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# High-Pressure Synthesis of Intermetallic Framework Compounds RESi3

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Five metastable binary rare-earth trisilicides RESi3 (RE= Gd, Tb, Dy, Er, Tm) are synthesized by high-pressure high-temperature synthesis (9.5 GPa, 823-923 K). X-Ray powder diffraction data evidence that the crystal structure of the compounds is isotopic to that of CaGe3 and lattice parameters are refined. Magnetic measurements on DySi3 reveal Curie-Weiss paramagnetic behaviour and antiferromagnetic ordering at low temperatures.

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