
 $^2\text{H}(^{34}\text{Si}, ^{35}\text{P}\gamma)$ **2007GeAA**

$^{34}\text{Si}(\text{d}, \text{n})^{35}\text{P}$ on $J^\pi=0^+$ ^{34}Si g.s. in inverse kinematics.

2007GeAA: 30-AMeV ^{34}Si beam on 30-mg/cm² CD₂ secondary target at GANIL. Heavy ions produced in reactions were identified by the VAMOS spectrometer. γ rays were detected using the EXOGAM germanium clover array. Measured Doppler-corrected E_γ , I_γ , $\gamma\gamma$ -coin, and $(^{35}\text{P})\gamma$ -coin. Deduced levels, J, π . Compared with shell-model calculations.

 ^{35}P LevelsE(level)

0
2386.5 8
3859.9 8
4100.9 13
4492.9 16
4868.9 13

 $\gamma(^{35}\text{P})$

<u>E_γ</u> [†]	<u>$E_i(\text{level})$</u>	<u>E_f</u>
241	4100.9	3859.9
392	4492.9	4100.9
1009	4868.9	3859.9
1473 [‡]	3859.9	2386.5
2386	2386.5	0
3860	3859.9	0

[†] From **2007GeAA**.

[‡] Placement of transition in the level scheme is uncertain.

$^2\text{H}(^{34}\text{Si}, ^{35}\text{P}\gamma)$ 2007GeAA

Legend

Level Scheme

 - - - - - \rightarrow γ Decay (Uncertain)
