(HI,xnγ) 2012Od01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	J. Tuli	ENSDF	15-Aug-2015

2012Od01: ^{92}Mo(^{84}Sr,3nγ) ^{84}Sr beam at E=392 MeV, 400 MeV accelerated by the K130 cyclotron. at Jyvaskyla facility. RITU gas-filled separator was used to separate recoils. GREAT spectrometer was used for detection of recoils, α particles and γ rays. Target=600 μg/cm^2 ^{92}Mo (enriched to 98%). Gamma rays detected by 34 large-volume, high-purity Ge detectors (ten EUROGAM Phase-I detectors, 24 Clover-type detectors). Measured Eγ, Iγ, (^{173}Hg)γ-coin, Eα, $T_{1/2}$. Deduced levels, J, π. RDT technique. Comparison with previous works.

Others: ^{96}Ru(^{78}Kr,xnypγ) 2009Ha42,2009Sa27 measured Eα; 2004Ke06,199se14,1998NiZW measured Eα, α(t).

Level scheme proposed by 2012Od01 is tentative.

^{173}Hg Levels

E(level)	Jπ	$T_{1/2}$	Comments
0	(7/2$^-$)	0.80 ms *8*	%α=100 *4* (2012Od01) $T_{1/2}$: measured in 2012Od01 from time decay of 7208α peak and using method maximum likelihood. Others: 0.59 MS +47-18 (2004Ke06). Measured Eα=7208 *5* (2012Od01).
0+x?	(9/2$^-$)		
721+x?	(13/2$^-$)		
1454+x?	(17/2$^-$)		
2029+x?	(21/2$^-$)		

γ(^{173}Hg)

No evidence was found for any isomeric transition.

E_γ	I_γ	E_i(level)	J^π_i	E_f	J^π_f
^{x}319	30 *13*				
575	57 *21*	2029+x?	(21/2$^-$)	1454+x?	(17/2$^-$)
721†	100 *33*	721+x?	(13/2$^-$)	0+x?	(9/2$^-$)
733†	84 *31*	1454+x?	(17/2$^-$)	721+x?	(13/2$^-$)

† Ordering of 733-721 cascade is not established, it could be in reverse order.

^{x} γ ray not placed in level scheme.

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Level Scheme

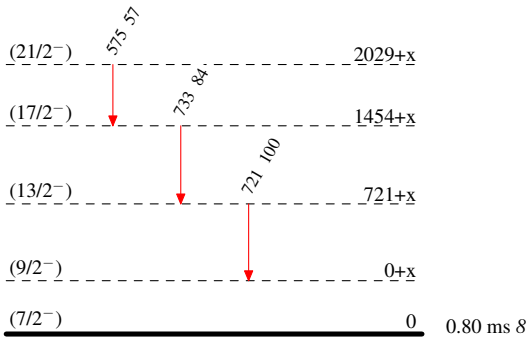
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{173}_{80}Hg_{93}$