ISOLDE Workshop and Users meeting 2016



Contribution ID: 4 Type: Submitted

Coulomb excitation of 206 Po and 208,210 Rn

Thursday 8 December 2016 09:30 (15 minutes)

The $B(E2;2_1^+\to0_1^+)$ values have been measured in the 208,210 Rn and 206 Po nuclei by employing Coulomb excitation in inverse kinematics at CERN-ISOLDE using the MINIBALL γ -ray spectrometer. These nuclei have been proposed to lie in, or at the boundary of the region where the seniority scheme should persist. However, contributions from collective excitations are likely to be present when moving away from the N=126 shell closure. Such an effect is confirmed by the observed increased collective $2_1^+\to0_1^+$ transitions. Experimental results have been interpreted with the aid of theoretical studies carried out within the BCS-based QRPA framework. The present work contributes to understanding of nuclear structure around the doubly closed-shell nucleus 208 Pb.

Primary author: GRAHN, Tuomas

Presenter: GRAHN, Tuomas

Session Classification: HIE-ISOLDE Results