

Physica B: Condensed Matter 2003 vol.329-333 NII, pages 1237-1238

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## 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  $^3\text{He}$ ,  $^4\text{He}$  or oxygen gases. At low temperatures the transferred hyperfine interaction was manifested in the case  $^3\text{He}$  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.

[http://dx.doi.org/10.1016/S0921-4526\(02\)02204-4](http://dx.doi.org/10.1016/S0921-4526(02)02204-4)

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### Keywords

$^3\text{He}$ , Dynamic polarization, EPR, Noble gas