

核物理

不同能量下核束缚能的影响

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摘要

在不同能量下, 利用核束缚能对虚光子四动量的平方项进行修正, 分别计算了Sn核碰撞中核束缚能对反应截面中湮灭项和康普顿散射项及K因子的影响。结果表明, 核束缚能在小x区域对反应截面中湮灭项和康普顿散射项及K因子的影响明显, 并且能量越低这种影响越显著, 随着x<sup>2</sup>增大影响逐渐消失。

We made a revision of square of virtual photon four momentum by means of using nuclear binding energy formula in different energy, and we also made an accurate calculation for the effect of nuclear binding energy on K factor and Compton term and annihilate term in the Drell Yan process of the Sn-Sn collision. The outcome indicates that the effect of nuclear binding energy on the annihilate term and the Compton term is marked in little x region and the effect will become more obvious with decrease of the energy and come to disappear with increase of the x.

关键词 [Drell Yan过程](#); [量子色动力学](#); [核束缚能](#)

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