

Adopted Levels

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Agda Artna-cohen		NDS 88,155 (1999)	31-Jul-1999

$Q(\beta^-) = -3.08 \times 10^3$ syst; $S(n) = 7.22 \times 10^3$ syst; $S(p) = 2.6 \times 10^3$ syst; $Q(\alpha) = 8.83 \times 10^3$ syst [2012Wa38](#)

Note: Current evaluation has used the following Q record -3010 ± 7210 syst 2500 ± 8830 syst [1995Au04](#).
Estimated $\Delta Q(\beta^-) = 210$, $\Delta S(n) = 250$, $\Delta S(p) = 300$, $\Delta Q(\alpha) = 150$ ([1995Au04](#)).

Calculations, compilations:

g.s. properties: [1995Mo29](#), [1997Mo25](#).

Single-particle Nilsson levels: [1994Cw02](#).

[1994Cw02](#) calculate the following single-particle level sequence:

g.s. $9/2[624]$, 0.23 MeV $5/2[512]$, 0.29 MeV $1/2[521]$, 0.46 MeV $7/2[514]$.

Assignment: $^{249}\text{Bk}(^{18}\text{O},4\text{n})$, ion chem, parent of ^{259}Lr from α – SF correlation ([1992Kr01](#)), (preliminary report [1987GrZN](#)).

Chemistry of Lr – detection of ^{263}Lr α 's ([1992Go28](#),[1993Zi06](#)).

 ^{263}Db Levels

E(level)	T _{1/2}	Comments
0.0	$27 \text{ s} +10-7$	%SF=57 14; % α =43 14 T _{1/2} : from 1992Kr01 . %SF: from 1992Kr01 . SF with broadly symmetric mass distribution with an average post-neutron-emission TKE=207 MeV 7 (1992Kr01). % $\varepsilon+\beta^+$: From $Q(\varepsilon)=2360 \pm 250$ (systematics, 1995Au04) and $\log ft \approx 6$ T _{1/2} ($\varepsilon+\beta^+$) ≈ 1000 s. Calculated T _{1/2} (α) $\approx 1 \times 10^4$ s, T _{1/2} (SF) ≈ 100 s (1988Lo03); T _{1/2} (α) ≈ 100 s (1990Ha26).