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E.K. Zavoiskii and NMR: Analysis of laboratory notebooks and rerun of experiments

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Abstract

© 2015 AIP Publishing LLC. An analysis of the laboratory notebooks of E. K. Zavoiskii, the discoverer of electron paramagnetic resonance, shows that in 1941 he began trying to observe NMR of various nuclei in condensed matter. A rerun of his NMR experiments shows that the sensitivity of the "grid current" method that he developed was adequate for reliable detection of NMR of protons in water solutions of paramagnetic salts. The reason for the poor reproducibility of Zavoiskii's NMR experiments was insufficient the homogeneity of the magnetic field of the electromagnets he used.

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