

$^{208}\text{Pb}(^{136}\text{Xe},\text{X}\gamma),(^{208}\text{Pb},\text{X}\gamma)$ 2000Re12

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev, S. Lalkovski		NDS 112, 707 (2011)	1-Aug-2010

Facility: UNILAC-GSI; Beam: $E(^{136}\text{Xe})=5.7$ MeV/A, $E(^{208}\text{Pb})=6.5$ MeV/A; Target: 30 mg/cm² enriched to 98.7% in ^{208}Pb ;
 Detectors: 5 EUROBALL Cluster detectors (Eff=2.2%), 132 NaI Crystal Ball detectors (Eff= 53%); Measured: $\gamma\gamma(t)$ coin, E_γ ,
 I_γ .
 Also: 1999ReZT and 1998Wo15 – from the same collaboration.

 ^{207}Pb Levels

$E(\text{level})^\dagger$	$J^\pi^\ddagger$	Comments
0.0	$1/2^-$	
570	$5/2^-$	
1633	$13/2^+$	configuration: $96\%\nu(1i_{13/2})^{-1}x0^+$ and $4\%\nu(2f_{7/2})^{-1}x3^-$ (2000Re12).
2340	$7/2^-$	configuration: $83\%\nu(2f_{7/2})^{-1}x0^+$ and $17\%\nu(1i_{13/2})^{-1}x3^-$ (2000Re12).
2662	$7/2^+$	$B(E3)=0.37$ 3 (1998Wo15).
		configuration: $\nu(3p_{1/2})^{-1}x3^-$, 1-phonon octupole state (1998Wo15).
4118	$19/2^-$	configuration: $94\%\nu(1i_{13/2})^{-1}x3^-$ and $6\%\nu(1f_{7/2})^{-1}x(3^-)^2$ (2000Re12).

[†] Rounded off from Adopted Levels.

[‡] From Adopted Levels.

 $\gamma(^{207}\text{Pb})$

$E_\gamma^\dagger$	$E_i(\text{level})$	J_i^π	E_f	J_f^π
2485	4118	$19/2^-$	1633	$13/2^+$

[†] From 2000Re12.

$^{208}\text{Pb}(^{136}\text{Xe},\text{X}\gamma),(^{208}\text{Pb},\text{X}\gamma)$ **2000Re12**

Level Scheme

