⁴⁴Ca(³⁷Cl,γ):giant res 2017Ce01

History				
Туре	Author	Citation	Literature Cutoff Date	
Full Evaluation	M. Shamsuzzoha Basunia	NDS 199,271 (2025)	1-Sep-2024	

Adapted/Edited the XUNDL datasets compiled by Jun Chen (NSCL/MSU), January 26, 2017 and E.A. McCutchan (NNDC,BNL) (2015Ce05), December 2, 2015.

2017Ce01: E=95 MeV ³⁷Cl beam was produced from the TANDEM linear accelerator complex at the Laboratori Nazionali di Legnaro (LNL), Italy. Target was 0.5 mg/cm² ⁴⁴Ca. Low-energy γ rays were detected with the AGATA array of segmented HPGe detectors and high-energy γ rays were detected with the HECTOR⁺ array of large-volume LaBr₃:Ce detectors. Measured E γ , γ yields, $\gamma\gamma$ -coin. Deduced isovector giant dipole resonance (IVGDR) parameters, centroid, width, and strength. Used as a reference reaction and results applied to deduce isospin mixing in ⁸⁰Zr populated in the ⁴⁰Ca+⁴⁰Ca reaction.

Other references: 2015Ce05, 2015Ce02, 2011Co04, 2011Co15 (same research group of 2017Ce01).

⁸¹Rb Levels

E(level)	Г	Comments	
16.4×10 ³ 2	7.0 MeV 2	E(level): GDR strength=0.90 5. Mean angular momentum $\langle J \rangle = 17 \hbar 4$.	