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Magnetic properties of 3d-metal Prussian Blue Analogs MANJITA SHRESTHA, SOURAV ADAK, HEINZ NAKOTTE, LUKE L. DAEMEN, MONIKA HARTL, VIVIEN ZAPF, New Mexico State University — Prussian Blue Analogs consists of MC_6 and AN_6 octahedra connected by cyanide ligands (M, A=metals). They typically crystallize in cubic structures. We have studied temperature and field dependence of the magnetization and the susceptibility of 3d-metal Prussian Blue Analogs, namely the hexacyanocobaltates, -ferrates and -chromates. All compounds exhibit modified Curie –Weiss behavior in the paramagnetic region. The observed effective moments of those compounds were compared with the ones of the respective free-ion values. Furthermore, we find evidence that a few of the compounds exhibit a transition to long-range magnetic order at low temperatures.

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