
 $\text{He}(^{35}\text{Al}, ^{35}\text{Al}\gamma)$ **2006FuZX**

2006FuZX: ^{35}Al was produced via the projectile fragmentation of a 63-MeV/nucleon ^{40}Ar primary beam impinging on 1-mm-thick C and Be targets and selected by the RIKEN Projectile-Fragment Separator (RIPS). The secondary cocktail beam was directed onto a 150-mg/cm² liquid He target and the outgoing particles were identified by energy loss, kinetic energy, and time-of-flight measured using a Si detector, a NaI calorimeter, and a couple of plastic scintillators. The positions and directions of incident and outgoing particles were measured using PPACs. Only outgoing particles were identified so that the excited states could be populated by any allowed reactions. Deexcited γ rays emitted from outgoing particle moving at $v/c \approx 0.3$ were detected by the Gamma-Ray detector Array with Position and Energy sensitivity (GRAPE) consisting of segmented Ge detectors surrounding the liquid He target.

 $\underline{\gamma(^{35}\text{Al})}$

$\underline{E_{\gamma}^{\dagger}}$
 $^x 760.1 \text{ 21}$

† From **2006FuZX**.

x γ ray not placed in level scheme.