

Isoscaling study of binary fission yields

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The isoscaling, which represents the exponential relationship exhibited in the isotopic yields of fragments between two systems with different neutron to proton ratios, can provide a direct link to the symmetry energy coefficient. In our work, the isoscaling relationships were investigated in the binary fission fragment yield of $^{236,234}\text{U}$ targets induced by the thermal neutrons. With the experimental and evaluated fission yield data away from stronger shell effects region, we extracted information of symmetry energy coefficients and its temperature dependence. Based on the isoscaling relationship and the values of extracted isoscaling parameters, one could make predictions for fission yield for unmeasured U isotopes.

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