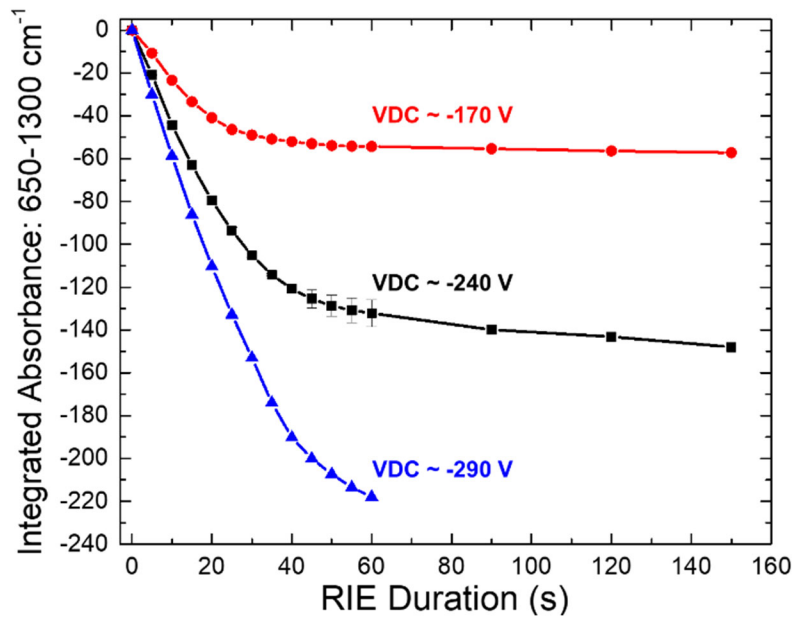
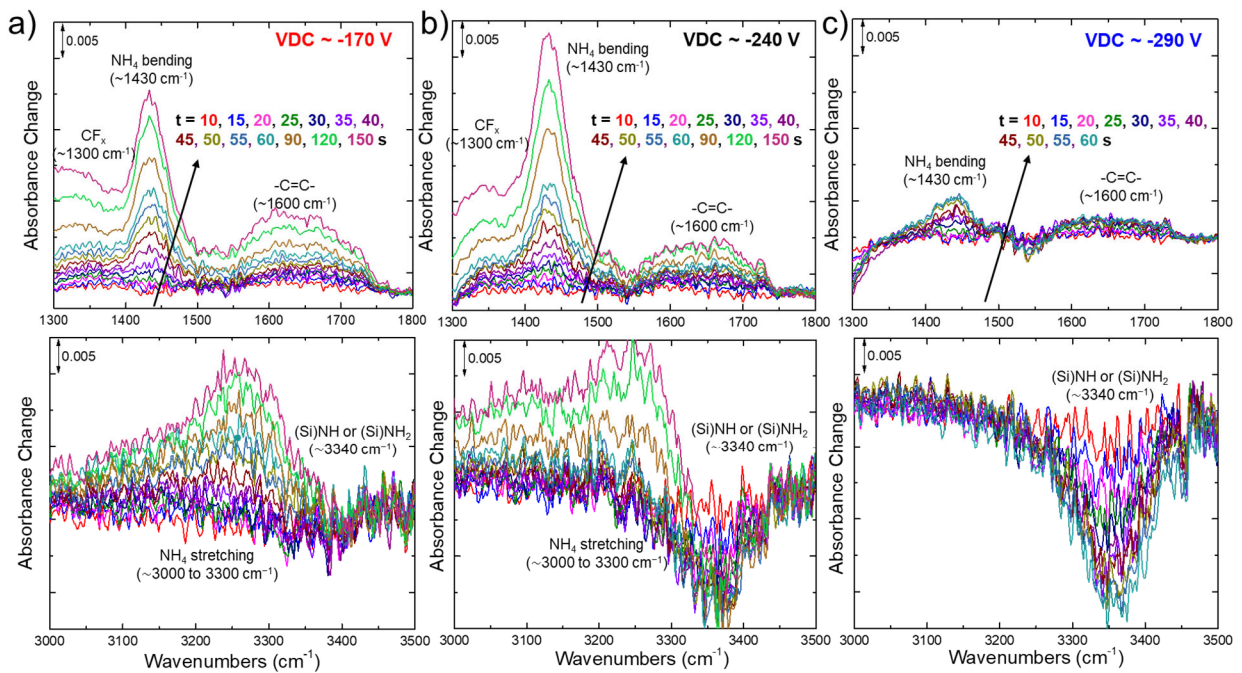


## Supplemental Information



**Fig. 1.** Change in integrated absorbance in the 650–1300  $\text{cm}^{-1}$  region (includes the Si-N-Si stretching mode at  $\sim 860 \text{ cm}^{-1}$  and Si-NH-Si bending mode at  $\sim 1180 \text{ cm}^{-1}$ ) during RIE of plasma-deposited  $\text{SiN}_x$  at different bias voltages. The reference spectrum corresponds to the film before RIE.



**Fig. 2.** Change in infrared absorbance in the 1300–1800  $\text{cm}^{-1}$  region and the 3000–3500  $\text{cm}^{-1}$  region over RIE of  $\text{SiN}_x$  at a bias voltage of (a)  $\sim -170 \text{ V}$ , (b)  $\sim -240 \text{ V}$ , and (c)  $\sim -290 \text{ V}$  with the reference spectrum recorded after 5 s RIE.