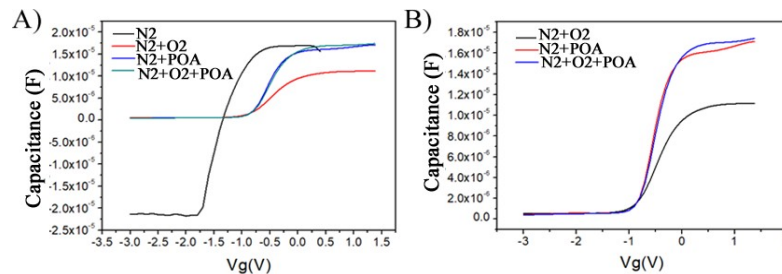**Table 01:** Summary of tests carried out with plasmas to determine the best SiC passivation method.

| Test | Gas | Time (minutes) |
|------|-----|----------------|
| 1 | $N_2$ | 15, 30 e 45 |
| 2 | $N_2$+ POA ($N_2$+$O_2$) | 15 + 5 |
| 3 | $N_2$+$O_2$ | 15 |
| 4 | $N_2$+$O_2$ + POA ($N_2$+$O_2$) | 15 + 5 |

**Table 02:** Parameters used in the passivation process.

| Parameters | |
|------------|------------------------|
| Work pressure | 50 mTorr |
| RF power | 450 Watts |
| Reflected power | 16 Watts |
| Gas | $N_2$ e/ou $O_2$ (70 sccm + 70 sccm) |



**Fig. 1.** C×V curves of MOS capacitors; A) $N_2$ plasma for 15 minutes (black), $N_2$ plasma for 15 minutes + $N_2$+$O_2$ plasma for 5 minutes (red), $N_2$+$O_2$ plasma for 15 minutes (blue) and $N_2$+$O_2$ plasma for 15 minutes + plasma $N_2$+$O_2$ for 5 minutes (green); B) $N_2$ plasma for 15 minutes + $N_2$+$O_2$ plasma for 5 minutes (black), $N_2$+$O_2$ plasma for 15 minutes (red) and $N_2$+$O_2$ plasma for 15 minutes + $N_2$+$O_2$ plasma for 5 minutes (blue);
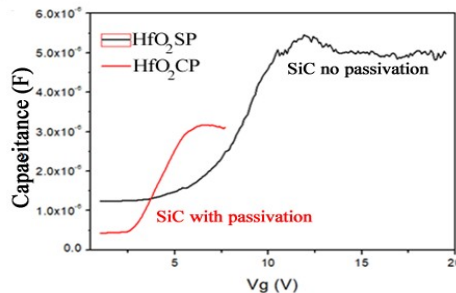


**Fig. 2.** Comparison between C×V curves with $HfO_2$/SiC capacitor with passivation (red) and without passivation (black).