

$^{208}\text{Pb}(^{16}\text{O},\text{F}\gamma):\text{GDR}$ [1987Th07,1992Di03](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Sukheet Singh		ENSDF	08-Mar-2022

[1987Th07](#): $E(^{16}\text{O})=100,120,140$ MeV; measured GDR γ spectra, $s(E\gamma)$, $\gamma(\theta)$, yield ratios. Deduced giant dipole resonance, level density parameters, fission hindrance factors.

[1992Di03](#): $E(^{16}\text{O})=140$ MeV; also $W(^{32}\text{S},\text{fragment})\gamma, E(^{32}\text{S})=185-230$ MeV; measured fission (fragment) $\gamma(\theta)$, GDR γ spectra in 5-22 MeV region, total kinetic energy distributions. Deduced shape features, quasifission $T_{1/2}$, GDR decay.

 ^{224}Th Levels

E(level)	Γ	Comments
10.8×10^3 3	4.4 MeV 6	E(level): average of 10.3, 11.2 and 11.0 MeV (1987Th07). Value is ≈ 10 MeV in 1992Di03 . Γ : average of 4.0, 4.2 and 5.0 MeV (1987Th07).
14.1×10^3 6	5.9 MeV 10	E(level): average of 14.0, 14.2 and 14.0 MeV (1987Th07). Γ : average of 5.4, 5.8 and 6.5 MeV (1987Th07).