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ERRATUM

Pair Spectra and the Magnetic Properties of Co^{2+} in Double Nitrate Crystals, J. W. Culvahouse and David P. Schinke [Phys. Rev. 187, 671 (1969)]. In Sec. VC, there are several misprints and some numerical errors. The seventh entry of Table VI should be b_M/R. In the text preceding Eq. (73), the direction of the spins along the c axis of the antiferromagnetic unit cell should be $\uparrow\uparrow\uparrow\downarrow\downarrow\downarrow$ rather than the sequence given which is the orientation of successive layers. In Eq. (73), the factor $\frac{1}{3}$ should be $\frac{1}{12}$, but the numerical values on the far right-hand side are correct. In Eq. (75), the factor $\frac{1}{3}$ should be $\frac{1}{6}$. Finally, a numerical error and an omitted term have been found in the calculation of the effects of the transverse components of the spin-spin interaction, and a numerical error has been found in the calculation of the dipolar interaction energy. The correct numerical values for the two models are as follows:

$$\text{Ferrimagnetic:}\quad E_{\text{tot}}^{(2)} = 0.0068R\ ,\ E_{\text{tot}}^{(L)} = -0.0082R\ .$$

$$\text{Antiferromagnetic:}\quad E_{\text{tot}}^{(2)} = 0.0089R\ ,\ E_{\text{tot}}^{(L)} = -0.0010R\ .$$

The changes are slight but significant. For a single domain of spherical shape, the ordering energy for the antiferromagnetic and ferrimagnetic models are $0.147R$ and $0.153R$. The agreement of the ordering energy of either model with the measurement of Mess is not significantly altered; but the ferrimagnetic arrangement is favored slightly even without domain formation. The energy difference for the two models is significant and strongly suggests a more complex ordering pattern which reduces the dipolar energy so that an antiferromagnetic state is lowest. If $J_{00}(X,X)$ were of the opposite sign our antiferromagnetic model would be lowest in energy; but our experimental data exclude this possibility.