

$^9\text{Be}(^{18}\text{O}, ^{18}\text{N})$ :moment [2009De34](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	R. Spitzer, J. H. Kelley		ENSDF	30-Jun-2021

[2009De34](#): XUNDL dataset compiled by TUNL (2009).

$\beta$ -NMR measurement.

A 74.3 MeV/nucleon  $^{18}\text{O}$  primary beam bombarded a  $^9\text{Be}$  target at GANIL producing  $^{18}\text{N}$  ions via single charge-exchange reactions. The  $^{18}\text{O}$  beam incident on the  $^9\text{Be}$  target was tuned and optimized so that an off-axis component of the fragment beam was accepted into the LISE spectrometer (i.e.  $\theta_{\text{lab}} \neq 0^\circ$ ). The resulting spin-polarized beam was implanted into a room temperature MgO crystal held in a static  $B_0 = 0.39971$  T magnetic field. Using standard  $\beta$ -NMR techniques, the asymmetry of emitted  $\beta$  particles was measured using a pair of  $\Delta E$ -E plastic scintillators, and the  $\mu = 0.3273 \mu_N$  was determined.

 $^{18}\text{N}$  Levels

E(level)	$J^\pi$	Comments
0	$1^-$	$\mu = 0.3273$ 4 ( <a href="#">2009De34</a> ) $\mu$ : $\beta$ -NMR method, $g(^{18}\text{N}) = 0.3273$ 4, sign is not determined in this measurement. $J^\pi$ : From Adopted Levels. A long lived isomer in $^{18}\text{N}$ could influence these measurements ( <a href="#">1999Og03</a> ).