

$^{10}\text{B}(^{16}\text{O},2\text{p}\gamma)$ 1975Eg01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia, Anagha Chakraborty		NDS 186, 2 (2022)	31-Mar-2022

The 560-keV state of ^{24}Na was populated by the $^{10}\text{B}(^{16}\text{O},2\text{p})$ reaction. The lifetime of the level was measured using the Recoil Distance technique. The target consisted of about $100 \mu\text{g}/\text{cm}^2$ natural CB_4 evaporated on a $1 \mu\text{m}$ thick Ni foil. The energy of the ^{16}O ions after passage through the Ni foil was 24 MeV. The gamma rays were observed using a large volume Ge(Li) detector.

 ^{24}Na Levels

E(level)	$T_{1/2}$	Comments
0		
470		
560	32 ps 4	$T_{1/2}$: From 1975Eg01 ($\tau=46$ ps 6 – recoil-distance technique).

 $\gamma(^{24}\text{Na})$

E_γ	$E_i(\text{level})$	E_f
91	560	470
560	560	0

 $^{10}\text{B}(^{16}\text{O},2\text{p}\gamma)$ 1975Eg01Level Scheme