ERRATA

Inverted Order of Acceptor and Donor Levels of Monatomic Hydrogen in Silicon
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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 $\varepsilon_F$ during the flooding pulse lies well above the hydrogen donor level $\varepsilon_D$, 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

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

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 $\tau_c^{-1}$, where $\tau_c$ 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 $\varepsilon_A$ does not depend on $\varepsilon_D$, in the opposite limit of $F_0 \ll 1$ it is $\varepsilon_A + \varepsilon_D$ that becomes independent of $\varepsilon_D$. For the measurement conditions of Fig. 2 (i.e., average electron concentration of $5.6 \times 10^{15}$ cm$^{-3}$ and $T = 310$ K) and the quoted value for $\varepsilon_D$ of $\sim 0.36$ eV above midgap (which may be slightly too low for the zero-electric-field value), $F_0$ is 0.15 and the corrected $\varepsilon_A$ is $\sim 0.05$ eV below midgap, rather than just at midgap.

Renormalization Group Theory for Global Asymptotic Analysis
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A misprint occurred in Eq. (5), which should read

$$y(t) = R(t) \sin(t) + \left( \frac{\varepsilon}{96} \right) R(t)^3 \left[ \cos(3t) - \cos(t) \right] + O(\varepsilon^3).$$

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