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Stationary and high-frequency pulsed electron paramagnetic resonance of a calcified atherosclerotic plaque

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Abstract

New possibilities of applying high-frequency electron paramagnetic resonance in medicine are demonstrated on an example of the investigation of a calcified atherosclerotic plaque. After the irradiation of the atherosclerotic plaque by x rays, a new type of paramagnetic centers-organomineral radicals-is detected. The spectral and relaxation characteristics of these radicals depend on the calcification degree of the atherosclerotic plaque and can be used for diagnostics. © 2008 Pleiades Publishing, Ltd.

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