

Supporting information for

Giant piezoelectric properties in [110]-oriented PZT-
5H single crystal grown by solid state crystal growth

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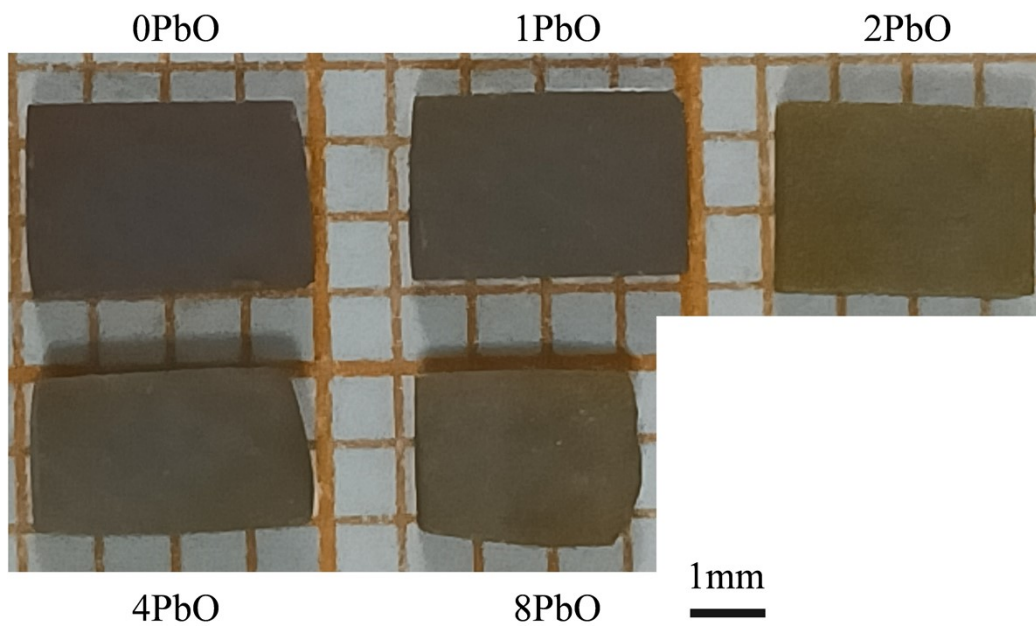


Fig. S1 The pictures for [110]-oriented PZT-5H single crystals grown with different excess PbO addition.

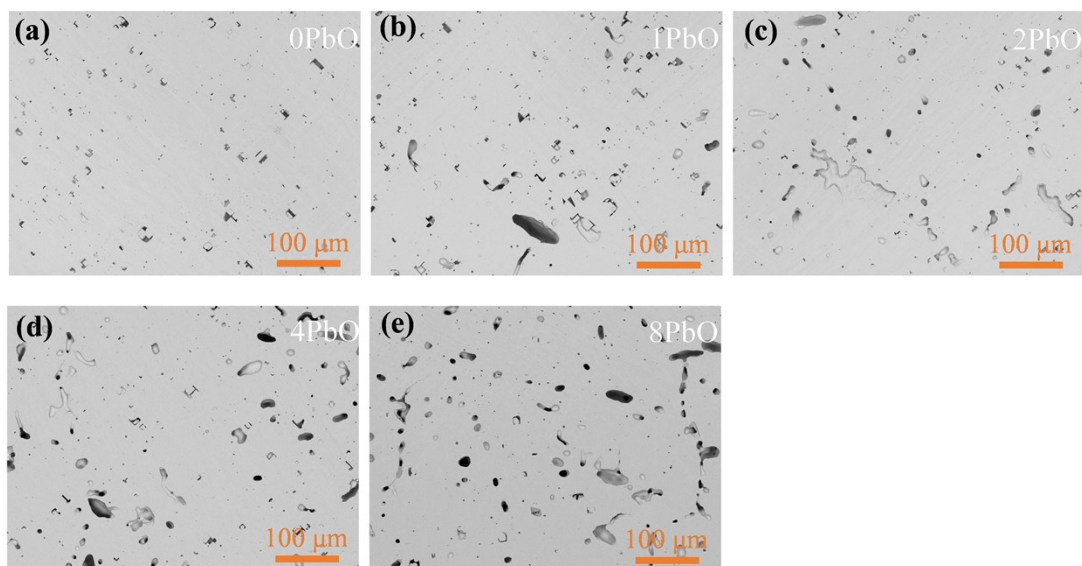


Fig. S2 SEM micrographs of cross section of [110]-oriented PZT-5H single crystals grown with different excess PbO addition.

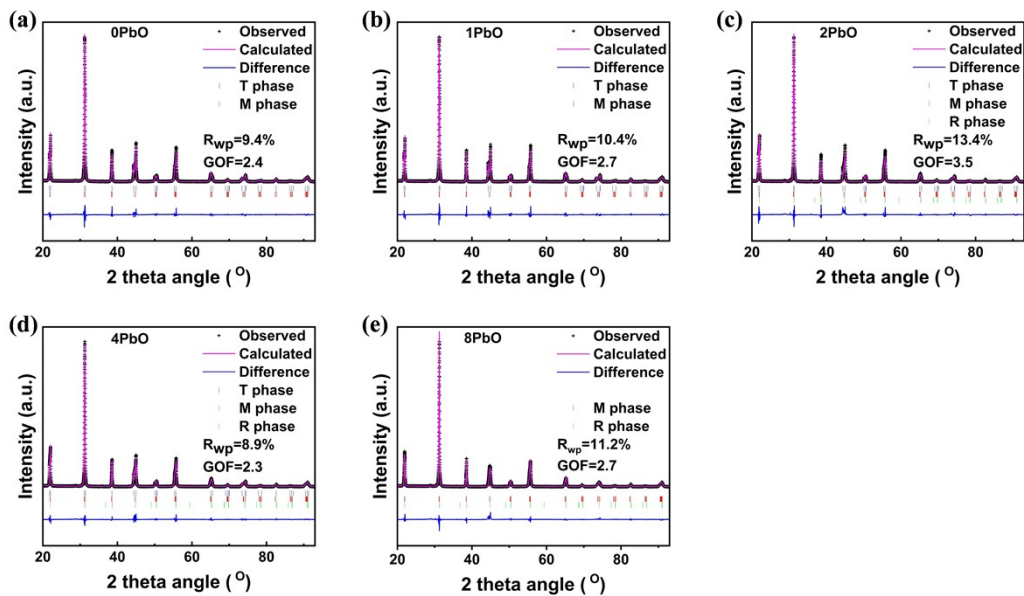


Fig. S3 Rietveld refinement patterns for powder of PZT-5H single crystals grown with different excess PbO addition.

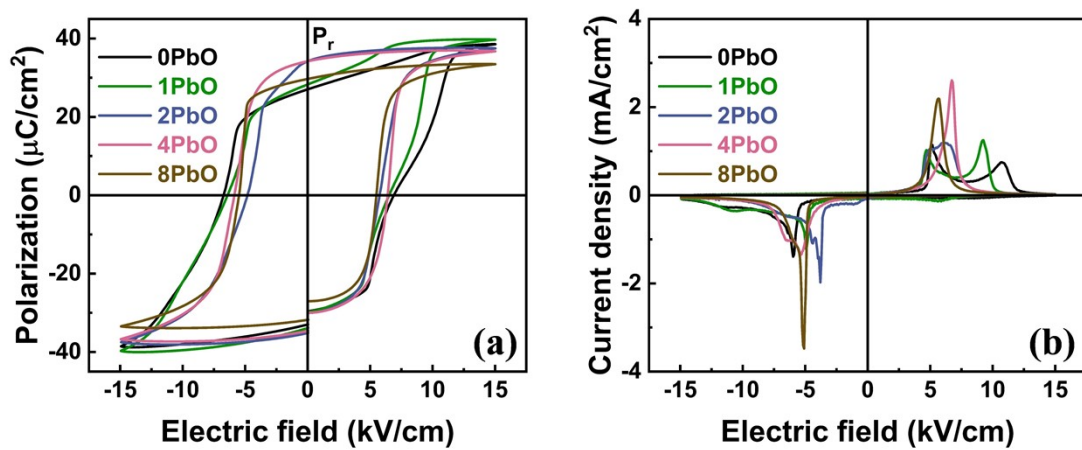


Fig. S4 a) Polarization hysteresis P-E loops and b) current density J-E curves for [110]-oriented PZT-5H single crystals grown with different excess PbO addition.