

POSSIBILITIES OF SYNTHESIS OF SUPERHEAVY NUCLEI IN HOT FUSION REACTIONS

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The actinide-based hot fusion reactions with stable projectiles heavier than ^{48}Ca are analyzed within the dinuclear system model for compound nucleus formation. Predictions for several reactions with radioactive beams for the synthesis of heaviest elements are also presented for the future interest. Possibilities of production of new isotopes of superheavy nuclei with charge numbers 104 -108 in incomplete fusion reactions are studied.