ERRATA

Inverted Order of Acceptor and Donor Levels of Monatomic Hydrogen in Silicon [Phys. Rev. Lett. 73, 130 (1994)]

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A correction factor, which affects the location of the hydrogen acceptor level, was omitted in the use of the data of Fig. 2 to determine the rate r_{0-} at which H^0 captures an electron. If the Fermi level ε_F during the flooding pulse lies well above the hydrogen donor level ε_D, no correction is needed, as all the hydrogen is quickly converted to H^0 and remains as such until further conversion to H^- (or a reverse bias is reapplied). However, if $\varepsilon_F \leq \varepsilon_D$, the rapid equilibration of H^0 and H^+ implies that during the flooding only a fraction

$$F_0 = \left\{ \tfrac{1}{2} \exp[(\varepsilon_D - \varepsilon_F)/kT] + 1 \right\}^{-1}$$

of the hydrogen not yet converted to H^- will at any instant be H^0, where k is Boltzmann's constant and T is the absolute temperature. Thus, the r_{0-} to be used in Eq. (4) should not be τ_c^{-1}, where τ_c is the capture time measured in Fig. 2, but rather should be $(F_0\tau_c)^{-1}$. While for $F_0 \approx 1$ the calculated ε_A does not depend on ε_D, in the opposite limit of $F_0 \ll 1$ it is $\varepsilon_A + \varepsilon_D$ that becomes independent of ε_D. For the measurement conditions of Fig. 2 (i.e., average electron concentration of 5.6×10^{15} cm^{-3} and $T = 310$ K) and the quoted value for ε_D of ~0.36 eV above midgap (which may be slightly too low for the zero-electric-field value), F_0 is 0.15 and the corrected ε_A is ~0.05 eV below midgap, rather than just at midgap.

Renormalization Group Theory for Global Asymptotic Analysis [Phys. Rev. Lett. 73, 1311 (1994)]

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A misprint occurred in Eq. (5), which should read

$$y(t) = R(t)\sin(t) + (\epsilon/96)R(t)^3[\cos(3t) - \cos(t)] + O(\epsilon^2).$$

We thank A. Wirth for bringing this to our attention.