113 Cd(86 Kr,4n γ) **2009**Gr05

History

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Full Evaluation Huang Xiaolong and Kang Mengxiao NDS 121, 395 (2014)

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2009Gr05: E=382 MeV beam provided by University of Jyvaskyla. Measured lifetime of $17/2^+$ yrast state by recoil-distance Doppler-shift method and recoil-decay tagging method. Gas-filled separator RITU was used to separate recoils and transport these to GREAT spectrometer. Charged particles detected using GREAT spectrometer including a MultiWire Proportional counter and two double-sided silicon strip detectors. The γ rays were detected in recoil-decay tagging mode using JUROGAM detector array with 43 Eurogam Compton-suppressed Ge detectors.

¹⁹⁵Po Levels

E(level) [†]	J^π	T _{1/2}	Comments
≈230	13/2+	1.92 s 2	%α≈90
549.3 5	17/2+	30 ps 8	$T_{1/2}$: from Adopted Levels. $T_{1/2}$: from 2009Gr05, recoil-distance Doppler-shift method. Analysis was that of recoil-decay tagged γ -ray spectra and differential decay curve method.

[†] From Adopted Levels.

$$\gamma(^{195}Po)$$

$$\frac{\text{E}_{\gamma}}{319} = \frac{\text{E}_{i}(\text{level})}{549.3} = \frac{\text{J}_{i}^{\pi}}{17/2^{+}} = \frac{\text{E}_{f}}{\approx 230} = \frac{\text{J}_{f}^{\pi}}{13/2^{+}} = \frac{\text{B}(\text{E2})(\text{W.u.})=80 \ 20}{\text{B}(\text{E2})(\text{W.u.})=80 \ 20}$$

Comments

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Level Scheme

