Production and Investigation of K isomers in ^{256}Rf

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K-isomers occur in deformed, axially-symmetric nuclei, (where K is the projection of the total angular momentum on the symmetry axis). K-isomers have been observed in A~130 and A~180 regions. High-K states are also predicted to occur near A=250 in the deformed trans-fermium region. So far there has been relatively little structure information on nuclei in this region of the chart of nuclides due to small production cross sections. However, recent experiments have studied the decay of high-K isomers in ^{252,254}No yielding important information on these multi-quasiparticle states. I will describe our recent identification of high-K isomeric states in ^{256}Rf. Nuclei of interest were produced via the ^{208}Pb(^{50}Ti, *2n*)^{256}Rf reaction at the Lawrence Berkeley National Laboratory's 88-Inch Cyclotron and the decay was studied at the focal plane of the Berkeley Gas-filled Separator (BGS).

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