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## Ba nuclear resonance in $\text{YBa}_2\text{Cu}_2\text{O}_y$

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### Abstract

The first observations of NMR and NQR of both isotopes  $^{135}\text{Ba}$  and  $^{134}\text{Ba}$  in isotopically enriched samples of  $\text{YBa}_2\text{Cu}_3\text{O}_y$  with oxygen concentrations  $y=6.0$ ,  $6.2$ , and  $7.0$  are described. The pure NQR frequencies and asymmetry parameter are in good agreement with theoretical predictions. The temperature dependence of the NQR frequency of Ba for  $y=7$  is qualitatively similar to that for Cu(2) but much stronger. The temperature dependence of the longitudinal and transverse relaxation times opens new questions. © 1992 Springer.

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