

**Enhanced piezoelectricity and reduced leakage current of a
novel $(1-x)\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3-x(\text{Sr}_{0.7}\text{Bi}_{0.2}\square_{0.1})\text{TiO}_3$ thin film**

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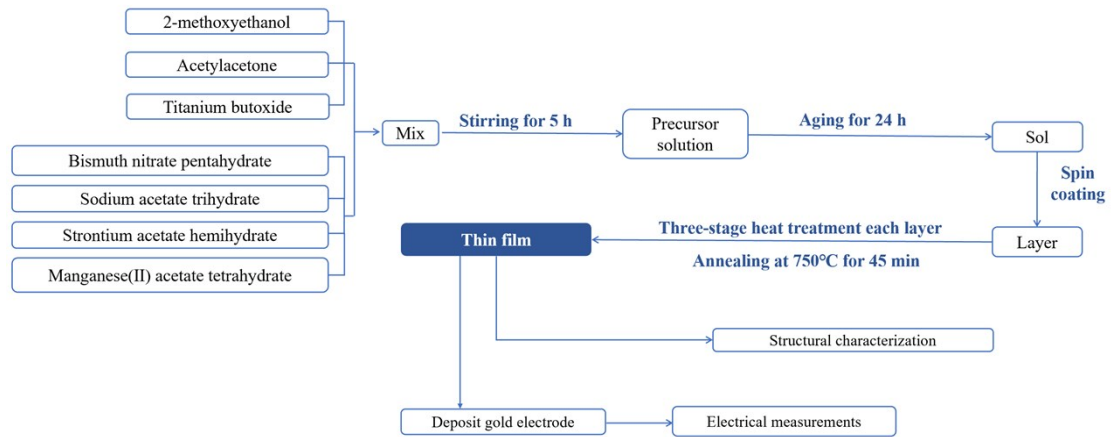


Fig S1 The schematic flow chart for the thin film synthesis

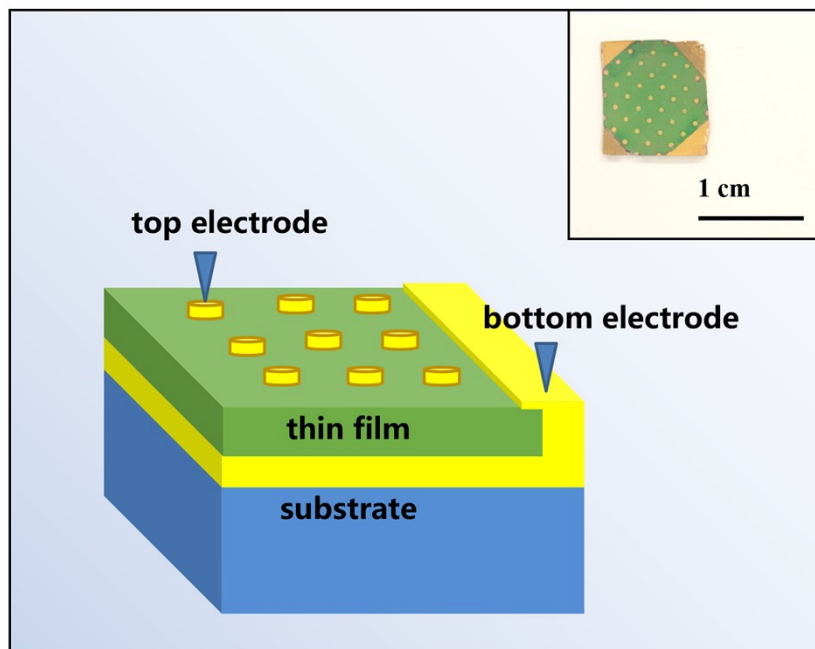


Fig S2 The schematic of the sandwich structure capacitor, the inset shows the real picture of thin film sputtered Au electrode on Pt/Ti/SiO₂/Si substrate

Table S1 The chemicals quantity of all samples

Quantity Chemicals	Samples			
	$x = 0.0$	$x = 0.1$	$x = 0.2$	$x = 0.3$
$C_3H_8O_2$	9.6074	9.6074	9.6074	9.6074
$C_5H_8O_2$	5.0566	5.0566	5.0566	5.0566
$Ti[O(CH_2)_3CH_3]_4$	8.5950	8.5950	8.5950	8.5950
$Bi(NO_3)_3 \cdot 5H_2O$	6.7371	6.3329	5.9286	5.5244
$Na(OOCCH_3) \cdot 3H_2O$	1.8900	1.7010	1.5120	1.3230
$Sr(OOCCH_3)_2 \cdot 0.5H_2O$	0.0000	0.3834	0.7669	1.1503
$Mn(OOCCH_3)_2 \cdot 4H_2O$	0.0619	0.0619	0.0619	0.0619

100 mL precursor solution (0.25 mol/L)