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Evidence for Kondo effect in Zn:Fe ELISA BAGGIO-SAITOVITCH, PABLO MUNAYCO, J. LARREA, Y.T. XING, Centro Brasileiro de Pesquisas Físicas, Brazil, H. MICKLITZ, II.Physikalisches Institut, Germany — Zn films doped with ^{57}Fe (atomic concentration c between 0.2 and 2.0 at %) have been prepared by the co-evaporation of the two metals onto a cooled substrate ($T_s = 80$ K). *In-situ* electrical resistance measurements on these films show resistance minima at T_K ($T_K = 10$ K for $c = 1.0$ at %) which disappear in an external magnetic field $B_{\text{ex}} = 5$ T and, therefore, are interpreted as Kondo minima. ^{57}Fe Mössbauer effect studies on the films with $c = 0.6$ at % taken at $T = 4.3$ K and for various B_{ex} values, reveal that the effective paramagnetic Fe moments, μ , are $\mu < 0.1 \mu_B$ for $B_{\text{ex}} = 3$ T. For larger magnetic fields the magnitude of μ is increasing with increasing B_{ex} [$\mu \sim 0.30(3) \mu_B$ for $B_{\text{ex}} = 7$ T], as expected for a spin-compensated Kondo state.

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