## Be( $^{238}$ U,F $\gamma$ ):XUNDL-2 2019Wa14

Compiled (unevaluated) dataset from 2019Wa14: Phys Lett B 792, 263 (2019). Compiled by Amani Ahnuar and Jun Chen (NSCL, MSU), May 1, 2019.

2019Wa14: 127Pd isotopes were produced from in-flight of fission of 238U beam of 345 MeV/nucleon with 7-12 pnA intensity on a Be target at the RI-Beam Factory (RIBF) in the RIKEN Nishina Center. Fission products were transported through the BigRIPS-ZeroDegree spectrometer and implanted into the WAS3ABi active stopper consisting of eight layers of double-sided silicon-strip detectors (DSSSDs) and  $\gamma$  rays were detected using the EURCA  $\gamma$ -ray spectrometer consisting of 12 Cluster-type detectors, each of which contains 7 HPGe crystals packed closely. Measured E $\gamma$ , I $\gamma$ ,  $\gamma$ (t). Deduced levels, spin-parities, half-life. Results are compared to the shell-model calculation, suggesting the competition between proton and neutron excitations in the proton-hole and neutron-hole systems in the south-west quadrant of the doubly magic nucleus <sup>132</sup>Sn.

## <sup>127</sup>Pd Levels

E(level) <sup>†</sup>	Jπ‡	$T_{1/2}^{\#}$		
0.0	$(11/2^{-})$			
1295.51 20	$(15/2^{-})$			
1717.91 <i>23</i>	$(19/2^+)$	$39 \mu s 6$		

† From Ey data.

$$\gamma(^{127}\text{Pd})$$

$E_{\gamma}^{\dagger}$	$I_{\gamma}^{\dagger}$	$E_i(level)$	$\mathbf{J}_i^{\pi}$	$\mathbf{E}_f$	$\mathbf{J}_f^{\pi}$	Mult.‡
422.4 <i>1</i>	100 <i>21</i>	1717.91	$(19/2^+)$	1295.51	$(15/2^{-})$	M2
1295.5 2	105 24	1295.51	$(15/2^{-})$	0.0	$(11/2^{-})$	E2

<sup>&</sup>lt;sup>‡</sup> As given in 2019Wa14.

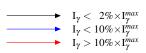
<sup>&</sup>lt;sup>#</sup> From weighted average of results from 422.4 $\gamma$ (t) and 1295.5 $\gamma$ (t).

<sup>†</sup> From 2019Wa14. ‡ As given in 2019Wa14.

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## Level Scheme

Intensities: Relative  $I_{\gamma}$ 



Legend

