

Electronic Supporting Information

Tailoring Ga_2O_3 Epitaxial Films on Sapphire: Impact of Gallium Ligand Precursors and Growth Temperature Using Mist-CVD

Jang Hyeok Park^{ab}, Chowdam Venkata Prasad^{ab}, Ho Jung Jeon^{ab}, Madani Labed^{ab}, You Seung Rim *^{ab}

^a*Department of Semiconductor Systems Engineering and Convergence Engineering for Intelligent Drone, Seoul, 05006, Republic of Korea*

^b*Institute of Semiconductor and System IC, Sejong University, Seoul, 05006, Republic of Korea*

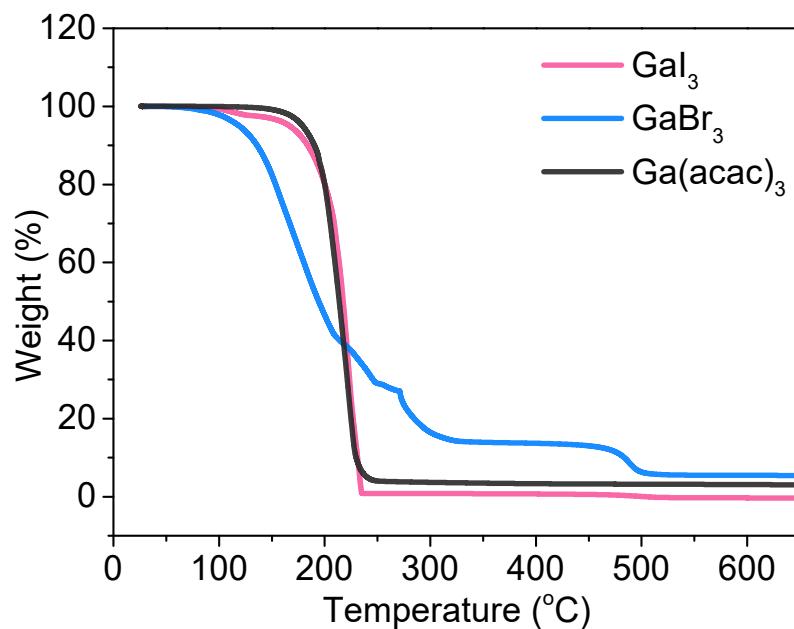


Fig. S1 TGA (thermogravimetric analysis) curves of $\text{Ga}(\text{acac})_3$, GaI_3 and GaBr_3 precursors.

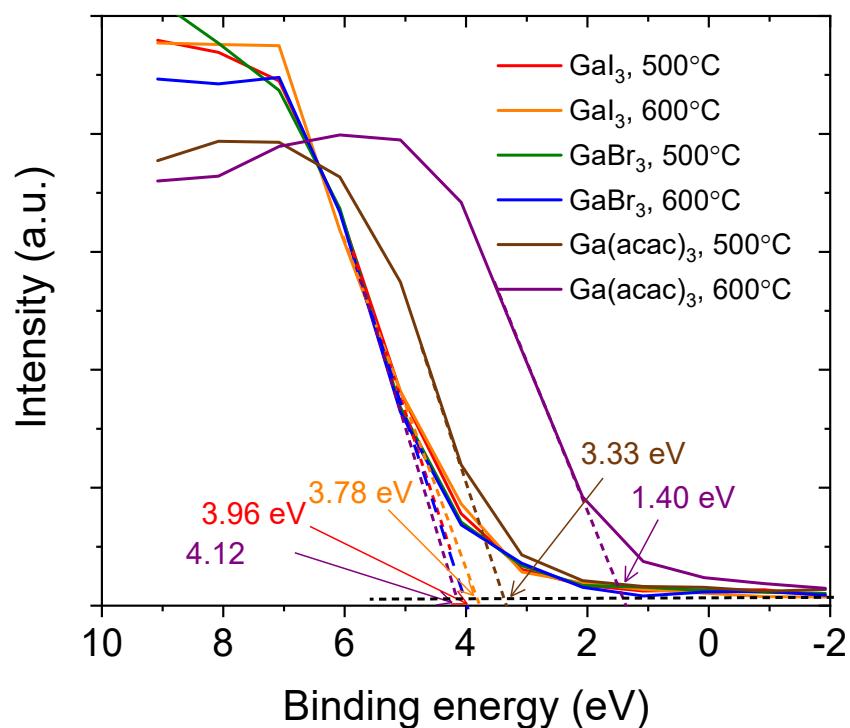


Fig. S2 UPS spectra of the valance band maximum of $\epsilon\text{-Ga}_2\text{O}_3$ epitaxial films with different gallium precursors and growth temperatures.

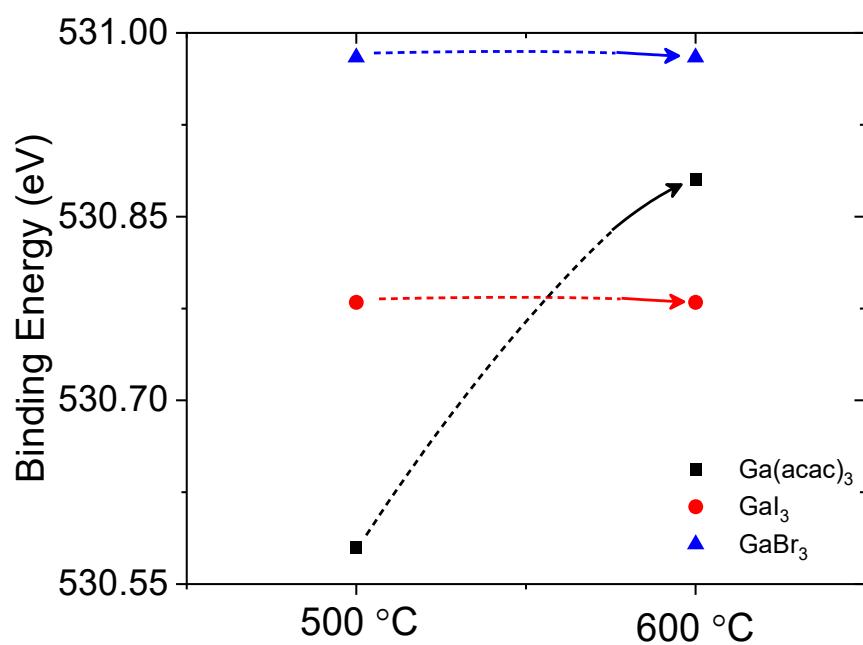


Fig. S3 Comparison of binding energy of $\epsilon\text{-Ga}_2\text{O}_3$ epitaxial films from O1s level with different gallium precursors and growth temperatures from 500 °C and 600 °C.