

Abstract Submitted  
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**Low Energy Electron Impact Ionization of Neon and Xenon<sup>1</sup>**

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— Experimental doubly differential cross-sections for electron impact ionization of  
Neon and Xenon will be presented. The measurements were taken at incident en-  
ergies ranging from near-threshold to below the second ionization threshold of the  
target and are the only set of data present in this range. Despite the fact that the  
targets are left similarly with an ionized P-core, the results show significant differ-  
ences between the targets in terms of angular distributions as well as the shapes of  
single differential cross-sections for these two targets, and imply dynamics in the post  
collision which differ between the two targets, and suggest that relativistic effects  
(spin-orbit coupling) may be important.

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