$^{12}C(^{32}Na,^{32}Na'\gamma)$ 2010Do05

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 201,1 (2025)	31-Oct-2024

2010Do05: E=230-250 MeV/nucleon ^{32}Na beam was produced from fragmentation of ^{48}Ca primary beam at 345 MeV/nucleon on a 20-mm-thick ^{9}Be production target at RIKEN. Fragments were separated with the BigRIPS fragment separator by the ΔE-Bρ-tof method. Secondary target was 2.54 g/cm^2 natural carbon. γ rays were detected with the DALI2 array of 180 NaI(Tl) detectors and reaction products were momentum-analyzed with the Zero Degree Spectrometer (ZDS). Measured Eγ, pγ-coin. Deduced level energy of an excited state in ^{32}Na for the first time.

^{32}Na Levels

E(level)	J^π	Comments
0	(3^-)	J^π: from Adopted Levels.
569 *12*		

$\gamma(^{32}Na)$

E_γ	E_i(level)	E_f	J^π_f
569 *12*	569	0	(3^-)

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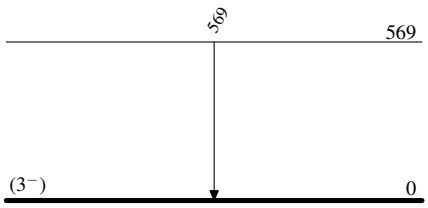
Level Scheme



$^{32}_{11}Na_{21}$