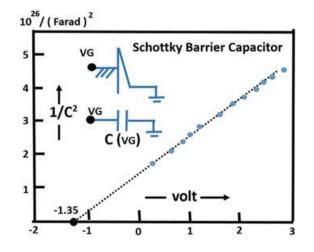
Schottky Barrier on Gallium Oxide

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A typical plot of $1/C^2$ as a function of the reverse voltage is shown in Fig. 8. The concentration was found to be $4.1 \pm 0.09 \times 10^7$ cm⁻³ from the slope using the relation:

$$N_{d} = \left(-\frac{2}{q} \varepsilon_{dc} \varepsilon_{o}\right) \left(\frac{\delta V}{\delta \left(\frac{\delta}{c}\right)^{2}}\right)$$
(1)

where S is the barrier area and \mathcal{E}_{dc} is the low frequency permitivity taken as 10.2 after Neville⁵.

Fig. 9: CV measurement of Ga₂O₃-Au Schottky Barrier

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Figure 9 shows

the typical CV measurement of

Ga2O3-Gold Metal Schottky Barrier

with a typical plot of

one over C squared as a function of the reverse voltage.

The concentration was found to be

4.1 times 10 to the 7 th power per cubic cm from the slope.