Erratum to "Reliability Characterization of a Low-k Dielectric Using Magnetoresistance as a Diagnostic Tool"

Philip A. Williams and James R. Lloyd

In [1], equations (1)–(4) appear incorrectly. They should appear as:

$$J_{PF} = q\mu E N_c \exp\left[-q\left(\frac{\phi_T - \sqrt{qE/\pi\epsilon\epsilon_0}}{k_B T}\right)\right] \quad (1)$$

$$\mathcal{E}_\lambda = eE\lambda \quad (2)$$

$$\lambda_t = \frac{\varepsilon_t}{eE} \quad (3)$$

$$\mathrm{P}(\varepsilon_\lambda > \varepsilon_t) = \mathrm{P}(\lambda > \lambda_t) = \mathrm{e}^{-\lambda_t/\lambda_p} \quad (4)$$

Also, on page 432 in the second column, the reference in the third full sentence should be changed to: "This indicates that the conduction mechanism is indeed primarily PFE at least in the temperature range of 25–125 °C used in this study, contrary to the anomalous Schottky predominated conduction in SiO_2 observed by Simmons [10]."

References

[1] P. A. Williams and J. R. Lloyd, "Reliability characterization of a low-k dielectric using magnetoresistance as a diagnostic tool," *IEEE Trans. Device Mater. Rel.*, vol. 21, no. 3, pp. 431–435, Sep. 2021.

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Philip A. Williams is with the College of Nanoscale Science and Engineering, State University of New York at Albany, Albany, NY 12222 USA (e-mail: pwilliams@albany.edu).

James R. Lloyd is with the College of Nanoscale Science and Engineering, State University of New York Polytechnic Institute, Albany, NY 12203 USA.

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