

^{167}Yb DECAY

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The level scheme of the deformed nucleus ^{167}Tm has been investigated in the decay of ^{167}Yb using germanium detectors and a magnetic beta spectrograph. The conversion electron spectrum, single gamma-ray spectra and prompt and delayed gamma-gamma-coincidences have been measured. About 45 new transitions have been observed. Most of them have been introduced into a level scheme of ^{167}Tm containing 13 new levels. In the low-energy region besides the rotational bands $1/2^+$ [411], $7/2^+$ [404] and $7/2^-$ [523] the $5/2^-$ and $9/2^-$ members of the $1/2^-$ [541] band could be identified. The possibilities of interpretation of the high-lying levels are discussed basing on the microscopic model.

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