

$^{30}\text{Si}(^{16}\text{O,pn}\gamma)$  1975Ch37

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh		NDS 190,1 (2023)	20-Jun-2023

1975Ch37: E=30 MeV  $^{16}\text{O}$  beam produced from the MP tandem Van de Graaff accelerator. Targets of metallic Si (enriched to 95% in  $^{30}\text{Si}$ ) on gold backings. Ge(Li) detectors for detecting  $\gamma$ -rays. Measured  $E\gamma$ ,  $\gamma(t)$ , perturbed  $\gamma(\theta)$ . Deduced  $T_{1/2}$ , g factors for the levels of 235 and 350 keV.

$^{44}\text{Sc}$  Levels

g factor is measured using the time integral perturbed angular distribution technique (TIPAD) with an external fields (1975Ch37).

E(level)	$J^{\pi\dagger}$	$T_{1/2}\ddagger$	Comments
0	$2^+$		
235	$2^-$	6.12 ns 23	g=0.30 13 (1975Ch37)
350	$4^+$	3.13 ns 19	g=0.90 12 (1975Ch37)

$\dagger$  From the Adopted Levels.

$\ddagger$  From  $\gamma(t)$  (1975Ch37).

$\gamma(^{44}\text{Sc})$

$E_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$
235	235	$2^-$	0	$2^+$
350	350	$4^+$	0	$2^+$

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Level Scheme

