

Supplementary Information for

High-breakdown-voltage β -Ga₂O₃ nanoFET with a beveled field-plate structure

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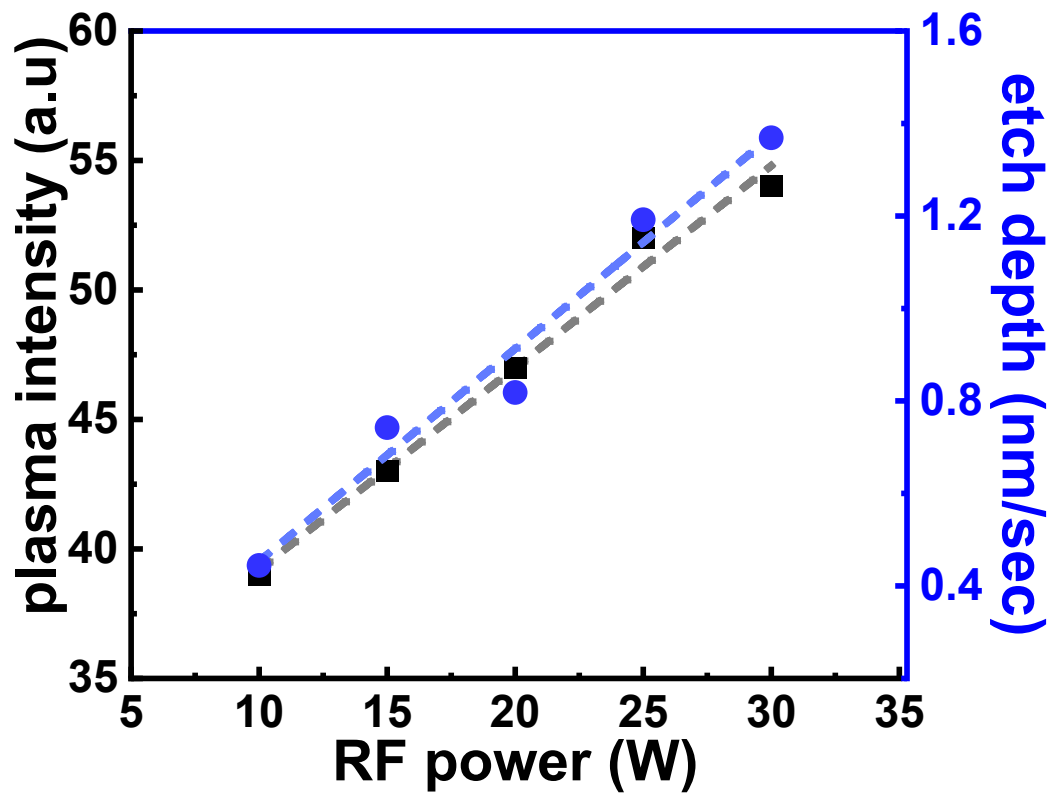


Fig. S1. Relationship between RF power and plasma intensity, and RF power and etch depth for h-BN etching.

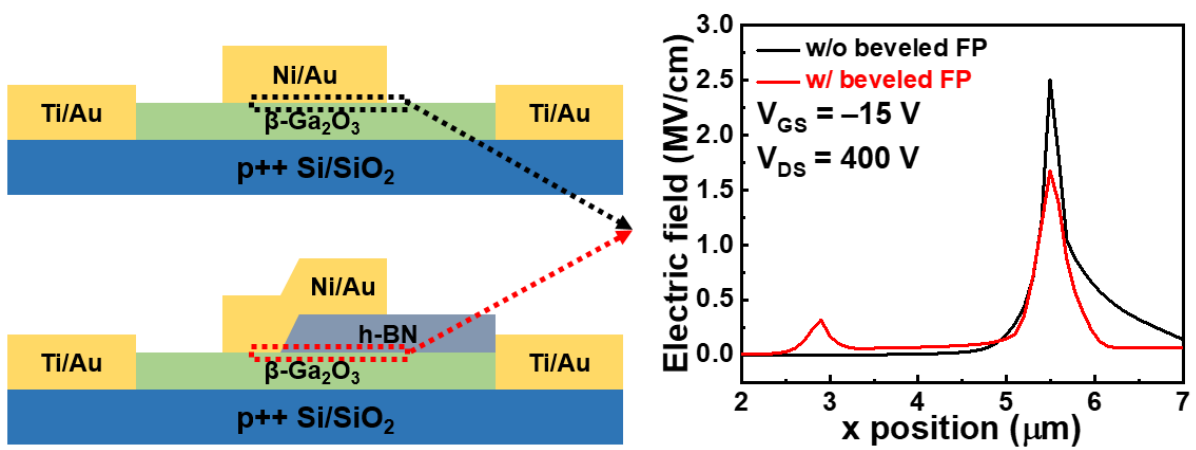


Fig. S2. The simulation of electric fields distribution on the surface of the $\beta\text{-Ga}_2\text{O}_3$ channel at $V_{\text{GS}} = -15 \text{ V}$, $V_{\text{DS}} = 400 \text{ V}$.

The beveled h-BN field-plate redistributes the electric fields on the surface of the $\beta\text{-Ga}_2\text{O}_3$. Fig. S2 presents the electric-field distributions calculated around the gate edge with and without the beveled field plate.