

$^{198}\text{Pt}(^{12}\text{C},4\text{n}\gamma)$ **2019St13**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 201,346 (2025)	21-Jan-2025

2019St13: $E(^{12}\text{C})=65$ MeV; beam produced from the FN Tandem facility at the University of Cologne. Target: 91.6% enriched 10 mg/cm² ^{198}Pt foil. γ rays were detected with a hybrid array consisting of 8 HPGe detectors and 9 LaBr₃(Ce) scintillators with 6 placed inside BGO shields. Measured $E\gamma$ and $\gamma\gamma\gamma(t)$.

 ^{206}Po Levels

E(level)	J^π	$T_{1/2}$	Comments
0	0 ⁺		
701	2 ⁺		
1178	4 ⁺	62 ps 5	$T_{1/2}$: From $\tau=89$ ps 7 and 395 γ -477 $\gamma(\Delta t)$ using LaBr ₃ (Ce) detectors, by gating on 701 γ in HPGe detectors (2019St13).
1573	6 ⁺		

 $\gamma(^{206}\text{Po})$

$E_\gamma^\dagger$	$E_i(\text{level})$	J_i^π	E_f	J_f^π
395	1573	6 ⁺	1178	4 ⁺
477	1178	4 ⁺	701	2 ⁺
701	701	2 ⁺	0	0 ⁺

[†] From **2019St13**.

 $^{198}\text{Pt}(^{12}\text{C},4\text{n}\gamma)$ **2019St13**Level Scheme