30 Si(16 O,2p γ) 1975Ki07

History

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1975Ki07: E=30-40 MeV 16 O beam was produced from the ORNL tandem van de Graaff accelerator. Target was 50 μ g/cm 2 isotopically enriched 30 Si on thick Ta or 300 μ g/cm 2 Ag₂S (81.1% 36 S). The γ rays were detected with four Ge detectors. Measured E γ , I γ , $\gamma\gamma$ -coin. Deduced levels.

⁴⁴Ca Levels

E(level) [†]	$J^{\pi \ddagger}$
0	0+
1157 <i>1</i>	2+
2283 2	4+
3284 2	6+
5086 2	8+

 $^{^{\}dagger}$ From a least-squares fit to γ -ray energies.

 γ (44Ca)

E_{γ}^{\dagger}	$E_i(level)$	\mathbf{J}_i^{π}	\mathbf{E}_f	\mathbf{J}_f^{π}
1001 <i>I</i>	3284	6+	2283	4+
1126 <i>1</i>	2283	4+	1157	2+
1157 <i>1</i>	1157	2+	0	0_{+}
1802 1	5086	8+	3284	6^{+}

 $^{^{\}dagger}$ From 1975Ki07.

[‡] From the Adopted Levels.

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Level Scheme

