

$^{79}\text{As IT decay (1.21 }\mu\text{s)}$ **1998Ho15,1998Gr14**

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 135, 193 (2016)	31-May-2016

Parent: ^{79}As : E=772.81 6; $J^\pi=(9/2)^+$; $T_{1/2}=1.21 \mu\text{s}$ 1; %IT decay=100.0

1998Ho15: $^{198}\text{Pt}(^{76}\text{Ge},\text{X})$ E=550, 635 MeV; $^{198}\text{Pt}(^{74}\text{Ge},\text{X})$ E=625 MeV. Measured $E\gamma$, $I\gamma$, $\gamma(t)$. (fragment) γ coin. Deduced $T_{1/2}$ of an isomer.

1998Gr14: $\text{Ni}(^{86}\text{Kr},\text{X})$ E=60.3 MeV/nucleon. Measured $E\gamma$, $\gamma(t)$, (fragment) γ coin. Deduced $T_{1/2}$ of an isomer.

2013RuZX: $^{233,235}\text{U},^{241}\text{Pu},^{241}\text{Am}(\text{n},\text{F})$, E=thermal: measured $E\gamma$, $I\gamma$, delayed γ , isomer half-life by $\gamma(t)$ or (ions)(t) using fragment mass separator at Lohengrin-ILL-Grenoble reactor facility.

 $^{79}\text{As Levels}$

$E(\text{level})^\dagger$	J^π	$T_{1/2}$	Comments
0	$3/2^-$		
231	$(5/2)^-$		
772.81 6	$(9/2)^+$	$1.21 \mu\text{s}$ 1	%IT=100 $T_{1/2}$: from weighted average of $1.21 \mu\text{s}$ 1 (1998Gr14) and $1.18 \mu\text{s}$ 4 (2013RuZX). Other: $0.87 \mu\text{s}$ 6 (1998Ho15) is in disagreement.

[†] From Adopted Levels.

 $\gamma(^{79}\text{As})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	Comments
231	231	$(5/2)^-$	0	$3/2^-$		
542	772.81	$(9/2)^+$	231	$(5/2)^-$	[M2]	$I\gamma(542\gamma)/I\gamma(231\gamma)=0.98$ 10 (1998Ho15).

$^{79}\text{As IT decay (1.21 \mu s)}$ **1998Ho15,1998Gr14**Decay Scheme

%IT=100.0

