^{23}Na NMR and ^{14}N NQR in Mixed Crystals $Na_{1-x}Ag_xNO_2$ *

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Z. Naturforsch. **53a,** 595–598 (1998); received October 31, 1997

The ^{23}Na ($I=3/2$) NMR powder pattern for the $m=1/2 \leftrightarrow m=-1/2$ transition, broadened by the second-order quadrupole interaction, was investigated in mixed crystals $Na_{1-x}Ag_xNO_2$ ($x \leq 0.16$). From the intensity loss of the ^{23}Na NMR line caused by the Ag^+-impurity, the range of the quadrupole interaction in the ^{23}Na NMR central line was estimated. The range comprises ionic charges approximately up to the first nearest neighbour Na^+ site from the ^{23}Na nucleus, showing a large difference compared with that obtained from the ^{14}N NQR investigation in the same system.

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