

$^1\text{H}(^{21}\text{N}, ^{19}\text{N}\gamma), ^{208}\text{Pb}(^{21}\text{N}, ^{19}\text{N}\gamma)$  2010EI05

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	G. C. Sheu, J. H. Kelley		ENSDF	06-Nov-2018

2010EI05: XUNDL dataset compiled by McMaster, 2010.

A beam of  $\approx 50$  MeV/nucleon  $^{21}\text{N}$  ions, from the RIKEN/RIPS facility, impinged on either a hydrogen target or a  $^{208}\text{Pb}$  target (thickness not given). Scattered particles were detected near  $\theta < 6.5^\circ$  and identified based on total energy and time-of-flight measurements using an array of plastic scintillators, in addition an array of 160 NaI(Tl) crystals from the DALI2 array detected correlated  $\gamma$  rays. The populated levels and a partial level scheme were deduced.

Measured  $E_\gamma$ ,  $I_\gamma$ , Doppler-corrected  $\gamma$  spectra.

The level scheme is based on that proposed in (2008So09).

 $^{19}\text{N}$  LevelsE(level)

0  
1137 26  
1666 33

 $\gamma(^{19}\text{N})$ 

<u><math>E_\gamma</math></u>	<u><math>I_\gamma</math></u>	<u><math>E_i(\text{level})</math></u>	<u><math>E_f</math></u>
529 21	37	1666	1137
1137 26	100	1137	0

 $^1\text{H}(^{21}\text{N}, ^{19}\text{N}\gamma), ^{208}\text{Pb}(^{21}\text{N}, ^{19}\text{N}\gamma)$  2010EI05Level Scheme

Intensities: Relative  $I_\gamma$

## Legend

$\longrightarrow$	$I_\gamma < 2\% \times I_\gamma^{\text{max}}$
$\longrightarrow$	$I_\gamma < 10\% \times I_\gamma^{\text{max}}$
$\longrightarrow$	$I_\gamma > 10\% \times I_\gamma^{\text{max}}$

