

Erratum: “Self-heating in small mesa structures” [J. Appl. Phys. 89, 5578 (2001)]

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A row of four Shimadzu spectrophotometers is shown. From left to right: a small benchtop model, a larger benchtop model with a sample compartment, a large floor-standing model with a wide sample compartment, and a tall floor-standing model with a large sample compartment.

ERRATA

Erratum: “Self-heating in small mesa structures” [J. Appl. Phys. 89, 5578 (2001)]

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The substitution required for reduction of the anisotropic heat diffusion equation, Eq. (2), to the Laplace equation is

$$z^* = z \sqrt{\kappa_{ab} / \kappa_c},$$

$$\text{not } z^* = z \kappa_{ab} / \kappa_c,$$

as written in the manuscript. Unfortunately, this obvious misprint penetrated into the final expression for self-heating, Eq. (3). In the correct expression κ_{ab} should be replaced by $\sqrt{\kappa_{ab} \kappa_c}$. Consequently, expression for the temperature rise of the mesa, Eq. (6), should read

$$\Delta T_m \simeq \frac{\pi q a}{4 \sqrt{\kappa_{ab} \kappa_c}}.$$

The correction does not affect any other part of the article, nor the conclusions.

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