

²⁵³Lr α decay (0.64 s) 2008Ga25,2001He35,1999He11

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Khalifeh Abusaleem	NDS 112, 2129 (2011)	31-Dec-2010

Parent: ²⁵³Lr: E=0.0+y; T_{1/2}=0.64 s 4; Q(α)=8937 9; % α decay=9 $\times$ 10¹ 1

²⁵³Lr-Q(α): from 2009AuZZ and 2003Au03; 2011AuZZ list 8918 20.

²⁵³Lr-% α decay: >0.8 (1985He22); from I α (²⁵³Lr)/I α (²⁵⁷Db) (1985He22,1986He28). The measurement is based on the number of α 's from both isomers in ²⁵³Lr and ²⁵³Db.

Others:2009He20: experimental details in 2004He28 and 2006He27. Measured: E α , I α and half life, deduced: level energy and J $^{\pi}$. 2005He27: predicts the isomeric state is small compared to the g.s..

α - α correlation from evaporation residues implanted in position-sensitive surface barrier detectors, FWHM=30 keV. Daughter of ²⁵⁷Db and parent of ²⁴⁹Md (1985He22).

²⁴⁹Md Levels

E(level)

0.0+y

α radiations

E α	E(level)	I $\alpha^{\ddagger}$	HF †	Comments
8786 15	0.0+y	≤ 100	0.72 13	E α : from 2009He20; others: 8794 10 (1999He11); 8800 20 (1985He22). HF: if branching=0.9 1 and I α =100.

† r₀(²⁴⁹Md)=1.470 20.

‡ For absolute intensity per 100 decays, multiply by 0.9 1.