

**Coulomb excitation** [2002Ja02,1993Sp01,1975EdZY](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 152, 331 (2018)	1-Apr-2018

[2002Ja02](#):  $^{\text{nat}}\text{Ti}(^{136}\text{Xe}, ^{136}\text{Xe}'\gamma)$  with  $E(^{136}\text{Xe})=485$  MeV. Measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma(\theta)$ , particle- $\gamma$ -coin using a solar cell detector and two HPGe detectors; deduced  $T_{1/2}$  from Doppler Shift Attenuation method (DSAM) and g factors from the transient field technique.

[1993Sp01](#):  $(^{32}\text{S}, ^{32}\text{S}'\gamma)$  with  $E(^{32}\text{S})=100$  MeV. Measured  $E\gamma$ ,  $I\gamma$ , particle- $\gamma$  coin,  $\gamma(\theta, H)$  using an annular Si detector and four BaF<sub>2</sub> scintillators; deduced  $T_{1/2}$  from DSAM and g factors from the transient field technique. Updated by [2002Ja02](#).

[1975EdZY](#):  $(\alpha, \alpha')$  with  $E(\alpha)=10-13$  MeV. Measured back-scattered  $\alpha$ -particles in an annular surface barrier detector.

 $^{136}\text{Xe}$  Levels

<u><math>E(\text{level})^\dagger</math></u>	<u><math>J^\pi^\dagger</math></u>	<u><math>T_{1/2}</math></u>	<u>Comments</u>
0.0	$0^+$		
1313.0	$2^+$	0.360 ps <i>14</i>	$g=+0.77$ 5 ( <a href="#">2002Ja02</a> ) $T_{1/2}$ : from DSAM in <a href="#">2002Ja02</a> . Others: 0.21 ps 3 ( <a href="#">1993Sp01</a> ), 0.40 ps <i>18</i> from B(E2) ( <a href="#">1975EdZY</a> ).
1694.4	$4^+$		B(E2) $\uparrow$ : 0.18 8 ( <a href="#">1975EdZY</a> ). $g=+1.08$ 43 ( <a href="#">2002Ja02</a> )

$^\dagger$  From the Adopted Levels.

 $\gamma(^{136}\text{Xe})$ 

<u><math>E_\gamma^\dagger</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>
381.4	1694.4	$4^+$	1313.0	$2^+$
1313.0	1313.0	$2^+$	0.0	$0^+$

$^\dagger$  From the Adopted Gammas. Observation of these transitions is indicated in Figure 2 of [2002Ja02](#).

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**Coulomb excitation 2002Ja02,1993Sp01,1975EdZY**Level Scheme