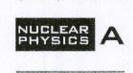




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Fission fragment mass distribution studies in 30 Si + 180 Hf reaction

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Abstract

Fission fragment mass-angle and mass ratio distributions have been measured for the 30 Si + 180 Hf reaction in the beam energy range 128–148 MeV. Quasifission signature is observed in this reaction, forming the compound system 210 Rn. The results are compared with a very asymmetric reaction 16 O + 194 Pt, forming the same compound nucleus. Calculations assuming saddle point, scission point and DNS models have been performed to interpret the experimental results. The results strongly suggest the entrance channel dependence of quasifission in heavy ion collisions.

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