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## IMPACT OF QUASIFISSION ON SHE PRODUCTION

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The properties of the mass and energy distributions of fissionlike fragments formed in the reactions  $^{48}\text{Ca}, ^{58}\text{Fe} + ^{208}\text{Pb}, ^{36}\text{S}, ^{48}\text{Ca}, ^{48}\text{Ti}, ^{64}\text{Ni} + ^{238}\text{U}, ^{48}\text{Ca} + ^{232}\text{Th}, ^{244}\text{Pu}, ^{248}\text{Cm}$  at energies around the Coulomb barrier have been analyzed to define the systematic trend of compound nucleus fission and quasifission in cold and hot fusion reactions. The measurements have been carried out at the U400 cyclotron of the FLNR, JINR using the double-arm time-of-flight spectrometer CORSET. The fusion probabilities have been deduced from the analysis of mass and energy distributions. It was found that for the studied reactions fusion probability depends exponentially on mean fissility parameter of the system. For the reactions with actinide nuclei leading to the formation of superheavy elements the fusion probabilities are of several orders of magnitude higher than in the case of cold fusion reactions.

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