

Supplementary Materials

# Improving the Ionic Conductivity of the LLZO–LZO Thin Film through Indium Doping

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**Table S1.** The thickness of In<sub>2</sub>O<sub>3</sub> thin film after repeating depositing 120 layers.

Samples	Thickness (nm)	The average thickness (nm)						
A1	701.4	A2	708.4	A3	715.6	A4	731.5	720.4
B1	712.3	B2	741.3	B3	718.7	B4	729.4	
C1	705.8	C2	732.6	C3	726.6	C4	727.3	
D1	704.5	D2	727.3	D3	725.2	D4	718.6	

**Table S2.** The thickness of LLZO thin film after repeating depositing 80 layers.

Samples	Thickness (nm)	The average thickness (nm)						
A1	544.6	A2	563.3	A3	554.9	A4	569.6	560.2
B1	554.7	B2	575.7	B3	565.1	B4	552.4	
C1	562.8	C2	571.2	C3	566.6	C4	548.4	
D1	548.6	D2	554.7	D3	568.6	D4	561.9	

**Table S3.** The thickness of Li<sub>2</sub>CO<sub>3</sub> thin film after repeating depositing 400 layers.

Samples	Thickness (nm)	The average thickness (nm)						
A1	317.2	A2	319.1	A3	324.0	A4	324.4	319.9
B1	322.1	B2	325.2	B3	317.4	B4	326.6	
C1	314.7	C2	315.1	C3	325.3	C4	313.6	
D1	317.7	D2	323.0	D3	316.3	D4	323.5	