

${}^{232}\text{Th}({}^{206}\text{Pb}, {}^{208}\text{Pb}\gamma)$ 1986De36

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 113, 2113 (2012)	1-May-2012

$E({}^{206}\text{Pb})=4.3\text{-}6.4$ MeV/mass unit (1986De36).

$Q({}^{206}\text{Pb}, {}^{208}\text{Pb})=2.55$ MeV (1986De36).

 ${}^{230}\text{Th}$ Levels

E(level)	J^π †
0.0	0^+
53.2	2^+
174.2	4^+
356.6	6^+
594.1	8^+
879.7	10^+
1207.8	12^+

† Adopted values.

 $\gamma({}^{230}\text{Th})$

E_γ †	E_i (level)	J_i^π	E_f	J_f^π
53.2	53.2	2^+	0.0	0^+
120.9	174.2	4^+	53.2	2^+
182.5	356.6	6^+	174.2	4^+
237.5	594.1	8^+	356.6	6^+
285.6	879.7	10^+	594.1	8^+
328.1	1207.8	12^+	879.7	10^+

† γ rays were detected in coincidence with ${}^{208}\text{Pb}$ particles to identify the excited states in reaction products. The measured photon energies were not given in 1986De36. γ -ray energies are from authors' Coulomb excitation work (1989Ku23).

 $^{232}\text{Th}(^{206}\text{Pb}, ^{208}\text{Pb}\gamma)$ **1986De36**Level Scheme