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Giant magnetic moment in Mn₁₁Si₁₉ microparticles at room temperature KIYOTAKA HAMMURA, Hitachi Cambridge Laboratory, University of Cambridge, HARUHIKO UDONO, TOMOSUKE AONO, Ibaraki University — Following our previous paper reporting enhancement of magnetic moment in powder Mn₁₁Si₁₉ (~30 microns in diameter), we report here on magnetic moment for smaller particles (~5 microns in diameter) at 5 K to 300 K. Apart from the larger particles case, magnetisation curves against field exhibit distinctive features of soft magnetic materials over the whole range of temperatures. We observed a sort of superparamagnetism in non-nanoparticles.

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