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Title:	Synthesis, crystallographic characterization and catecholase activity of a monocopper(II) and a dimanganese(III) complex with an anionic Schiff base ligand
Authors:	Kaur, Gurpreet (/jspui/browse?type=author&value=Kaur%2C+Gurpreet) Choudhury, A.R. (/jspui/browse?type=author&value=Choudhury%2C+A.R.)
Keywords:	Copper(II)/manganese(III) Schiff base Crystal structure Magnetism
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Citation:	Polyhedron, 61, pp.15-19.
Abstract:	The mononuclear [CuII(HL)2] (1) and dinuclear [MnIII2(μ1,3-OAc)2L2] (2) [H2L = N-(2-hydroxypropyl)-3-methoxysalicylaldehyde] compounds have been synthesized and characterized using microanalytical, spectroscopic and X-ray crystallographic results. Structural analysis reveals a bidentate chelation behavior of the monoanionic HL ligand, having a distorted square planar coordination environment around copper(II) with a CuN2O2 chromophore. In compound 2, each manganese(III) center has a distorted octahedral geometry, with an MnN2O4 chromophore bridged by two acetate ligands in a μ1,3 fashion. Variable-temperature magnetic susceptibility measurements of 2 indicate an antiferromagnetic interaction between the two manganese(III) centers. Both 1 and 2 behave as effective catalysts towards the oxidation of 3,5-di-tert-butylcatechol to its corresponding quinone with molecular oxygen in methanolic solution.
Description:	Only IISERM authors are available in the record.
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