ERRATA

SURFACE CORE-LEVEL BINDING-ENERGY SHIFTS FOR GaAs(110) AND GaSb(110). D. E. Eastman, T.-C. Chiang, P. Heimann, and F. J. Himpsel [Phys. Rev. Lett. 45, 656 (1980)].

Figures 1 and 2 should be interchanged (captions excluded).

GEOMETRY-DEPENDENT Si(2p) SURFACE CORE-LEVEL EXCITATIONS FOR Si(111) AND Si(100) SURFACES. F. J. Himpsel, P. Heimann, T.-C. Chiang, and D. E. Eastman [Phys. Rev. Lett. 45, 1112 (1980)].

The following introductory paragraphs have been omitted:

"The electronic and geometrical structures of silicon surfaces continue to be the subject of extensive research, especially the Si(111)-(2×1) cleavage surface, the annealed Si(111)-(7×7) surface, and the Si(100)-(2×1) surface (device face). Despite active research involving various structure-sensitive methods including surface state spectroscopies¹, the atomic arrangements of Si surfaces are not well understood. Low-energy electron diffraction² (LEED), the most successful structural method, has been hampered by the large number of displaced surface atoms due to large surface unit cells and/or subsurface strains.^{3,4}

In this paper we report new Si(2p) surface core-level binding-energy shifts as well as excitations into empty surface states which shed new light on various structural models. Recently, it has been demonstrated that such shifts can be related to the coordination number of surface atoms for transition metals⁵ and to structure-dependent surface charge transfer for semiconductors.⁶ For silicon, various structural models have direct implications for surface core-level shifts. For example, an up-down buckling motion of surface atoms^{1,2} would result in surface atom charge transfer and a pair of shifted surface core levels corresponding in intensity to one-half monolayer each.⁷"