

Supplementary Materials: A Two-Step Annealing Method to Enhance the Pyroelectric Properties of the Mn:PIMNT Chips for Infrared Detectors

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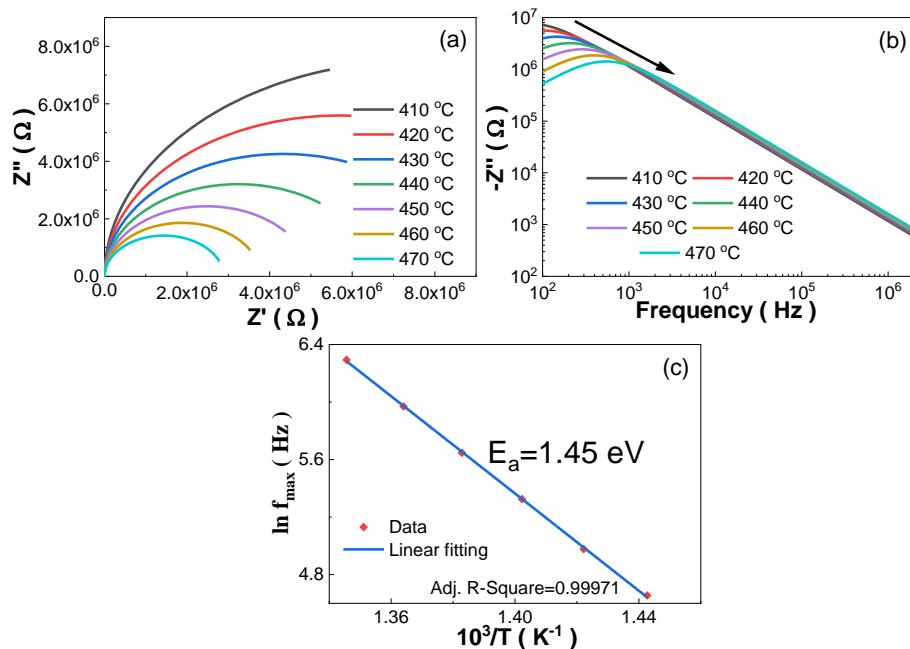


Figure S1. (a) Imaginary parts (Z'') versus real parts (Z') measured from 100 Hz to 2 MHz, (b) imaginary parts (Z'') versus frequency measured from 100 Hz to 2 MHz and (c) linear fitting of relaxation frequency (f_{max}) of the Mn:PIMNT single crystals annealed at 400 °C.

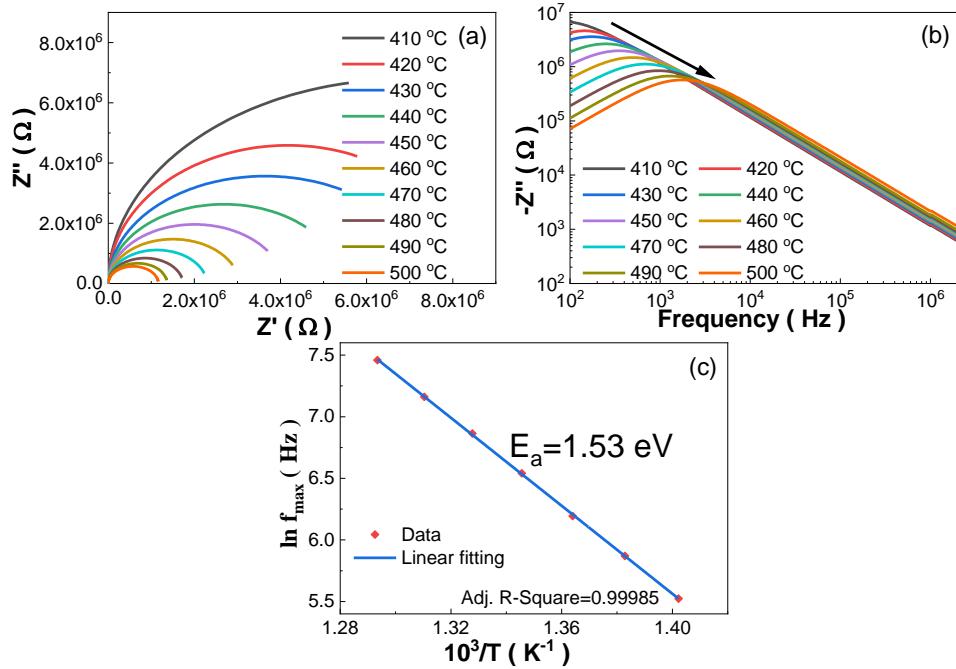


Figure S2. (a) Imaginary parts (Z'') versus real parts (Z') measured from 100 Hz to 2 MHz, (b) imaginary parts (Z'') versus frequency measured from 100 Hz to 2 MHz and (c) linear fitting of relaxation frequency (f_{\max}) of the Mn:PIMNT single crystals annealed at 500 °C.

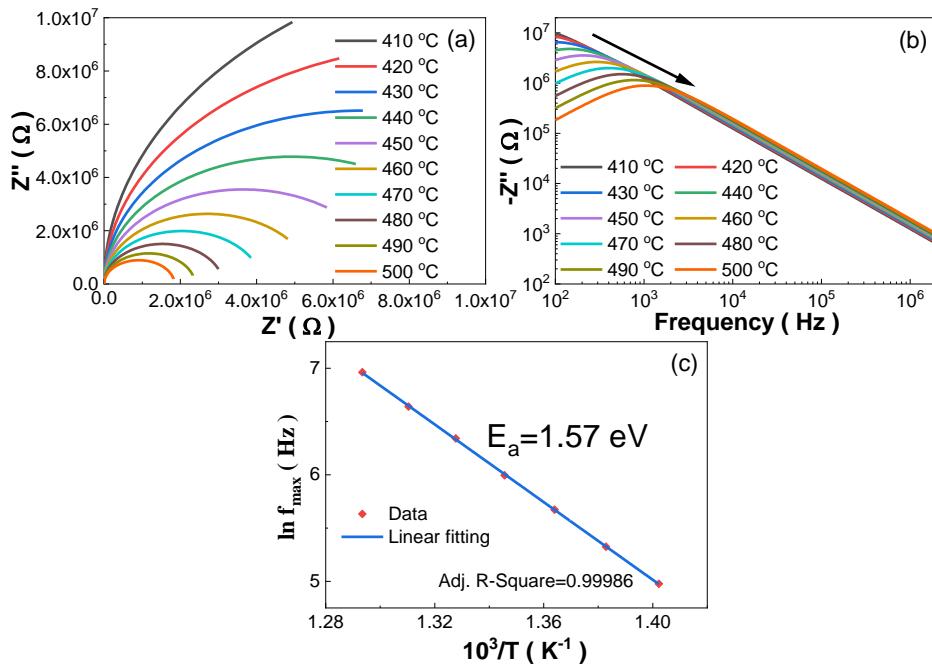


Figure S3. (a) Imaginary parts (Z'') versus real parts (Z') measured from 100 Hz to 2 MHz, (b) imaginary parts (Z'') versus frequency measured from 100 Hz to 2 MHz and (c) linear fitting of relaxation frequency (f_{\max}) of the Mn:PIMNT single crystals annealed at 600 °C.

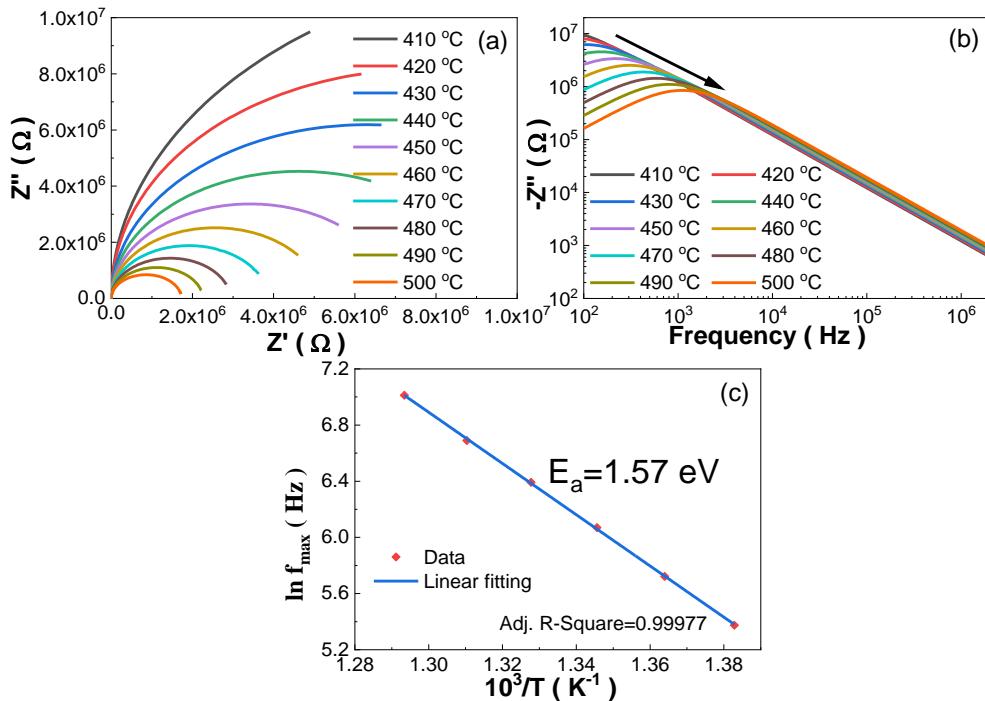


Figure S4. (a) Imaginary parts (Z'') versus real parts (Z') measured from 100 Hz to 2 MHz, (b) imaginary parts (Z'') versus frequency measured from 100 Hz to 2 MHz and (c) linear fitting of relaxation frequency (f_{\max}) of the Mn:PIMNT single crystals annealed at 700 °C.

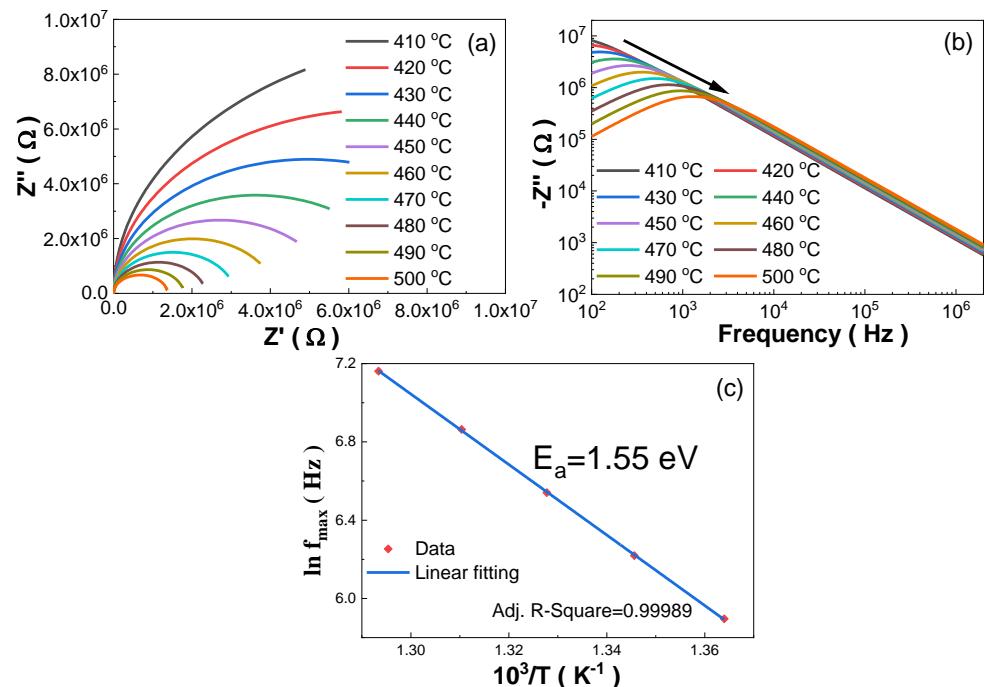


Figure S5. (a) Imaginary parts (Z'') versus real parts (Z') measured from 100 Hz to 2 MHz, (b) imaginary parts (Z'') versus frequency measured from 100 Hz to 2 MHz and (c) linear fitting of relaxation frequency (f_{\max}) of the Mn:PIMNT single crystals annealed at 800 °C.

