TABLE I: Fermi-distribution parameters from Ref. [52]. "c" is the adjusted half-density radius for the charge distribution and "a" is the diffuseness parameter.

Target	$^{112}\mathrm{Sn}$	¹¹⁴ Sn	$^{116}\mathrm{Sn}$	¹¹⁸ Sn	$^{120}\mathrm{Sn}$	$^{122}\mathrm{Sn}$	¹²⁴ Sn
c(fm)	5.3714	5.3943	5.4173	5.4391	5.4588	5.4761	5.4907
a(fm)	0.523	0.523	0.523	0.523	0.523	0.523	0.523

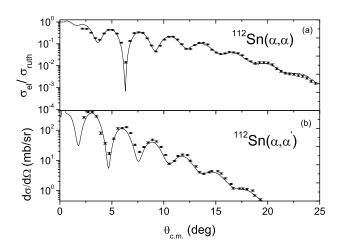


FIG. 4: (a) Ratio of the elastic α -scattering cross sections to the Rutherford cross sections for 112 Sn at 386 MeV. (b) Differential cross sections for excitation of the 2_1^+ state in 112 Sn. The solid lines are the results of the folding-model calculations.

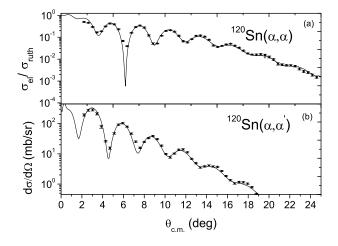


FIG. 5: Same as Fig. 4, except for $^{120}\mathrm{Sn}.$