

Application of Q-band electron spin echo spectrometer to investigation of glasses doped with rare earth ions

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Abstract

The Q-band electron spin echo (ESE) spectrometer which was created using modern microwave components is described. This simple incoherent apparatus was used with the X-band one for the study of phosphate and silicate glasses doped with non-Kramers rare earth Tb³⁺ ions. The EPR spectra measured by the ESE method have frequency independent peaks. The experimental results presumably show the existence of several types of paramagnetic centers in studied systems. © 1992 Springer.

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