

Spontaneous fission half lives in various macroscopic-microscopic models

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The problem of the description of the spontaneous fission for the all region of superheavy nuclei is still present in the theoretical investigations. In the report we show the results of calculation of fission barriers and spontaneous fission half lives for superheavy nuclei in the region of $Z = 104-120$ in mean field model. We examined four distinct macroscopic models and two types of pairing interaction. The approach is based on the deformed Woods-Saxon potential. Spontaneous fission half-lives are calculated within a multi-dimensional dynamical-programming method where the action integral is minimized within the three dimensional space of the nuclear deformation parameters.