Erratum: Polaron effects on the dc- and ac-tunneling characteristics of molecular Josephson junctions [Phys. Rev. B 86, 035406 (2012)]

B. H. Wu, J. C. Cao, and C. Timm (Received 10 July 2012; published 20 July 2012)

DOI: 10.1103/PhysRevB.86.039906 PACS number(s): 74.78.Na, 74.25.fc, 74.45.+c, 74.50.+r, 99.10.Cd

Equation (2) contains a spurious sum over σ in the last term. The equation should read

$$H_{\alpha} = \sum_{\mathbf{k}\sigma} \epsilon_{\alpha\mathbf{k}\sigma} c_{\alpha\mathbf{k}\sigma}^{\dagger} c_{\alpha\mathbf{k}\sigma} + \sum_{\mathbf{k}} (\Delta_{\alpha}^{*} c_{\alpha\mathbf{k}\uparrow} c_{\alpha,-\mathbf{k},\downarrow} + \text{H.c.}).$$
 (2)

Equation (5) is missing a sum over α . The equation should read

$$\tilde{H} = \sum_{\alpha} H_{\alpha} + \sum_{\sigma} \left(\tilde{\varepsilon}_{0} - \frac{eV}{2} \right) d_{\sigma}^{\dagger} d_{\sigma} + \hbar \omega_{v} \, a^{\dagger} a + \tilde{H}_{T}. \tag{5}$$

The correct equations have been used in the derivations and our results remain unchanged.

The definition of the quantity g appearing in Eqs. (14) and (15) was inadvertently omitted from the paper. The correct definition is $g \equiv \lambda/\hbar\omega_v$.