

ΔS at the Θ_1 transition calculated from the Jarrett expression

$$\Delta S = -E \frac{\Delta c}{c} \alpha_p = 38.9 \text{ ergs/g} \cdot \text{deg}$$

differs by three orders of magnitude from experimental data (see Table 1). Such a large difference between theory and experiment is evidently due to the fact that the low-temperature magnetic transition in Mn_3Ge_2 does not belong to the AF \rightarrow F type and is not associated with exchange inversion. The transition at point Θ_1 is possibly caused by spontaneous reorientation of the antiferromagnetic vector relative to the crystallographic axes and belongs to magnetic transitions of the Morin-point kind.

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