

$^4\text{He}(^{32}\text{Al}, ^{32}\text{Al}'\text{X})$ 2006FuZX

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Christian Ouellet, Balraj Singh		NDS 112, 2199 (2011)	24-Aug-2011

2006FuZX: ^{32}Al particles produced by fragmentation of ^{40}Ar beam at 63 MeV/nucleon impinging carbon or beryllium target. The fragments were separated by RIPS fragment separator. The secondary beam of ^{32}Al at 40 MeV/nucleon bombarded liquid helium target. The reaction products and scattered particles were detected and identified by a parallel-plate avalanche counter (PPAC) and a silicon detector telescope. Time-of-flight method used for atomic charge selection. The γ rays measured with an array of NaI(Tl) and Ge detectors surrounding the target.

The gamma-ray data are stated by 2006FuZX as preliminary. The level scheme is proposed by the evaluators based on Adopted Levels.

 ^{32}Al LevelsE(level)

0
735.5 6
954.9 8
1177
1743

 $\gamma(^{32}\text{Al})$

<u>E_γ</u>	<u>$E_i(\text{level})$</u>	<u>E_f</u>
219.4 [†] 5	954.9	735.5
219.4 [†] 5	1177	954.9
^x 280.4 8		
^x 530.2 11		
566	1743	1177
735.5 6	735.5	0
786	1743	954.9

[†] Multiply placed with undivided intensity.

^x γ ray not placed in level scheme.

$^4\text{He}(^{32}\text{Al}, ^{32}\text{Al}'\text{X})$ 2006FuZXLevel Scheme