

Fig.1 (a) Etch rate as a function of substrate temperature, (b) Etch rate as a function of TEGa flow rate, (c) lateral to vertical etch rate as a function of in-plane orientation.



Fig.2 (a) Schematic of the spoke-wheel structure used to study in-plane etch anisotropy. (b) Tilted SEM image of the etched spoke-wheel pattern. (c) SEM image of (010)  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> surface after Ga etching.



Fig.3 SEM images of various etched sidewall planes formed on the (010)  $\beta$ -Ga<sub>2</sub>O<sub>3</sub> sample. The in-plane orientation of the trenches is shown. See Fig.2 (a) and (b) for the schematic of trench orientation.