

$^{44}\text{Ca}(^{18}\text{O},^{18}\text{O}),(^{18}\text{O},^{18}\text{O}')$ 1984De38,1972Ei07

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, Balraj Singh and John A. Cameron		NDS 112, 2357 (2011)	31-Jul-2011

1984De38: ($^{18}\text{O},^{18}\text{O}'$) E=30-60 MeV 90 nA beam produced from the 9 MV Van de Graaff tandem accelerator of DPh-N/BE at CEN Saclay. Target of $179 \mu\text{g}/\text{cm}^2$ (98.55%) on 0.2 mm sandwich backing of Pb+Cu+Pb. Ge(Li) and HPGe for detecting γ -rays, FWHM=2 keV at 1332 keV. Measured E_γ , fusion cross-section. Deduced barrier parameters.

1972Ei07: ($^{18}\text{O},^{18}\text{O}$) E=25-42 MeV 200nA beam. Enriched targets of 20-30 $\mu\text{g}/\text{cm}^2$ on carbon or gold backing. Particle detectors. Measured $\sigma(E(^{18}\text{O}),\theta)$ at backward angles. Deduced differences between ^{16}O and ^{18}O . Incoming-wave boundary-condition method (IWB).

 ^{44}Ca Levels

E(level) [†]	J π [‡]
0	0 ⁺
1157	2 ⁺

[†] From 1984De38.

[‡] From Adopted Levels.

 $\gamma(^{44}\text{Ca})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
1157	1157	2 ⁺	0	0 ⁺

 $^{44}\text{Ca}(^{18}\text{O},^{18}\text{O}),(^{18}\text{O},^{18}\text{O}')$ 1984De38,1972Ei07Level Scheme