

2008, Volume 47

Atsushi Okazawa,* Takashi Nogami, Hiroyuki Nojiri, and Takayuki Ishida: Ferromagnetic Dy–Ni and Antiferromagnetic Dy–Cu Couplings in Single-Molecule Magnets [Dy₂Ni] and [Dy₂Cu]

Pages 9763 (abstract) and 9765. We have found an incorrect definition for the sign of $J_{\text{Dy-Ni}}$. The $J_{\text{Dy-Ni}}$ value written as +0.031 K should be corrected to be –0.031 K, although the energy-level diagrams and calculated lines in Figures 3 and 4 are entirely correct. The exchange coupling between the Dy and Ni ions is antiferromagnetic, and accordingly the Ni strongest and weakest forbidden bands in high-field electron paramagnetic resonance should be assigned to the excitations from Dy(\uparrow)–Ni(\downarrow)–Dy(\uparrow) to Dy(\uparrow)–Ni(\uparrow)–Dy(\uparrow) and from Dy(\downarrow)–Ni(\uparrow)–Dy(\downarrow) to Dy(\downarrow)–Ni(\downarrow)–Dy(\downarrow), respectively. As for the paragraph in the discussion on the mechanism of $J_{\text{Dy-Ni}}$, the sentence “The smaller out-of-plane distortion in the latter favors ferromagnetic coupling” should be deleted. The geometries were correctly described on the basis of the X-ray crystal structure analysis on [Dy₂Cu] and [Dy₂Ni]. Therefore, we have to make a comment instead as follows: “They are basically isomorphous, and both $J_{\text{Dy-Cu}}$ and $J_{\text{Dy-Ni}}$ are antiferromagnetic.”

IC900351P

10.1021/ic900351p
Published on Web 03/12/2009