^{2}H(^{34}Si,^{35}Pγ)   **2007GeAA**

J^π=0$^+$ for ^{34}Si ground state.

2007GeAA: 30-AMeV ^{34}Si beam on 30-mg/cm^2 CD$_2$ secondary target at GANIL. Ejectiles were identified by the VAMOS spectrometer. γ rays were detected using the EXOGAM germanium clover array. Measured Doppler-corrected Eγ, Iγ, (^{35}P)γ-coin. Deduced levels, J, π, and compared with shell-model calculations.

^{35}P Levels

E(level)
0
2386.5 *8*
3859.9 *8*
4100.9 *13*
4492.9 *16*
4868.9 *13*

γ(^{35}P)

E$_\gamma$	E$_i$(level)	E$_f$
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

† Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme

-------- ▶ γ Decay (Uncertain)

$^{35}_{15}P_{20}$