Erratum: *Ab initio* supercell calculations on nitrogen-vacancy center in diamond: Electronic structure and hyperfine tensors [Phys. Rev. B 77, 155206 (2008)]

Adam Gali, Maria Fyta, and Efthimios Kaxiras (Received 19 November 2008; published 11 December 2008)

DOI: 10.1103/PhysRevB.78.239902

PACS number(s): 71.15.Mb, 99.10.Cd

In the Introduction of our paper we labeled the dangling bonds of the carbon and nitrogen atoms as σ_{1-4} , see Fig. 1. Then, we constructed an orthonormal set of states from these orbitals in Eq. (1), which we called ϕ_{1-4} . These orthonormal states are the solution of the Schrödinger equation, therefore, all the multideterminant states and their corresponding energies should be expressed in terms of ϕ_{1-4} instead of σ_{1-4} , as was accidentally done in the original paper. Therefore, in all cases that involve multideterminant states and energies, σ_{1-4} should be replaced by ϕ_{1-4} . This includes: the caption of Table I; Eqs. (2a), (2b), and (3); all four-state expressions on page 7; Eqs. (5a)–(5c) and (6).

Finally, there is a minor typographical error in the energy sequence scheme on page 7; the correct sequence is

$$\mathcal{E}[{}^{3}A_{2}] \xrightarrow{\approx 0.0 \text{ eV}} \mathcal{E}[{}^{1}A_{1}] \xrightarrow{\approx 0.9 \text{ eV}} \mathcal{E}[{}^{1}E] \xrightarrow{\approx 0.8 \text{ eV}} \mathcal{E}[{}^{3}E] \xrightarrow{\approx 0.5 \text{ eV}} \mathcal{E}'[{}^{1}E] \xrightarrow{\approx 1.3 \text{ eV}} \mathcal{E}[{}^{1}A_{1}].$$

These changes do not affect the conclusions of the paper.