

The possible dynamic polarization of nuclei by using coal surface paramagnetic centers

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Abstract

Electron paramagnetic resonance spectra of paramagnetic centers on coal surface at 4.2-300 K have been measured when the sample is in contact with ^3He , ^4He or oxygen gases. At low temperatures the transferred hyperfine interaction was manifested in the case ^3He gas. Our experimental data support a possibility of dynamics polarization of nuclei by using coal surface paramagnetic centers. © 2003 Elsevier Science B.V. All rights reserved.

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Keywords

^3He , Dynamic polarization, EPR, Noble gas