillator. Calibrations using precision capacitors indicate a sensitivity on the order of 0.05 pF, stabilizing in under 0.1s. Surface topography of metallic structures, such as machined grooves and coins, can be readily obtained either in the constant-height (non-contact) or tapping (contact) mode. Spatial resolution of sub-50  $\mu$  micron has been achieved.

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