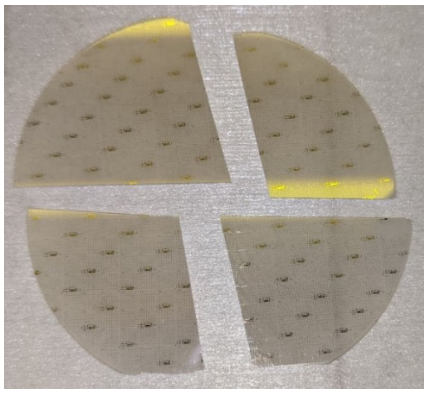

**Fig. 1.** Patterned 2-inch (010) β-$Ga_2O_3$ substrate from Northrop Grumman Synoptics.

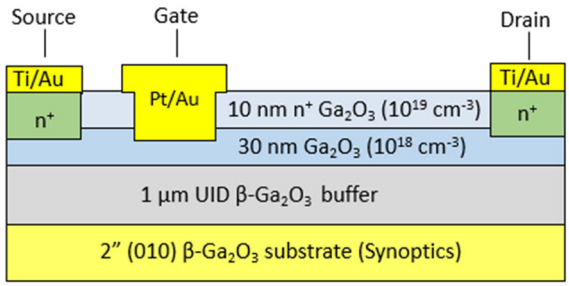


**Fig. 2.** Cross-section schematic of gate-recessed MESFET. Gate-source and gate-drain spacing is set to 2.5 µm and 10 µm, respectively.

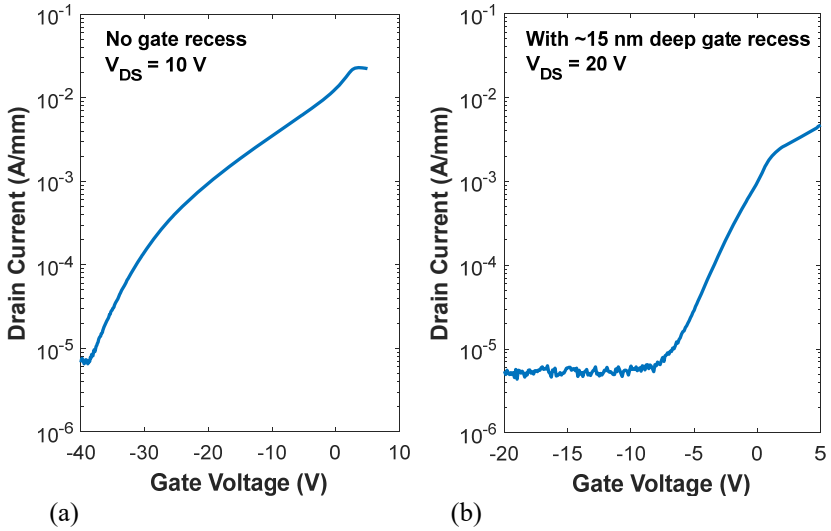


**Fig. 3.** Input ($J_D$-$V_{GS}$) characteristics of fabricated MOCVD β-$Ga_2O_3$ MESFETs (a) without and (b) with a 15 nm gate recess.

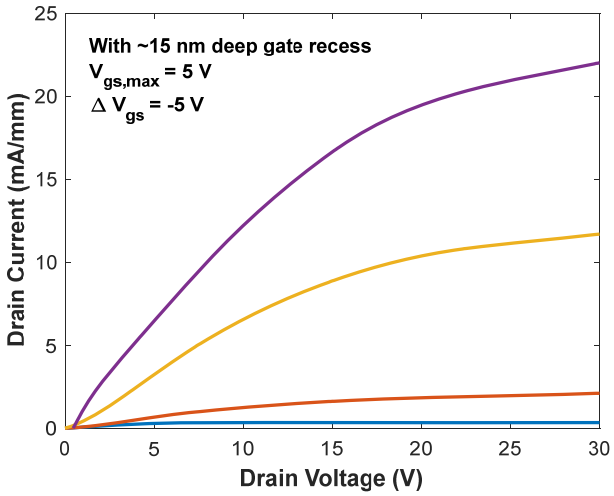


**Fig. 4.** Output ($J_D$-$V_{DS}$) characteristics of fabricated MOCVD β-$Ga_2O_3$ MESFETs with a 15 nm gate recess.

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