

## Supplementary material

### Using selective-area growth and selective-area etching on $(-102)$ $\beta$ - $\text{Ga}_2\text{O}_3$ substrates to fabricate plasma-damage-free vertical fins and trenches

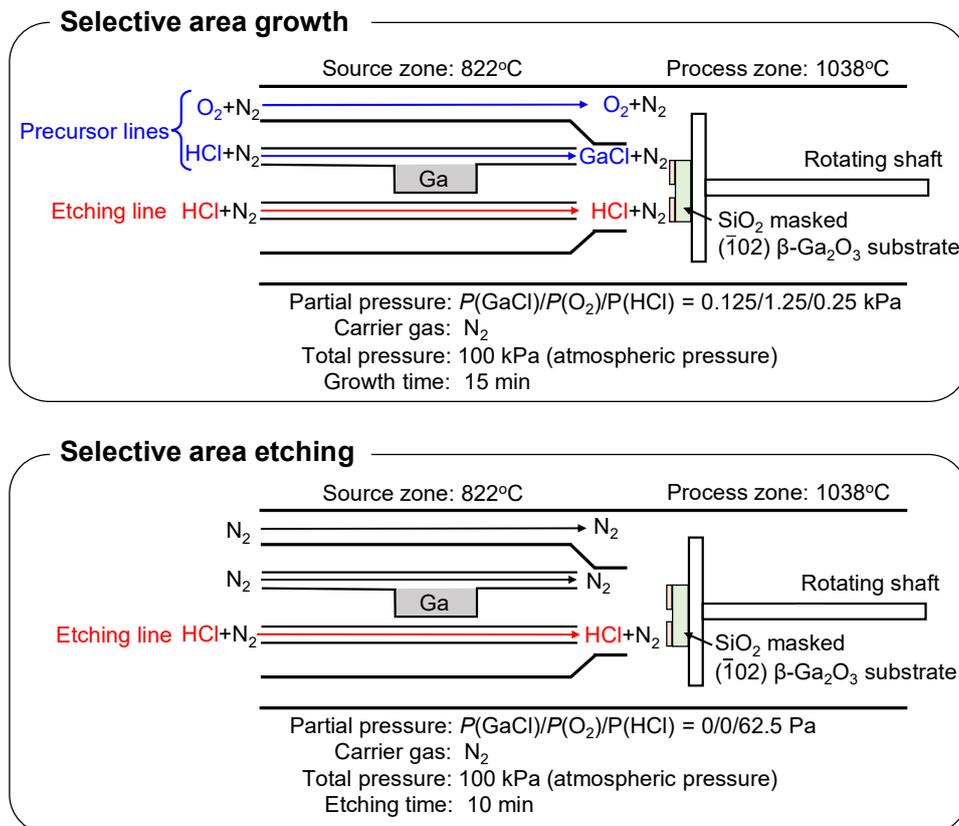
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#### 1. Schematic of our halide vapor phase epitaxy/etching (HVPE) system

Figure S1 illustrates the gas flows in our HVPE system in selective area growth and selective area etching scenarios. See the Experimental section of the paper for the details.



**Fig. S1.** Schematic of our halide vapor phase growth/etching system, illustrating gas flows for both growth and etching cases.