

$^{45}\text{Sc}(e^+, X\gamma)$ 1986Bo06

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	T. W. Burrows	NDS 109, 171 (2008)	30-Oct-2007

Annihilation with atomic electrons. $e^+ \leq 1041$ from ^{45}Ti ε decay. See ^{45}Ti ε decay for details. See 1988Ko19 and 1989Ko36 for theoretical calculations.

 ^{45}Sc Levels

<u>E(level)</u>	<u>J^π</u>	<u>Comments</u>
0.0	$7/2^-$	
12	$3/2^+$	
1661	$9/2^-$	
1801	$5/2^+$	$\sigma(\text{res}) \approx 1.2 \times 10^4$ b 3. $\sigma(\text{nonres}) \approx 0.06$ b 2.

† From the Adopted Levels.

 $\gamma(^{45}\text{Sc})$

Note that $I_\gamma(1801\gamma)/I_\gamma(1789\gamma) = 0.71$ is discrepant with the adopted value of 0.221 23.

<u>E_γ</u>	<u>I_γ</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>
1661	100	1661	$9/2^-$	0.0	$7/2^-$
1789	0.14 2	1801	$5/2^+$	12	$3/2^+$
1801	0.10 2	1801	$5/2^+$	0.0	$7/2^-$

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Level Scheme

Intensities: Relative I_γ

Legend

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

