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Size effect in the (PrF₃ nanoparticles-³He) system

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Abstract

Spin kinetics of adsorbed and liquid ³He in contact with crystalline nanopowders of the Van Vleck paramagnet PrF₃ at a temperature of 1.5 K has been studied by nuclear magnetic resonance. The correlation between the parameters of the nuclear magnetic relaxation of ³He and the sizes of the sample particles has been found. A qualitative model of the magnetic relaxation of ³He describing the experimental results has been proposed. © 2013 Pleiades Publishing, Ltd.

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