

Spin reorientation in tetragonal $\text{Er}_{1-x}\text{Y}_x\text{Co}_{10}\text{Mo}_2$ and $\text{ErCo}_{10-x}\text{Ni}_x\text{Mo}_2$ compounds

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Abstract: The thermal dependence of the easy magnetisation direction of tetragonal $\text{Er}_{1-x}\text{Y}_x\text{Co}_{10}\text{Mo}_2$ and $\text{ErCo}_{10-x}\text{Ni}_x\text{Mo}_2$ compounds were studied from the angular dependence of the magnetisation vector measured on oriented powders. Whereas one of the studied materials exhibits rather usual first-order transitions at T_{SR} , the other materials present quite complex and unusual spin reorientation which are discussed by considering the different contributions to the anisotropy. © 2003 Published by Elsevier B.V.

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