

Erratum

BCS superconductivity in $f-d$ and $p-d$ systems

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Z. Phys. B – Condensed Matter 75, 475–479 (1989)

As a result of a sign error, Eq. (30) is incorrect. Equation (30) should read:

$$[(\varepsilon_{\mathbf{k}}^d - \mu)(\varepsilon_{\mathbf{k}}^f - \mu) - |V_{\mathbf{k}}|^2 + |\tilde{A}_{fd\mathbf{k}}|^2]^2 + 4|V_{\mathbf{k}}|^2 |\tilde{A}_{fd\mathbf{k}}|^2 = 0.$$

This implies that the gap vanishes only at symmetry points of the Brillouin zone where $V_{\mathbf{k}} = \tilde{A}_{fd\mathbf{k}} = 0$ and $\varepsilon_{\mathbf{k}}^d = \mu$ or $\varepsilon_{\mathbf{k}}^f = \mu$. For $P_d P_f = -1$, this happens at the

X and Γ points for stoichiometric compounds [Martin, R.M., Allen, J.W.: J. Appl. Phys. **50**, 7561 (1979)].

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