

$^{27}\text{Al}(^{19}\text{F},2\text{p}\gamma)$  1976Po03

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, Balraj Singh and John A. Cameron		NDS 112, 2357 (2011)	31-Jul-2011

**1976Po03:** E=40 MeV  $^{19}\text{F}$  beam incident on a target of  $350 \mu\text{g}/\text{cm}^2$  aluminum evaporated on a tungsten backing. Ge(Li) detectors for detecting  $\gamma$ -rays. Measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin. Deduced information mainly for  $^{43}\text{Ca}$  and  $^{43}\text{Sc}$ ; also deduced  $T_{1/2}$  for  $^{44}\text{Ca}$  levels of 3285 and 2283 keV using Recoil Distance Method (RDM).

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

<u>E(level)<sup>†</sup></u>	<u><math>J^\pi</math><sup>‡</sup></u>	<u><math>T_{1/2}</math><sup>#</sup></u>
0	$0^+$	
1157	$2^+$	
2283		16 ps 5
3285	$6^+$	<17 ps

<sup>†</sup> From least-squares fit to  $E\gamma$  data.

<sup>‡</sup> From Adopted Levels.

<sup>#</sup> From RDM ([1976Po03](#)).

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

<u><math>E_\gamma</math></u>	<u><math>E_i(\text{level})</math></u>	<u><math>J_i^\pi</math></u>	<u><math>E_f</math></u>	<u><math>J_f^\pi</math></u>
1002	3285	$6^+$	2283	
1126	2283		1157	$2^+$

${}^{27}\text{Al}({}^{19}\text{F},2\text{p}\gamma)$  1976Po03Level Scheme