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Development of A Web Toolkit for Calculating (α, n) Induced Neutron Yield and Energy Spectrum¹ CHAO ZHANG, DONGMING MEI, the University of South Dakota — Neutrons from (α, n) reactions induced by natural radioactivity are important sources of background for low-background experiments such as direct detection of dark matter and neutrinos. A web toolkit has been built for calculating (α, n) neutron yield and neutron energy spectrum induced by ^{238}U , ^{232}Th and Sm decays in all possible elements or compound. We describe the web toolkit that offers neutron yield and energy spectrum in terms of customized input.

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