

$^{116}\text{I}$  IT decay [1990Wu01](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Jean Blachot	NDS 111, 717 (2010)	1-Dec-2009

Parent:  $^{116}\text{I}$ : E=430.4 5;  $T_{1/2}$ =3.27  $\mu\text{s}$  16; %IT decay=100.0

Activity:  $^{92}\text{Mo}(^{28}\text{Si}, 3\text{pn}\gamma)$  E=120 MeV.

Measured:  $\gamma$ ,  $\gamma\gamma$ , recoil-mass spectrometer (RMS),  $\gamma(t)$ . The RMS determines with a good separation the nucleus which is isomer.

The  $\gamma$ 's are not placed in a level scheme, but two independent branches are found from  $\gamma\gamma$  correlations. One path includes 65, 105 (doublet), 109  $\gamma$ 's. The other: 114, 227  $\gamma$ 's. The first cascade gives E(isomer) $\geq$ 385. One component of 105 doublet could correspond to the 104.5 $\gamma$  seen in  $^{116}\text{Xe}$   $\varepsilon$  decay.

 $^{116}\text{I}$  Levels

<u>E(level)</u>	<u><math>T_{1/2}</math></u>
0.0	
430.4 5	3.27 $\mu\text{s}$ 16

 $\gamma(^{116}\text{I})$ 

<u><math>E_\gamma</math></u>	<u><math>I_\gamma</math></u>	<u><math>E_i(\text{level})</math></u>	<u>Comments</u>
<sup>x</sup> 65.4			
<sup>x</sup> 105	180 28		$E_\gamma$ : a doublet.
<sup>x</sup> 109.6	100		
<sup>x</sup> 114.2	33 5		
<sup>x</sup> 227.2	36 5		

<sup>x</sup>  $\gamma$  ray not placed in level scheme.