

Supporting Information

Epitaxial growth of β -Ga₂O₃ thin films on Si with YSZ buffer layer

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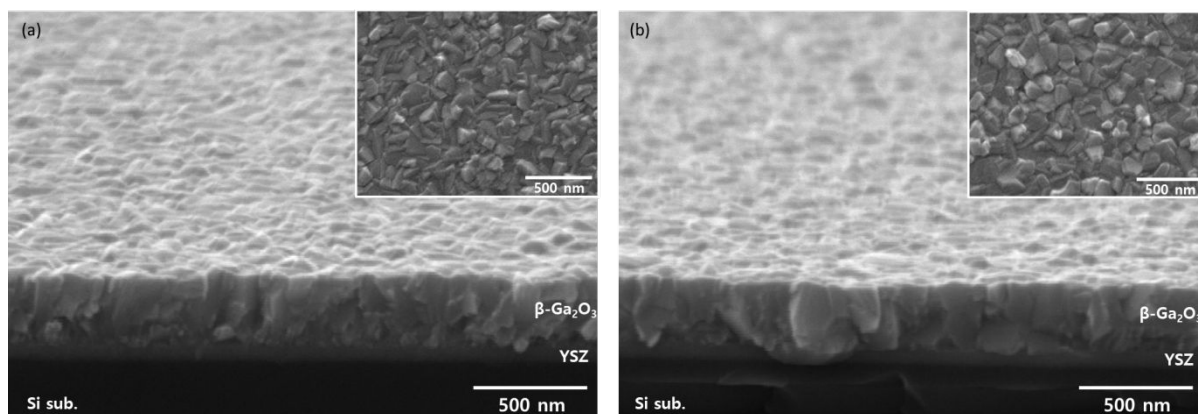
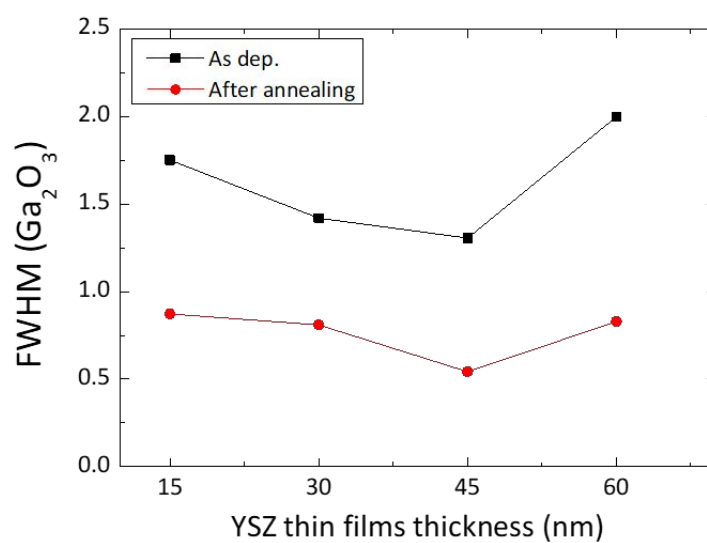


Figure. S1. Cross & surface SEM images of (a) the as-grown and (b) annealed β -Ga₂O₃/YSZ/Si



	YSZ 15nm		YSZ 30nm		YSZ 45nm		YSZ 60nm	
FWHM (As/ anneal)	1.753	0.873	1.42	0.81	1.307	0.543	2.0	0.83

Figure S2. FWHM of the as-grown and annealed β -Ga₂O₃/YSZ/Si

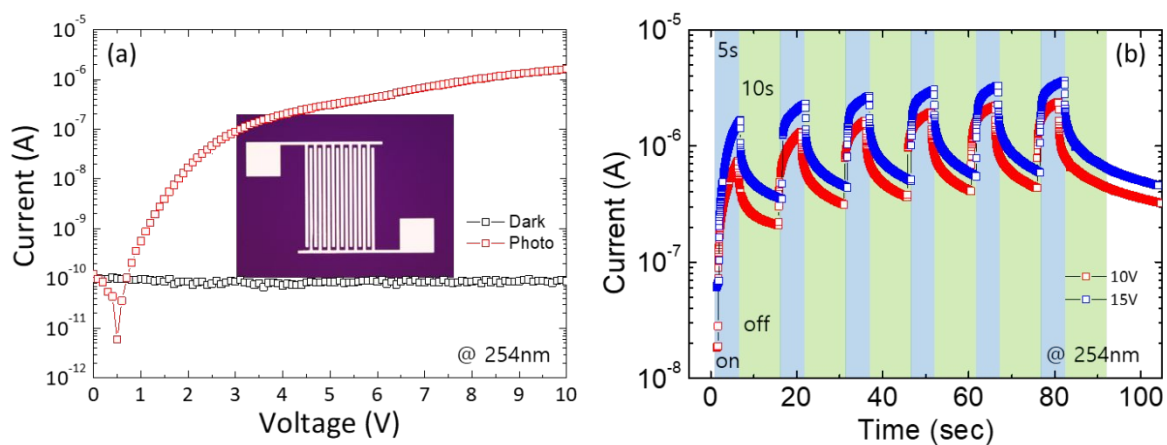


Figure S3. Current-voltage curve of the $\beta\text{-Ga}_2\text{O}_3/\text{YSZ}/\text{Si}$ (a) photo/dark current and (b) on/off switching current