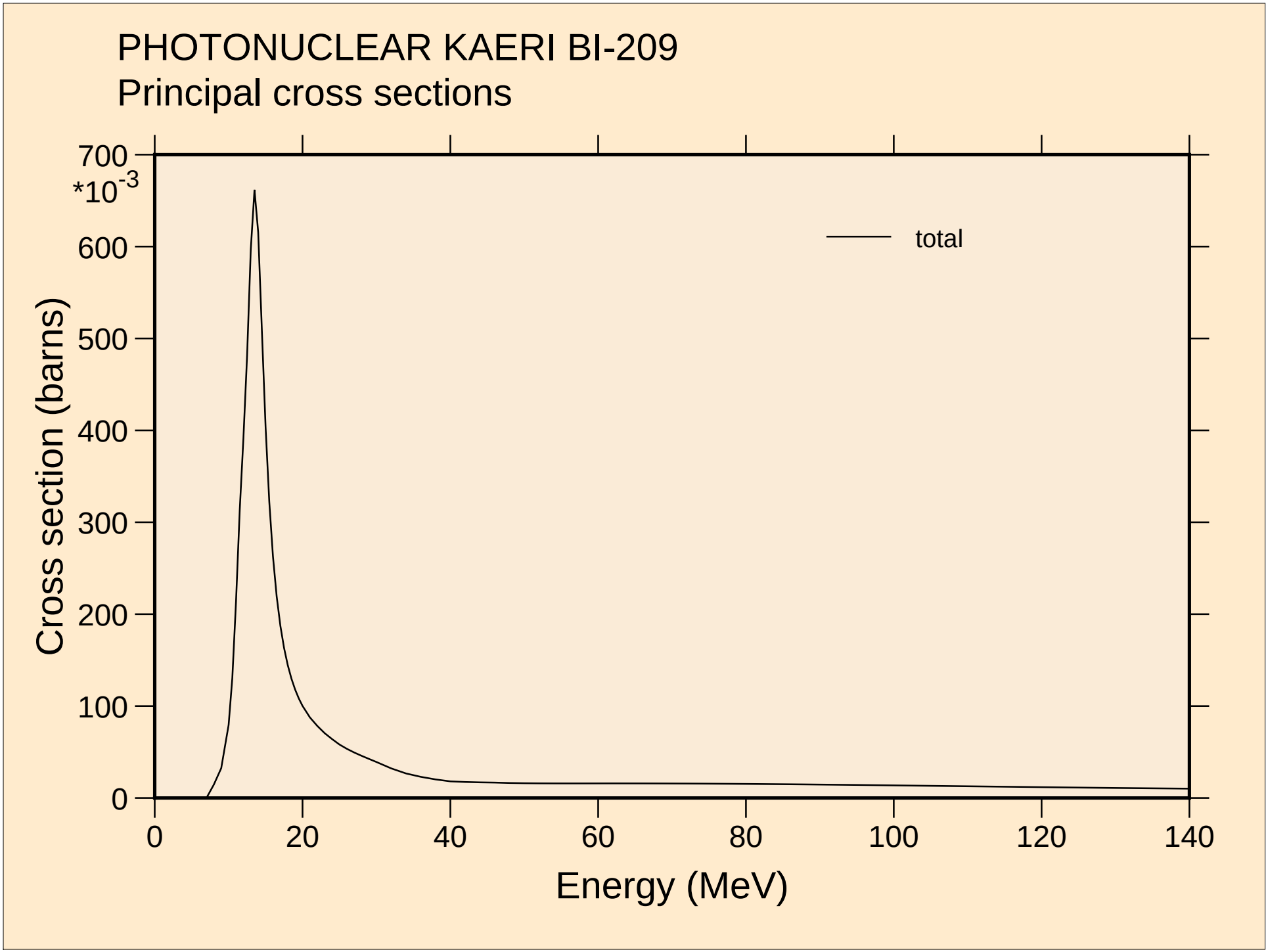
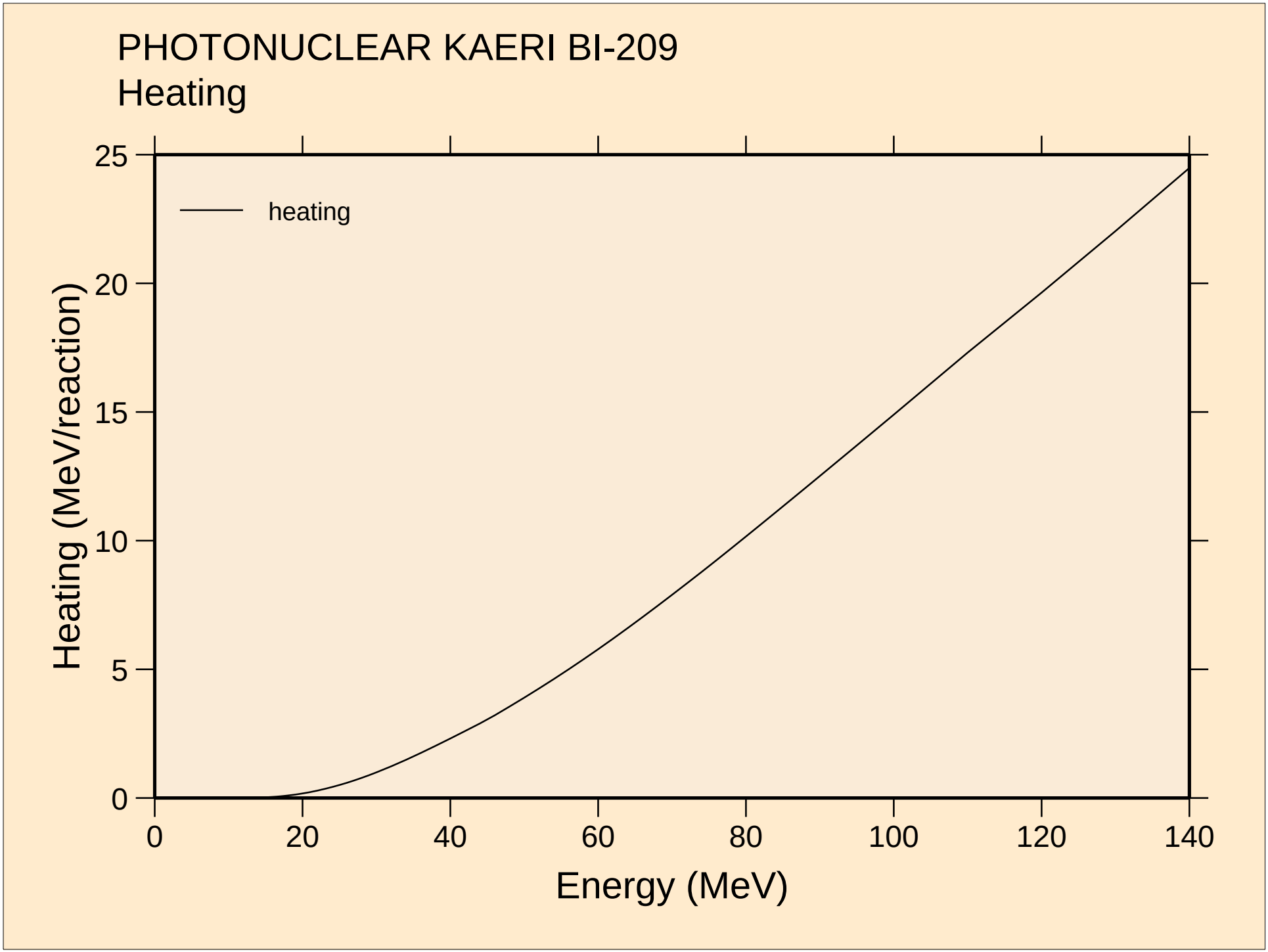
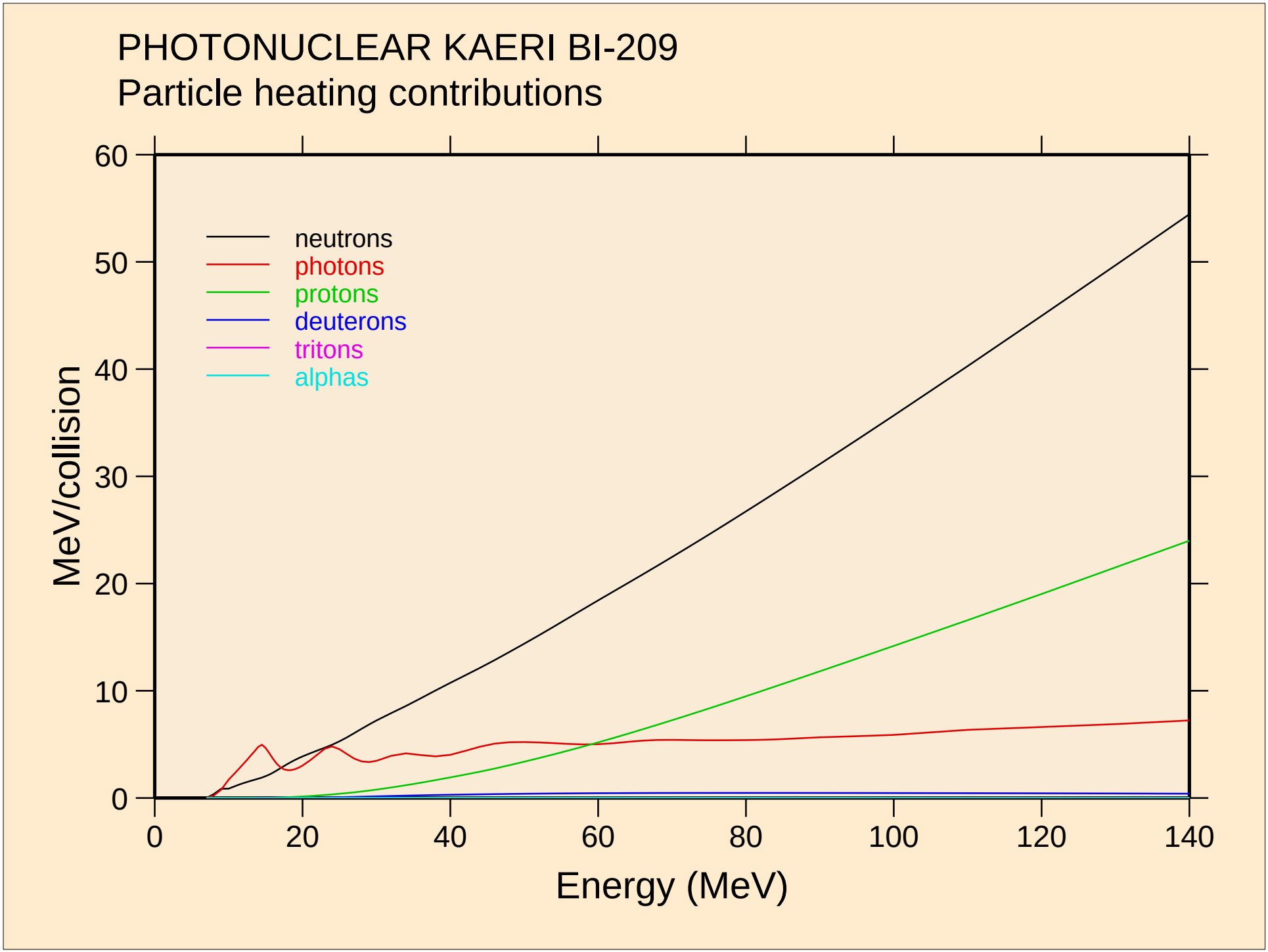
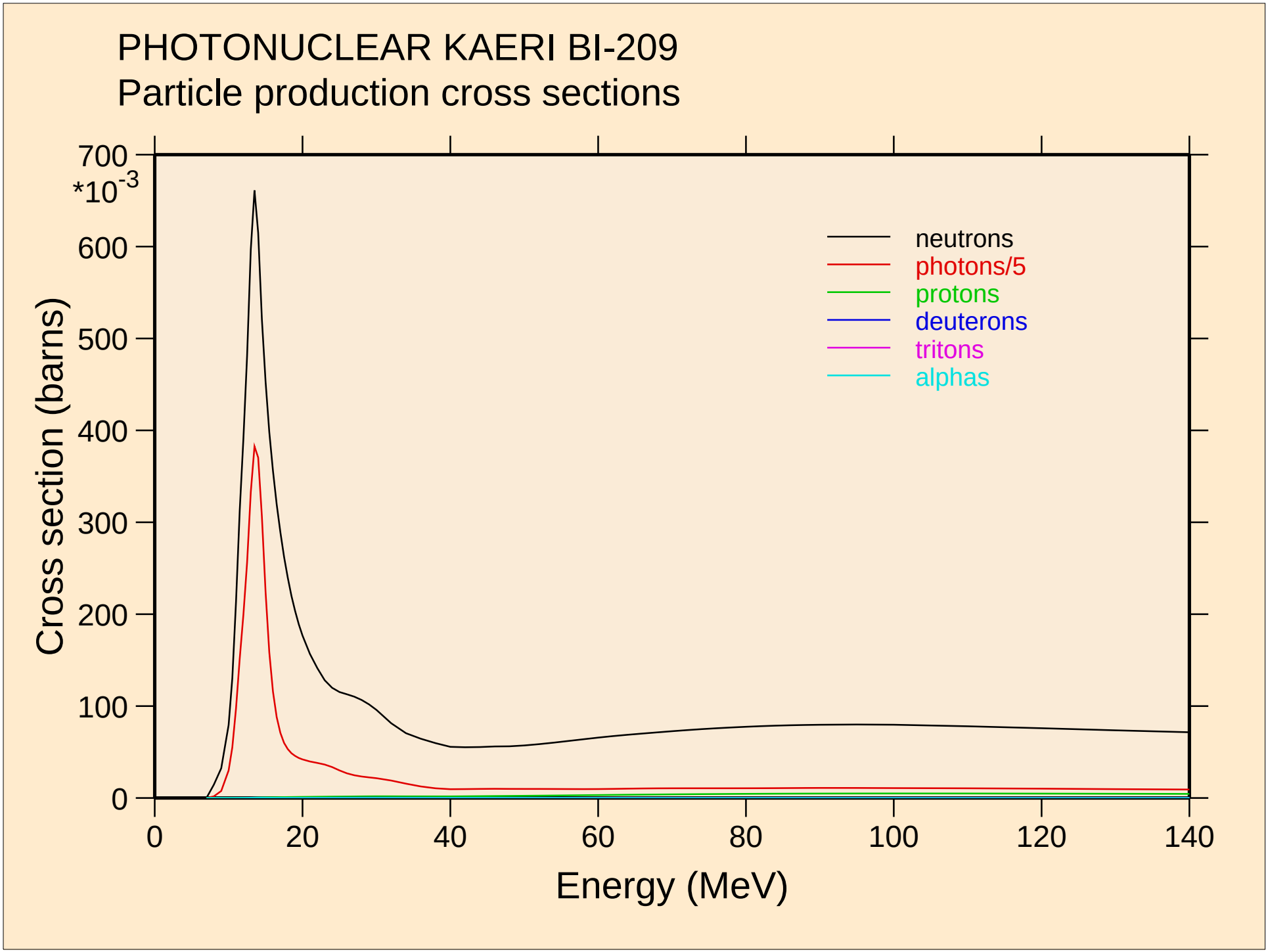
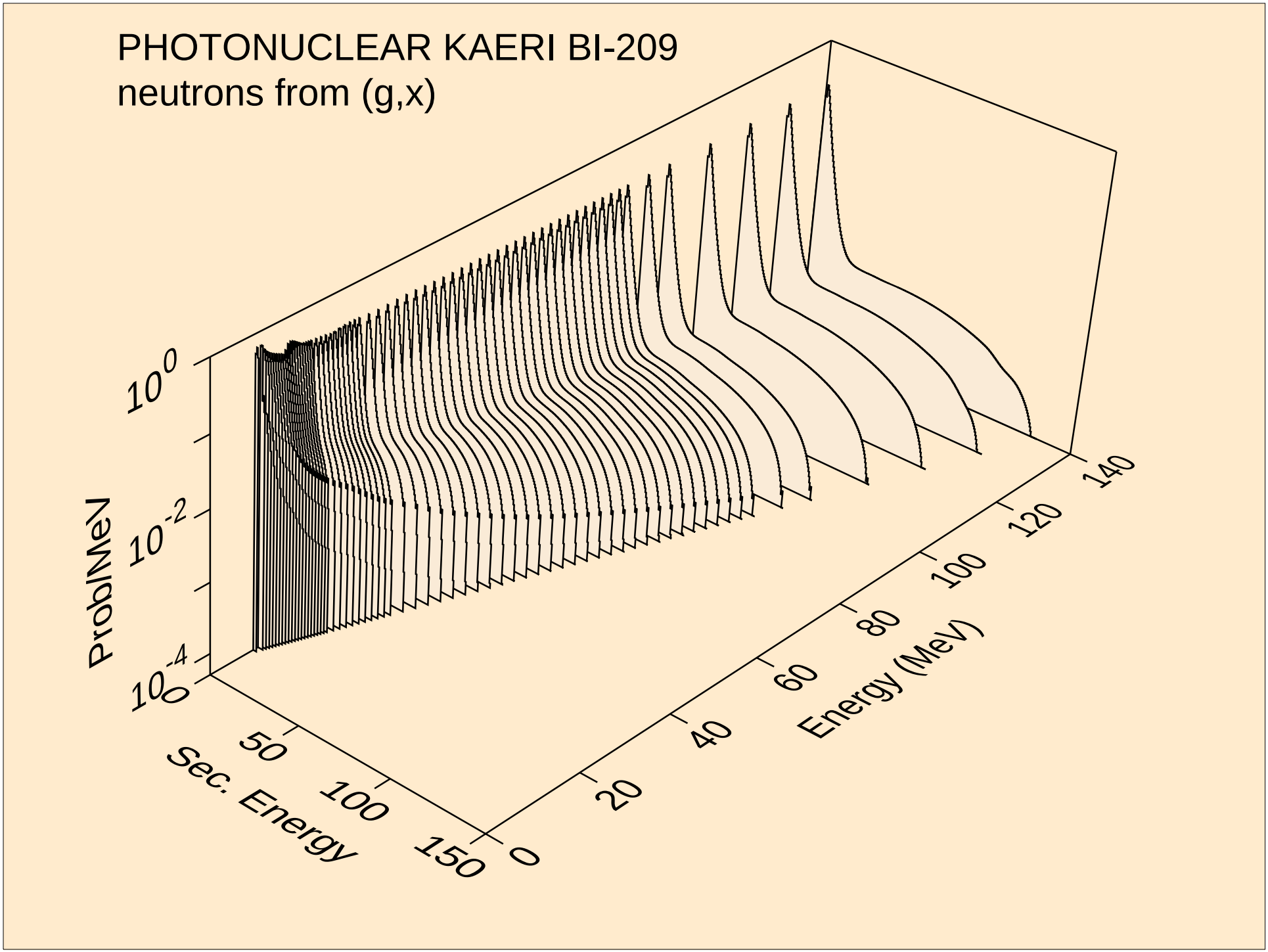
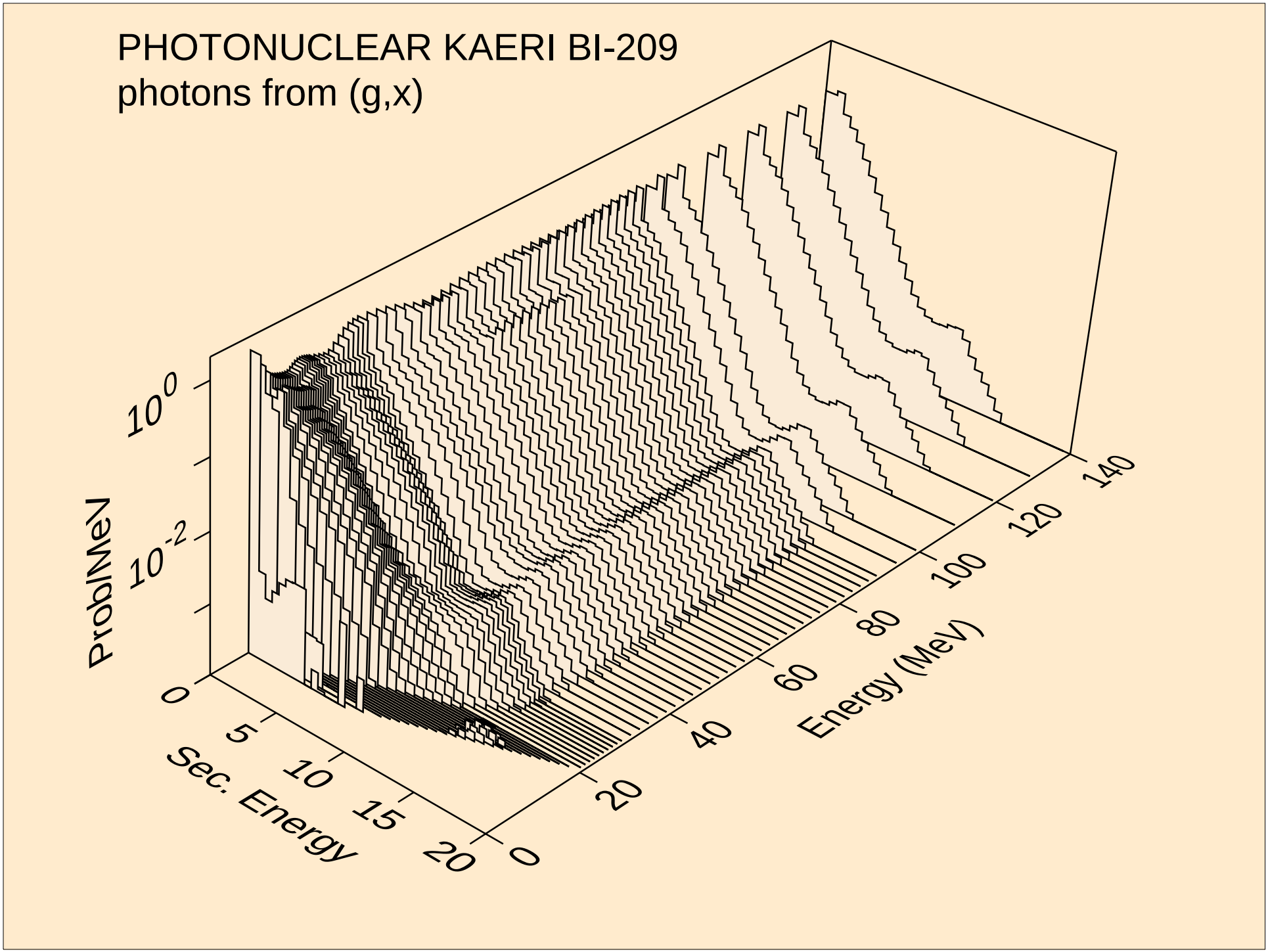

PHOTONUCLEAR KAERI BI-209
Principal cross sections
Cross section (barns)
*10-3
700
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
Energy (MeV)
total

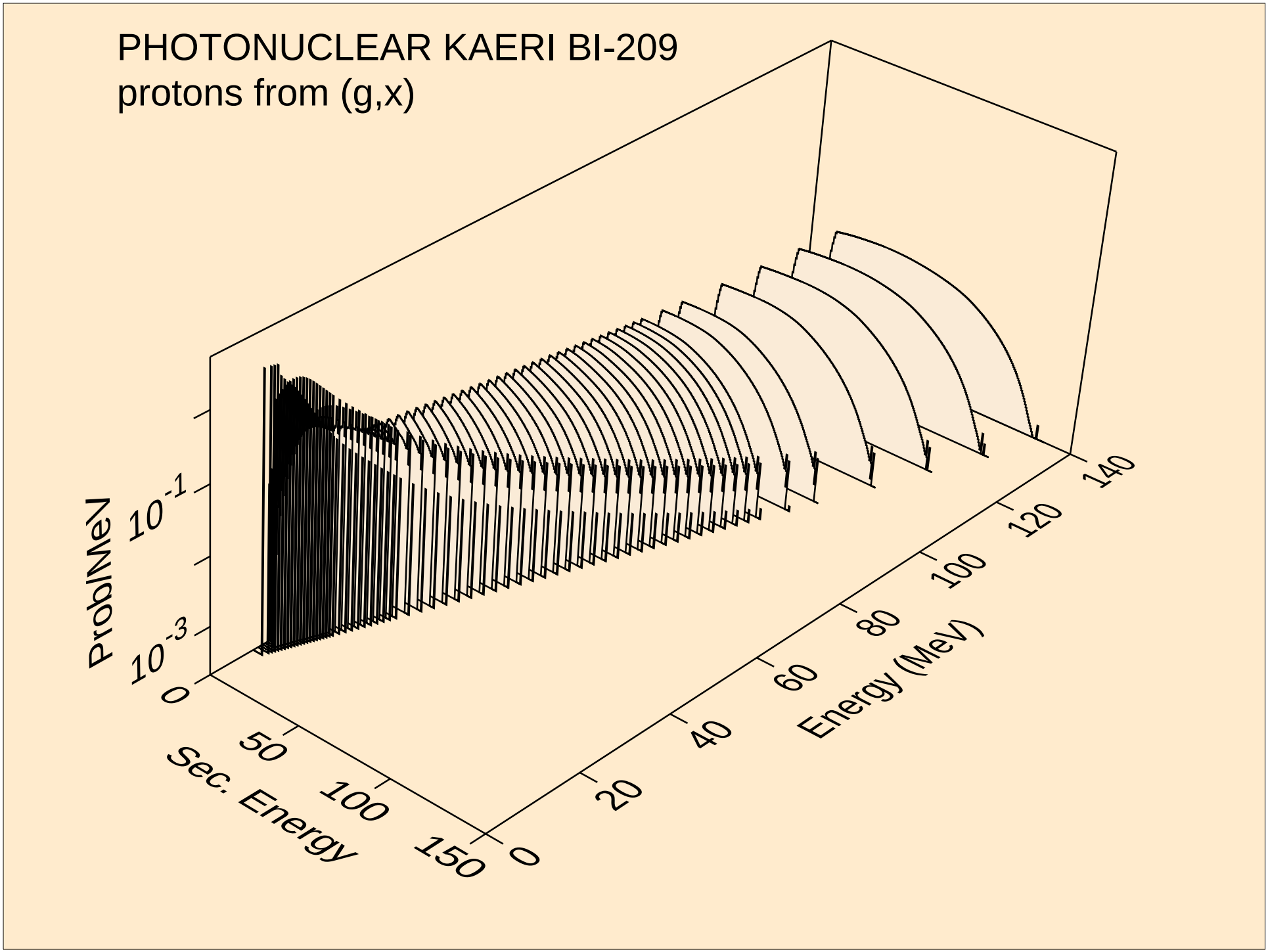

PHOTONUCLEAR KAERI BI-209
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
0
5
10
15
20
25
0
20
40
60
80
100
120
140

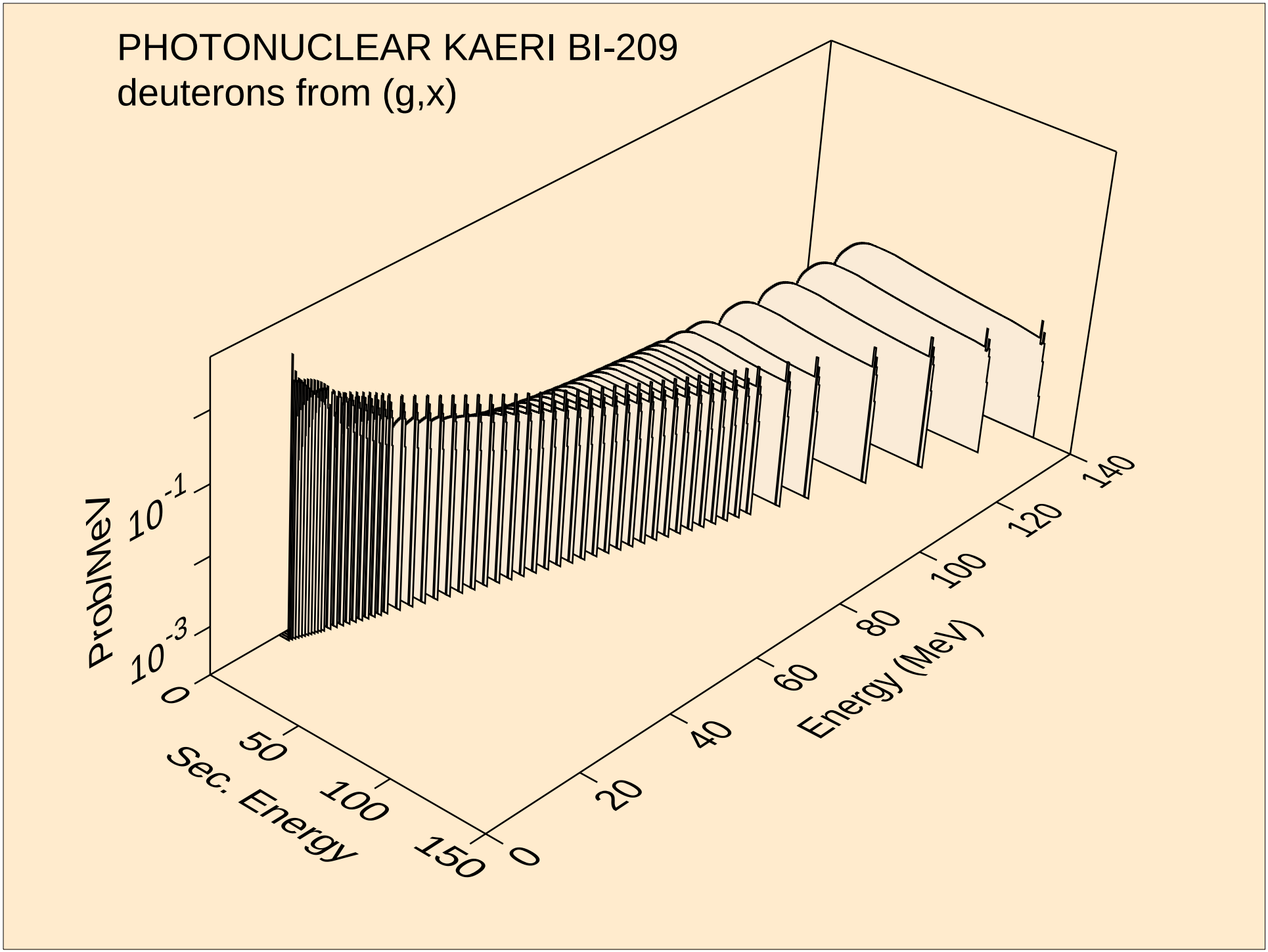

PHOTONUCLEAR KAERI BI-209
Particle heating contributions
neutrons
photons
protons
deuterons
tritons
alphas
MeV/collision
Energy (MeV)
0
10
20
30
40
50
60
0
20
40
60
80
100
120
140

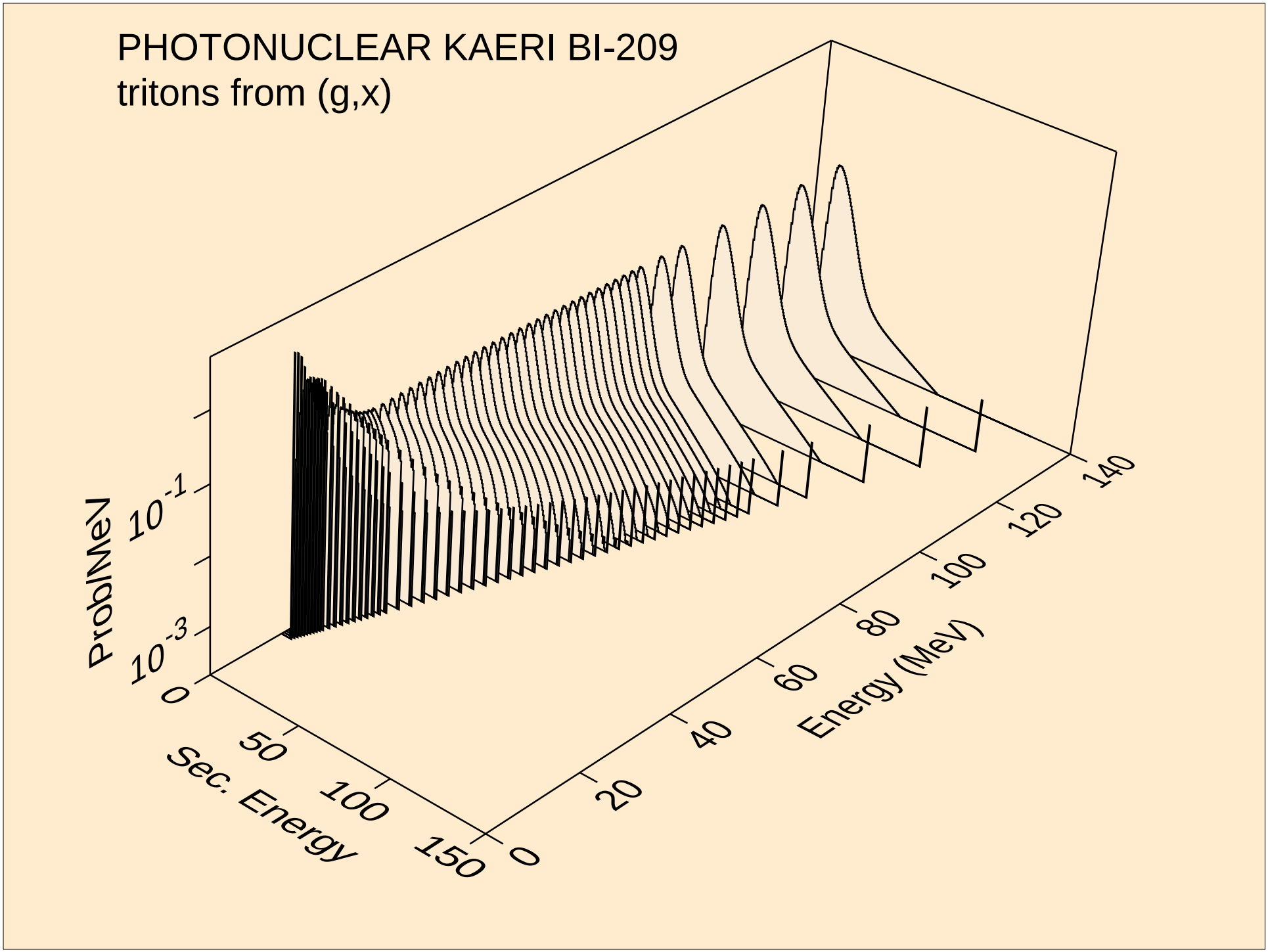

PHOTONUCLEAR KAERI BI-209
Particle production cross sections
Cross section (barns)
*10-3
700
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140
Energy (MeV)
neutrons
photons/5
protons
deuterons
tritons
alphas

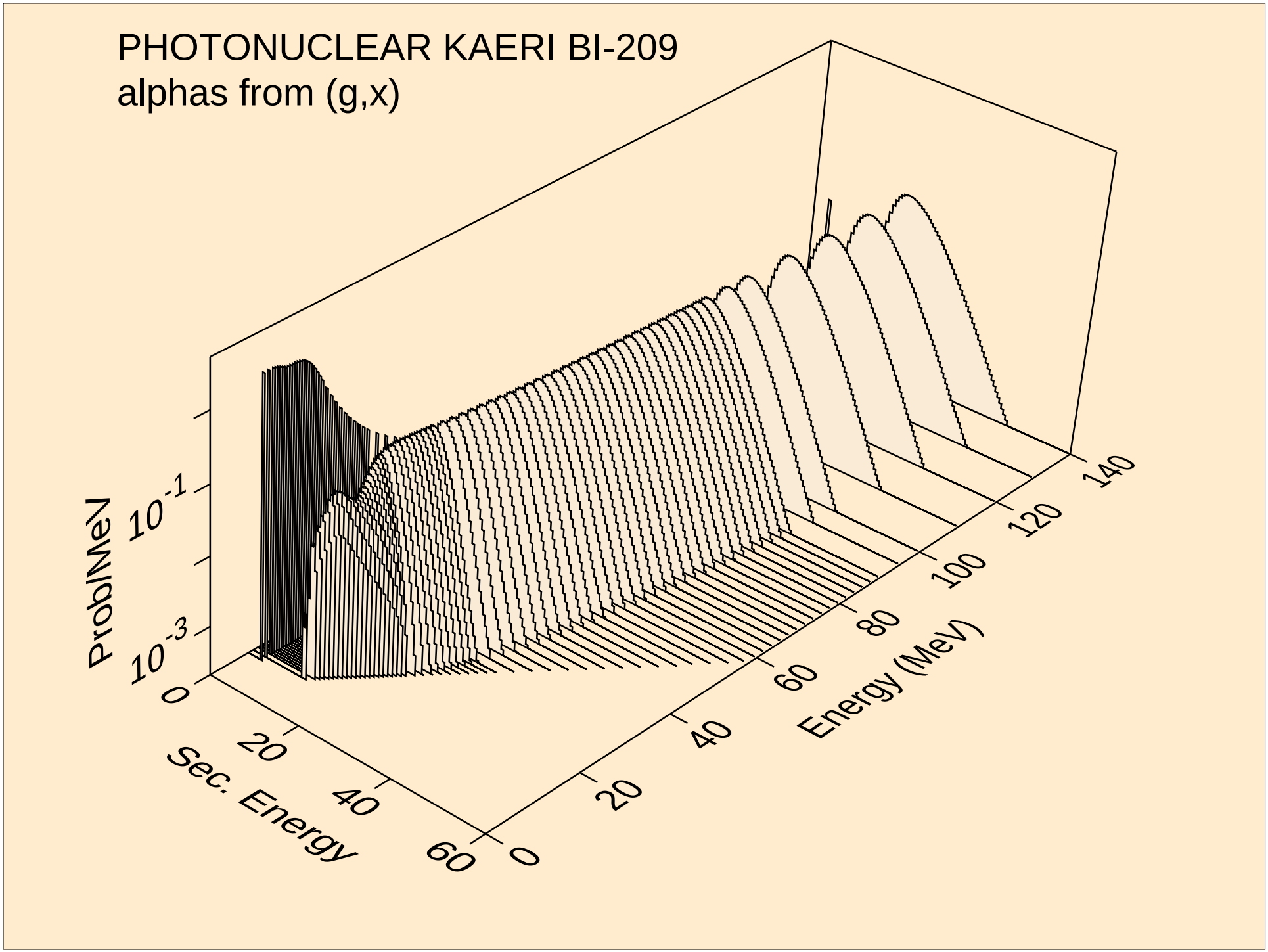

PHOTONUCLEAR KAERI BI-209
neutrons from (g,x)
Prob/MeV
10^0
10^-2
10^-4
0
50
100
150
Sec. Energy
0
20
40
60
80
100
120
140
Energy (MeV)


PHOTONUCLEAR KAERI BI-209
photons from (g,x)
Prob/MeV
10^0
10^-2
0
5
10
15
20
Sec. Energy
0
20
40
60
80
100
120
140
Energy (MeV)


PHOTONUCLEAR KAERI BI-209
protons from (g,x)
Prob/MeV
10-1
10-3
0
50
100
150
Sec. Energy
0
20
40
60
80
100
120
140
Energy (MeV)


PHOTONUCLEAR KAERI BI-209
deuterons from (g,x)
Prob/MeV
10-1
10-3
0
50
100
150
Sec. Energy
0
20
40
60
80
100
120
140
Energy (MeV)


PHOTONUCLEAR KAERI BI-209
tritons from (g,x)
Prob/MeV
10-1
10-3
0
50
100
150
Sec. Energy
0
20
40
60
80
100
120
140
Energy (MeV)


PHOTONUCLEAR KAERI BI-209
alphas from (g,x)
Prob/MeV
10-1
10-3
0
20
40
60
Sec. Energy
0
20
40
60
80
100
120
140
Energy (MeV)