

Octupole excitation in uranium isotopes

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The nuclei ^{230}U and ^{232}U have been studied using the AFRODITE array together with a recoil detector. A comprehensive set of in-band E2 transitions were observed in the lowest lying negative-parity band of ^{232}U while two new E2 transitions were observed for ^{230}U . These allowed ratios to be extracted and compared with systematics in the actinide region. The values are similar to those of their Th and Ra isotones. Therefore these results contradict the tetrahedral prediction in the actinide region.

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