

$^{220}\text{Pa}$   $\alpha$  decay [1987FaZS](#)

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	S. -c. Wu	NDS 108, 1057 (2007)	1-Mar-2007

Parent:  $^{220}\text{Pa}$ :  $E=0.0+x$ ;  $T_{1/2}=0.78 \mu\text{s}$  16;  $Q(\alpha)=9830$  50; % $\alpha$  decay=100.0

 $^{216}\text{Ac}$  Levels

Production and assignment:  $^{204}\text{Pb}(^{19}\text{F},\text{xn})$ , excit ([1987FaZS](#)).

[1987MiZO](#) produced an activity with  $T_{1/2}=1.1 \mu\text{s}$  1 and  $E_{\alpha}=9.16$  MeV by  $^{205}\text{Tl}(^{20}\text{Ne})$   $E=102-110$  MeV. They assign this as possibly from  $^{220}\text{Pa}$ .

<u>E(level)</u>	<u>Comments</u>
0.0+y	It is not known which isomer of $^{216}\text{Ac}$ is fed by this activity.

 $\alpha$  radiations

<u><math>E_{\alpha}</math></u>	<u>E(level)</u>	<u>HF<sup>†</sup></u>
9650 50	0.0+y	1.9 5

<sup>†</sup> From  $r_0(^{216}\text{Fr})=1.527$  24, unweighted average of  $r_0(^{214}\text{Ra})=1.554$  9,  $r_0(^{216}\text{Ra})=1.566$  9,  $r_0(^{214}\text{Th})=1.46$  9,  $r_0(^{220}\text{Th})=1.527$  30.