

Title:

Measurement of Fission Fragment Anisotropies for Proton-Induced Fission of ^{209}Bi and ^{197}Au Nuclei at several energies

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Abstract:

The angular distribution of fission fragments has been measured for proton- induced fission of ^{197}Au and ^{209}Bi nuclei at several energies between 25 and 30 MeV using surface- barrier detectors. The measured anisotropies are found to be in agreement with the predictions of the standard saddle- point statistical model. The measured anisotropies for neither of the nuclei show any anomalous behavior as a function of both energy and entrance channel mass asymmetry. The fission cross sections of ^{198}Hg and ^{210}Po nuclei were also measured and compared with that of the previous works.