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Experimental proof of the existence of water clusters in fullerene-like PrF 3 nanoparticles

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Abstract

Synthesized fullerene-like nanoparticles of the Van Vleck paramagnet PrF 3 have been studied by nuclear magnetic resonance cryoporometry. Water clusters have been discovered in the internal cavities of the nanoparticles. The analysis of the experimental data indicates that the cluster radius is 1-2. 3 nm. The obtained data agree well with the high-resolution transmission electron microscopy data. © 2012 Pleiades Publishing, Ltd.

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