

$^{237}\text{Np}(^{209}\text{Bi}, ^{210}\text{Po}\gamma)$ 2002AbZV

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Shaofei Zhu	NDS 182, 2 (2022).	1-Apr-2022

One-proton pickup channel.

2002AbZV: High-spin states in ^{236}U were populated by $^{237}\text{Np}(^{209}\text{Bi}, ^{210}\text{Po}\gamma)$ reaction with a ^{209}Bi beam at E=1406 MeV at ATLAS. Measured E_γ , I_γ , $\gamma\gamma$ using Gammasphere with 101 Compton-suppressed Ge detectors.

 ^{236}U Levels

<u>E(level)[†]</u>	<u>J^π#</u>	<u>E(level)[†]</u>	<u>J^π#</u>	<u>E(level)[†]</u>	<u>J^π#</u>	<u>E(level)[†]</u>	<u>J^π#</u>
0.0 [‡]	0 ⁺	309.4 [‡]	6 ⁺	1084.4 [‡]	12 ⁺	2203.2 [‡]	18 ⁺
45.243 [‡]	2 ⁺	521.6 [‡]	8 ⁺	1425.4 [‡]	14 ⁺	2631.1 [‡]	20 ⁺
149.4 [‡]	4 ⁺	781.6 [‡]	10 ⁺	1799.9 [‡]	16 ⁺	3079.6 [‡]	22 ⁺

[†] From least-squares fit to E_γ 's by evaluator.

[‡] Band(A): g.s. band.

Based on g.s. band argument, not direct measurement.

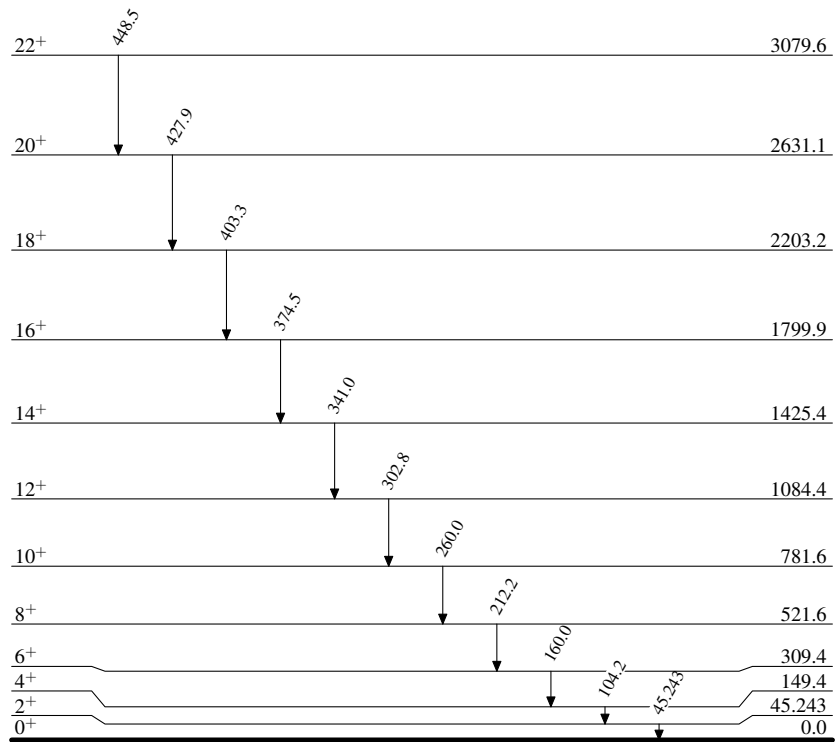
 $\gamma(^{236}\text{U})$

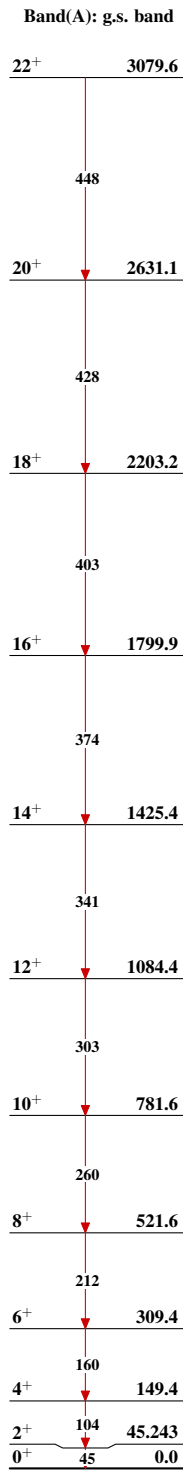
<u>E_γ</u>	<u>$E_i(\text{level})$</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Comments</u>
(45.243)	45.243	2 ⁺	0.0	0 ⁺	E _γ : not observed, from Adopted Gammas.
104.2	149.4	4 ⁺	45.243	2 ⁺	
160.0	309.4	6 ⁺	149.4	4 ⁺	
212.2	521.6	8 ⁺	309.4	6 ⁺	
260.0	781.6	10 ⁺	521.6	8 ⁺	
302.8	1084.4	12 ⁺	781.6	10 ⁺	
341.0	1425.4	14 ⁺	1084.4	12 ⁺	
374.5	1799.9	16 ⁺	1425.4	14 ⁺	
403.3	2203.2	18 ⁺	1799.9	16 ⁺	
427.9	2631.1	20 ⁺	2203.2	18 ⁺	
448.5	3079.6	22 ⁺	2631.1	20 ⁺	

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Legend

Level Scheme

-----> γ Decay (Uncertain) $^{236}_{92}\text{U}_{144}$

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