Erratum: "Defect-free band-edge photoluminescence and band gap measurement of pseudomorphic $Si_{1-x-y}Ge_xC_y$ alloy layers on Si (100)" [Appl. Phys. Lett. 67, 3915 (1995)]

A. St. Amour, C. W. Liu, and J. C. Sturm
Department of Electrical Engineering, Princeton University, Princeton, New Jersey 08544

Y. Lacroix and M. L. W. Thewalt
Department of Physics, Simon Fraser University, Burnaby BC V5A 1S6, Canada

[S0003-6951(96)04708-5]

On page 3917, the second paragraph contains errors that were introduced during the production of the article. The correct paragraph is reproduced here.

Extrapolating our $Si_{1-x-y}Ge_xC_y$ data back to zero strain (Fig. 2), gives the band gap of relaxed $Si_{1-x-y}Ge_xC_y$. This can then be compared to the known band gap of the relaxed $Si_{1-x}Ge_x$ alloy[13] with the same Ge content to determine the effect of C on the band gap of relaxed films. Doing so, we found that for *relaxed* $Si_{1-x-y}Ge_xC_y$ $\Delta E_G/\Delta y = -19$ meV/%C. That this agrees with the above result (which assumed $Si_{1-x}Ge_x$ deformation potentials) confirms that the deformation potentials of $Si_{1-x-y}Ge_xC_y$ are indeed similar to those of $Si_{1-x}Ge_x$.

 0003-6951/96/68(8)/1169/1/$10.00