

Coulomb excitation 2006Mu04

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. Katakura, Z. D. Wu		NDS 109, 1655 (2008)	1-Apr-2008

**2006Mu04:** Xe beam on  $^{58}\text{Ni}$ , E=555, 556, 553, 563, 571 and 579 MeV; measured  $\gamma$ , B(E2) and B(E3).

**2006Ch26:**  $^{124}\text{Xe}$  beam on movable  $^{93}\text{Nb}$  target, E=54.9 MeV/u; measured  $\gamma$ , lifetime with TOF.

**1975Go18:** ( $^{16}\text{O}$ ,  $^{16}\text{O}'$ ) E=36, 42 MeV, semi, measured  $^{16}\text{O}'$ - $\gamma$  coin.

 $^{124}\text{Xe}$  Levels

E(level)	$J^\pi$	$T_{1/2}$	Comments
0.0	$0^+$		
354.7	$2^+$	44 ps +7-6	B(E2) $\uparrow$ =1.12 +12-9; g=0.23 2 g: From ion implantation PAC. $T_{1/2}$ : from B(E2) ( <b>1975Go18</b> ); others: 56 5 ( <b>2006Ch26</b> ). B(E2) from <b>2006Mu04</b> ; other: 0.90 7 ( <b>1975Go18</b> ).
879	$4^+$		
1898	$3^{(-)}$		B(E3) $\uparrow$ =0.091 10 $J^\pi$ : Negative parity is proposed from systematics in <b>2006Mu04</b> . B(E3) from <b>2006Mu04</b> .

 $\gamma(^{124}\text{Xe})$ 

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma$	$I_\gamma$	$E_f$	$J_f^\pi$
354.7	$2^+$	354		0.0	$0^+$
879	$4^+$	525		354.7	$2^+$
1898	$3^{(-)}$	1019	16 8	879	$4^+$
		1544	100 13	354.7	$2^+$

**Coulomb excitation 2006Mu04**Level Scheme

Intensities: Relative photon branching from each level

