

Abstract Submitted  
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**Interaction and reaction cross sections calculations in the Glauber theory framework** IVAN NOVIKOV, Western Kentucky University, YULI SHABELSKI, Petersburg Nuclear Physics Institute — The parameters of nuclear densities can be extracted from the comparison between experimentally measured interaction cross sections and reaction or interaction cross sections calculated in optical approximation or using exact expressions of the Glauber theory. The difference between reaction and interaction cross sections between stable isotopes with atomic weight  $A < 40$  was calculated in various approximations as well as using exact expressions. In addition, the cross sections of the processes with excitation or disintegration of one or both nuclei were calculated in the same approximations. Lastly, we will discuss the accuracy of the obtained results.

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