

Group meeting

WD 的调整

在低能的情况下，对与弹性微分散射截面后角区的会偏小，这是由于surface absorption 太强所导致的，因此，我们要对表面吸收项的系数 WD 进行一个调整。

我们将 WD 乘以一个系数 γ ，让 γ 在0到1的范围内以0.01的步长变化，每变化一次就计算一次微分散射截面，并求计算值和实验值的方差 χ^2 。

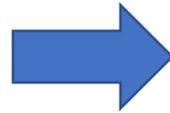
$$\chi^2 = \sum \left[\frac{d\sigma}{d\Omega}(i)_{cal} - \frac{d\sigma}{d\Omega}(i)_{exp} \right]^2$$

选取当 χ^2 有最小值时的那次计算的微分散射截面，看看其与实验数据是符合的较好。

WD 的调整

C12+Pb208 体系

E (MeV)	gamma
56.5	0.00
57.0	0.00
58.9	0.05
60.9	0.00
62.9.	0.30
64.9	0.37
69.9	0.57
74.9	0.67
84.9	0.92
118.0	1.00



WD 的调整

C12+Si28 体系

E (MeV)	gamma
22.0	1.00
25.0	1.00
28.0	1.00
32.0	1.00
35.0	1.00
40.9	1.00
44.0	1.00
48.0	0.77
56.0	1.00
59.0	1.00
66.0	1.00
69.5	1.00
70.0	1.00

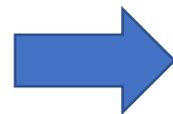


WV 的调整

我们并没有得到想要的结果, 下面我们对WV调整来看看, 同样我们也给WV一个系数 γ' 。

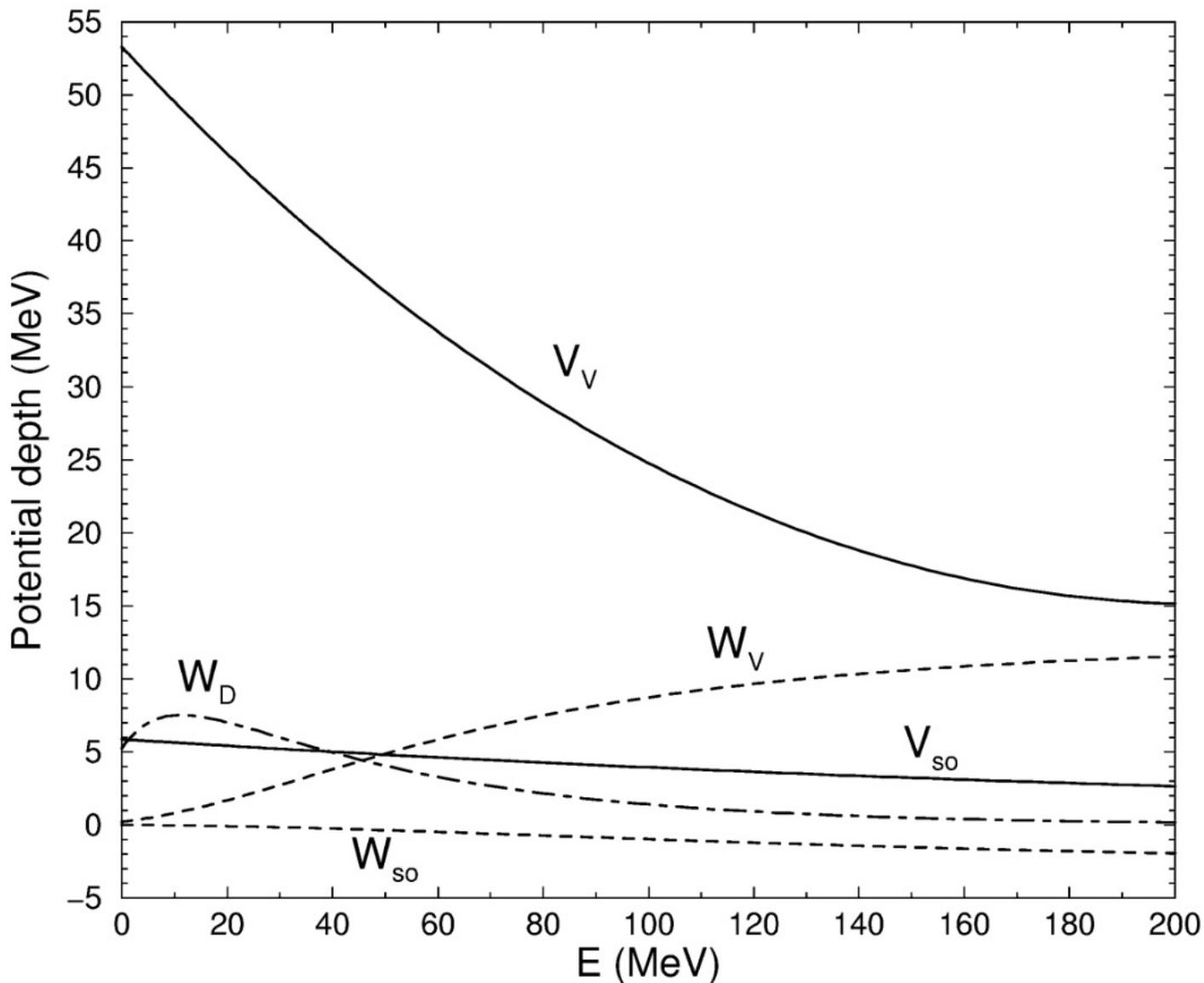
C12+Pb208 体系

E (MeV)	gamma'
56.5	0.00
57.0	0.00
58.9	0.00
60.9	0.00
62.9.	0.00
64.9	0.00
69.9	0.00
74.9	0.00
84.9	0.00
118.0	1.00

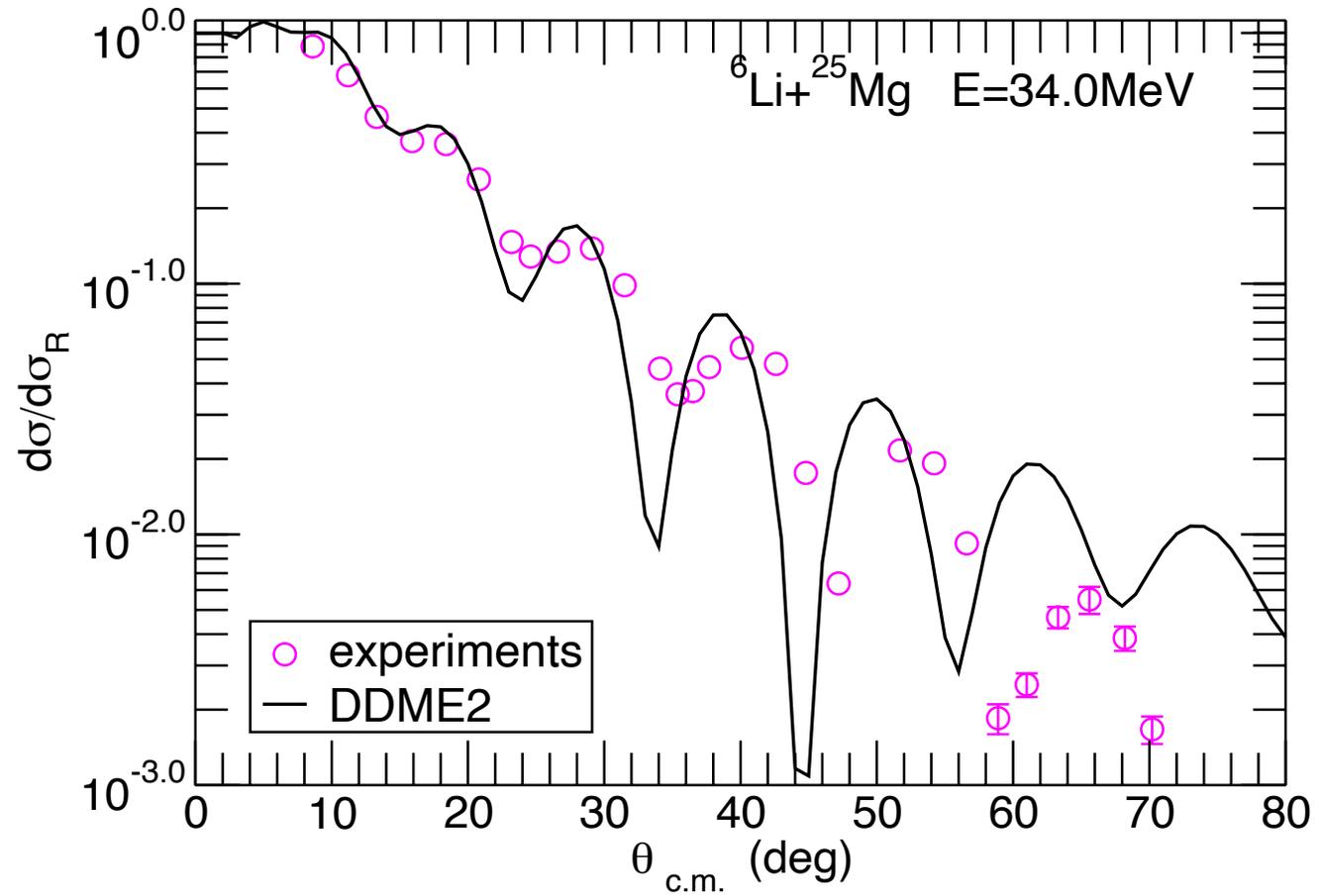


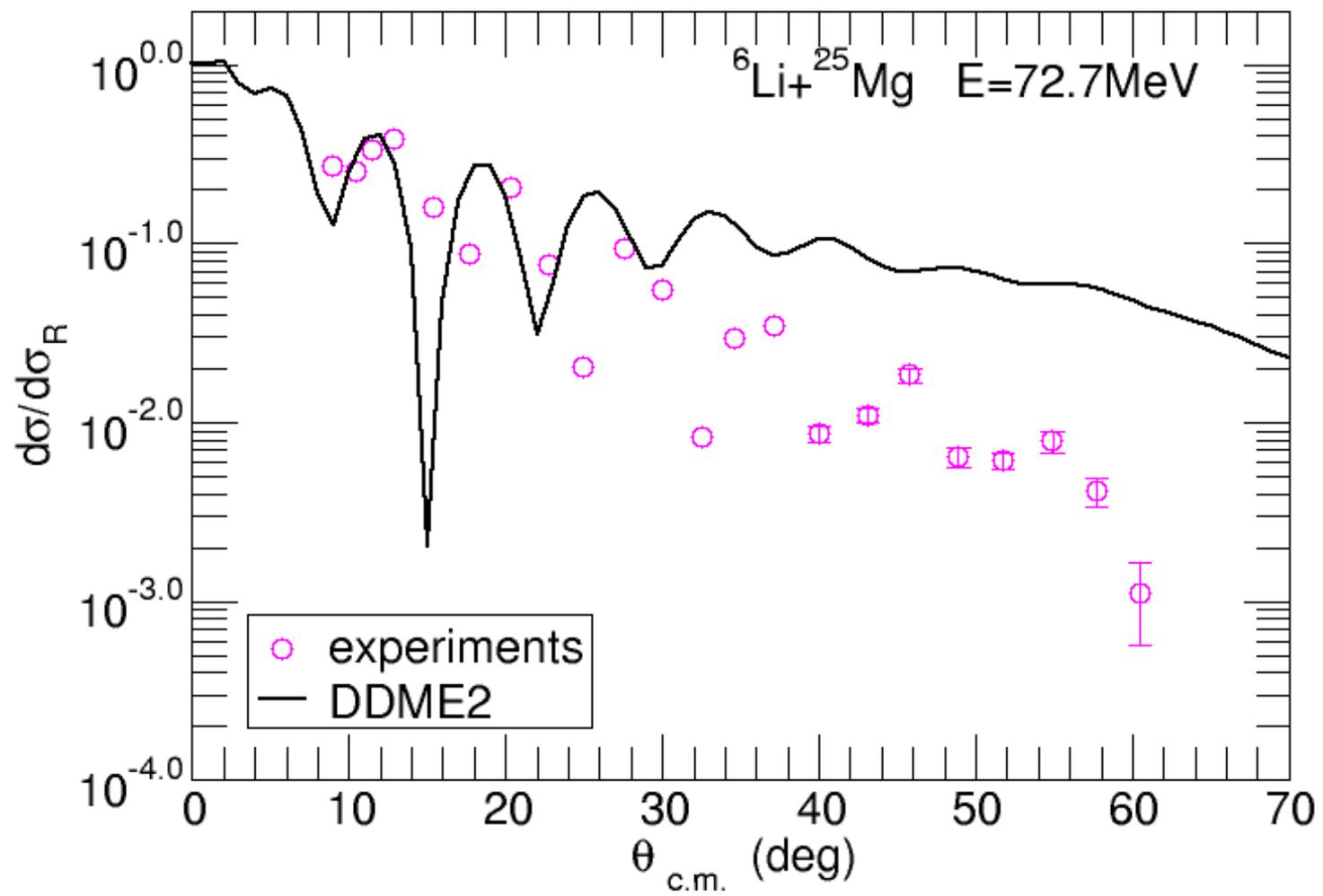
WV 的调整

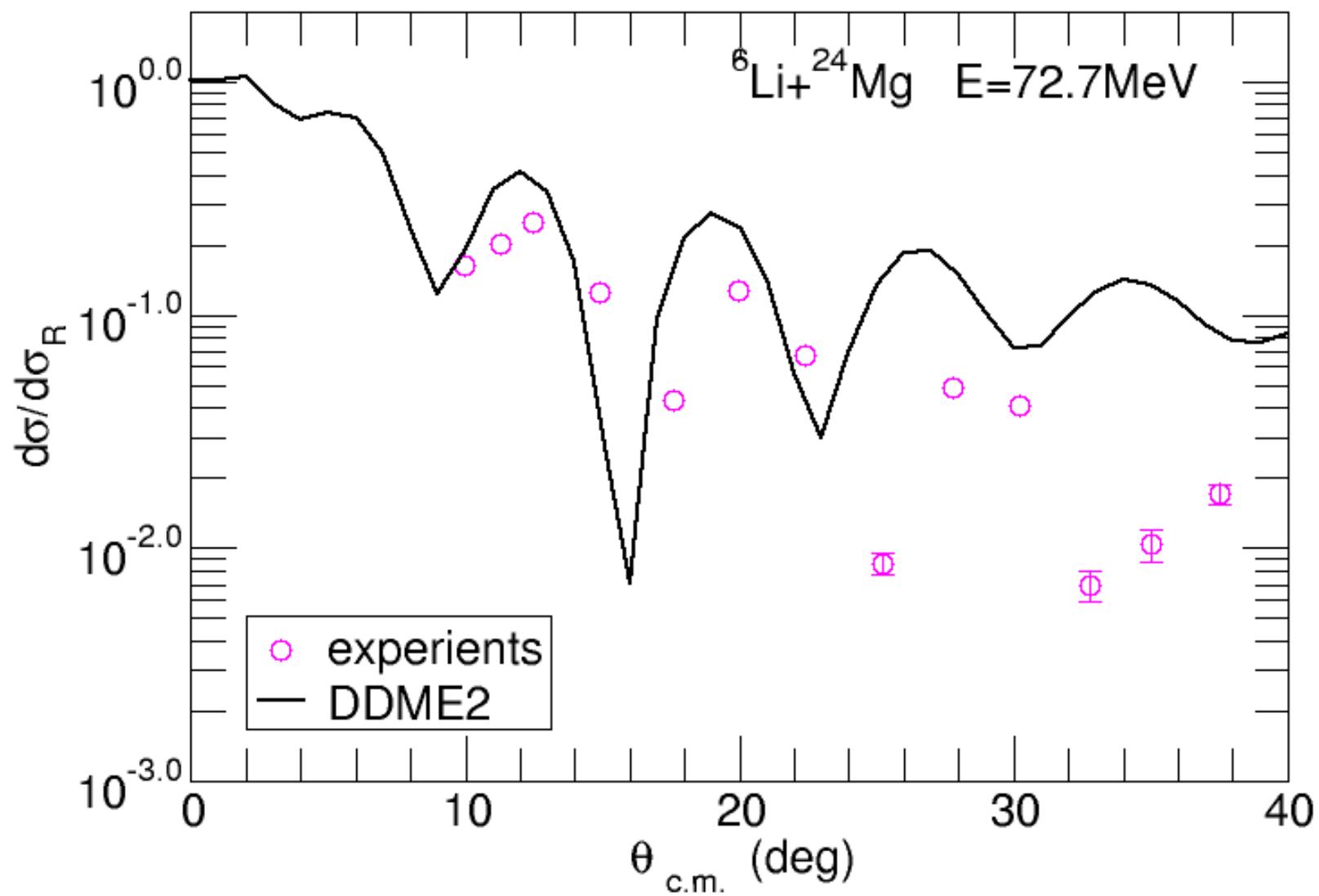
实际上，即使在能量为 118.0MeV 时，单个核子的能量也只有 9.83MeV，在这样比较低的能量的情况下， W_V 本来就很小。占主导地位的是 surface 项，有没有体积项虚部几乎对微分散射截面没有影响。

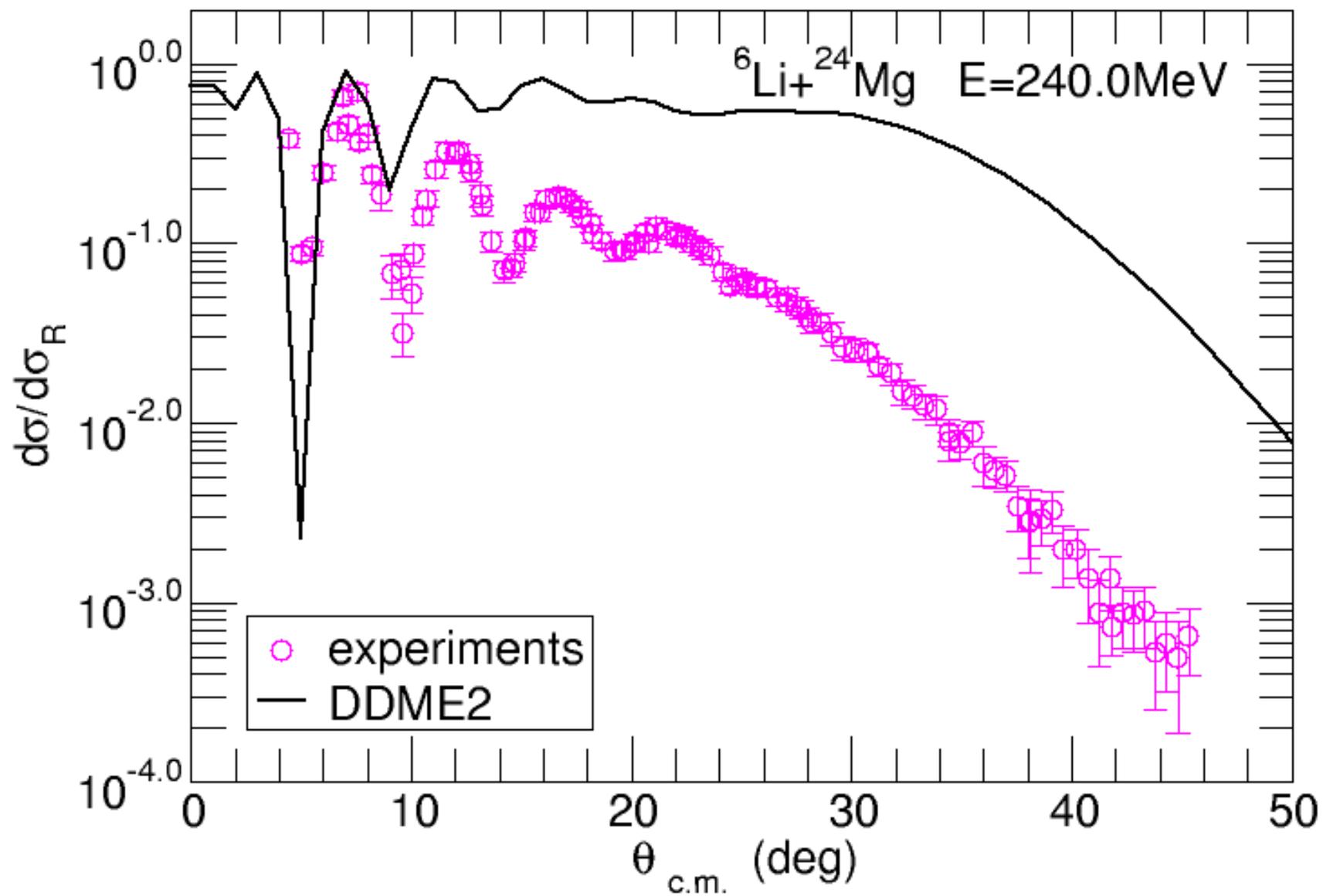


Li6+Mg

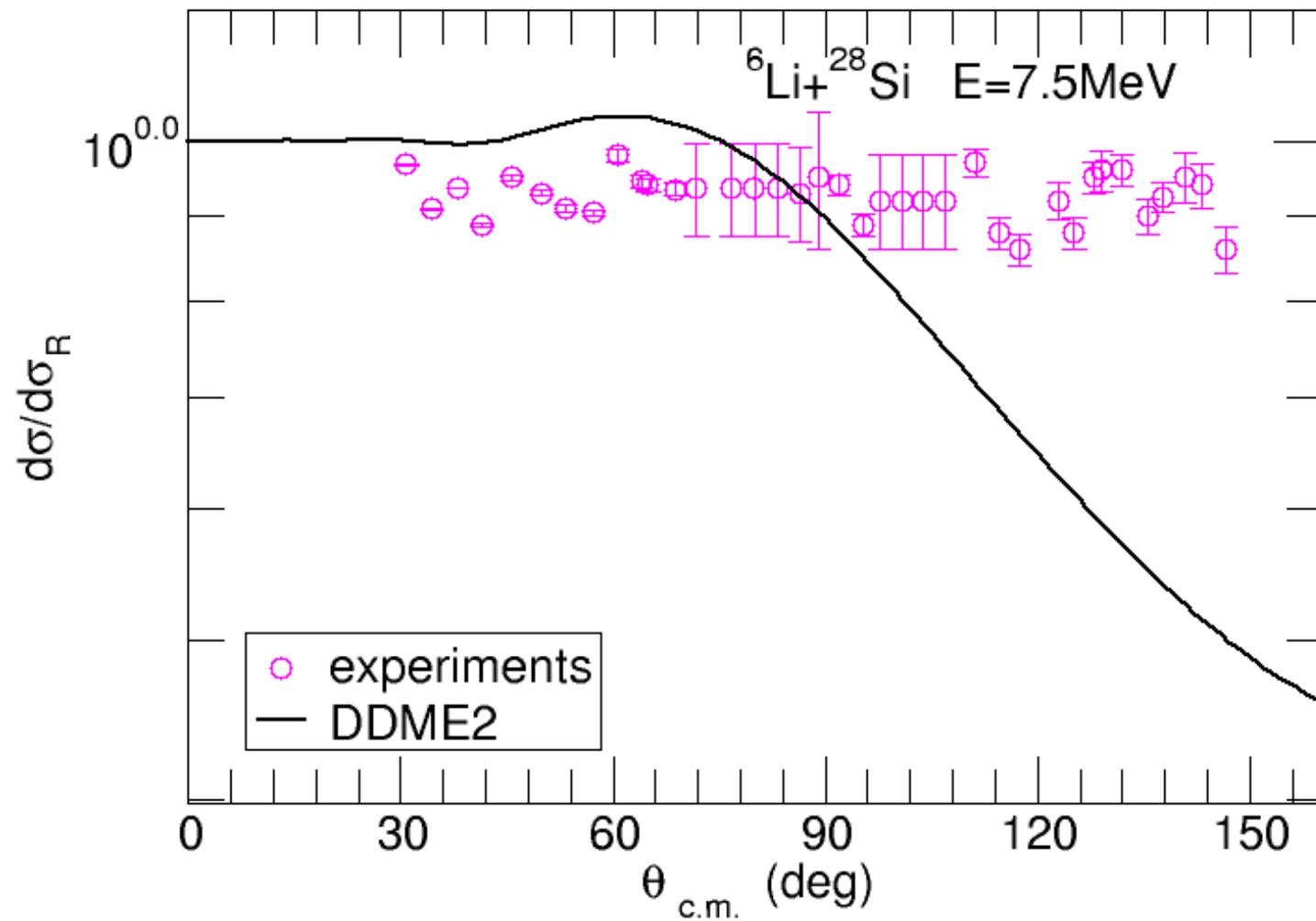


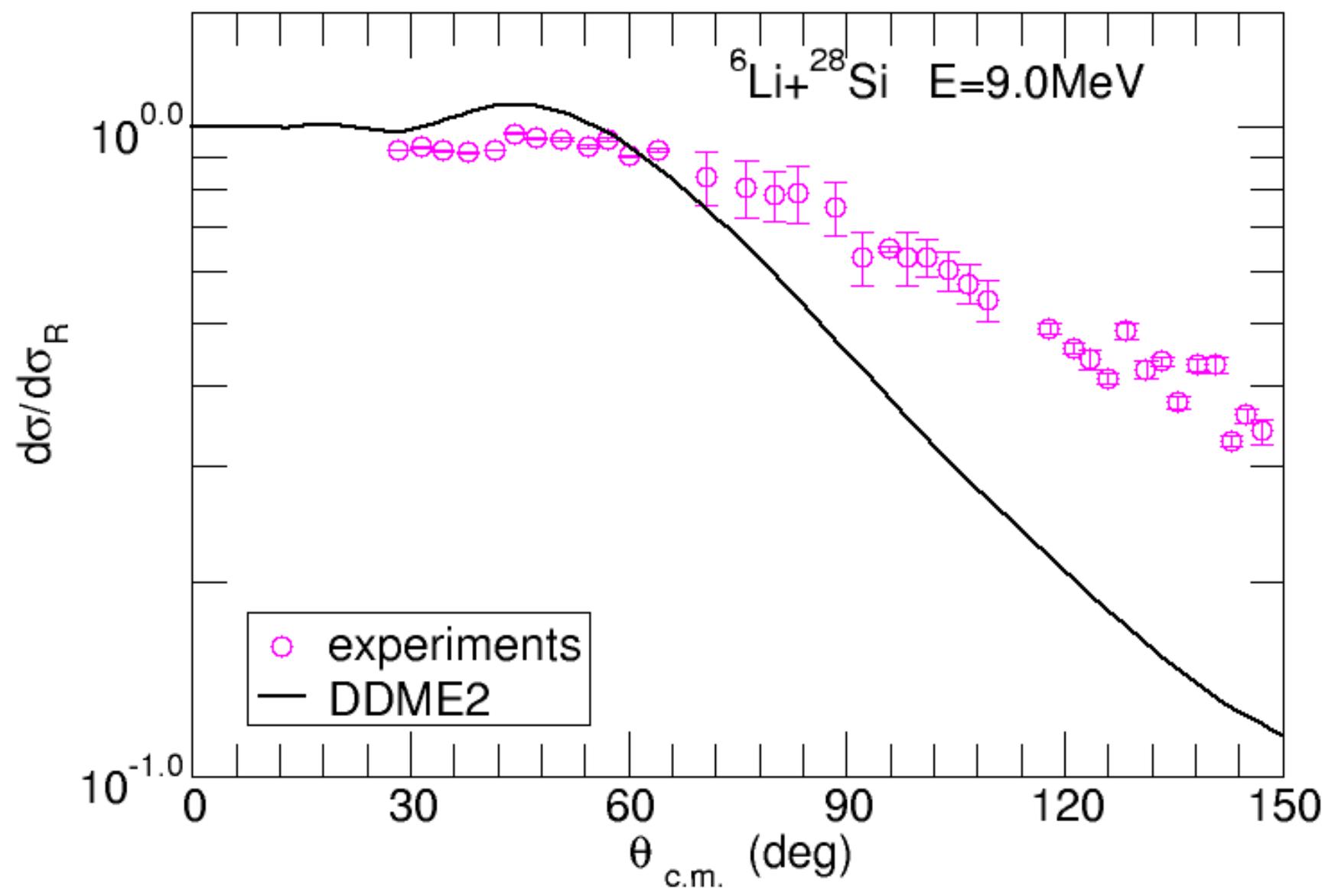


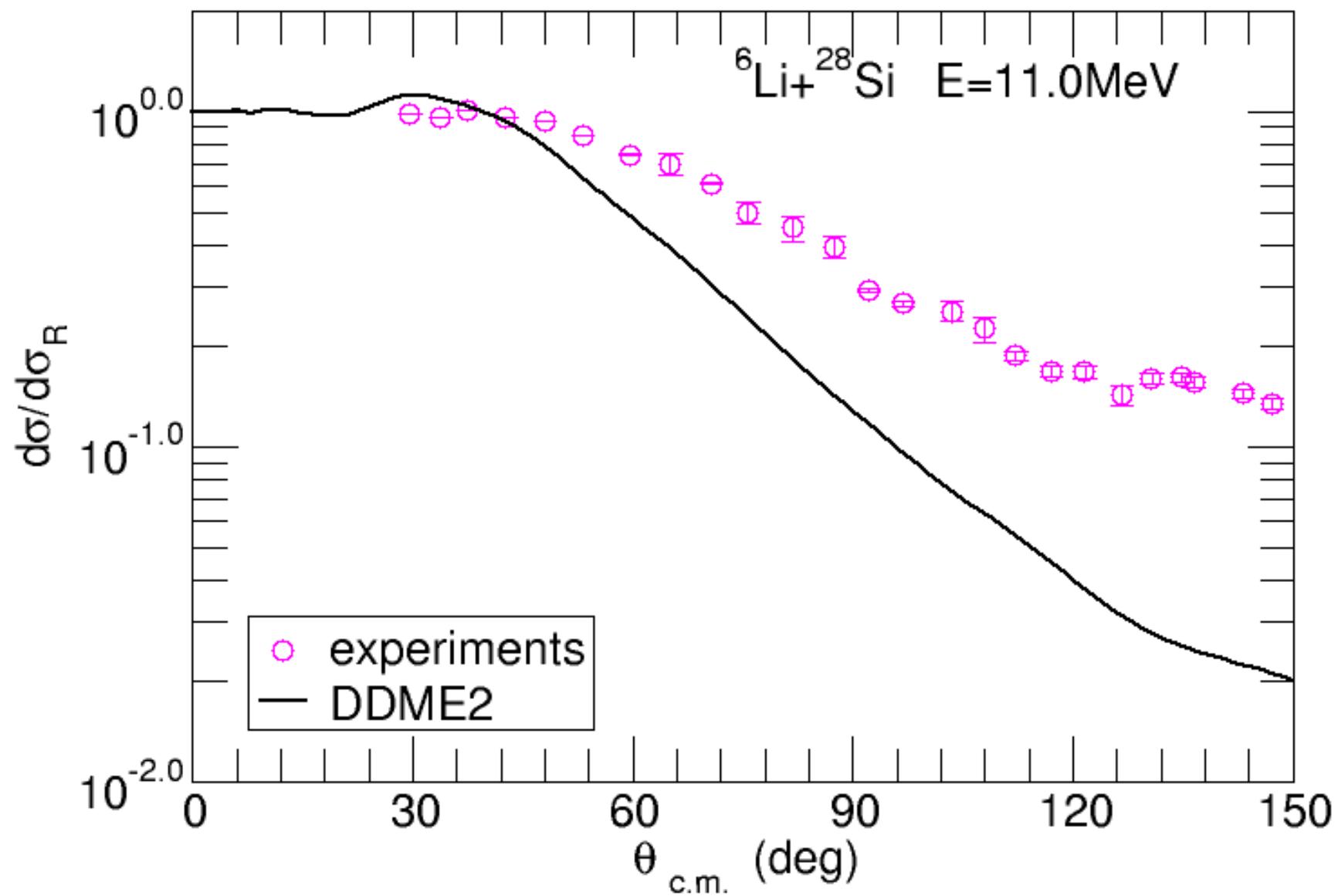


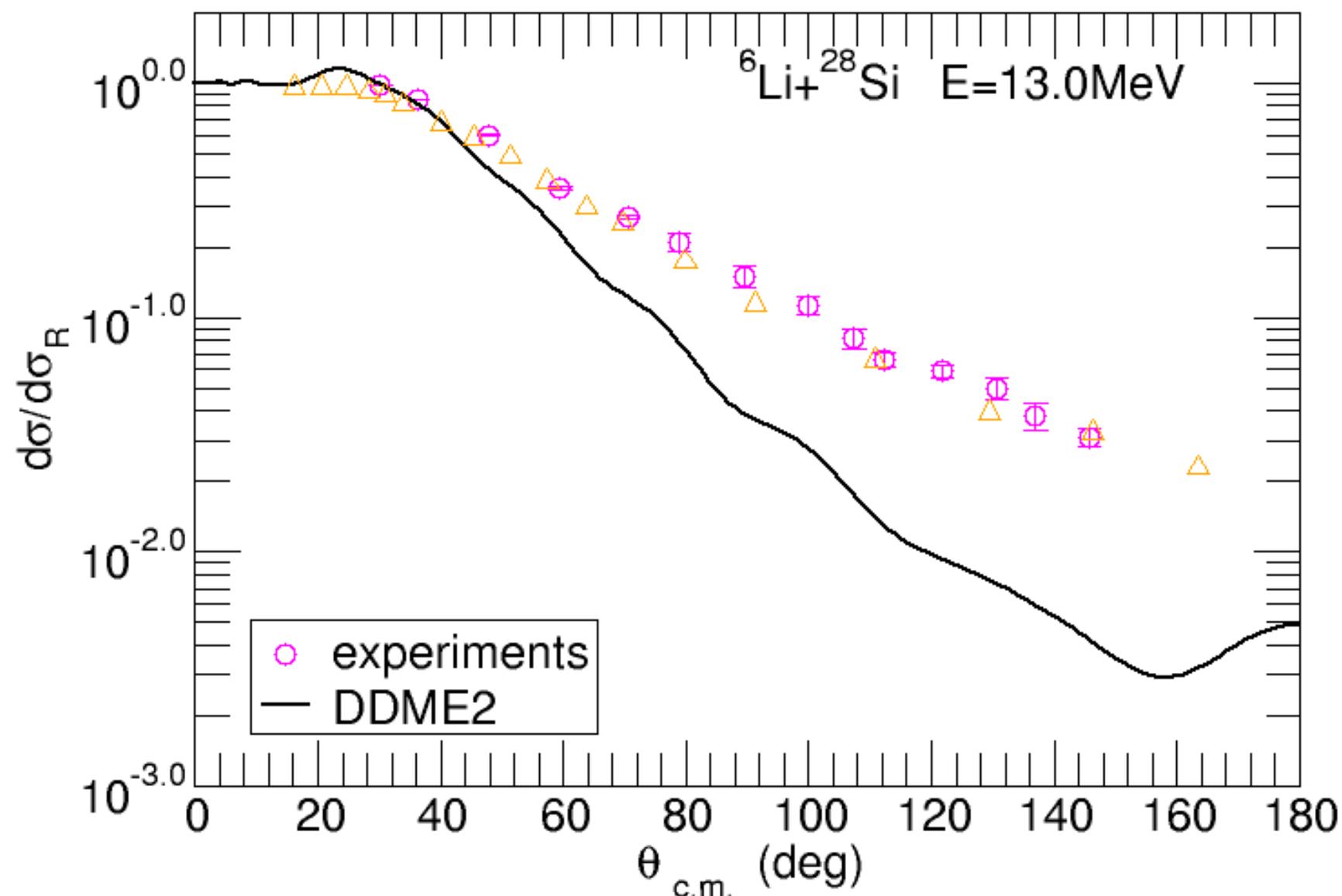


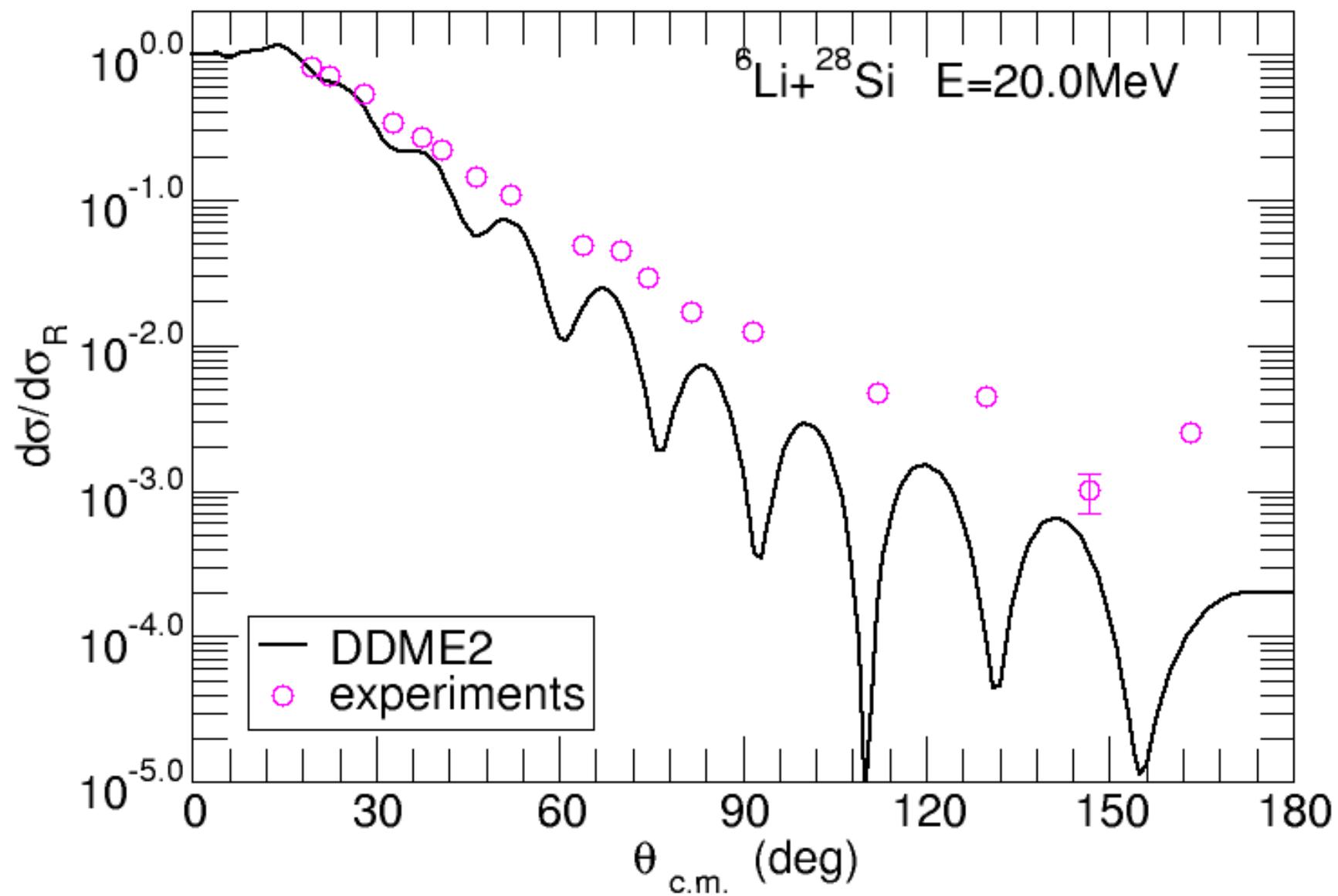
Li6+Si28

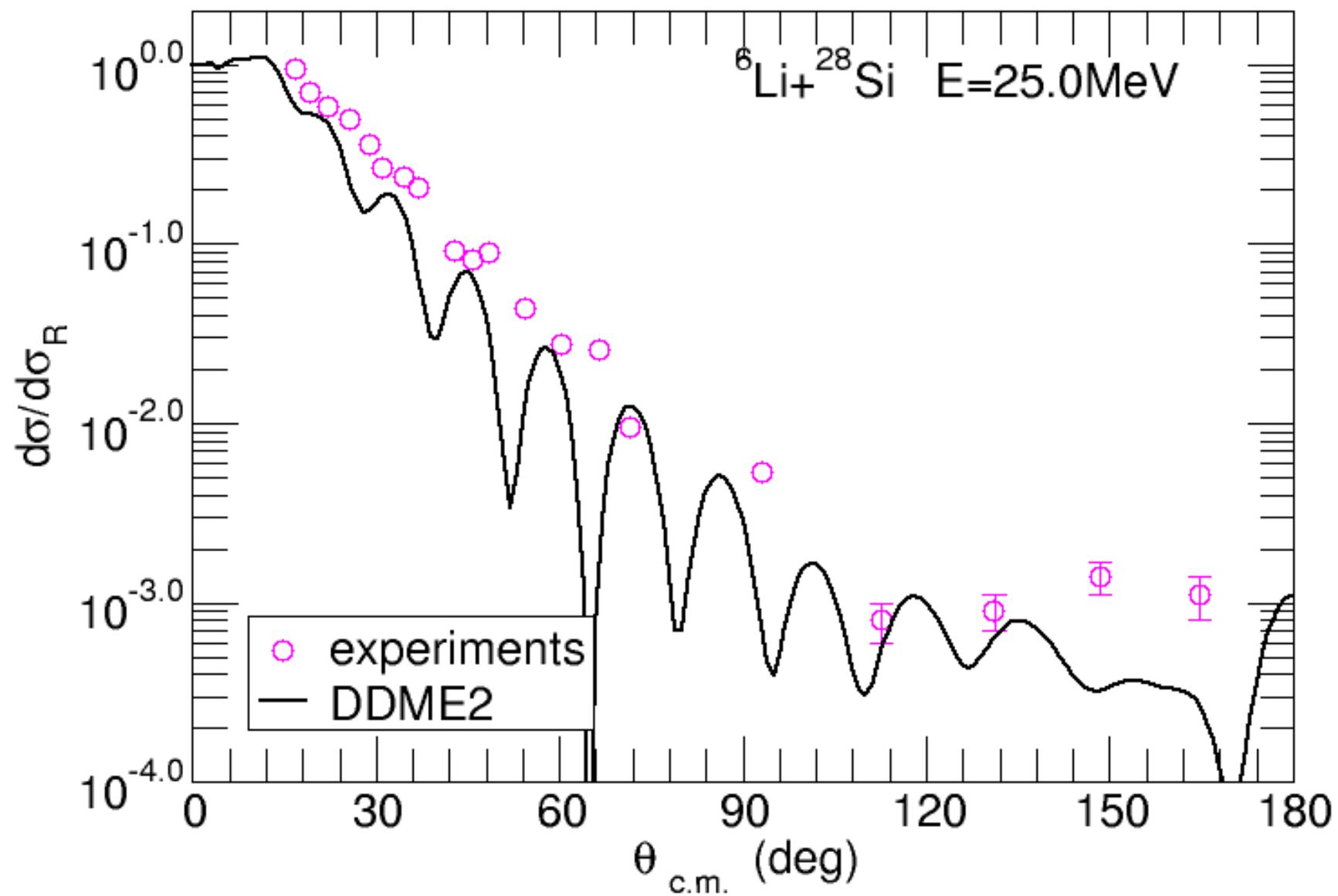


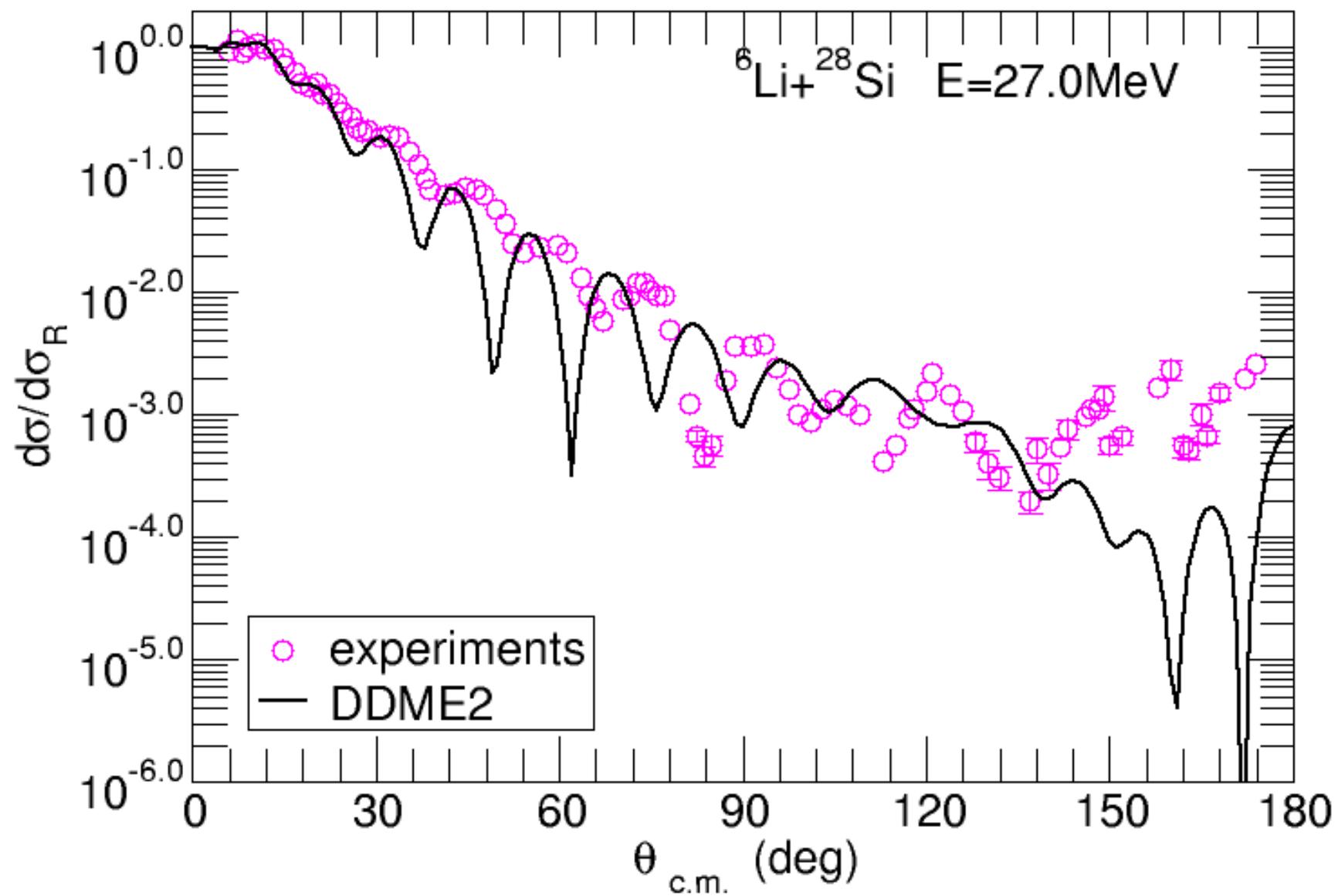


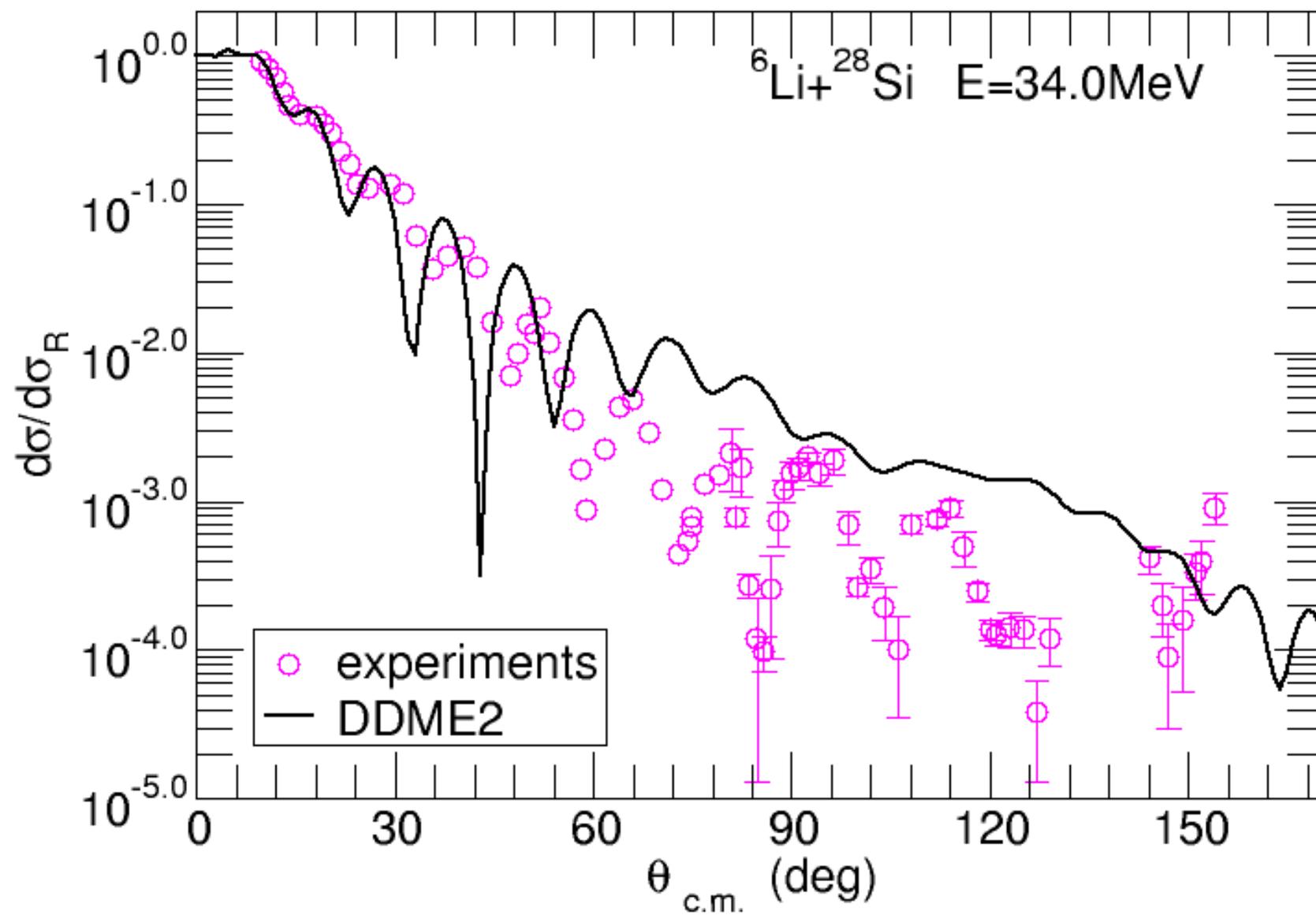


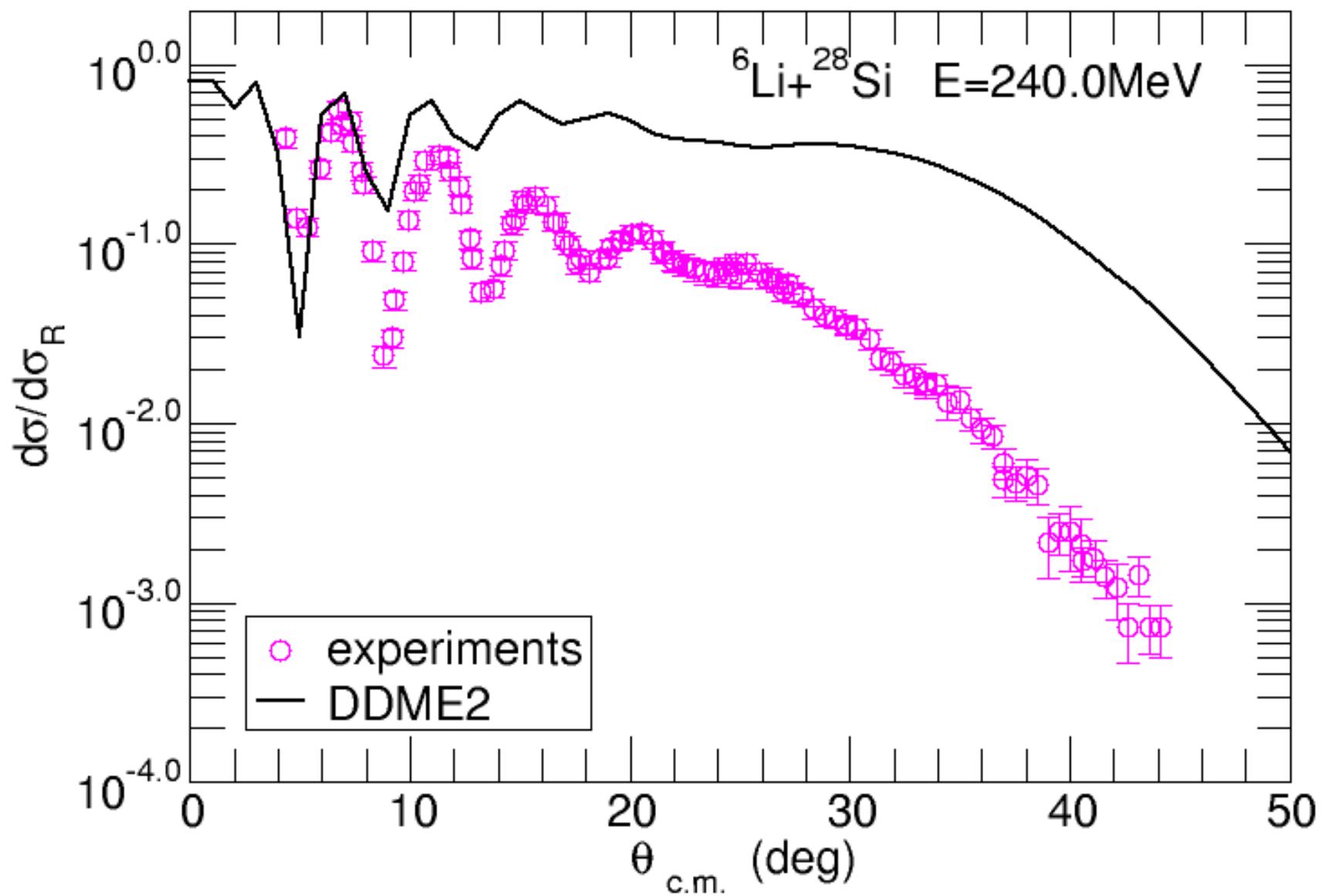




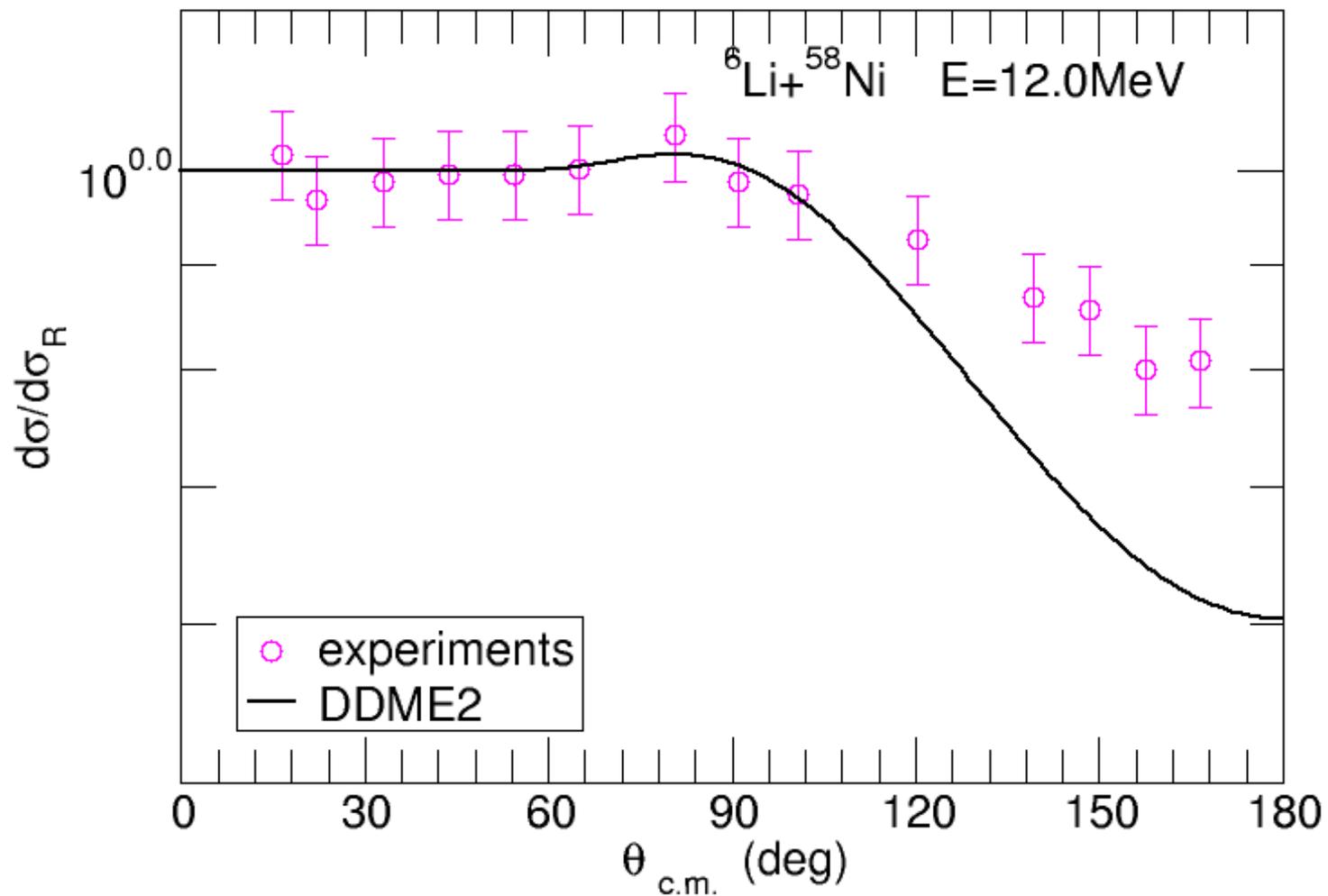


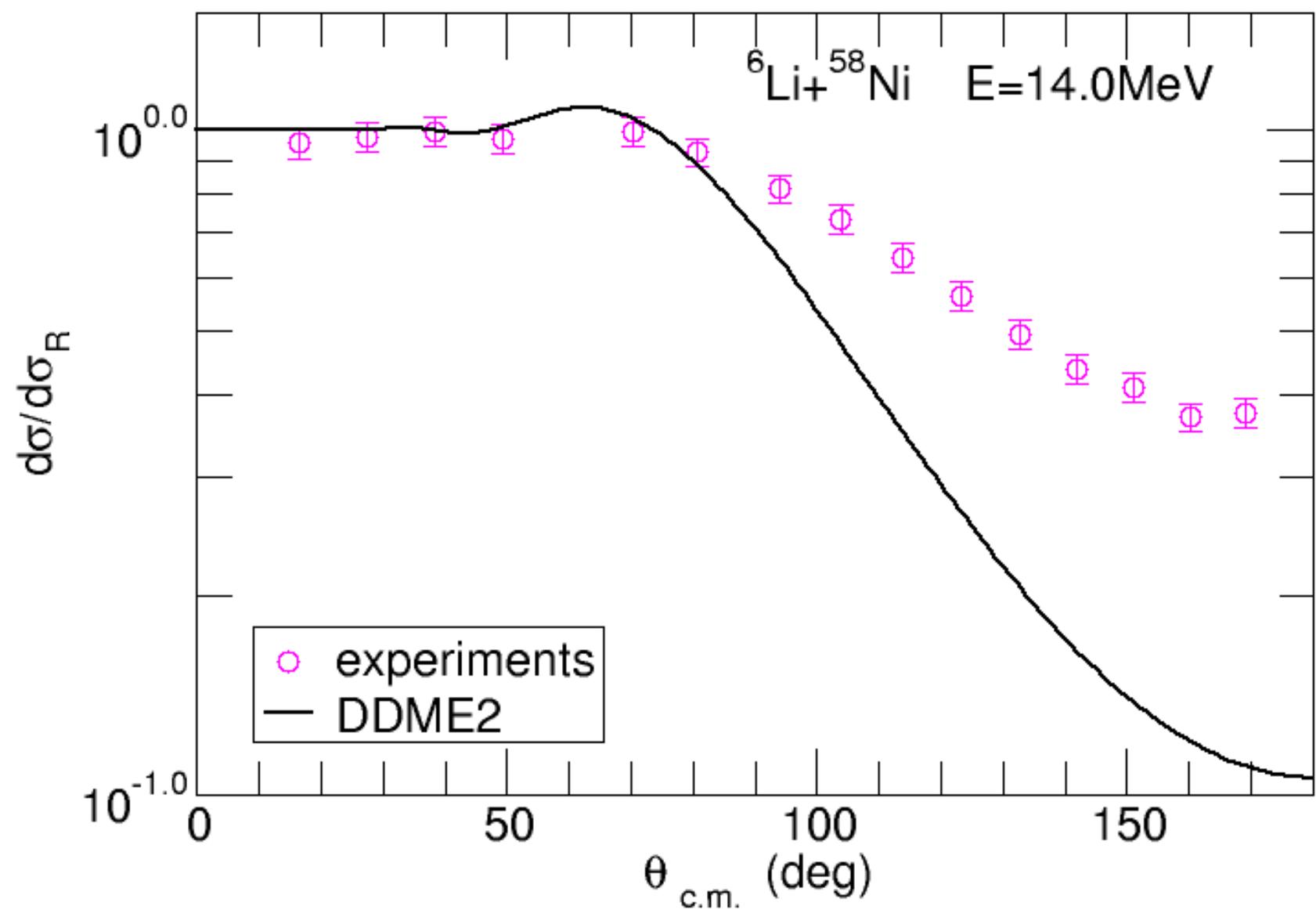


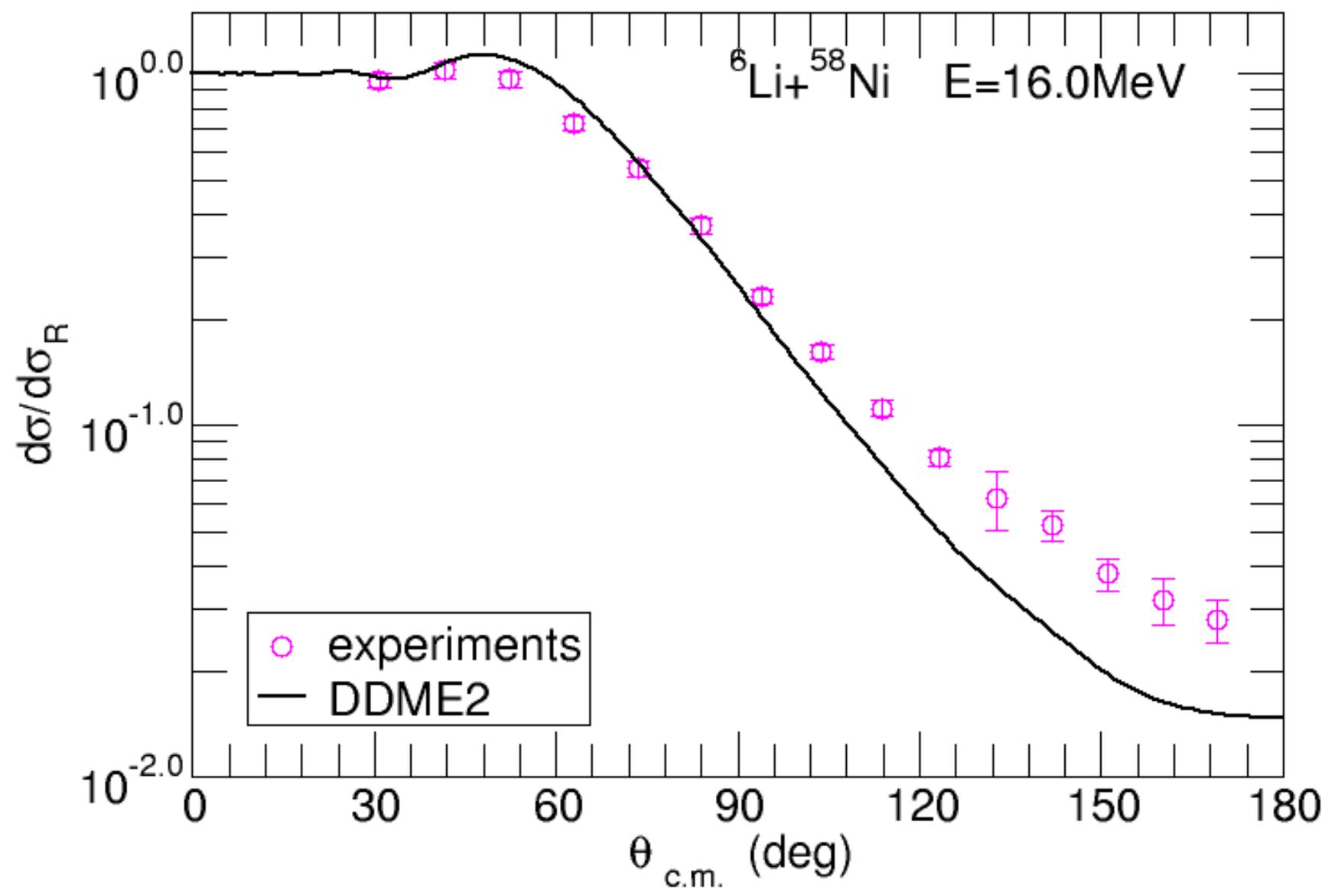


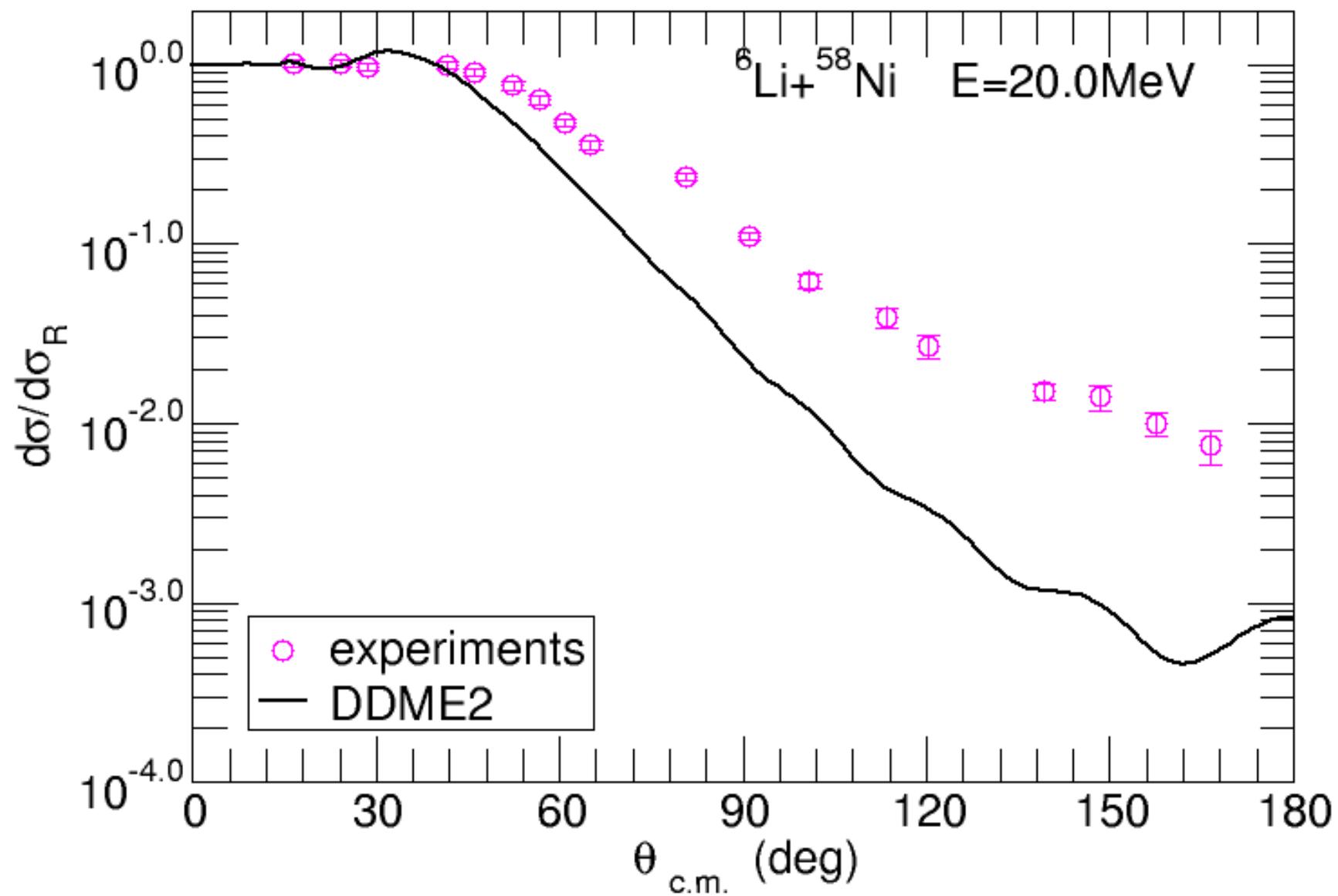


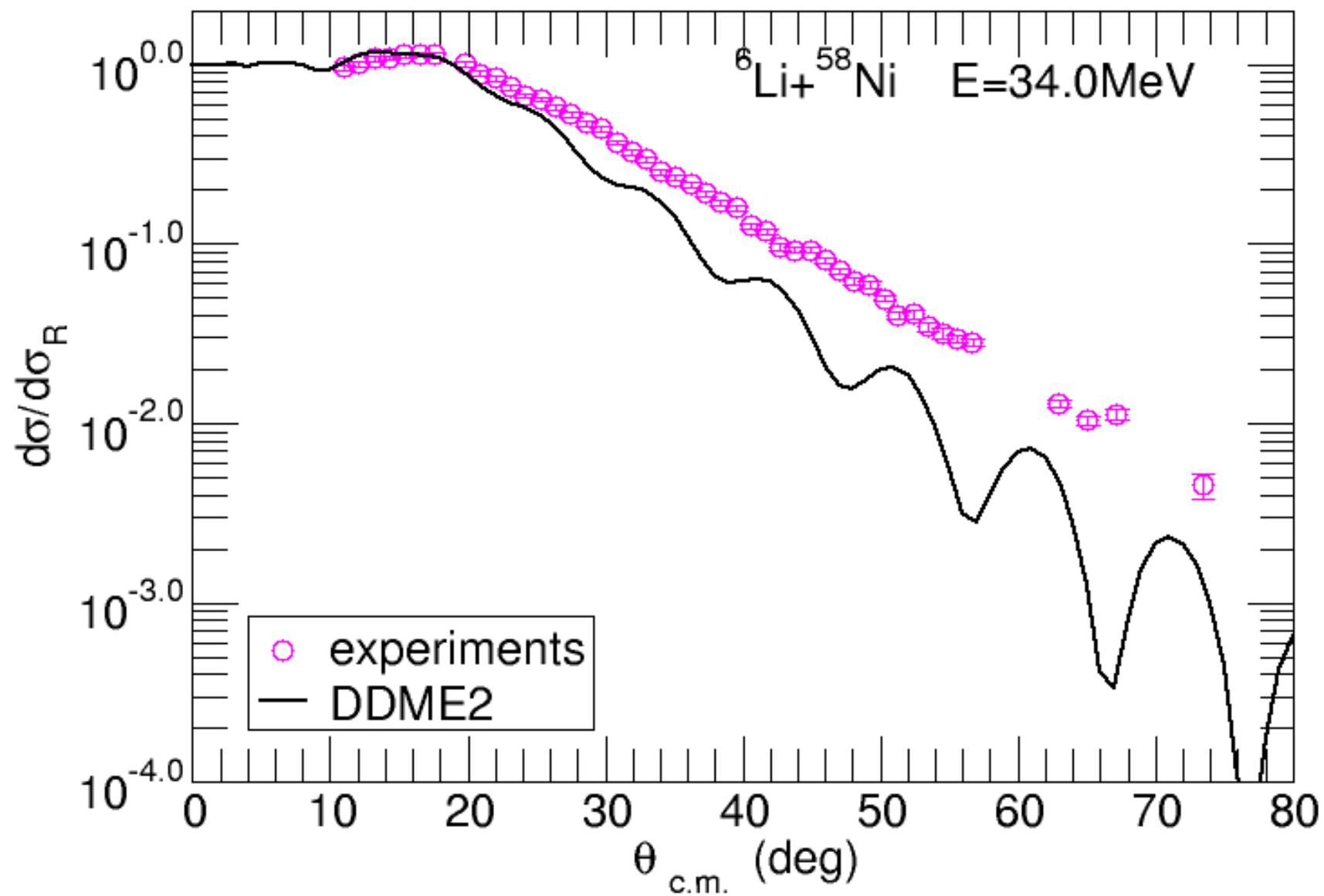
Li6+Ni58

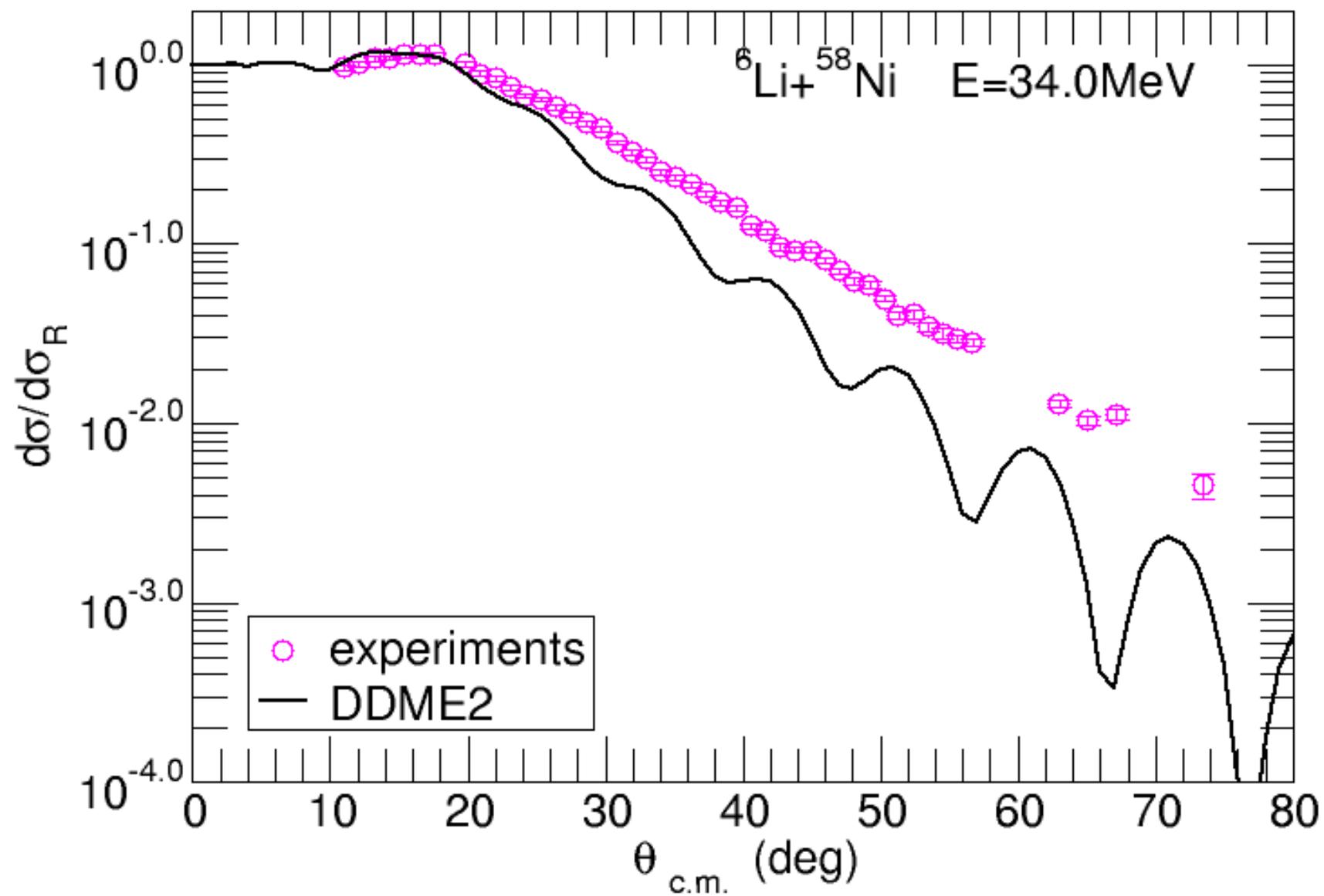


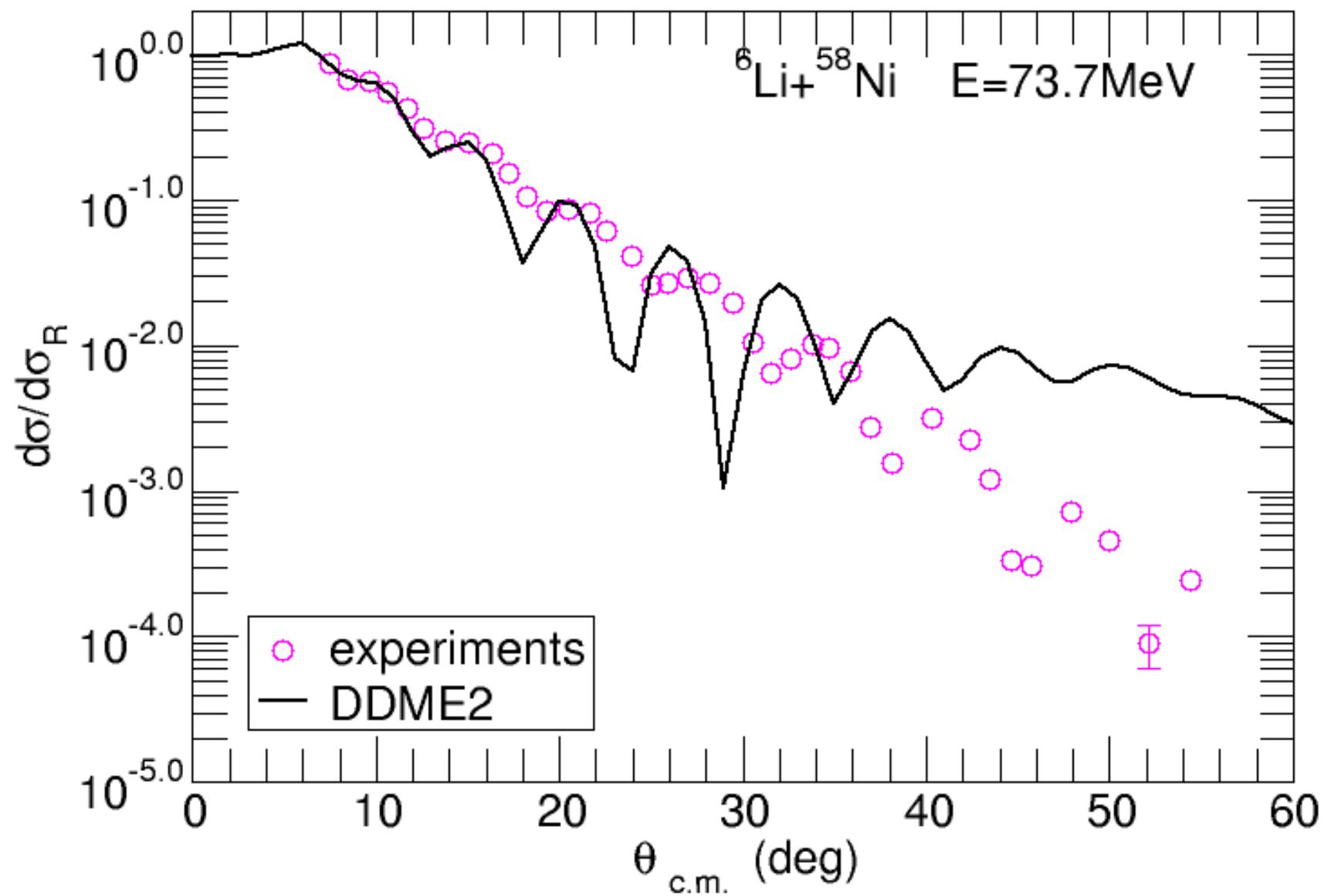


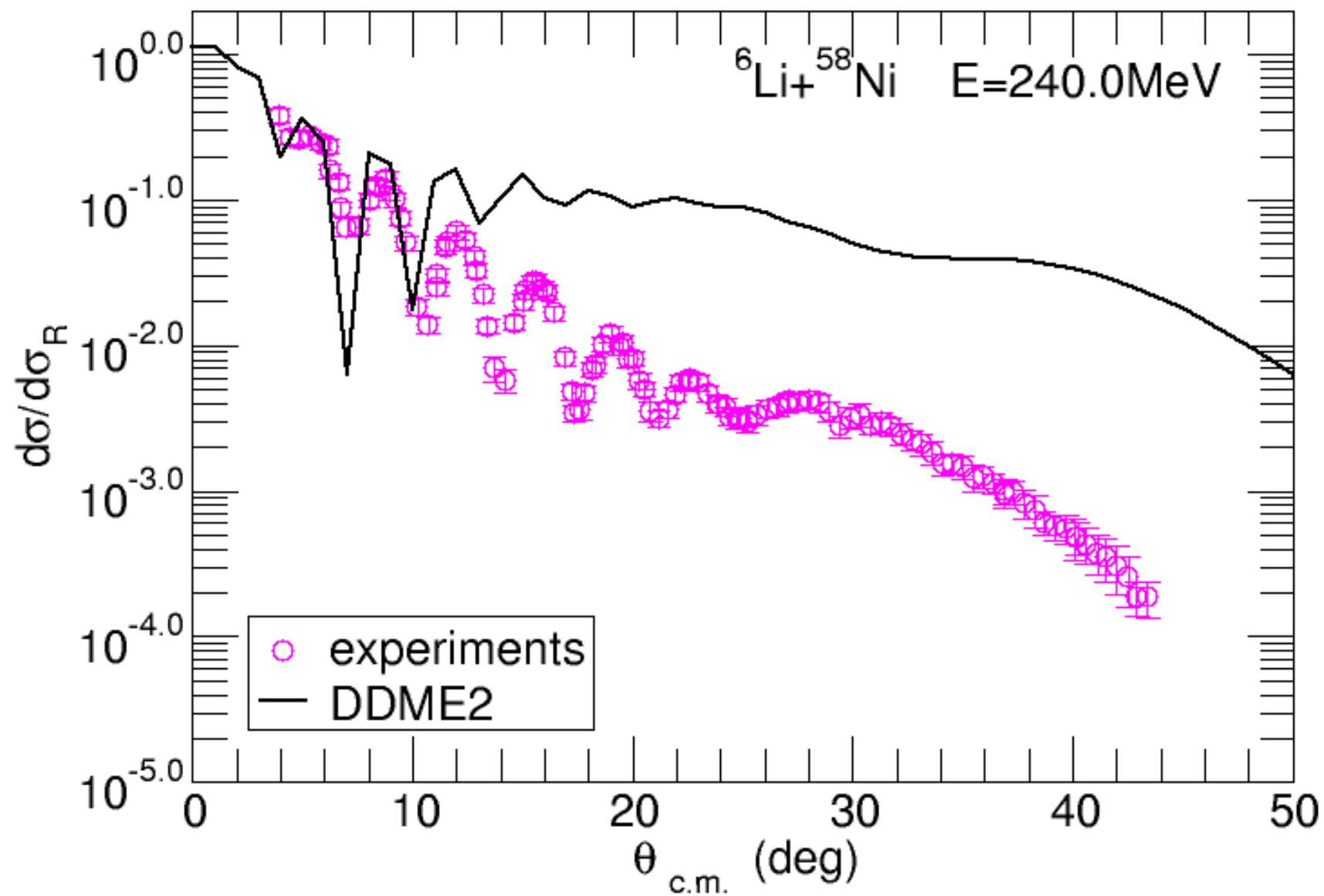




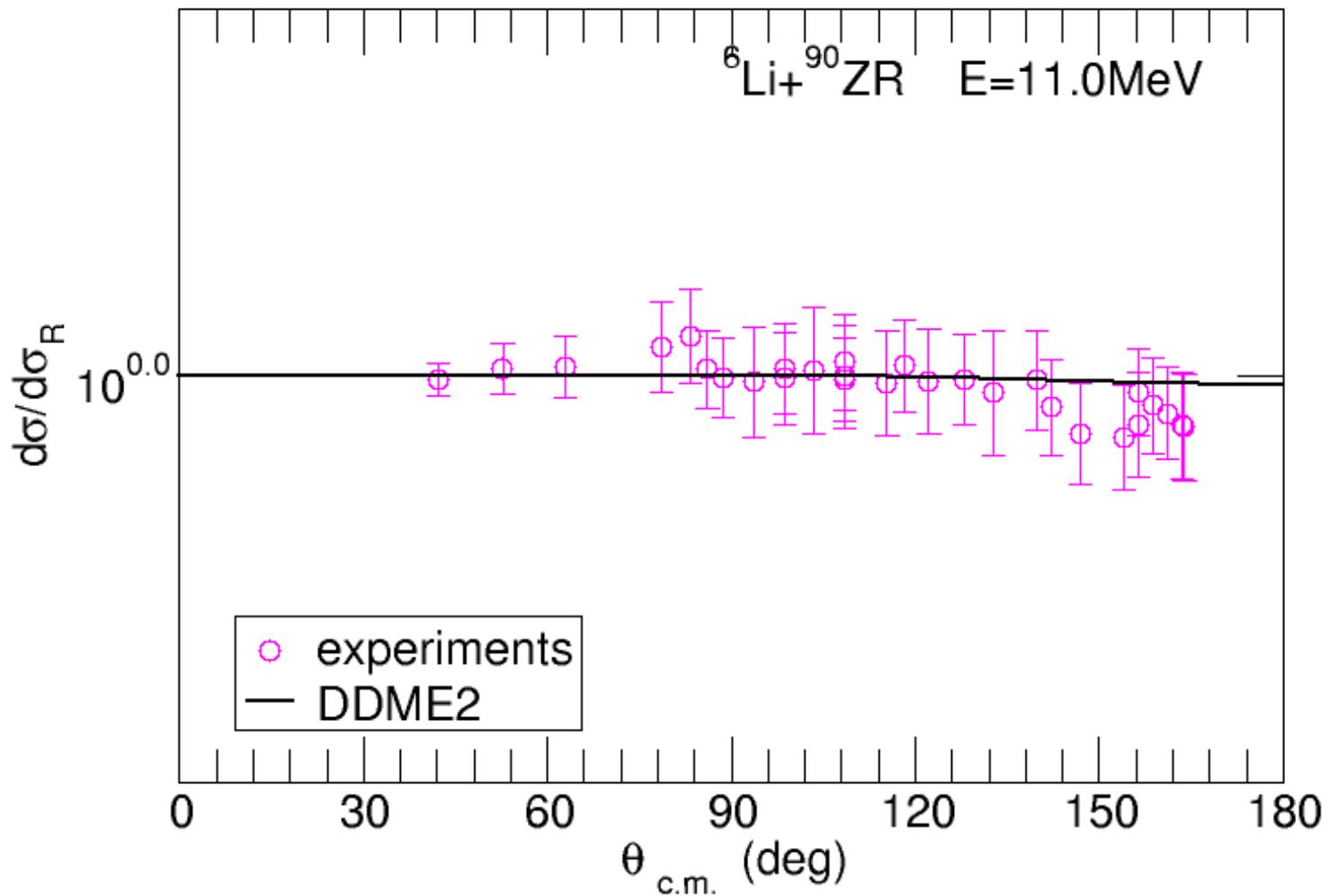


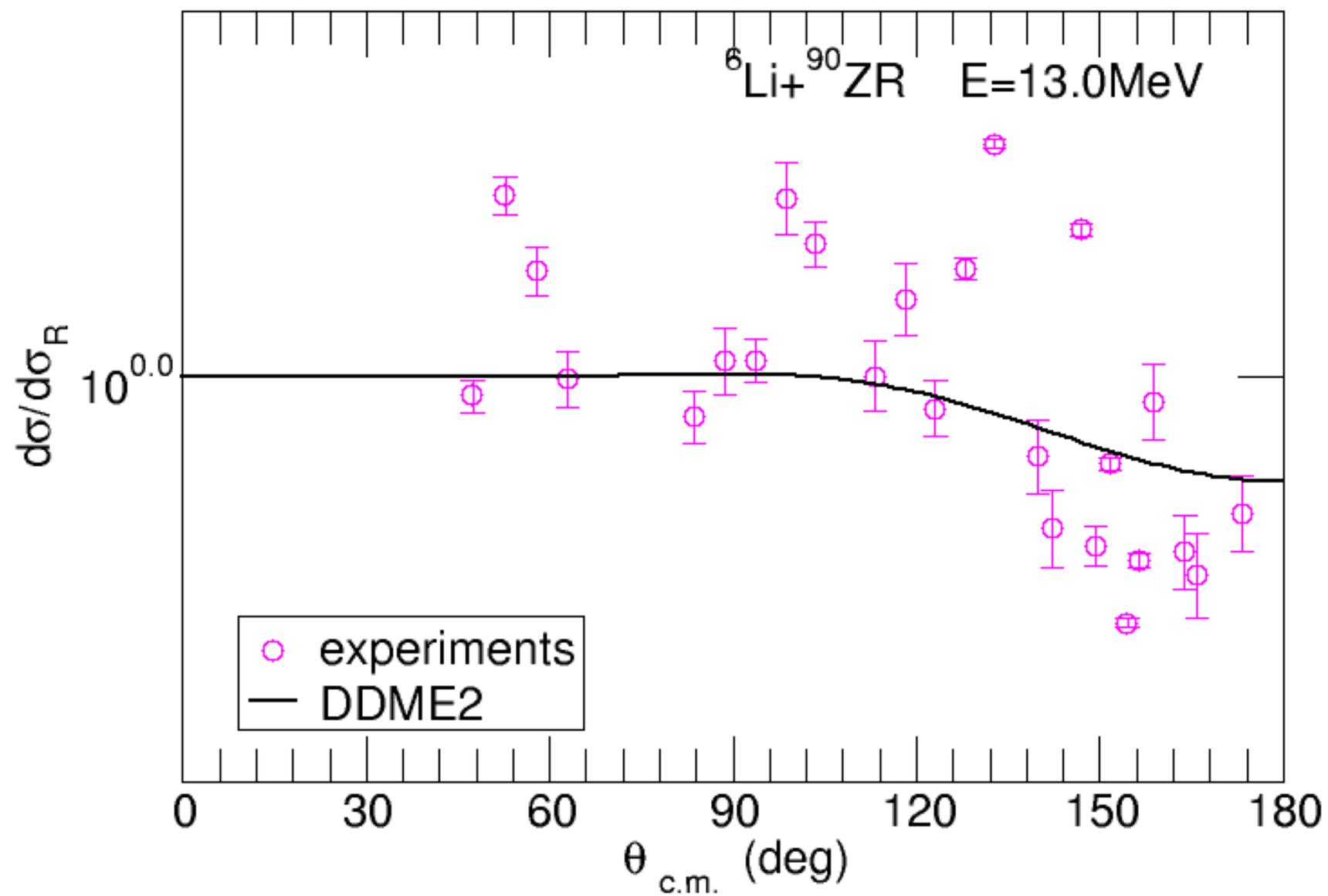


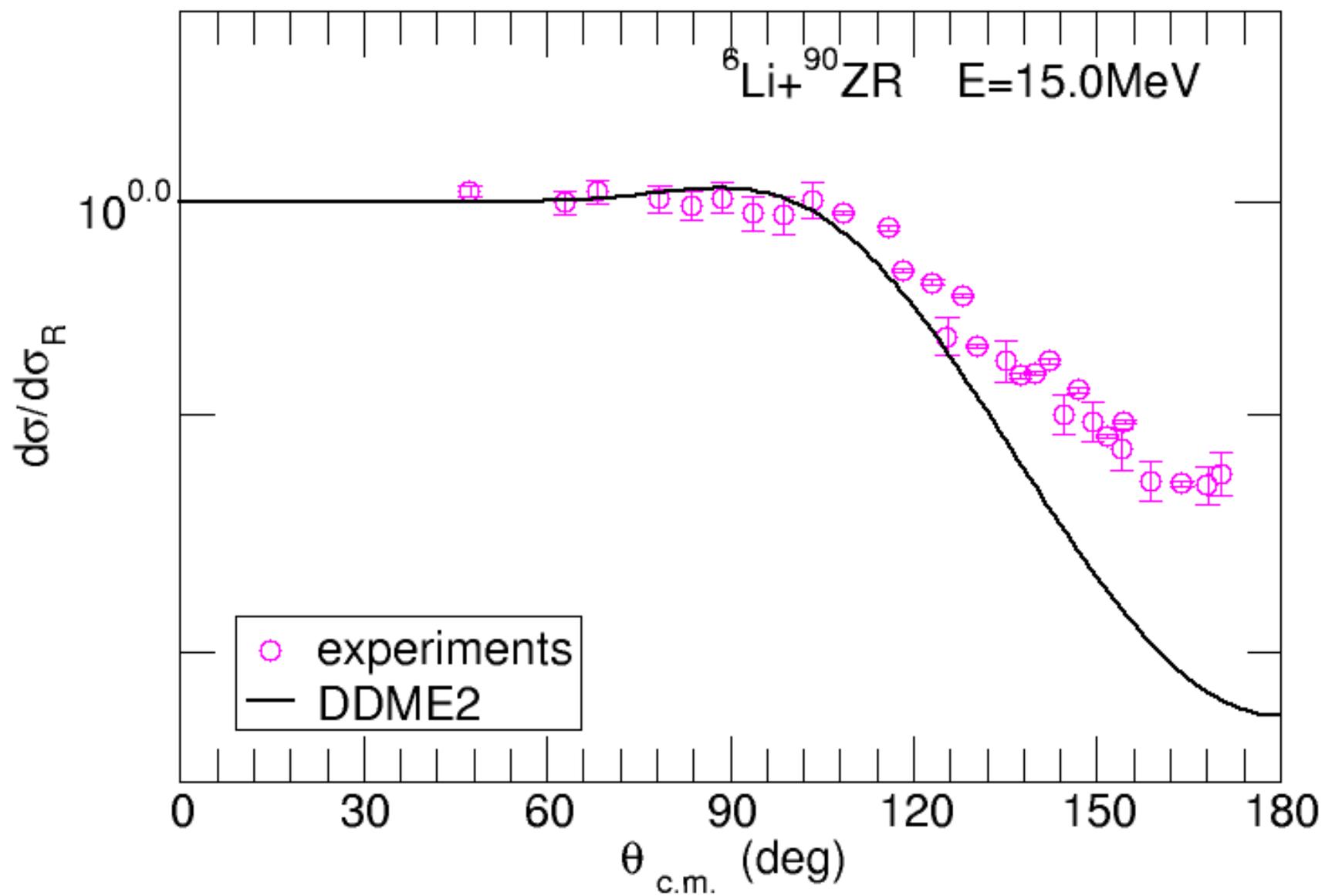


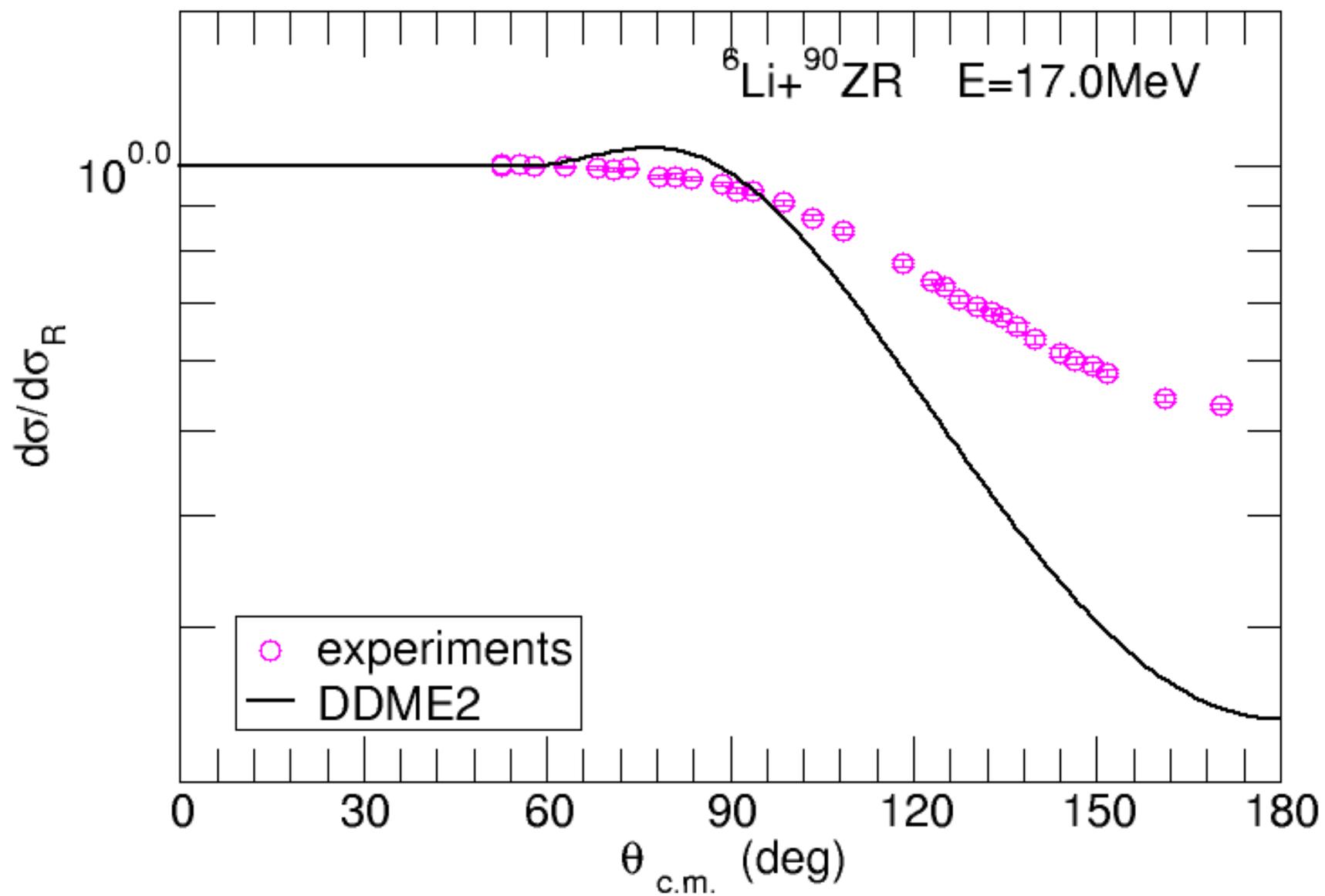


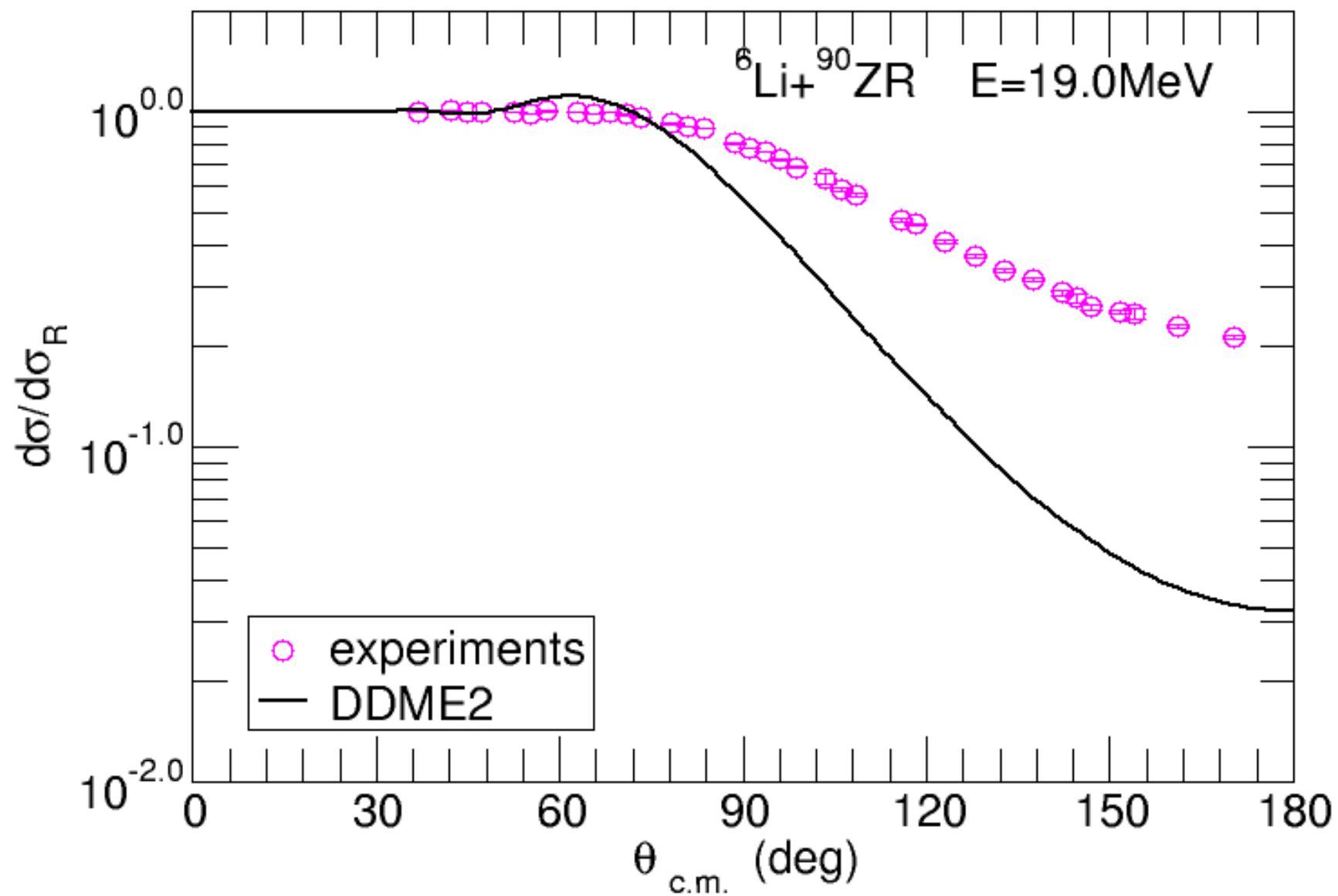
Li6+ZR90

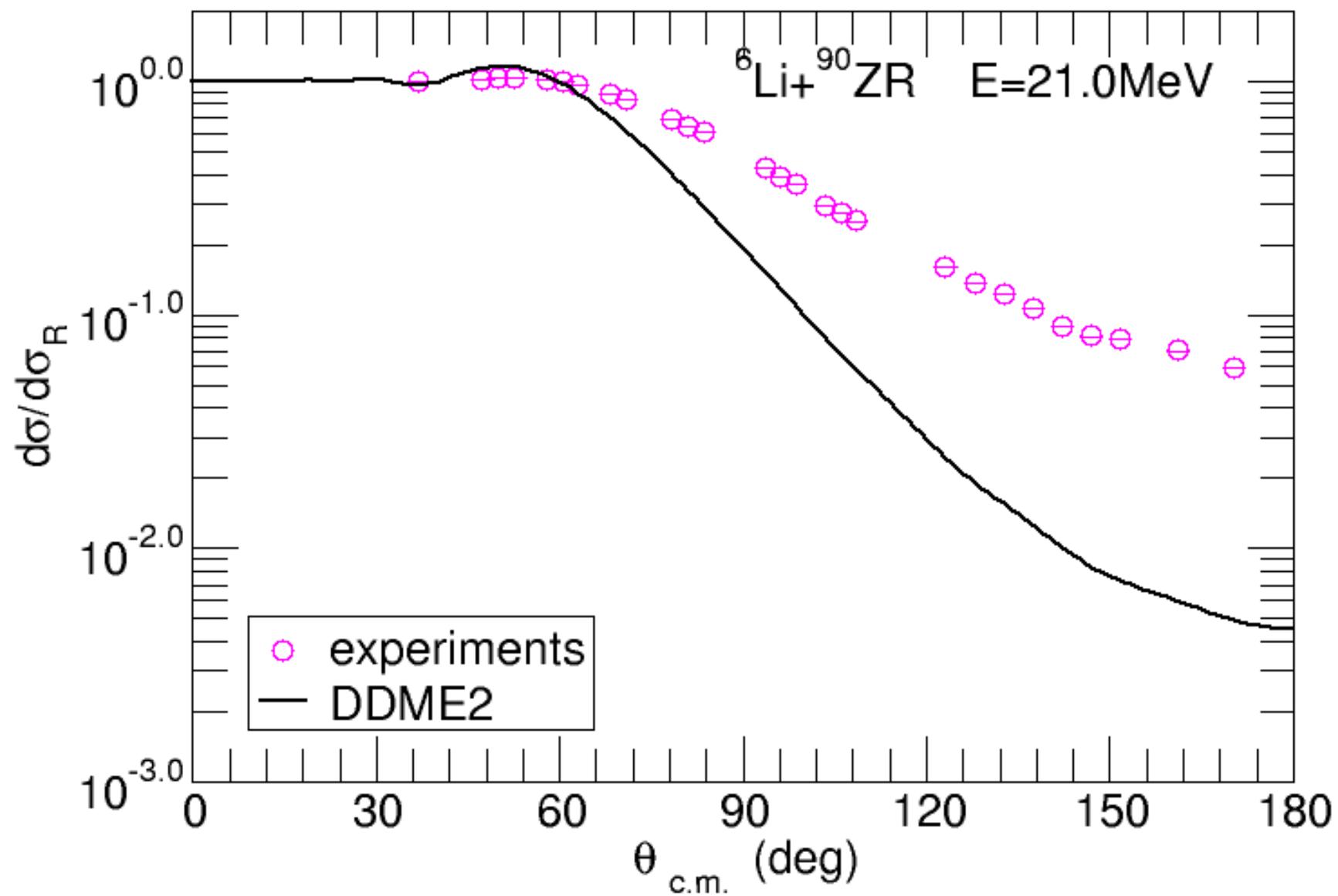


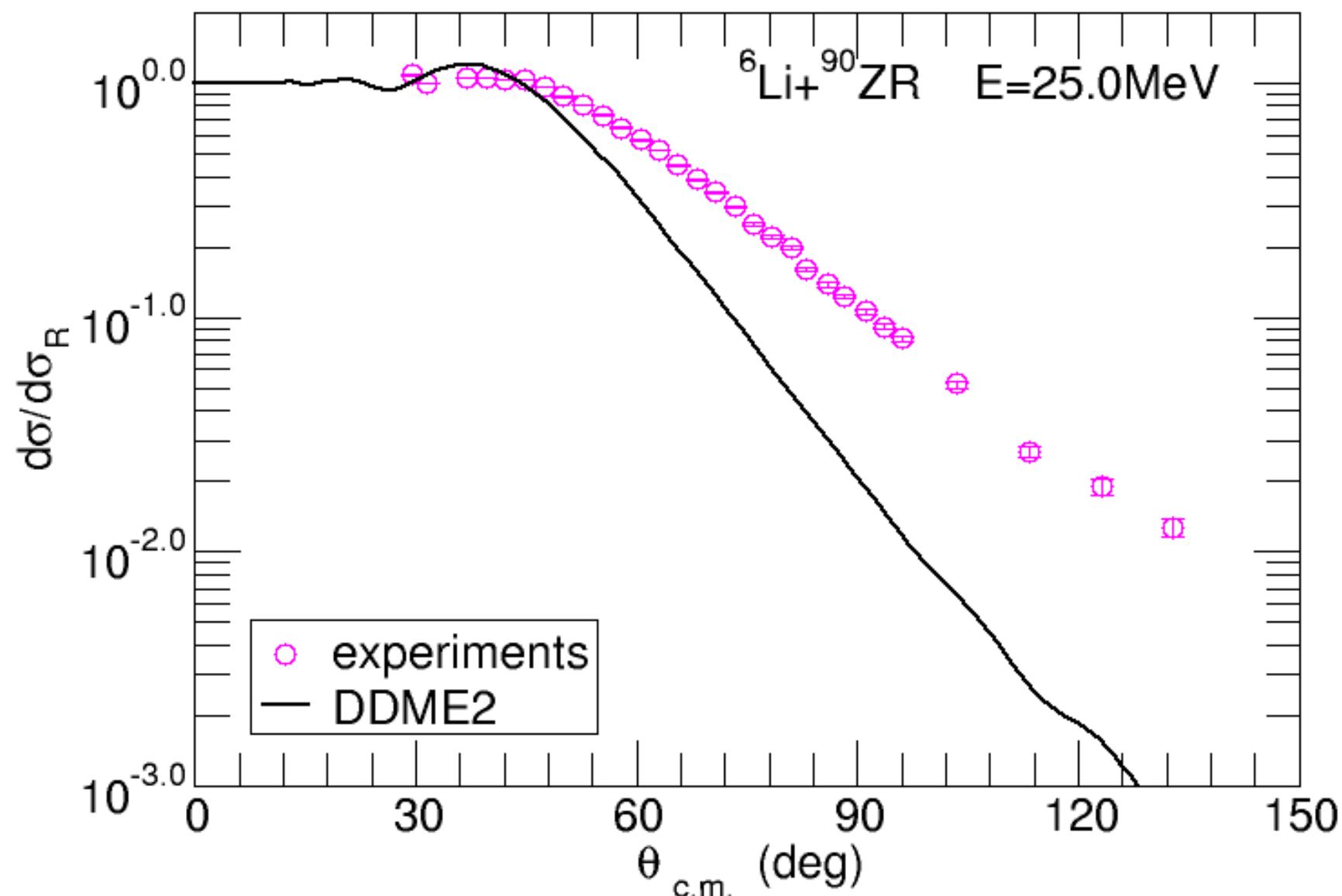


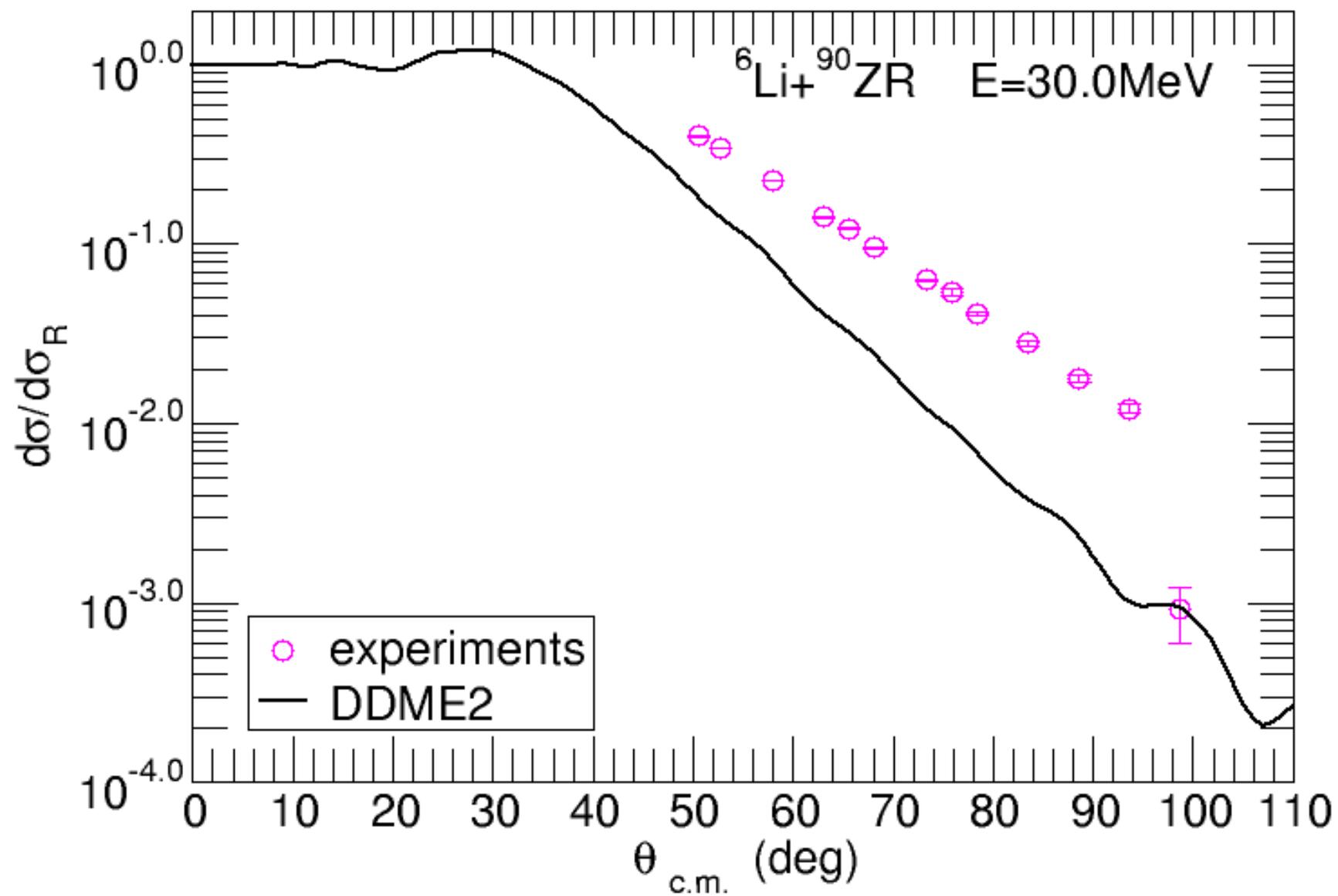


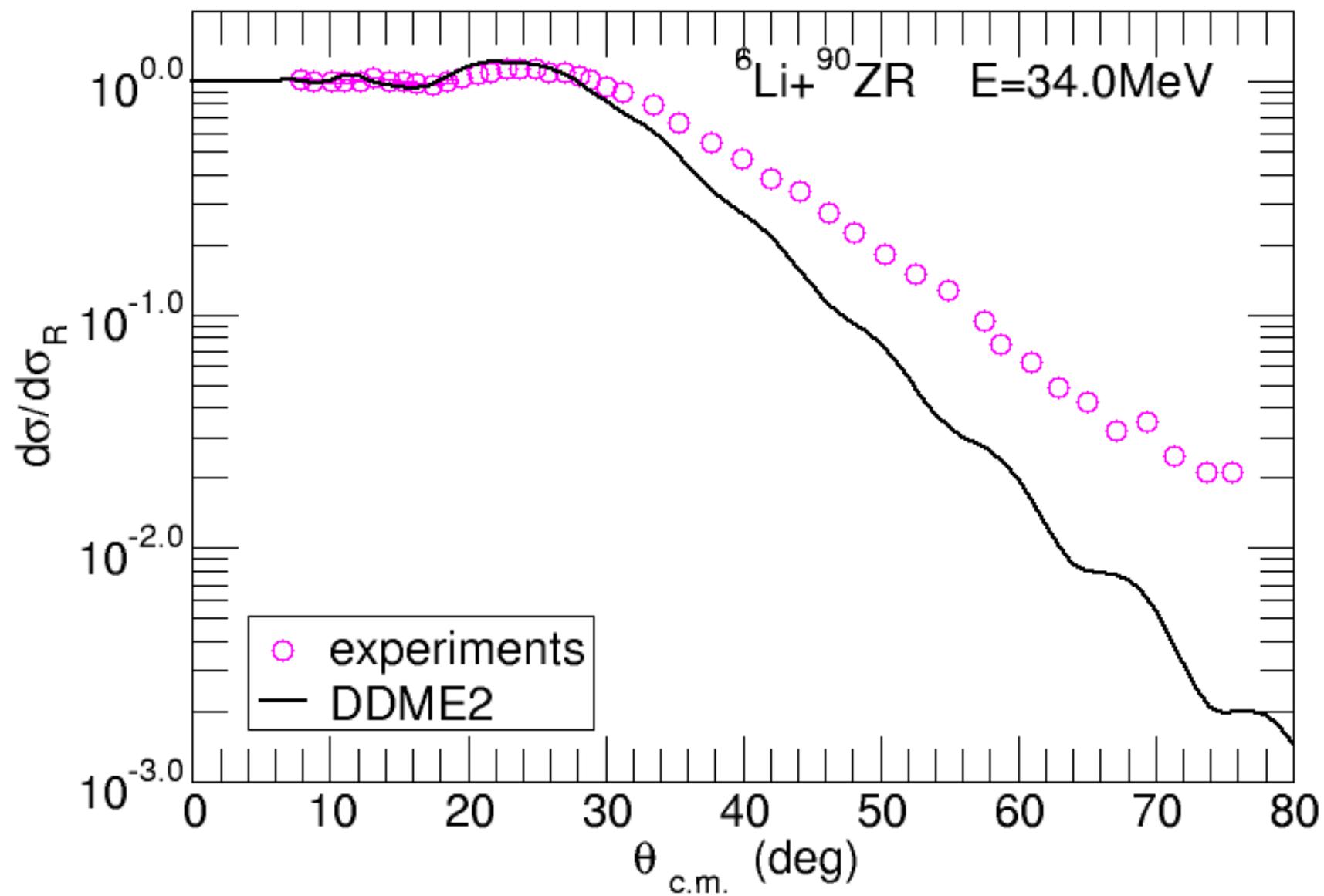


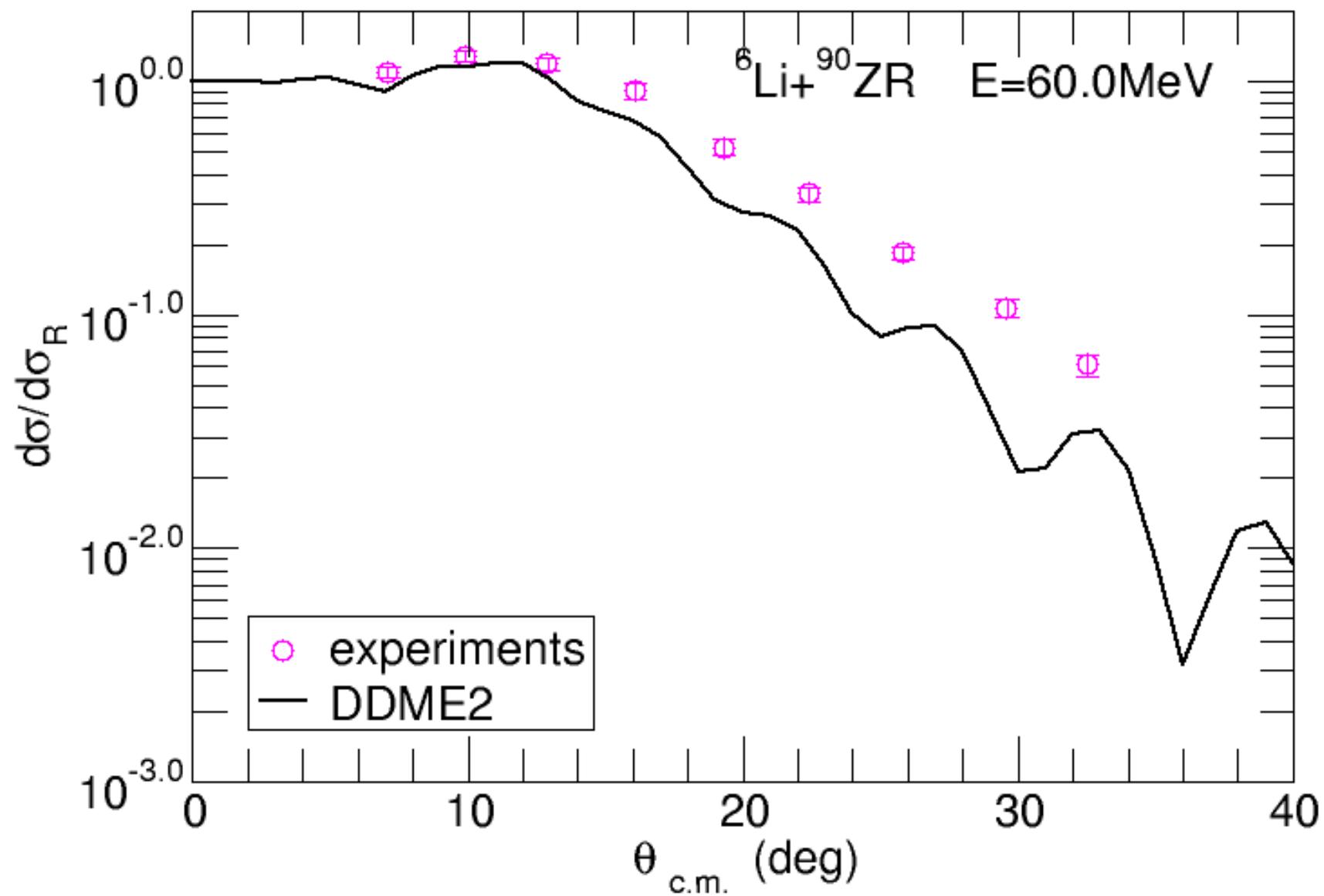


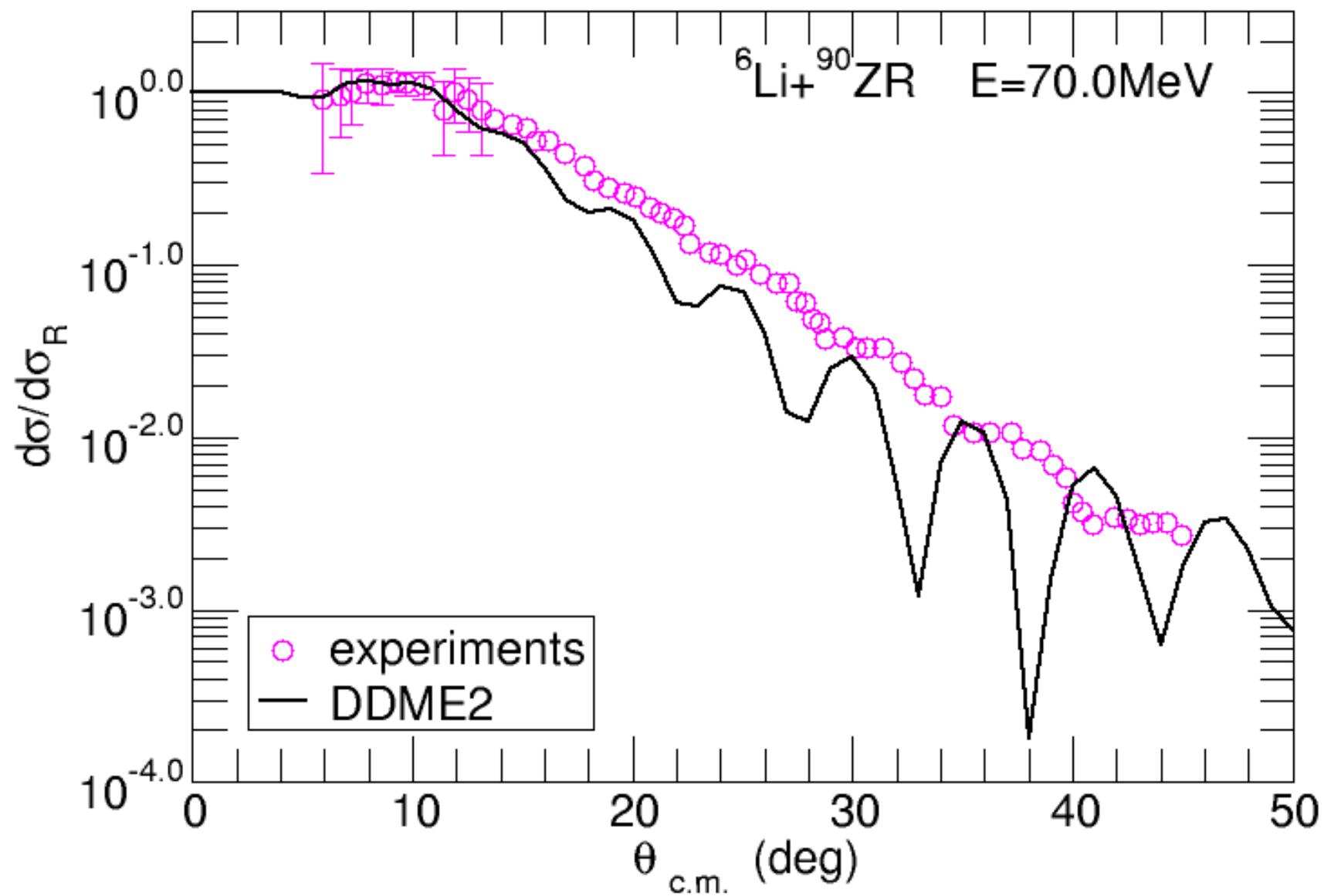


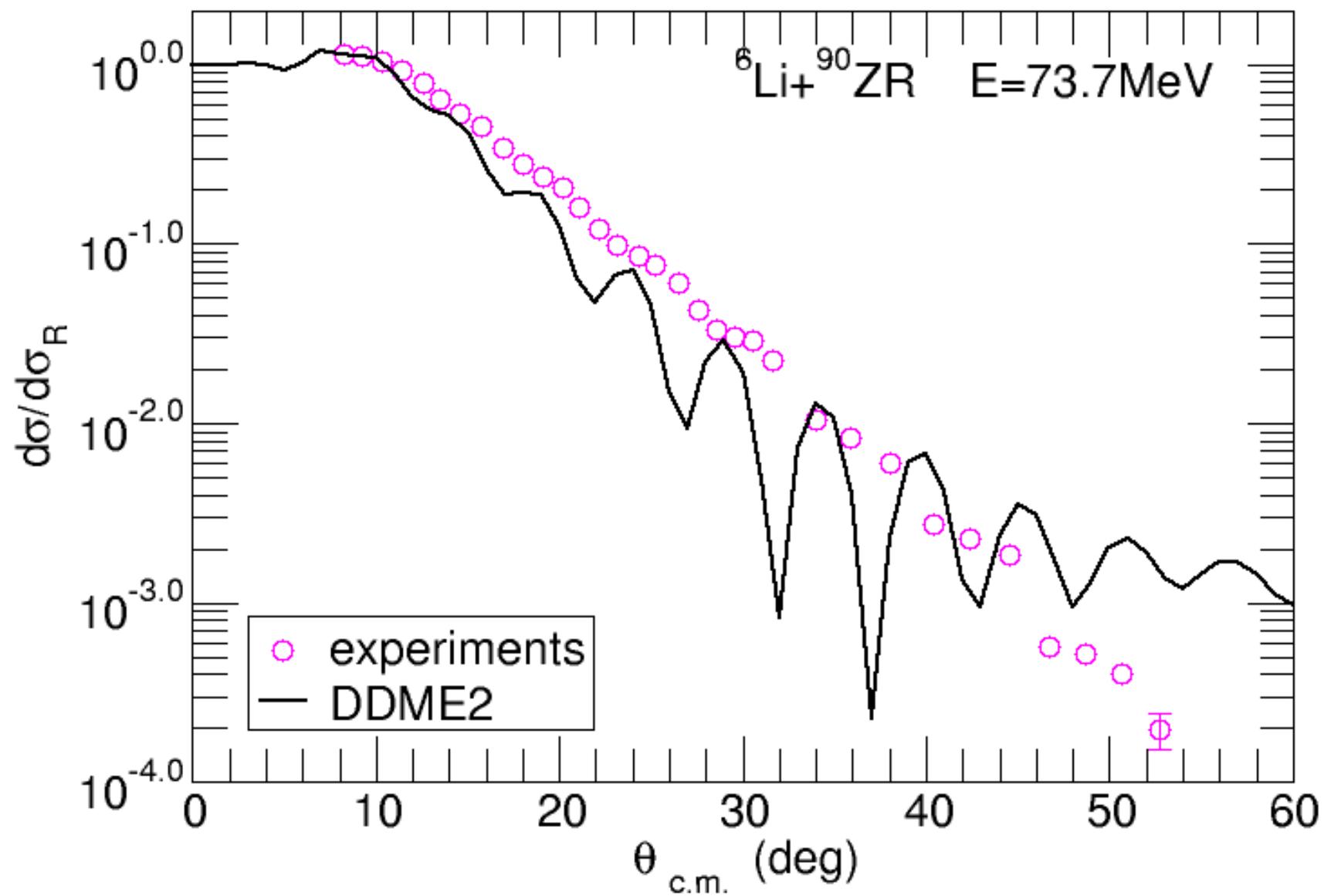


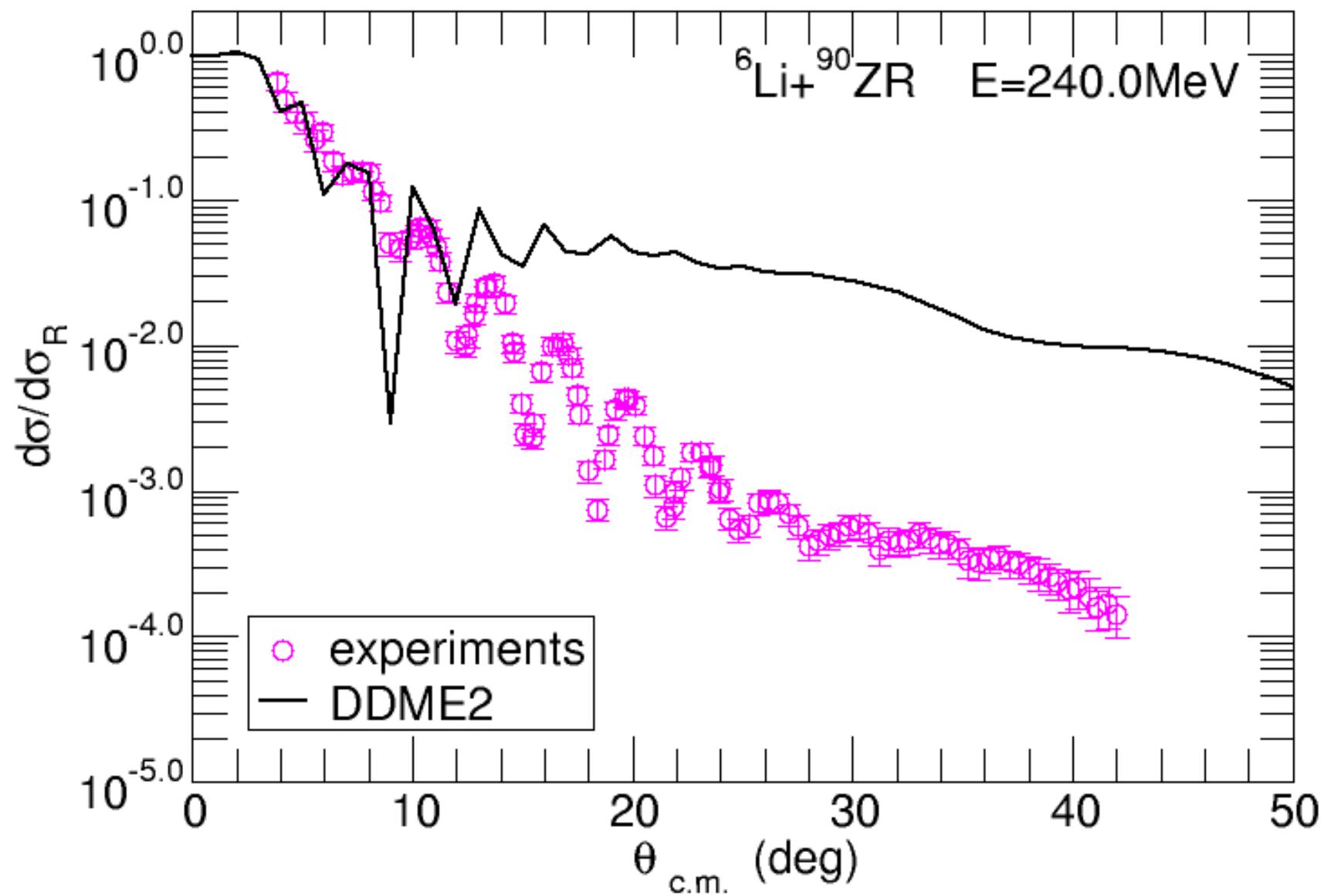












Li6+P208

