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Magnetic properties of (R, R', R'',...)Ni₂Ge₂ solid solutions S.A. LAW, S.L. BUD'KO, P.C. CANFIELD, Ames Laboratory and Dept. of Physics and Astronomy, Iowa State University — Anisotropic magnetic properties of single crystals of (R, R', R'',...)Ni₂Ge₂ (R = rare earth) solid solutions will be presented. Whereas the magnetic ordering temperatures and the paramagnetic Θ 's broadly follow de Gennes scaling there are some systematic deviations from this oversimplified trend. In this talk we will examine these deviations and also discuss the apparent absence of a spin-glass state induced by random magnetic anisotropy for the most highly mixed samples.

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