

Si(p,X): μ 2009Kr05

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	R. B. Firestone	NDS 127, 1 (2015)	15-Jan-2015

The magnetic moment and the nuclear ground state spin were measured using NMR and collinear laser spectroscopy techniques at ISOLDE CERN facility. A silicon carbide target was exposed to the 1.4-GeV proton beam and the extraction of Mg isotopes was achieved by resonant laser ionization. The average production yield of ${}^{21}\text{Mg}$ was 10^4 ions/s.

 ${}^{21}\text{Mg}$ Levels

<u>E(level)</u>	<u>J$^\pi$</u>	<u>T$_{1/2}$</u>	<u>Comments</u>
0	5/2 ⁺	122 ms 3	$\mu = -0.9837$ (2009Kr05) J $^\pi$: 5/2 using collinear laser spectroscopy technique (2009Kr05). Positive parity is deduced from the measured μ and shell-model calculations. T $_{1/2}$: From Adopted Levels of ${}^{21}\text{Mg}$ in ENSDF database. μ : Using NMR and collinear laser spectroscopy techniques (2009Kr05). The sign of μ has been determined experimentally. configuration: $\nu d_{5/2}$.