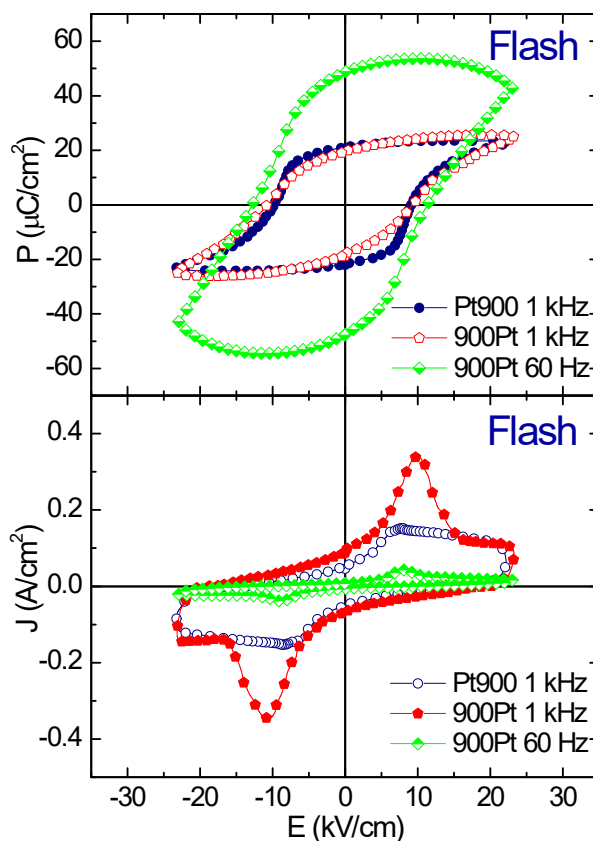


## Unveiling the Electrical Performance of Flash-Sintered Potassium Sodium Niobate

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### Supplementary information



*Figure S1. Polarization,  $P$ , (top) and current density,  $J$ , (bottom) as a function of AC electric field,  $E$ , for Flash sintered KNN ceramics, measured at room temperature. Flash ceramics annealed at 900 °C for 1 h with sputtered Pt electrodes (900Pt, pentagons) exhibit similar polarization compared with that for Flash (circles) ceramics with painted Pt electrodes annealed at 900 °C for 1 h (Pt900, circles) at 1 kHz. Decrease in the measurement frequency to 60 Hz results in significantly rounded loop, indicating higher conductivity contribution.*