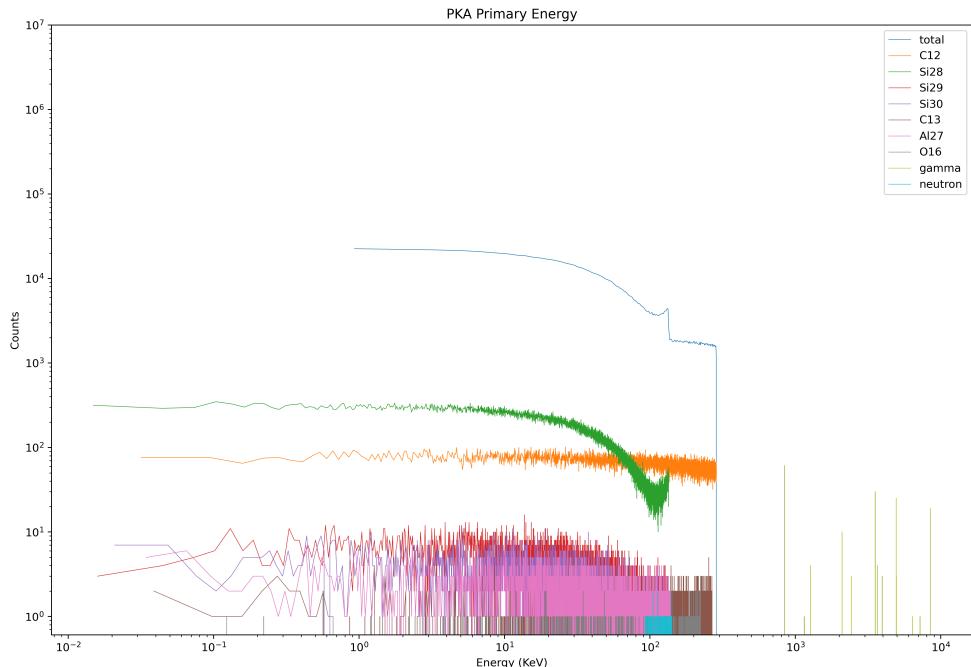


PKA数据处理

PKA初始能量分布

所有粒子种类：

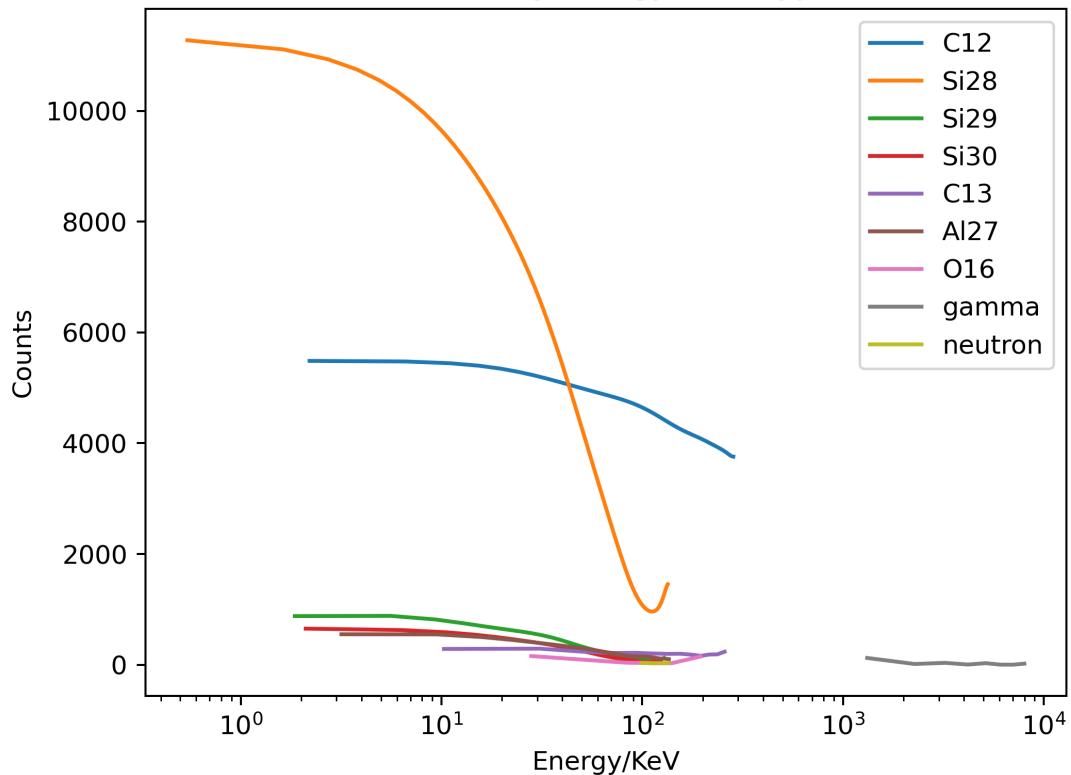


Note: 由于粒子初始能量均为离散的，故统计一个个小区间内的数目，区间数由Freedman-Diaconis rule确定

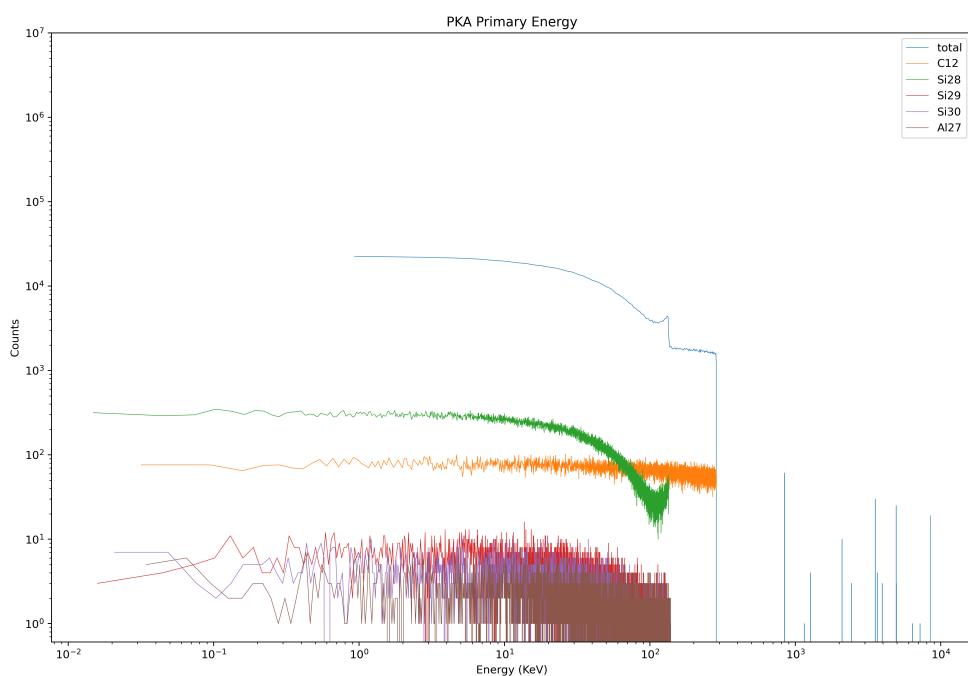
```
iqr = np.percentile(preKE_t, 75) - np.percentile(preKE_t, 25)
bin_size = 2 * iqr / (len(preKE_t) ** (1/3))
num_bins = int((max(preKE_t) - min(preKE_t)) / bin_size)
# calculate the histogram
counts, bins = np.histogram(preKE_t, bins=num_bins)
```

曲线拟合：

PKA Primary Energy of all types

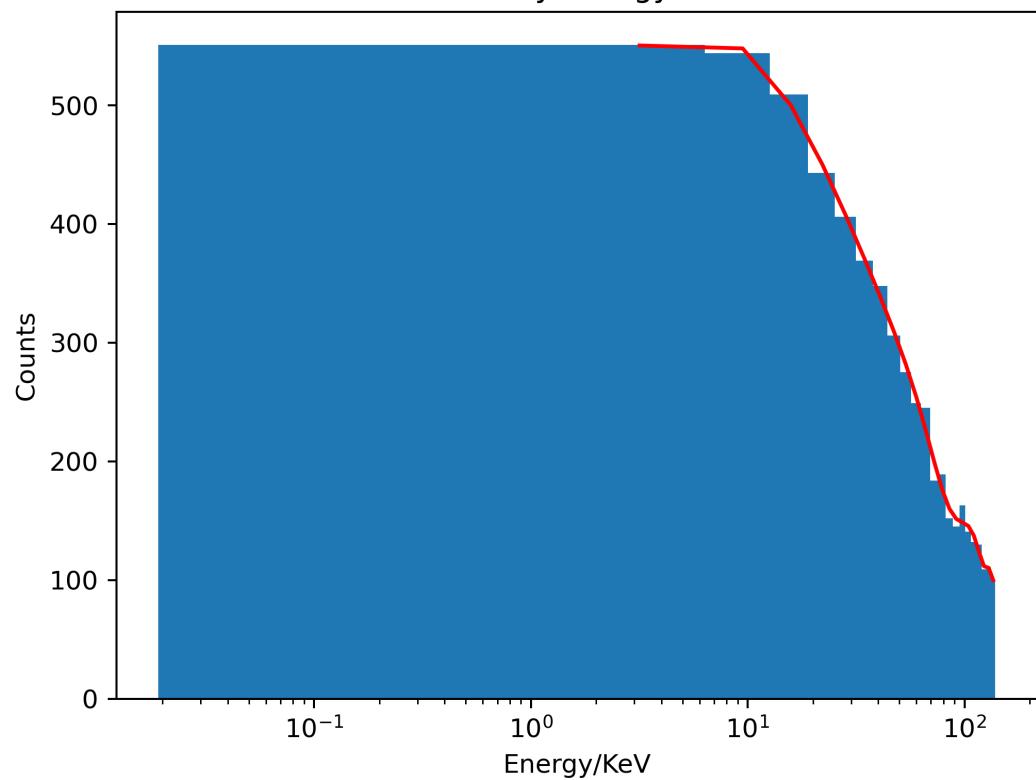


主要粒子:

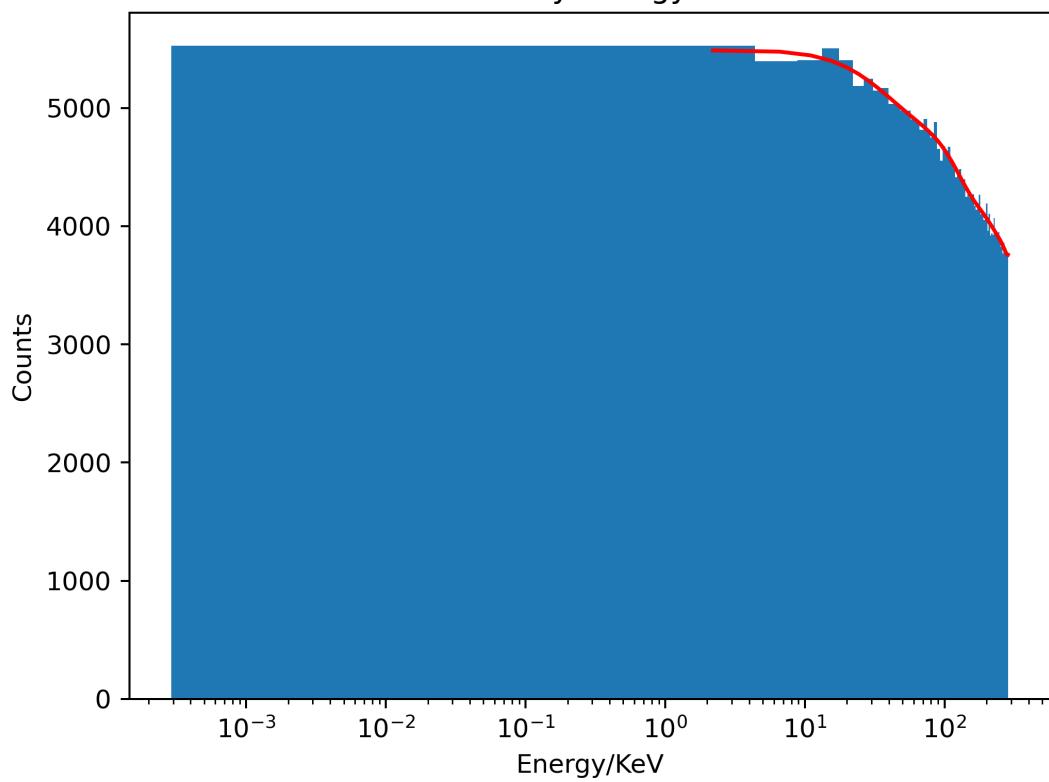


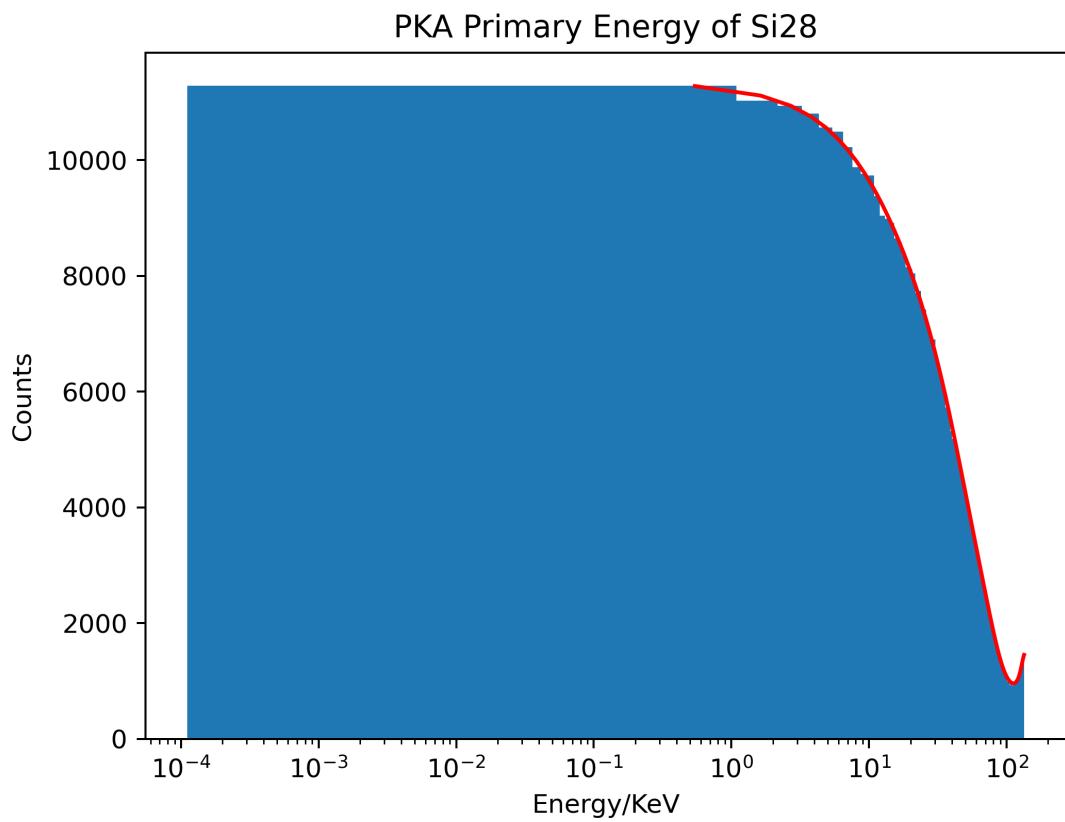
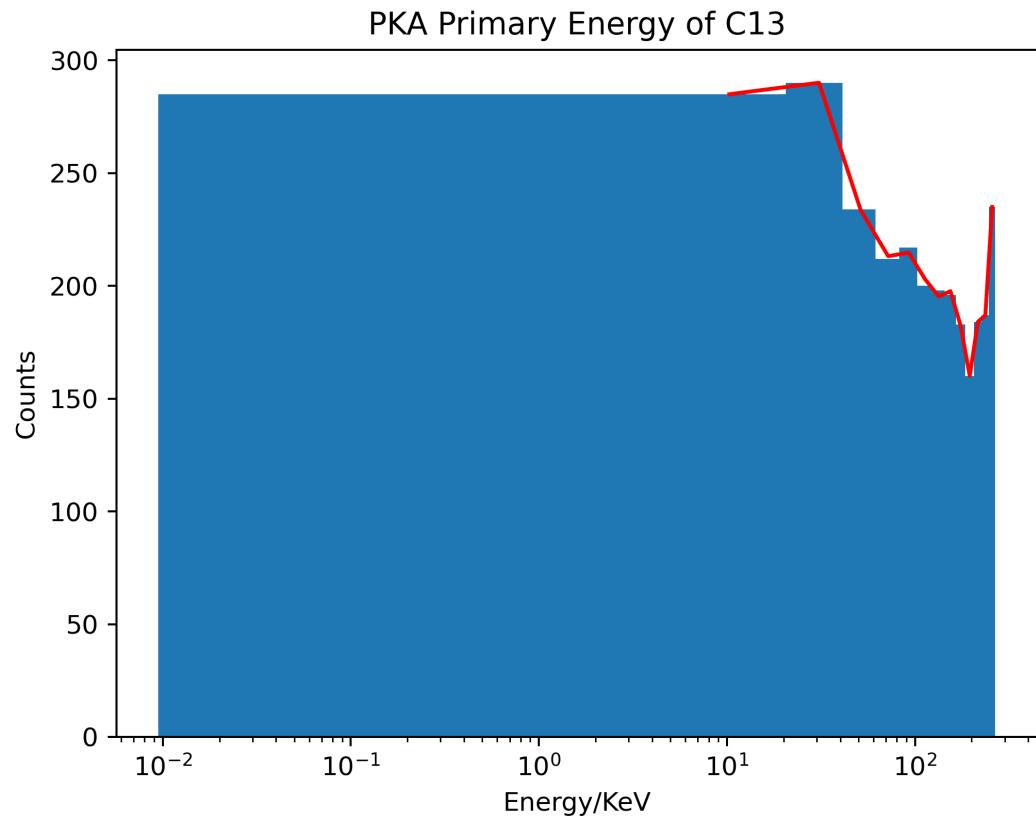
各粒子:

PKA Primary Energy of Al27

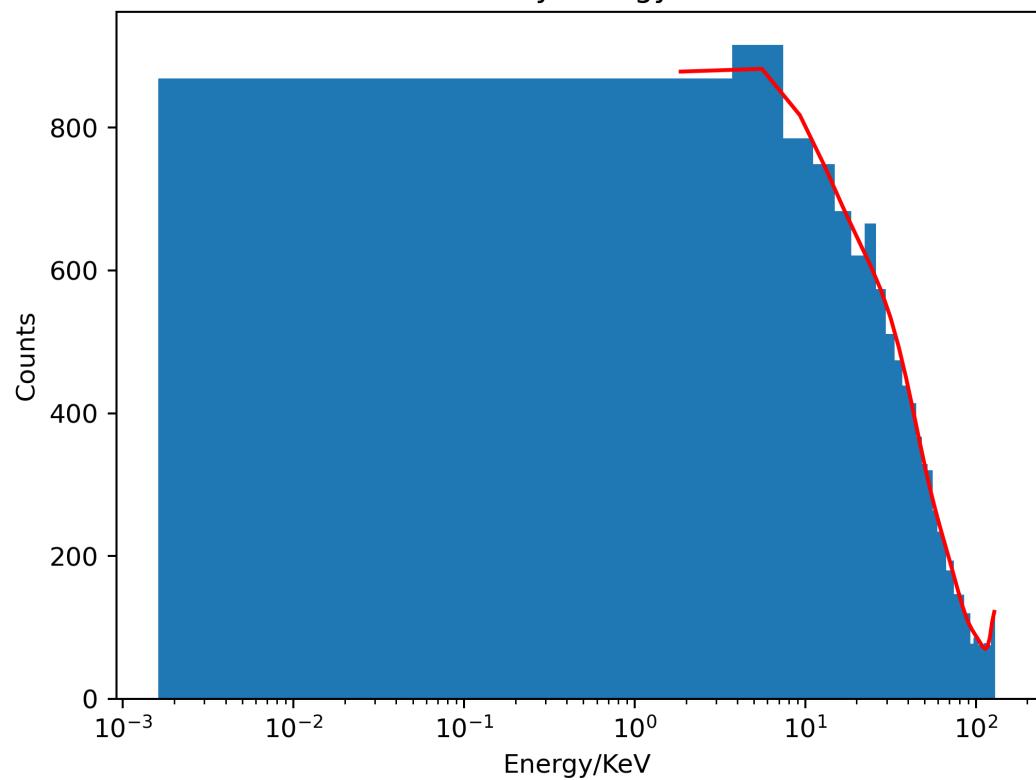


PKA Primary Energy of C12

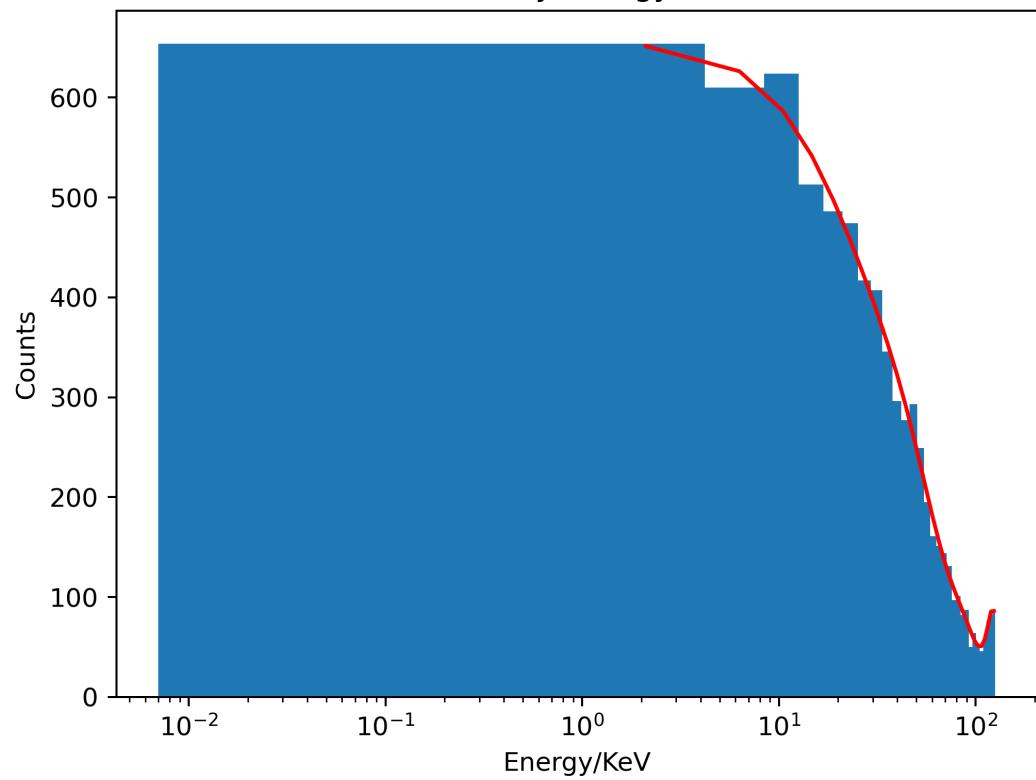


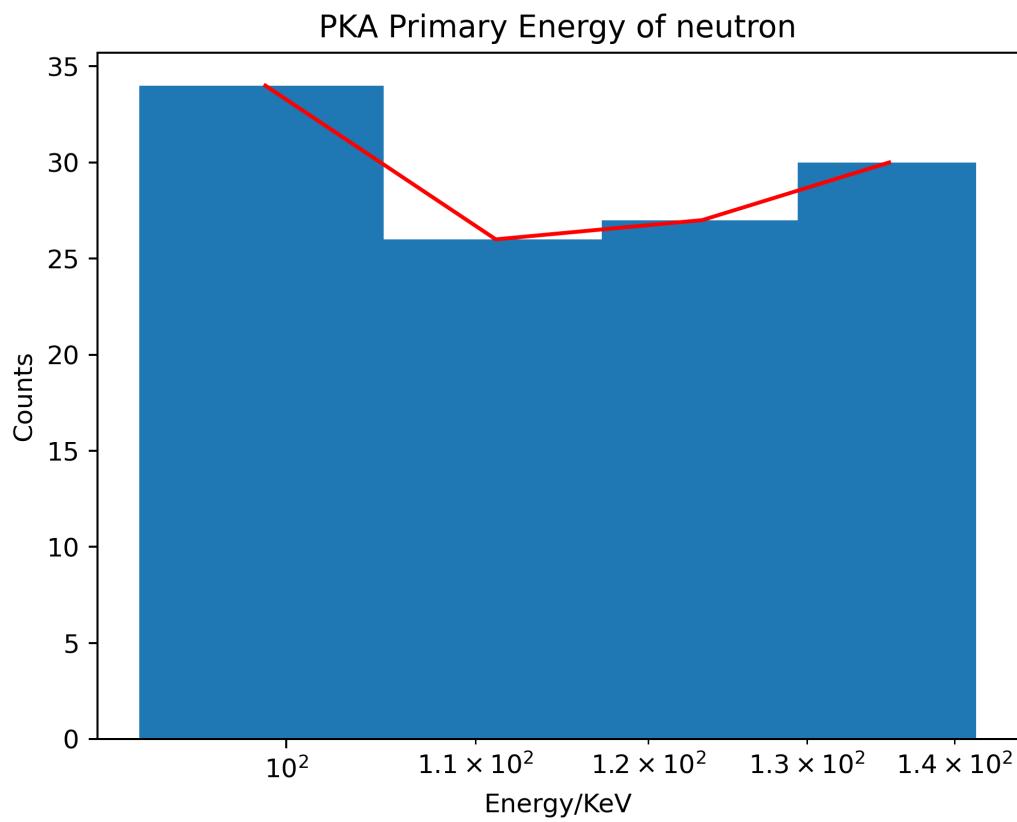
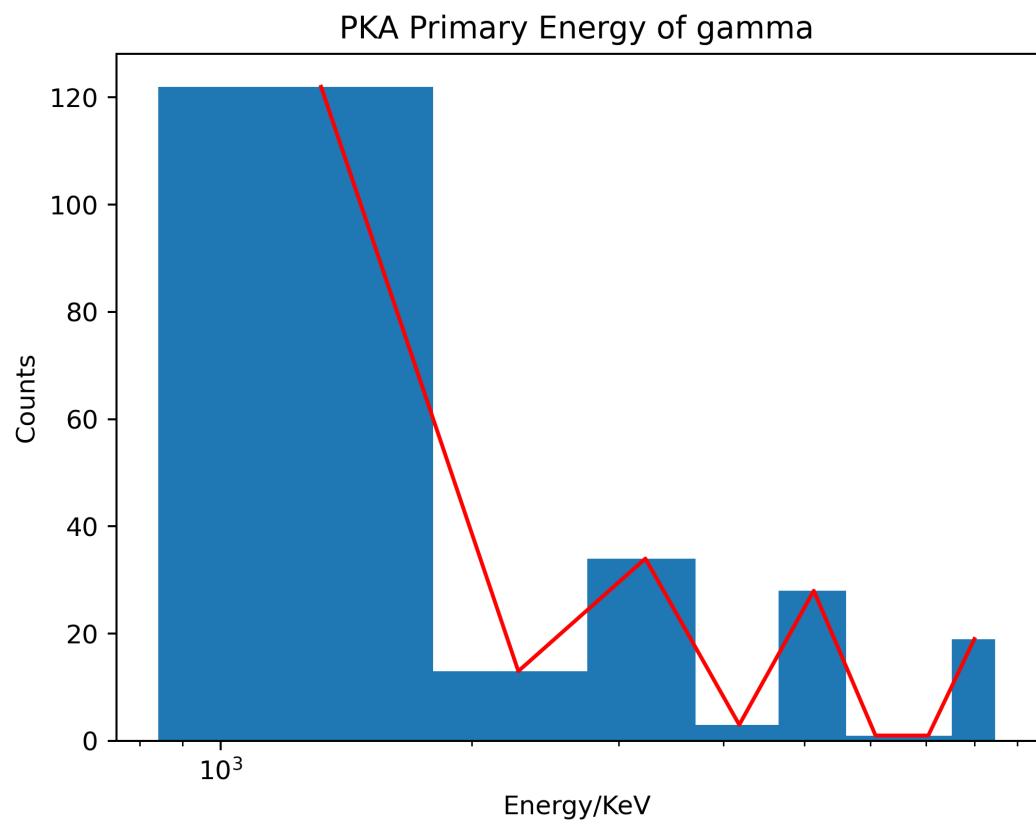


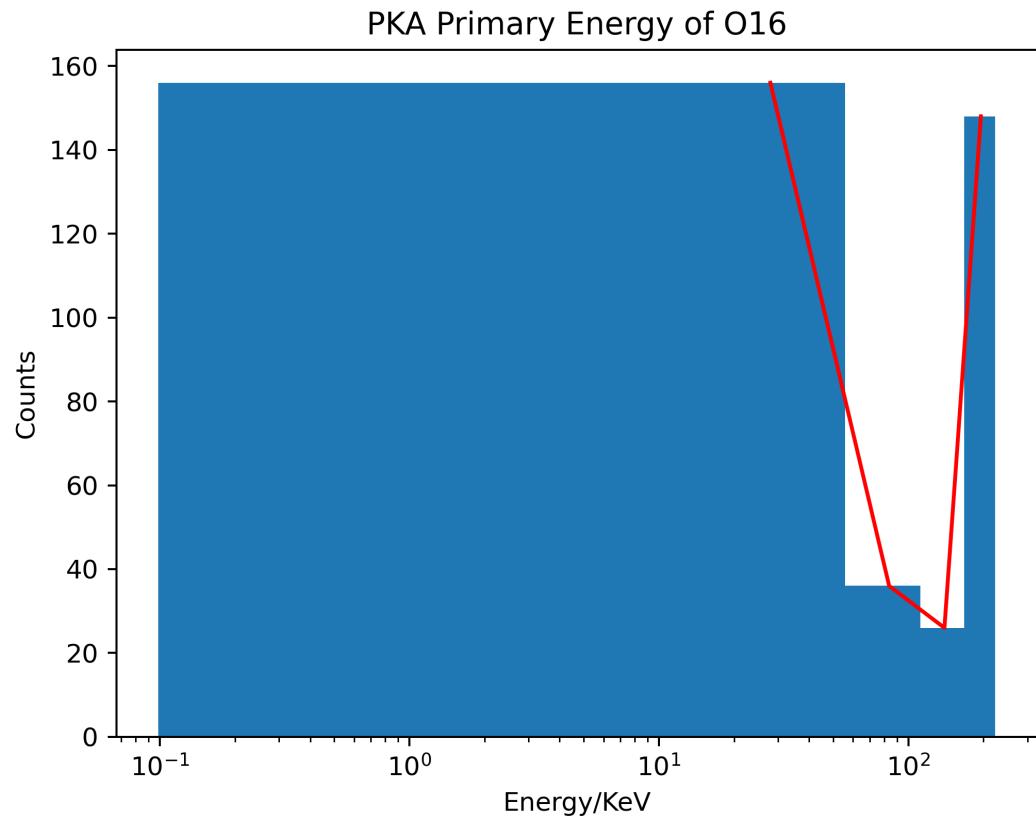
PKA Primary Energy of Si29



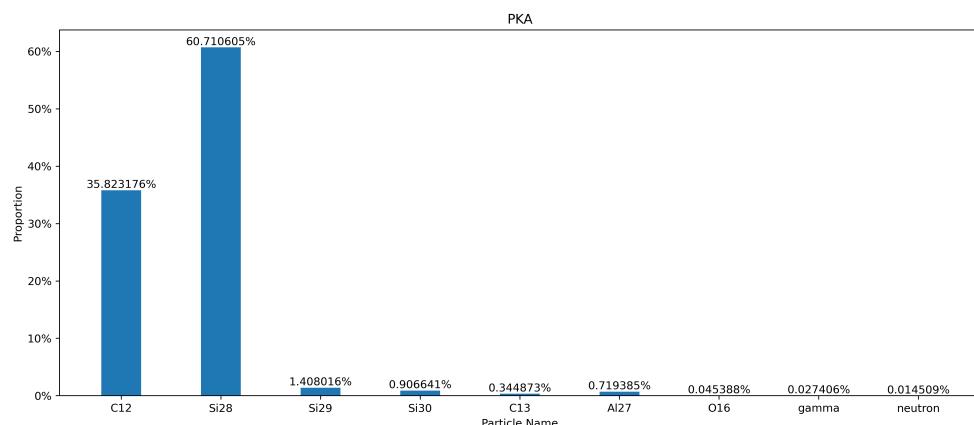
PKA Primary Energy of Si30



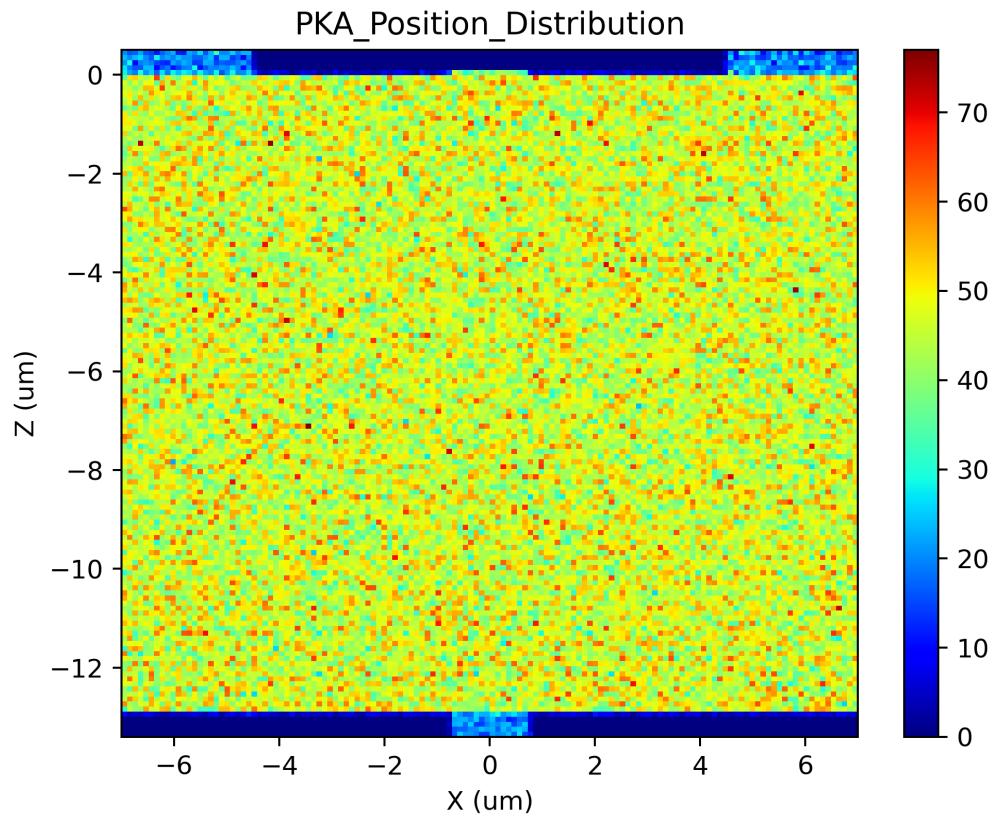




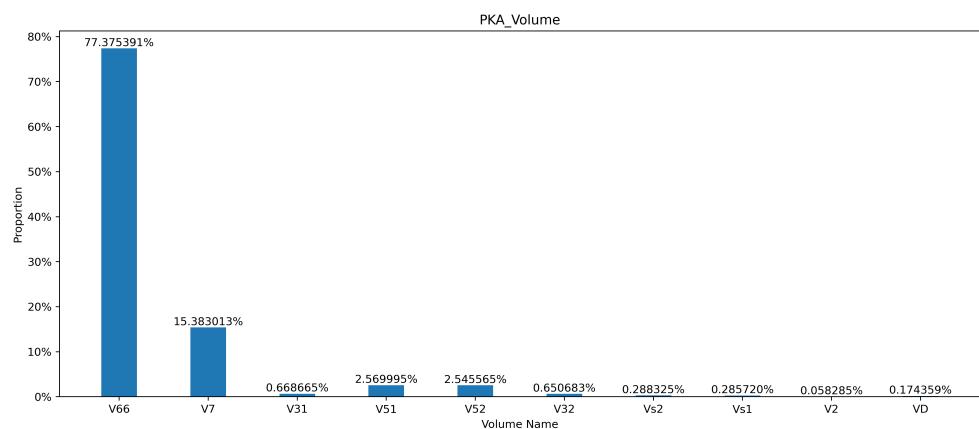
PKA粒子种类



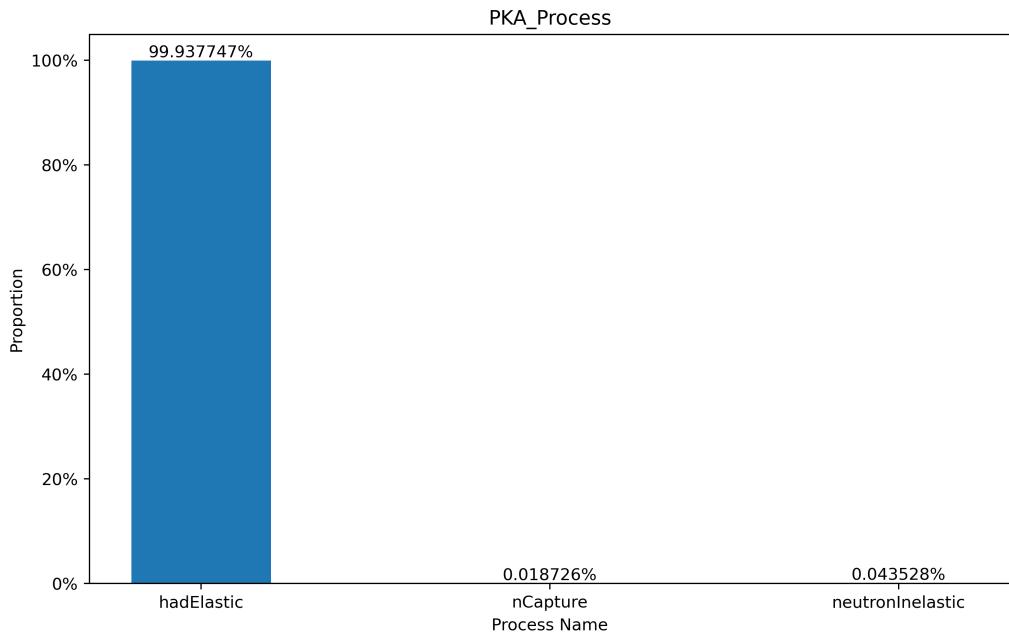
PKA产生位置分布



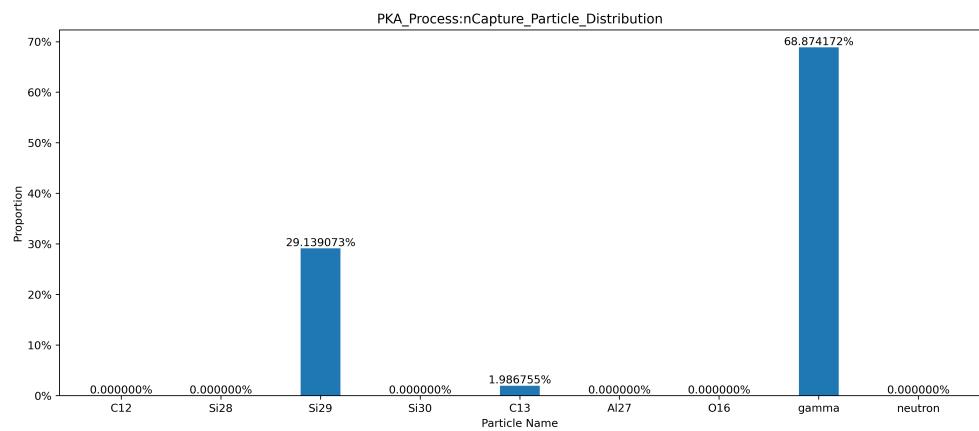
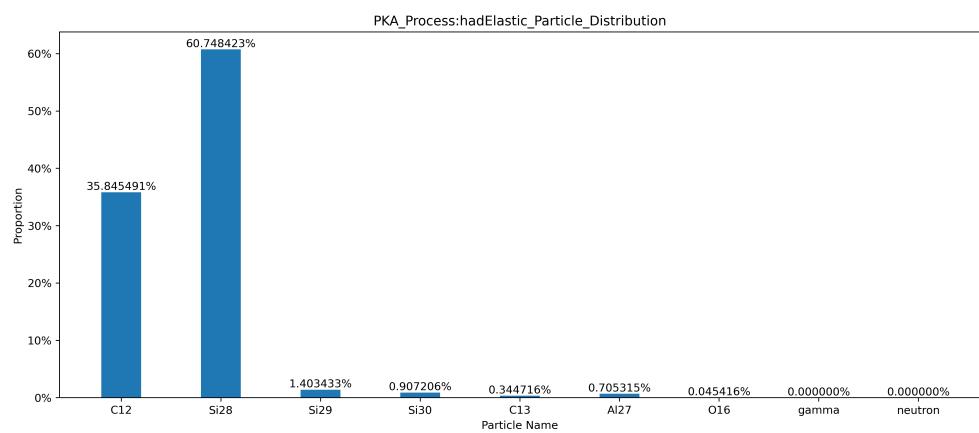
体积分布：

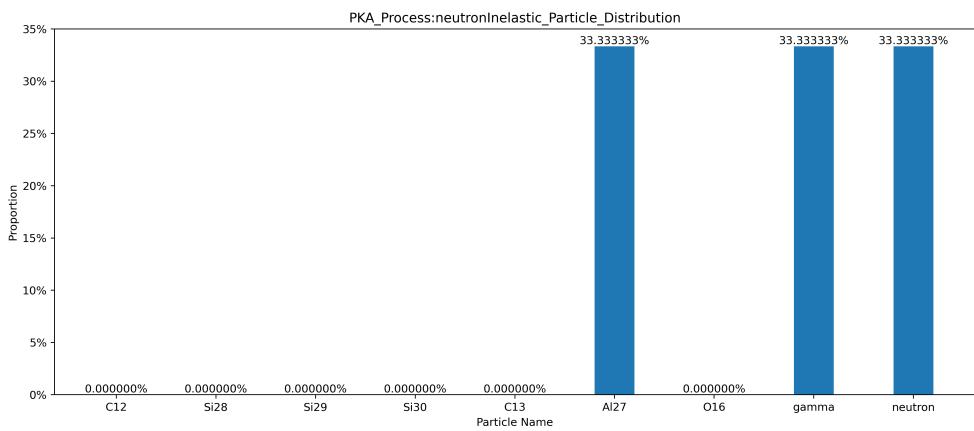


产生PKA反应类型

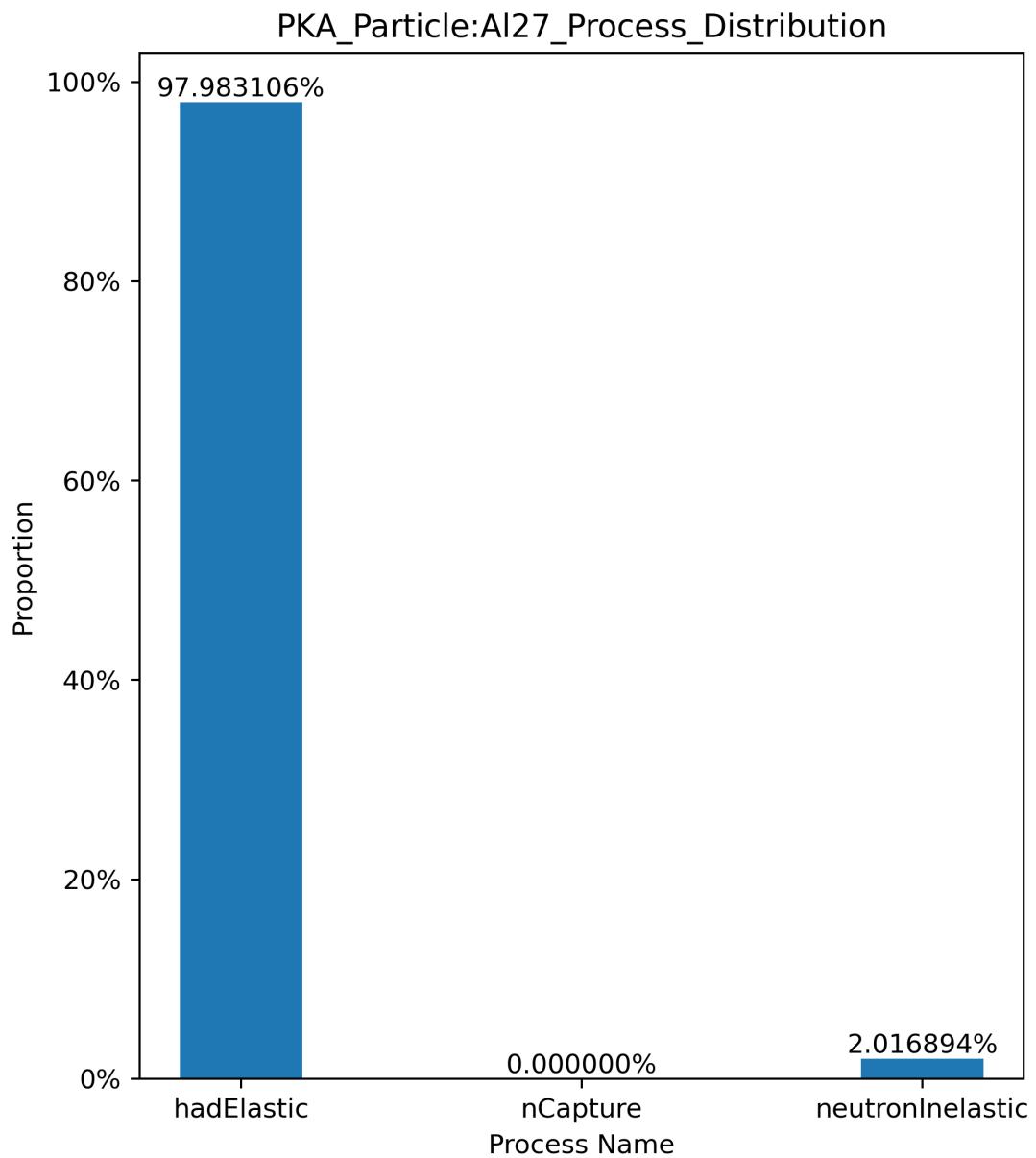


各反应类型产生的PKA种类：

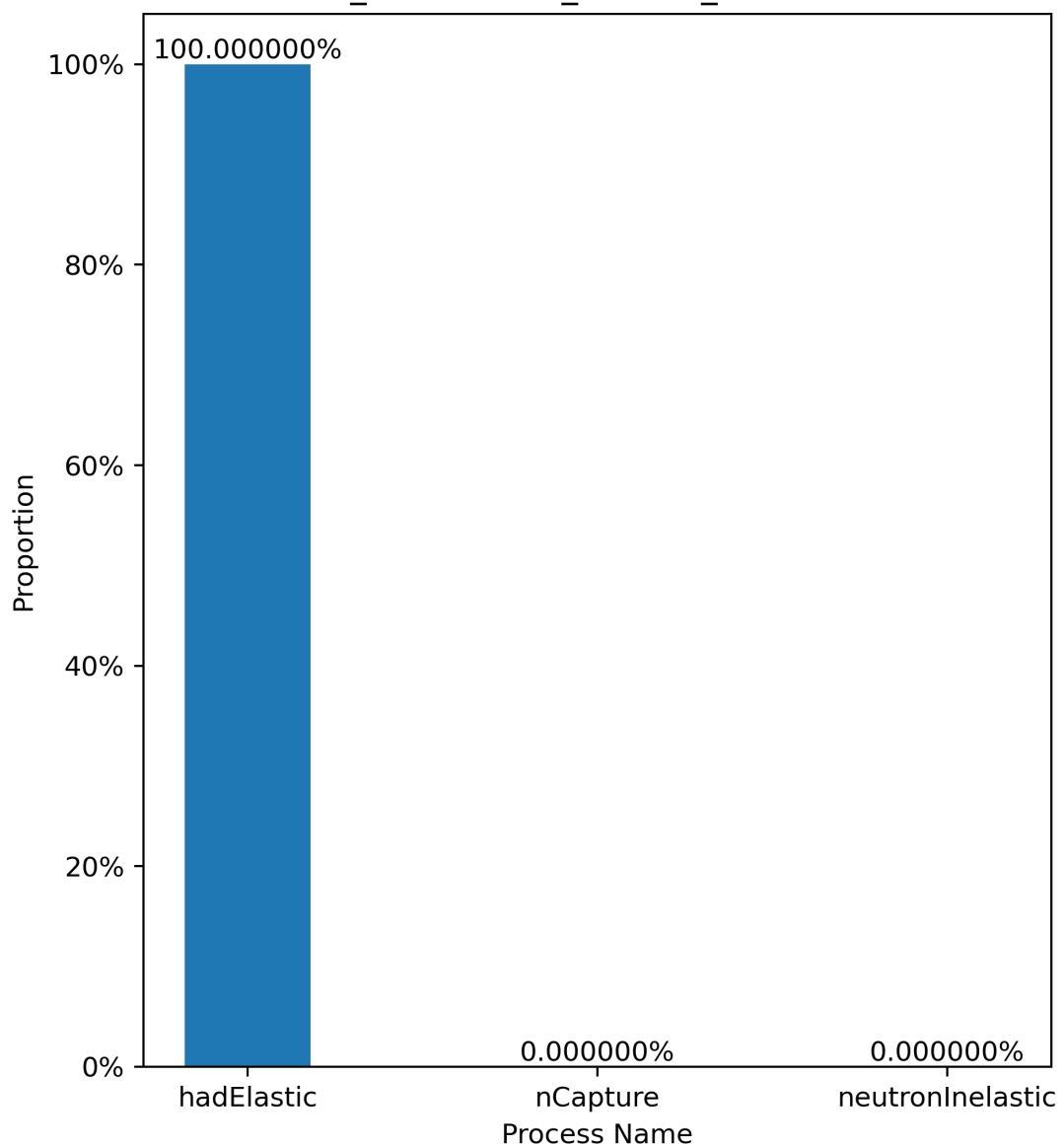




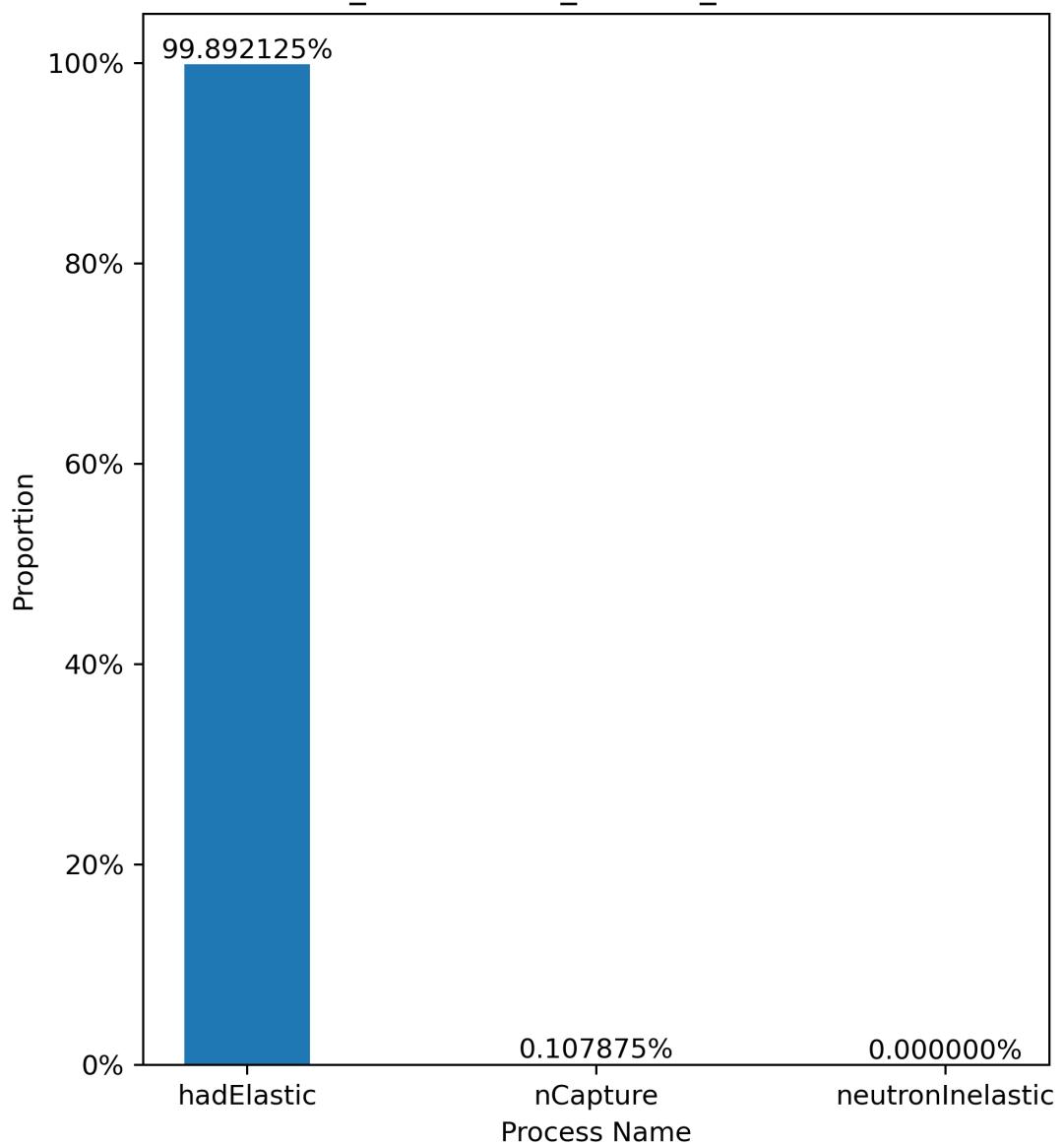
各类PKA所属反应：

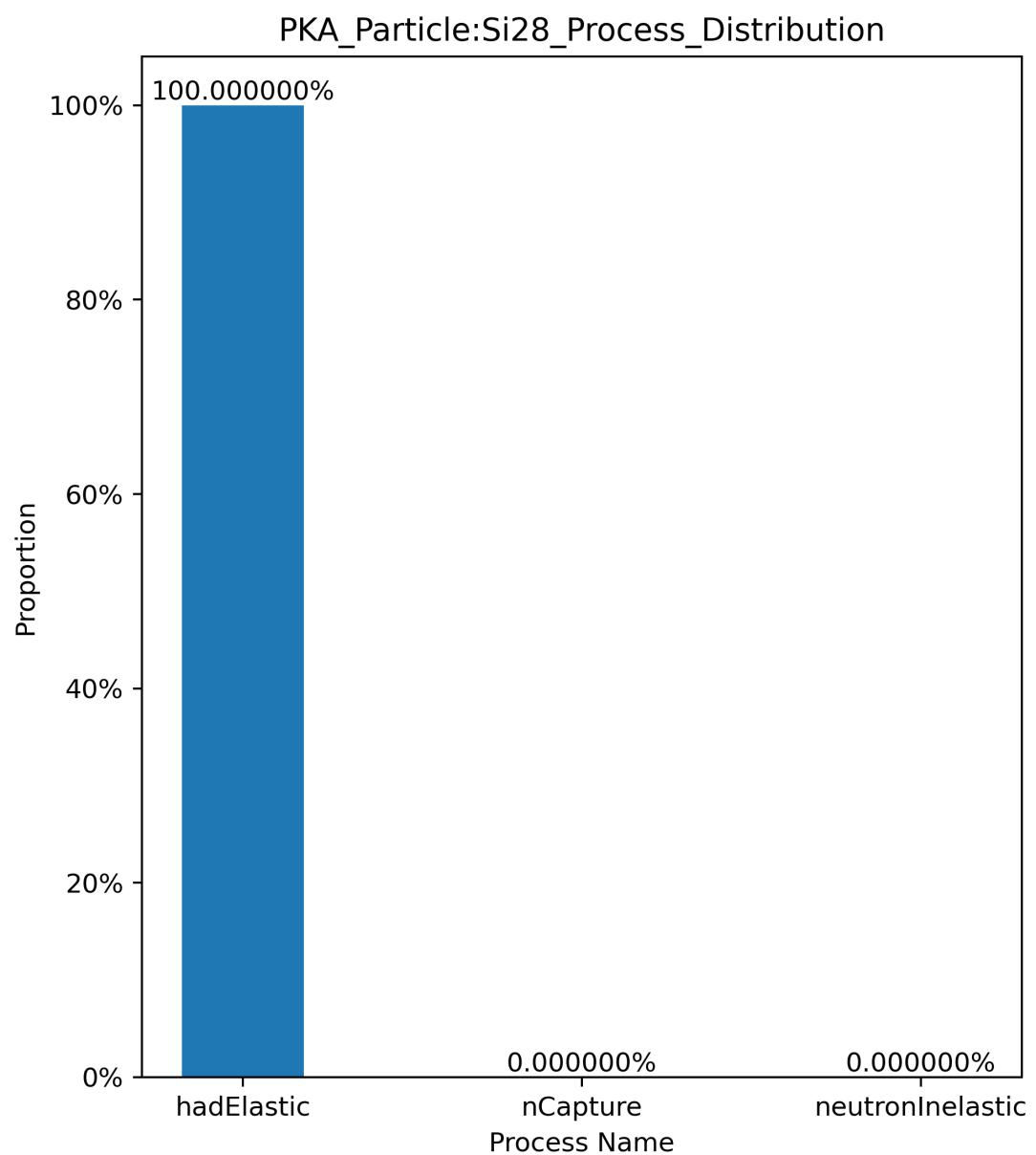


PKA_Particle:C12_Process_Distribution

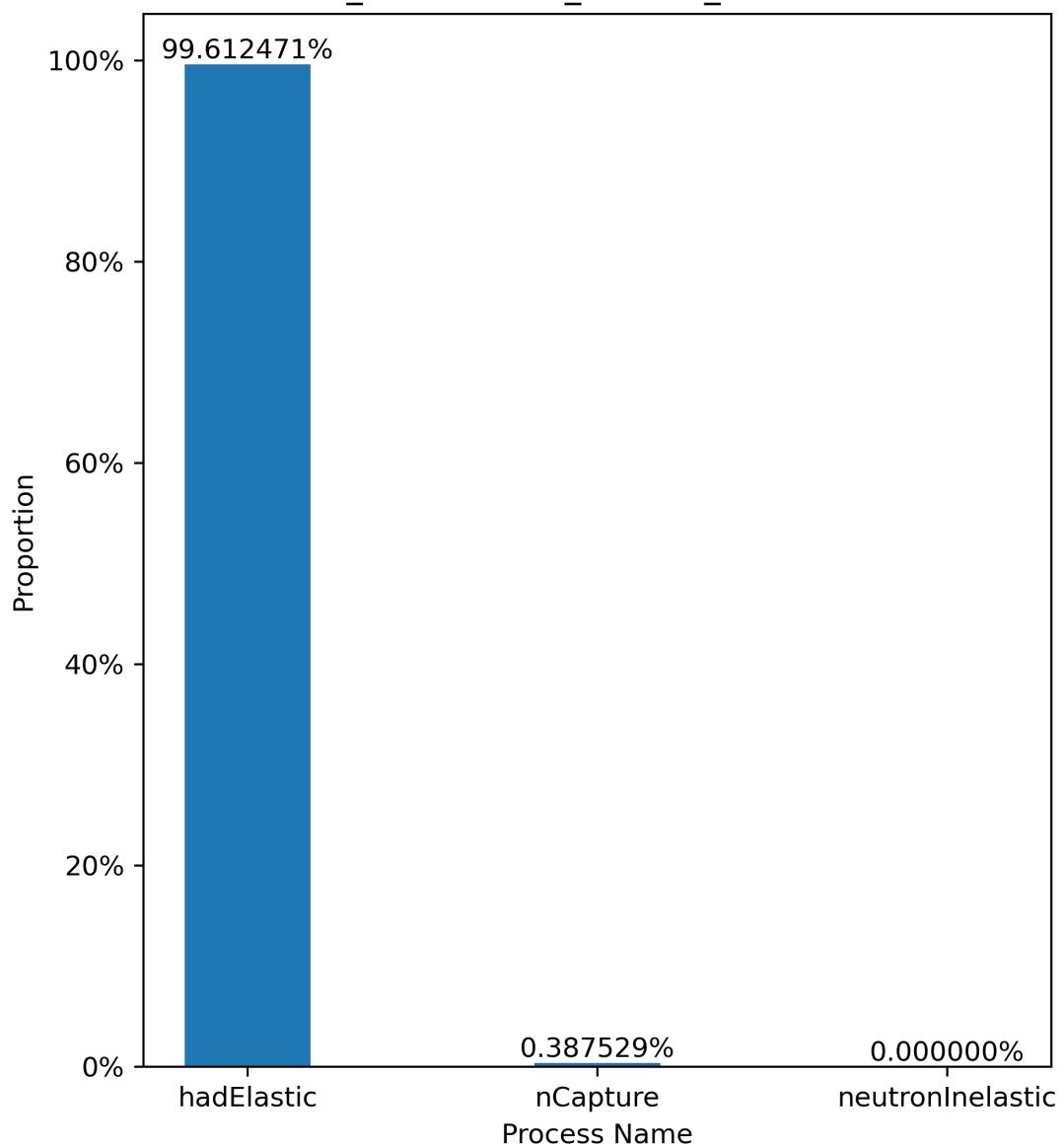


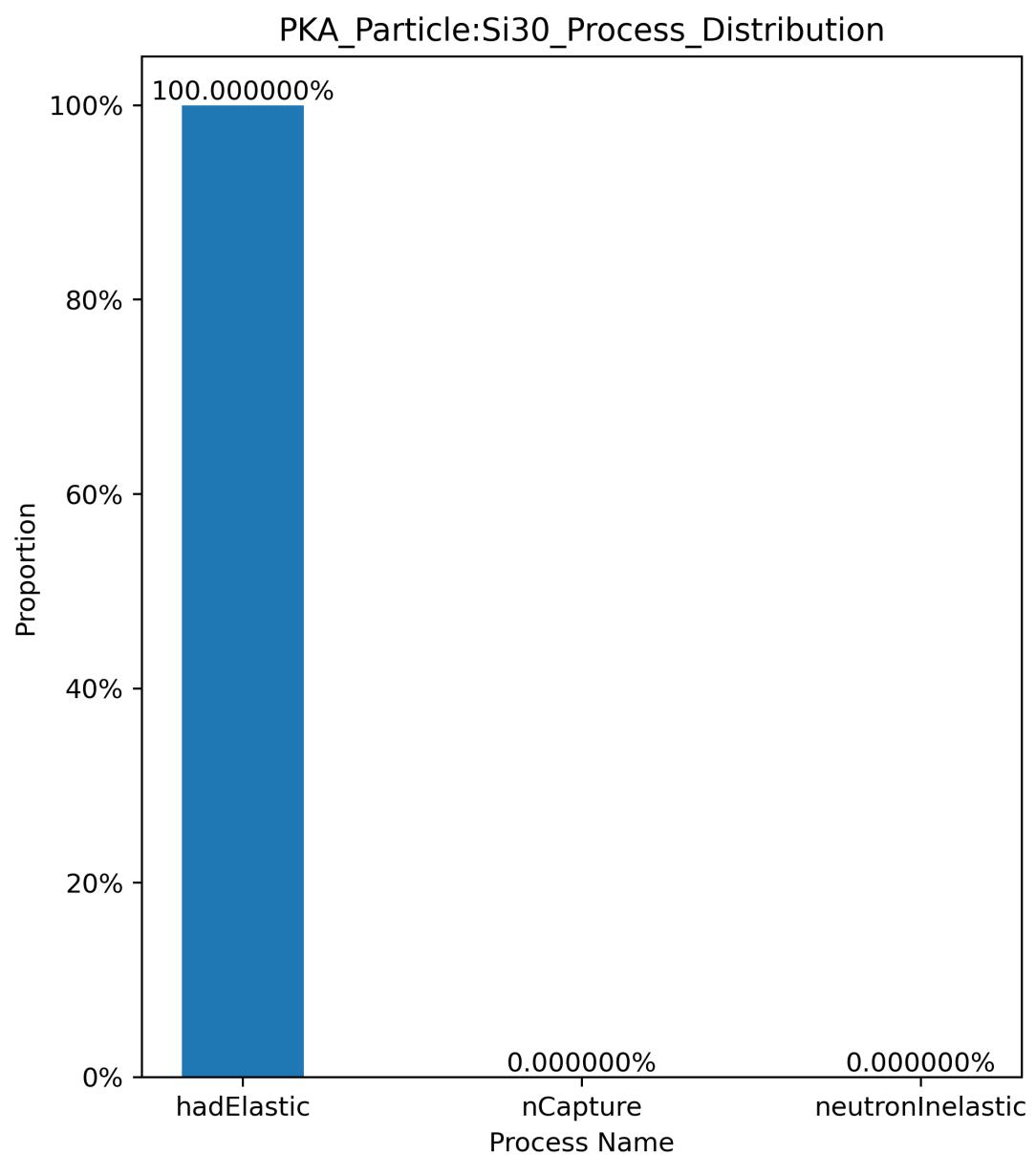
PKA_Particle:C13_Process_Distribution



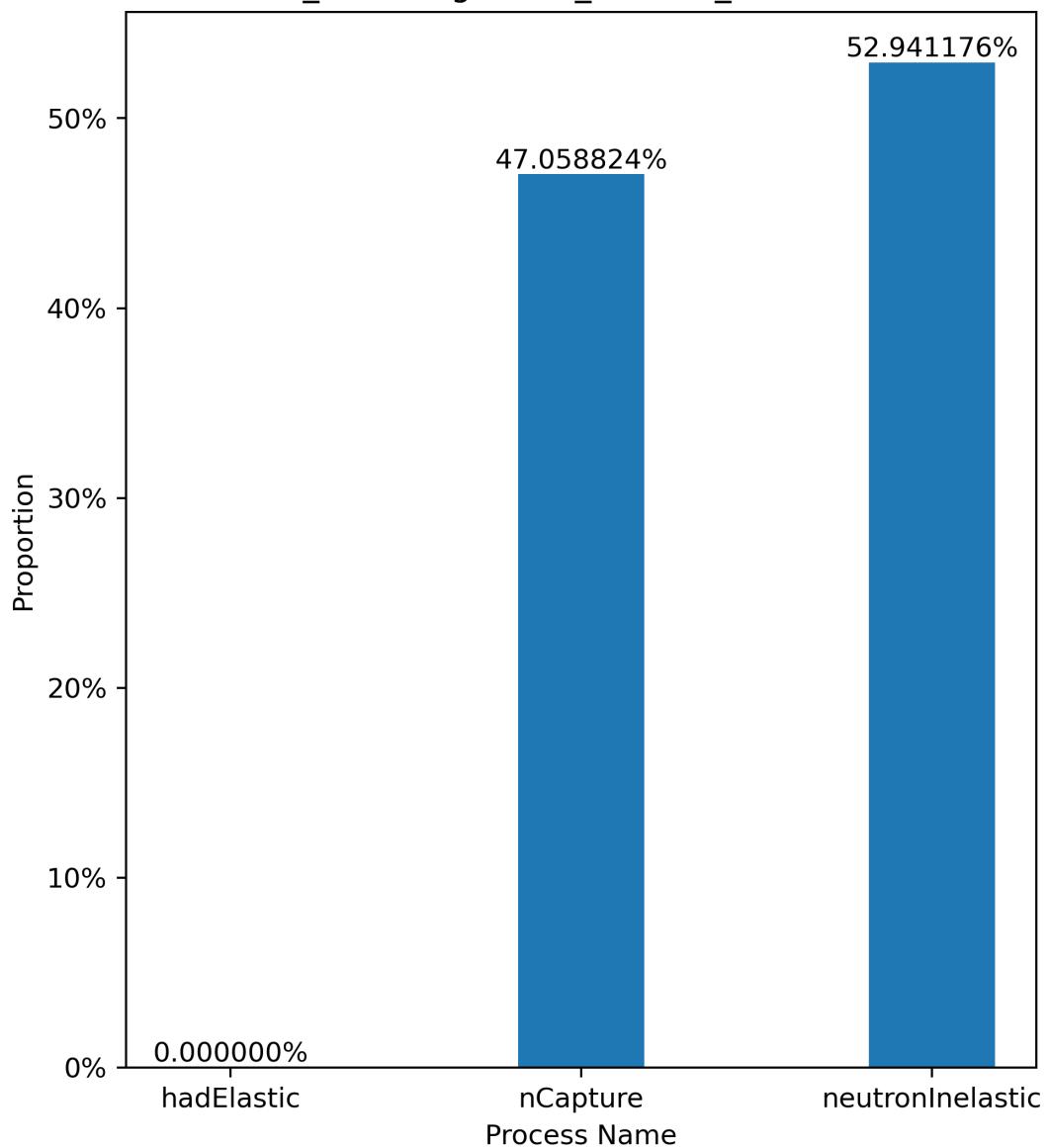


PKA_Particle:Si29_Process_Distribution

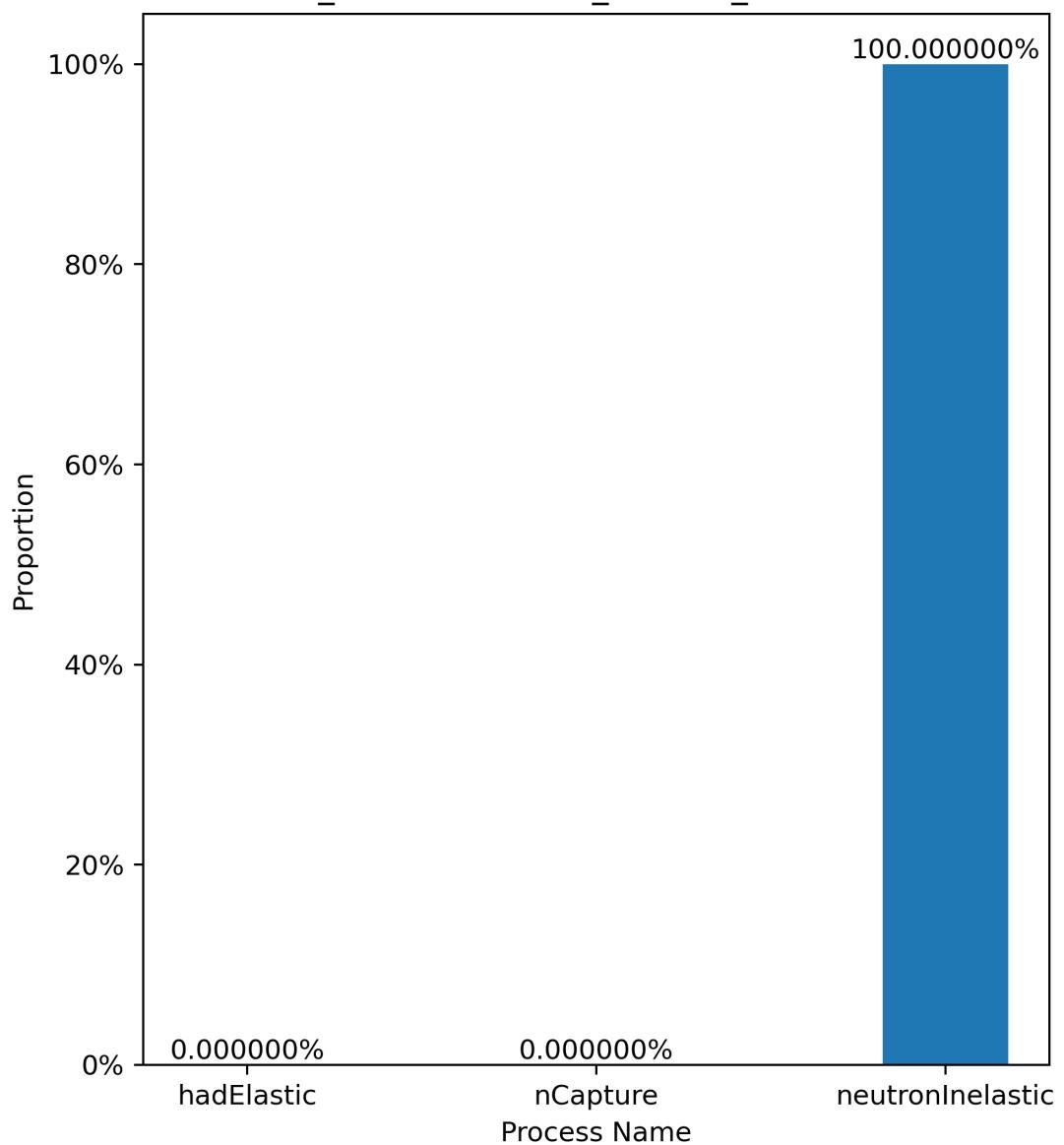




PKA_Particle:gamma_Process_Distribution



PKA_Particle:neutron_Process_Distribution



PKA_Particle:O16_Process_Distribution

