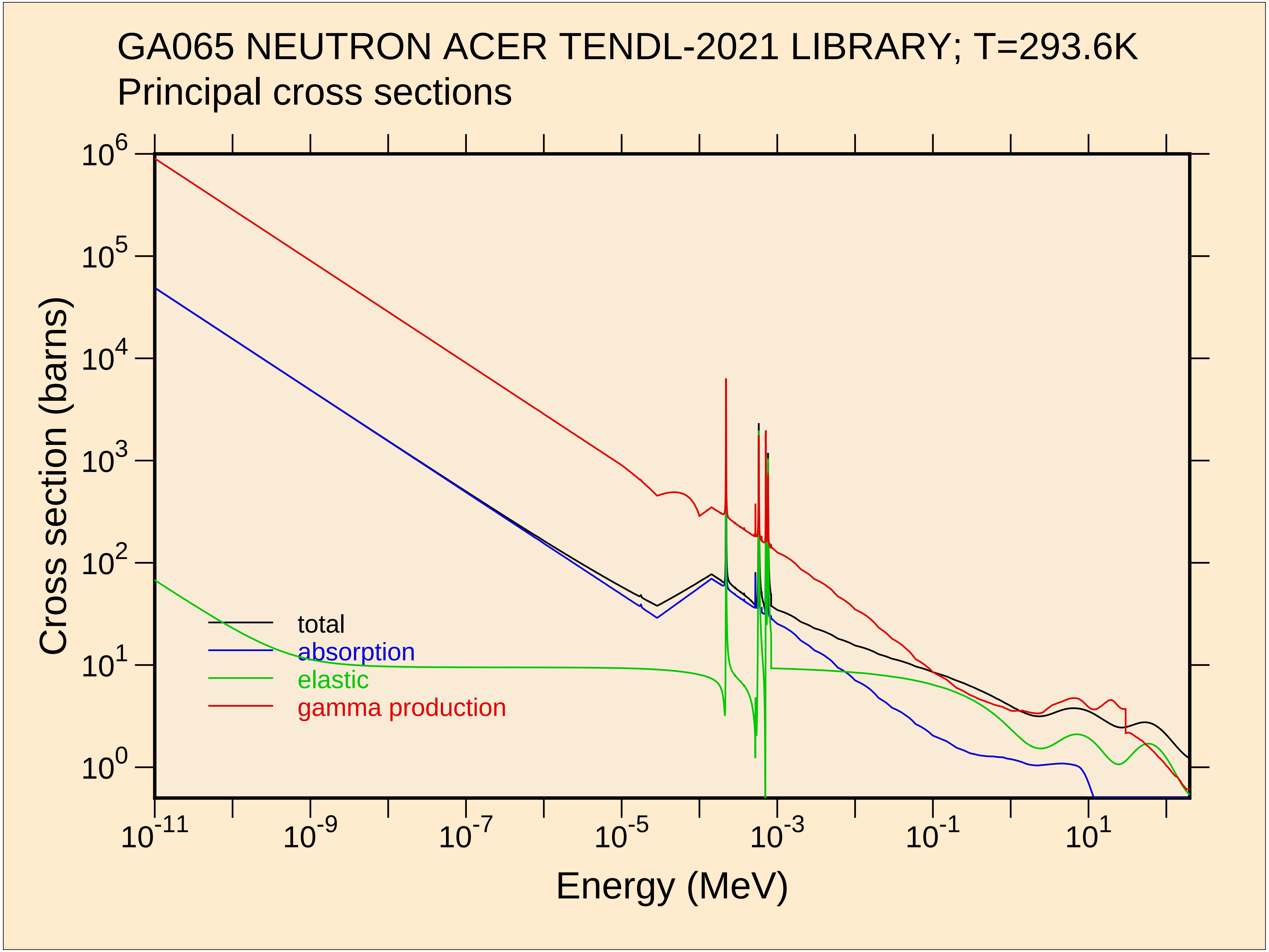
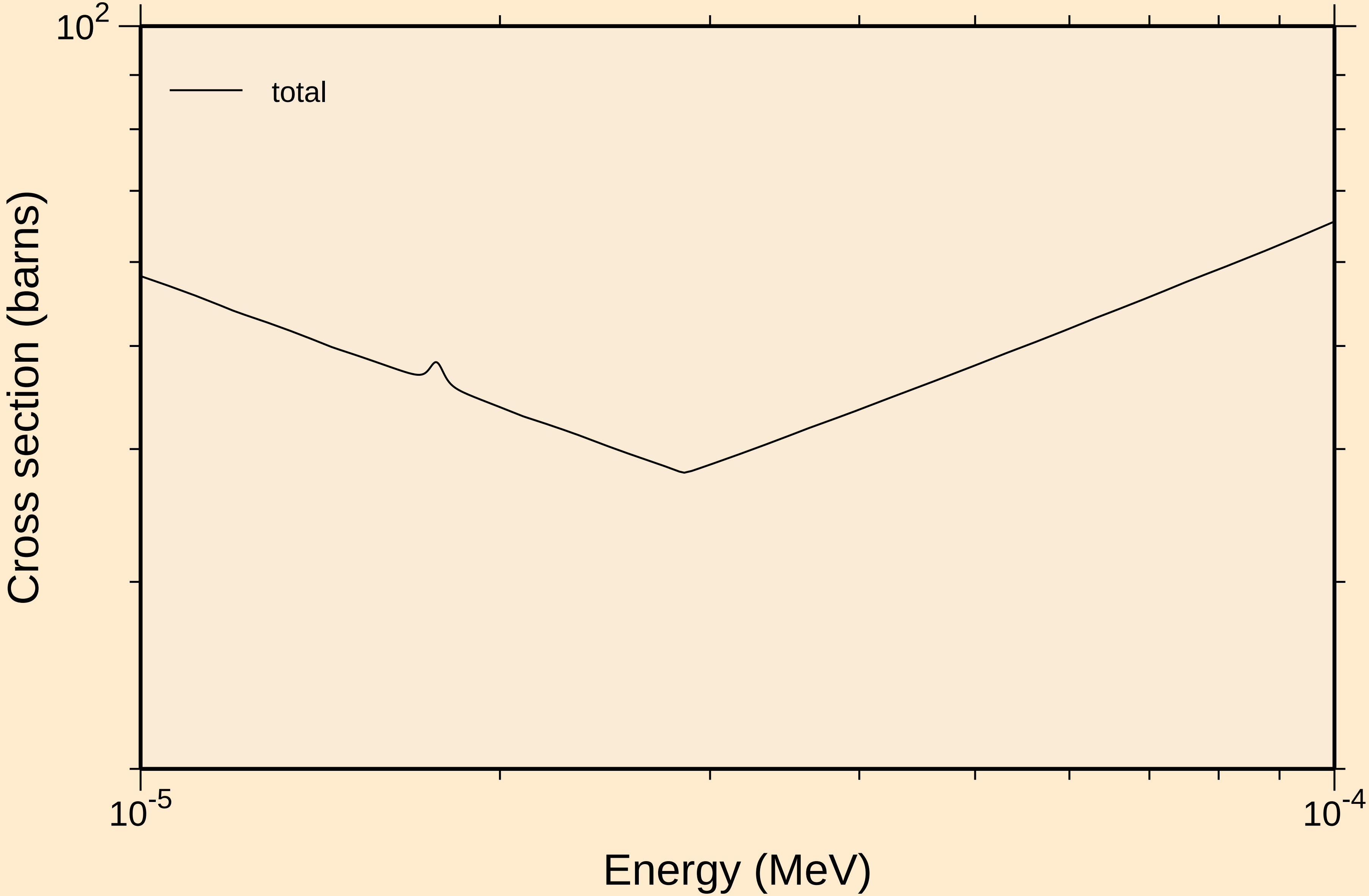
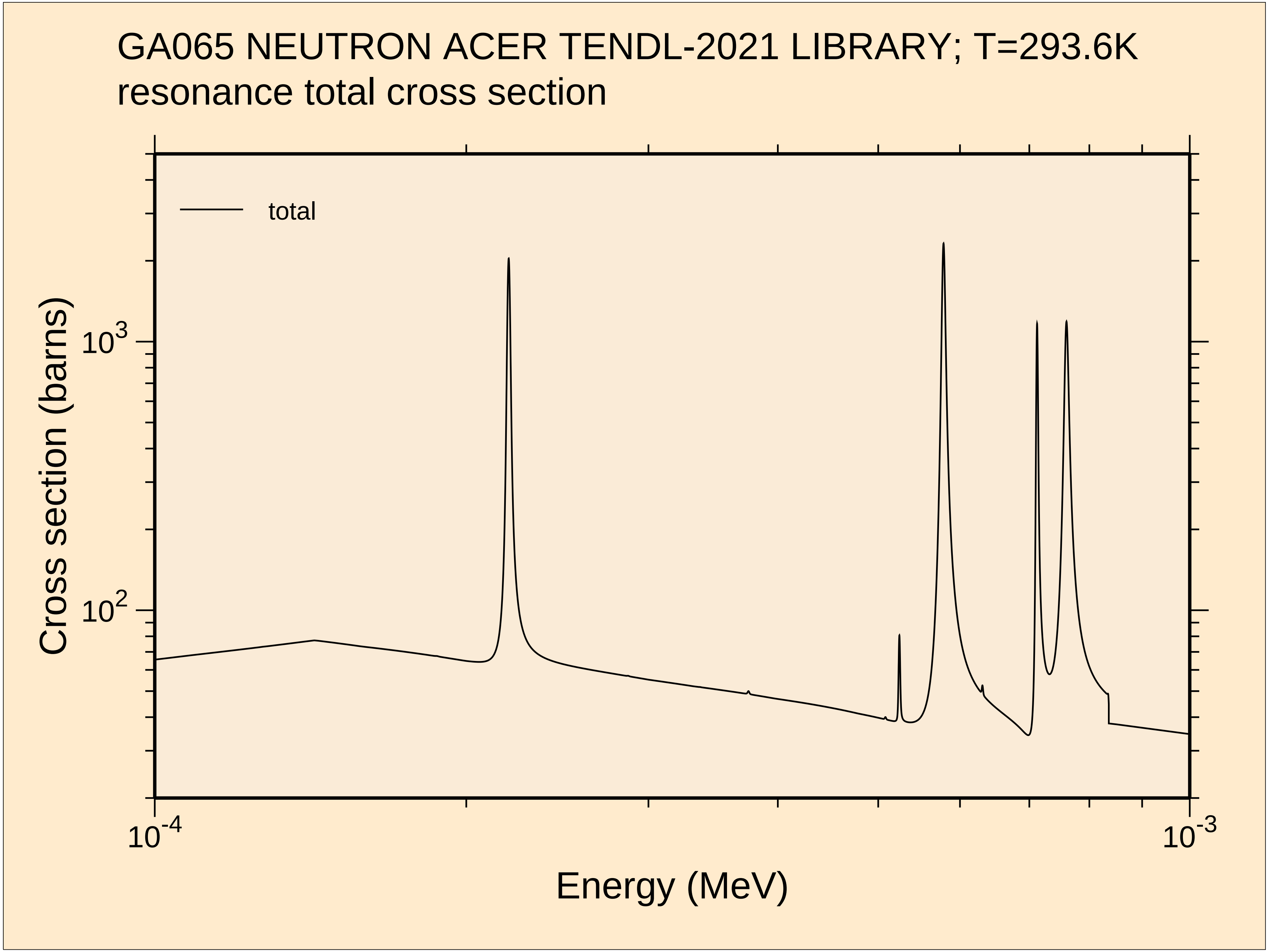
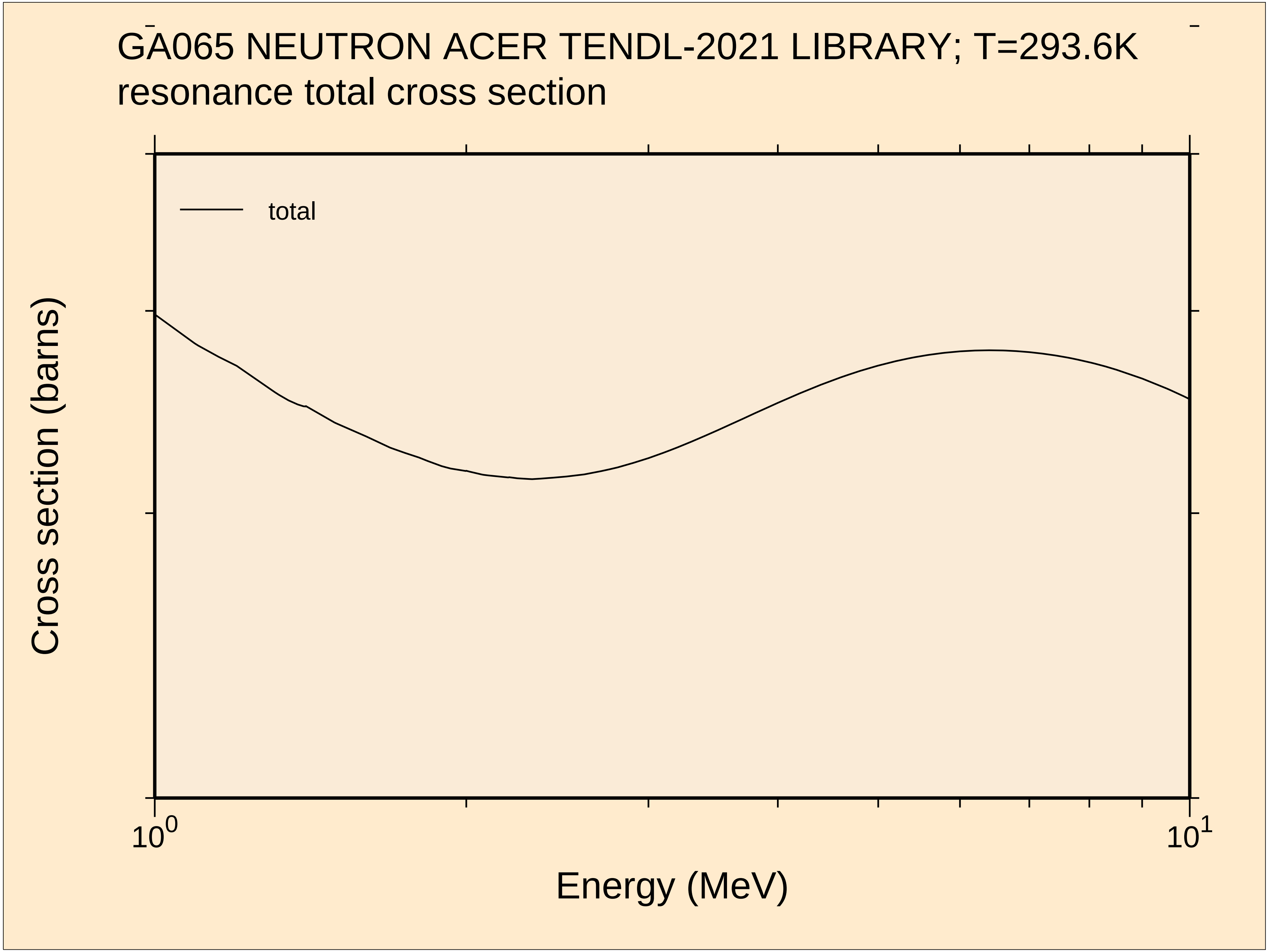
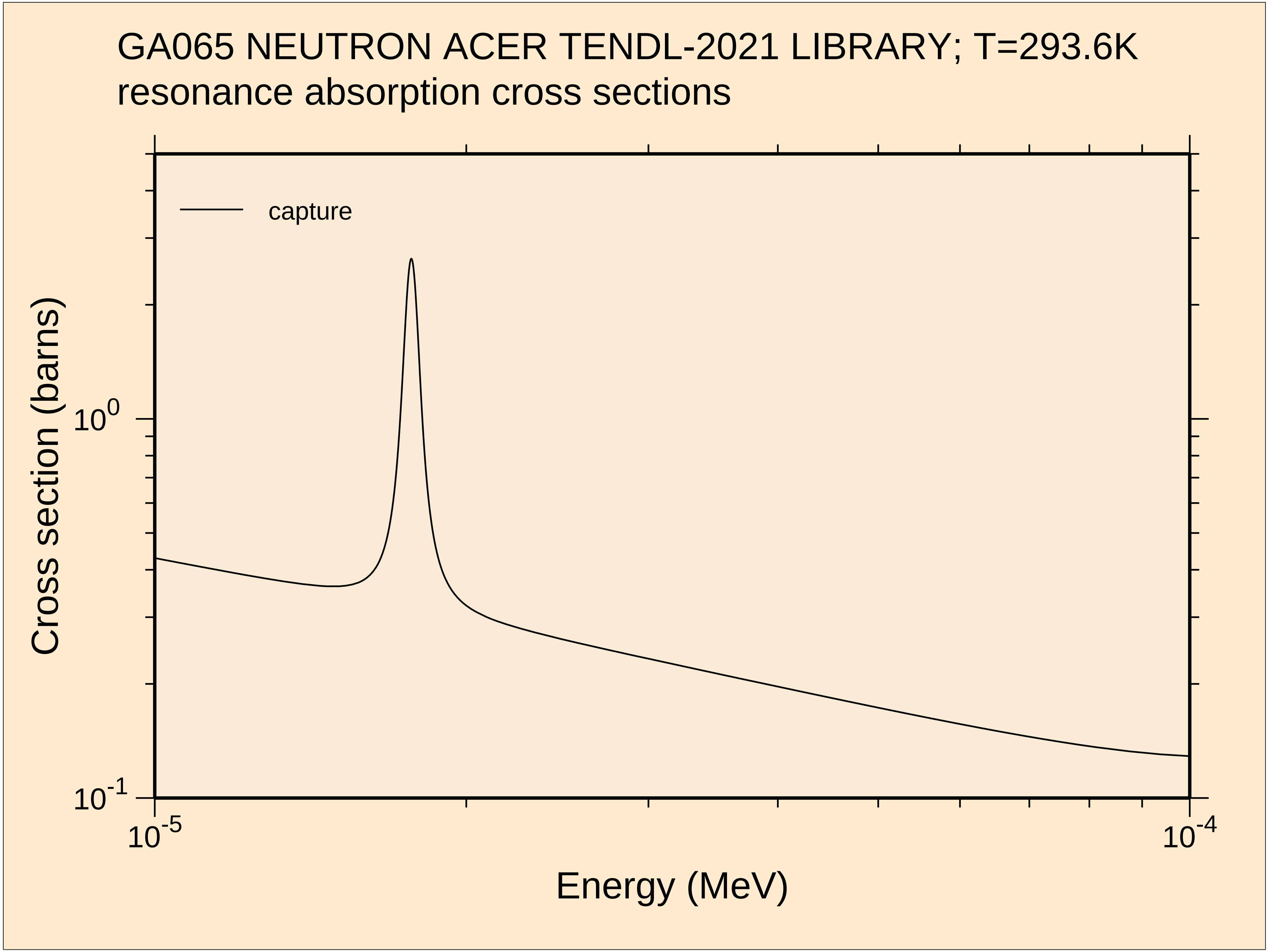

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Principal cross sections
Cross section (barns)
Energy (MeV)
10^{6}
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-11}
10^{-9}
10^{-7}
10^{-5}
10^{-3}
10^{-1}
10^{1}
total
absorption
elastic
gamma production

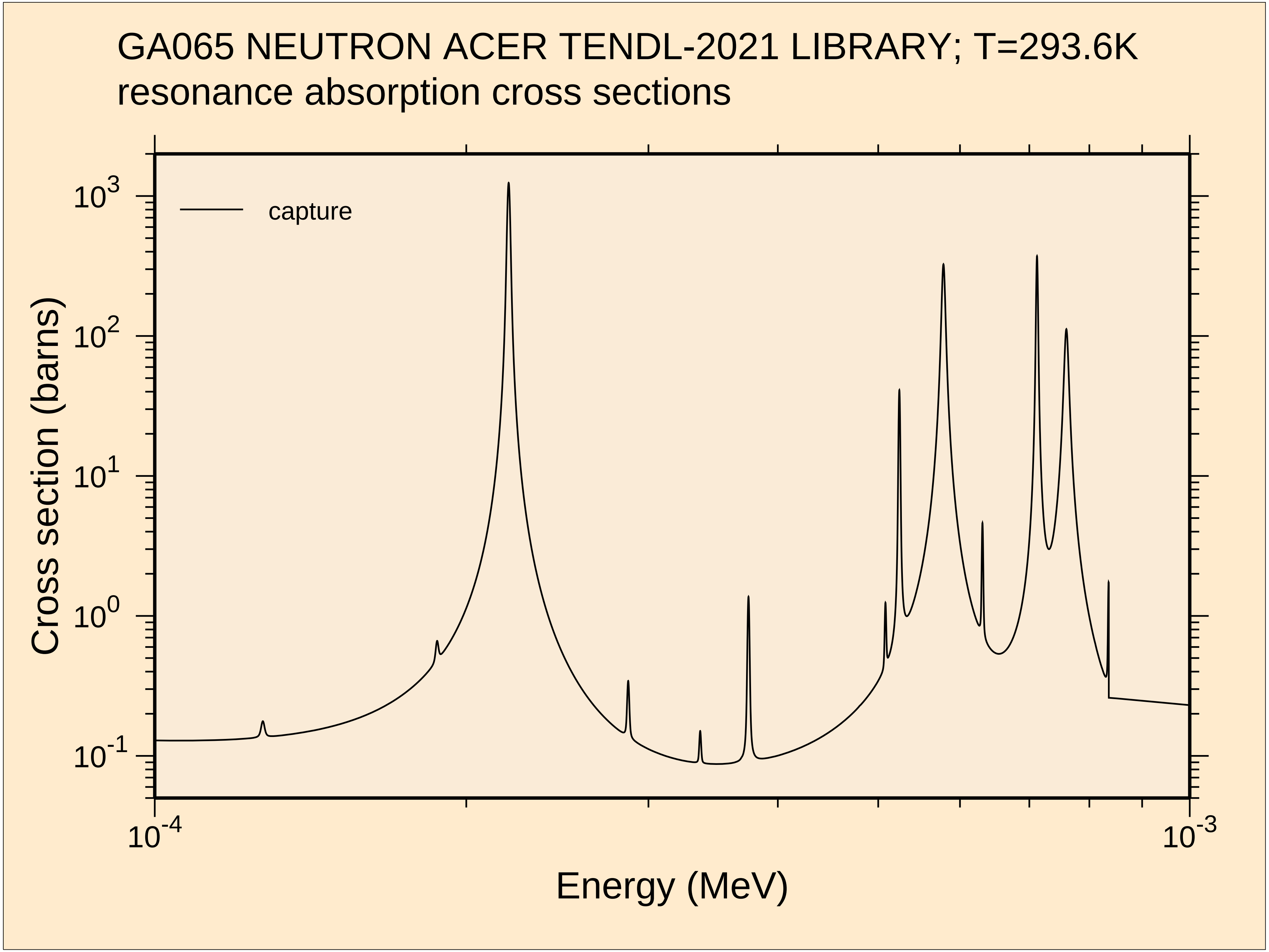
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
resonance total cross section

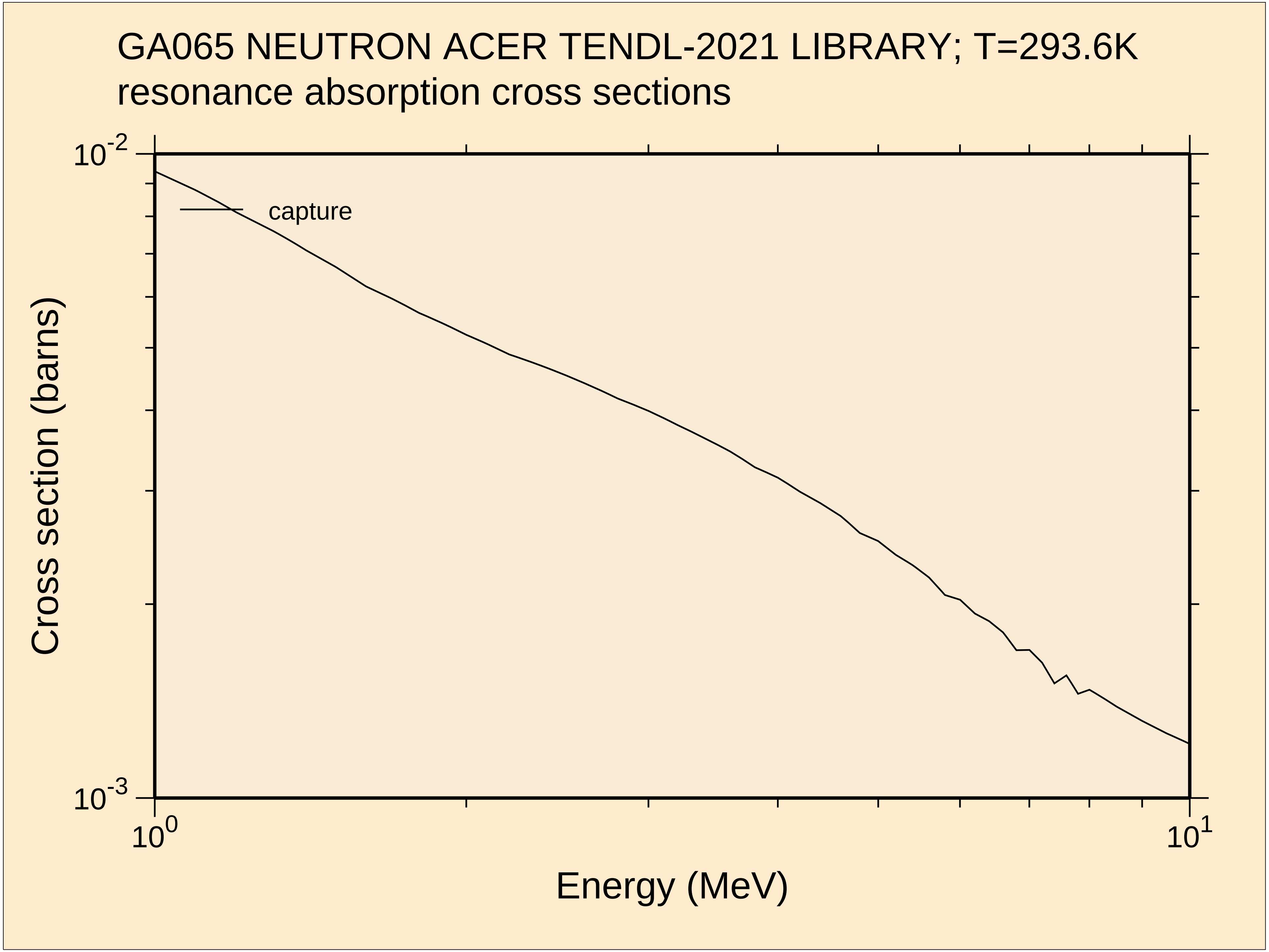


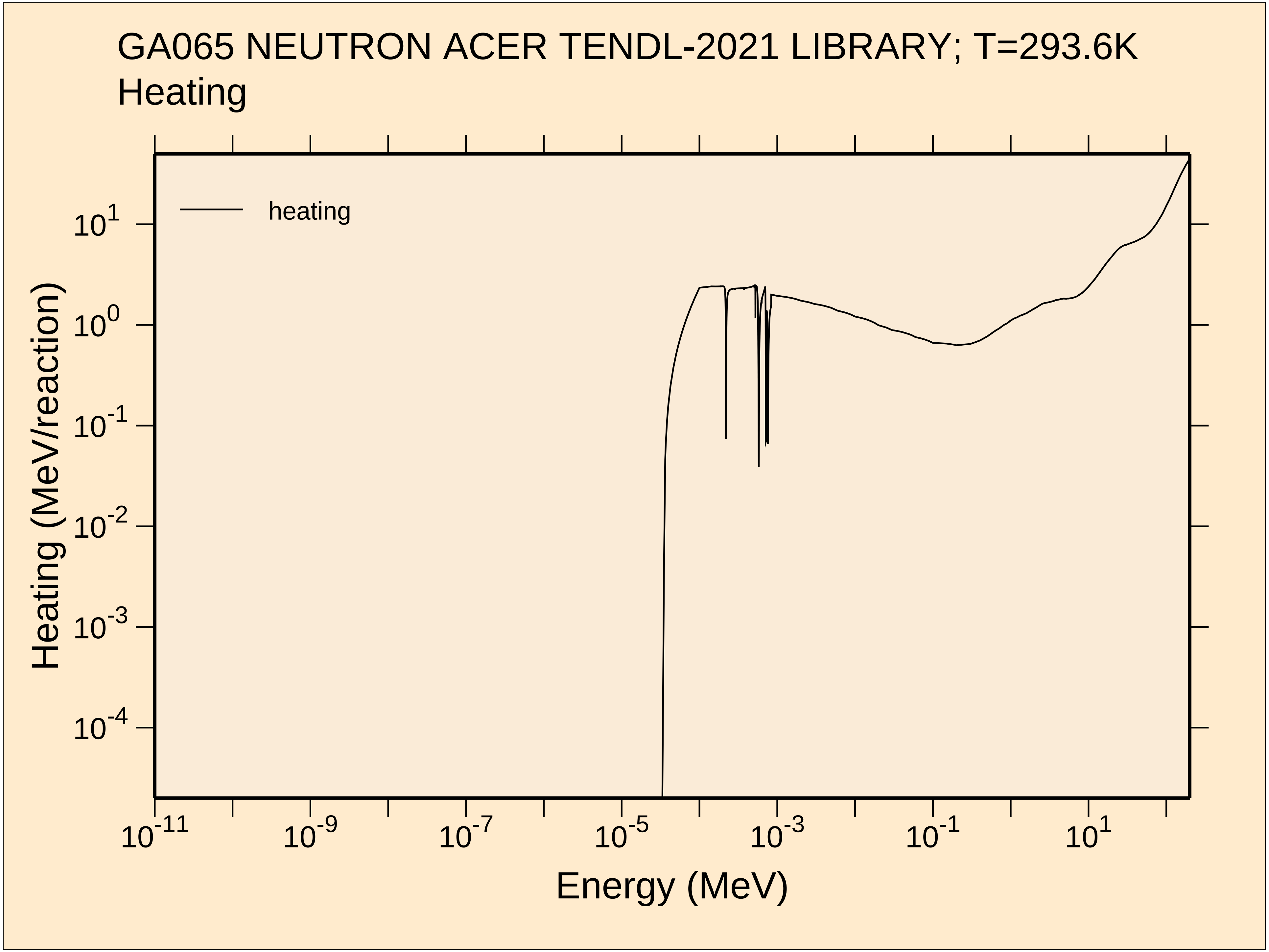

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
resonance total cross section
total
Cross section (barns)
10^3
10^2
10^{-4}
10^{-3}
Energy (MeV)

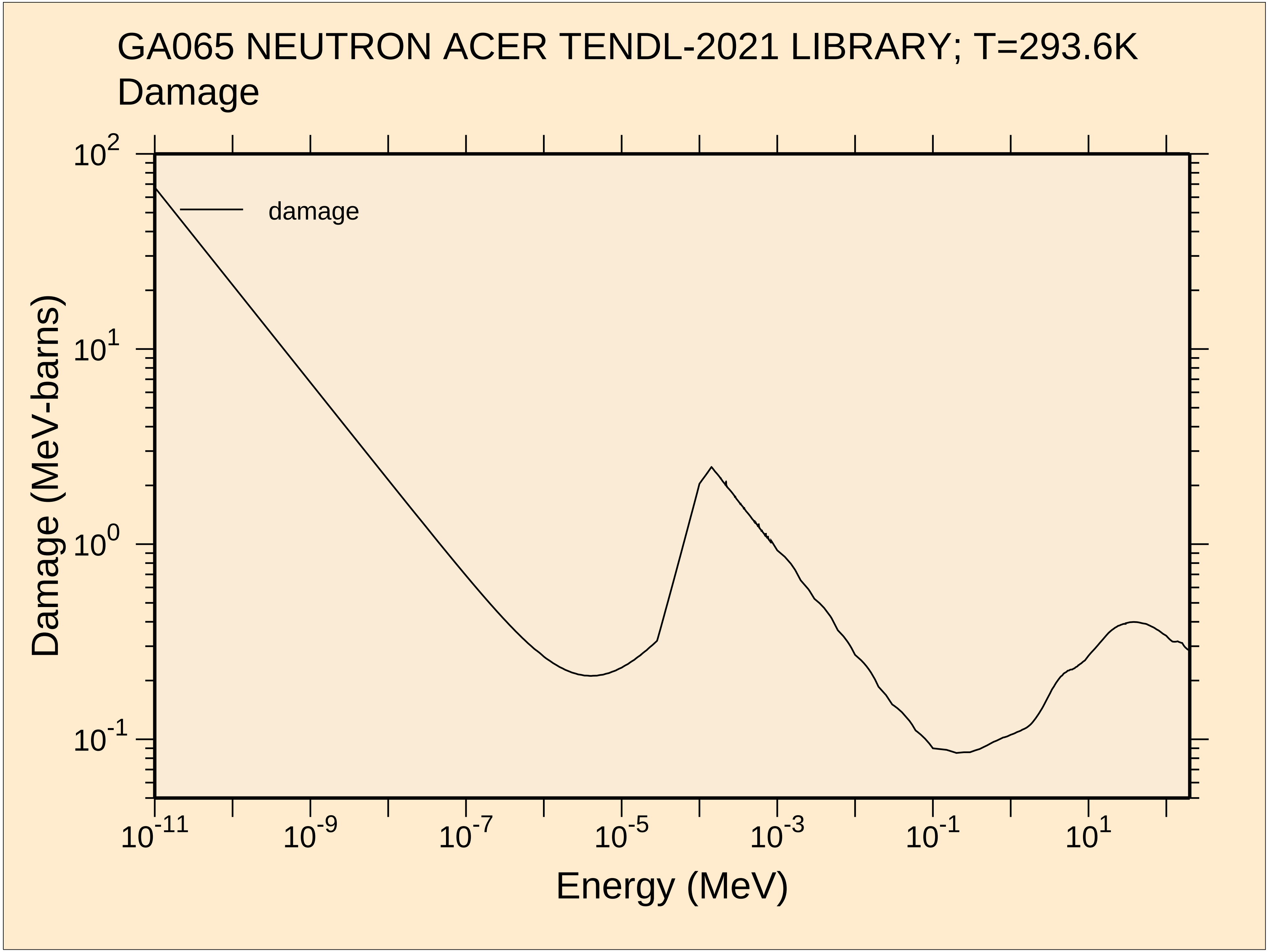

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
resonance total cross section
total
Cross section (barns)
10^0
10^1
Energy (MeV)

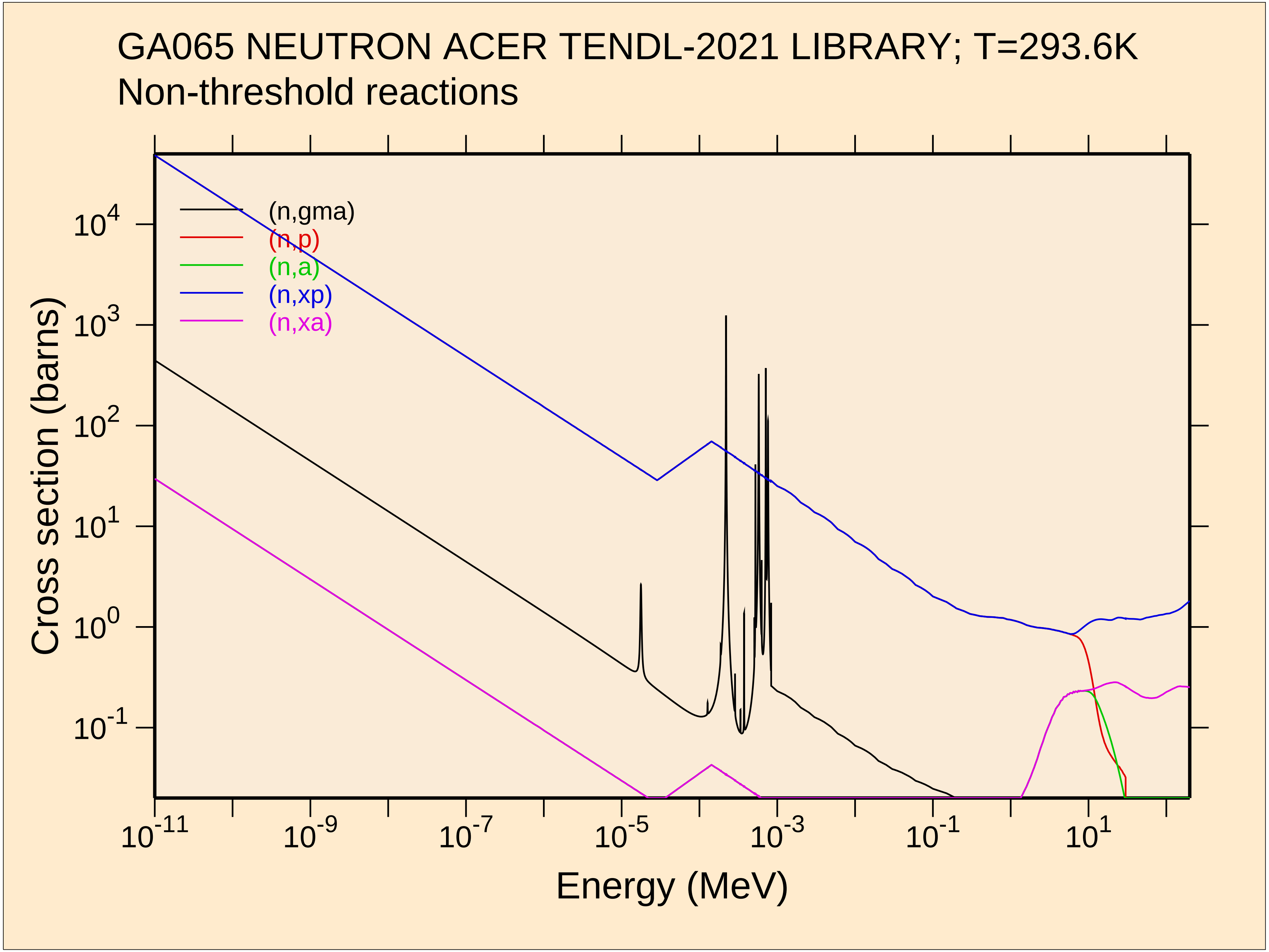

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
resonance absorption cross sections
capture
Cross section (barns)
10^0
10^{-1}
10^{-5}
10^{-4}
Energy (MeV)

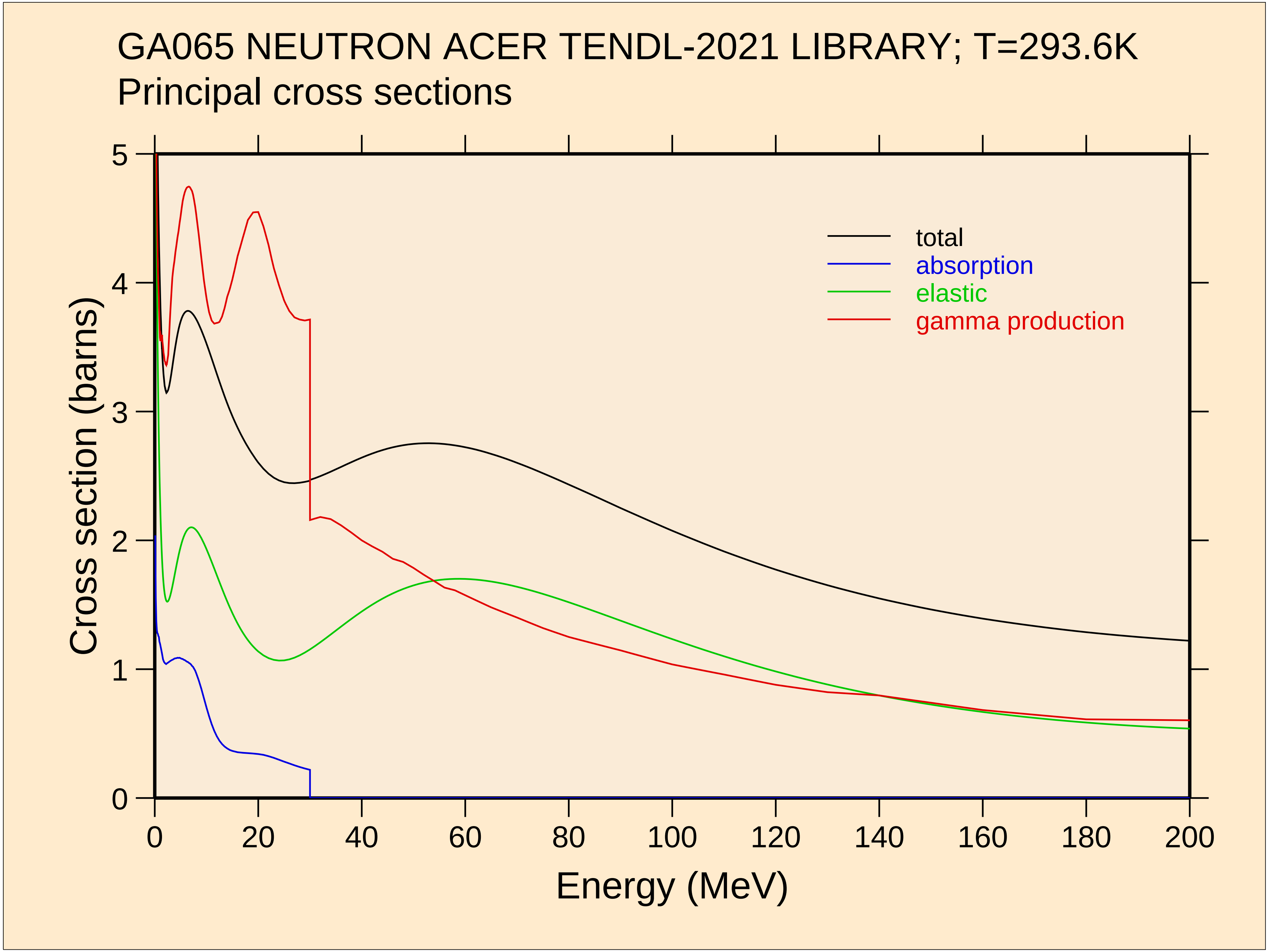

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
resonance absorption cross sections
capture
Cross section (barns)
Energy (MeV)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-4}
10^{-3}

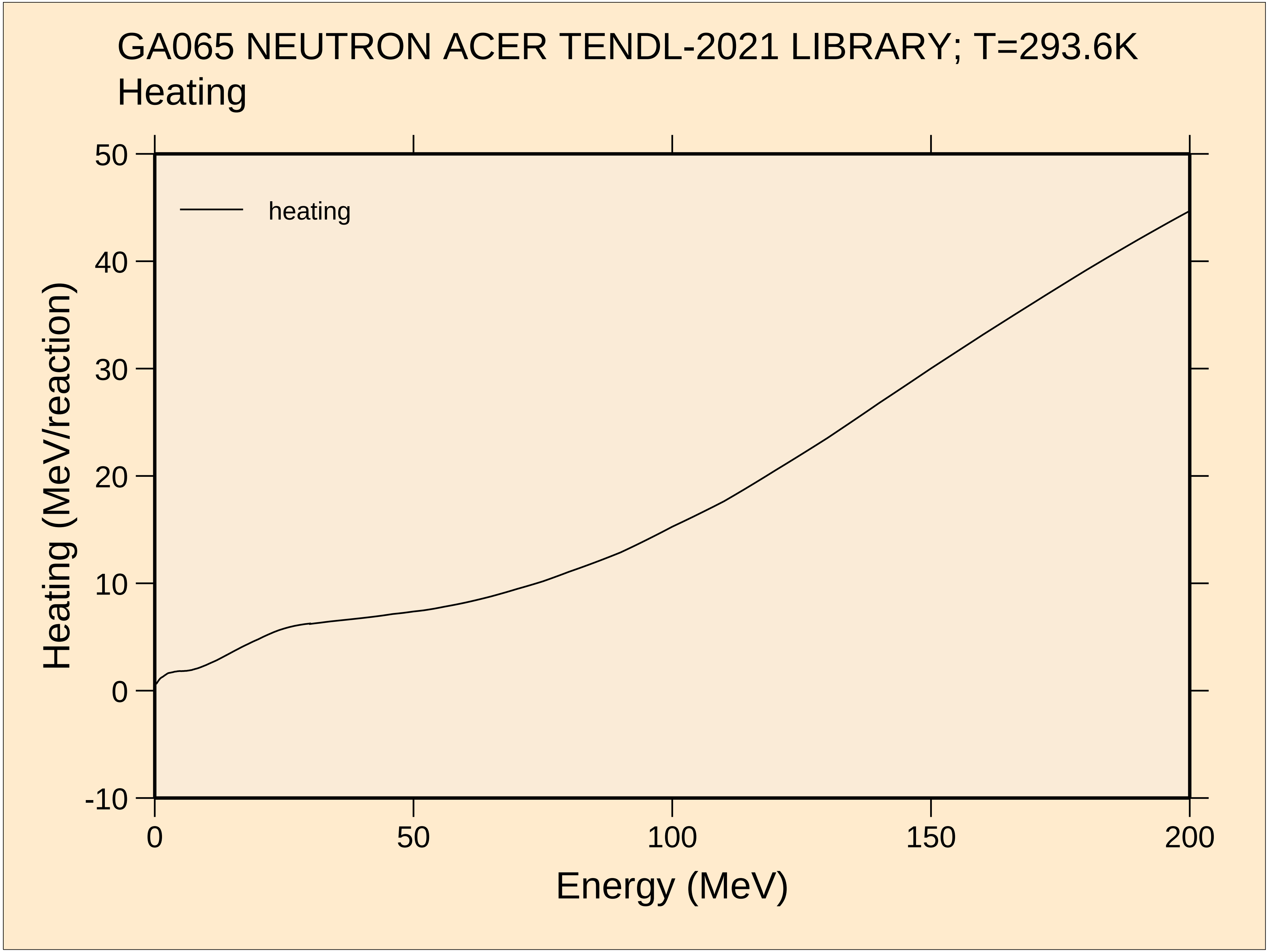

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
resonance absorption cross sections
capture
10^{-2}
10^{-3}
10^{0}
10^{1}
Cross section (barns)
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
10^1
10^0
10^-1
10^-2
10^-3
10^-4
10^-11
10^-9
10^-7
10^-5
10^-3
10^-1
10^1

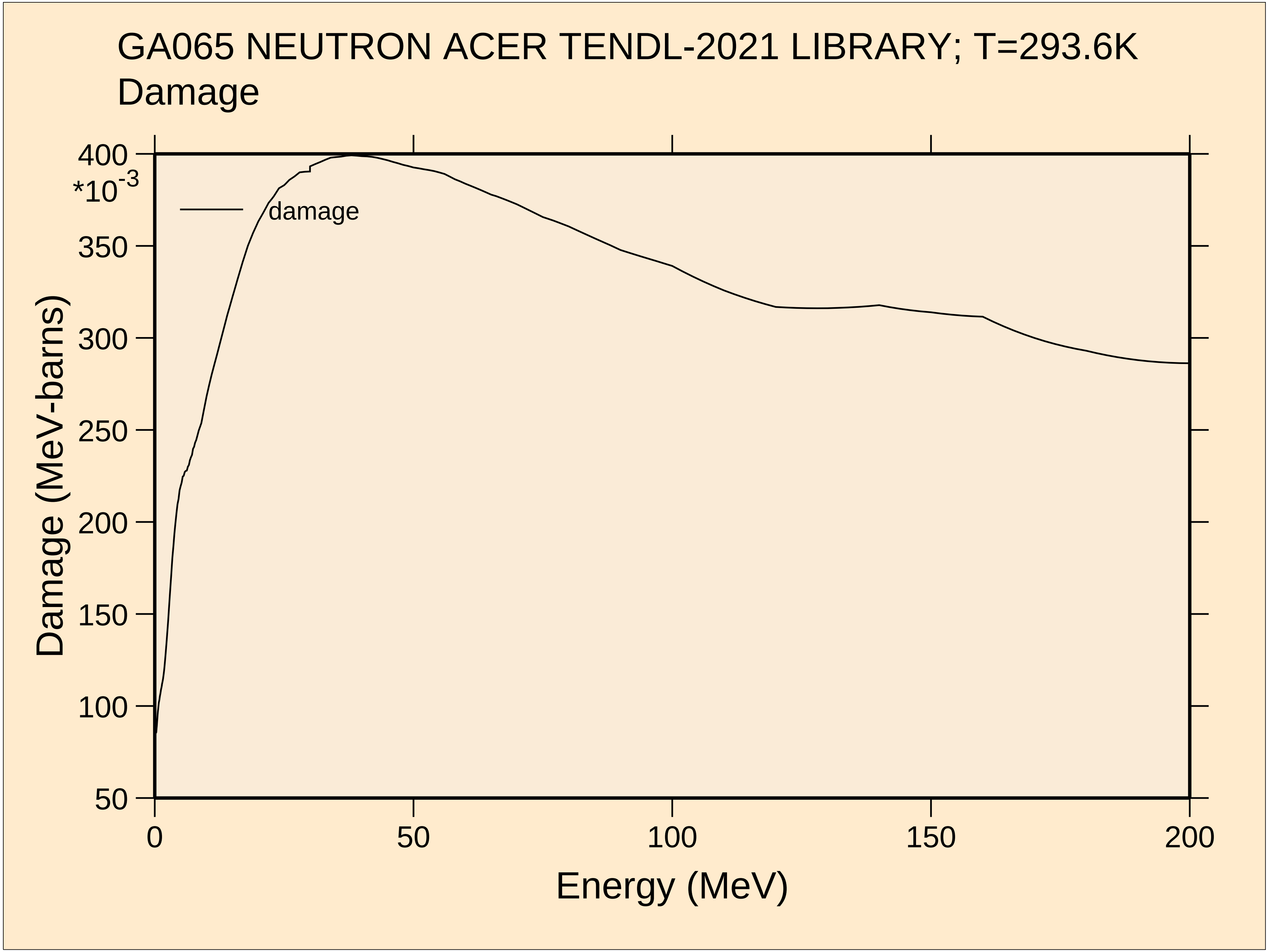

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Damage
damage
Damage (MeV-barns)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-11}
10^{-9}
10^{-7}
10^{-5}
10^{-3}
10^{-1}
10^{1}
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Non-threshold reactions
(n,gma)
(n,p)
(n,a)
(n,xp)
(n,xa)
Cross section (barns)
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-11}
10^{-9}
10^{-7}
10^{-5}
10^{-3}
10^{-1}
10^{1}
Energy (MeV)

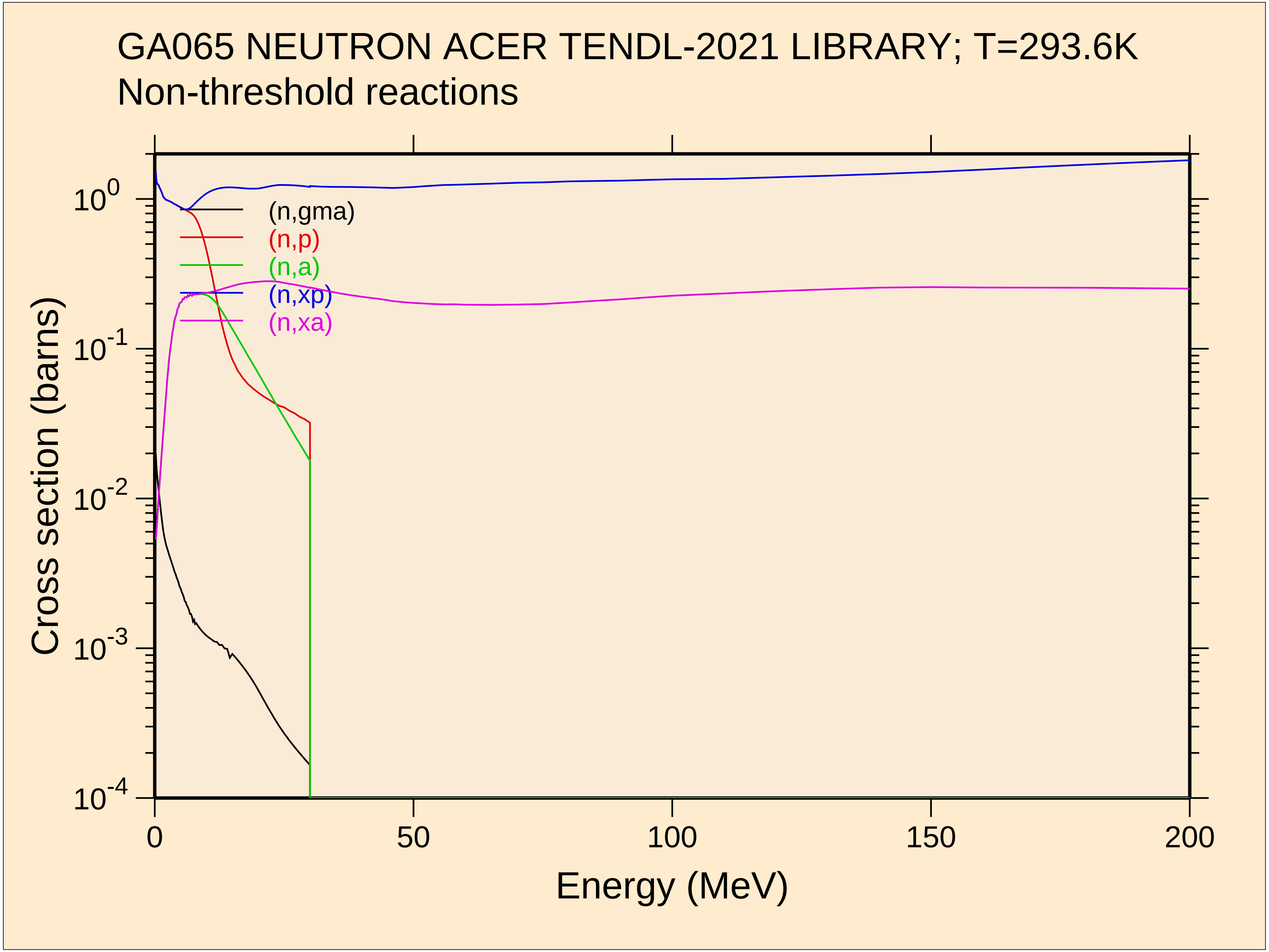

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Principal cross sections
Cross section (barns)
Energy (MeV)
total
absorption
elastic
gamma production
0
1
2
3
4
5
0
20
40
60
80
100
120
140
160
180
200



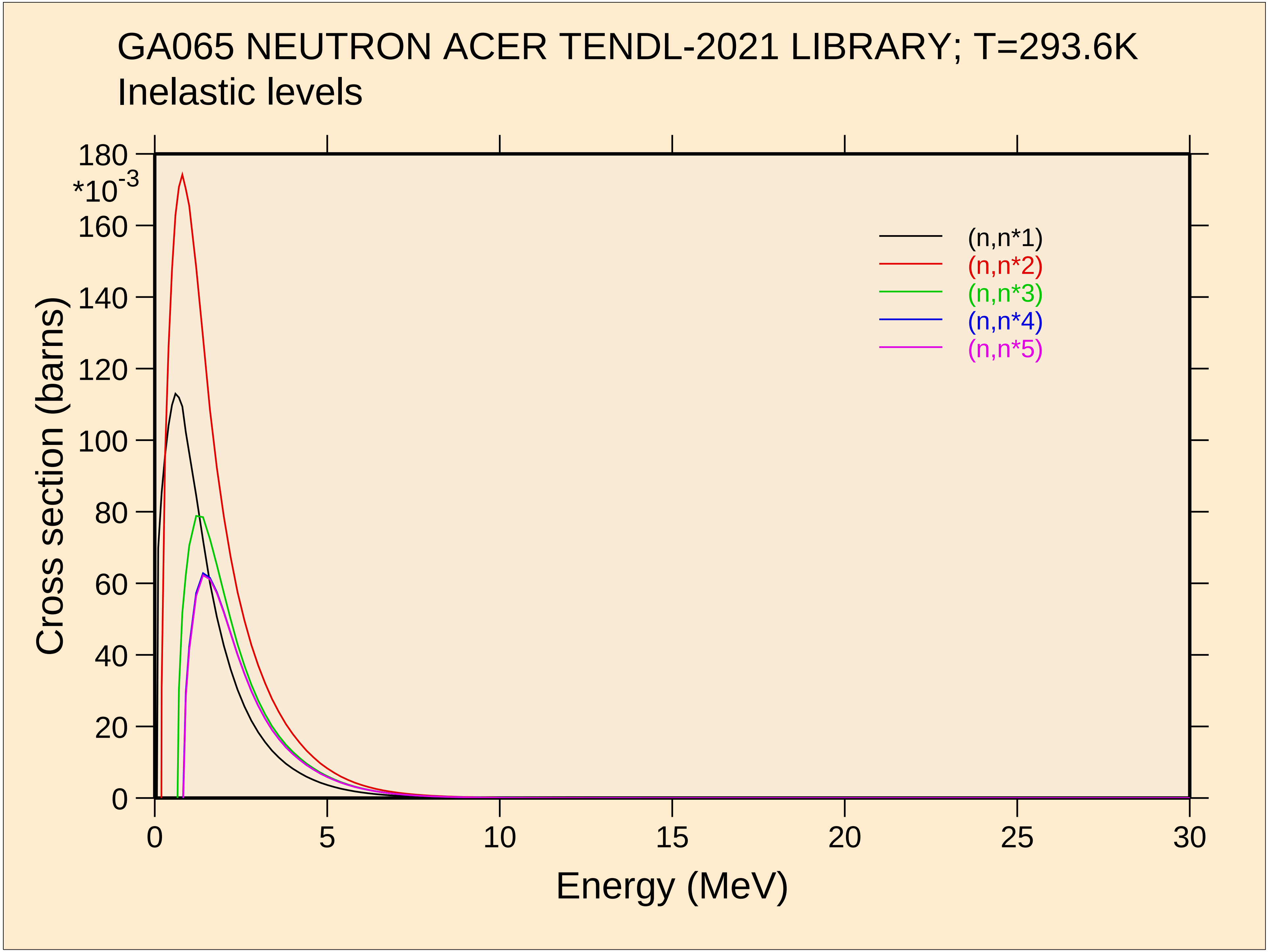
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Heating
heating
Heating (MeV/reaction)
Energy (MeV)
50
40
30
20
10
0
-10
0
50
100
150
200



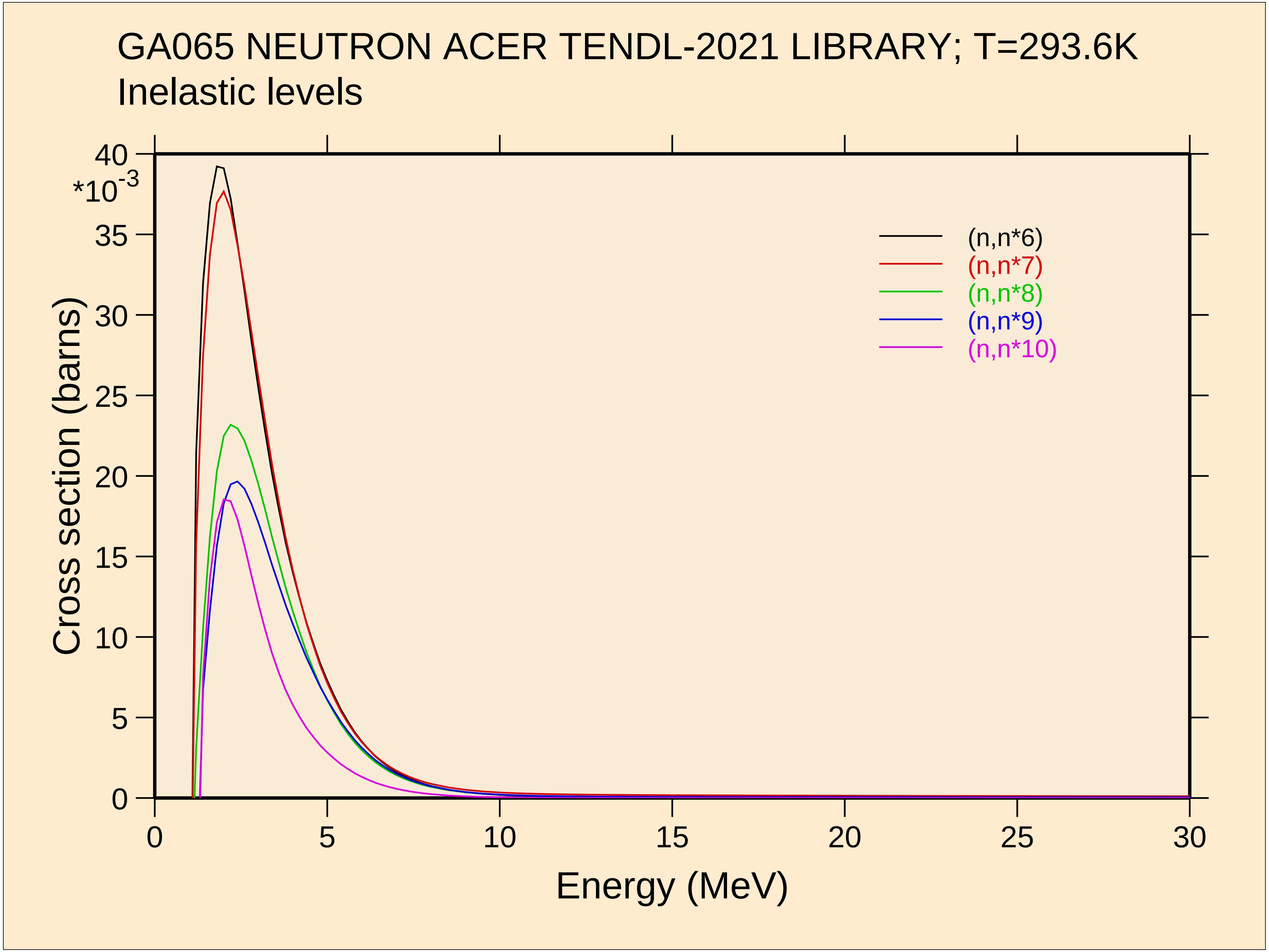
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Damage
damage
Damage (MeV-barns)
*10^-3
400
350
300
250
200
150
100
50
0
50
100
150
200
Energy (MeV)

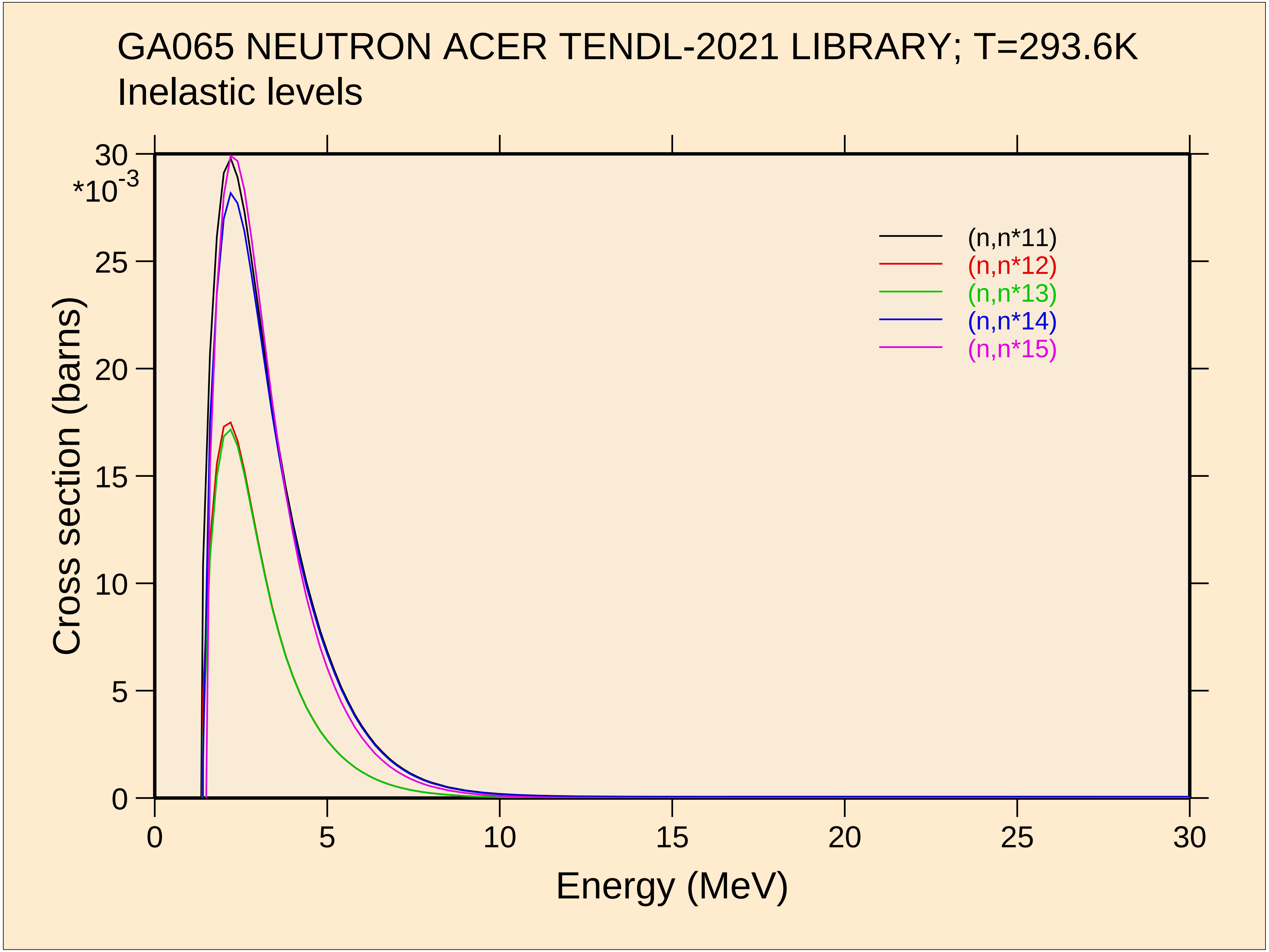


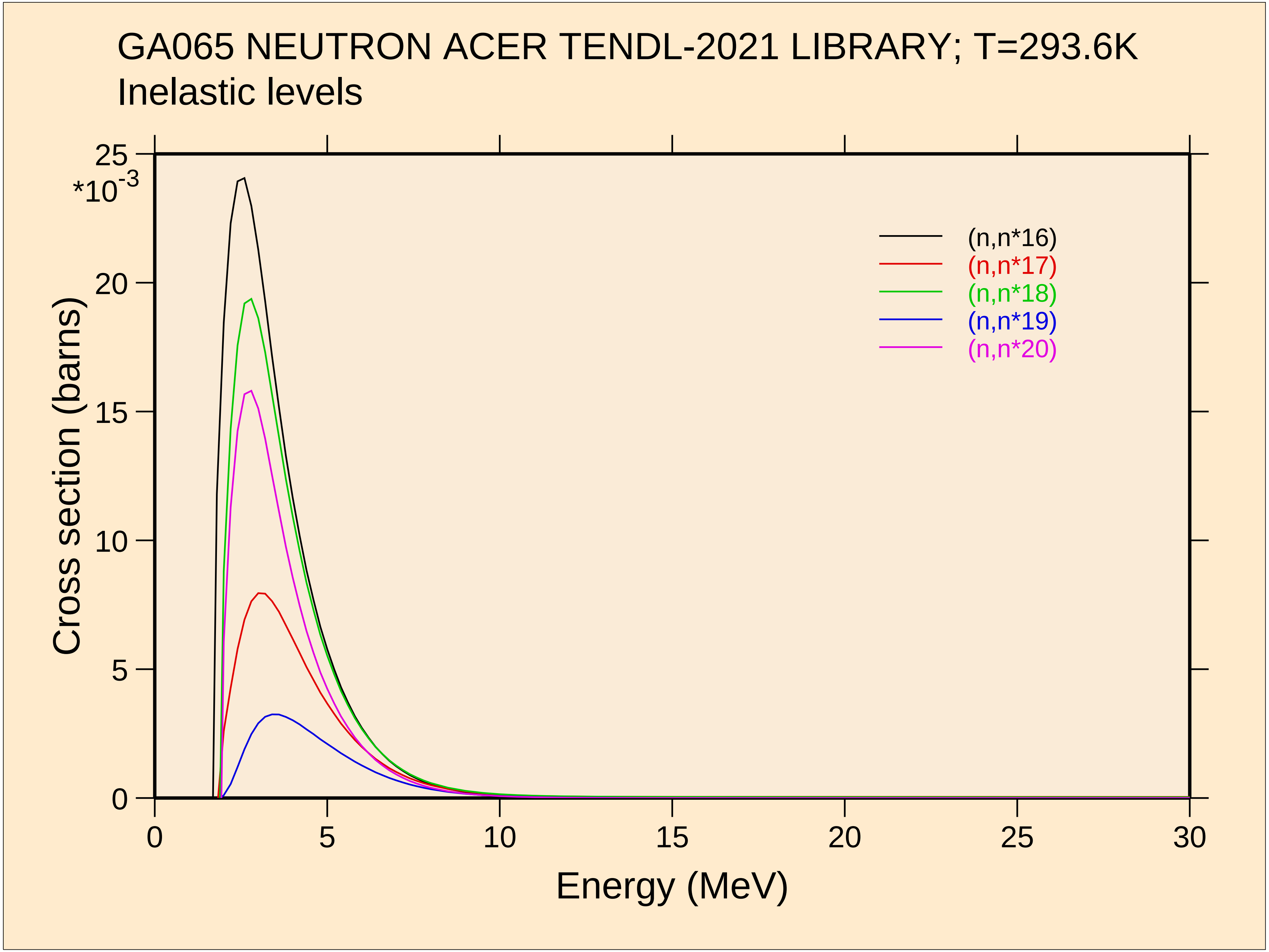
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Non-threshold reactions
Cross section (barns)
Energy (MeV)
(n,gma)
(n,p)
(n,a)
(n,xp)
(n,xa)
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-4}
0
50
100
150
200

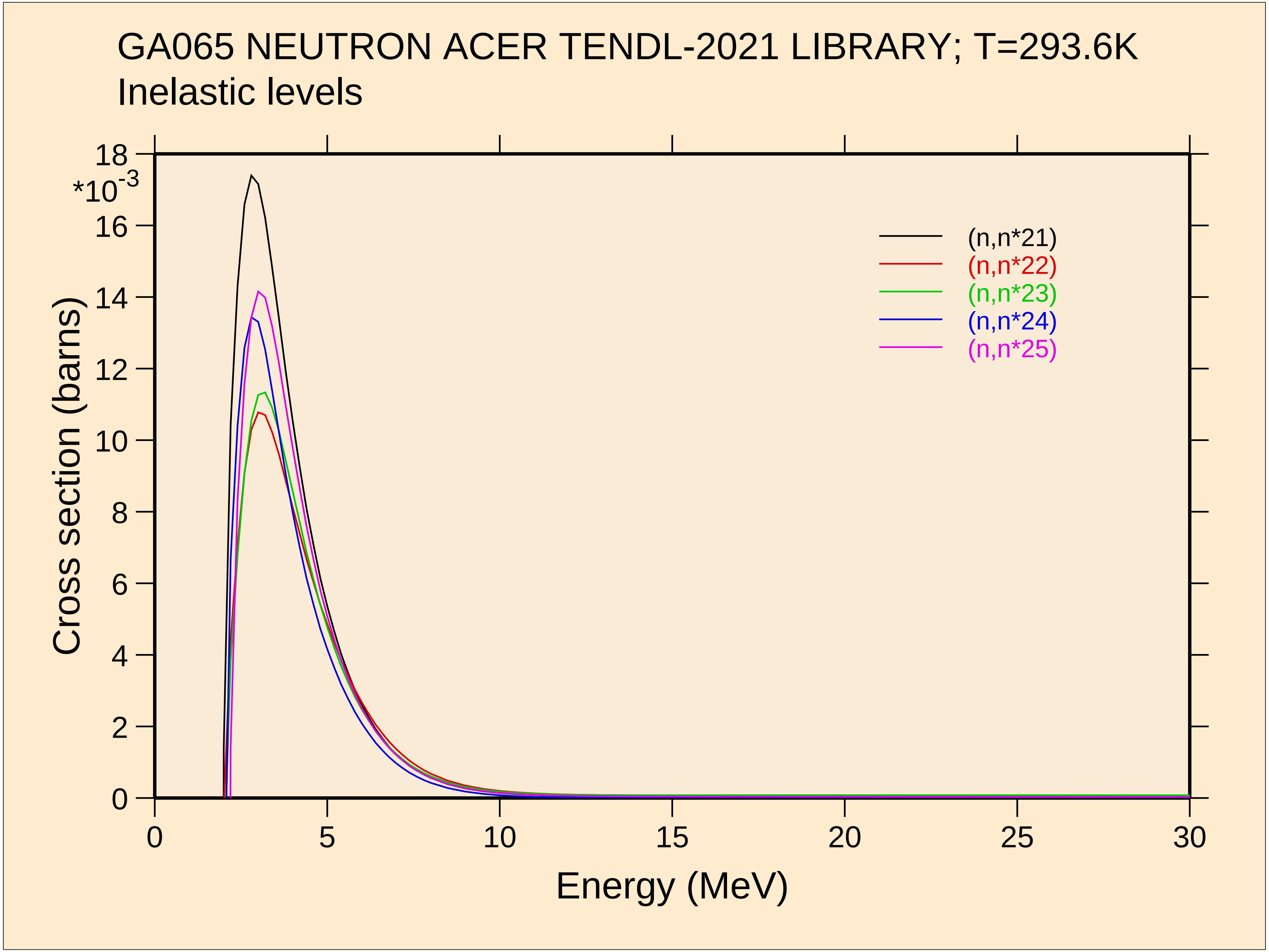


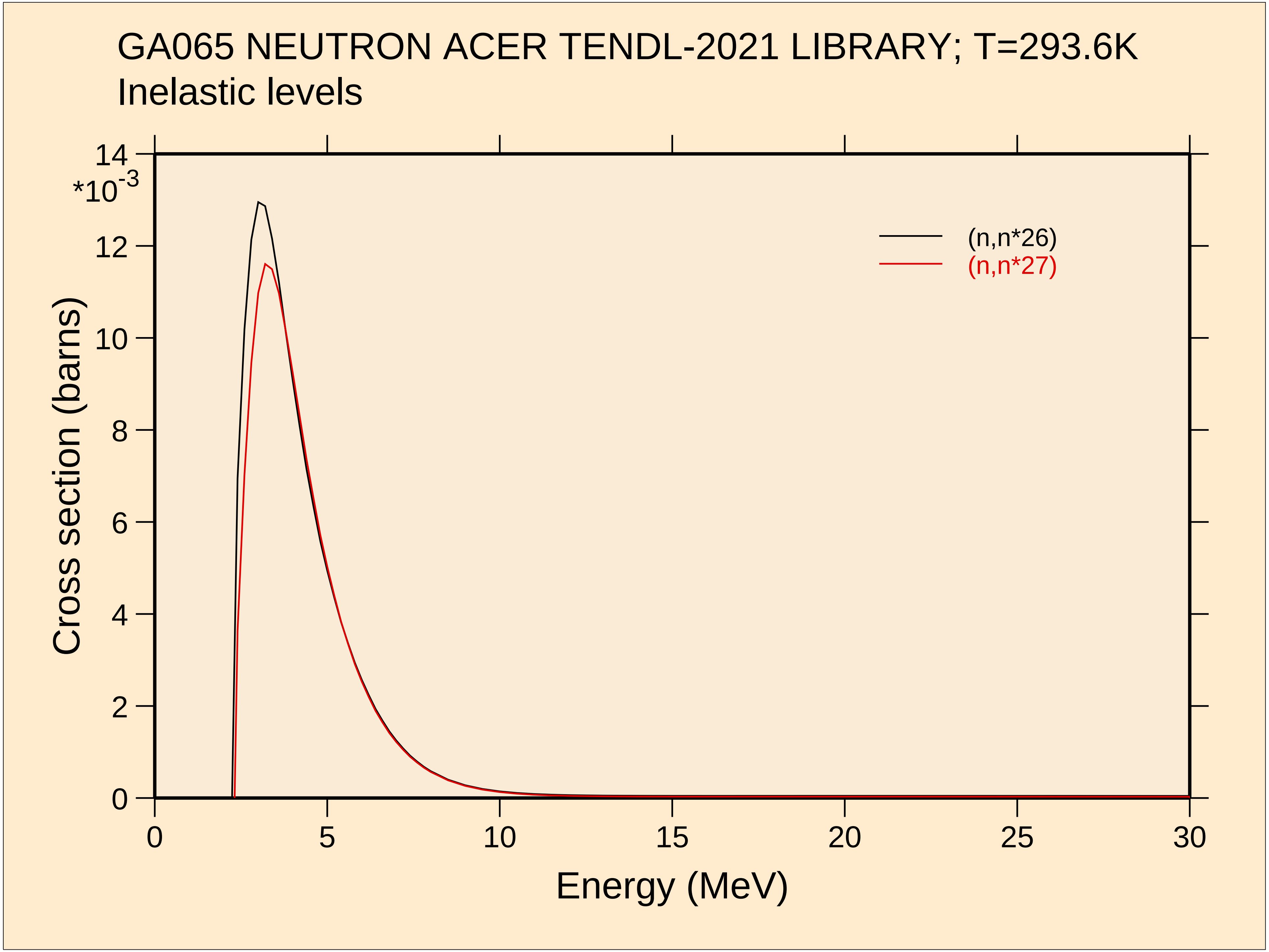
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Inelastic levels
Cross section (barns)
*10^-3
180
160
140
120
100
80
60
40
20
0
0
5
10
15
20
25
30
Energy (MeV)
(n,n*1)
(n,n*2)
(n,n*3)
(n,n*4)
(n,n*5)

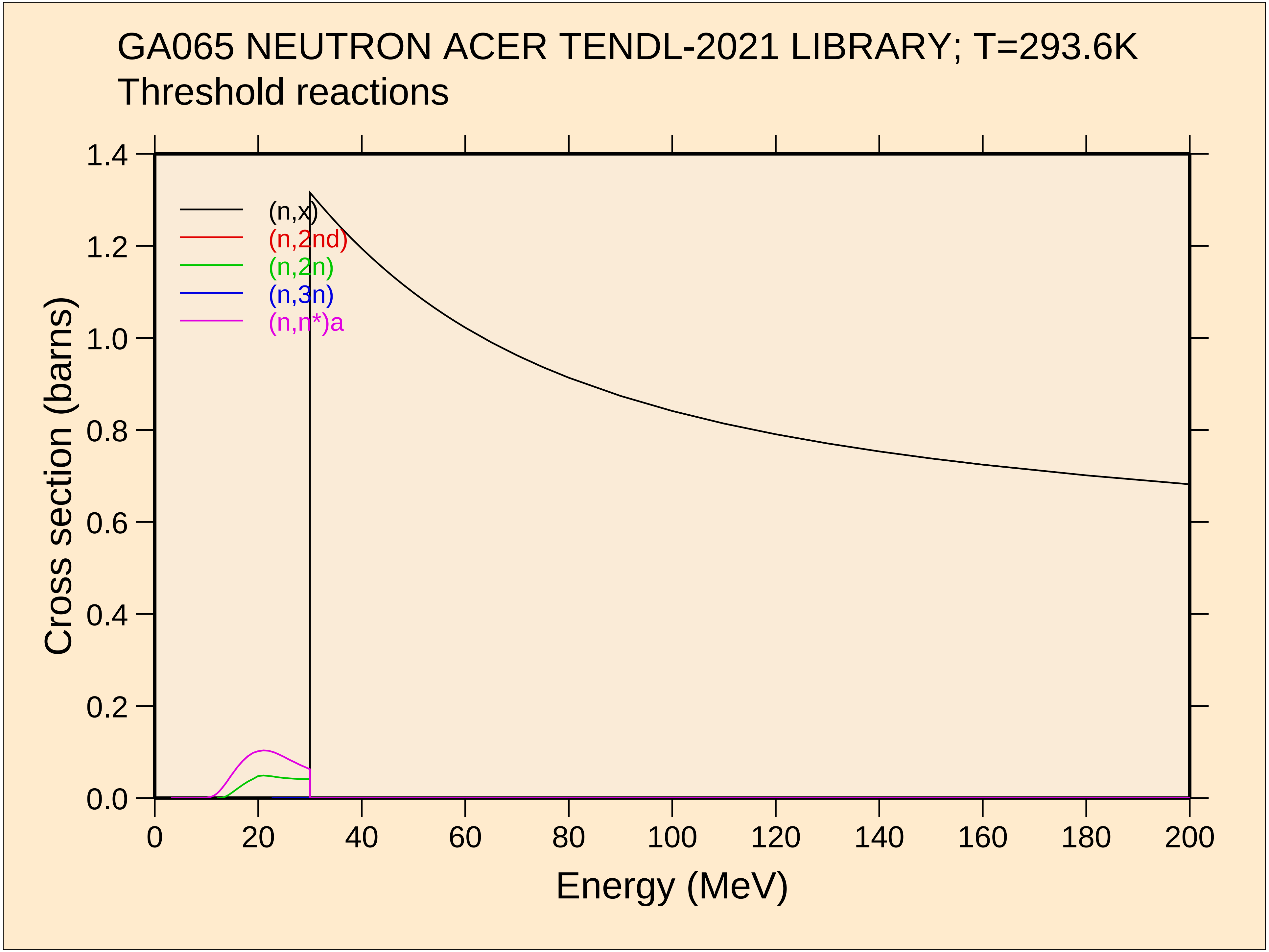

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Inelastic levels
Cross section (barns)
*10-3
40
35
30
25
20
15
10
5
0
0
5
10
15
20
25
30
Energy (MeV)
(n,n*6)
(n,n*7)
(n,n*8)
(n,n*9)
(n,n*10)

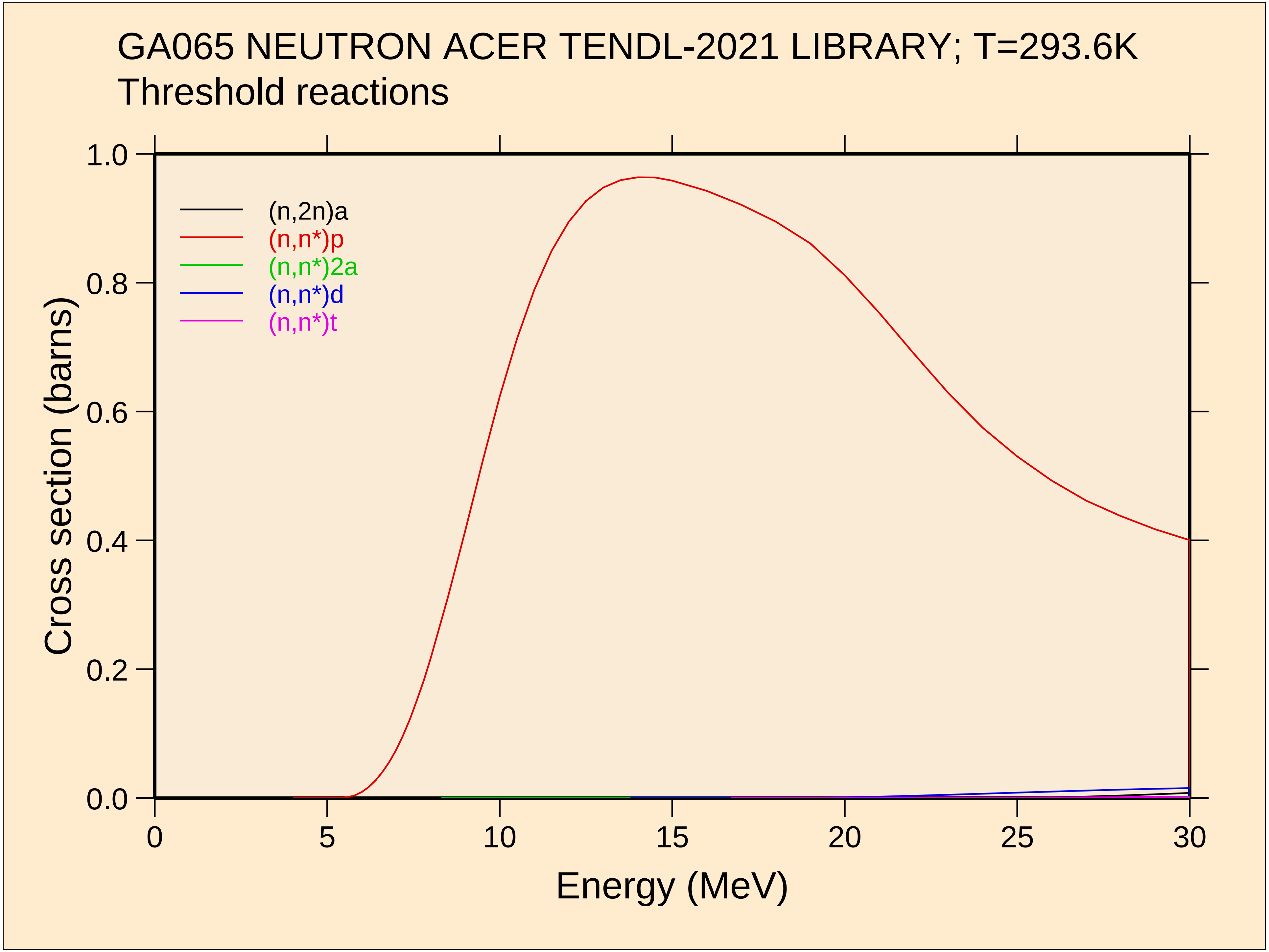

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Inelastic levels
(n,n*11)
(n,n*12)
(n,n*13)
(n,n*14)
(n,n*15)
Cross section (barns)
*10-3
0
5
10
15
20
25
30
Energy (MeV)
0
5
10
15
20
25
30

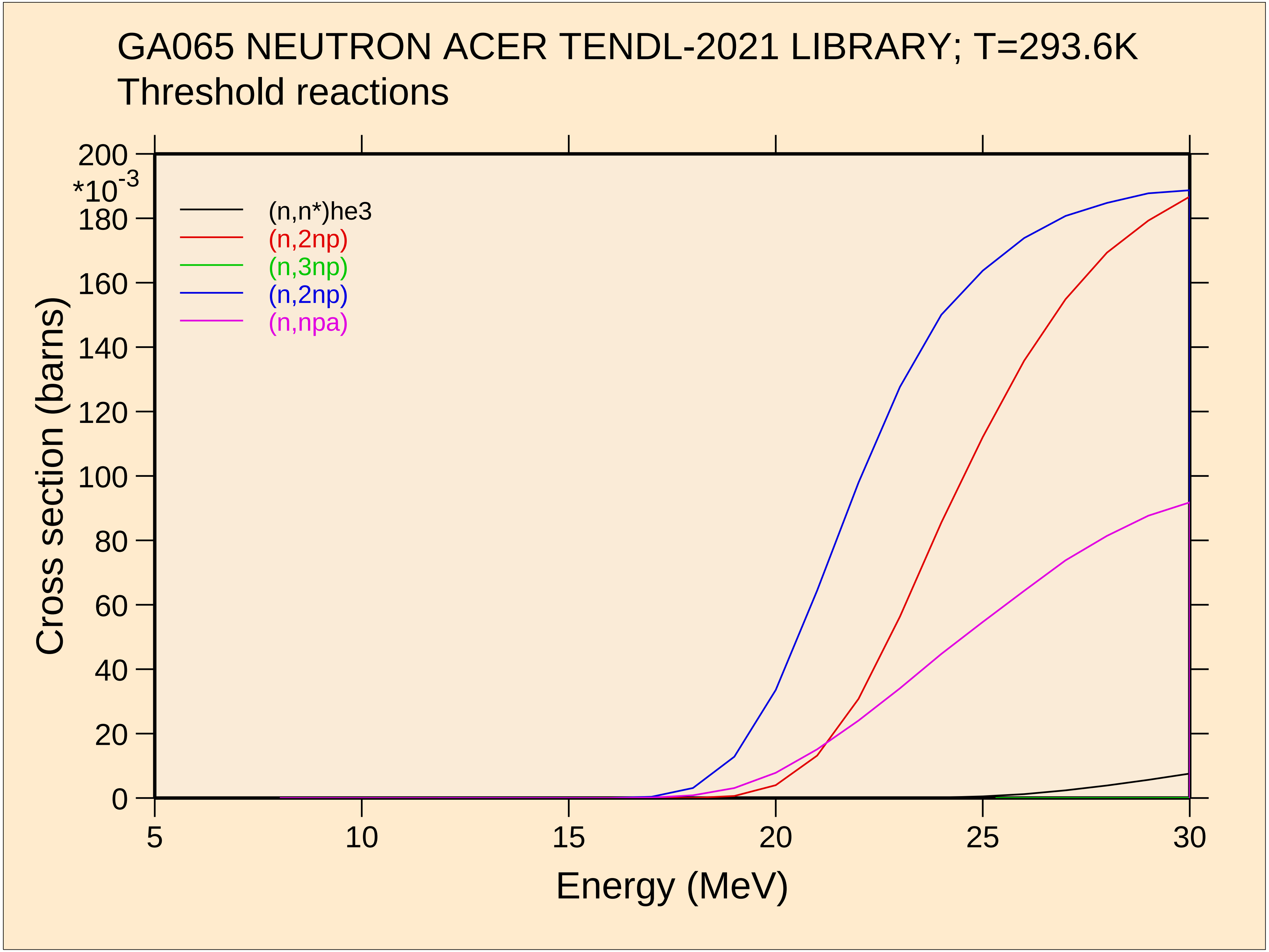

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Inelastic levels
Cross section (barns)
*10^-3
0
5
10
15
20
25
Energy (MeV)
0
5
10
15
20
25
30
(n,n*16)
(n,n*17)
(n,n*18)
(n,n*19)
(n,n*20)

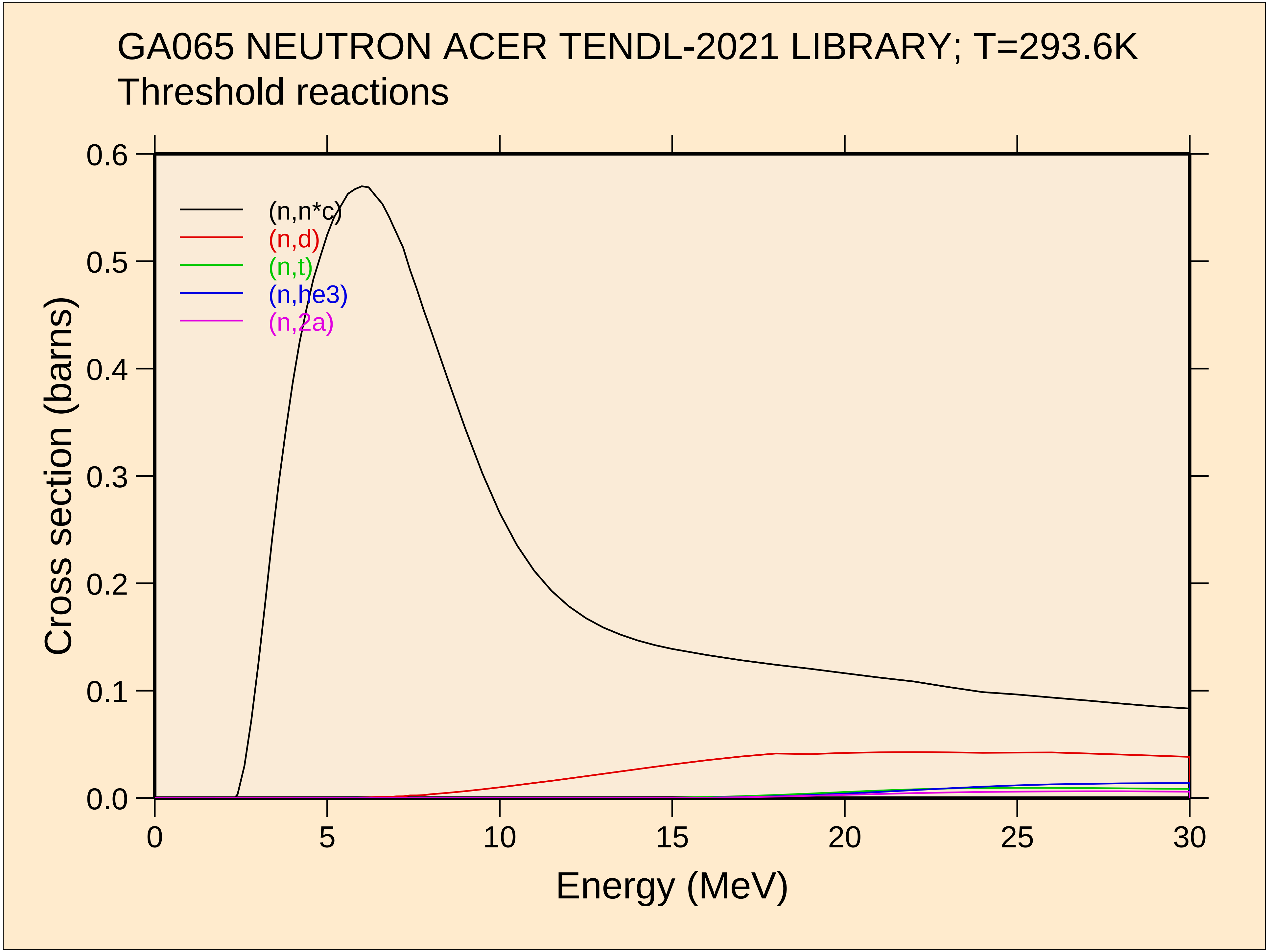

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Inelastic levels
Cross section (barns)
*10^-3
0
2
4
6
8
10
12
14
16
18
0
5
10
15
20
25
30
Energy (MeV)
(n,n*21)
(n,n*22)
(n,n*23)
(n,n*24)
(n,n*25)

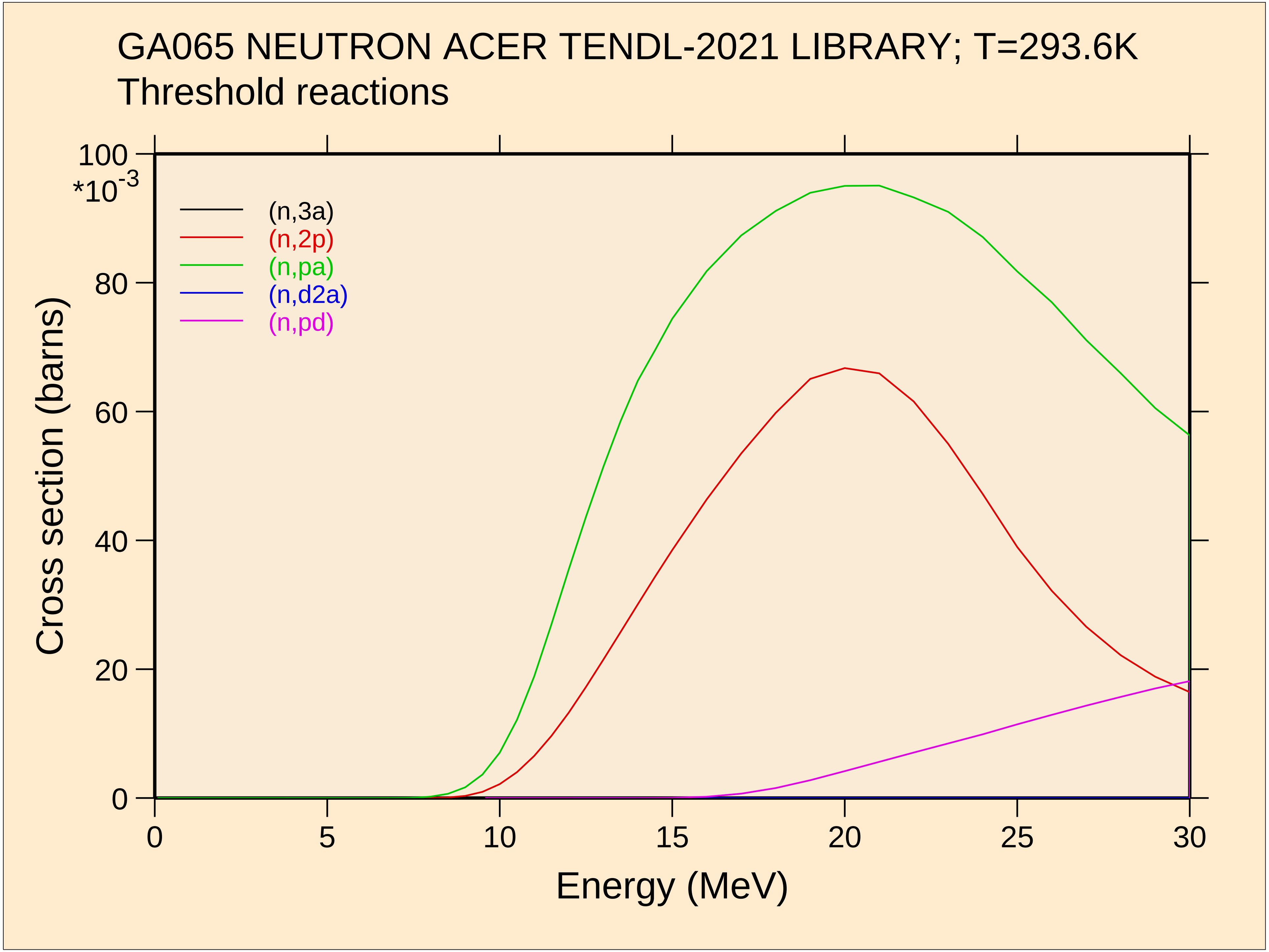

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Inelastic levels
Cross section (barns)
*10-3
14
12
10
8
6
4
2
0
0
5
10
15
20
25
30
Energy (MeV)
(n,n*26)
(n,n*27)

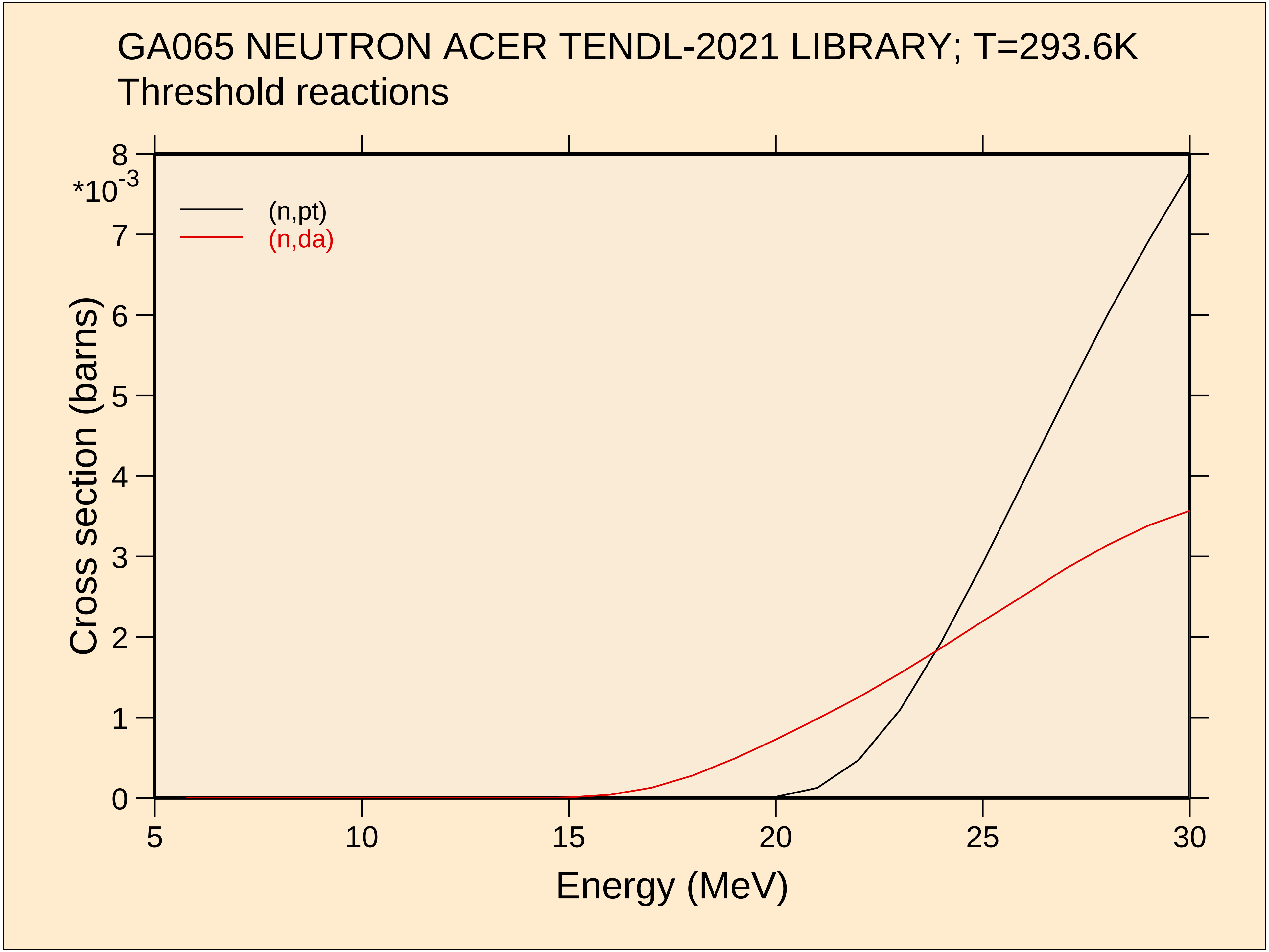

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Threshold reactions
(n,x)
(n,2nd)
(n,2n)
(n,3n)
(n,n*)a
Cross section (barns)
Energy (MeV)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
20
40
60
80
100
120
140
160
180
200

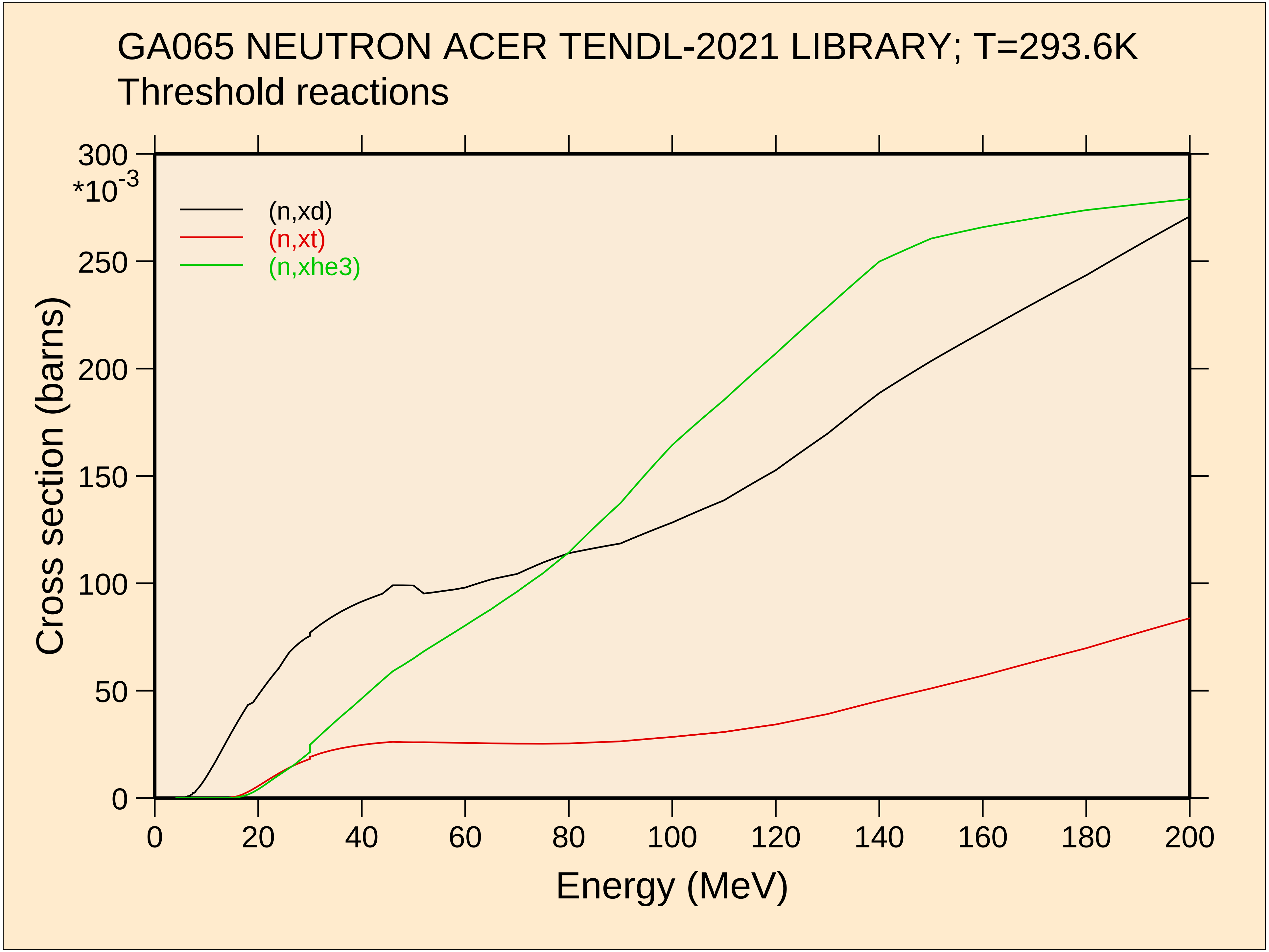

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Threshold reactions
(n,2n)a
(n,n*)p
(n,n*)2a
(n,n*)d
(n,n*)t
Cross section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
0
5
10
15
20
25
30
Energy (MeV)

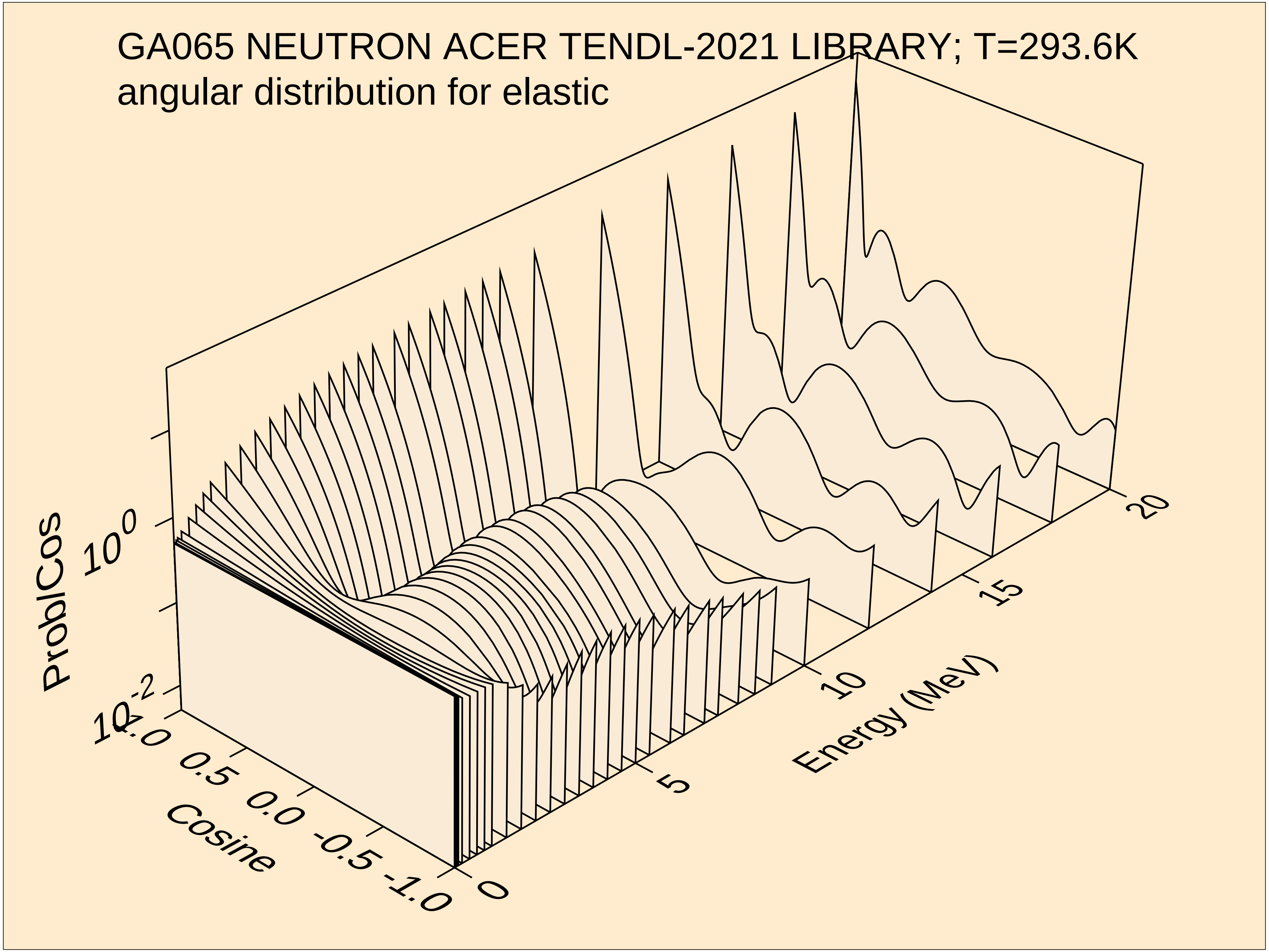

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Threshold reactions
Cross section (barns)
*10^-3
200
180
160
140
120
100
80
60
40
20
0
(n,n*)he3
(n,2np)
(n,3np)
(n,2np)
(n,npa)
5
10
15
20
25
30
Energy (MeV)

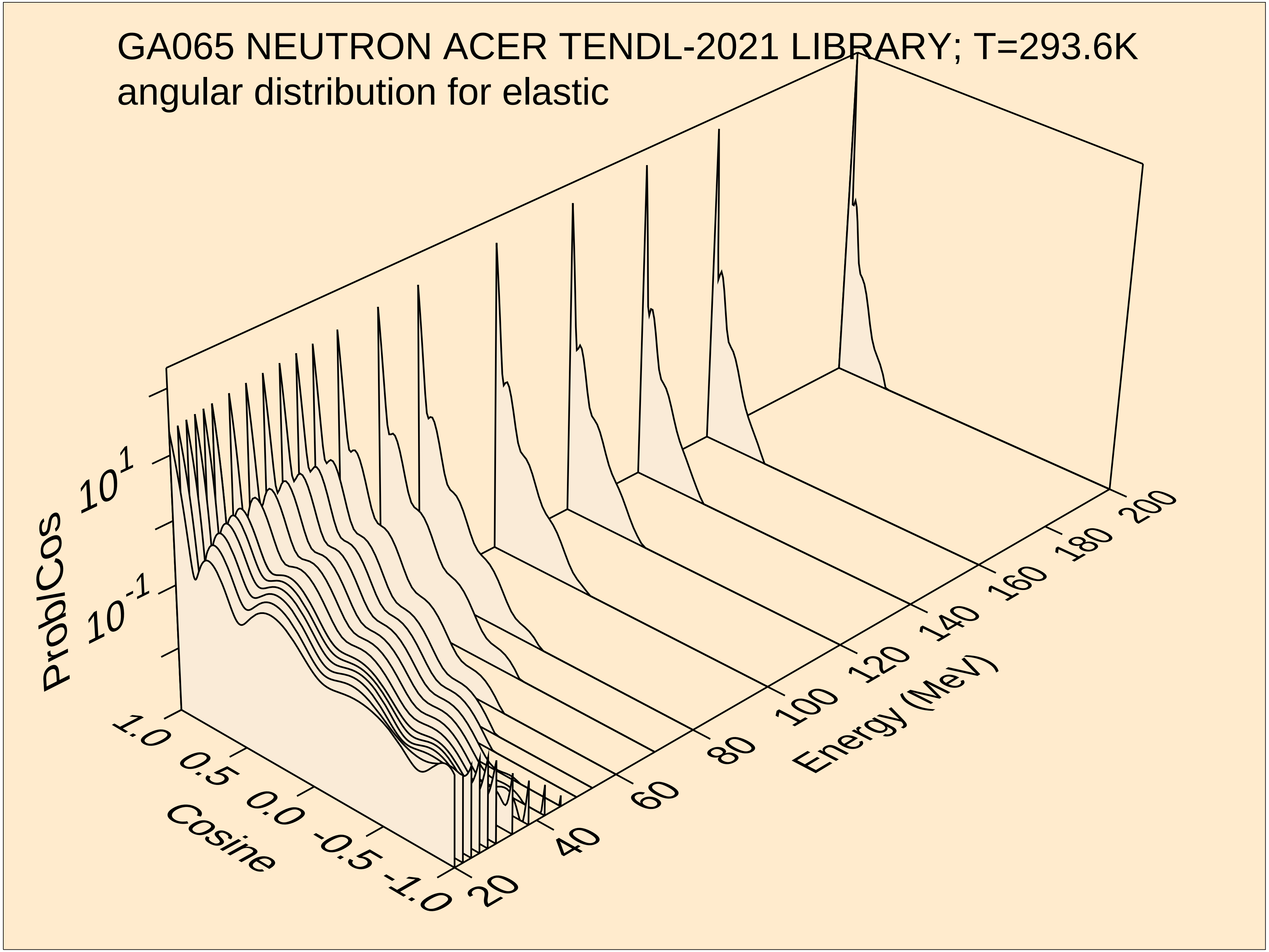

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Threshold reactions
Cross section (barns)
Energy (MeV)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0
5
10
15
20
25
30
(n,n*c)
(n,d)
(n,t)
(n,he3)
(n,2a)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Threshold reactions
Cross section (barns)
*10^-3
100
80
60
40
20
0
(n,3a)
(n,2p)
(n,pa)
(n,d2a)
(n,pd)
0
5
10
15
20
25
30
Energy (MeV)

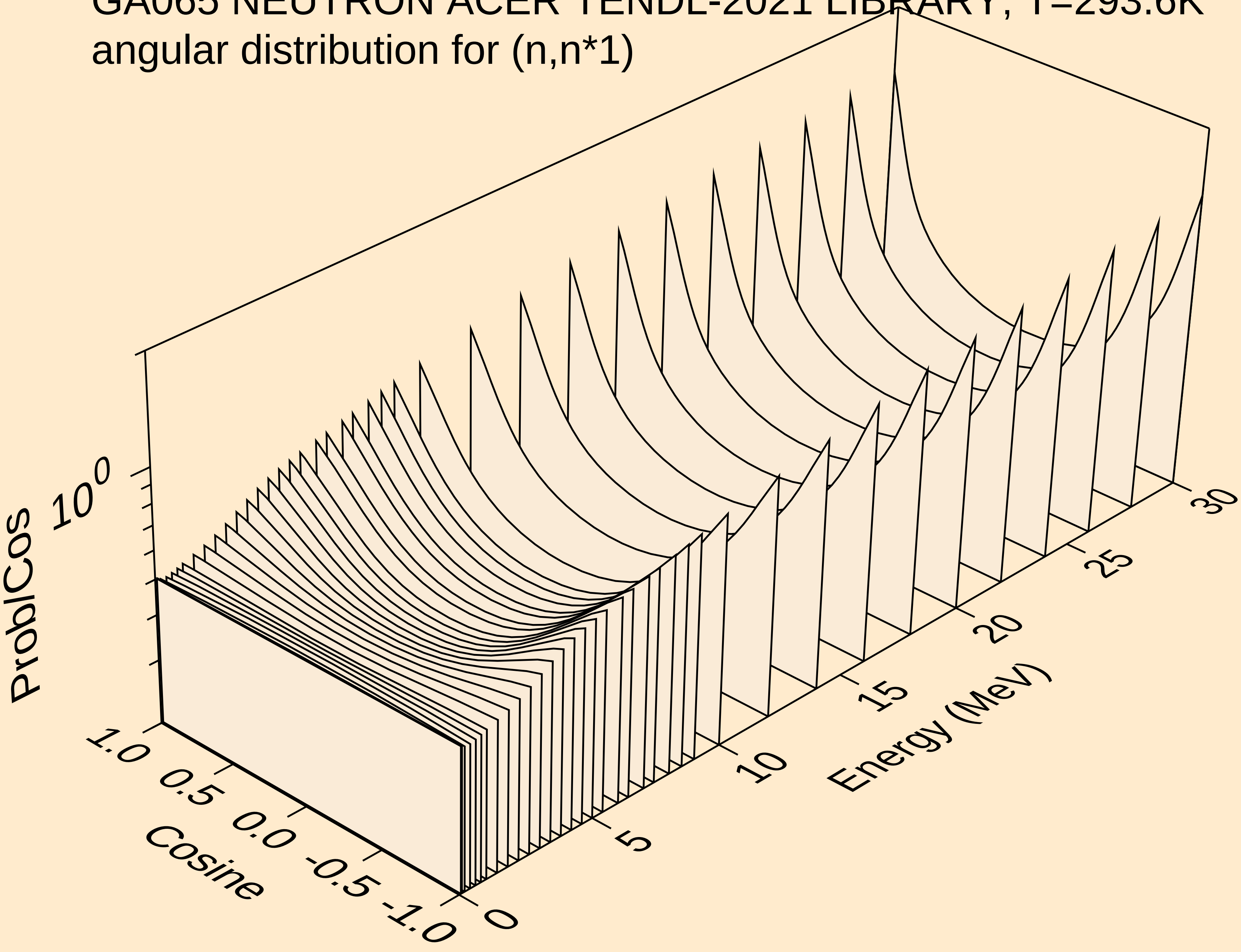

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Threshold reactions
(n,pt)
(n,da)
Cross section (barns)
*10-3
0
1
2
3
4
5
6
7
8
5
10
15
20
25
30
Energy (MeV)

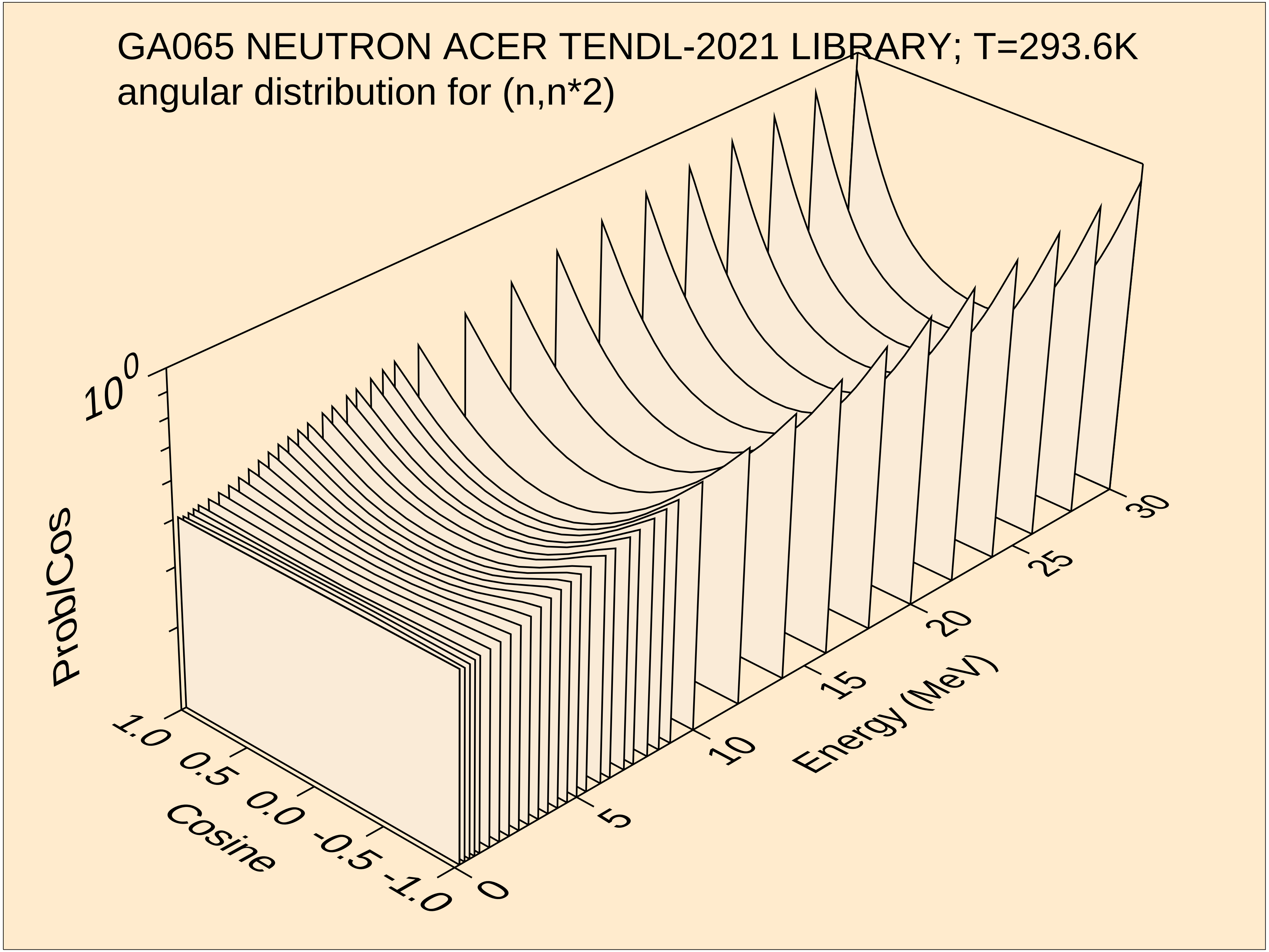

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Threshold reactions
(n,xd)
(n,xt)
(n,xhe3)
Cross section (barns)
*10^-3
0
50
100
150
200
250
300
Energy (MeV)
0
20
40
60
80
100
120
140
160
180
200

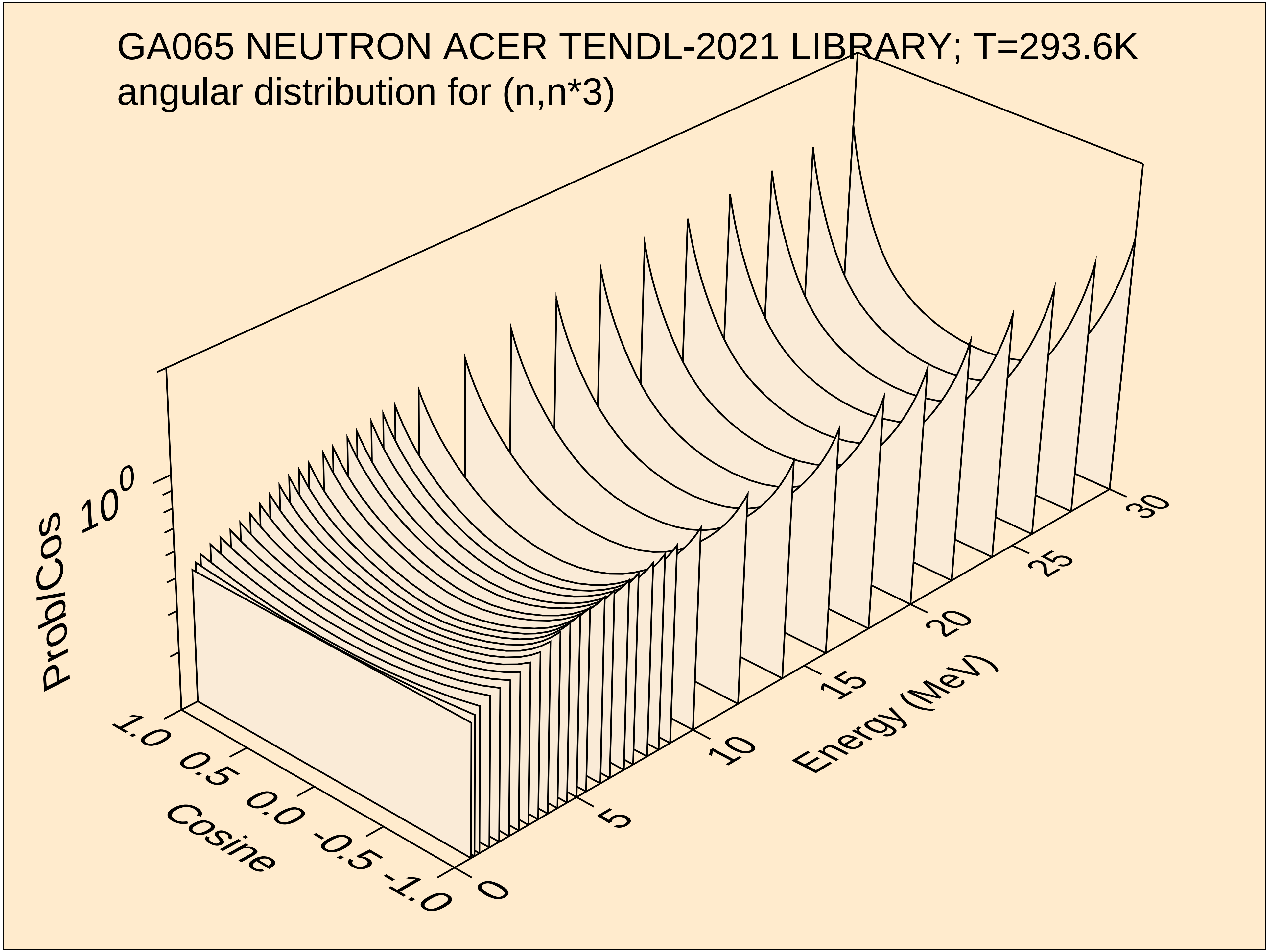

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for elastic
Probl/Cos
10^0
10^{-2}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
Energy (MeV)

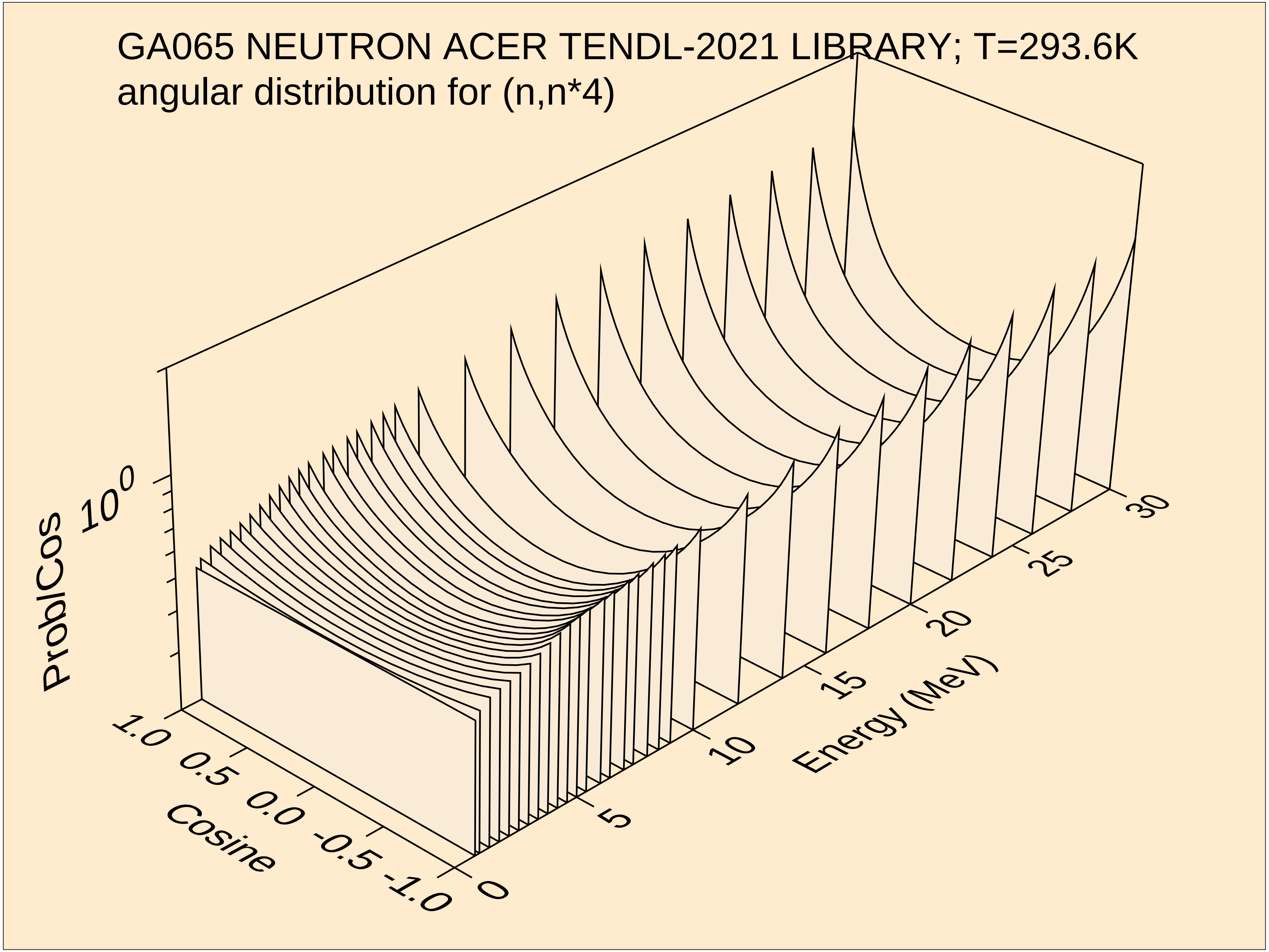

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for elastic
Probl/Cos
10^{1}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
20
40
60
80
100
120
140
160
180
200
Energy (MeV)

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*1)

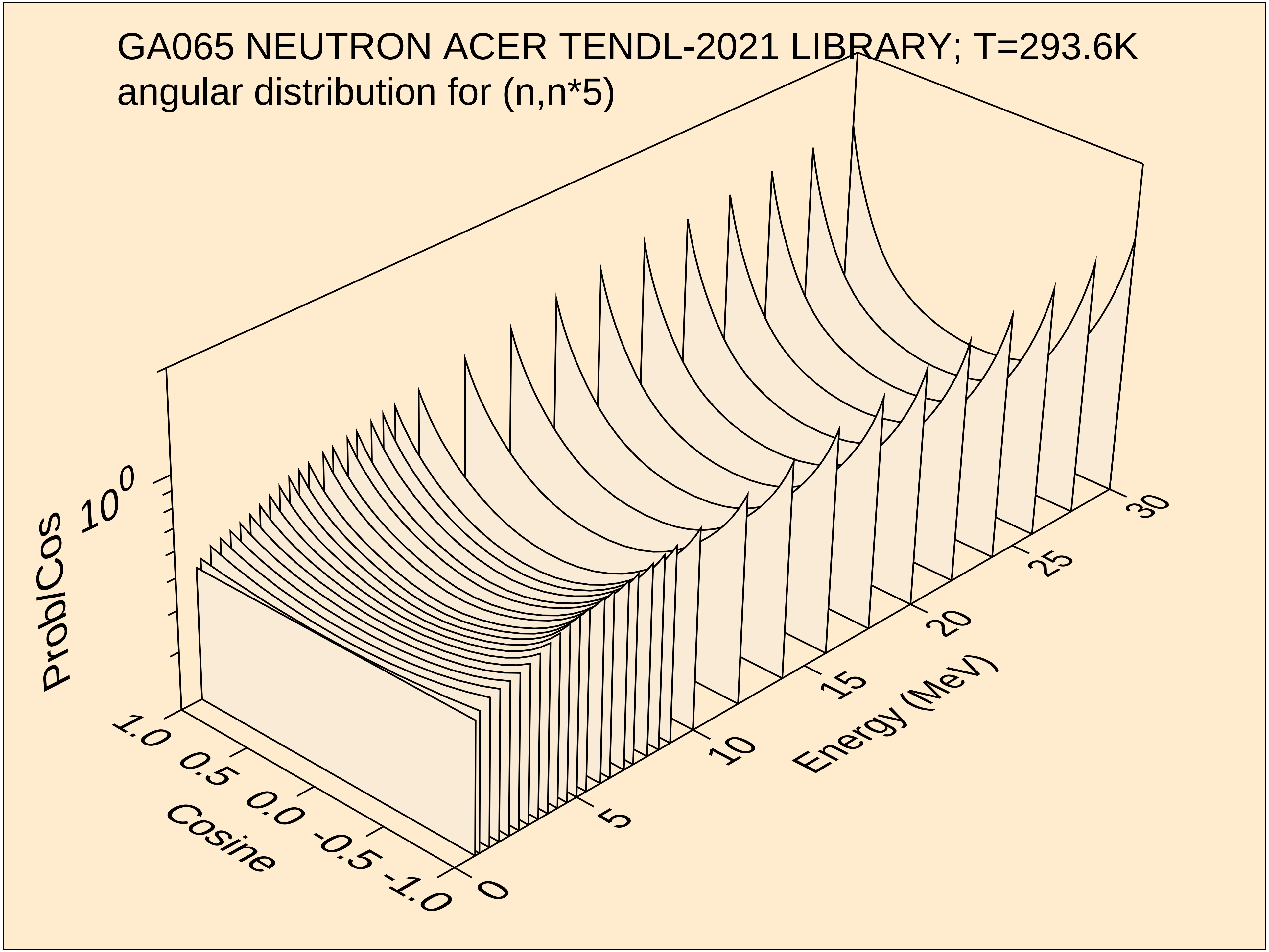


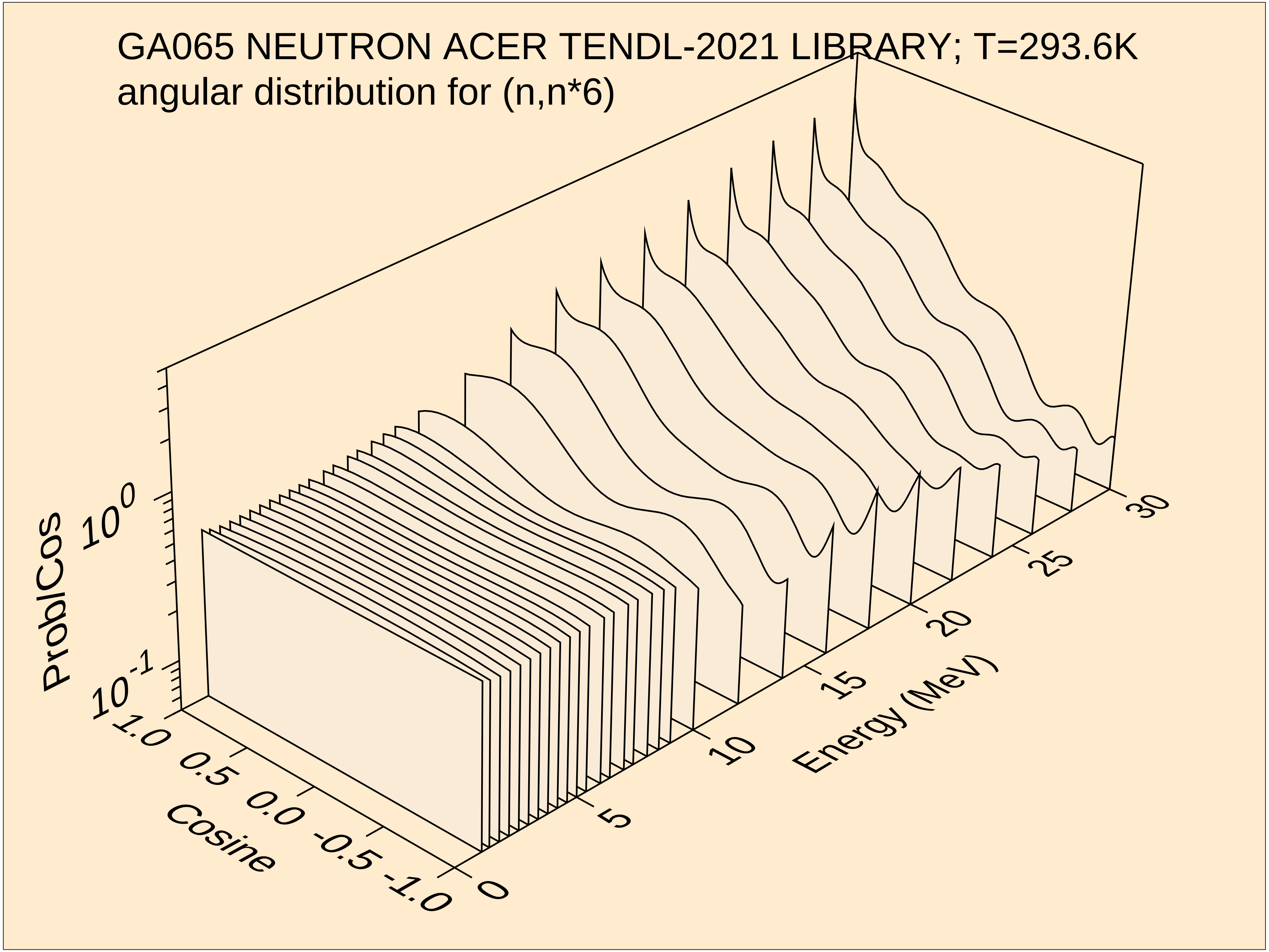

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*2)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*3)
ProblCos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

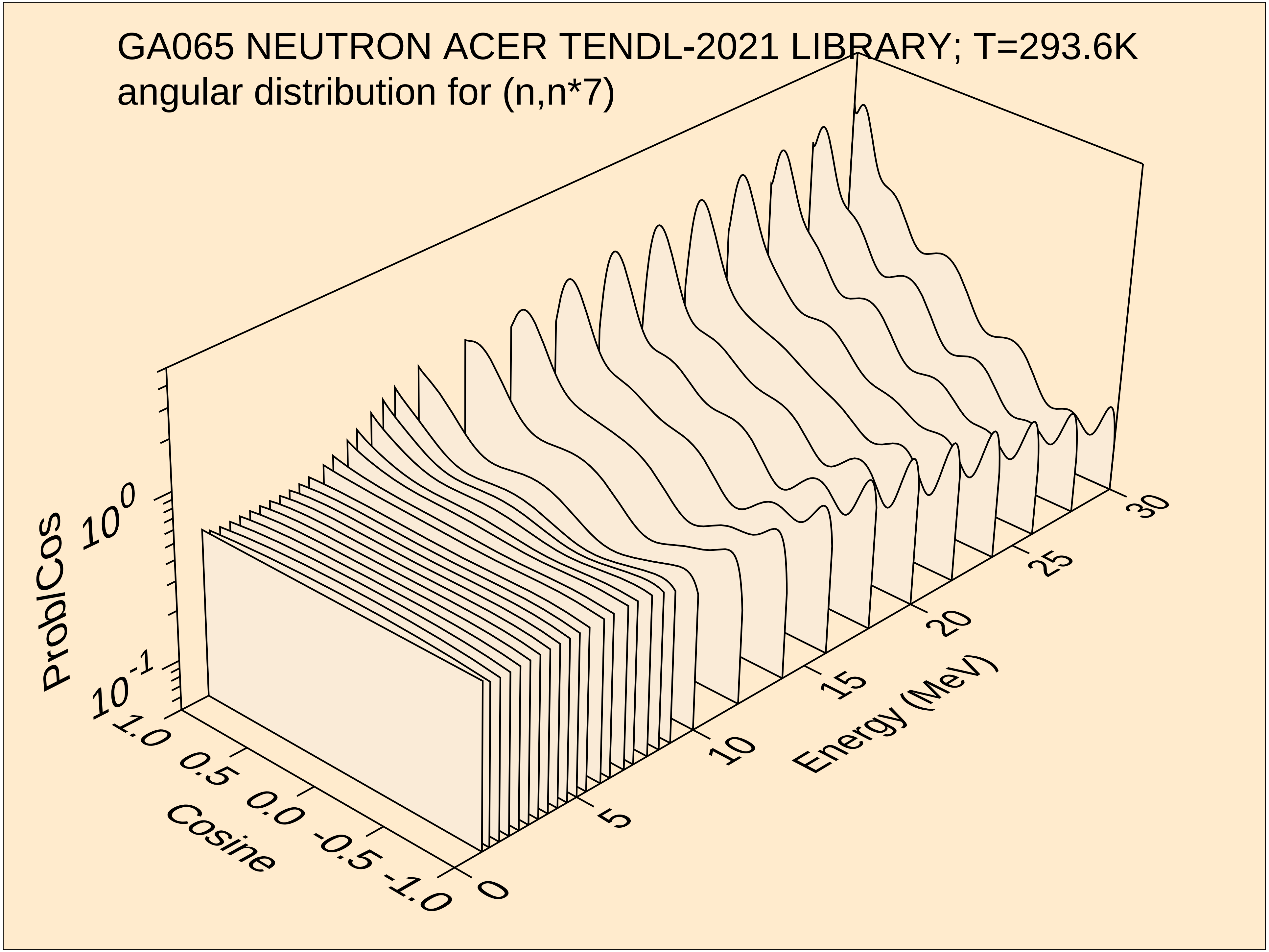


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*4)
Probl/Cos
10^0
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
5
10
15
20
25
30

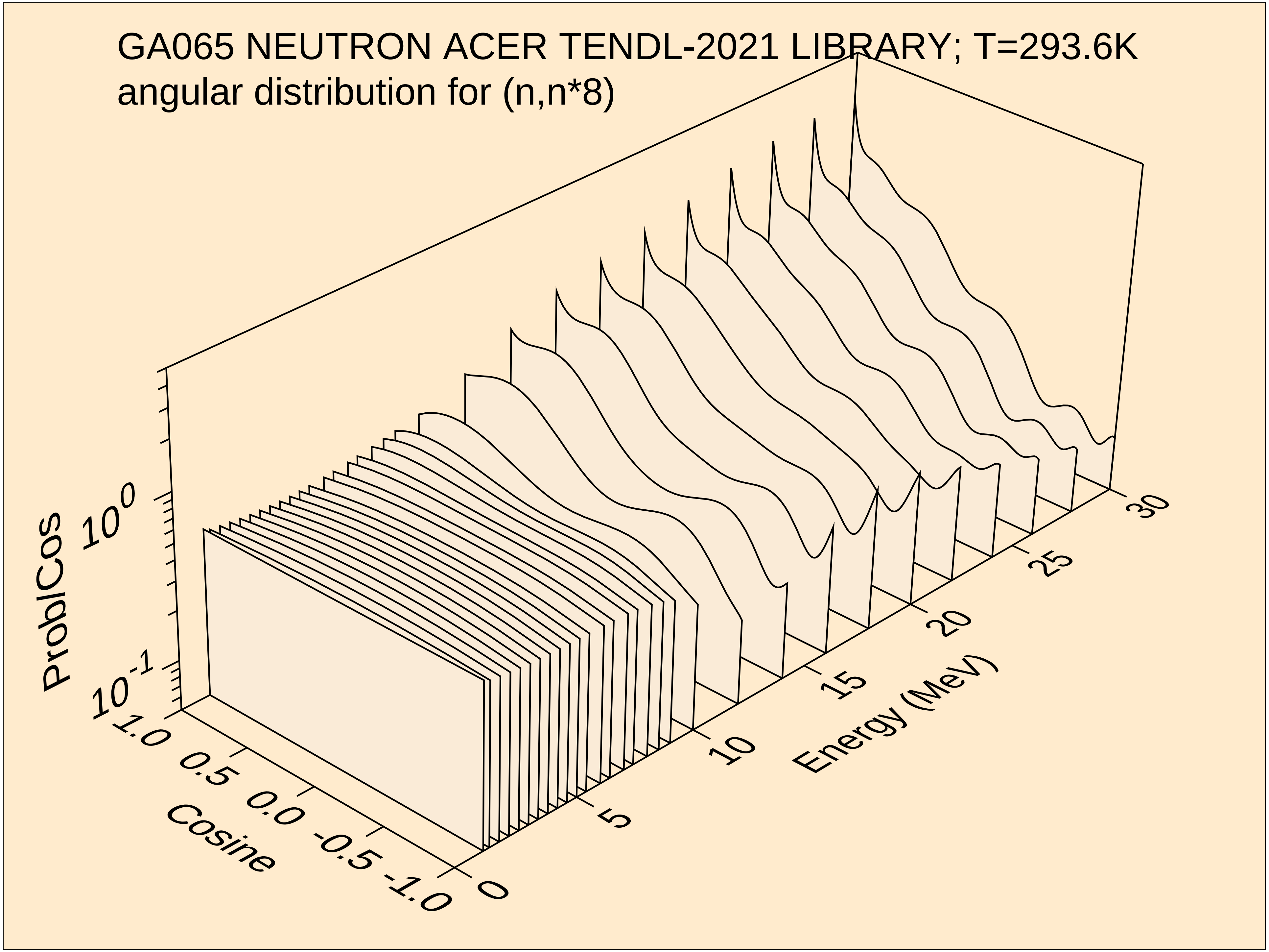

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*5)
ProblCos
10^0
Cosine
1.0 0.5 0.0 -0.5 -1.0
Energy (MeV)
0 5 10 15 20 25 30

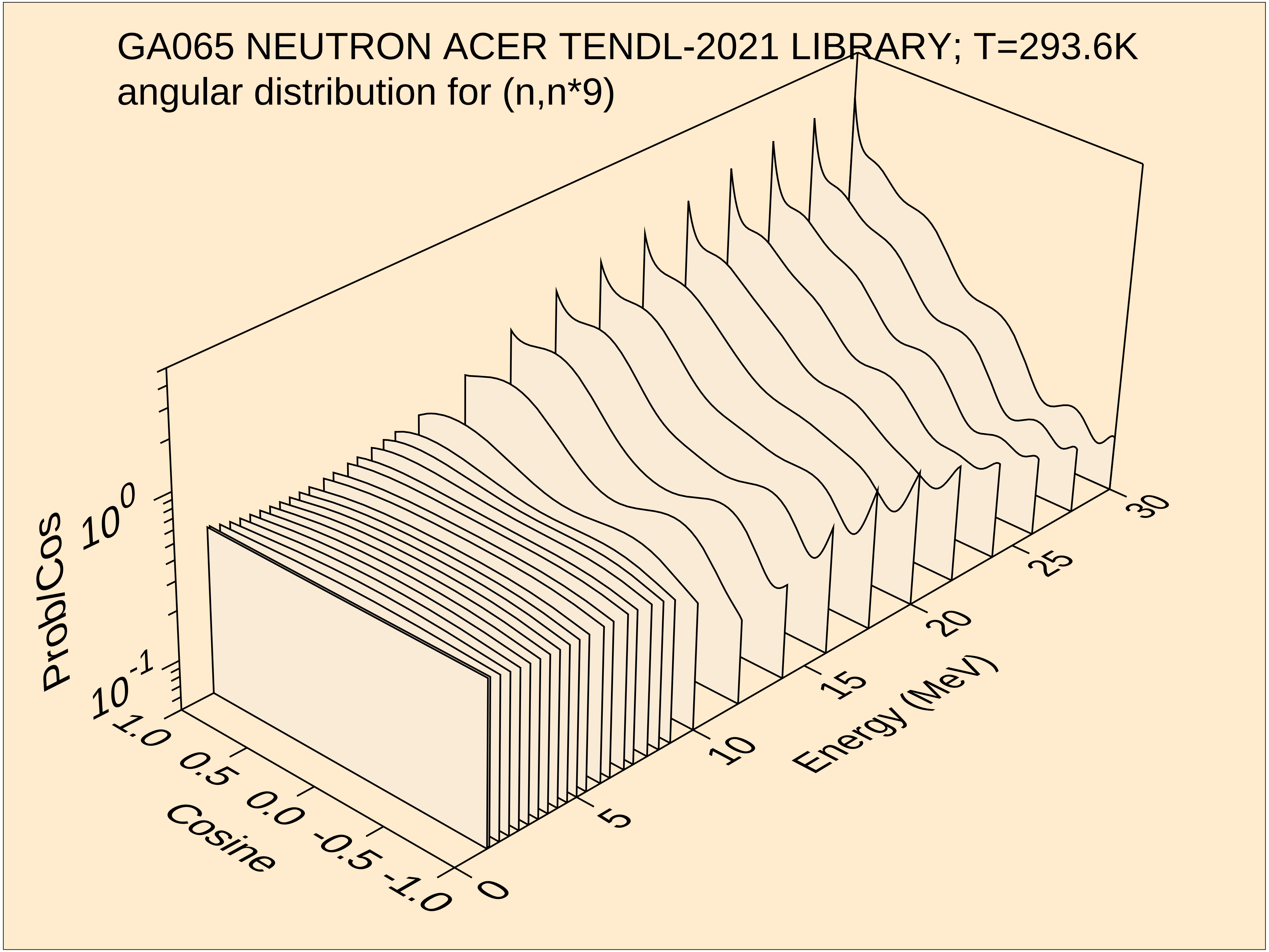


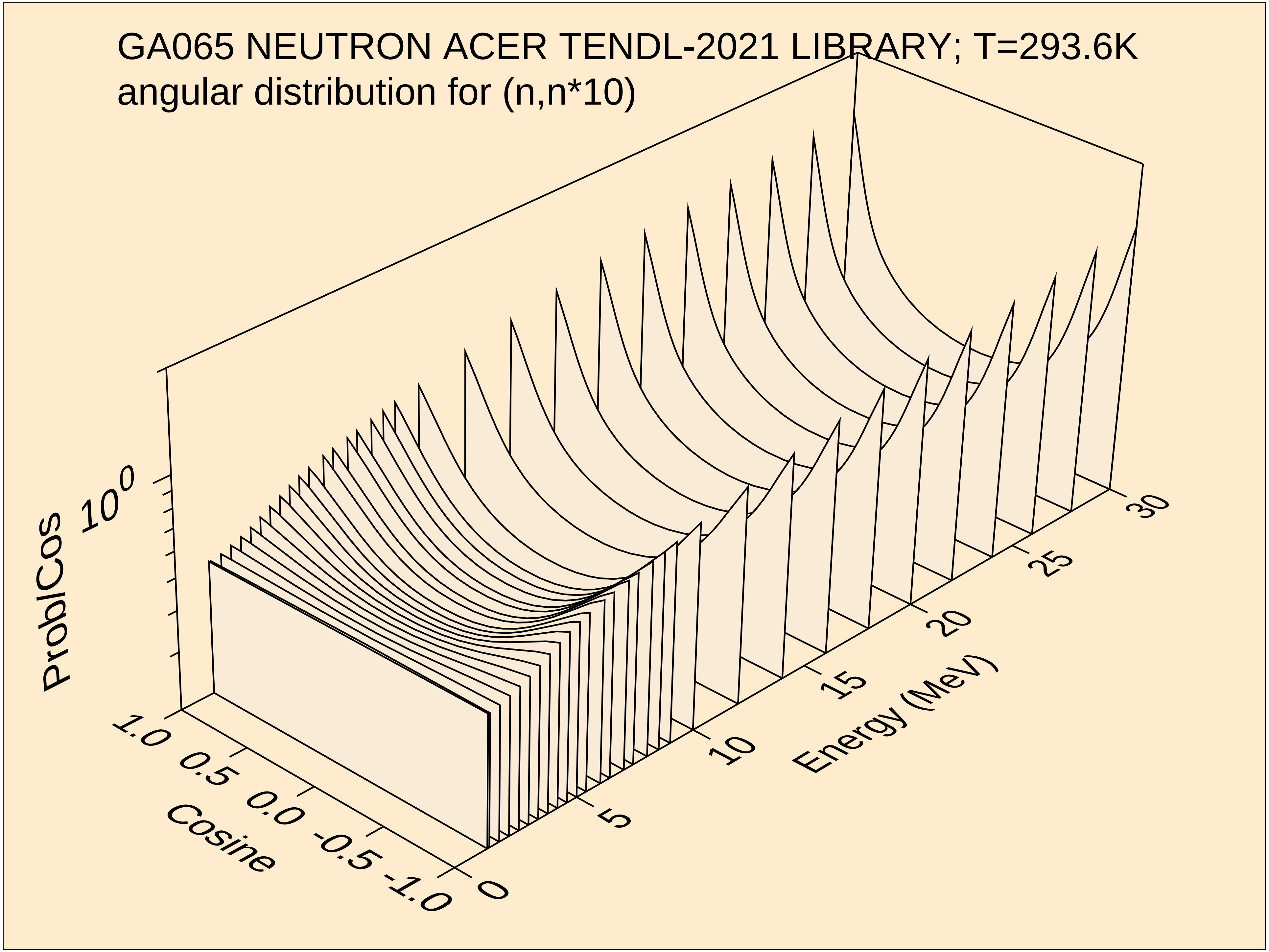
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*6)
Probl/Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)



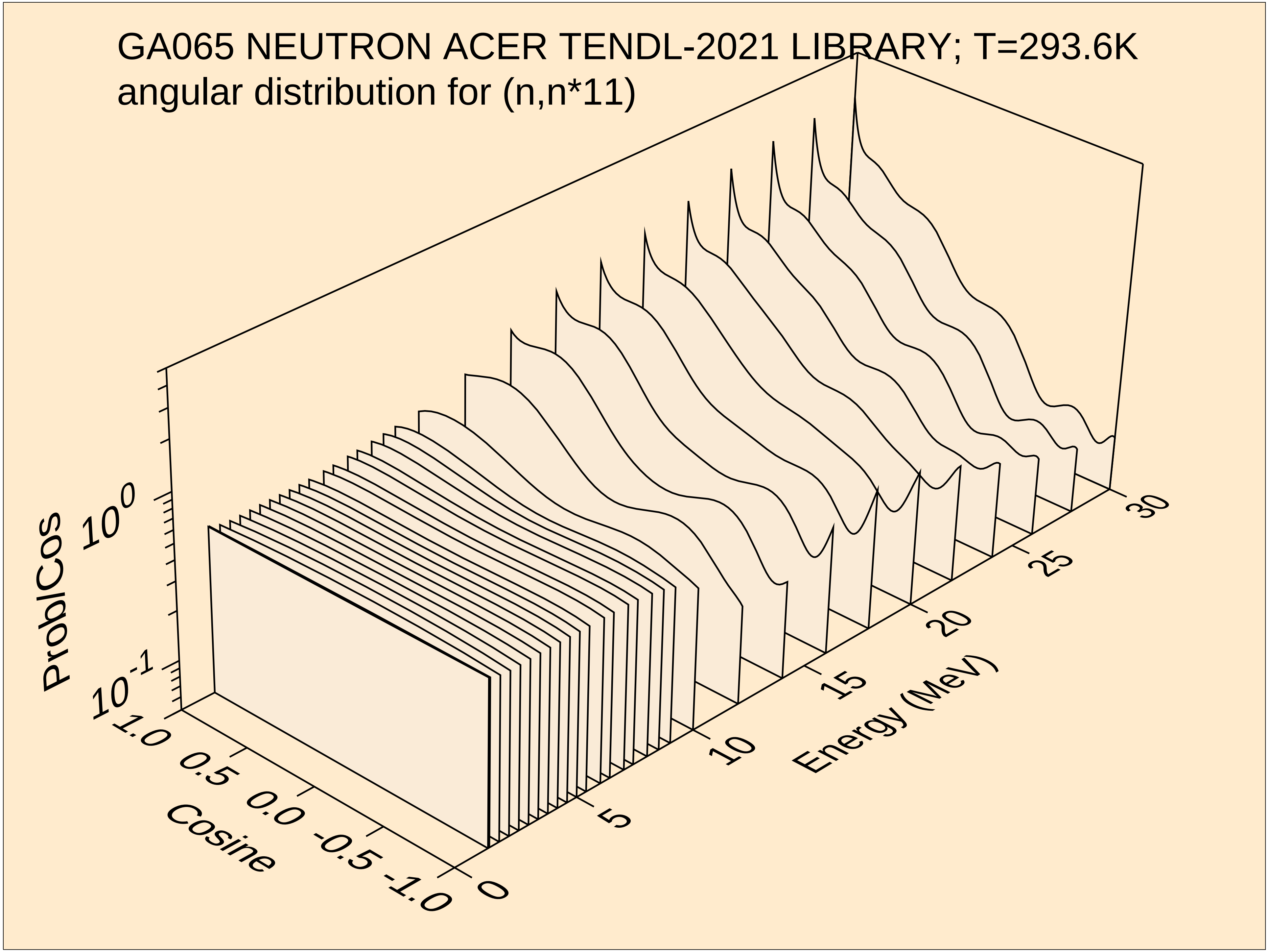
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*7)
Prob/Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

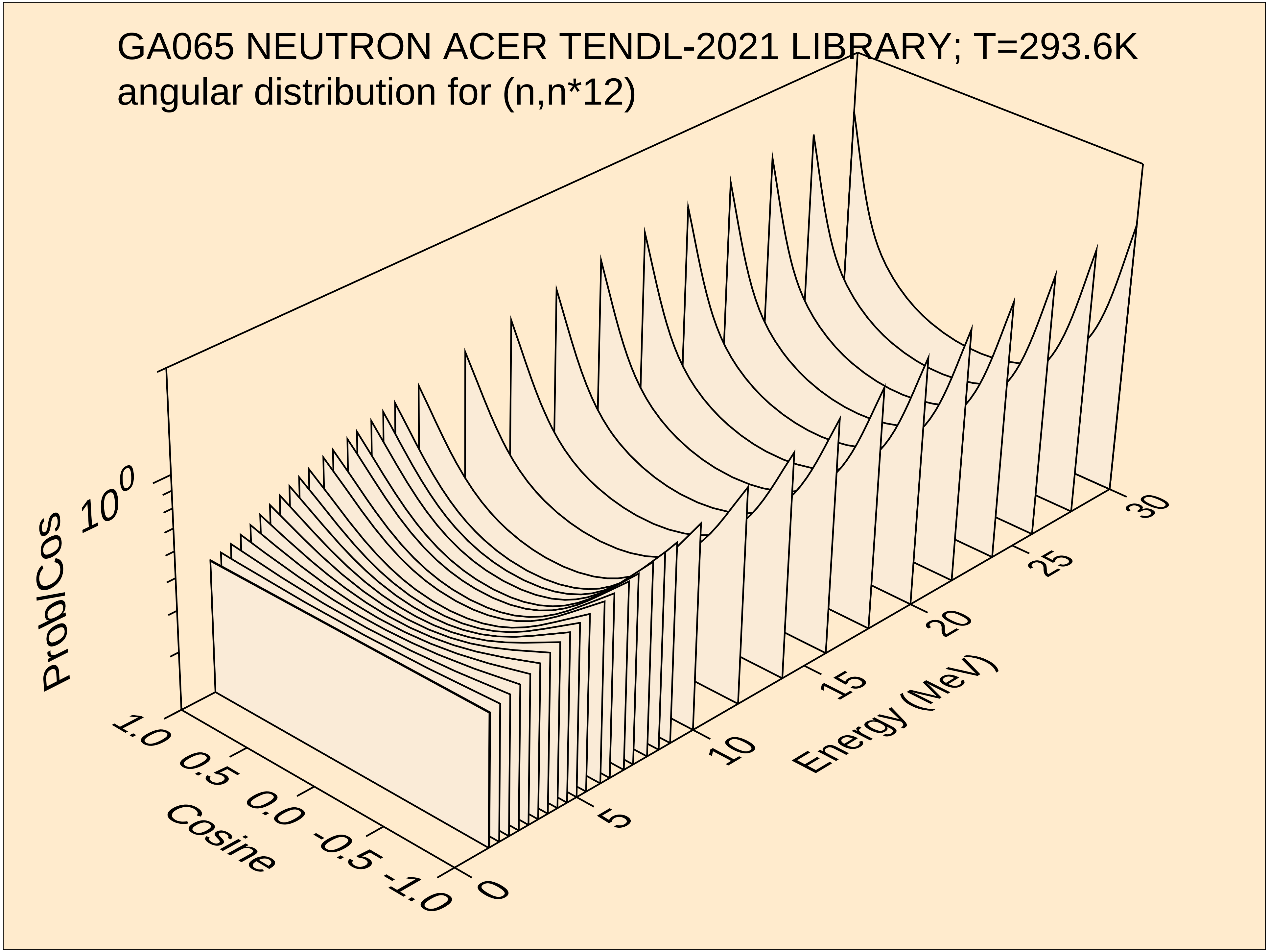

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*8)
Probl/Cos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

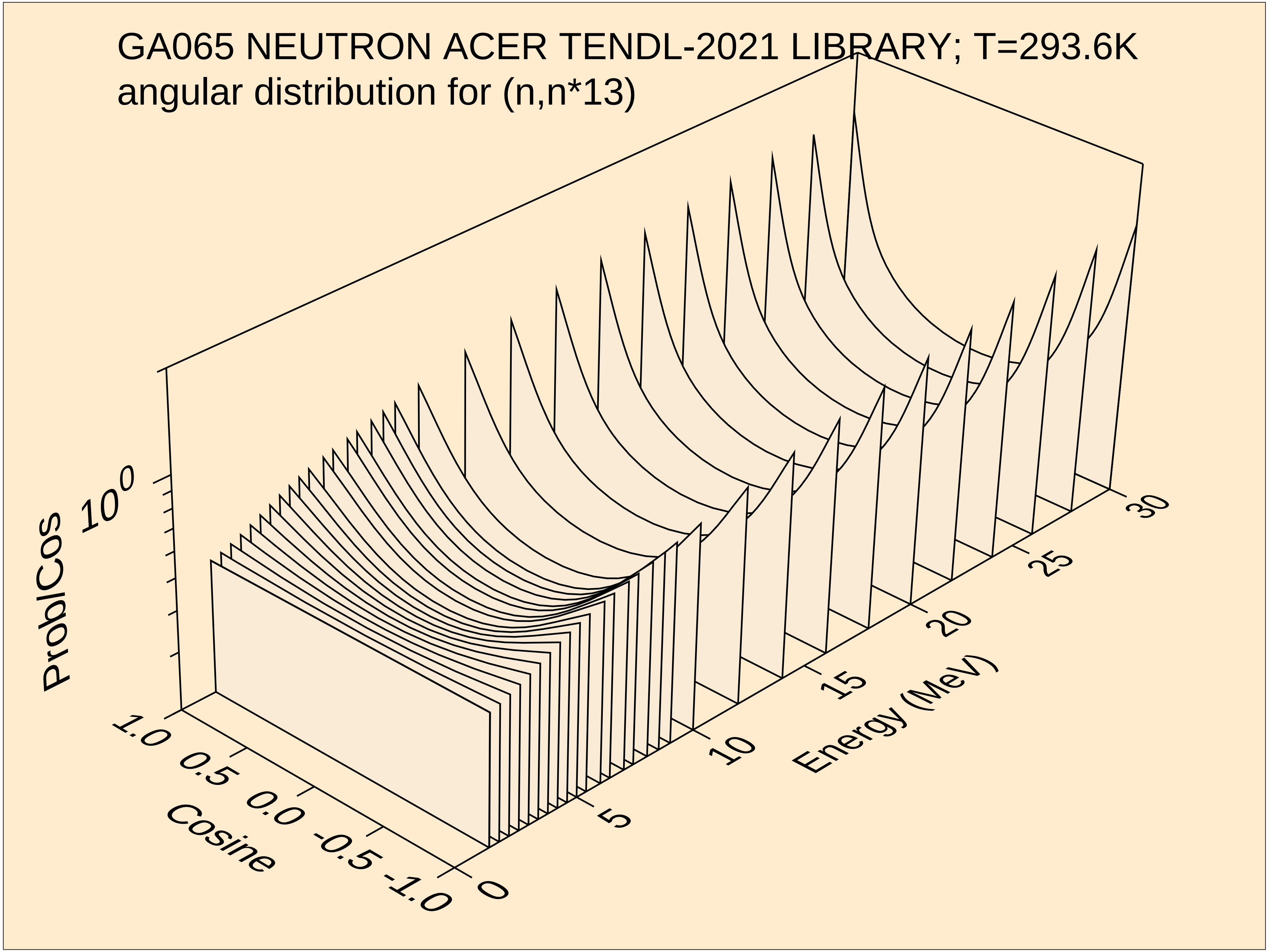

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*9)
Probl/Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

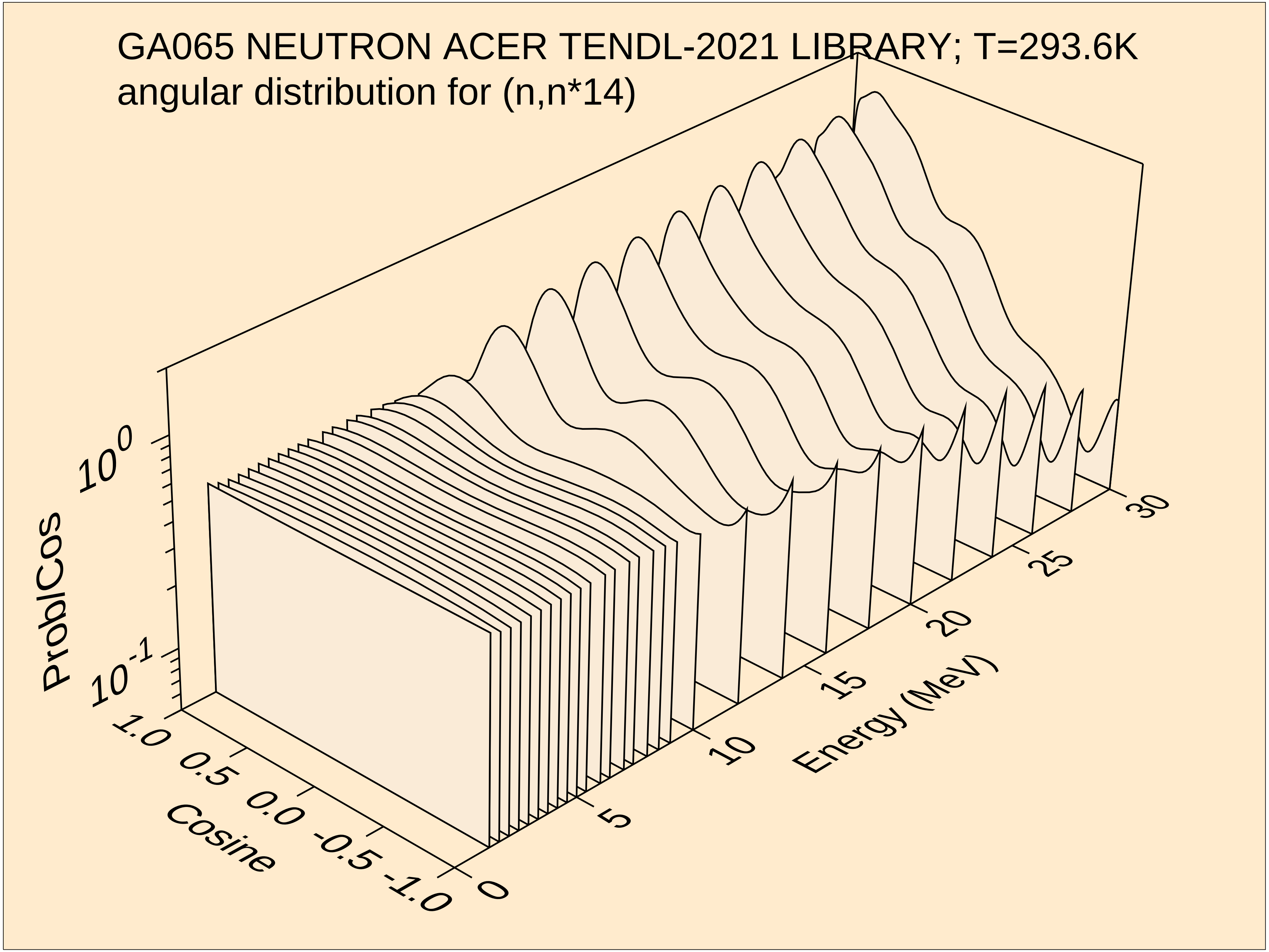


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*10)
ProblCos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

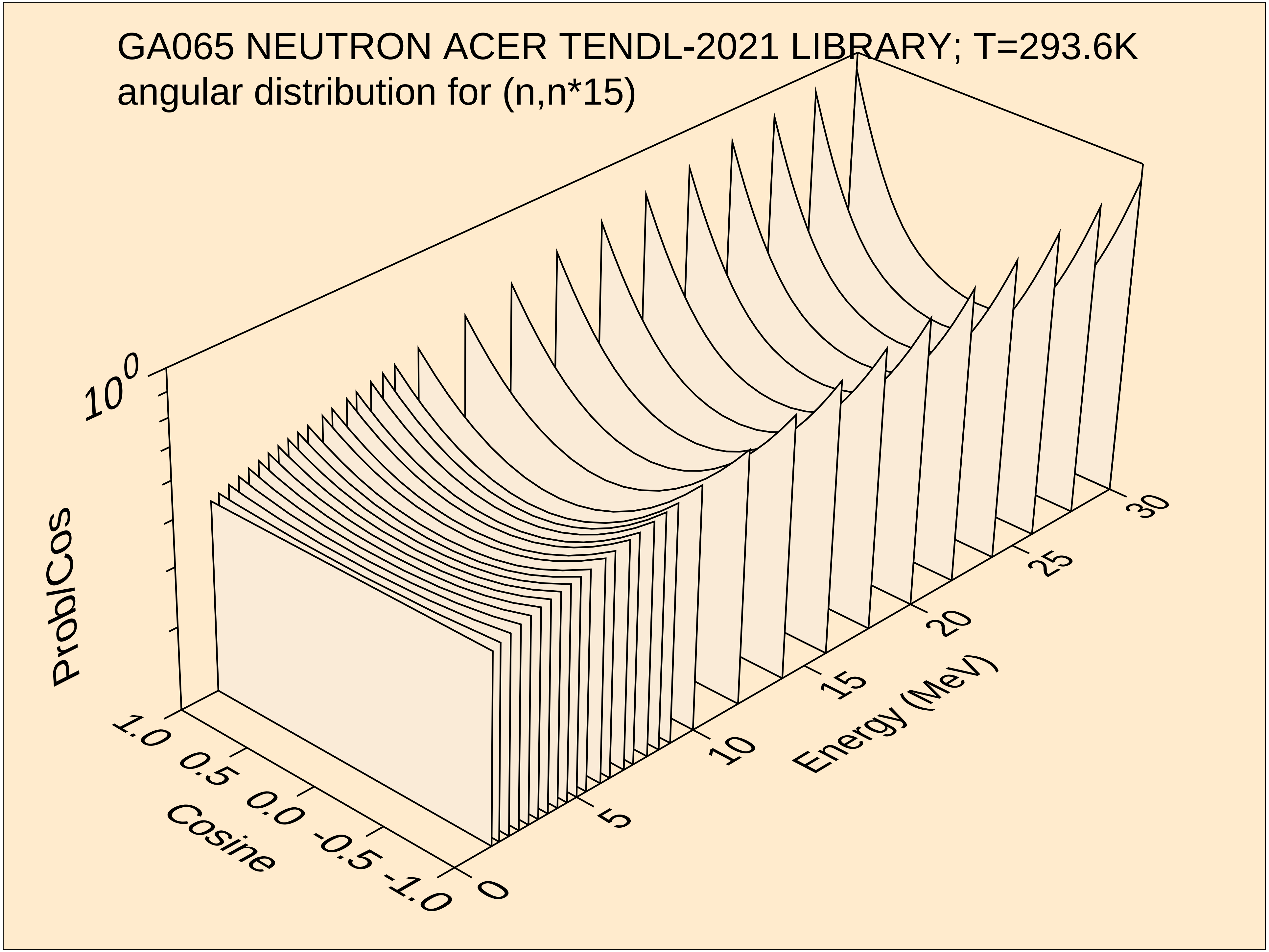

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*11)
Probl/Cos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

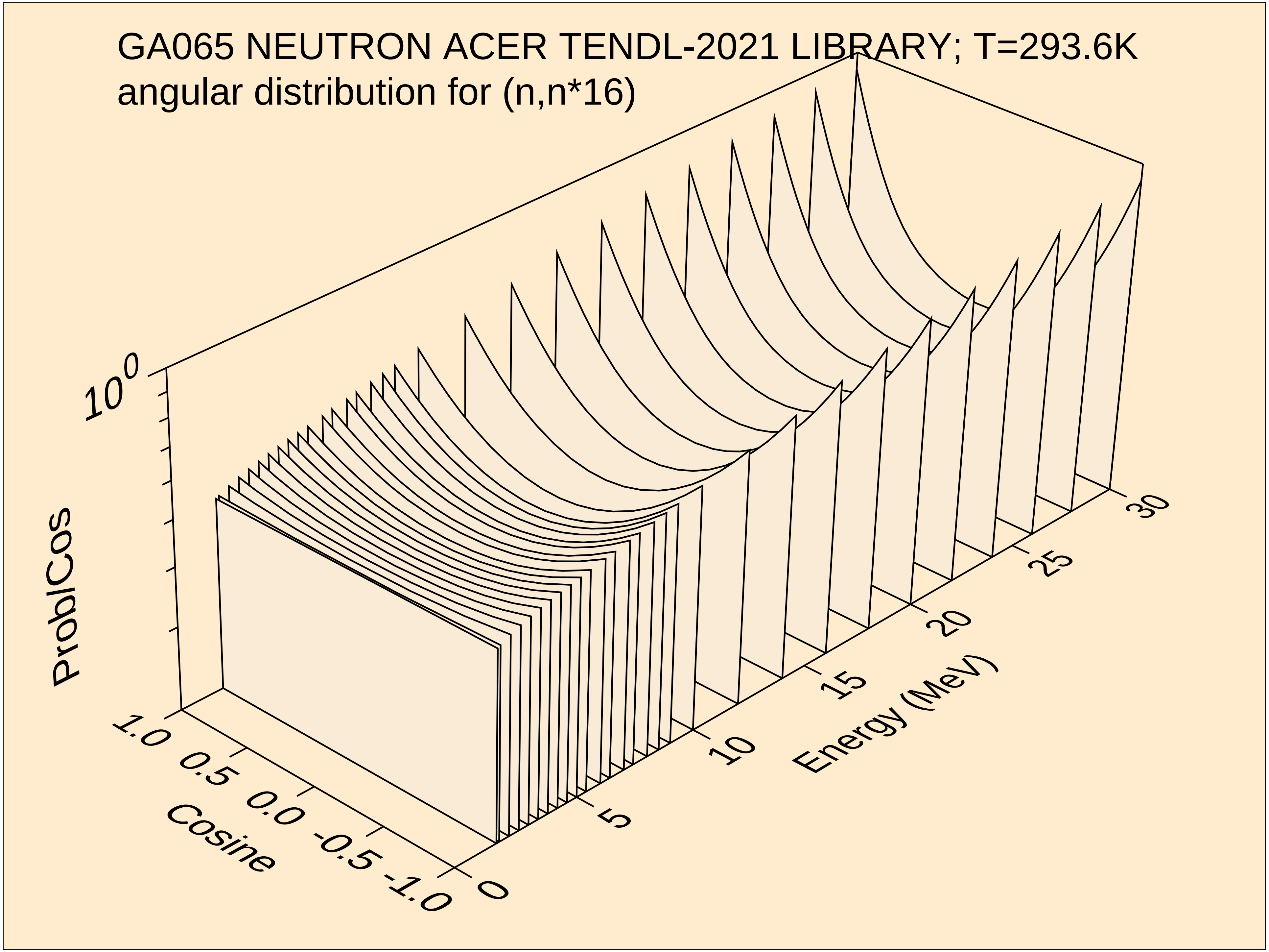

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*12)
ProblCos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

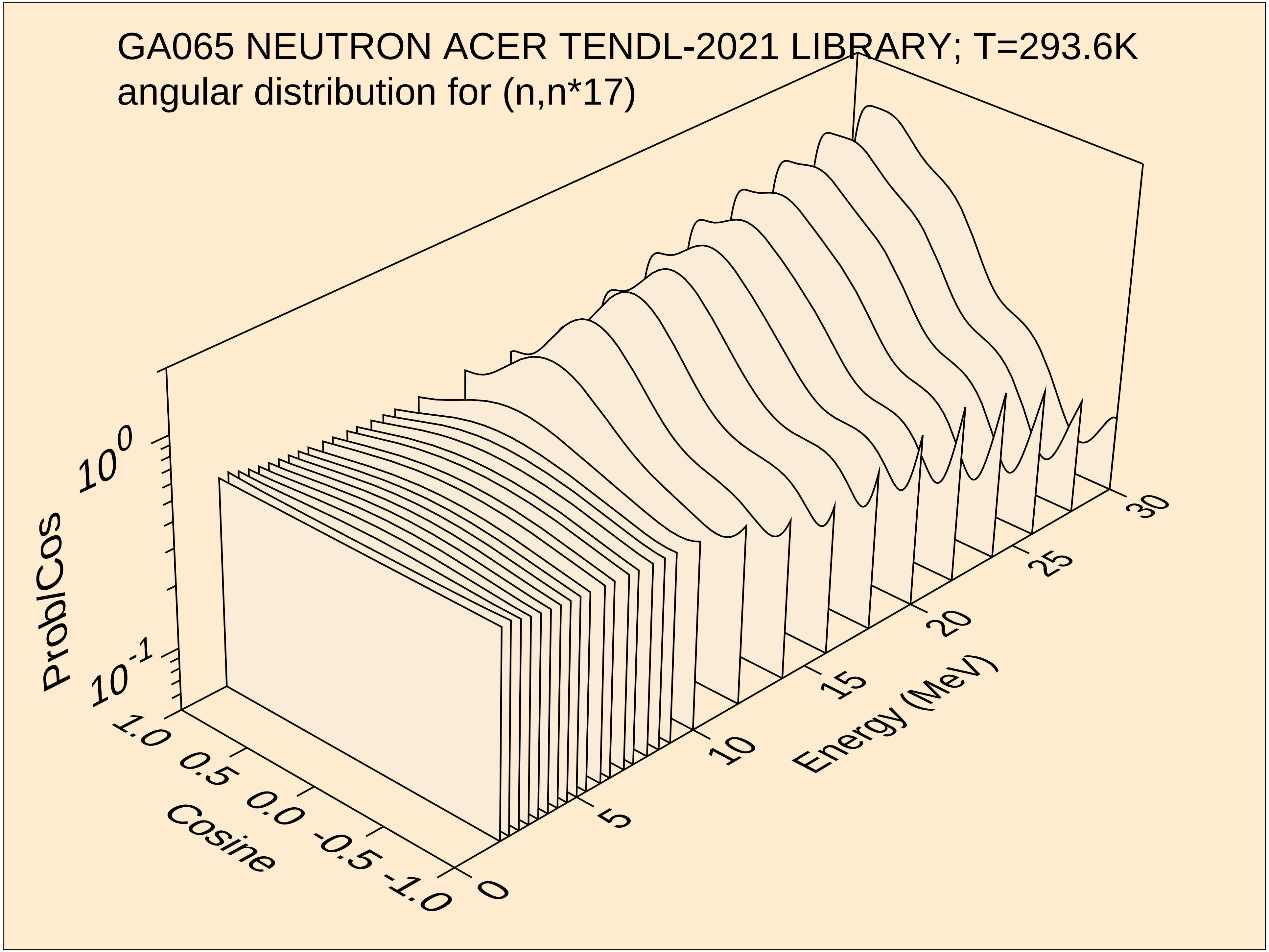

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*13)
ProblCos
10^0
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
5
10
15
20
25
30

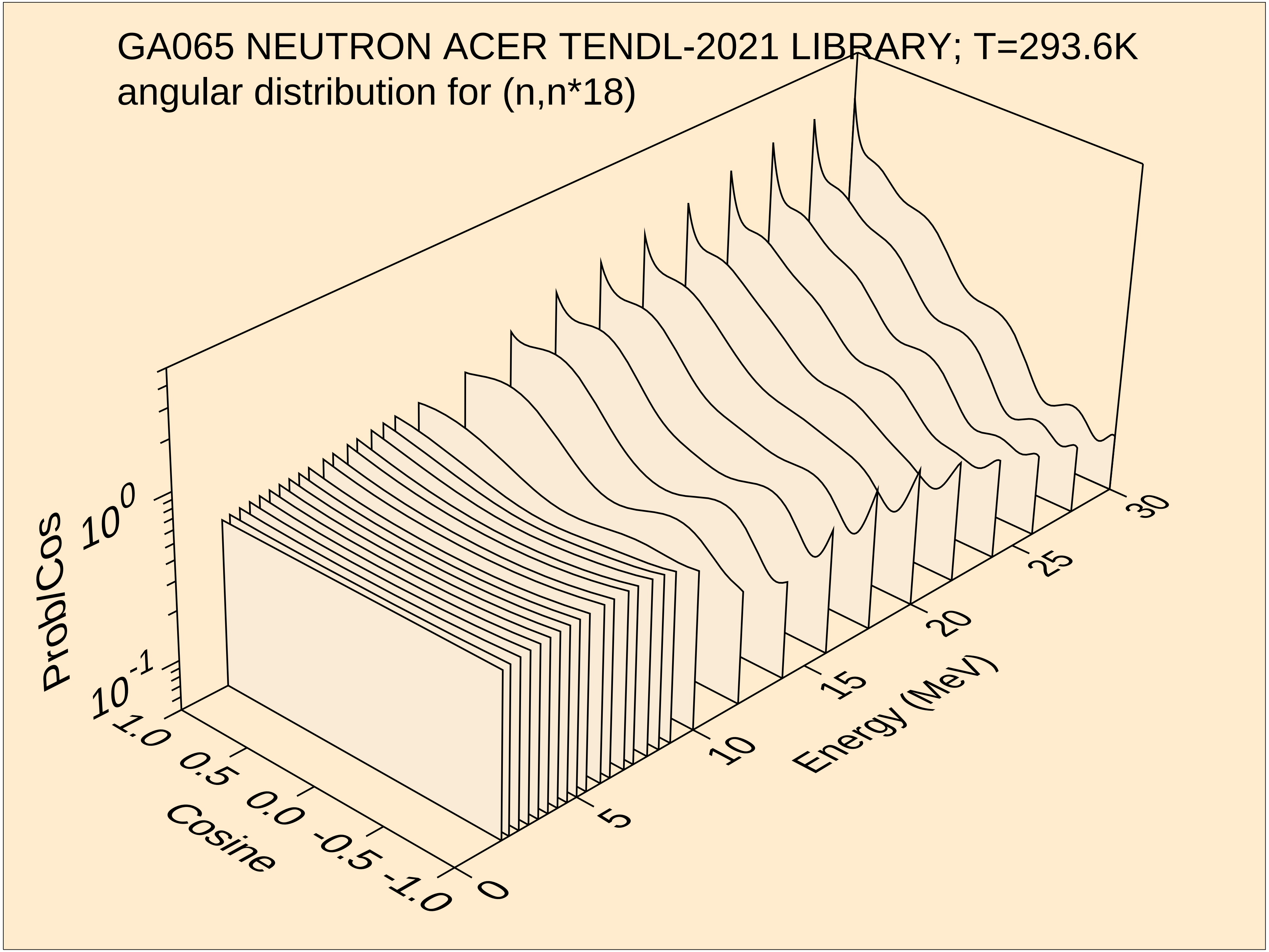


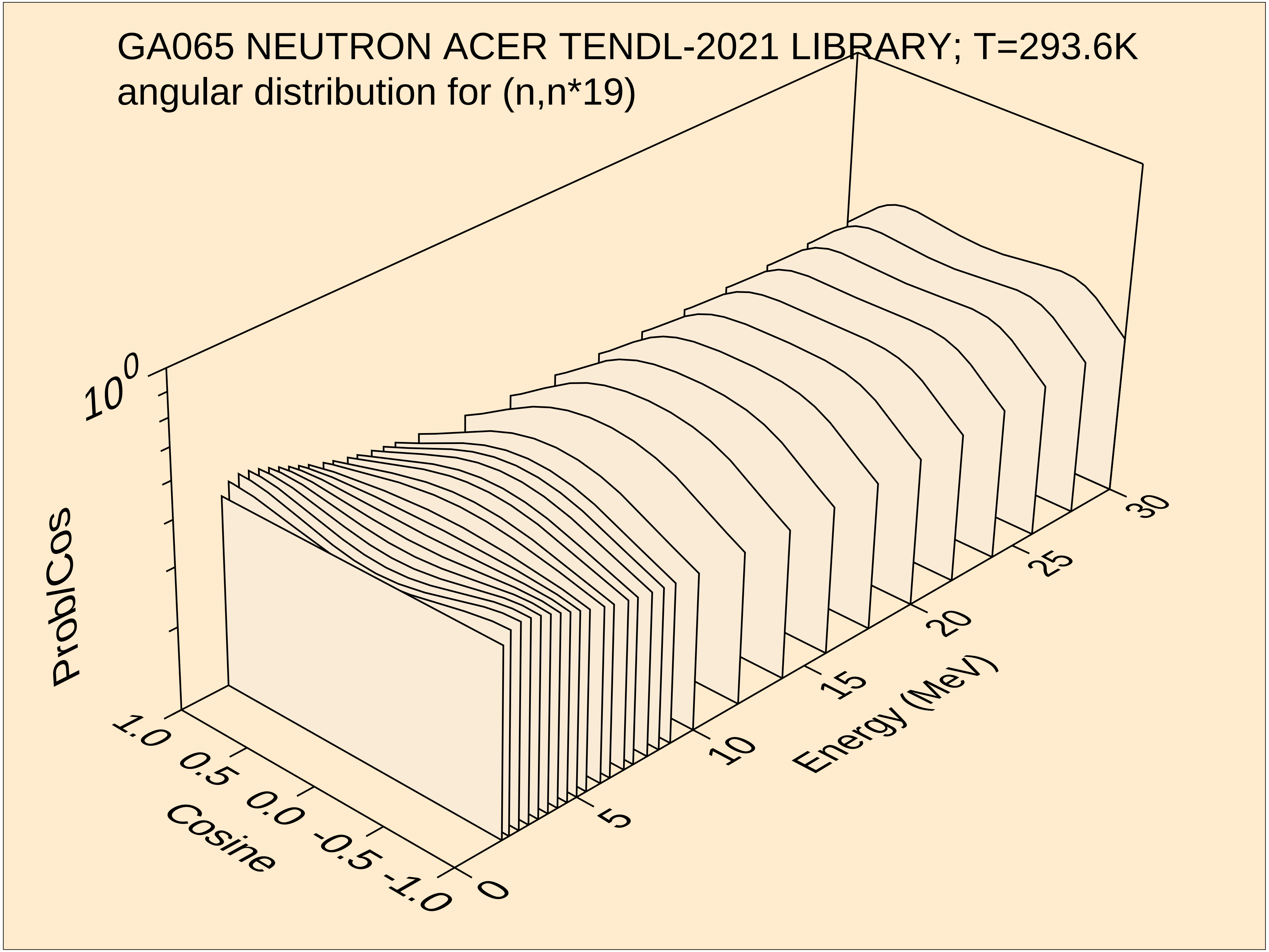
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*14)
ProblCos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*15)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

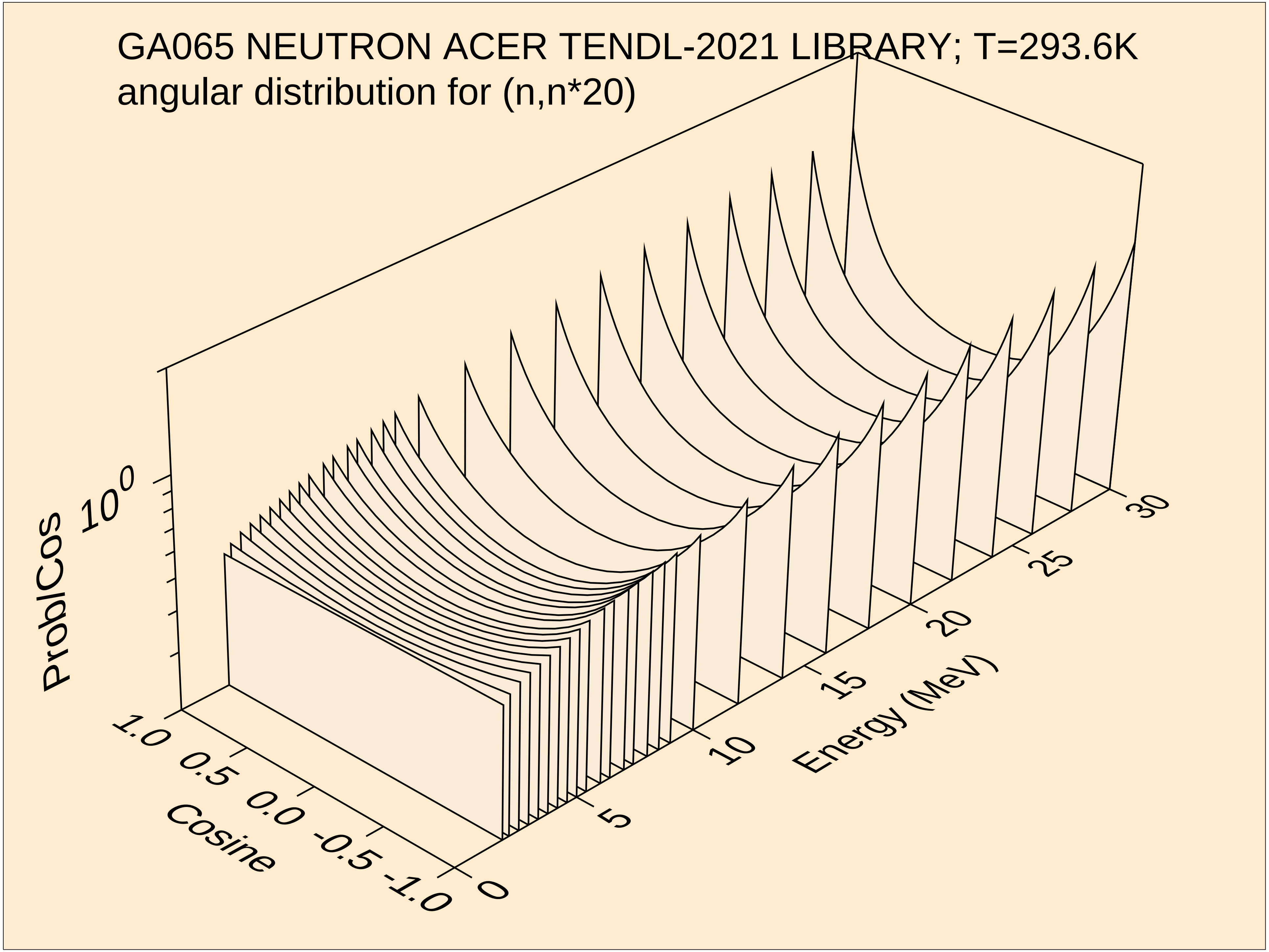

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*16)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

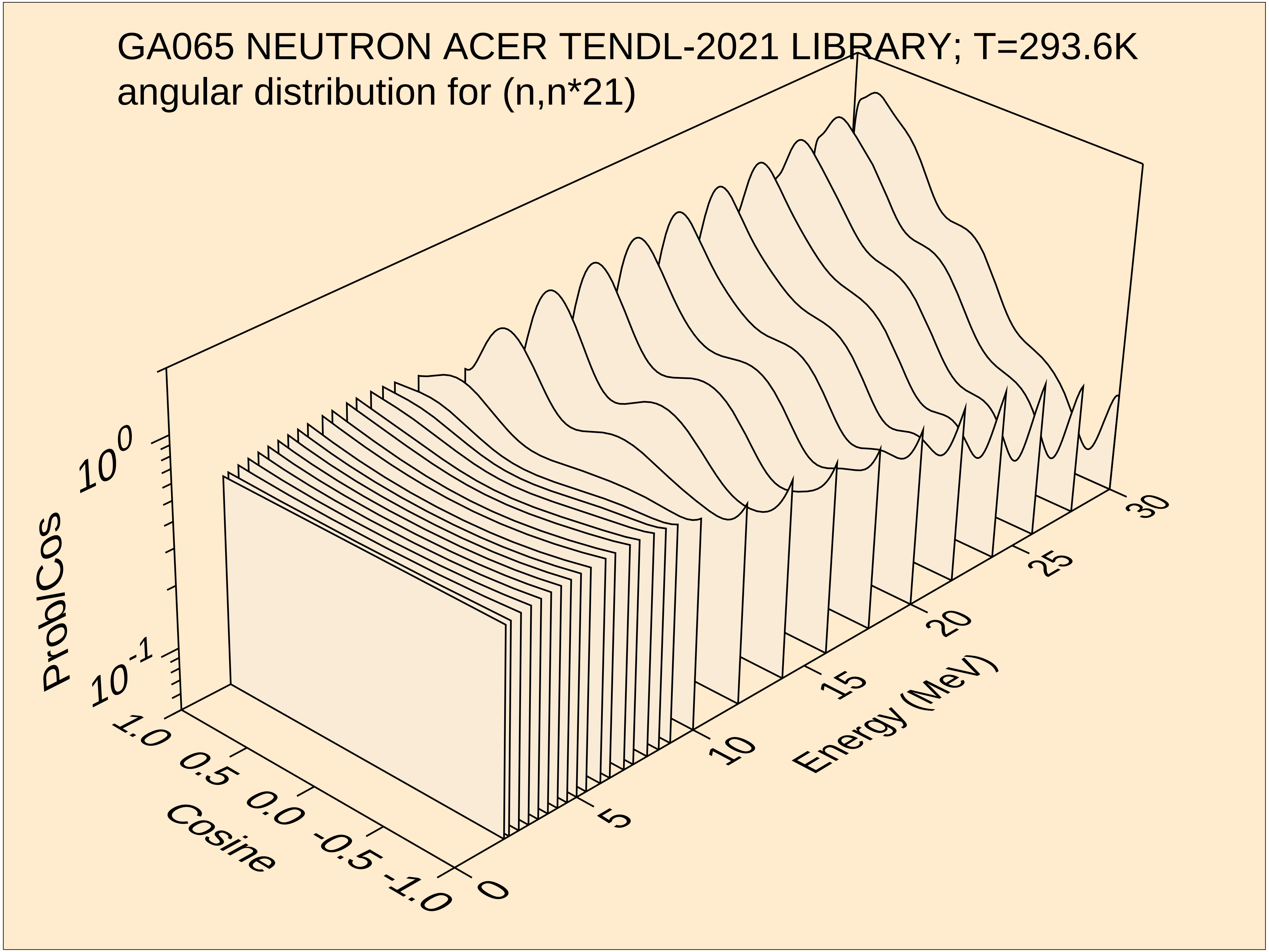

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*17)
Probl/Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

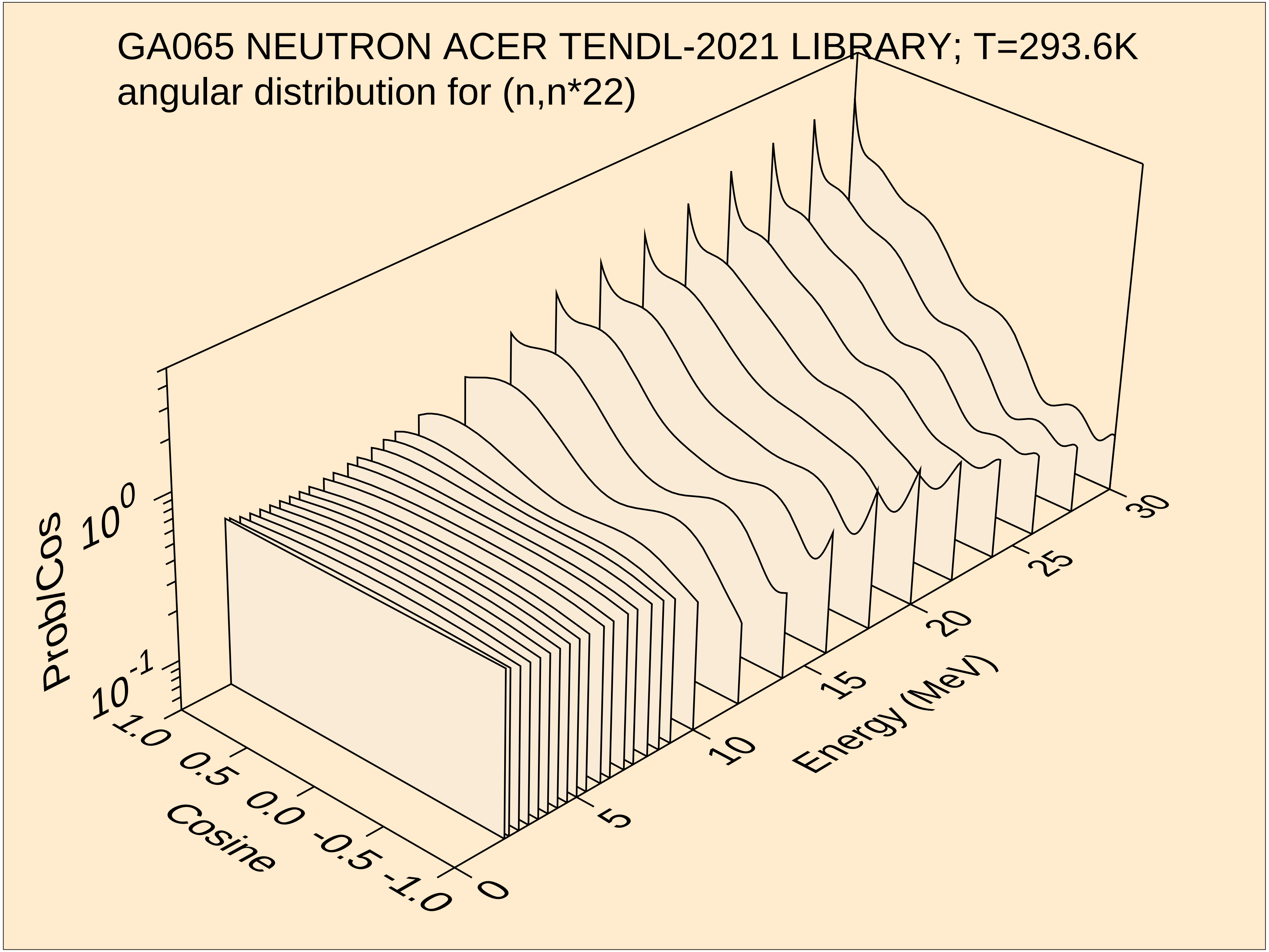

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*18)
Probl/Cos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

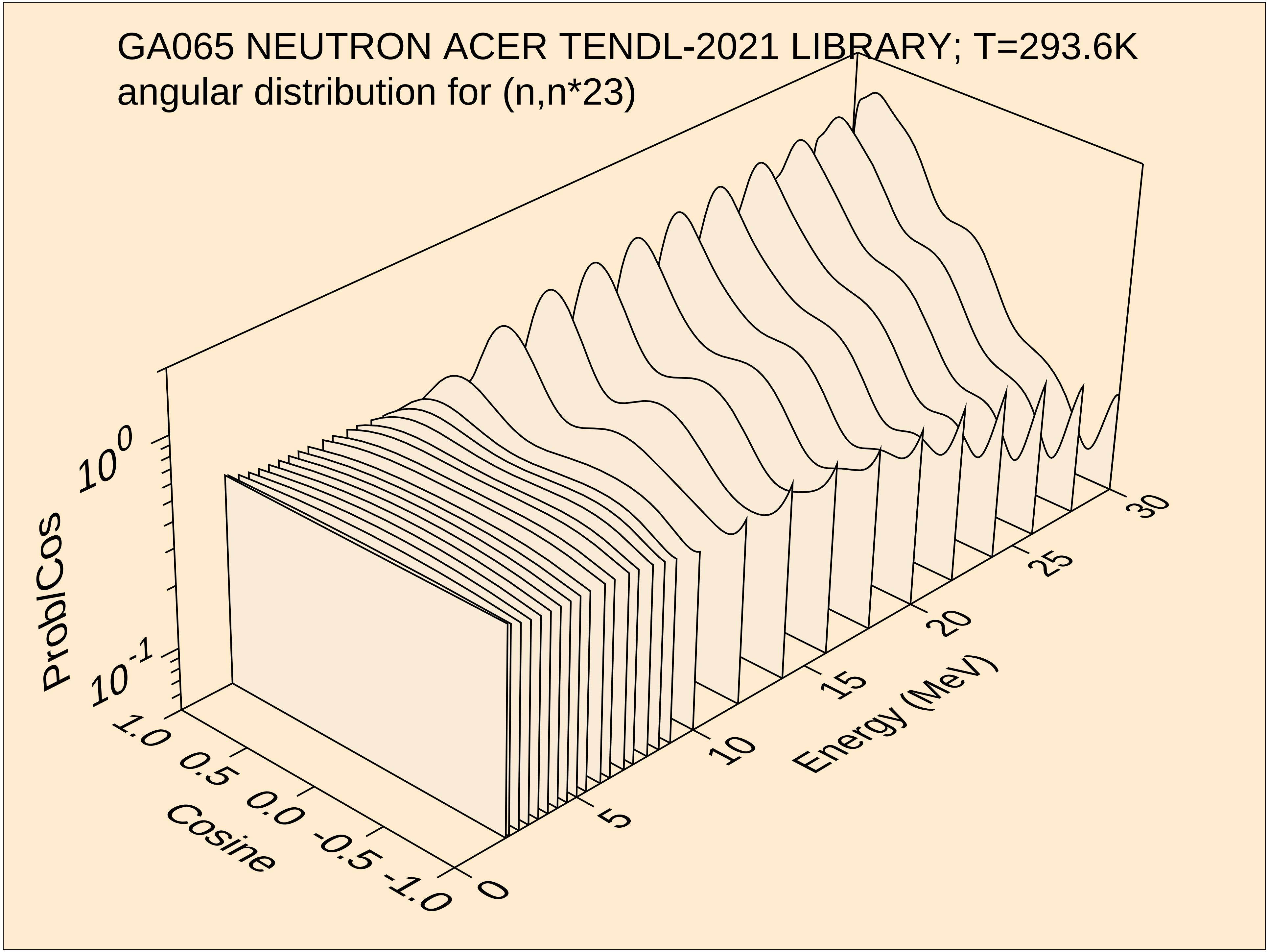


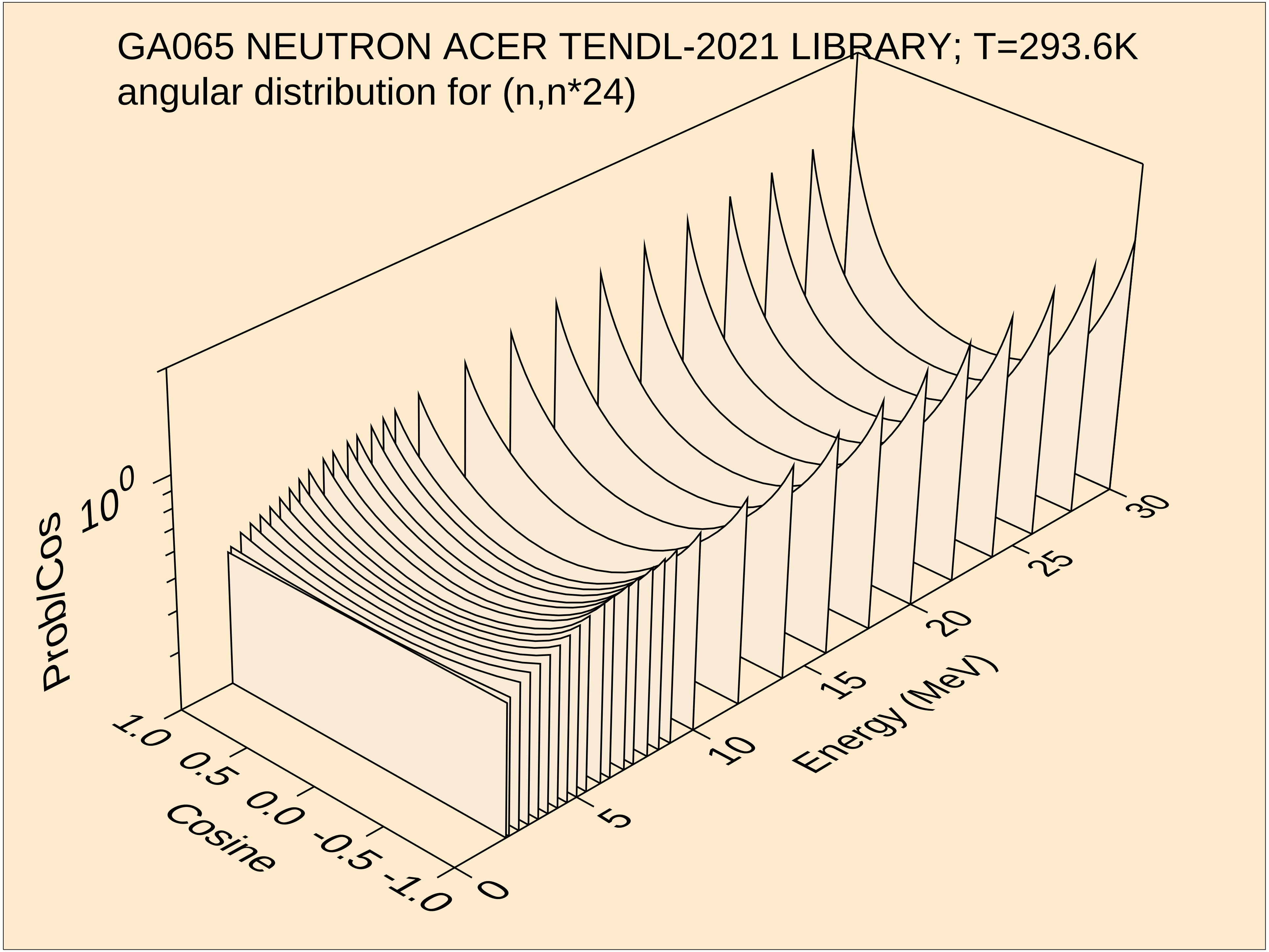
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*19)
10^0
ProblCos
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*20)
ProblCos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

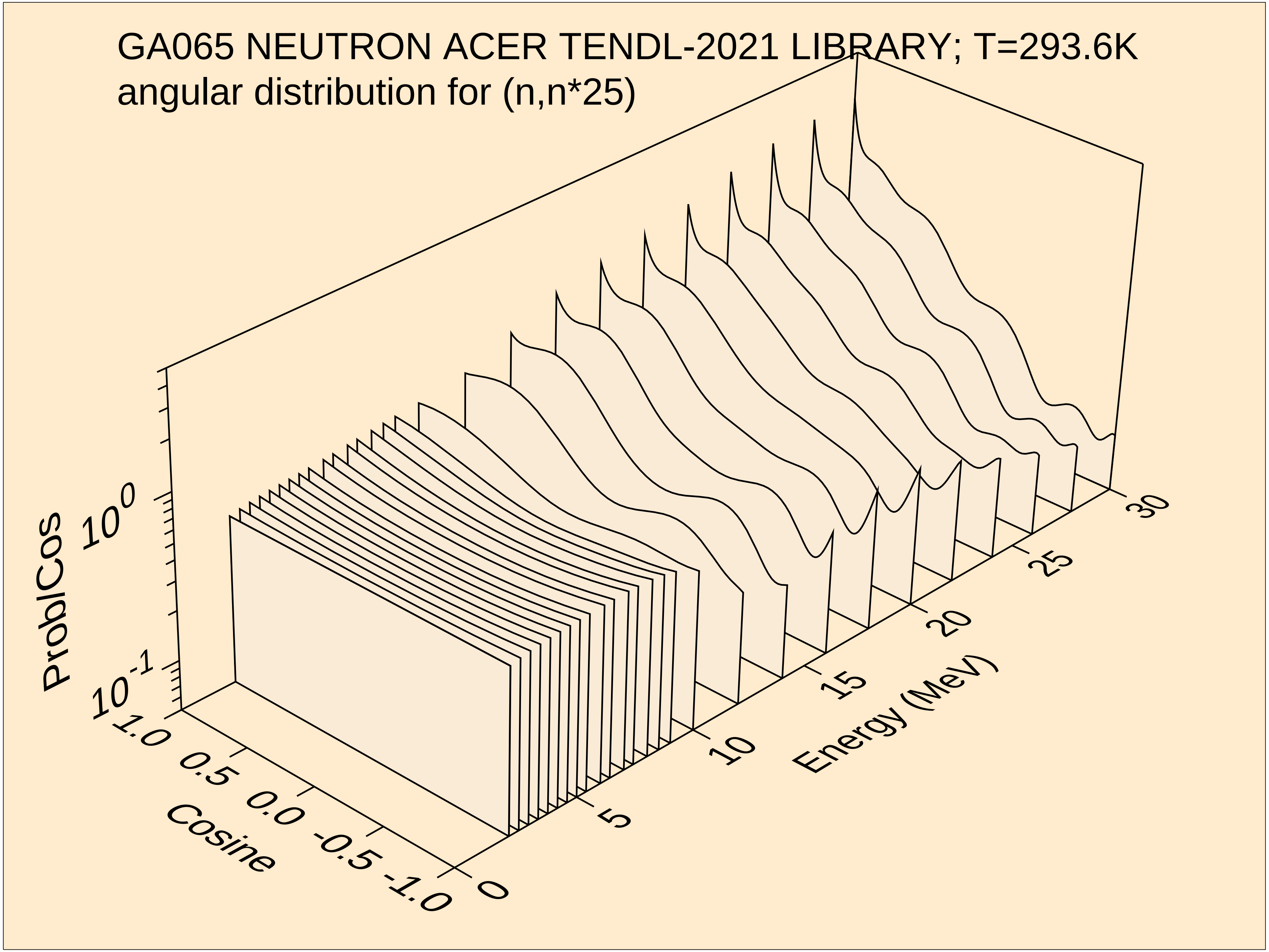

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*21)
ProblCos
10^0
10^-1
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

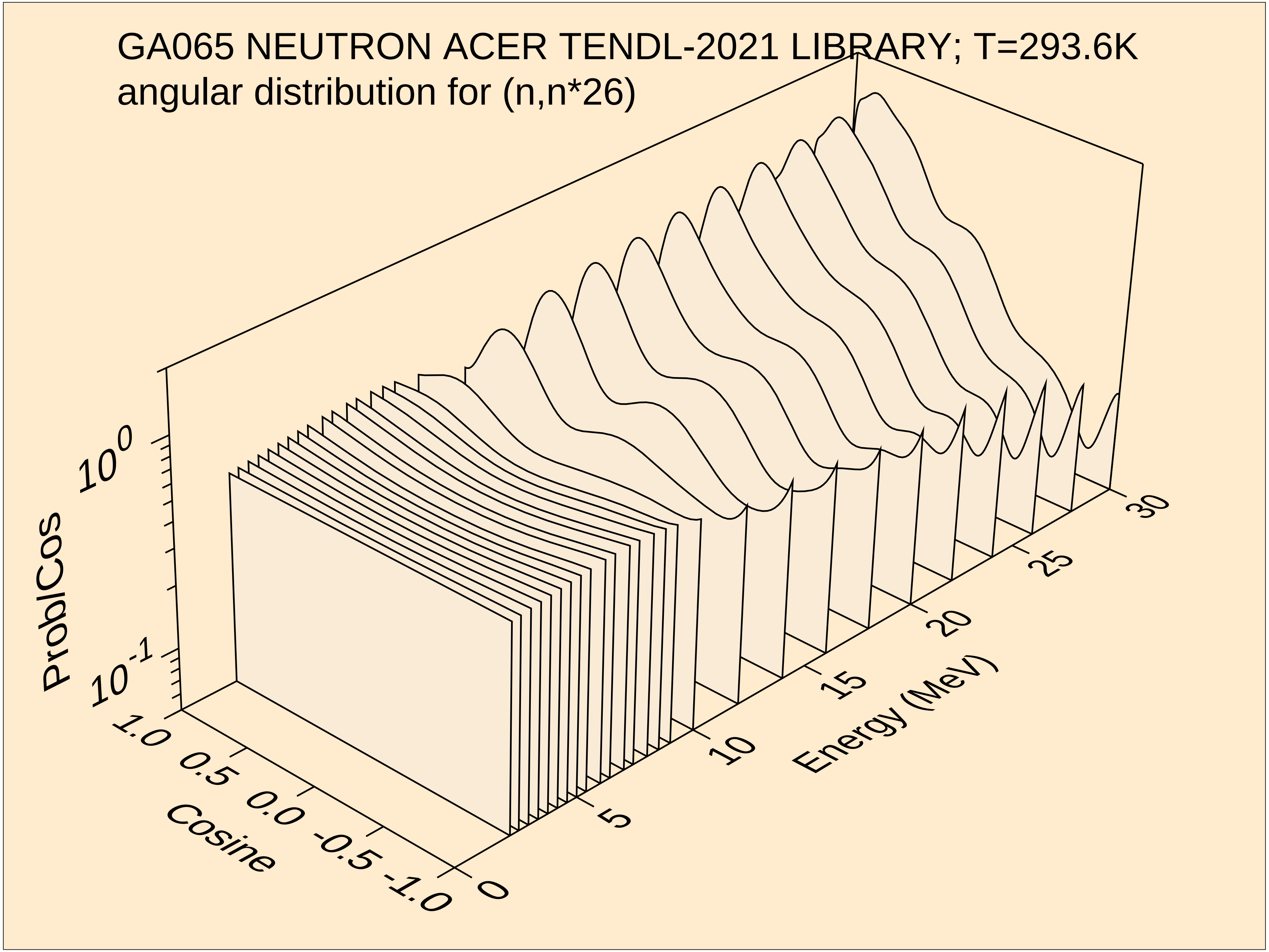

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*22)
Probl/Cos
10^0
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

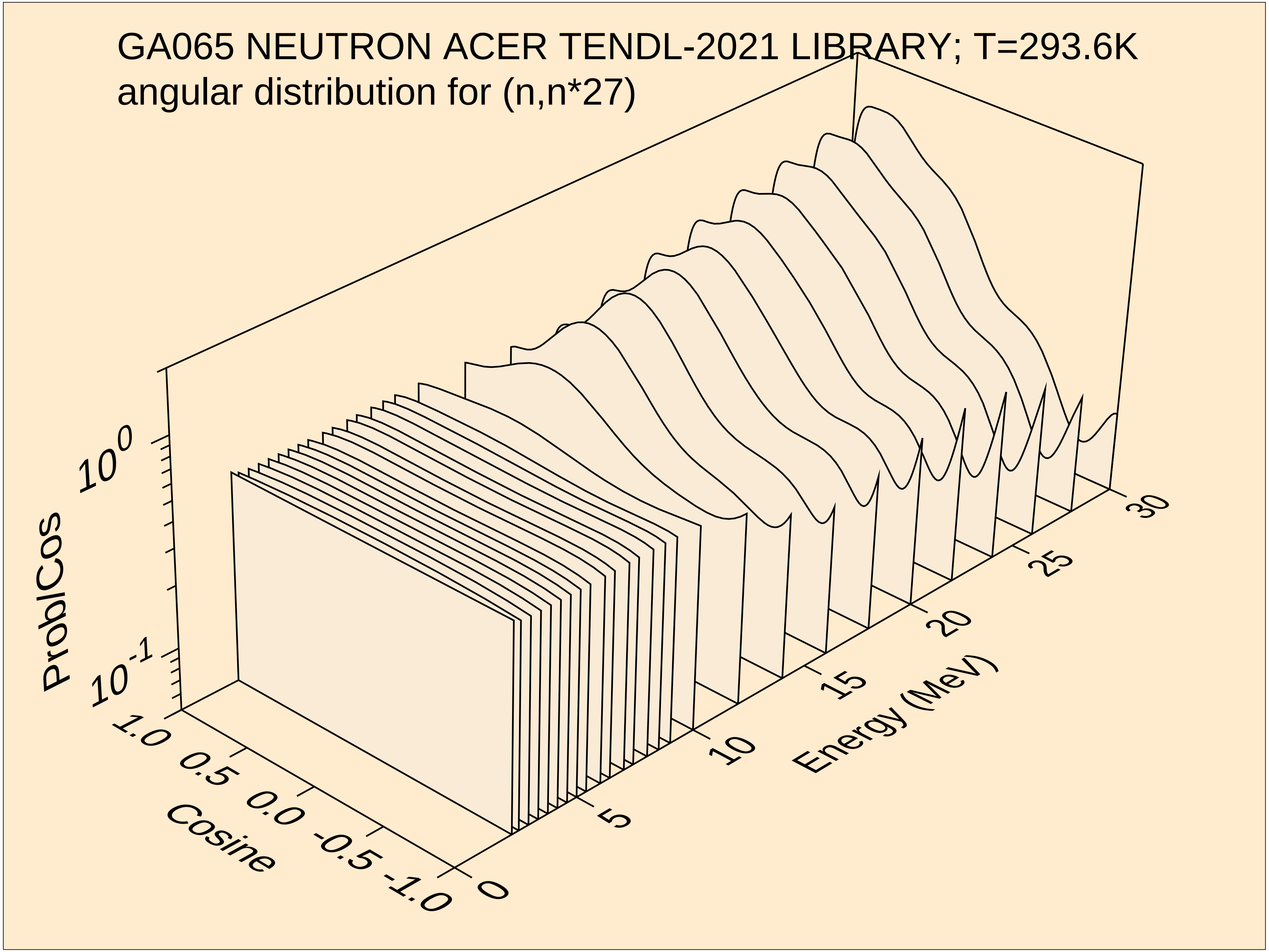

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*23)
ProblCos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

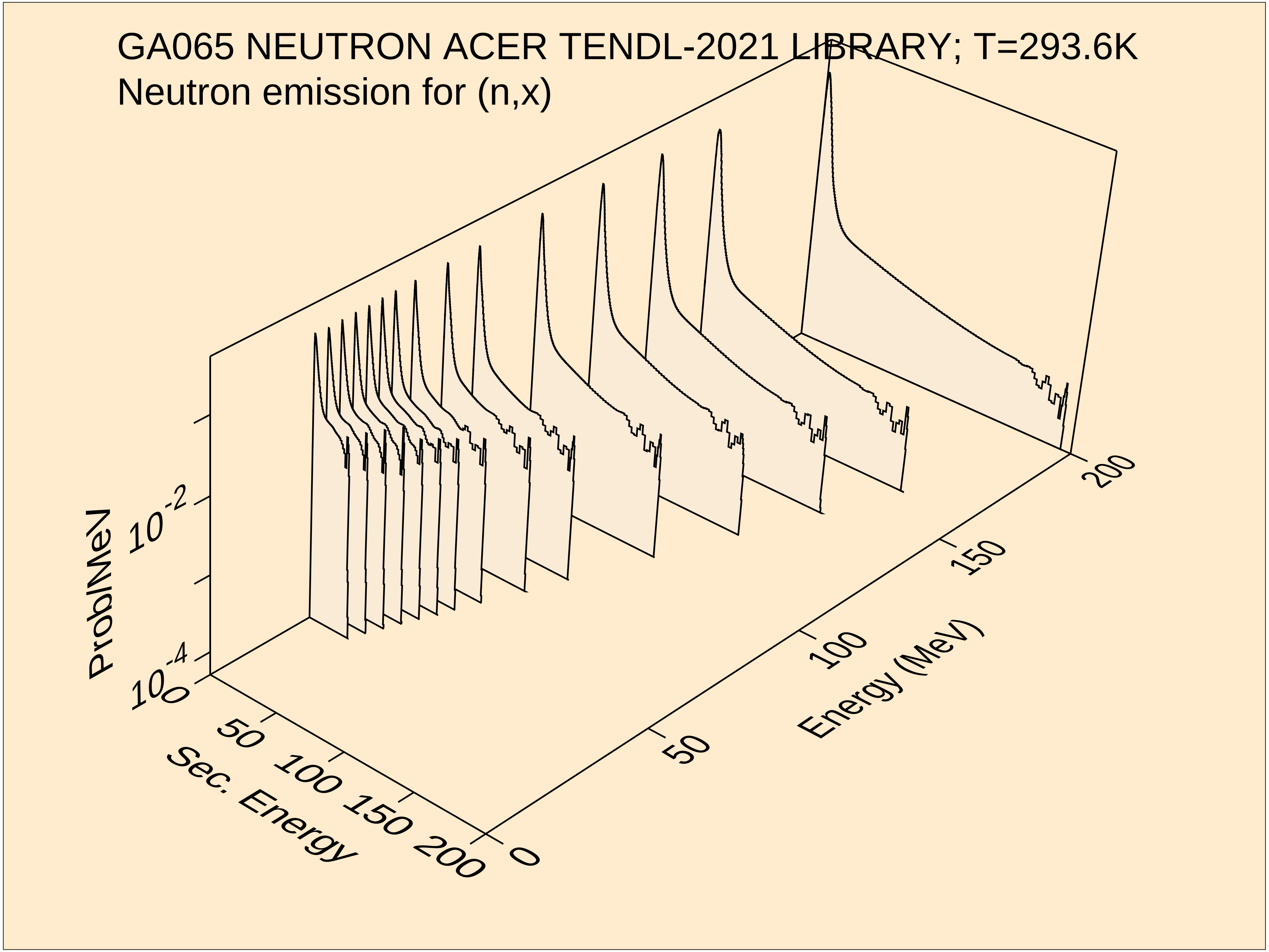


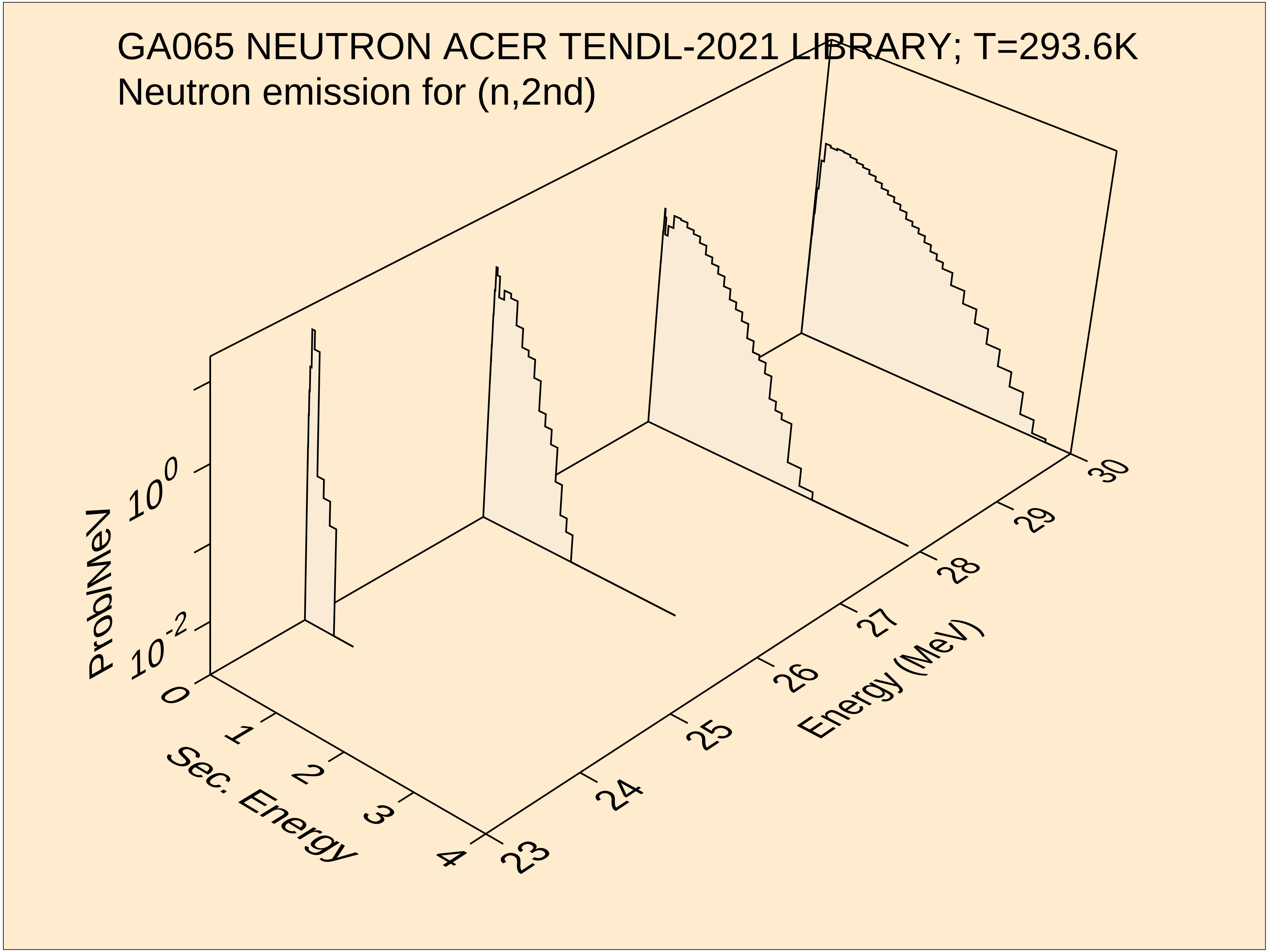
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*24)
Prob/Cos
10^0
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

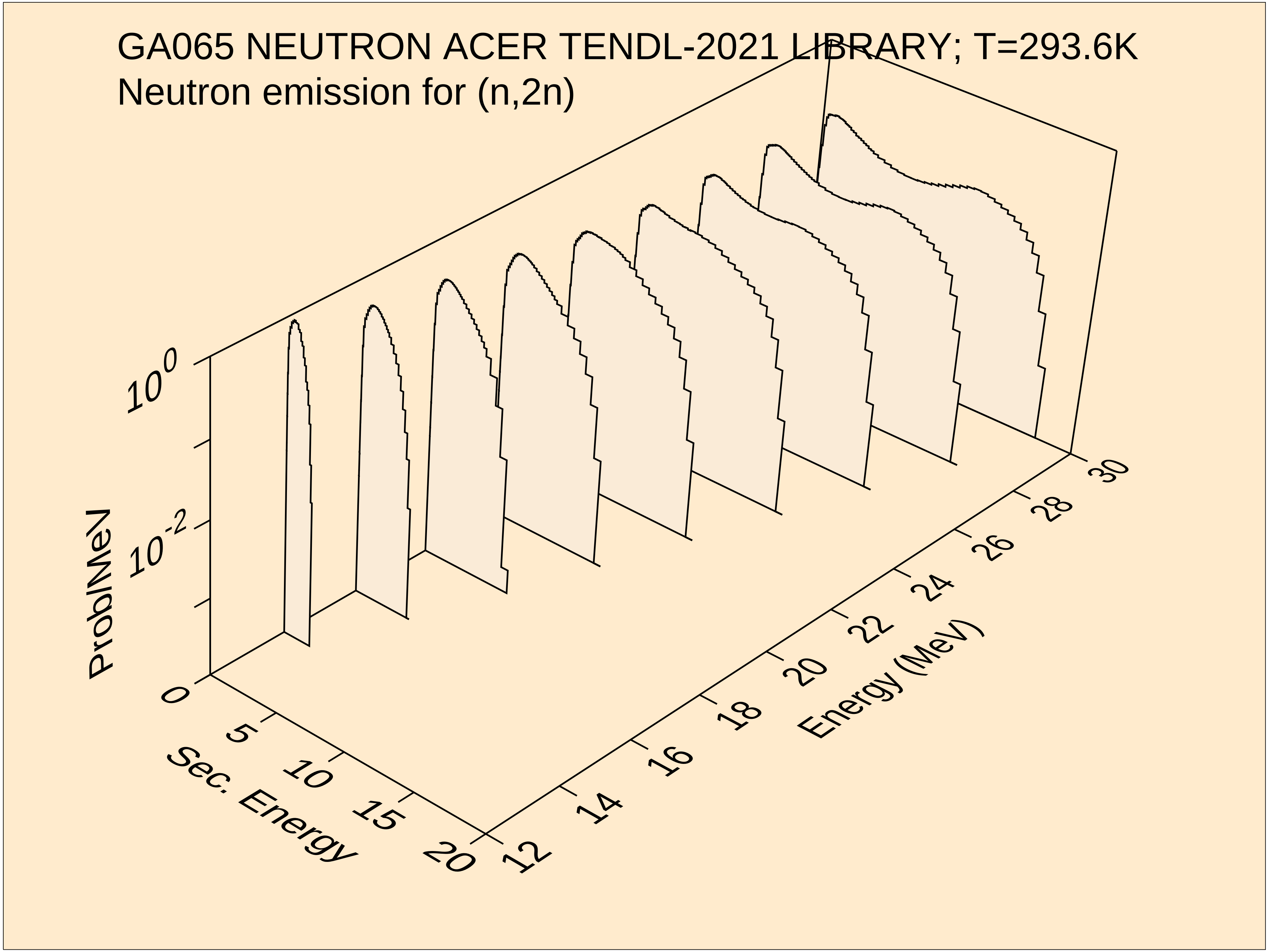

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*25)
ProblCos
10^0
10^{-1}
Cosine
1.0
0.5
0.0
-0.5
-1.0
Energy (MeV)
0
5
10
15
20
25
30

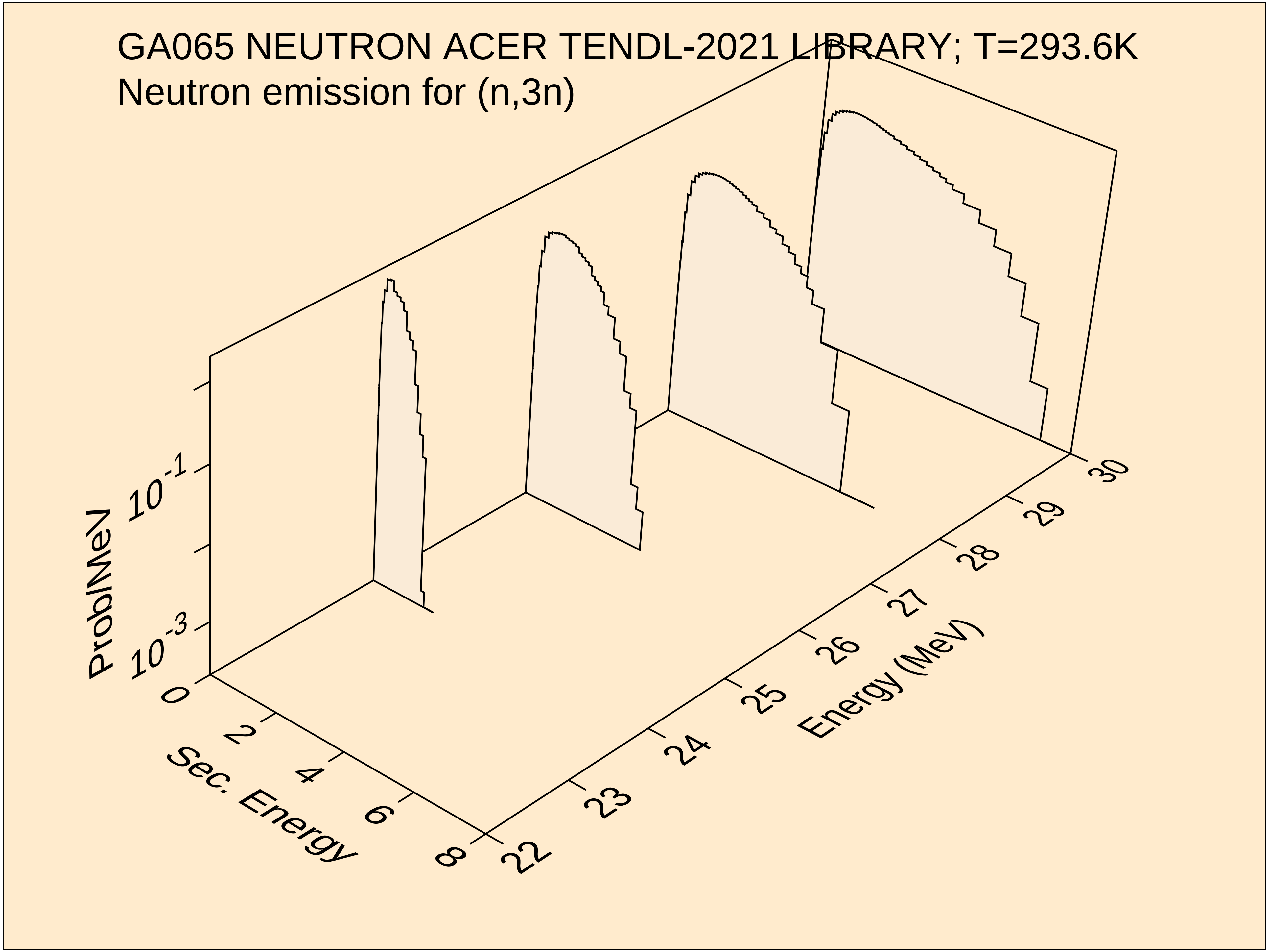

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*26)
Probl/Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)

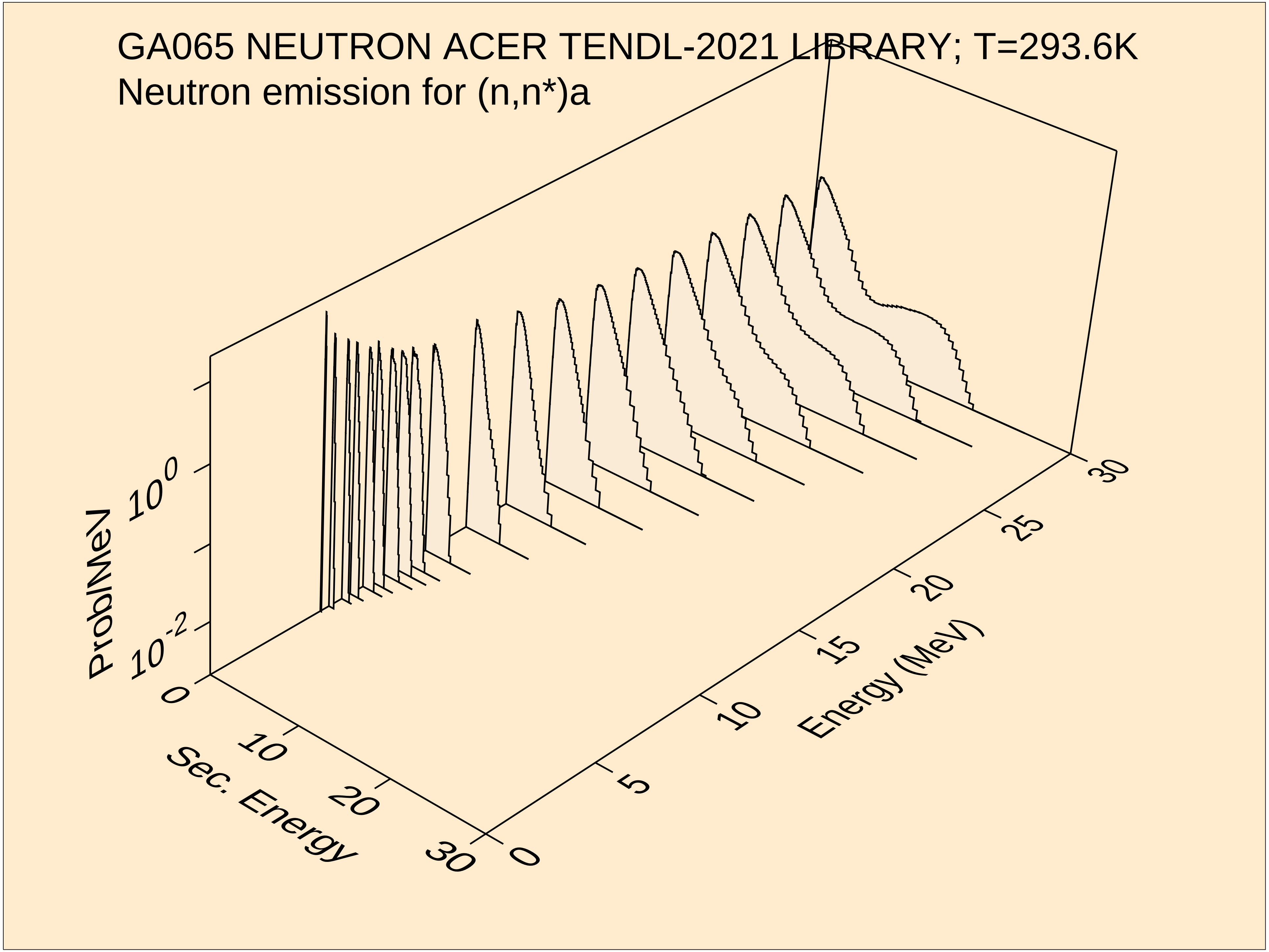

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
angular distribution for (n,n*27)
Probl/Cos
10^{0}
10^{-1}
1.0
0.5
0.0
-0.5
-1.0
Cosine
0
5
10
15
20
25
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,x)
ProblMeV
10^{-2}
10^{-4}
0
50
100
150
200
Sec. Energy
0
50
100
150
200
Energy (MeV)

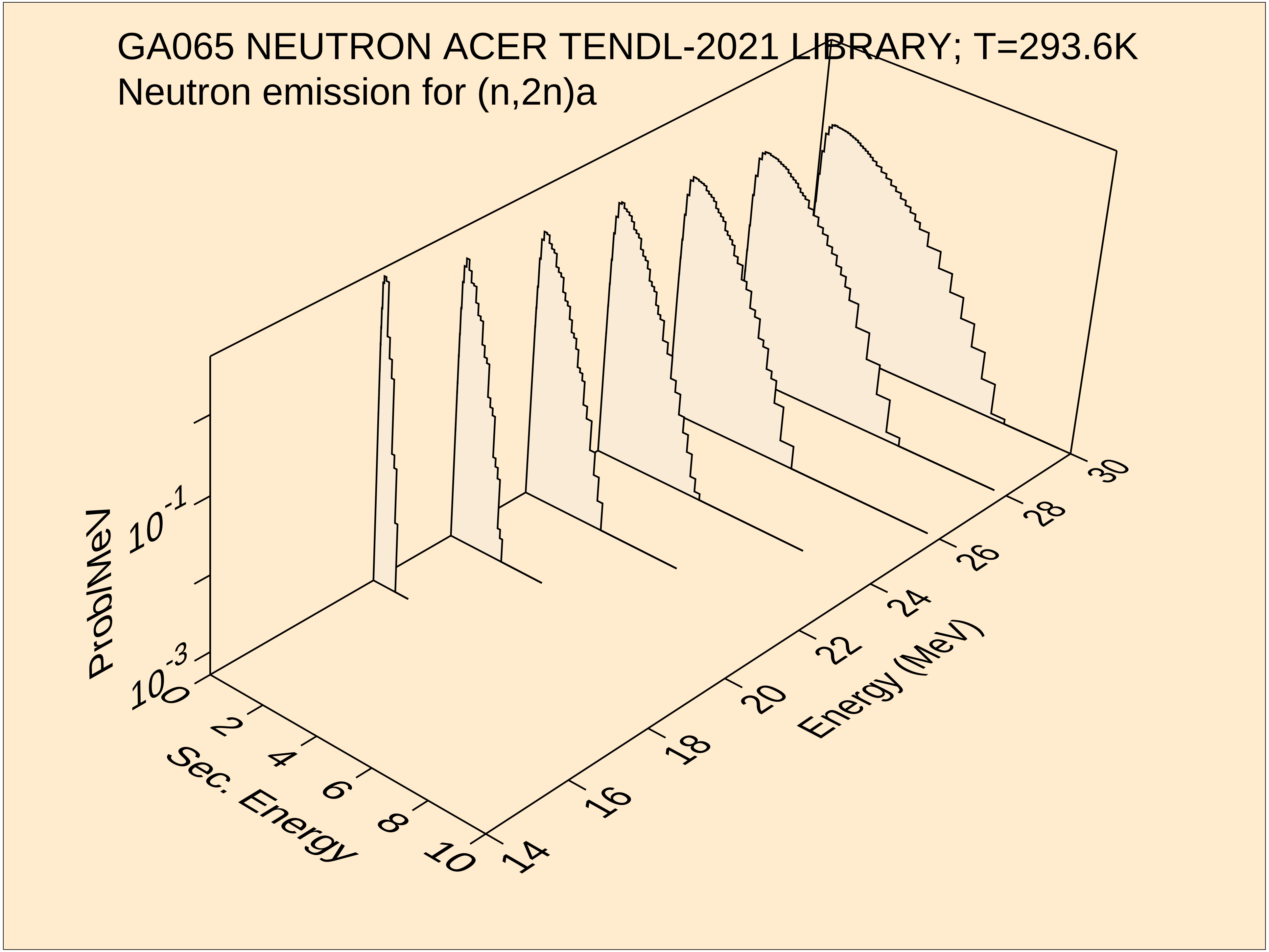

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,2nd)
Prob/MeV
10^{0}
10^{-2}
0
1
2
3
4
Sec. Energy
23
24
25
26
27
28
29
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,2n)
ProbMeV
10^0
10^{-2}
0
5
10
15
20
Sec. Energy
12
14
16
18
20
22
24
26
28
30
Energy (MeV)

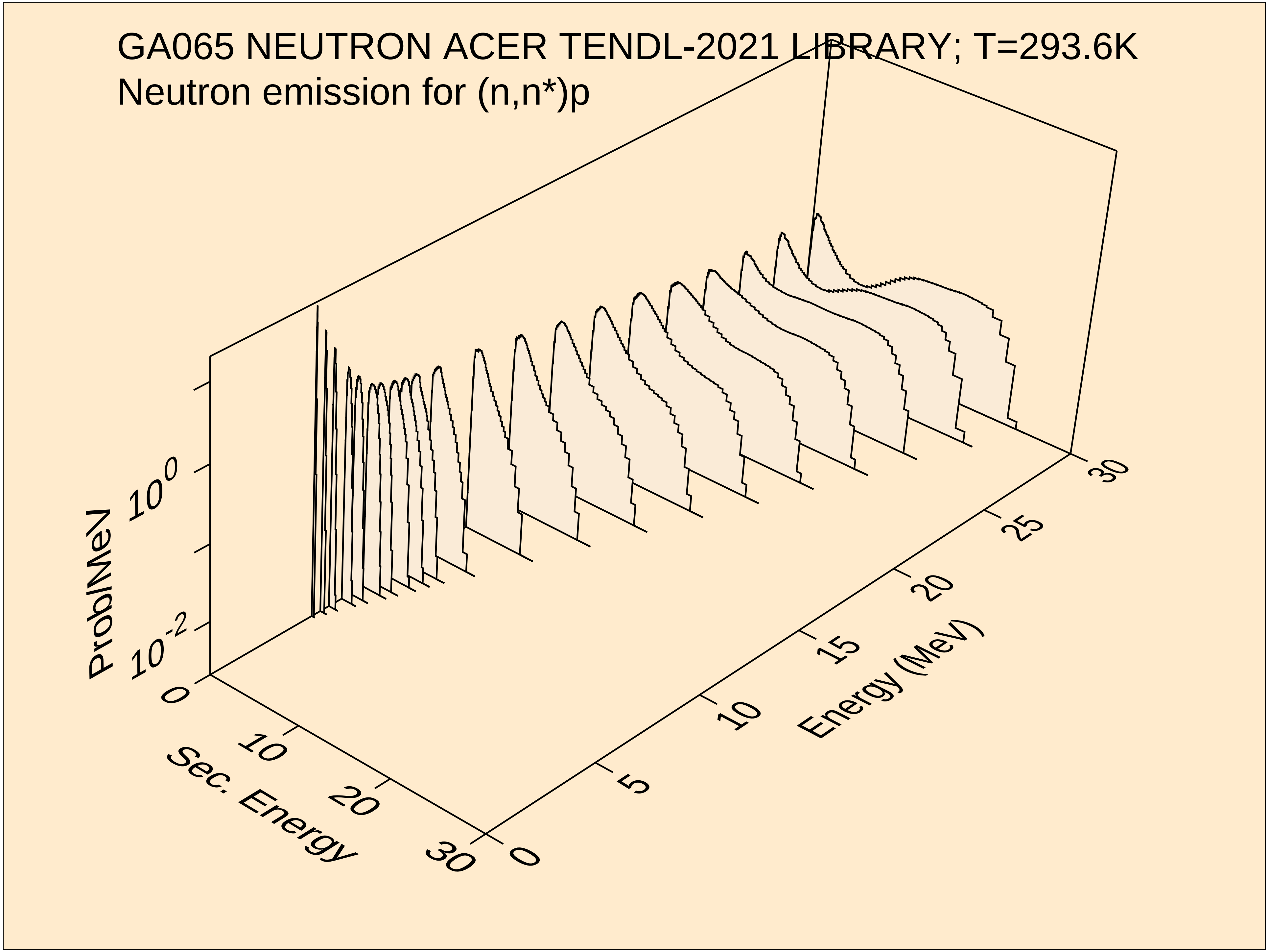

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,3n)
ProbMeV
10^-1
10^-3
0
2
4
6
8
Sec. Energy
22
23
24
25
26
27
28
29
30
Energy (MeV)



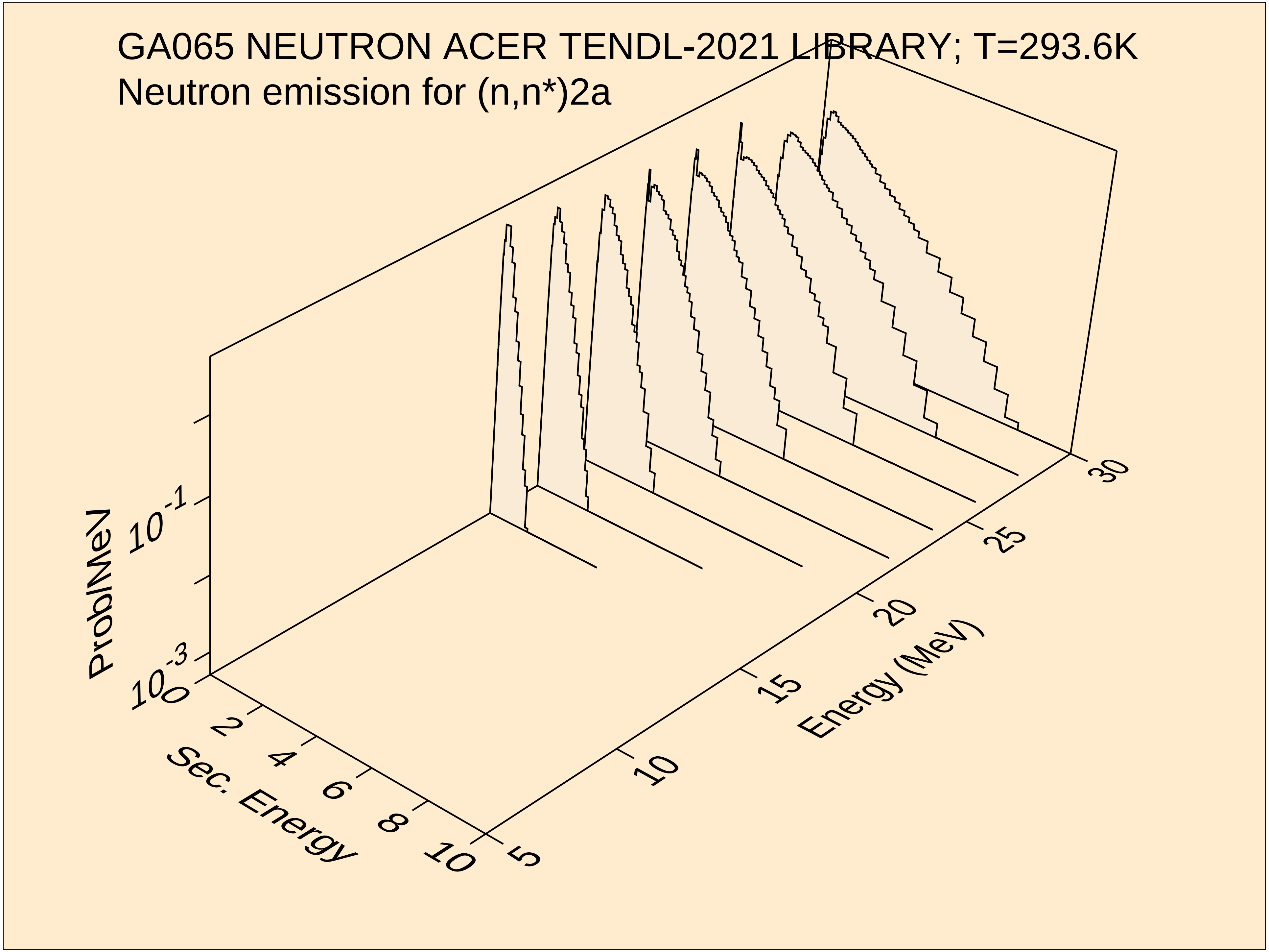
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,n*)a
ProbMeV
10^{0}
10^{-2}
0
10
20
30
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)

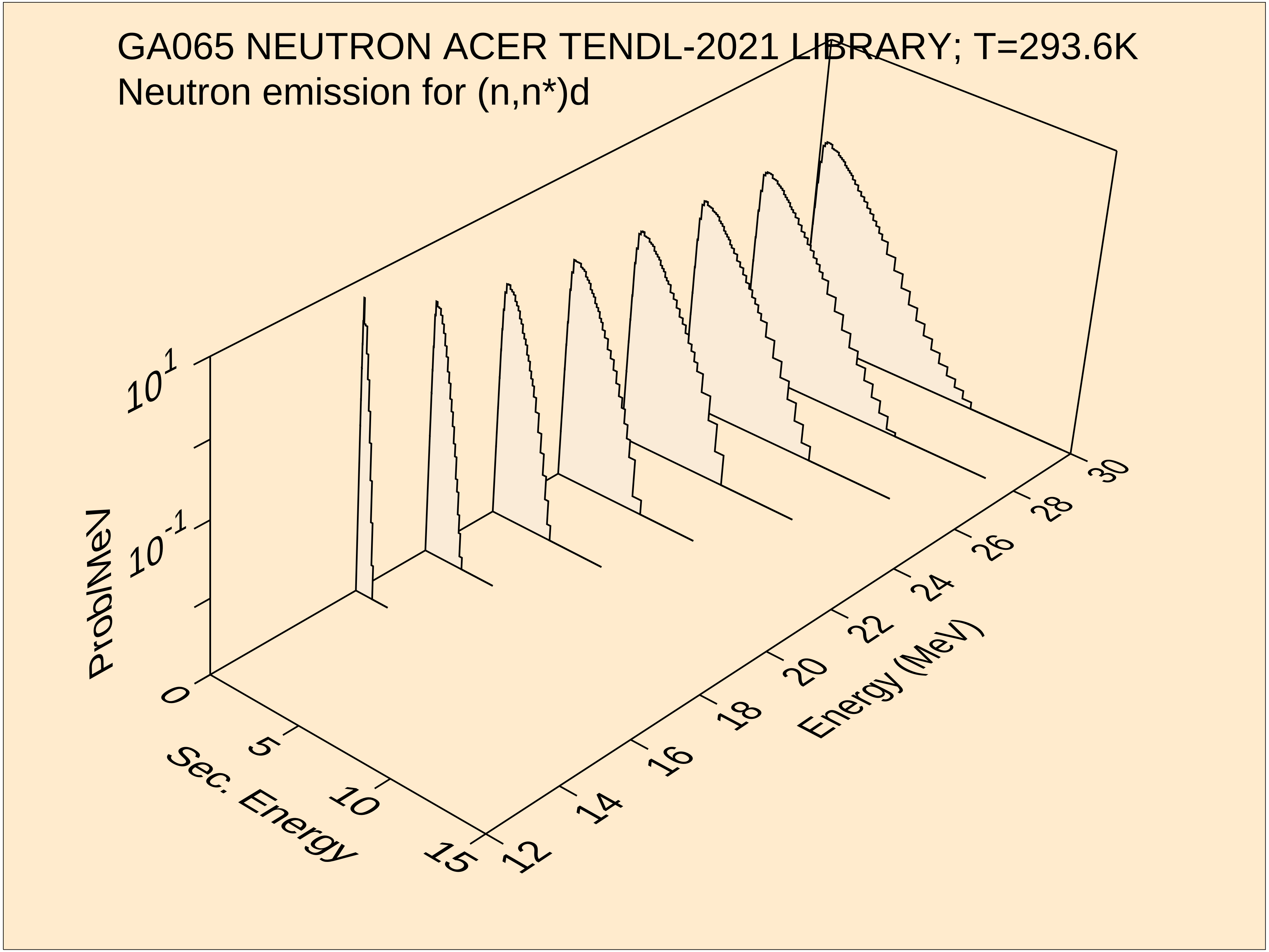


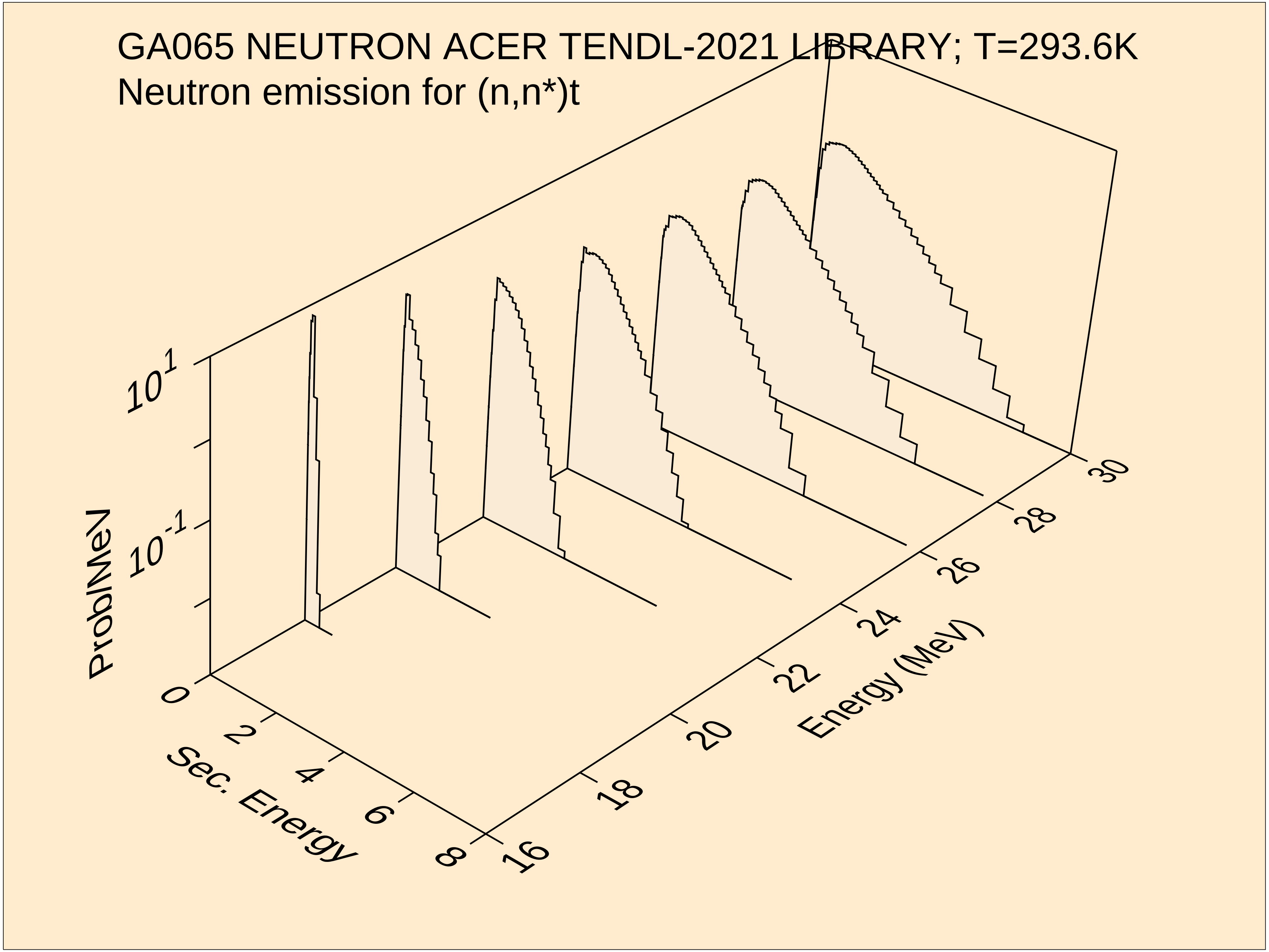
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,2n)a
ProbMeV
10^{-1}
10^{-3}
0
2
4
6
8
10
Sec. Energy
14
16
18
20
22
24
26
28
30
Energy (MeV)



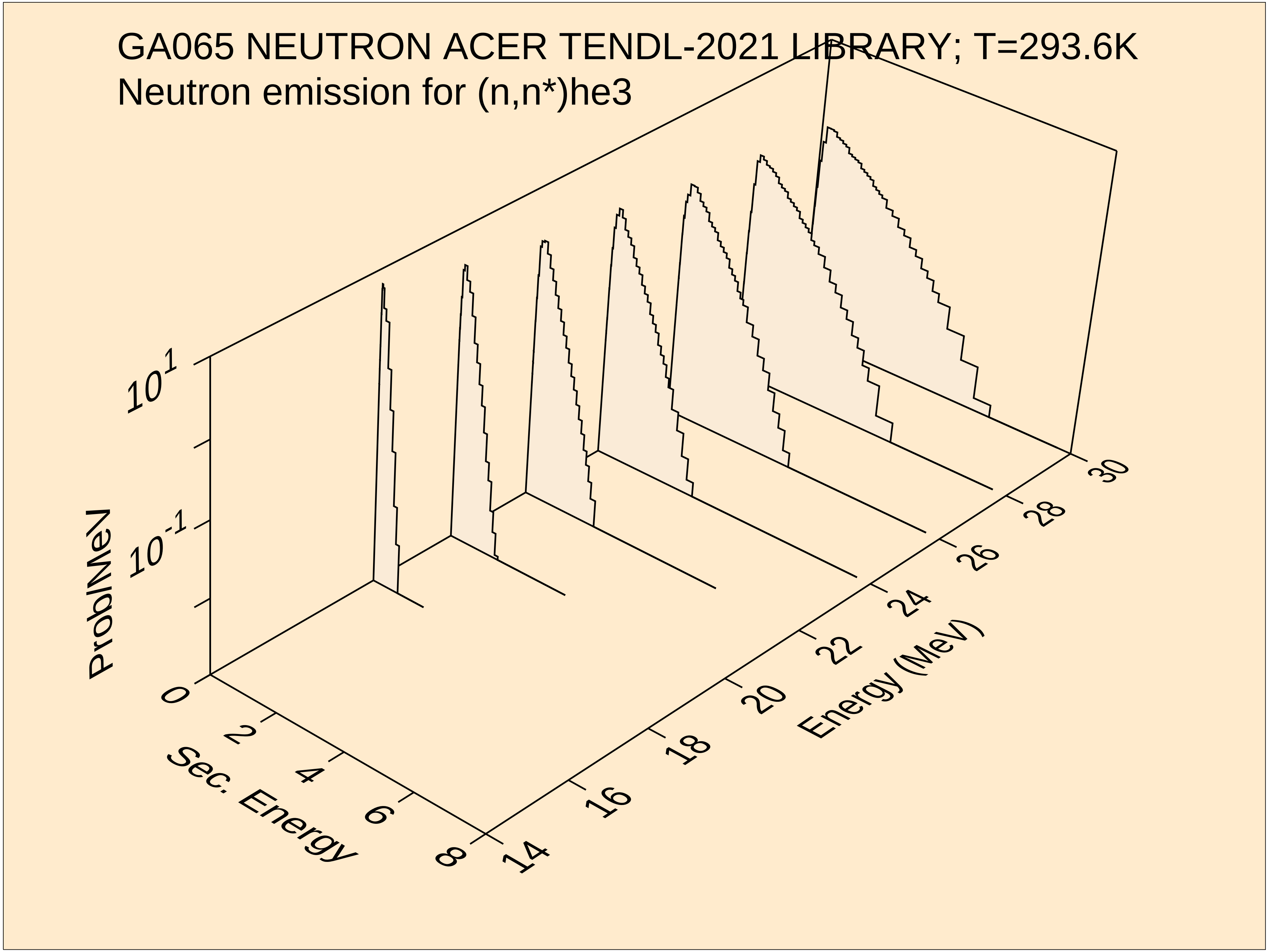
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,n*)p
ProblMeV
10^0
10^{-2}
0
10
20
30
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,n*)2a
Prob/MeV
10^{-1}
10^{-3}
Sec. Energy
0
2
4
6
8
10
Energy (MeV)
5
10
15
20
25
30

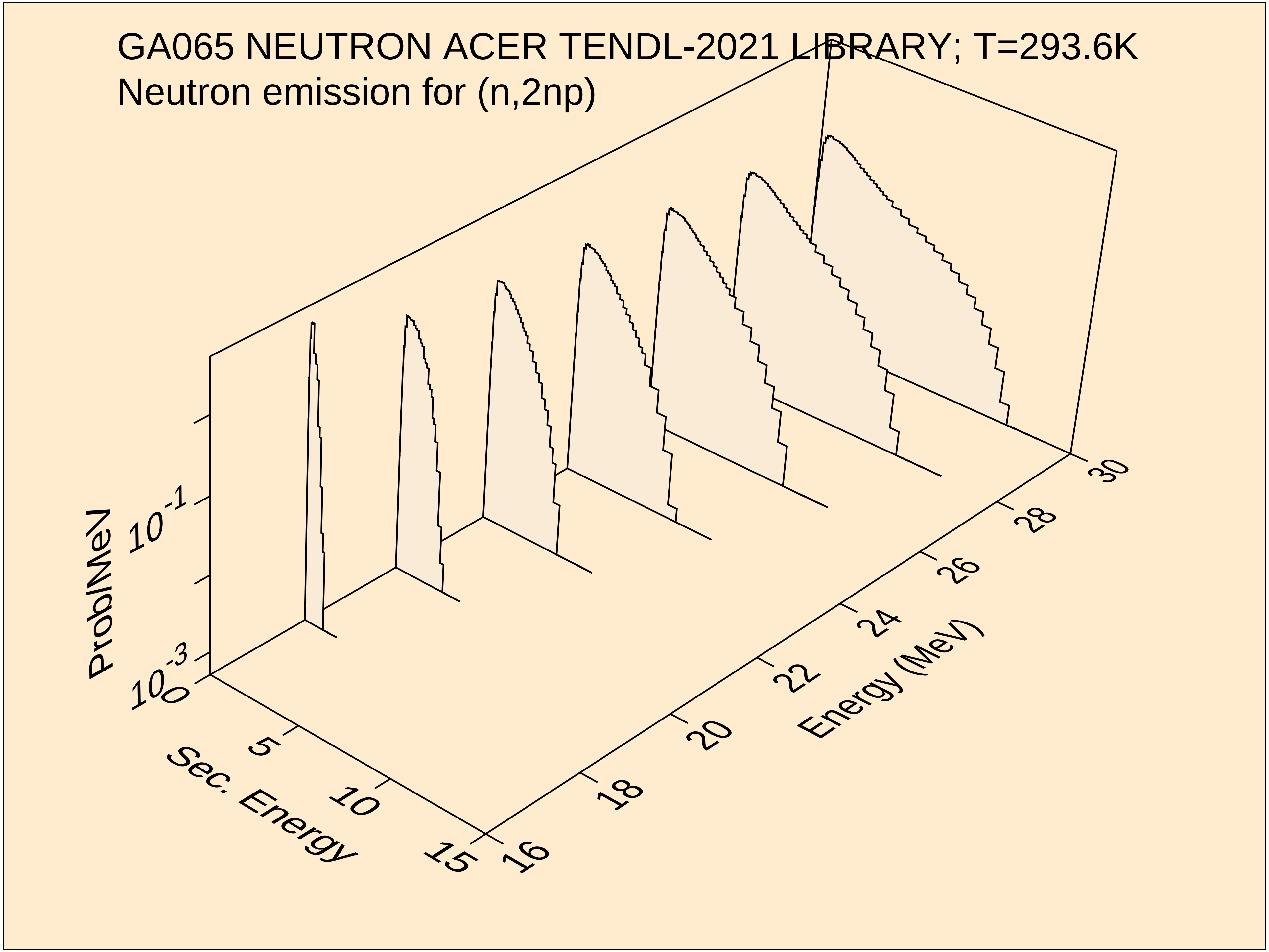

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,n*)d
ProbMeV
10^{1}
10^{-1}
0
5
10
15
Sec. Energy
12
14
16
18
20
22
24
26
28
30
Energy (MeV)

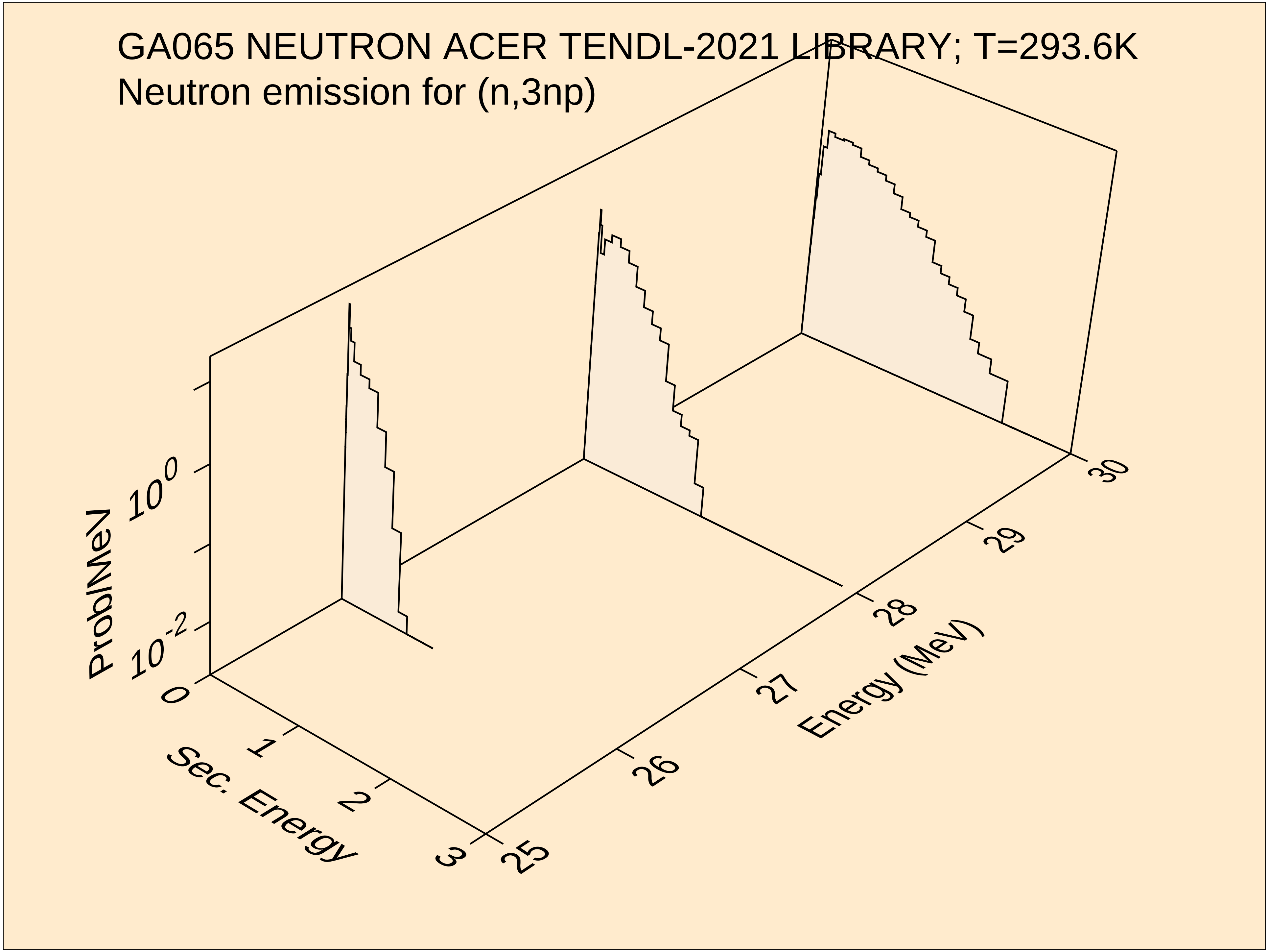


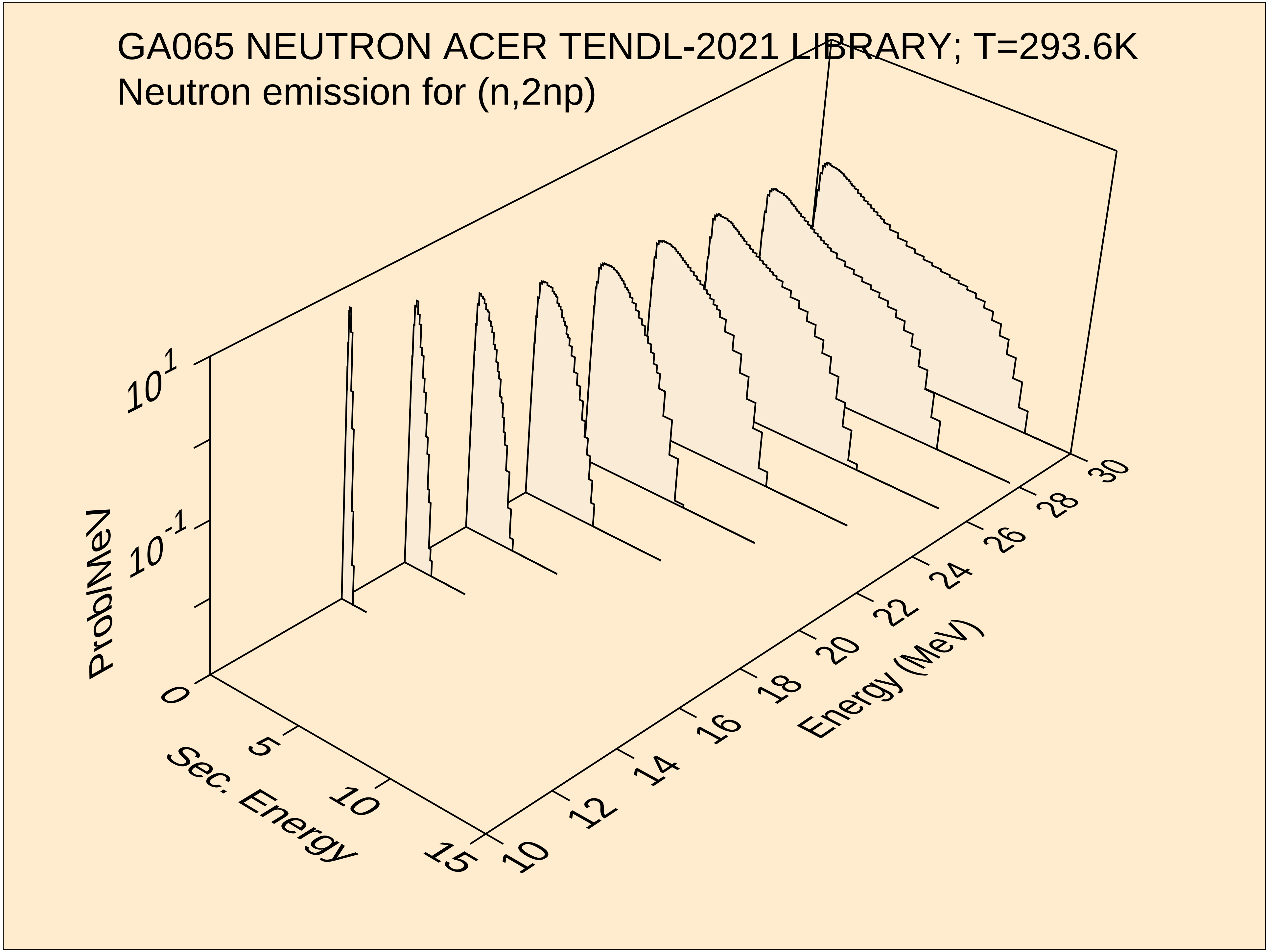
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,n*)t
ProbMeV
10^1
10^-1
0
2
4
6
8
Sec. Energy
16
18
20
22
24
26
28
30
Energy (MeV)

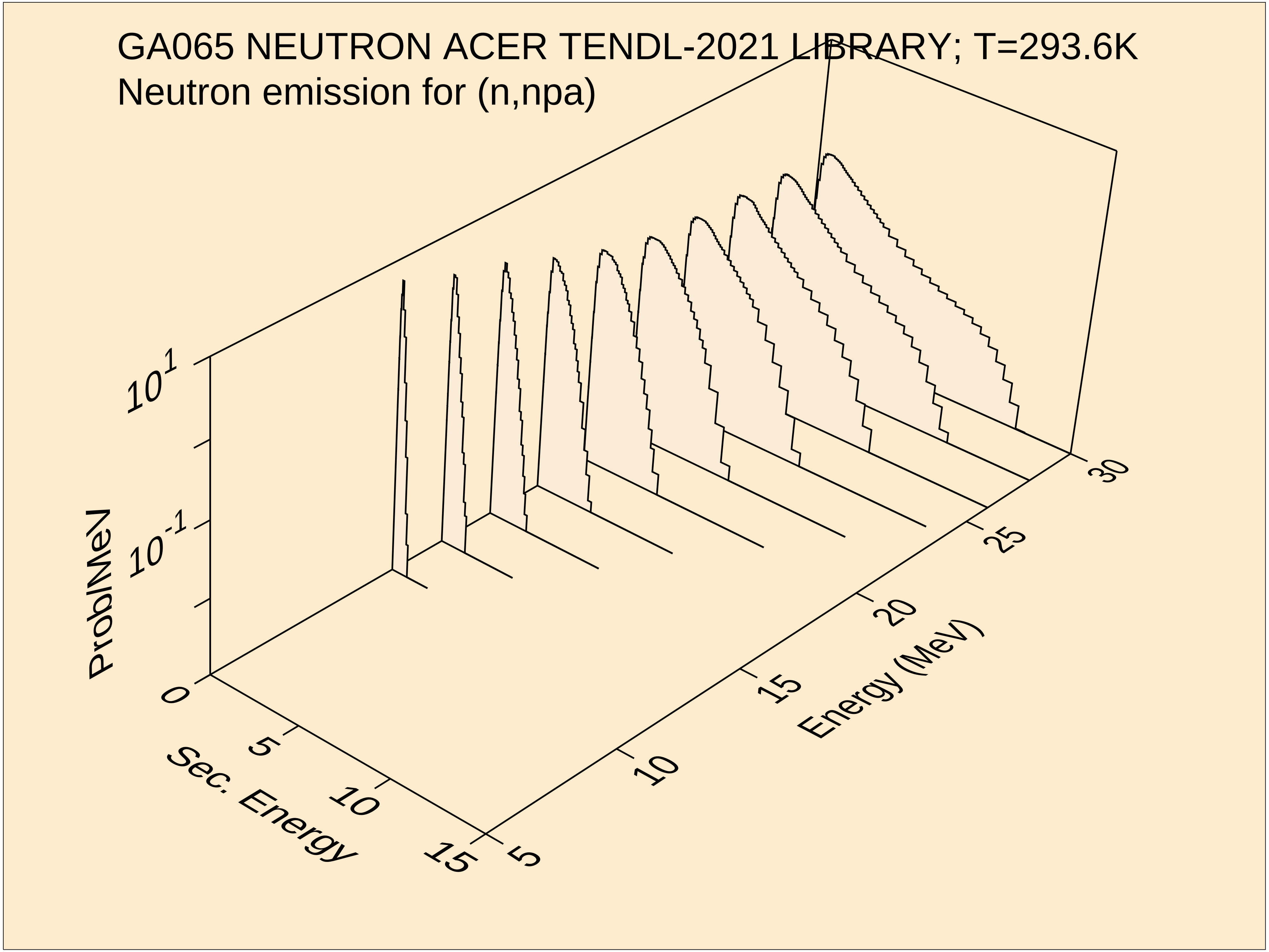


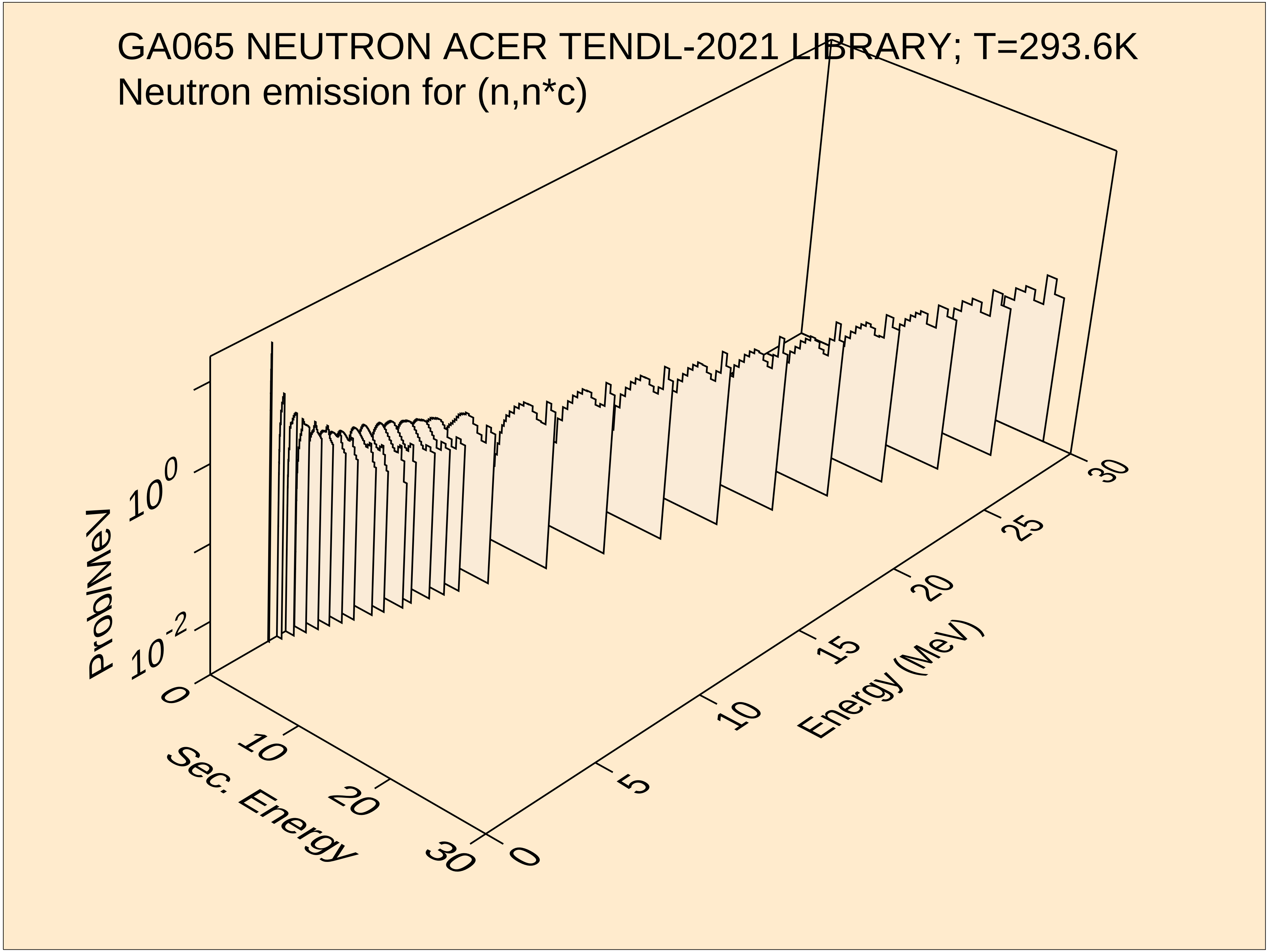
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,n*)he3
ProbMeV
10^1
10^-1
0
2
4
6
8
Sec. Energy
14
16
18
20
22
24
26
28
30
Energy (MeV)

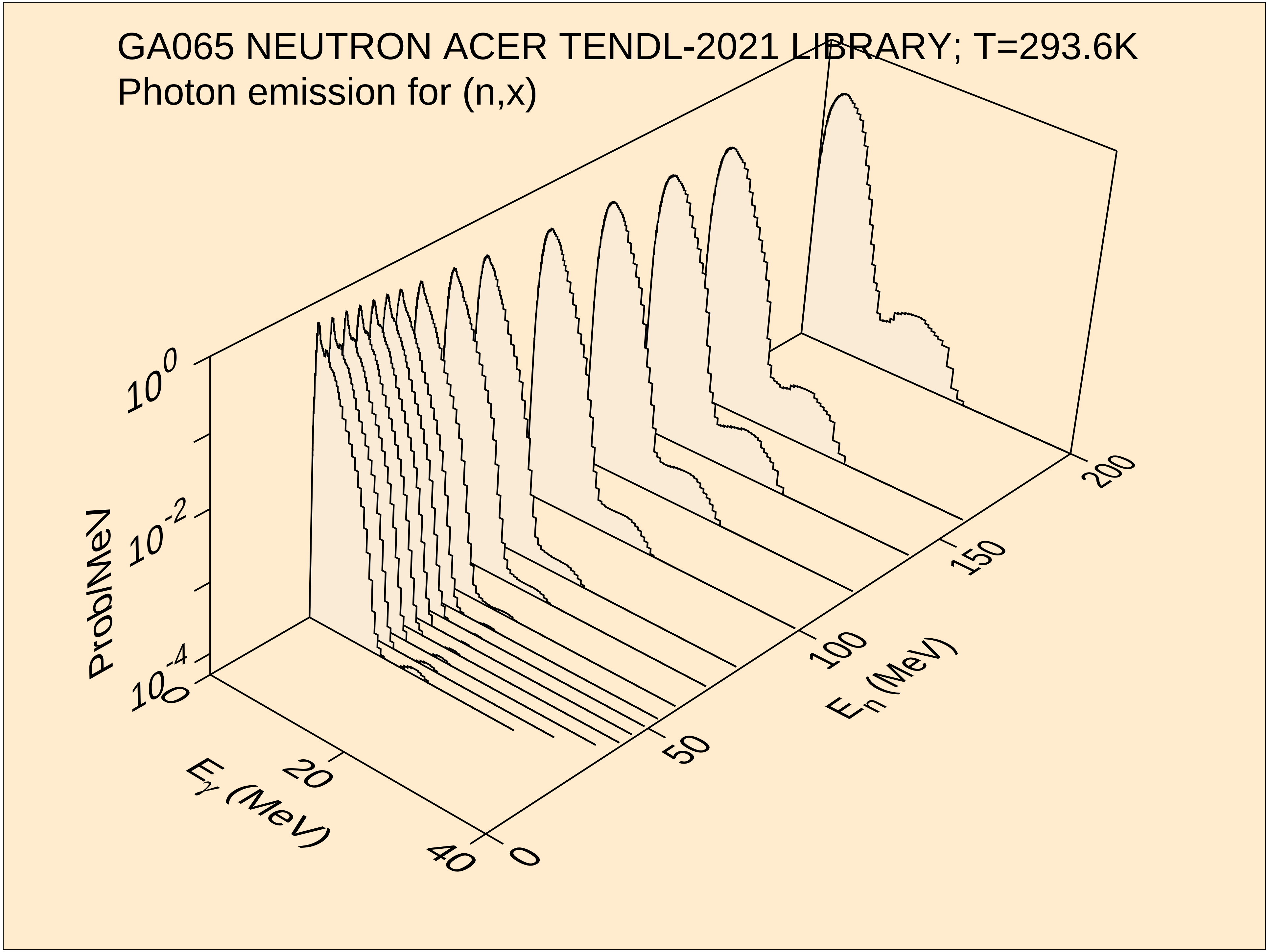

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,2np)
Prob/MeV
10^{-1}
10^{-3}
0
5
10
15
Sec. Energy
16
18
20
22
24
26
28
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,3np)
ProbMeV
10^{0}
10^{-2}
0
1
2
3
Sec. Energy
25
26
27
28
29
30
Energy (MeV)

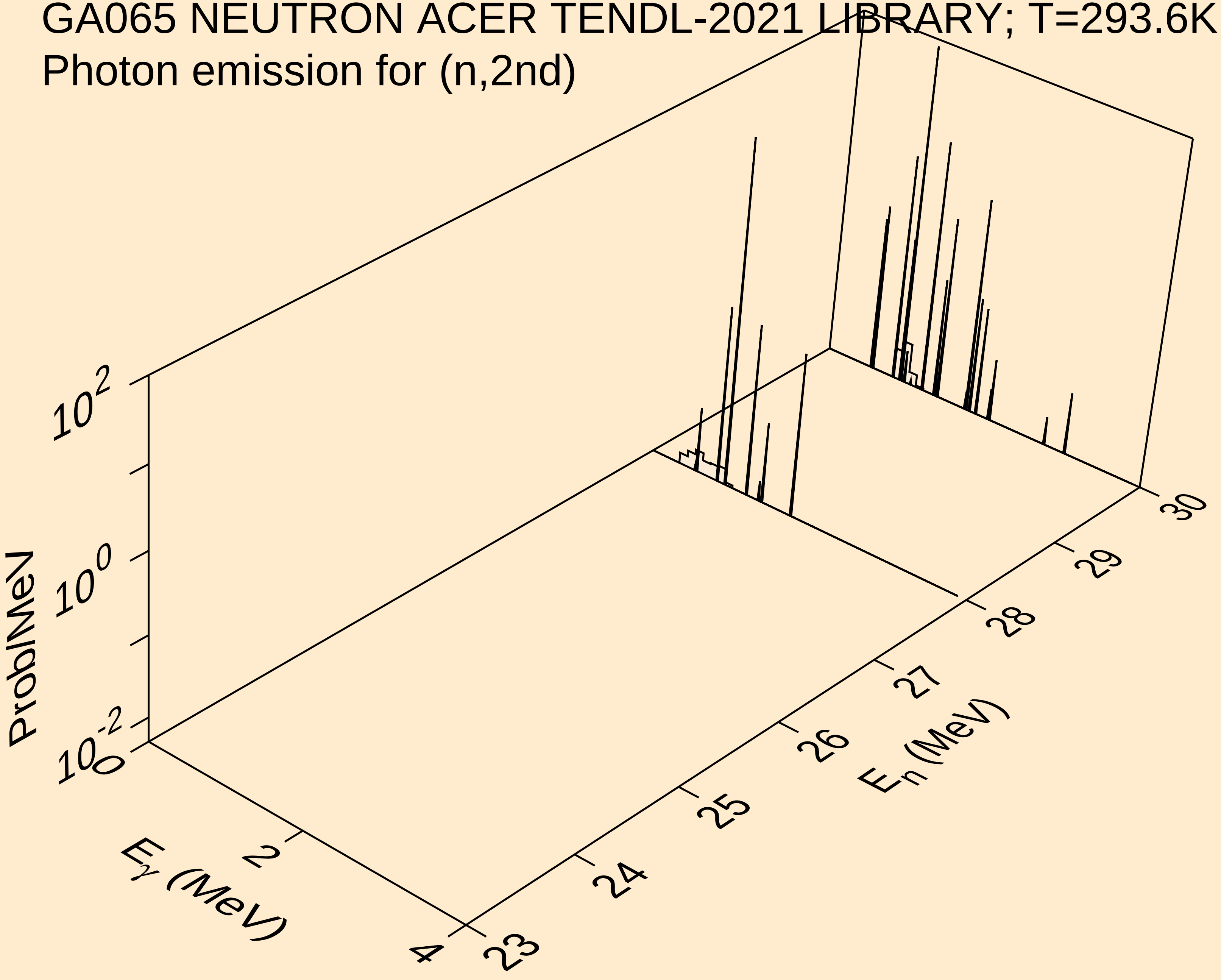

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,2np)
Prob/MeV
10^{1}
10^{-1}
0
5
10
15
Sec. Energy
10
12
14
16
18
20
22
24
26
28
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,npa)
ProbMeV
10^{1}
10^{-1}
0
5
10
15
Sec. Energy
Energy (MeV)
5
10
15
20
25
30

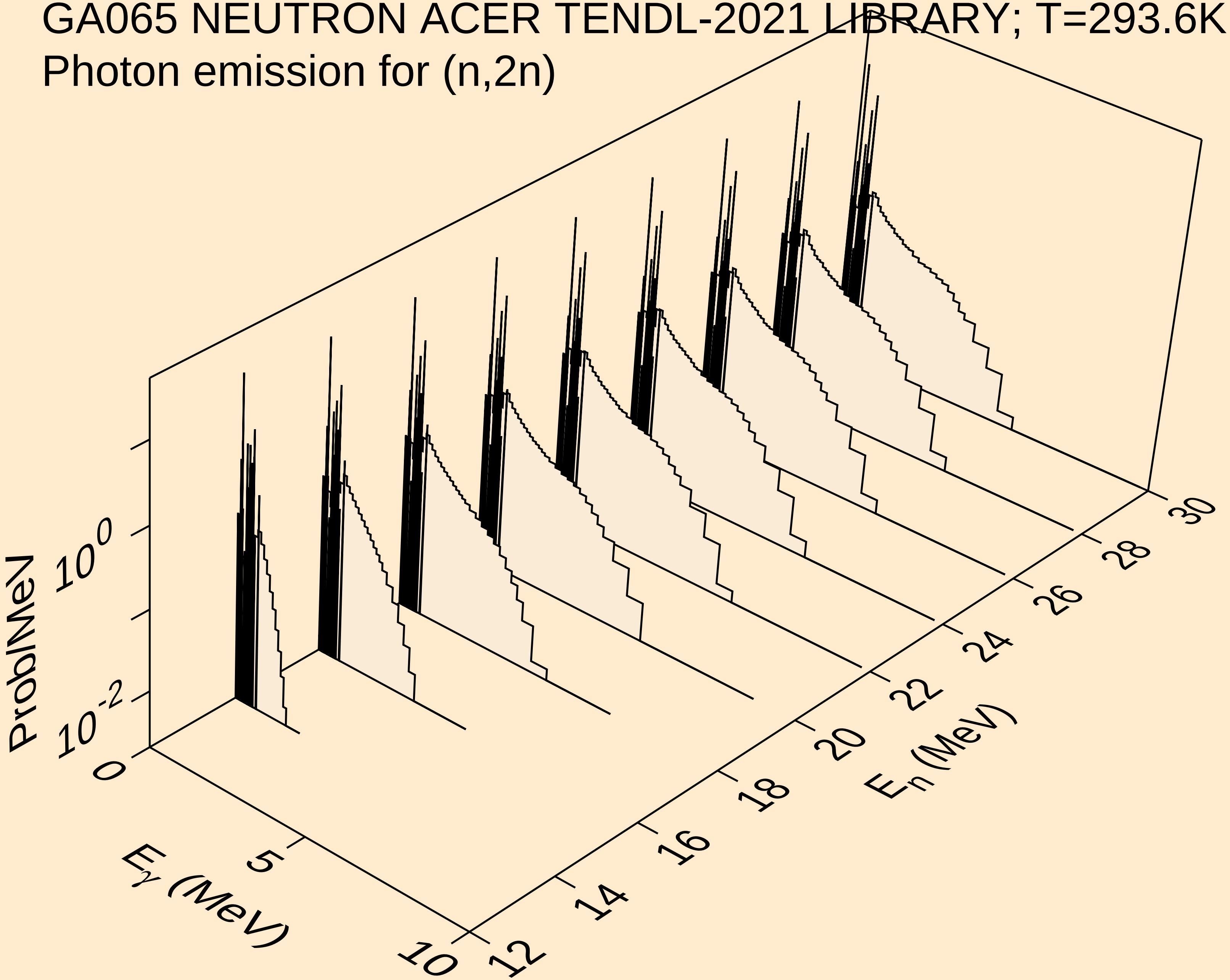

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Neutron emission for (n,n*c)
ProblMeV
10^{0}
10^{-2}
0
10
20
30
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)

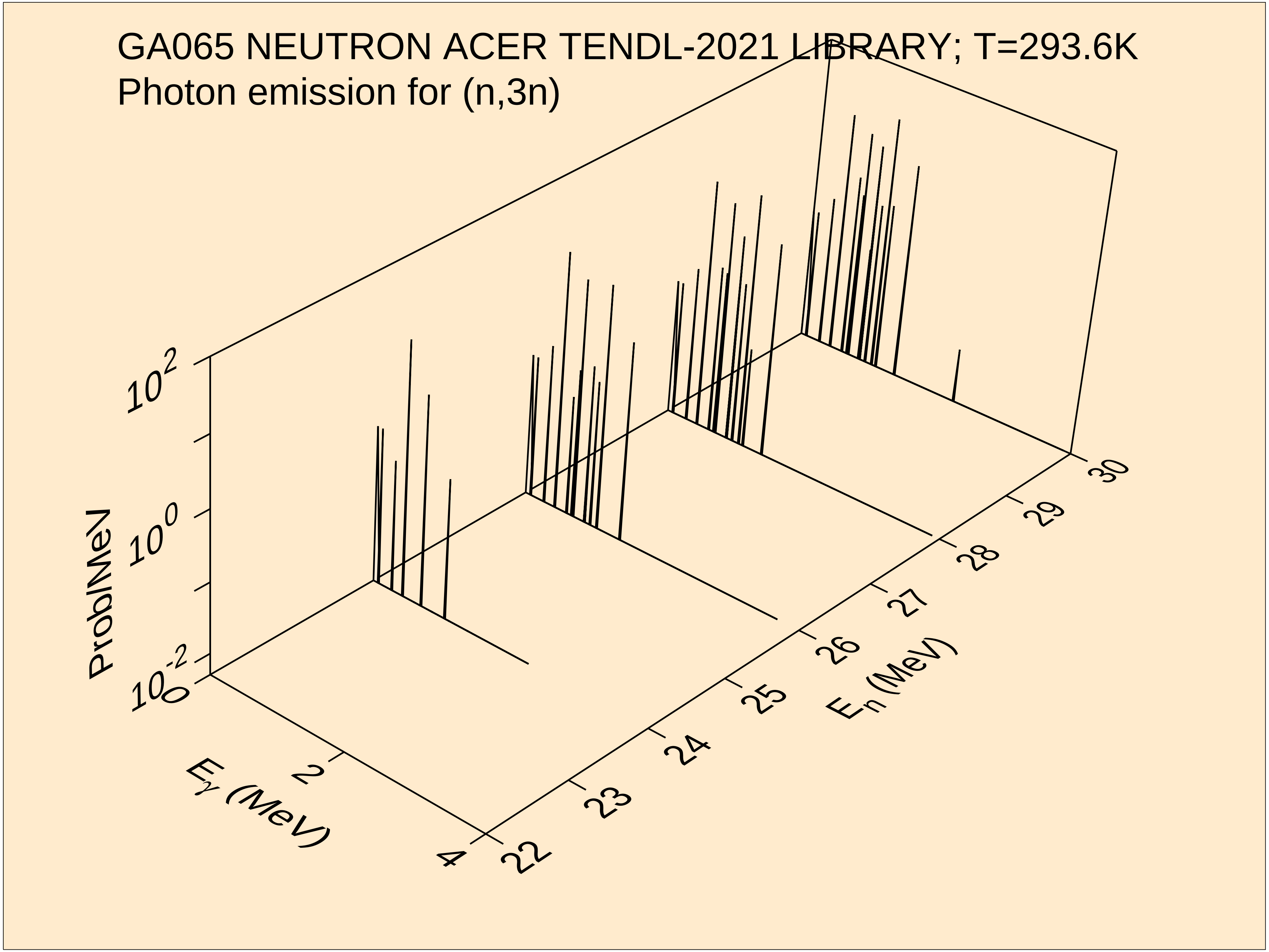

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,x)
ProbMeV
10^{0}
10^{-2}
10^{-4}
0
20
40
E_{γ} (MeV)
0
50
100
150
200
E_{n} (MeV)

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,2nd)

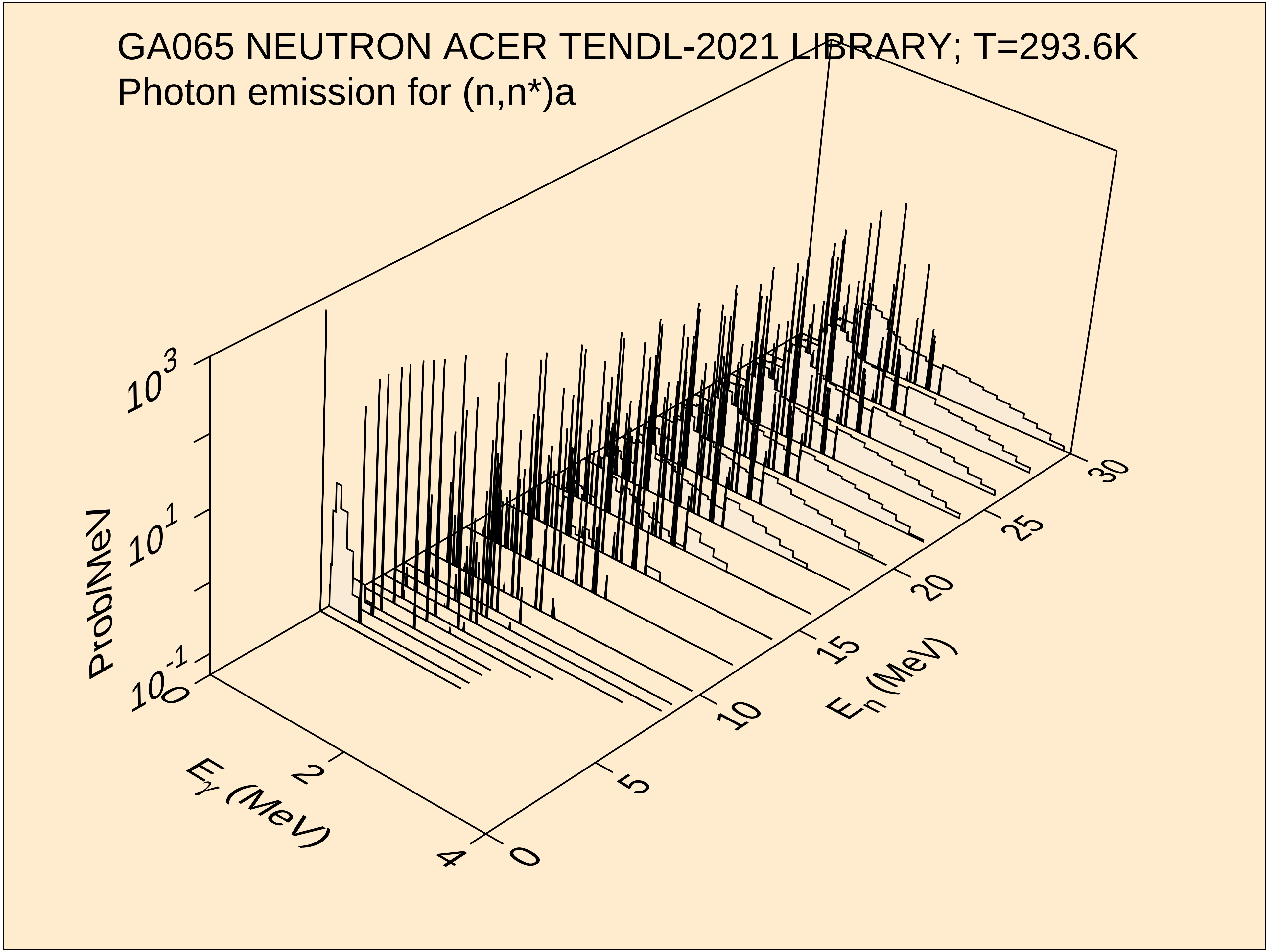


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,2n)

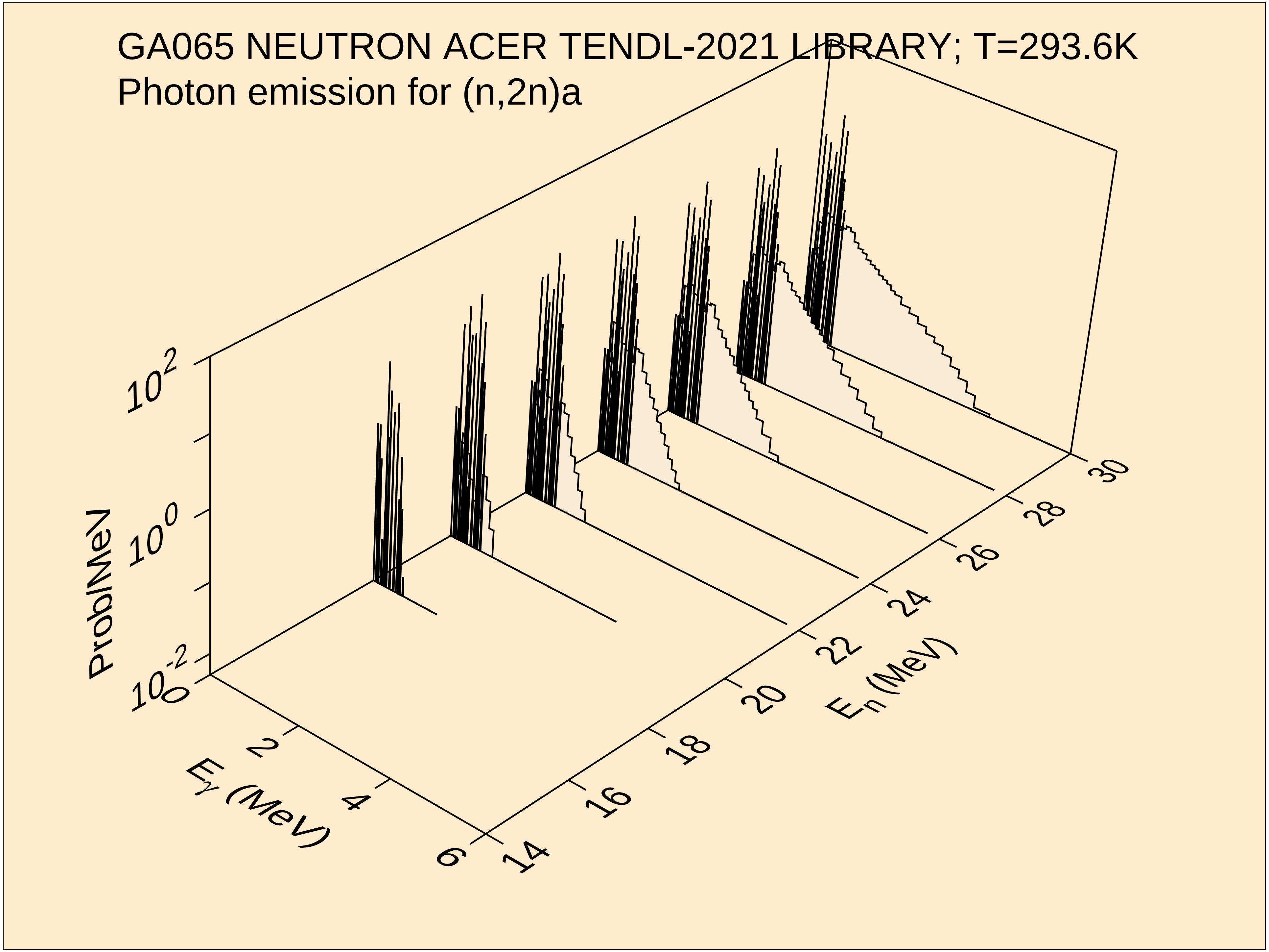




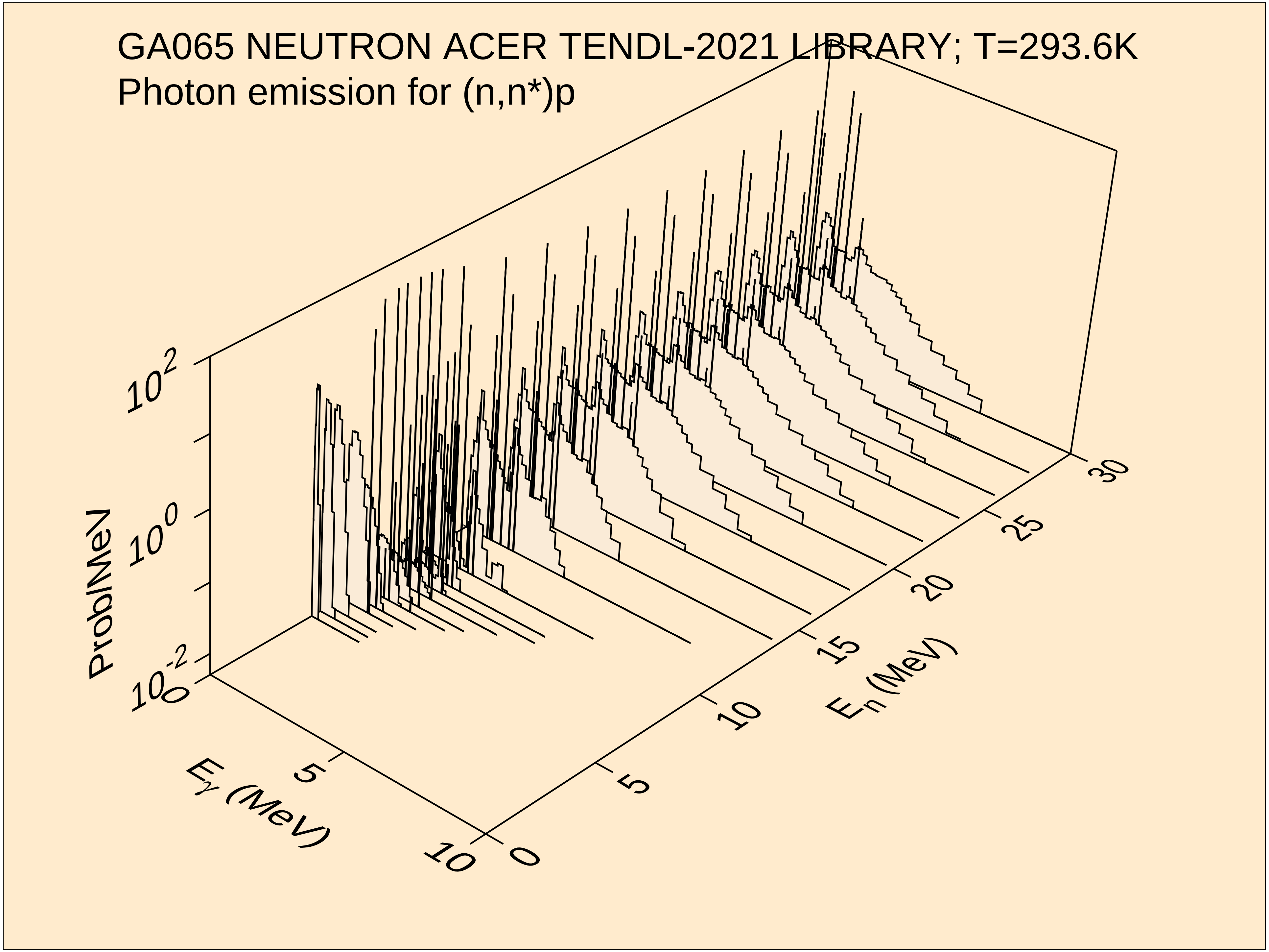
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,3n)
Prob/MeV
10^{2}
10^{0}
10^{-2}
0
2
4
E_{γ} (MeV)
22
23
24
25
26
27
28
29
30
E_n (MeV)

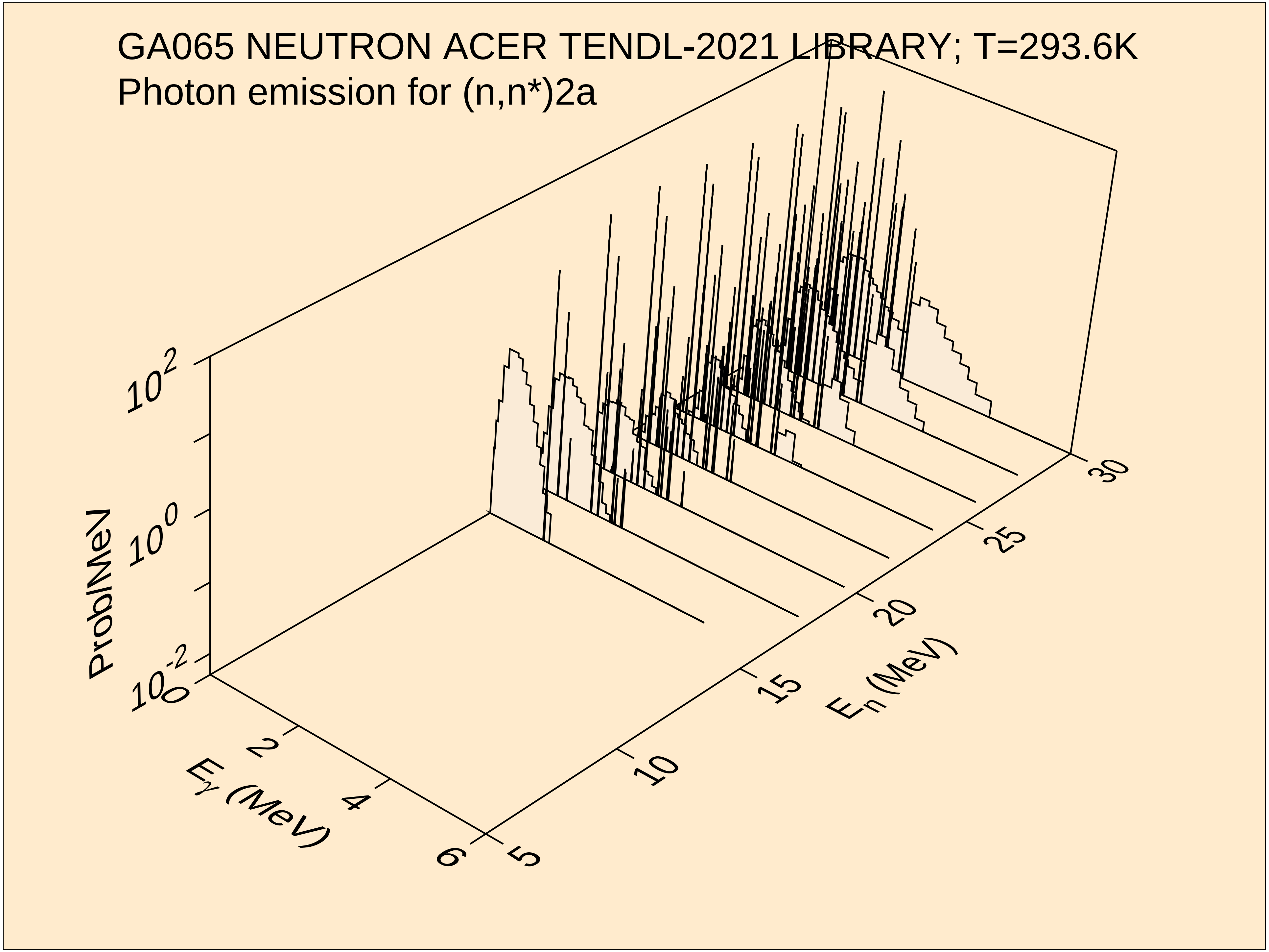


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,n*)a
Prob/MeV
10^{3}
10^{1}
10^{-1}
0
2
4
E_γ (MeV)
0
5
10
15
20
25
30
E_n (MeV)

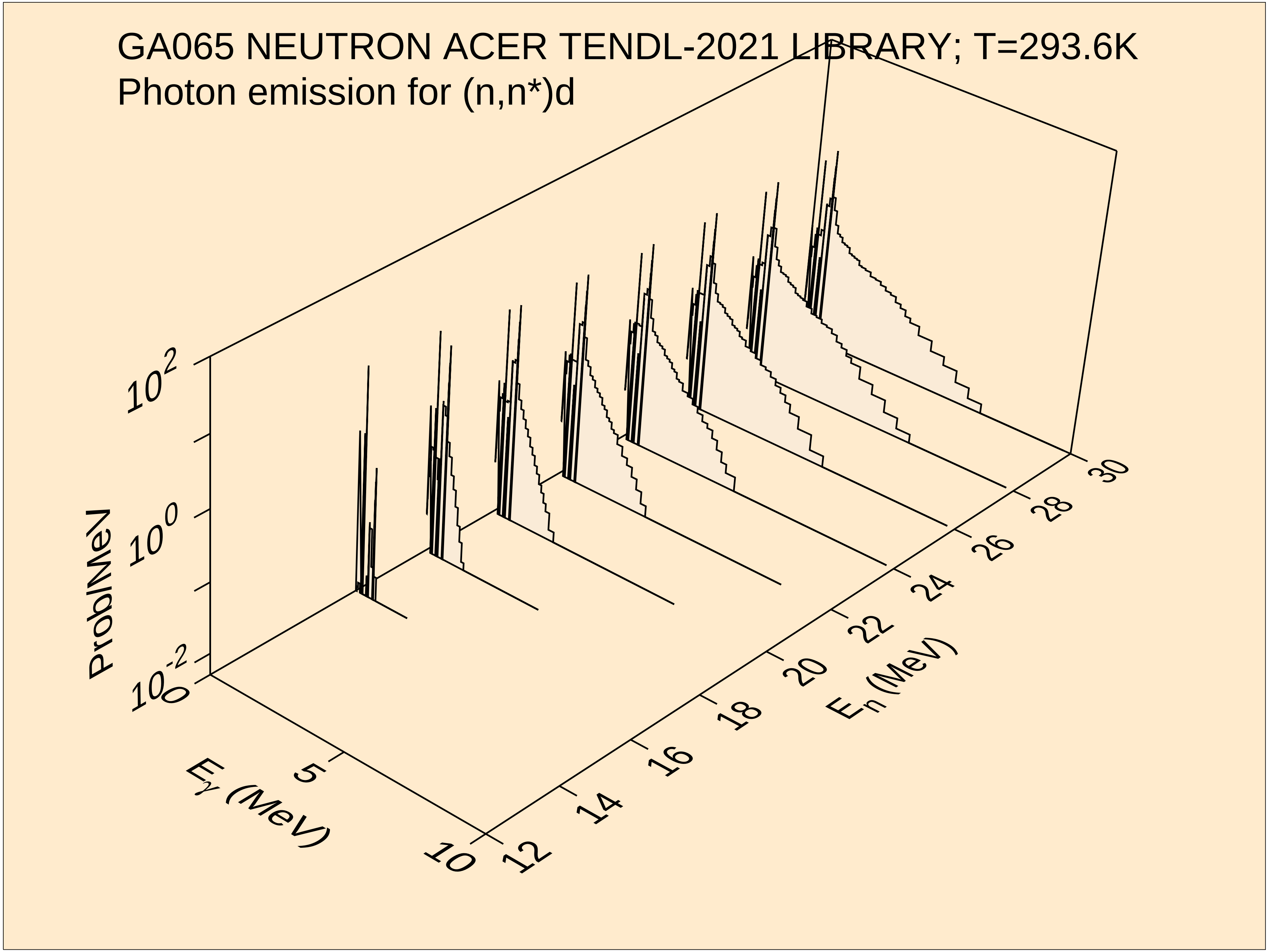


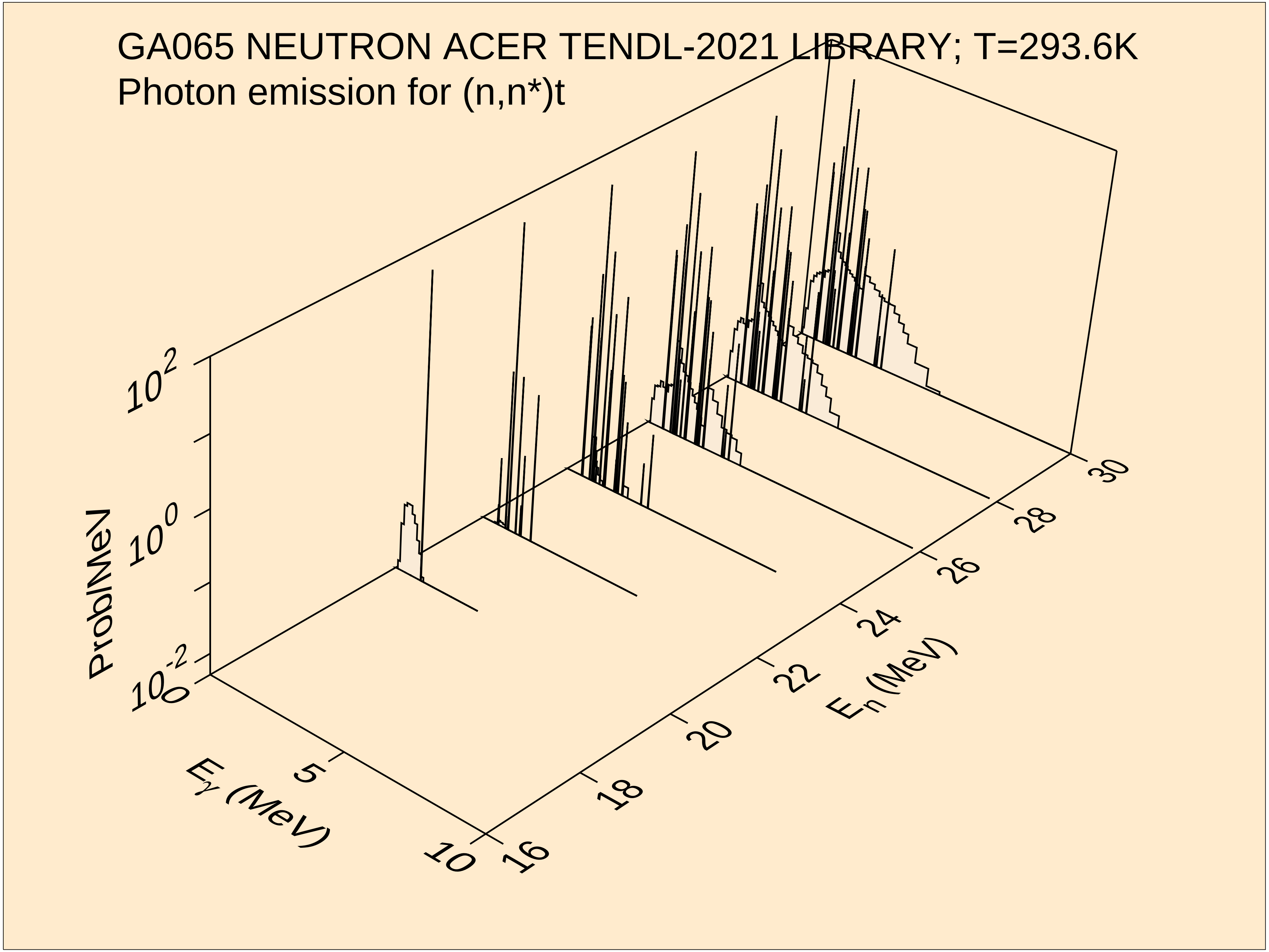
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,2n)a
Prob/MeV
10^{2}
10^{0}
10^{-2}
E_γ (MeV)
0
2
4
6
E_n (MeV)
14
16
18
20
22
24
26
28
30

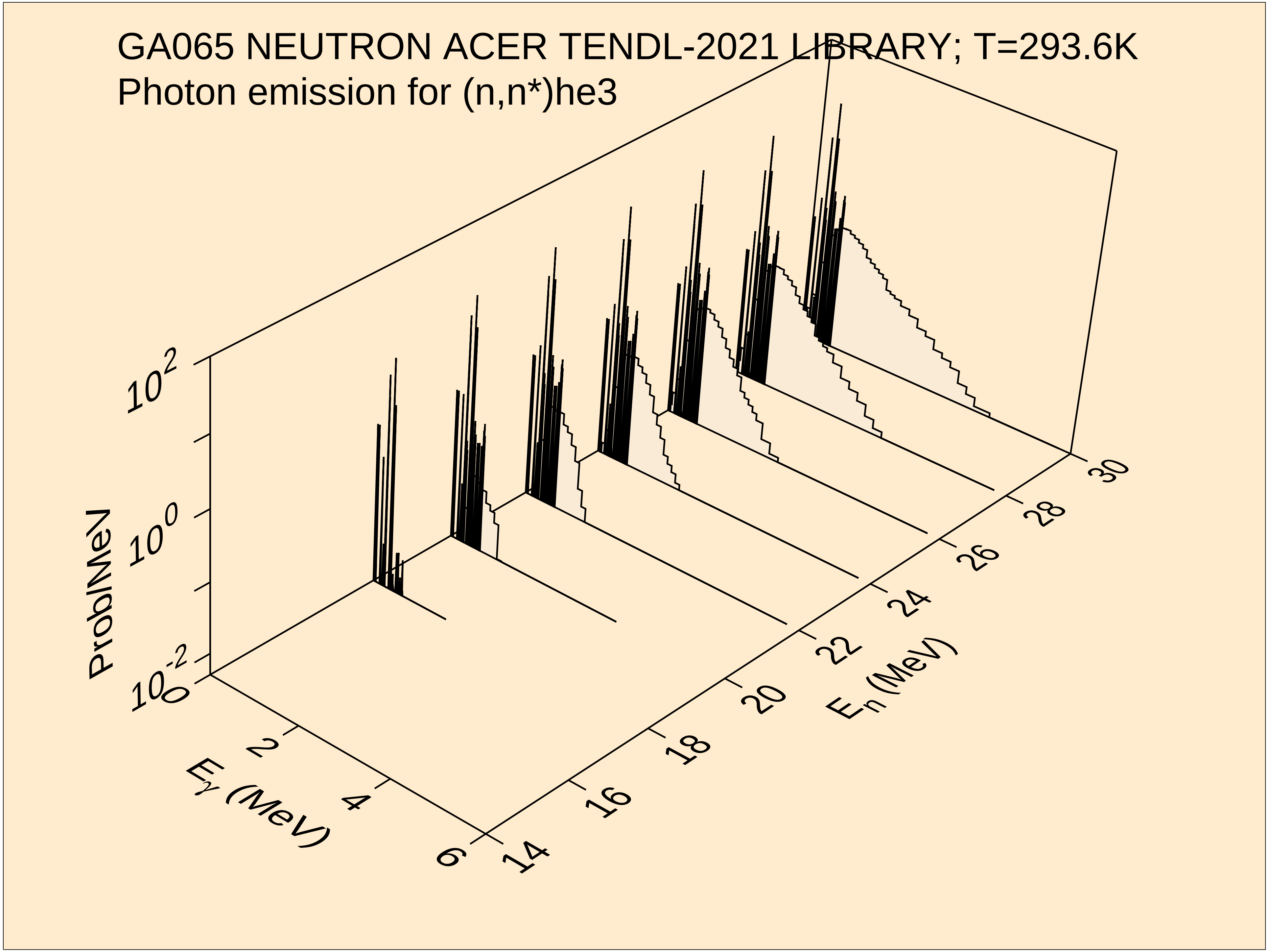

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,n*)p
ProbMeV
10^2
10^0
10^-2
0
5
10
Eγ (MeV)
0
5
10
15
20
25
30
En (MeV)



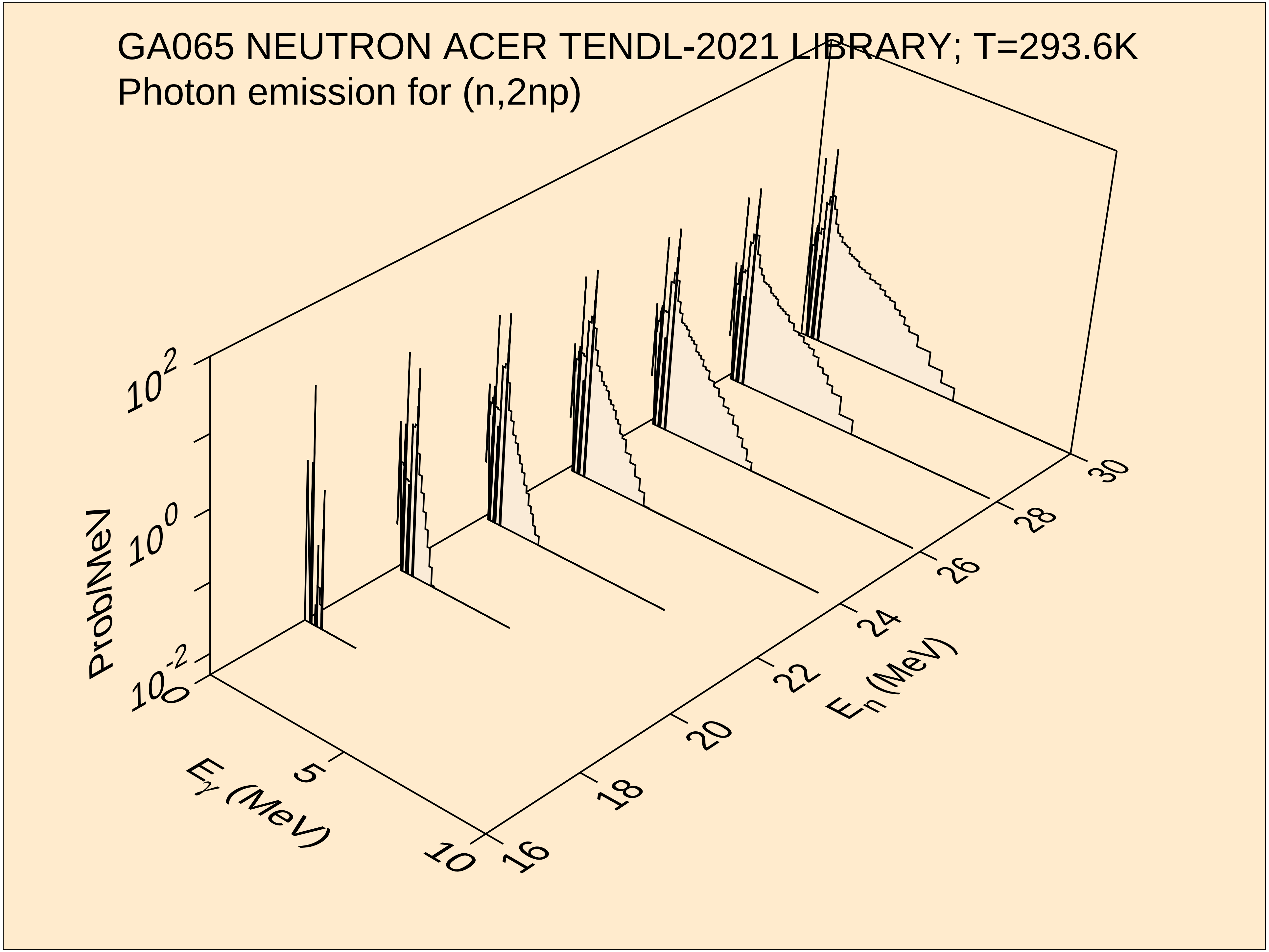
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,n*)2a
Probl/MeV
10^{2}
10^{0}
10^{-2}
0
2
4
6
E_γ (MeV)
5
10
15
20
25
30
E_n (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,n*)d
ProbMeV
10^{2}
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
12
14
16
18
20
22
24
26
28
30
E_n (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,n*)t
ProbMeV
10^{2}
10^{0}
10^{-2}
0
5
10
E_{γ} (MeV)
16
18
20
22
24
26
28
30
E_n (MeV)

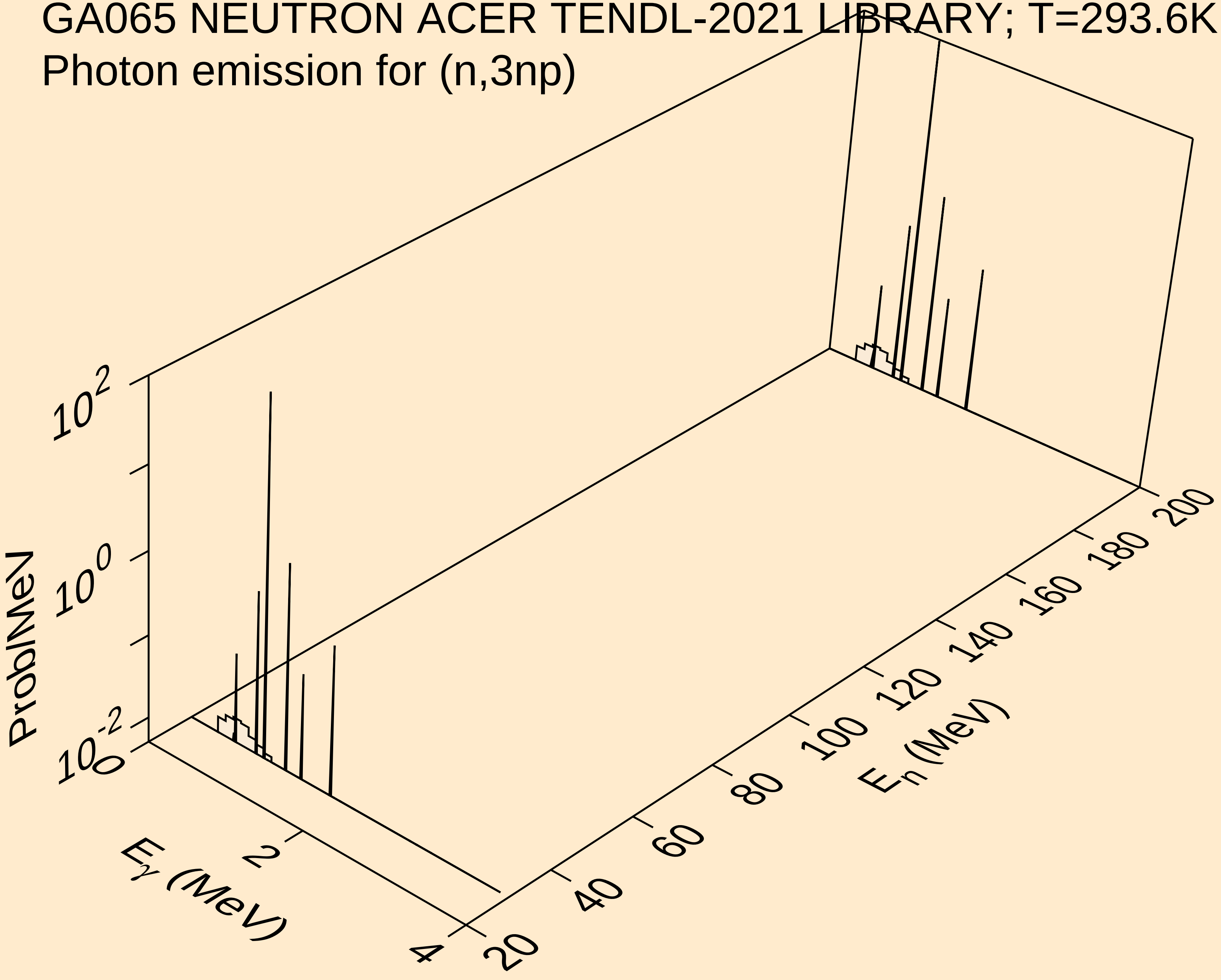


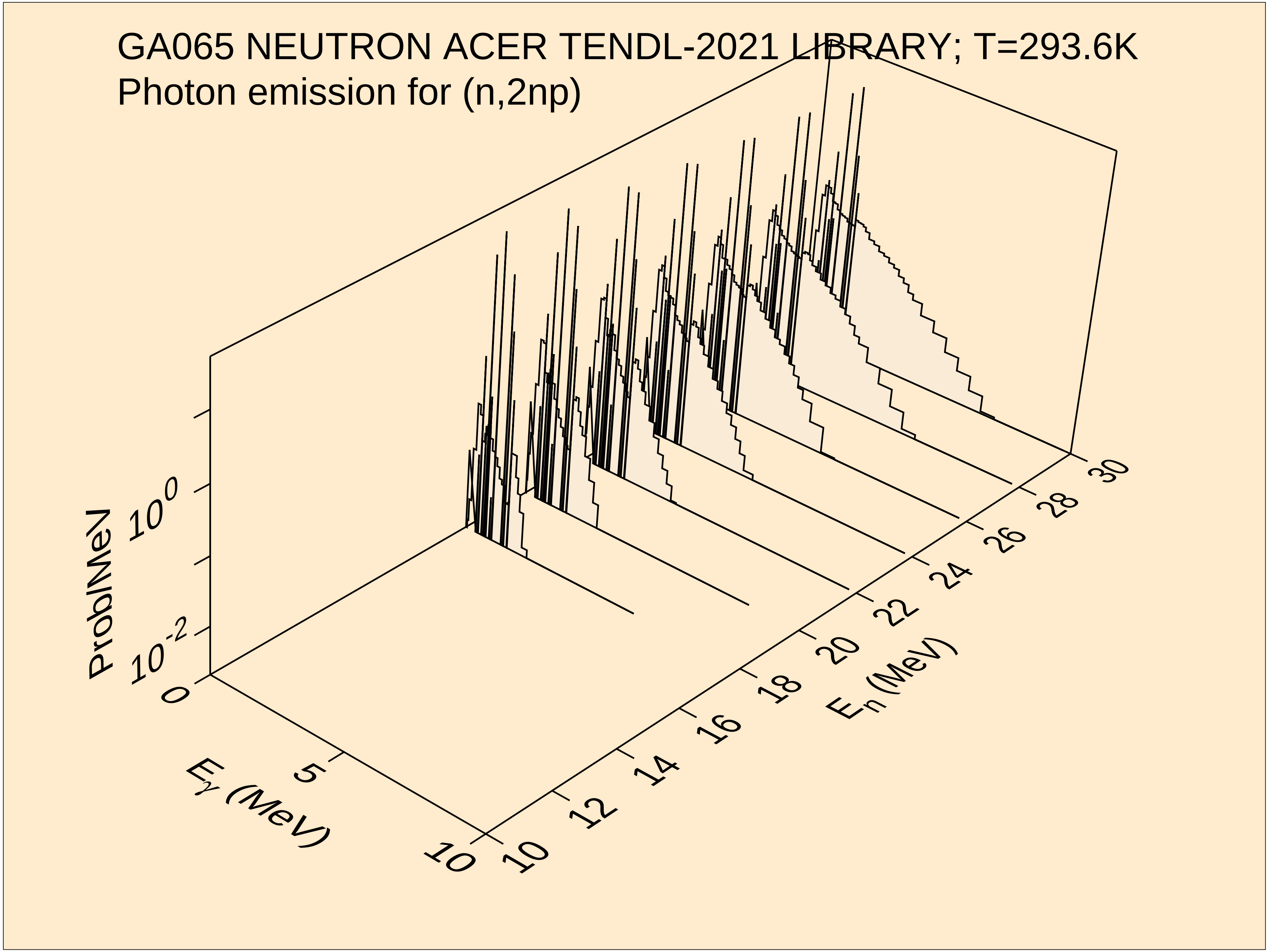
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,n*)he3
ProbMeV
10^{2}
10^{0}
10^{-2}
E_{γ} (MeV)
0
2
4
6
E_{n} (MeV)
14
16
18
20
22
24
26
28
30



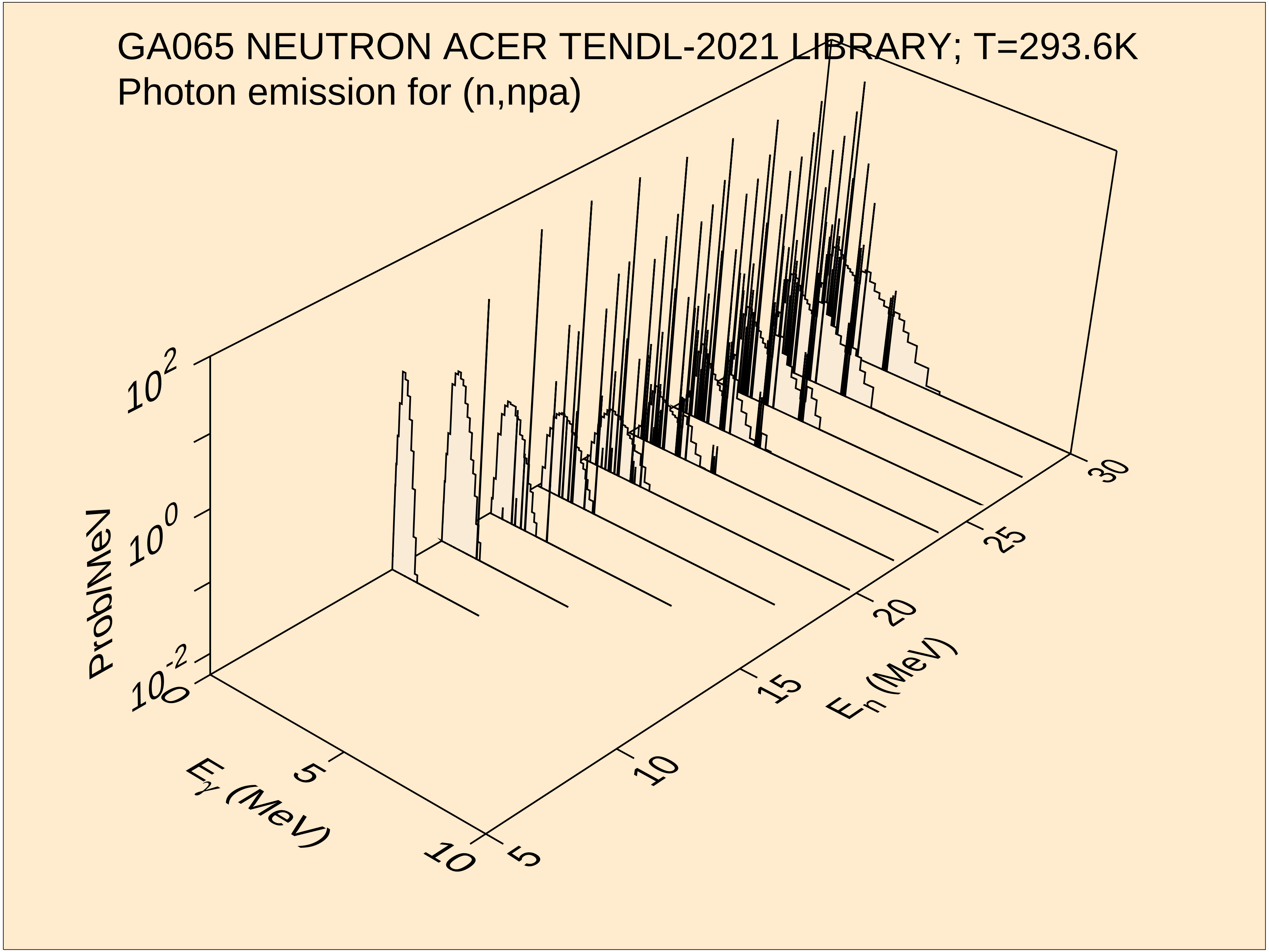
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,2np)
ProbMeV
10^{2}
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
16
18
20
22
24
26
28
30
E_n (MeV)

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,3np)

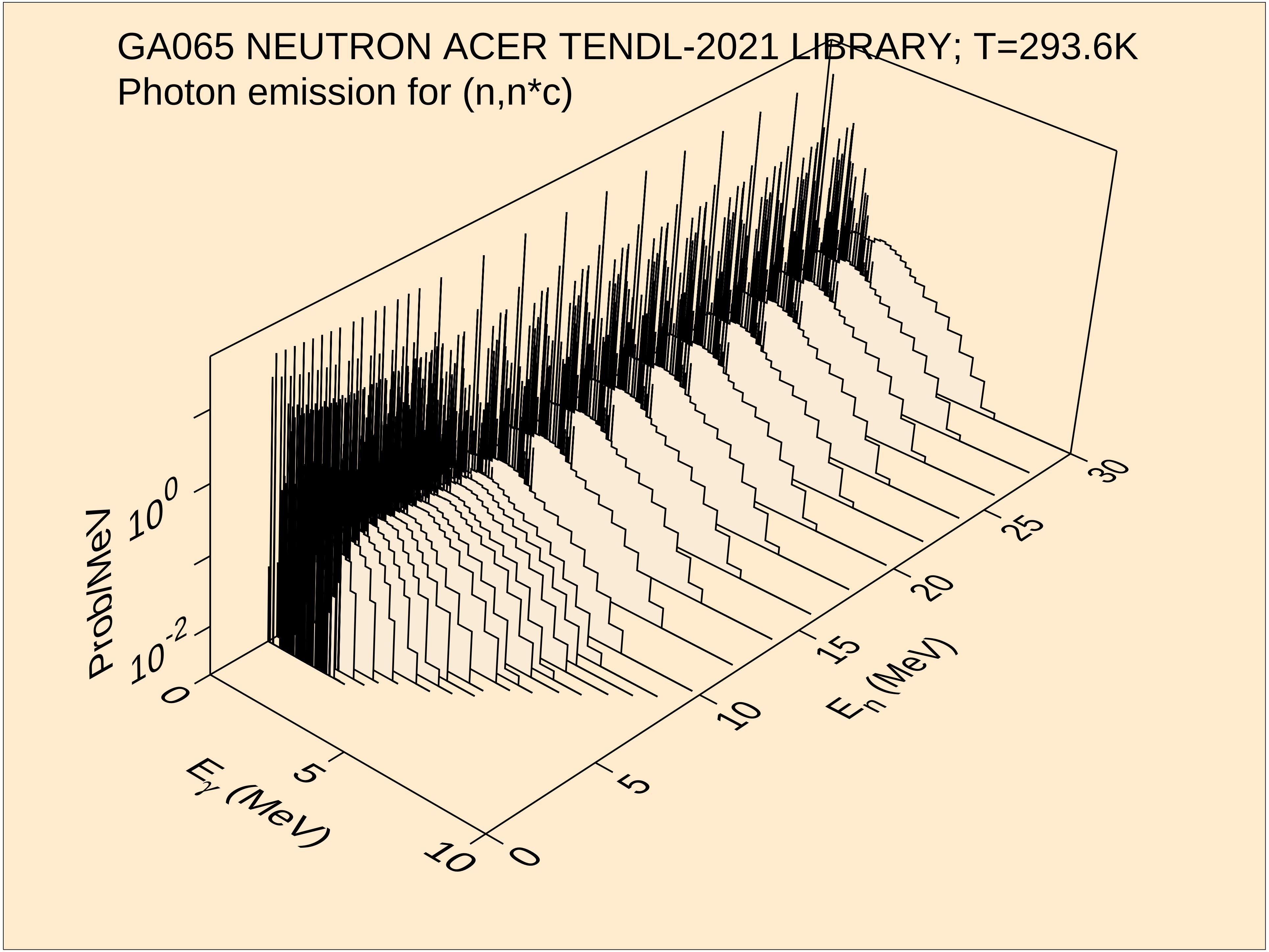


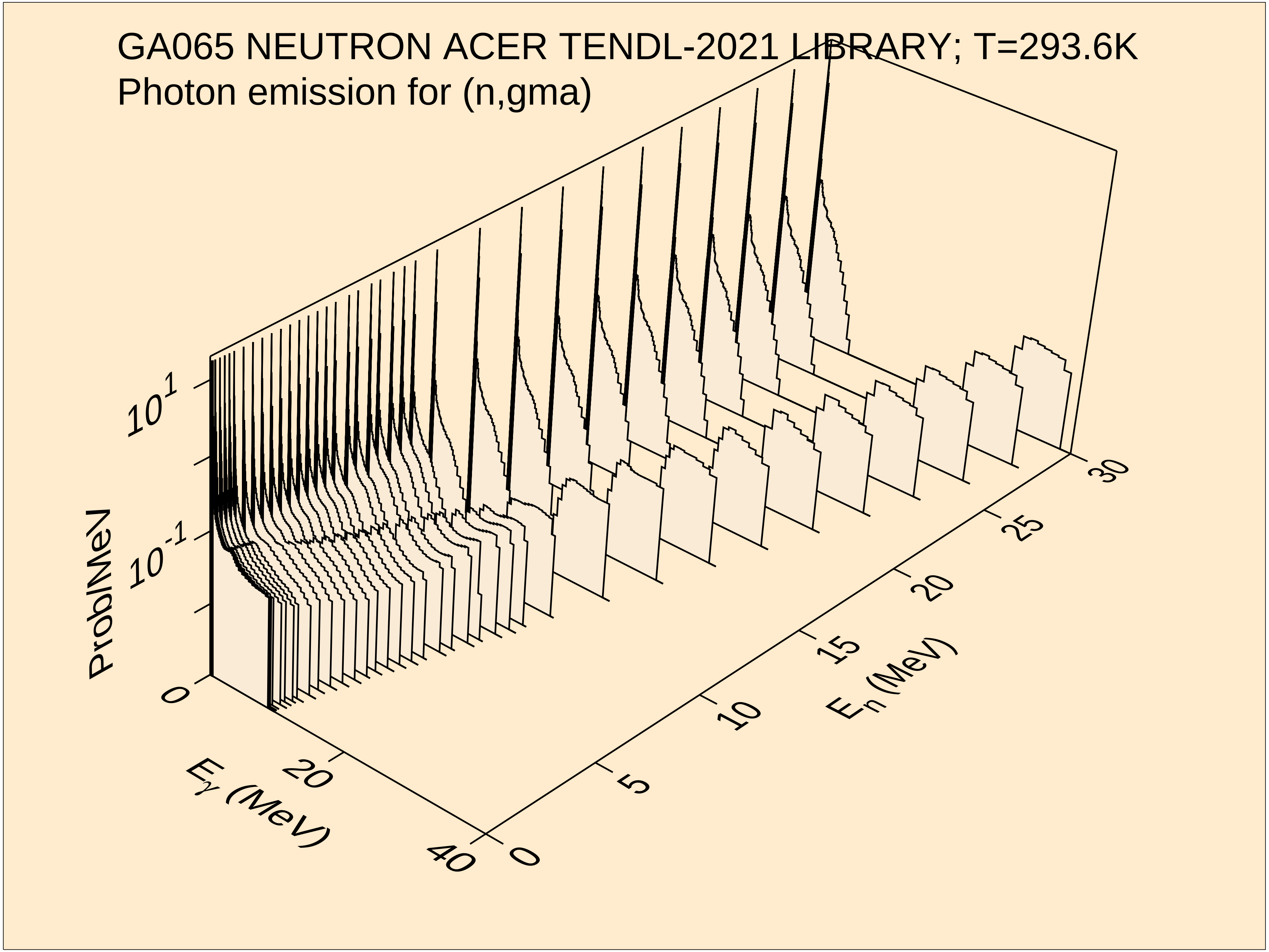


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,2np)
ProbMeV
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
10
12
14
16
18
20
22
24
26
28
30
E_n (MeV)

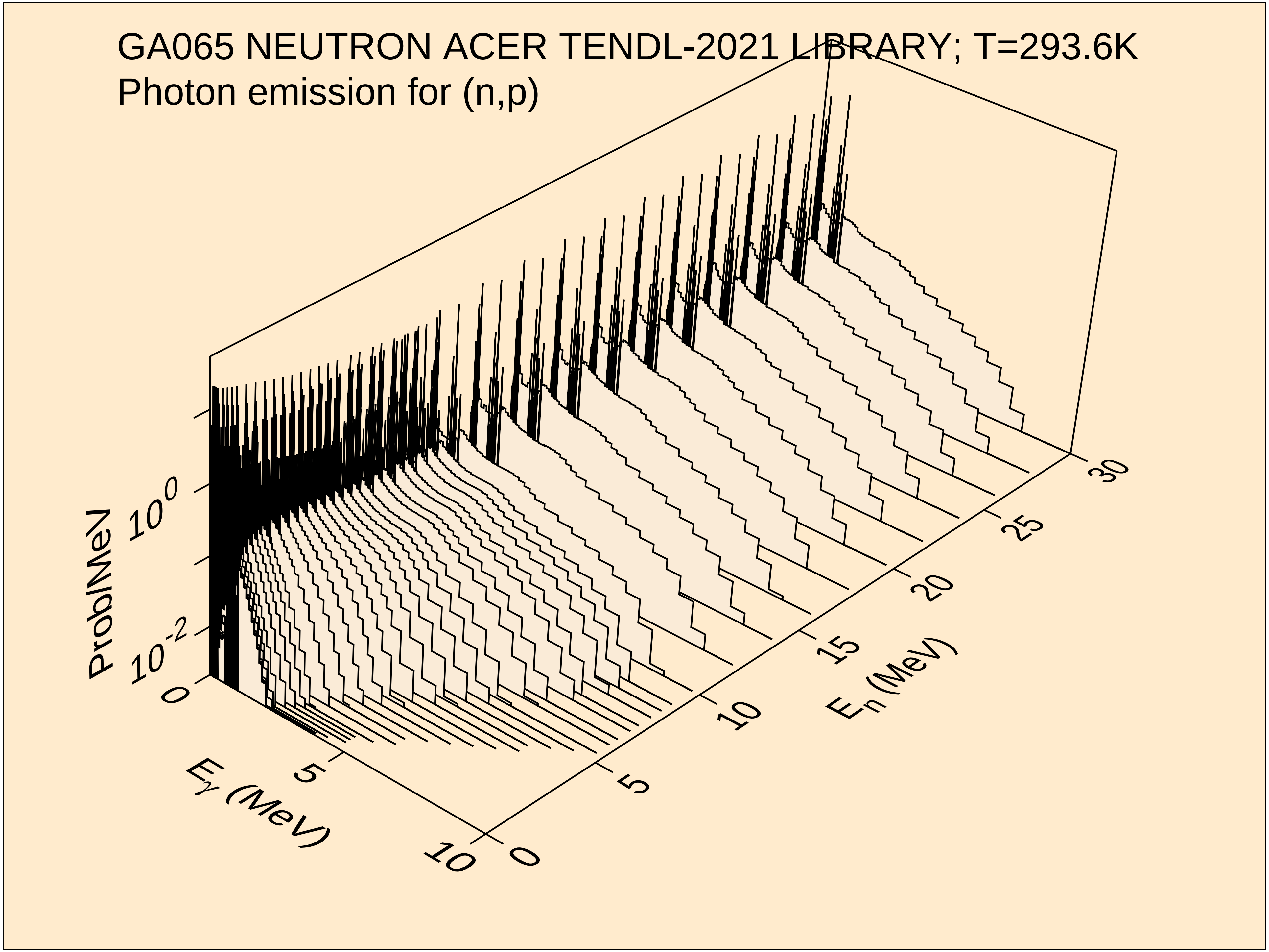


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,npa)
ProbMeV
10^{2}
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
5
10
15
20
25
30
E_n (MeV)

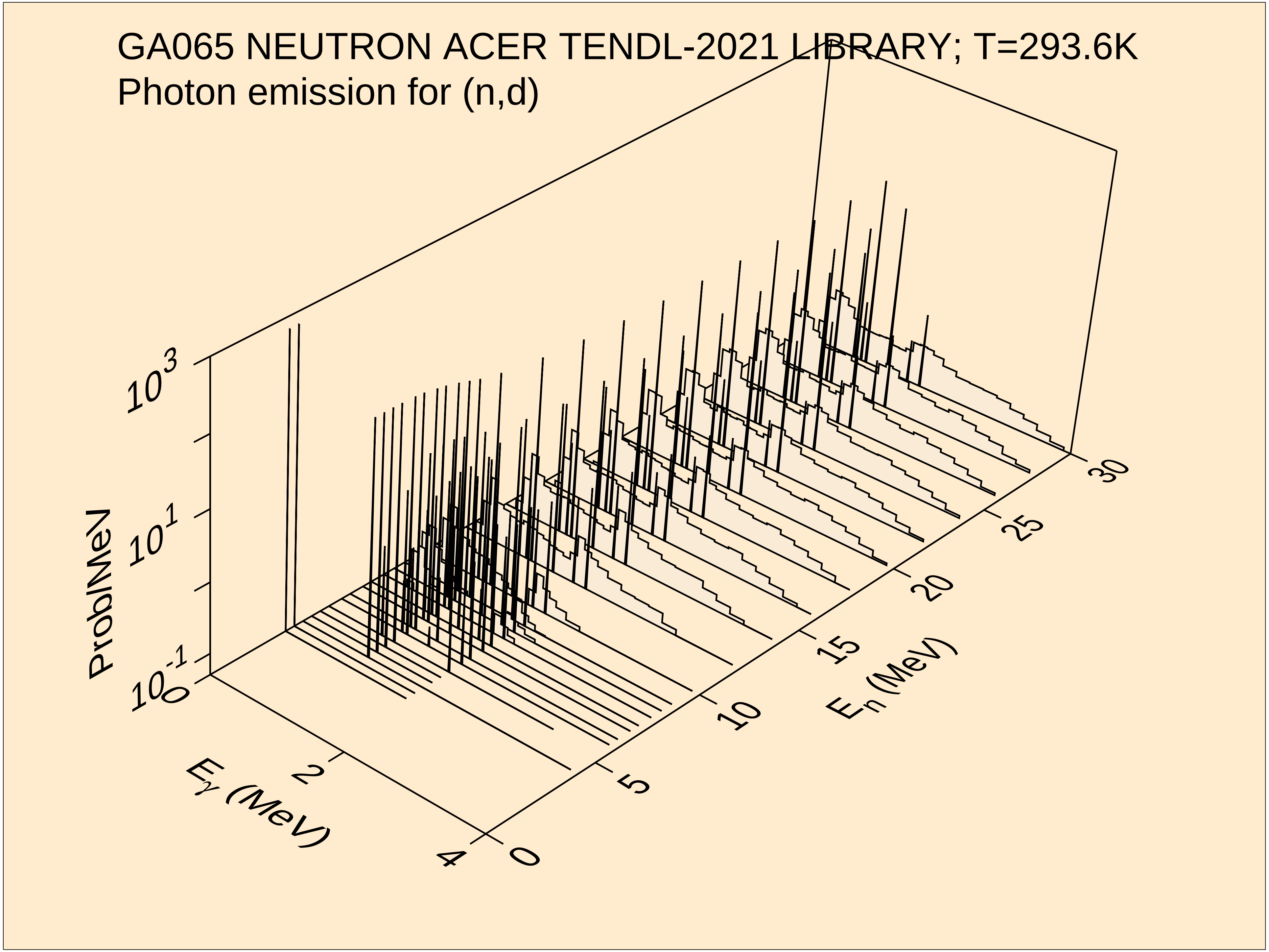

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,n*c)
ProbMeV
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
0
5
10
15
20
25
30
E_n (MeV)



GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,gma)
ProbMeV
10^{1}
10^{-1}
0
20
40
E_{γ} (MeV)
0
5
10
15
20
25
30
E_n (MeV)

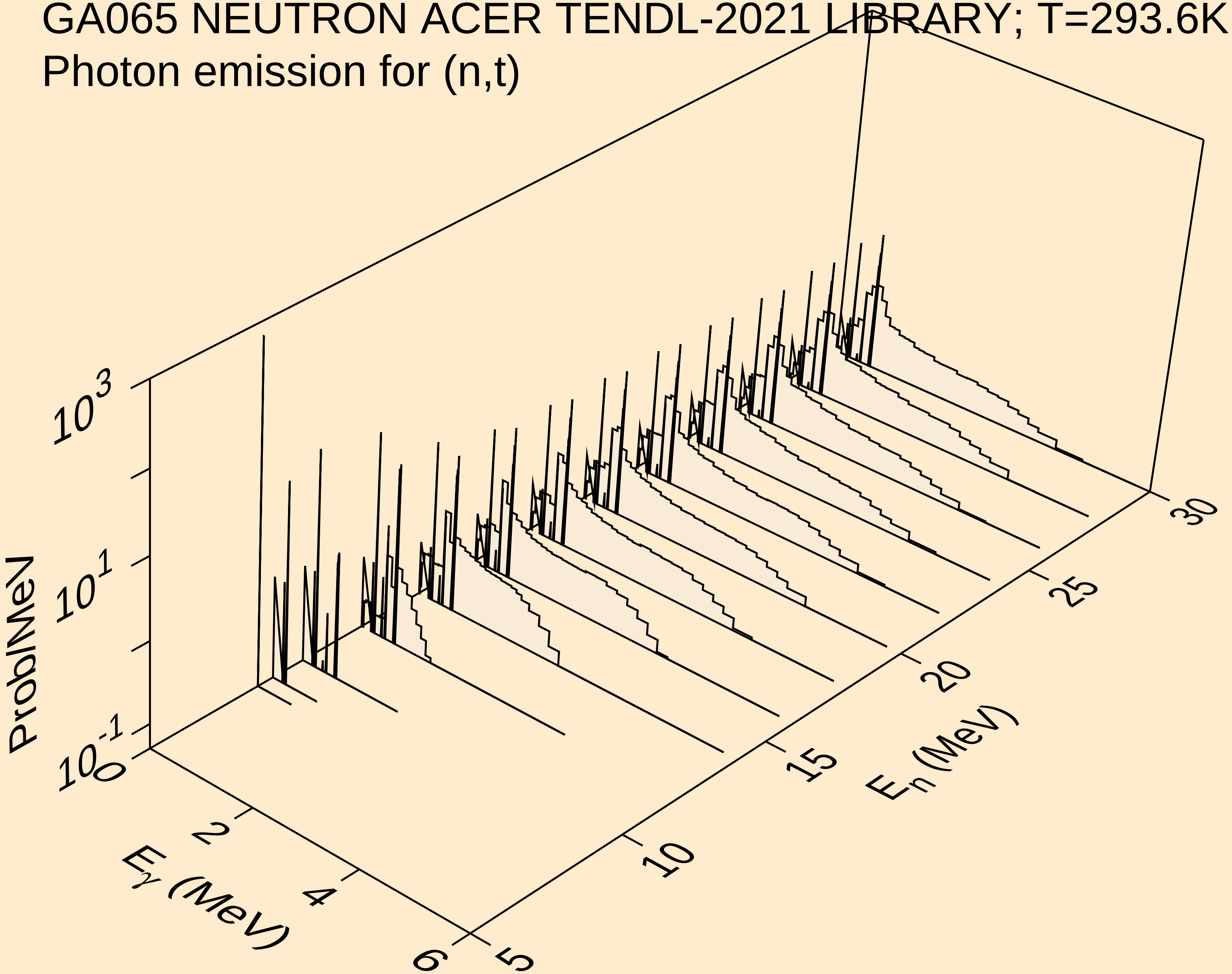


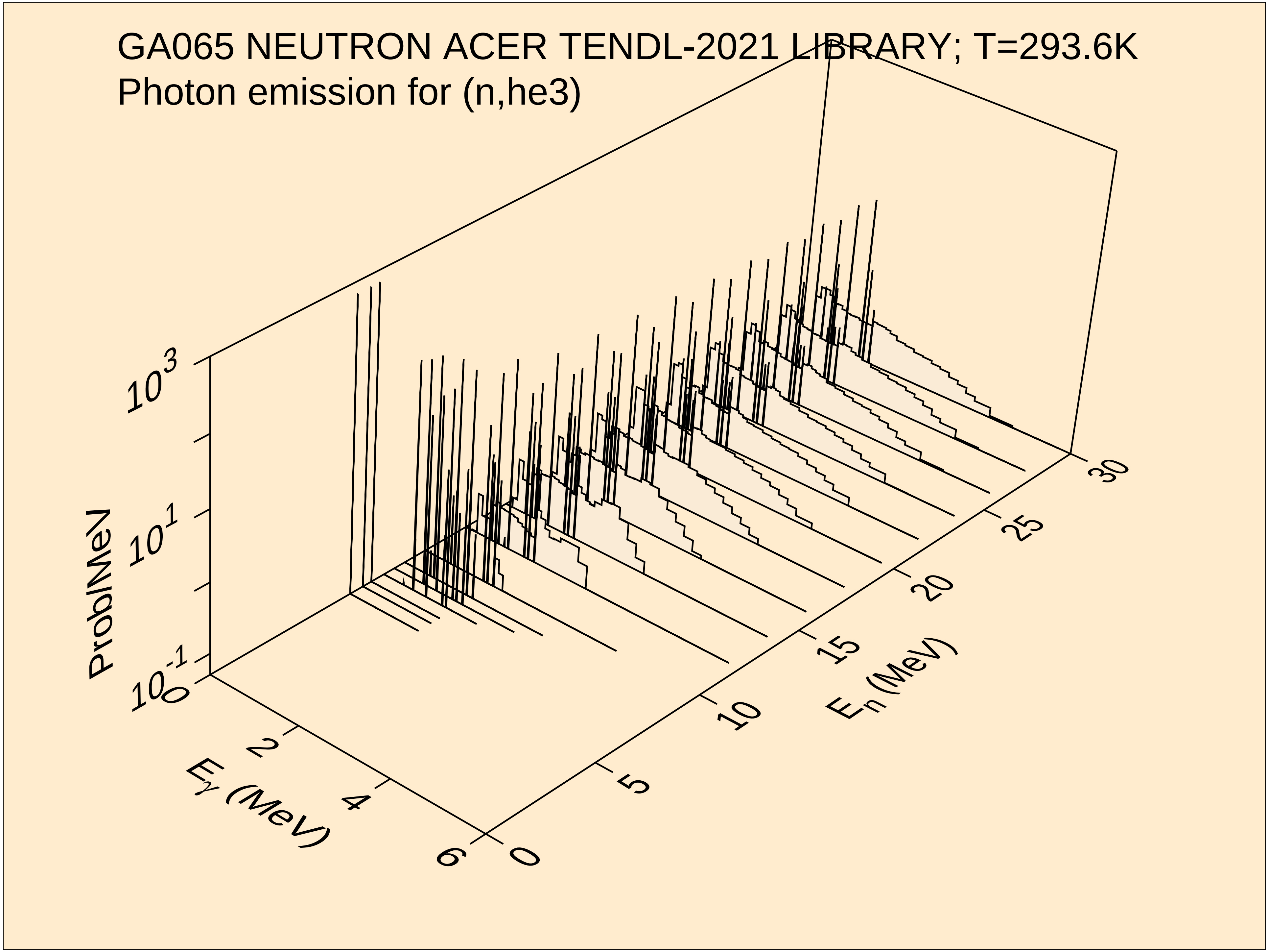
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,p)
ProbMeV
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
0
5
10
15
20
25
30
E_n (MeV)



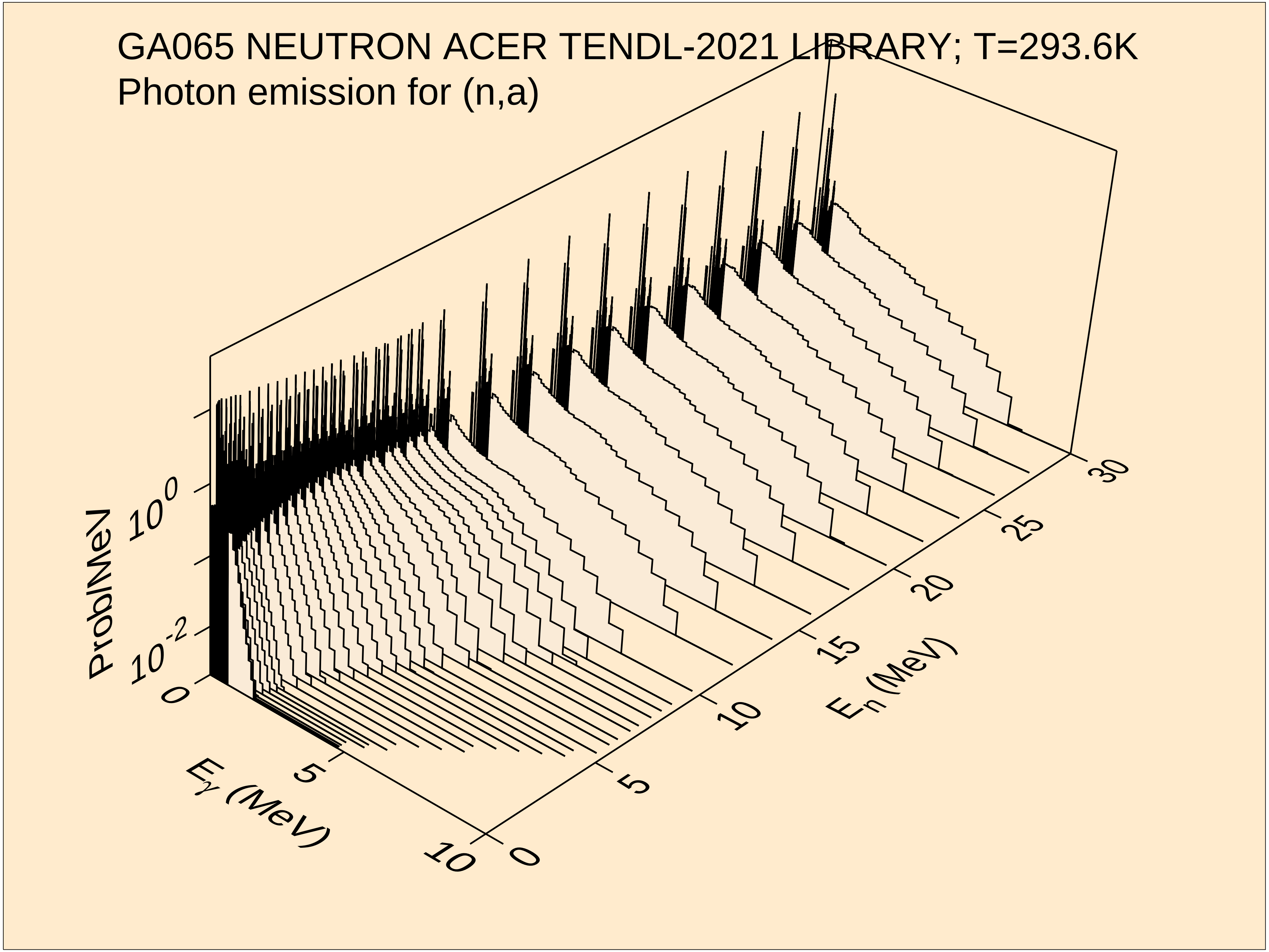
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,d)
ProbMeV
10^{-1}
10^{1}
10^{3}
E_γ (MeV)
0
2
4
E_n (MeV)
0
5
10
15
20
25
30

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,t)

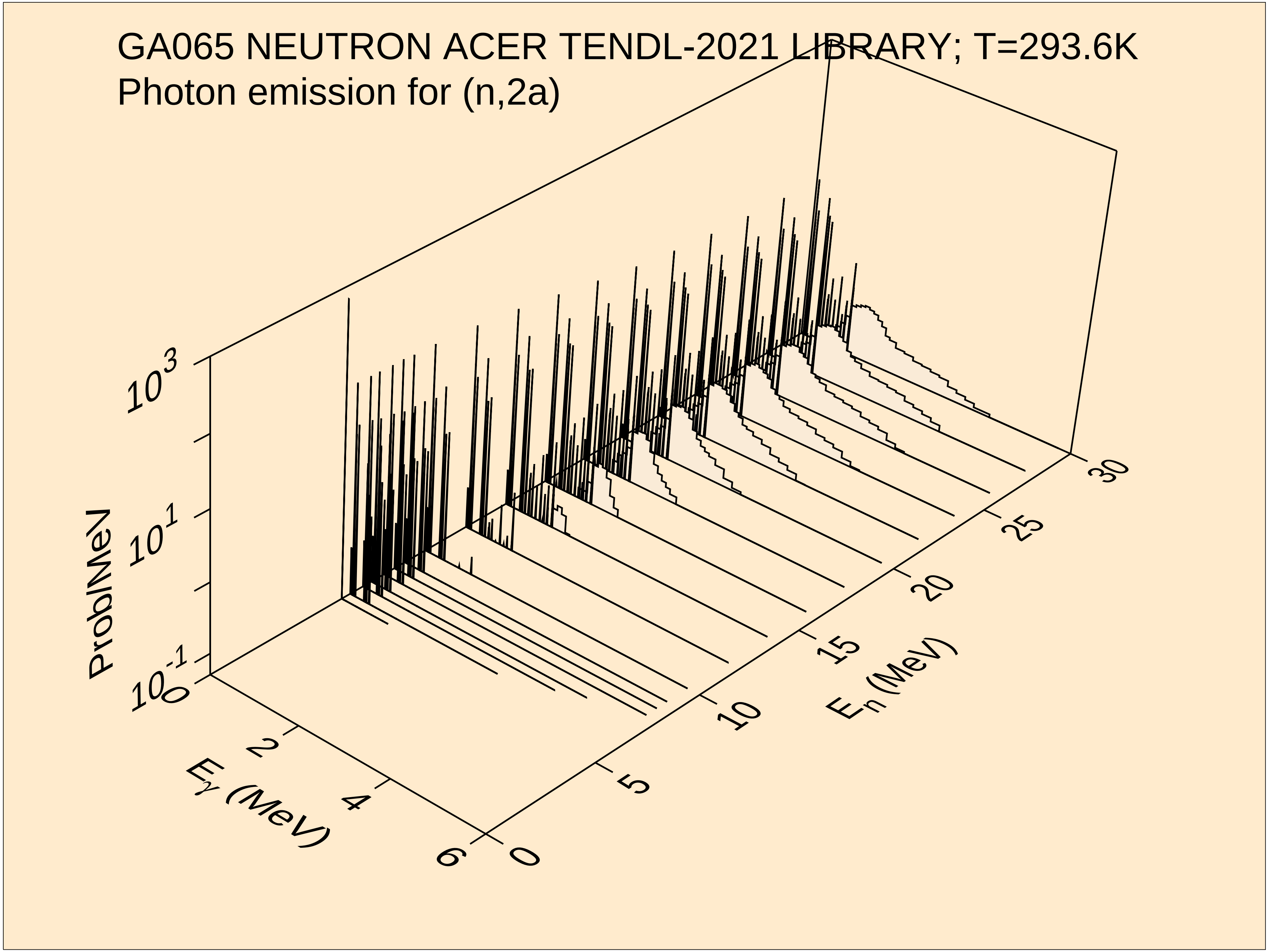


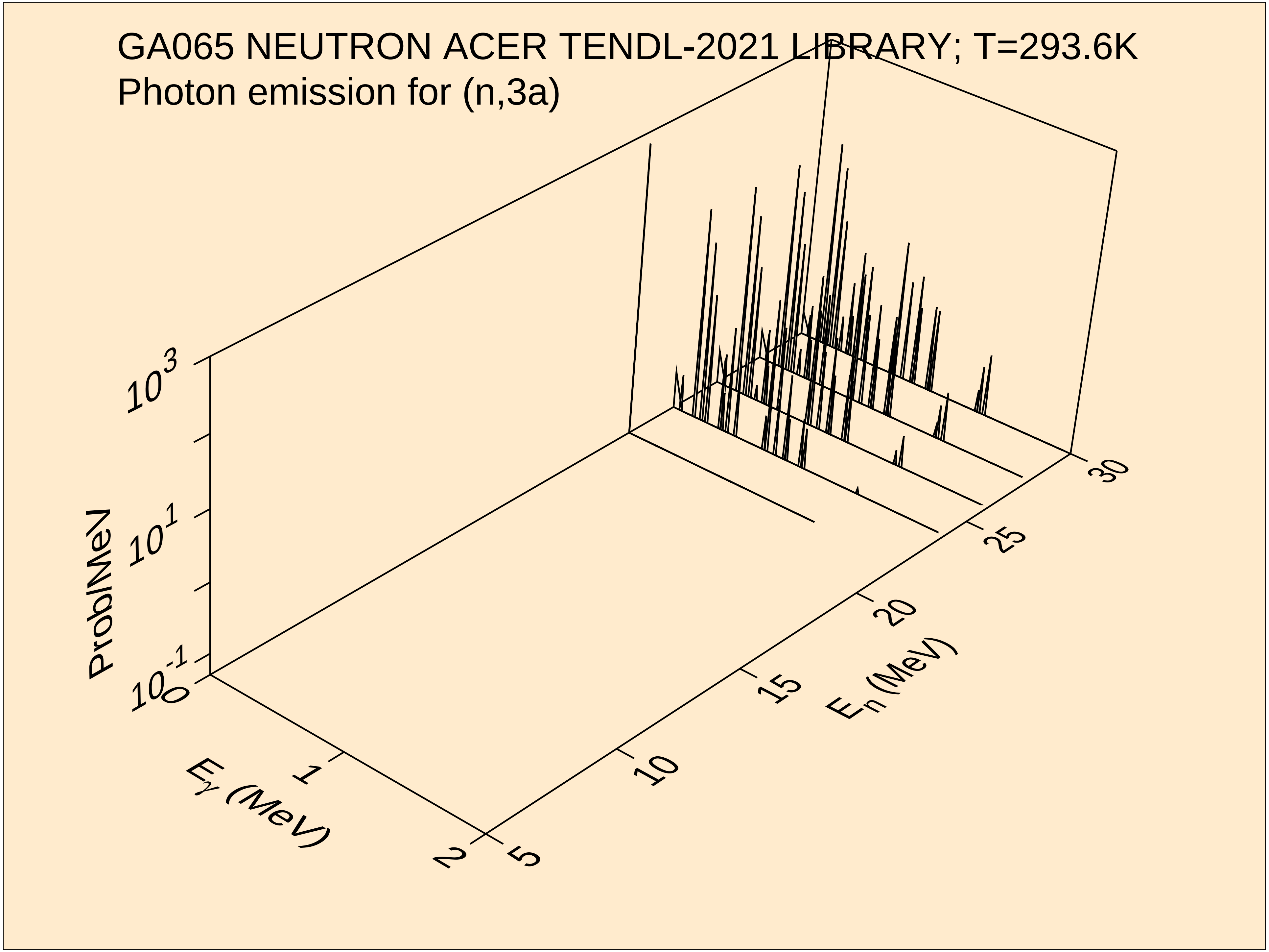


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,he3)
10^3
10^1
10^{-1}
Prob/MeV
0
2
4
6
E_γ (MeV)
0
5
10
15
20
25
30
E_n (MeV)

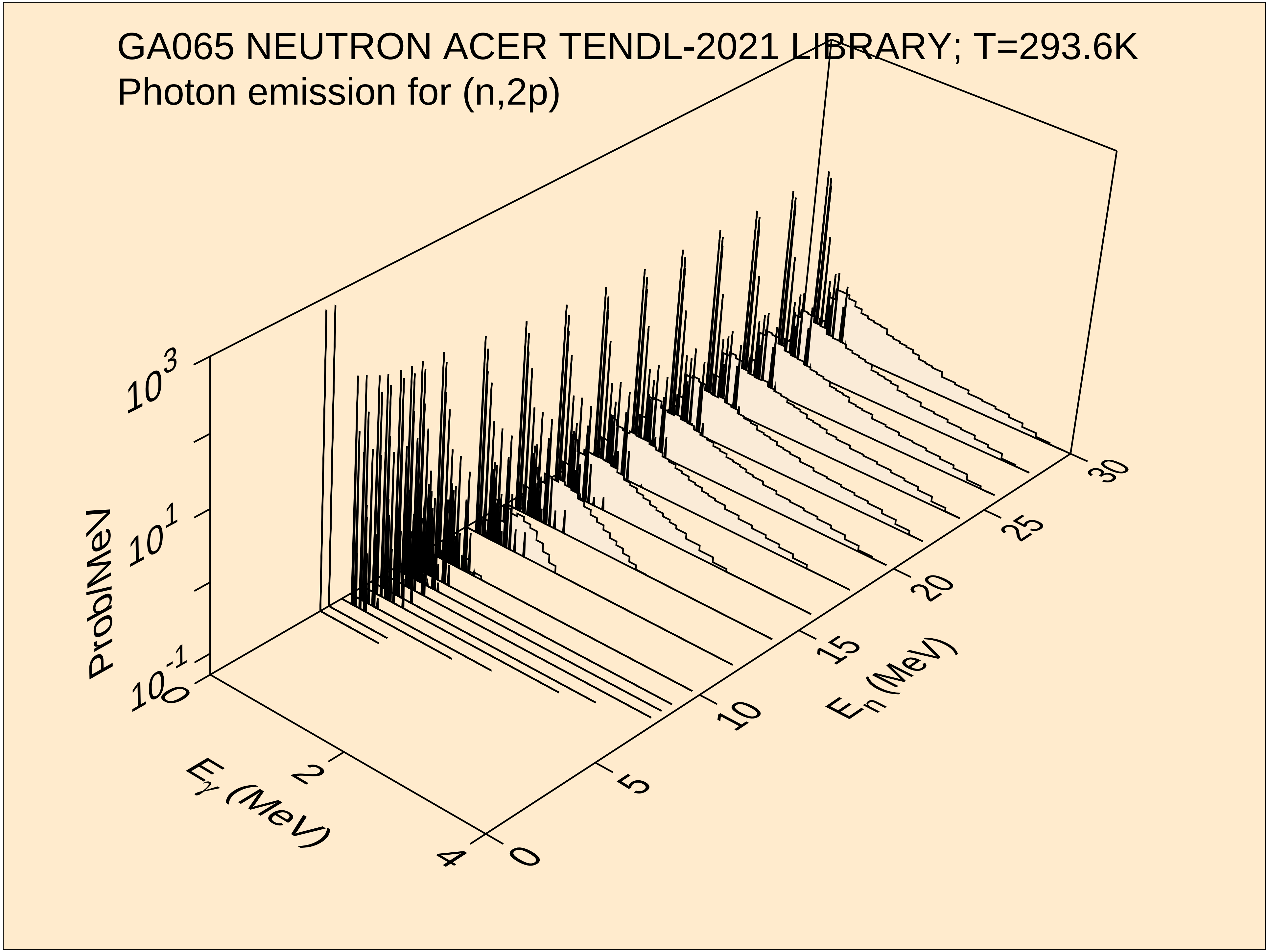


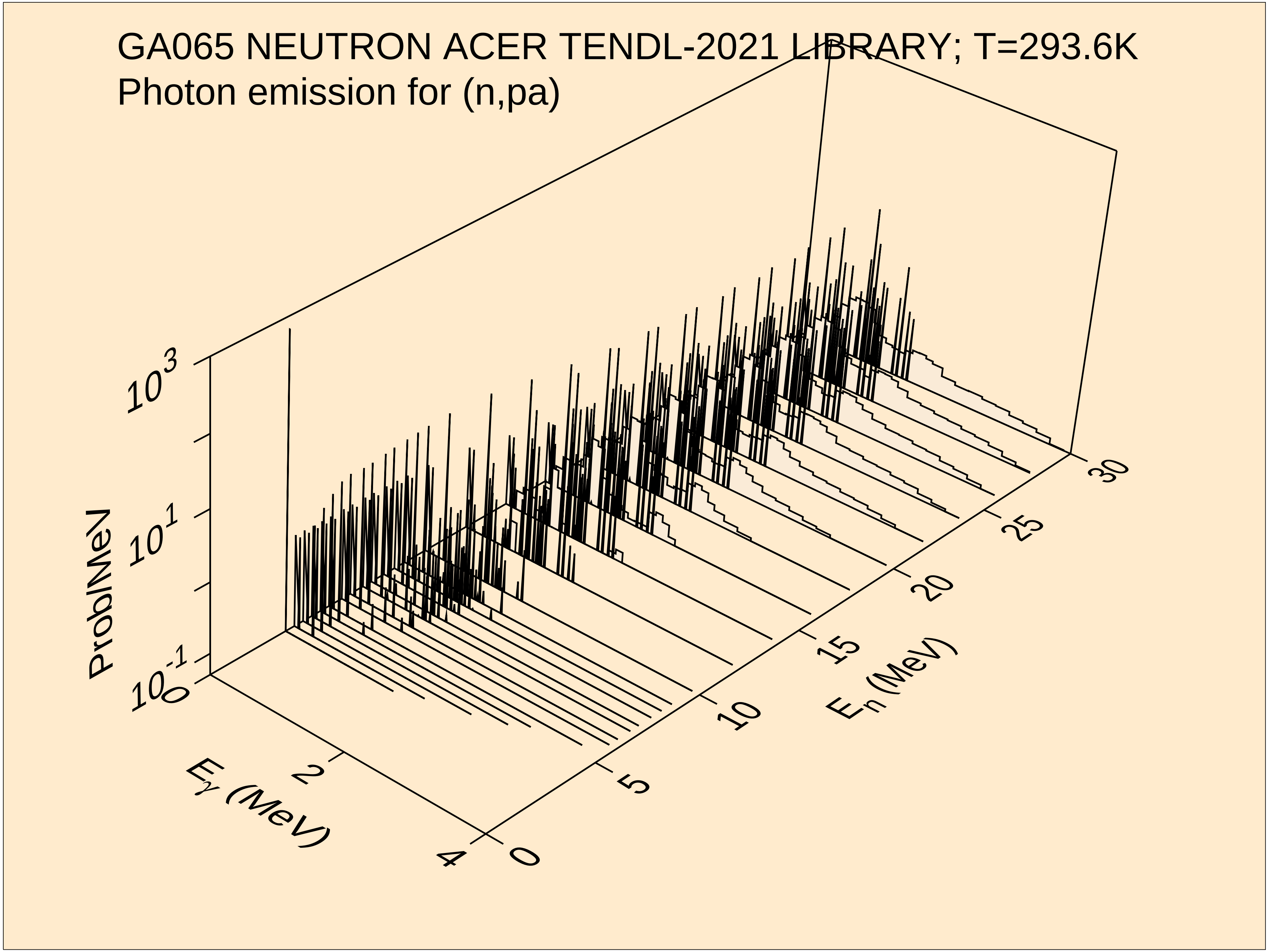
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,a)
ProbMeV
10^{0}
10^{-2}
0
5
10
E_γ (MeV)
0
5
10
15
20
25
30
E_n (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,2a)
ProbMeV
10^{3}
10^{1}
10^{-1}
E_γ (MeV)
E_n (MeV)
0
2
4
6
0
5
10
15
20
25
30

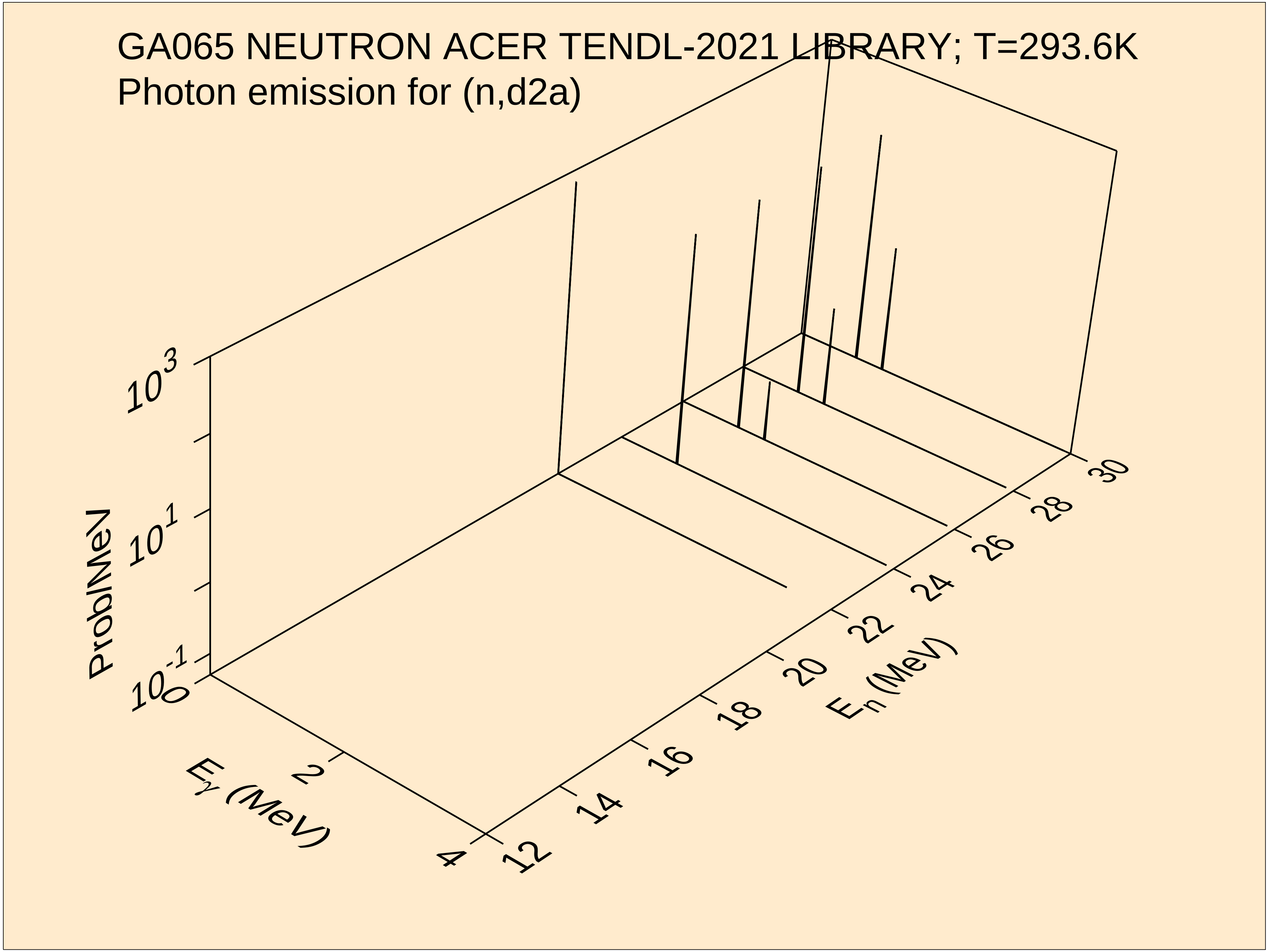


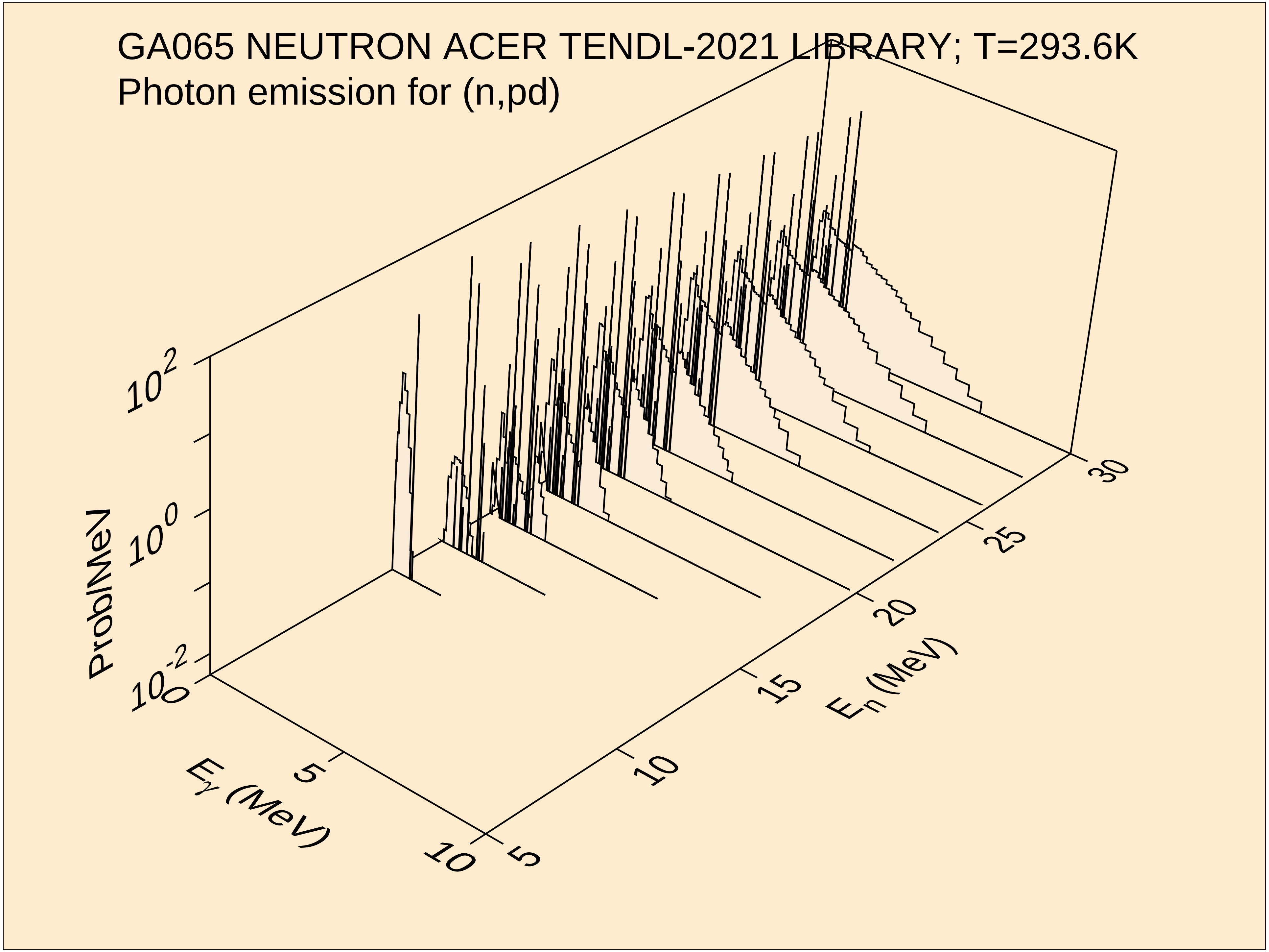
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,3a)
ProbMeV
10^{-1}
10^{1}
10^{3}
E_γ (MeV)
0
1
2
E_n (MeV)
5
10
15
20
25
30

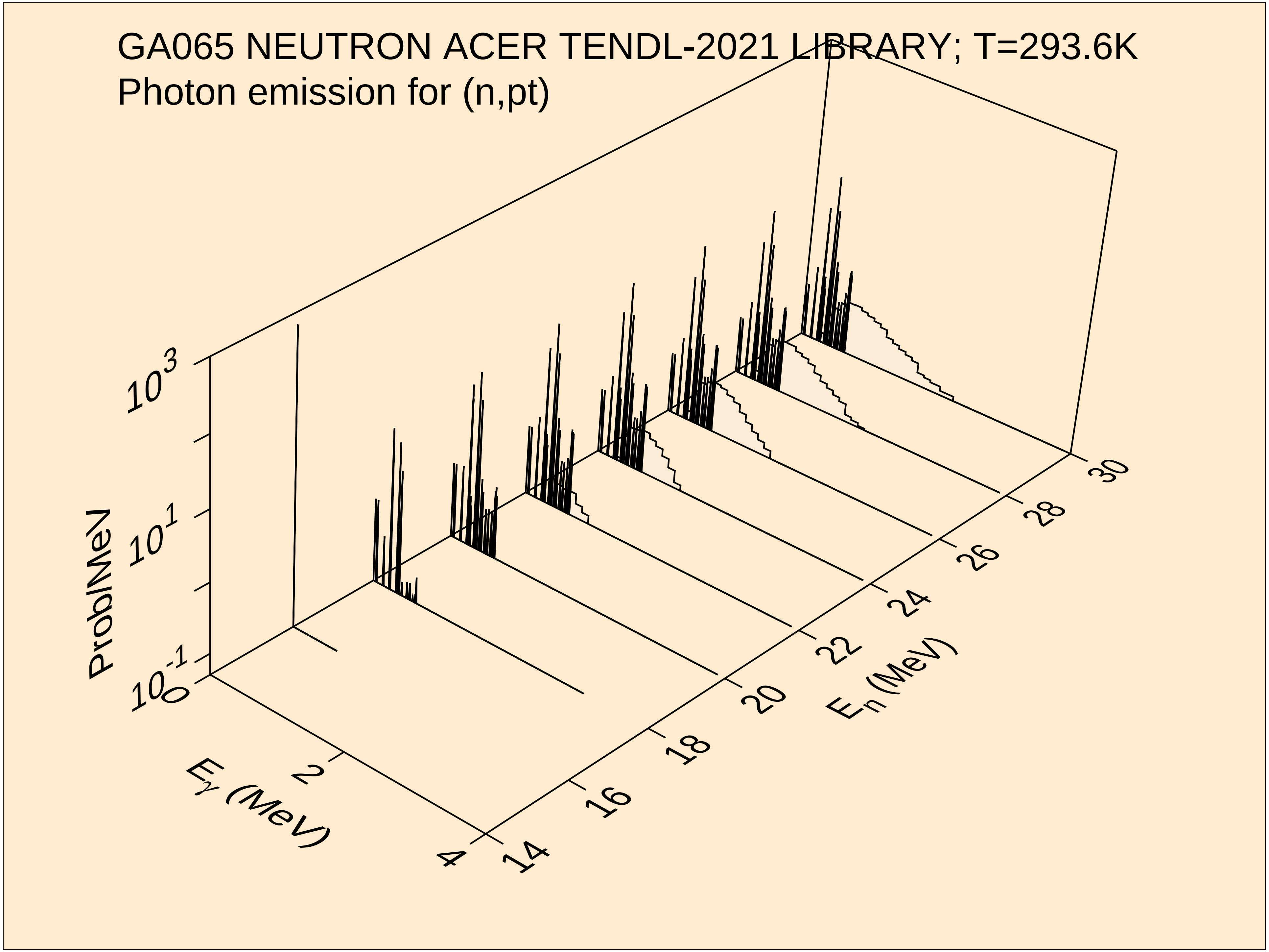

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,2p)
ProblMeV
10^{3}
10^{1}
10^{-1}
E_γ (MeV)
0
2
4
E_n (MeV)
0
5
10
15
20
25
30

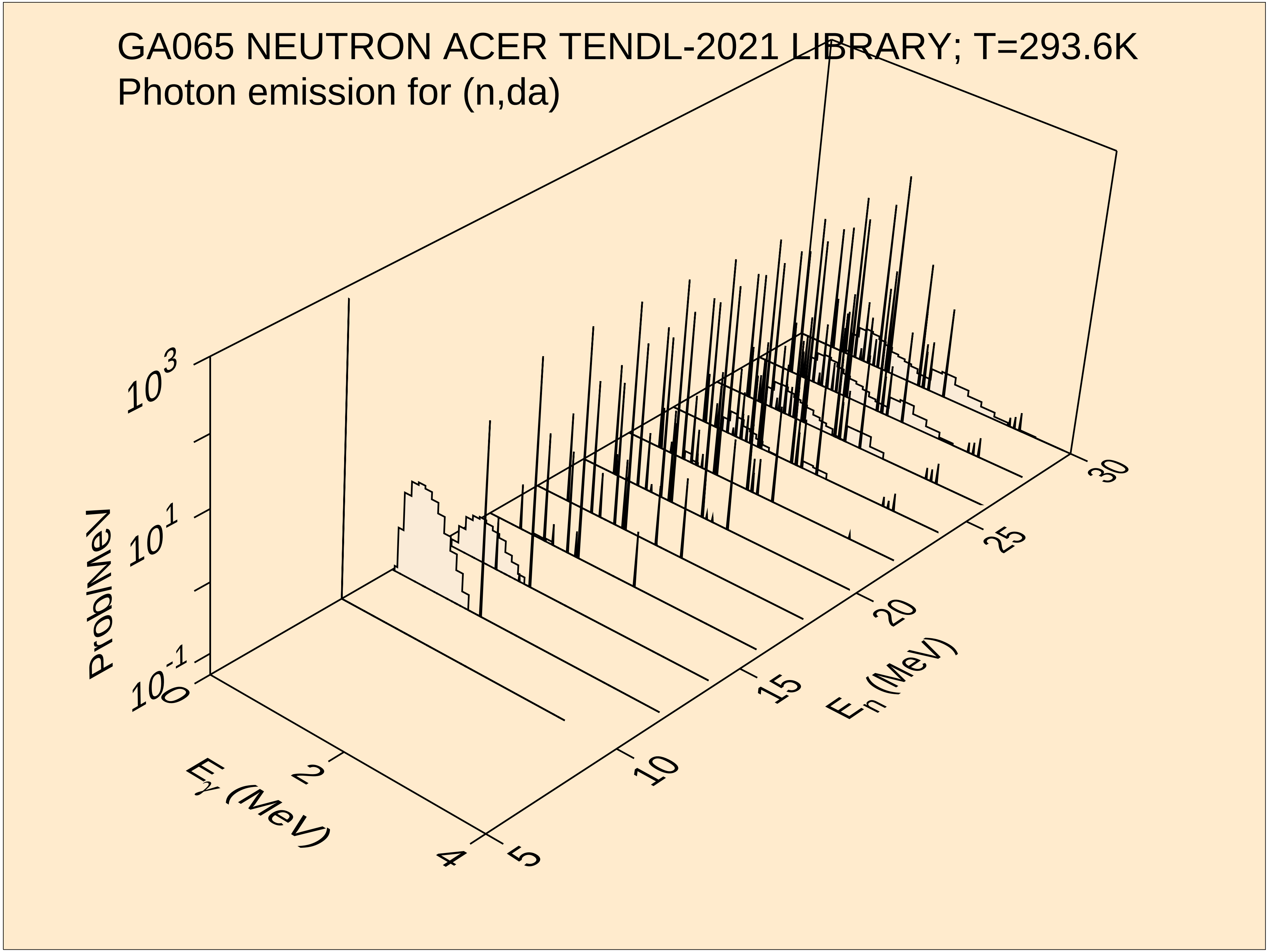


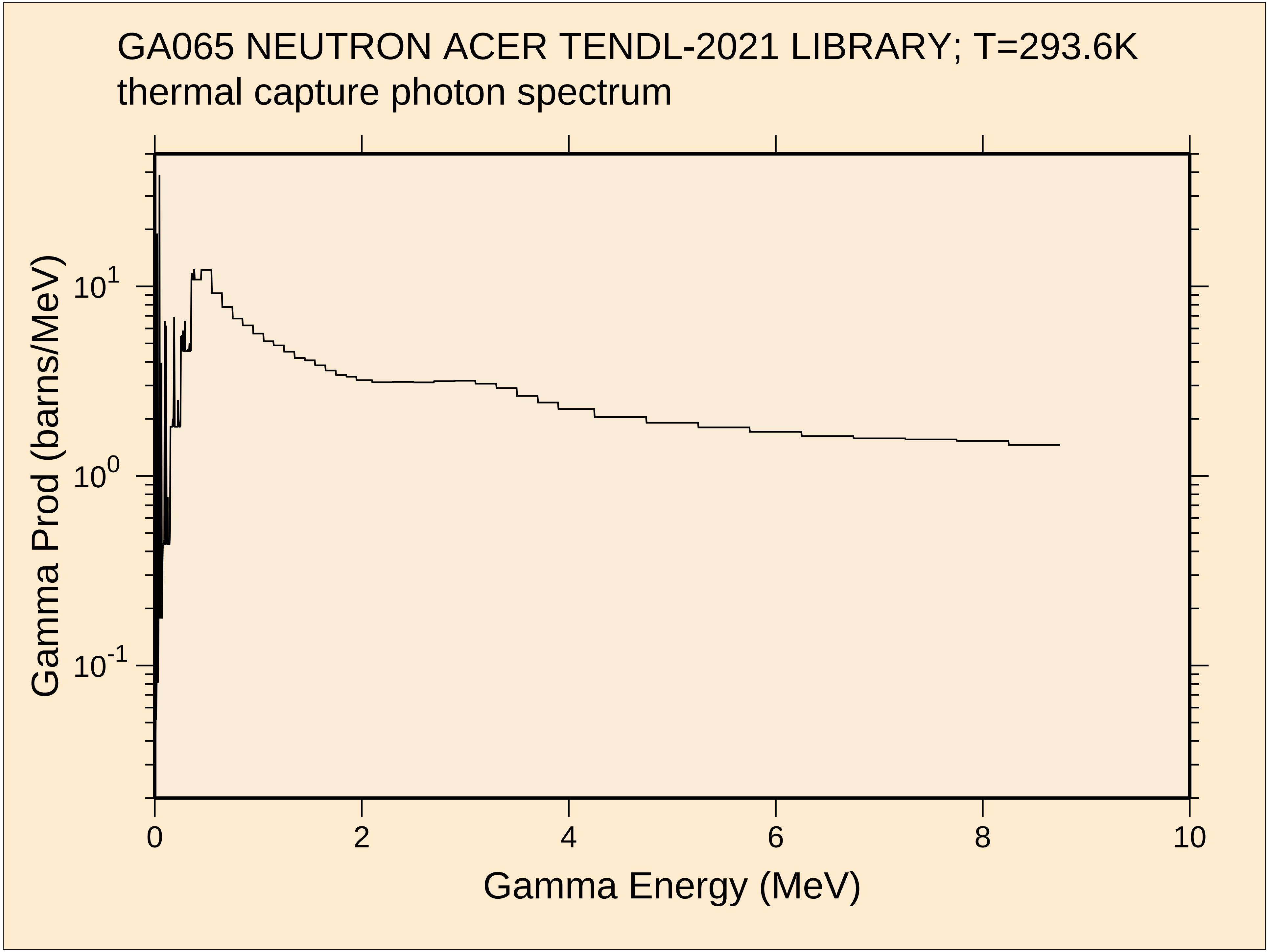
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,pa)
ProbMeV
10^3
10^1
10^-1
0
2
4
E_γ (MeV)
0
5
10
15
20
25
30
E_n (MeV)

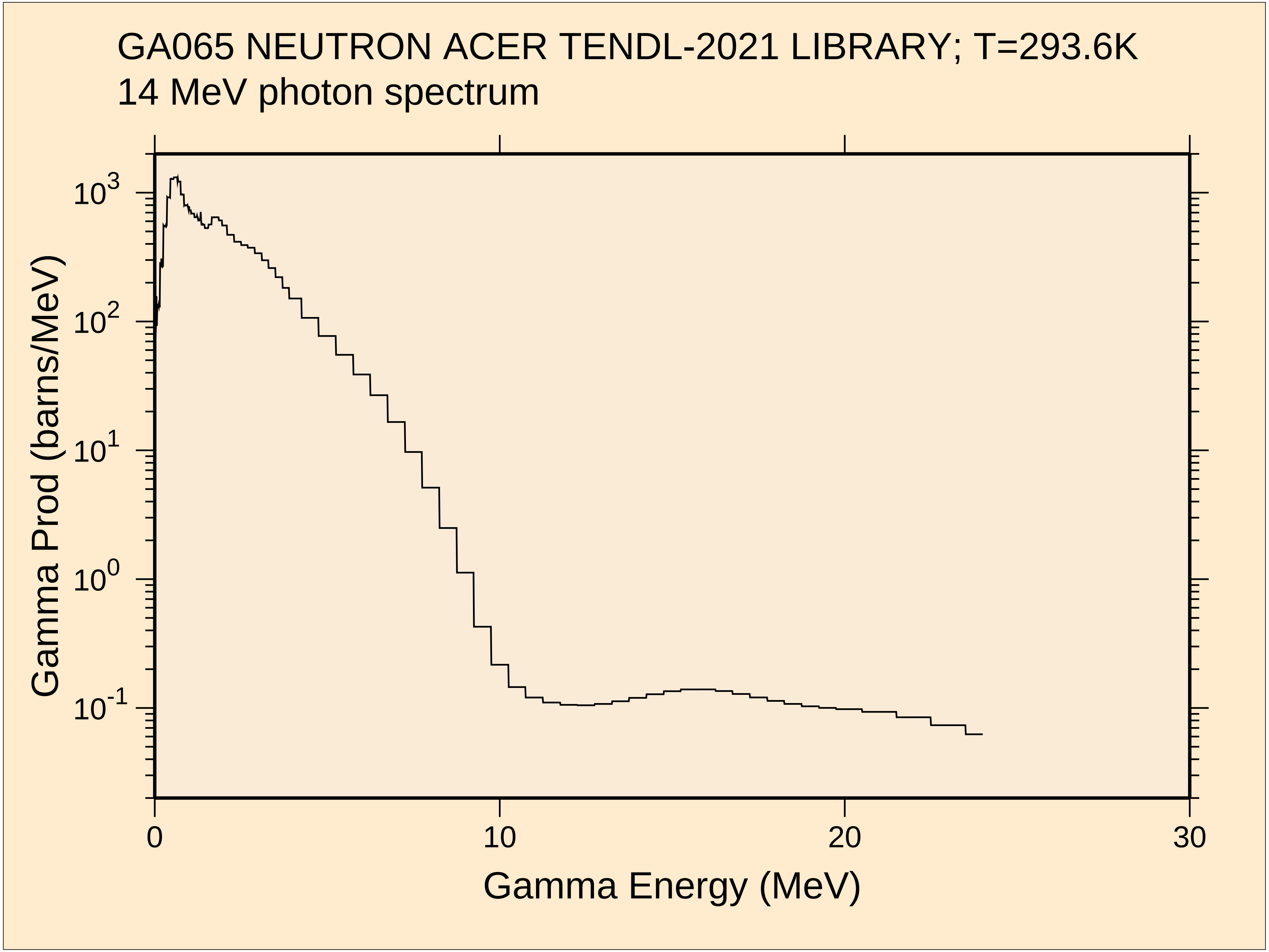

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,d2a)
Probl/MeV
10^{3}
10^{1}
10^{-1}
0
2
4
E_γ (MeV)
12
14
16
18
20
22
24
26
28
30
E_n (MeV)

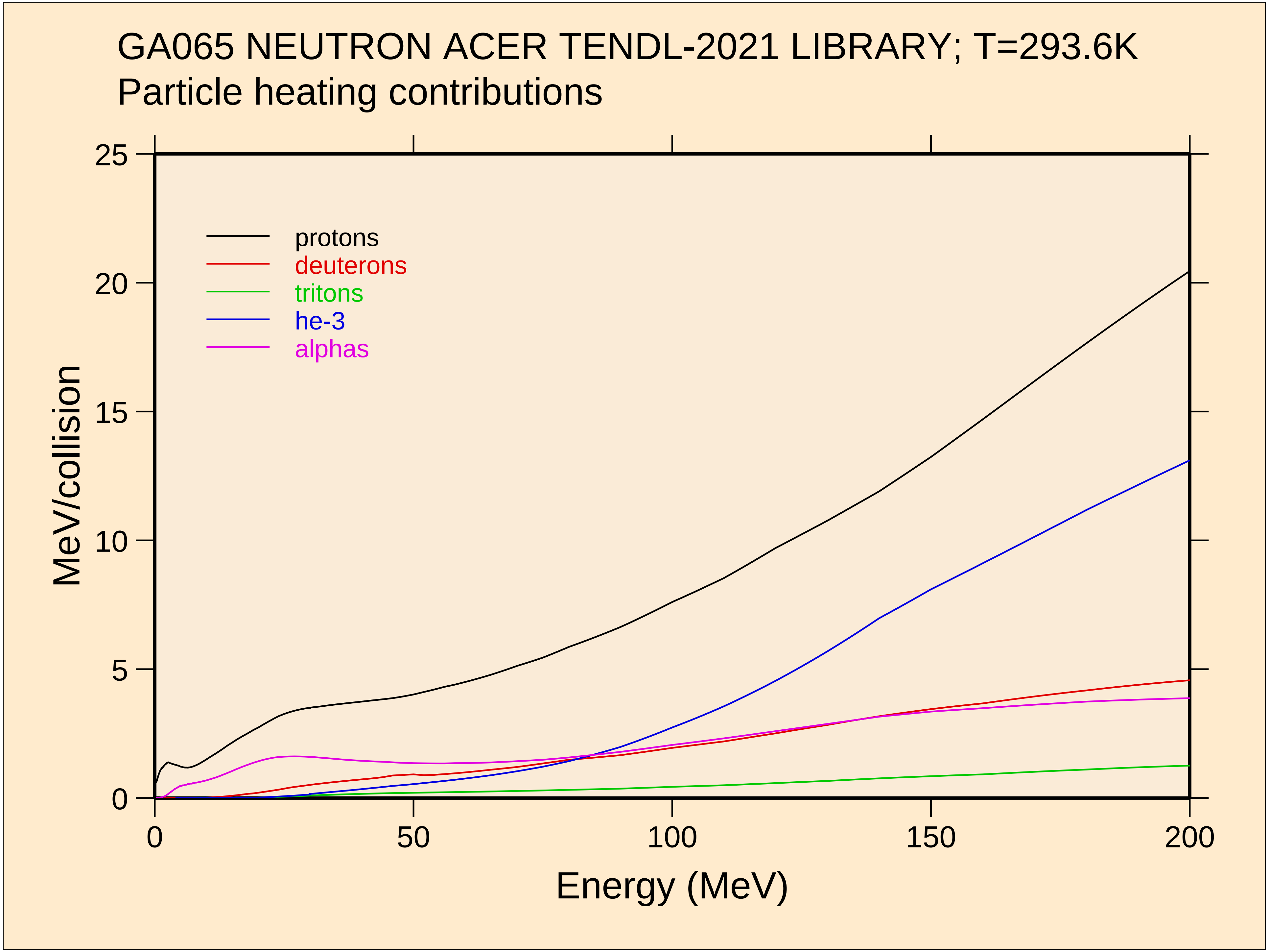

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,pd)
ProbMeV
10^{2}
10^{0}
10^{-2}
E_{γ} (MeV)
0
5
10
E_{n} (MeV)
5
10
15
20
25
30

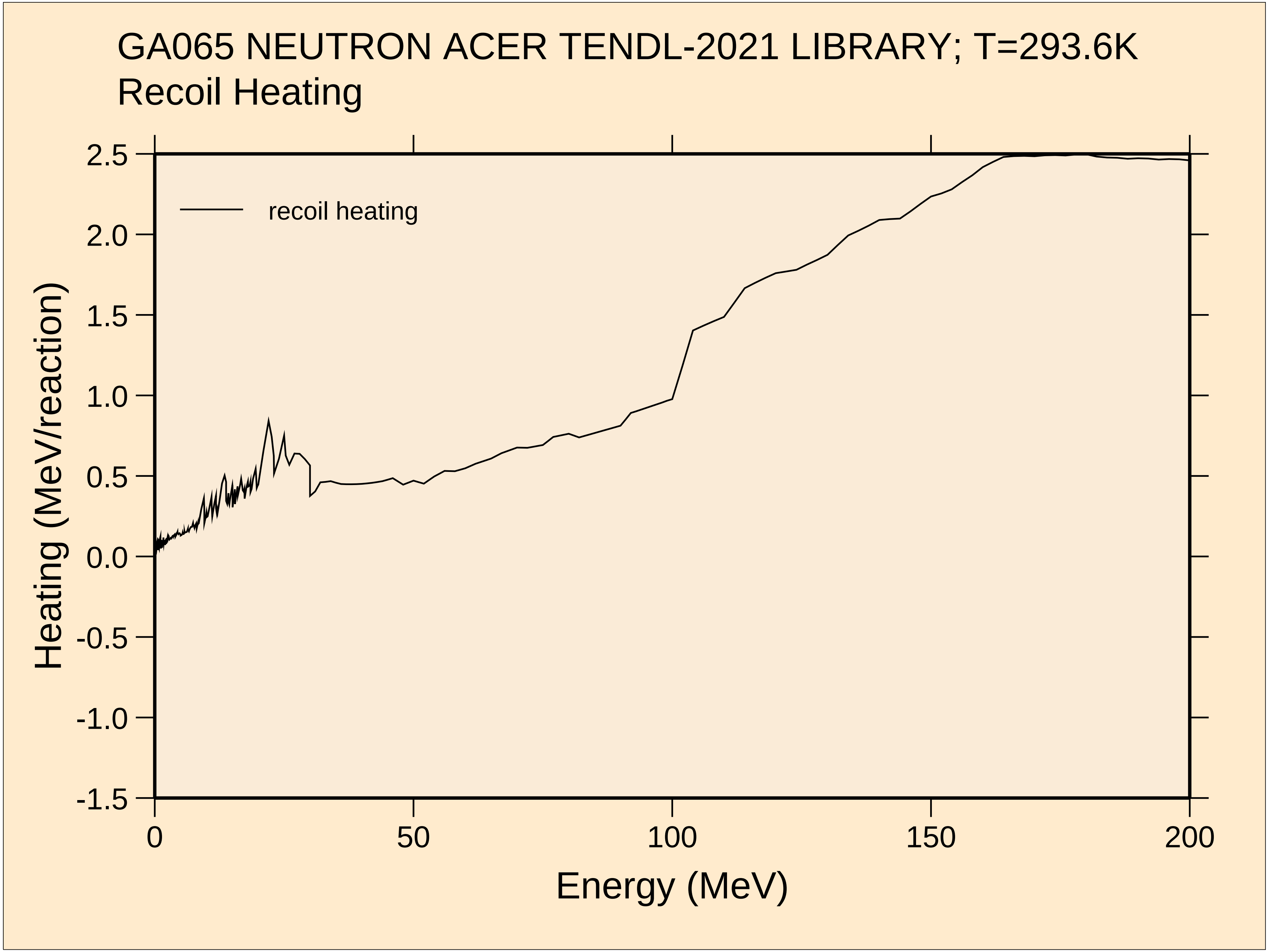

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,pt)
Prob/MeV
10^{3}
10^{1}
10^{-1}
0
2
4
E_γ (MeV)
14
16
18
20
22
24
26
28
30
E_n (MeV)

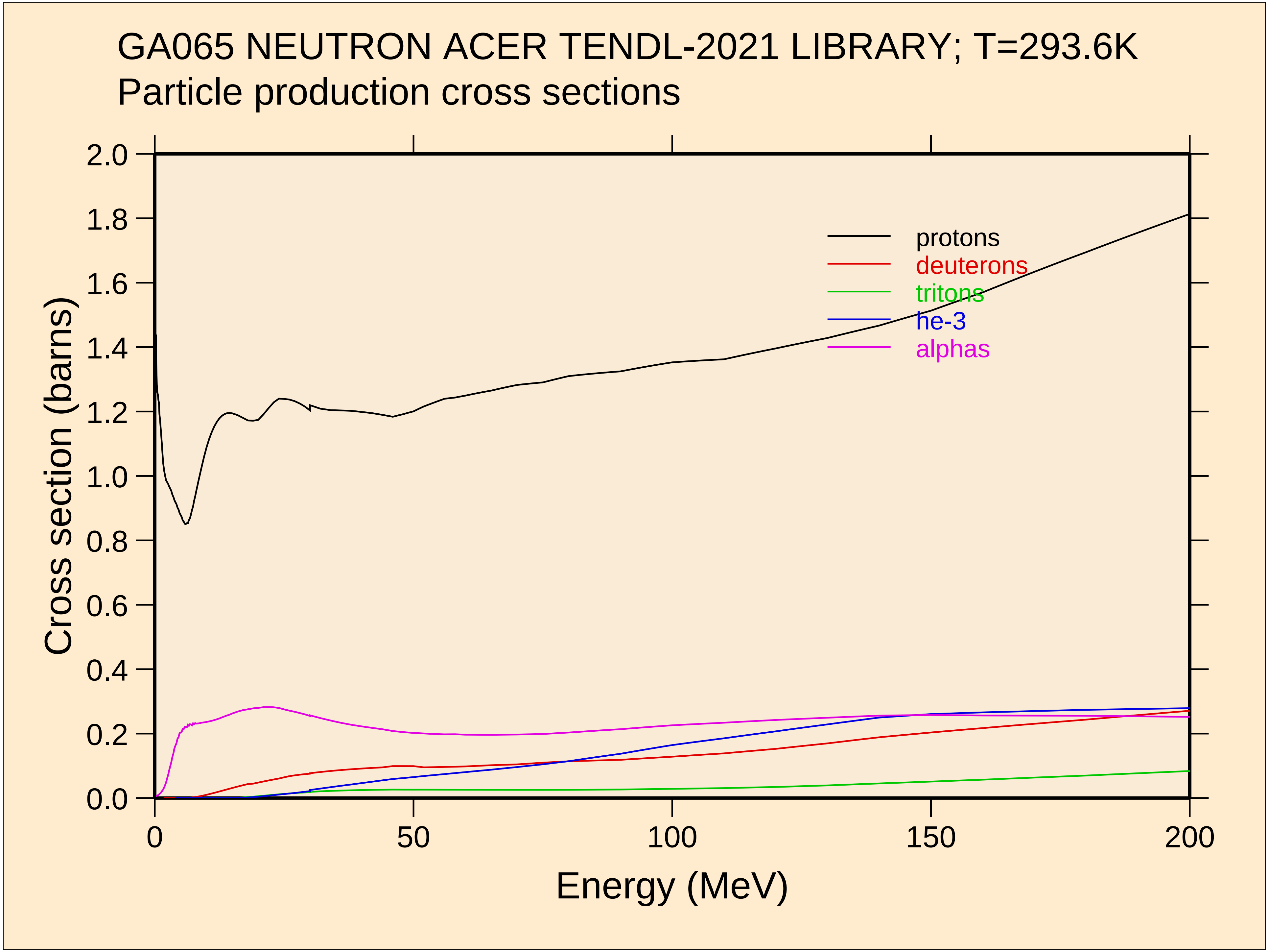

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Photon emission for (n,da)
ProbMeV
10^3
10^1
10^{-1}
E_γ (MeV)
0
2
4
E_n (MeV)
5
10
15
20
25
30

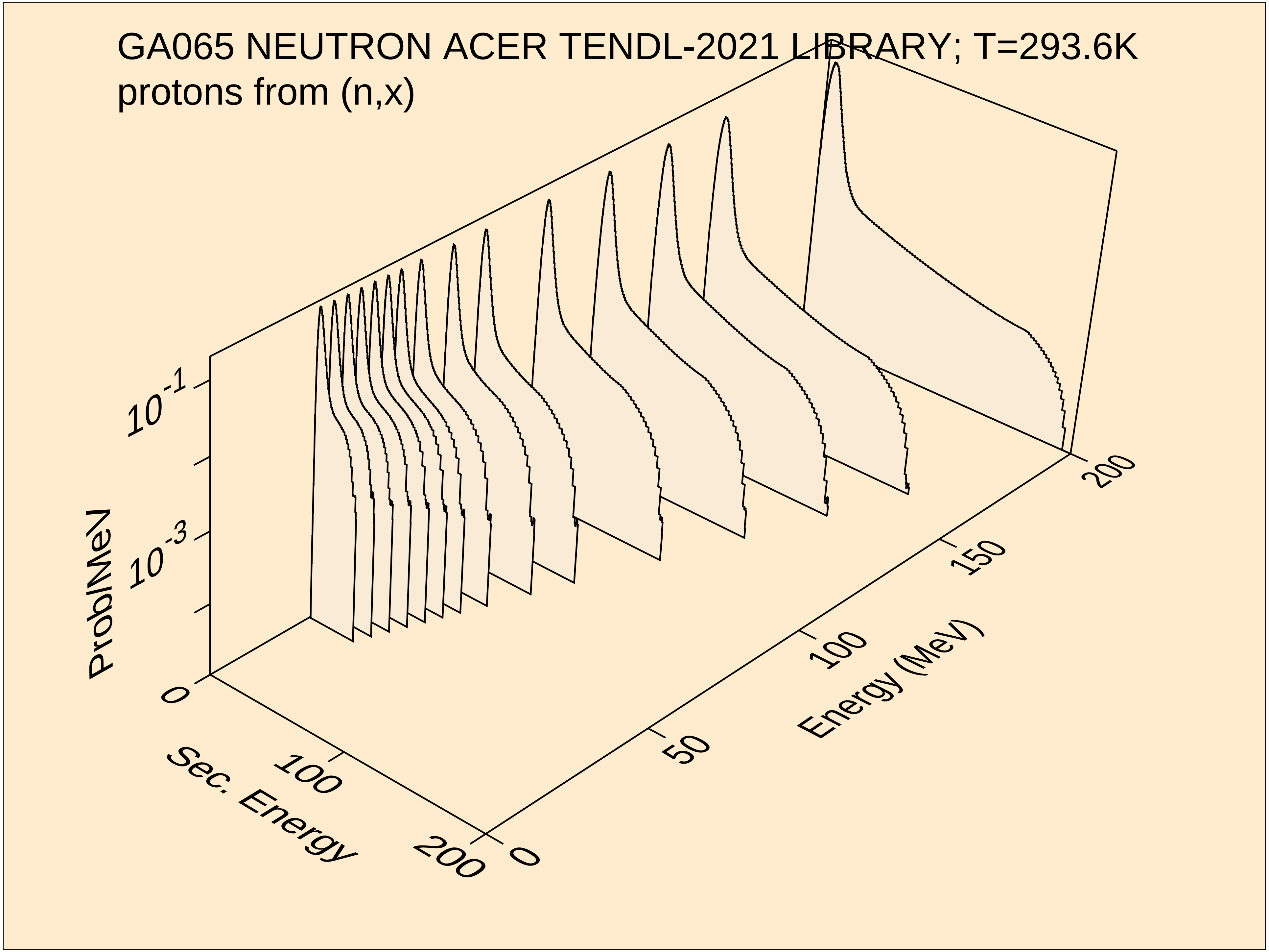

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
thermal capture photon spectrum
Gamma Prod (barns/MeV)
10^1
10^0
10^{-1}
0
2
4
6
8
10
Gamma Energy (MeV)

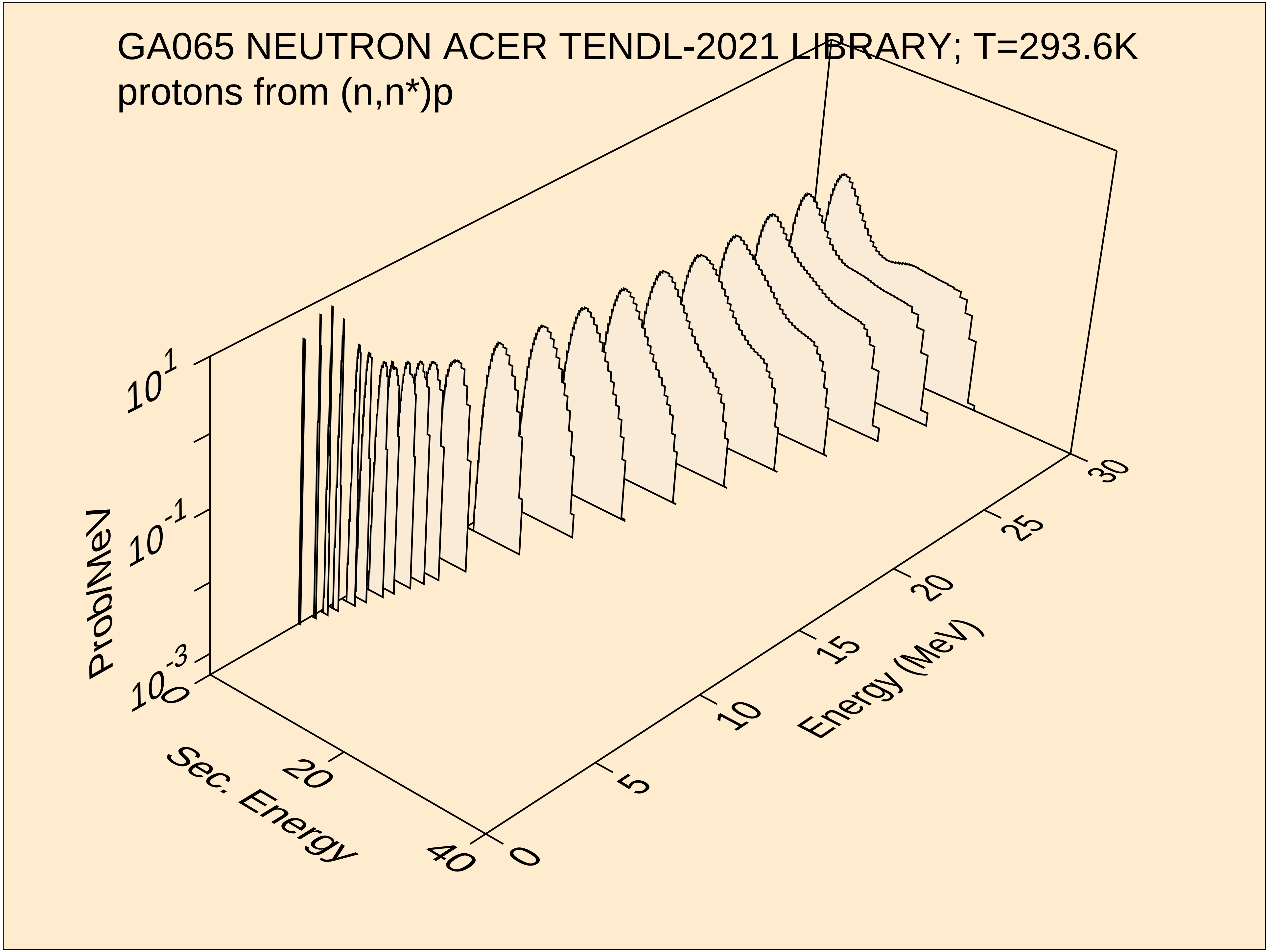

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
14 MeV photon spectrum
Gamma Prod (barns/MeV)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
0
10
20
30
Gamma Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Particle heating contributions
MeV/collision
Energy (MeV)
protons
deuterons
tritons
he-3
alphas
0
5
10
15
20
25
0
50
100
150
200

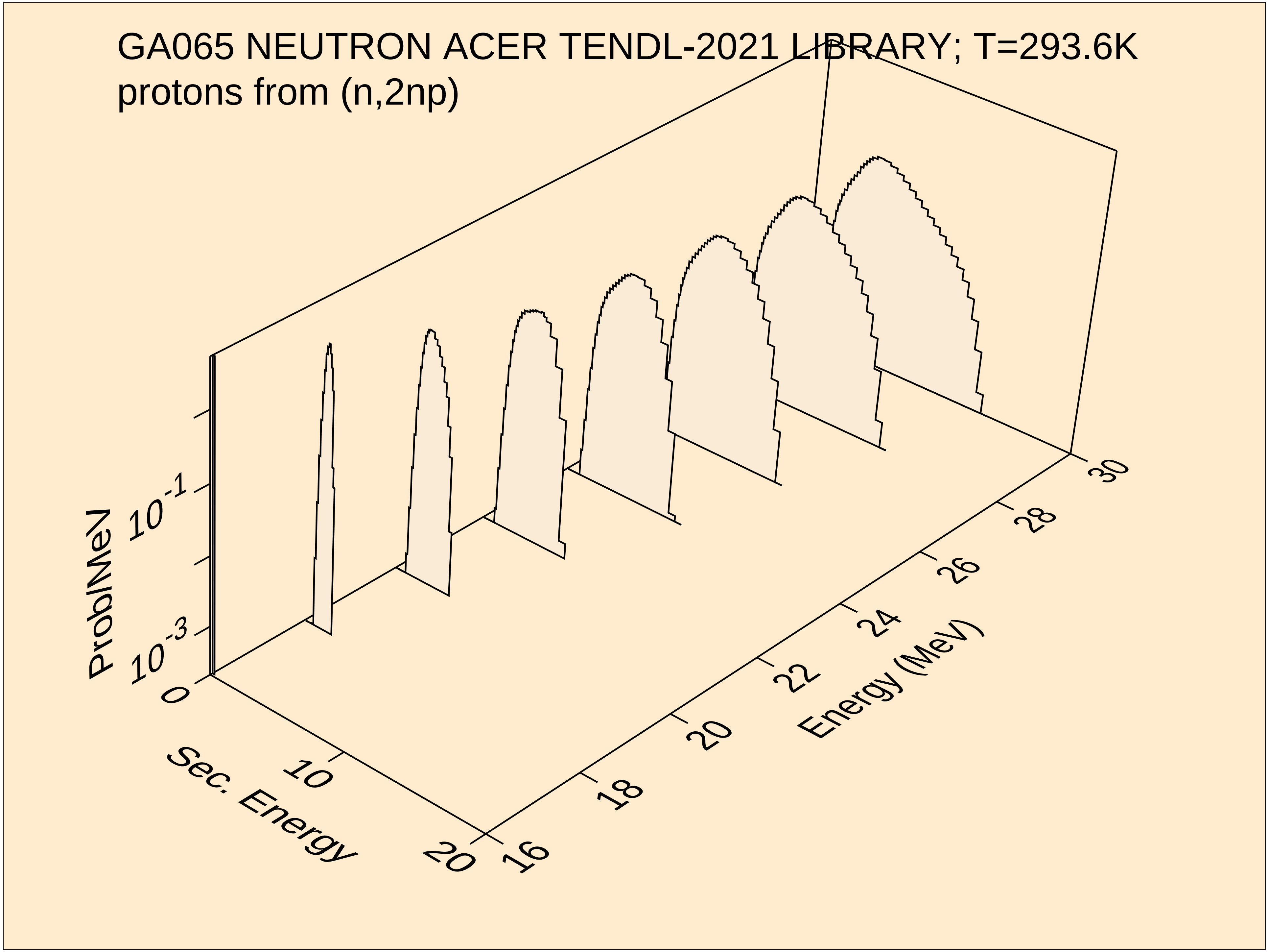

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Recoil Heating
recoil heating
Heating (MeV/reaction)
Energy (MeV)
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
0
50
100
150
200


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
Particle production cross sections
Cross section (barns)
Energy (MeV)
protons
deuterons
tritons
he-3
alphas
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
0
50
100
150
200

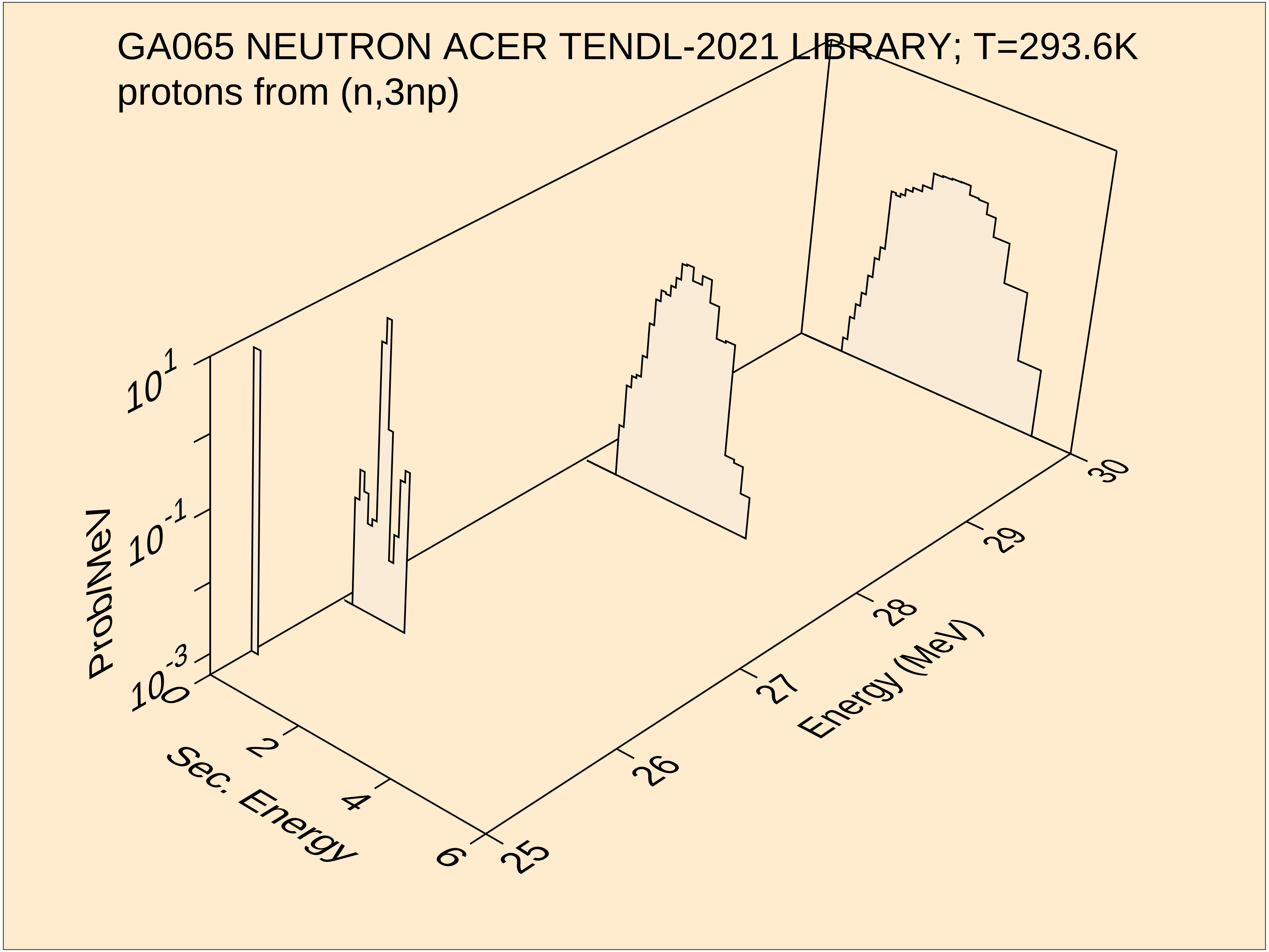

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,x)
ProblMeV
10^{-1}
10^{-3}
0
100
200
Sec. Energy
0
50
100
150
200
Energy (MeV)

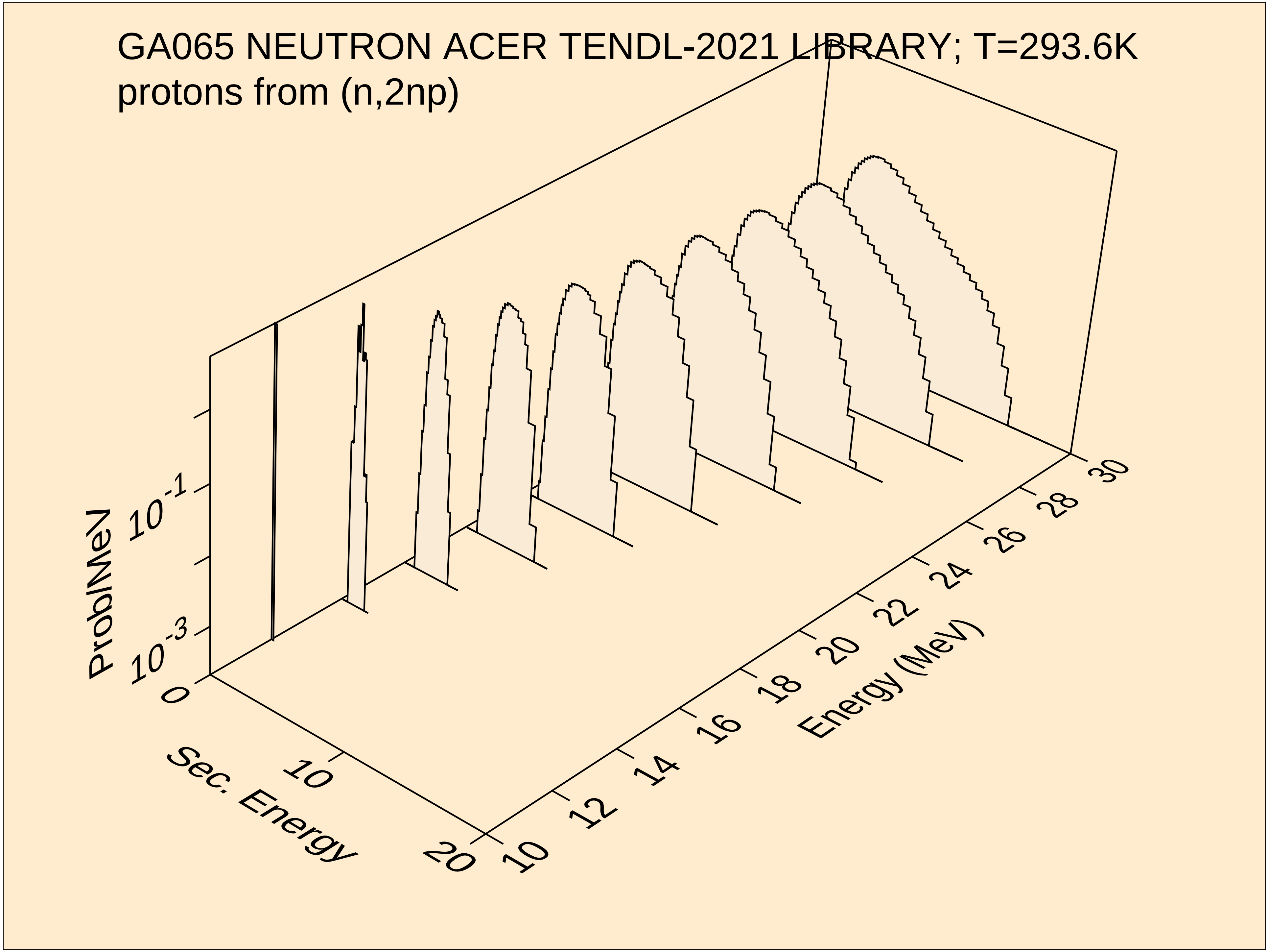


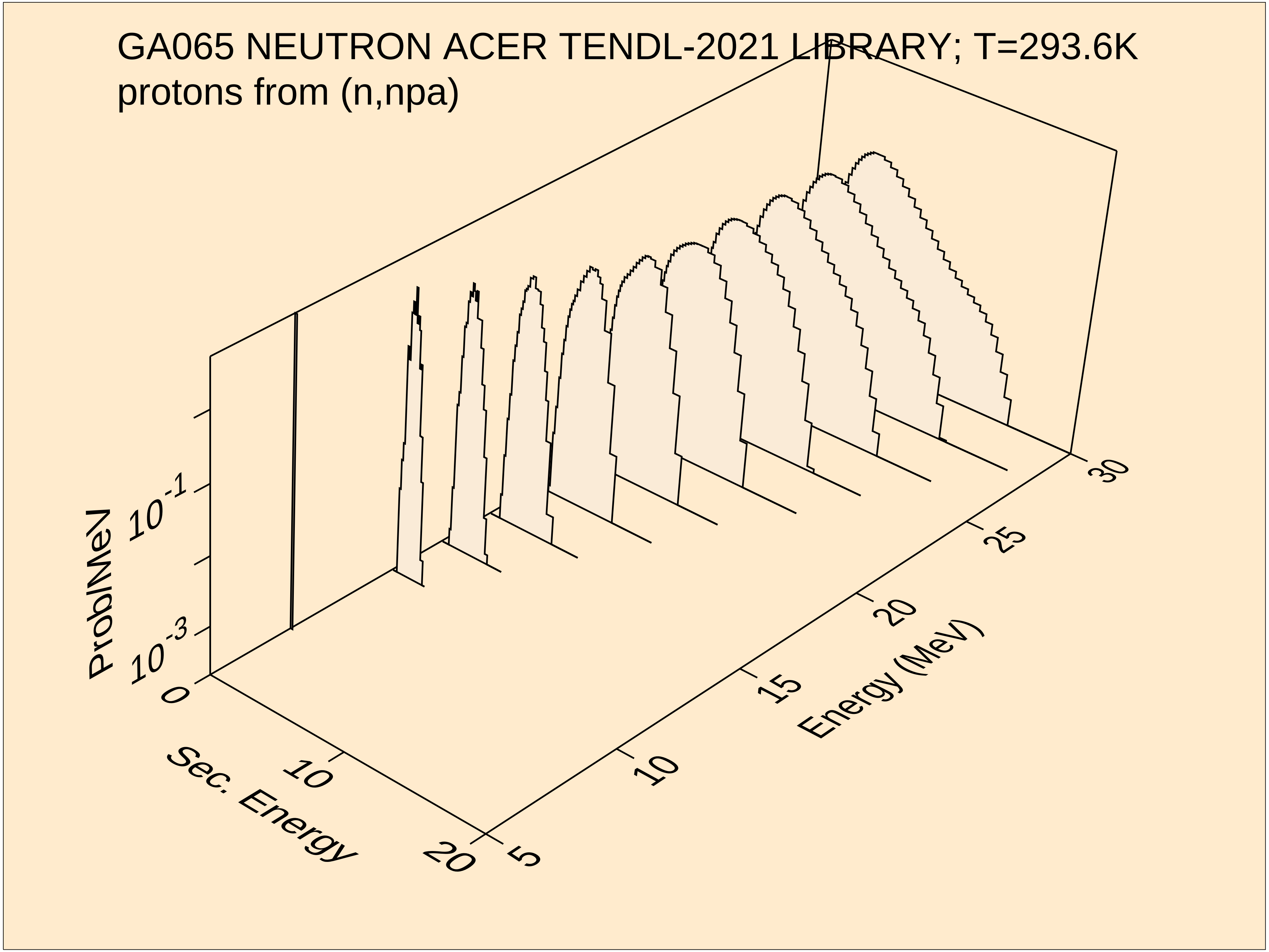
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,n*)p
ProbMeV
10^{1}
10^{-1}
10^{-3}
0
20
40
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)



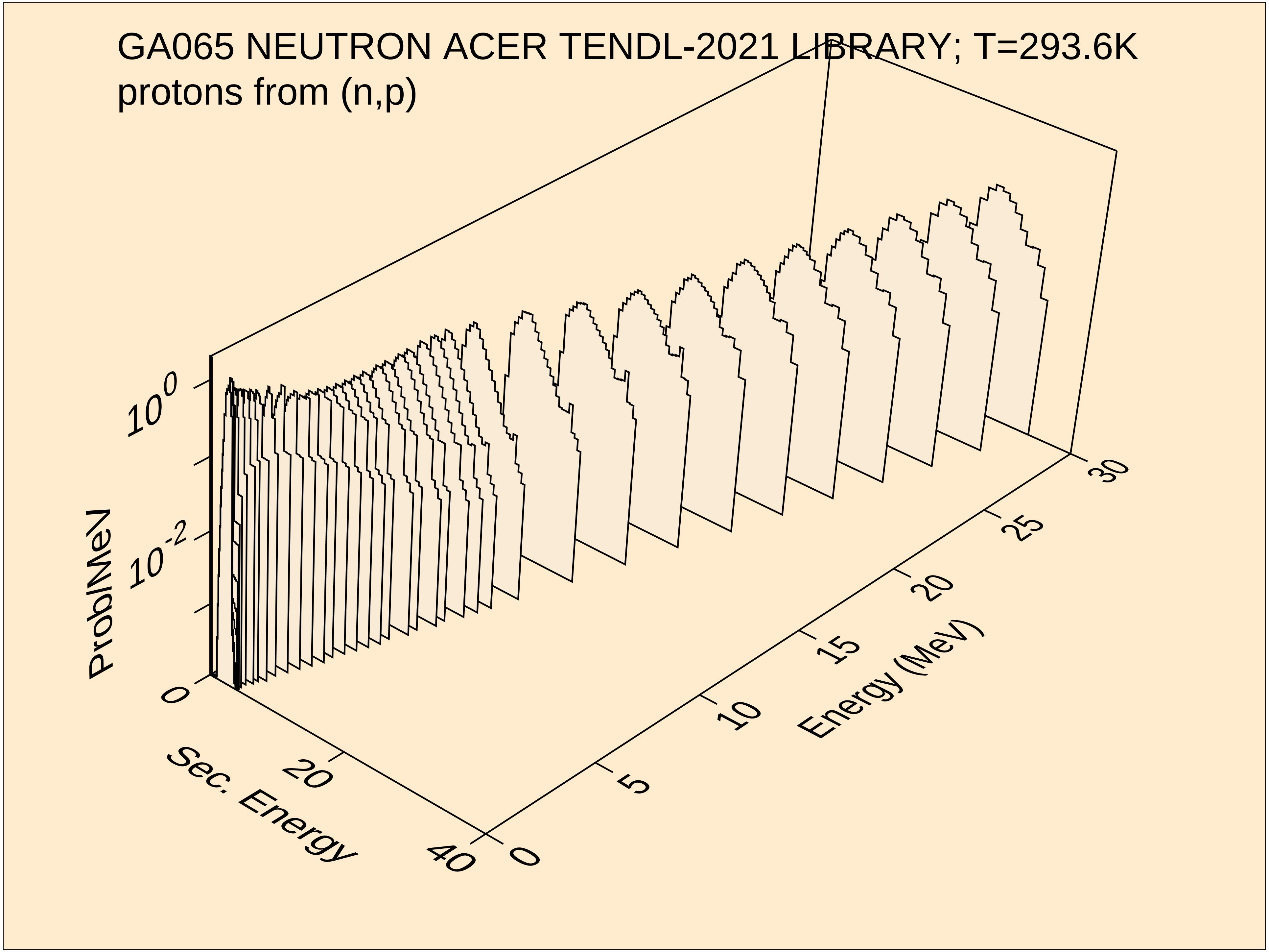
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,2np)
Prob/MeV
10^{-1}
10^{-3}
0
Sec. Energy
10
20
16
18
20
22
24
26
28
30
Energy (MeV)

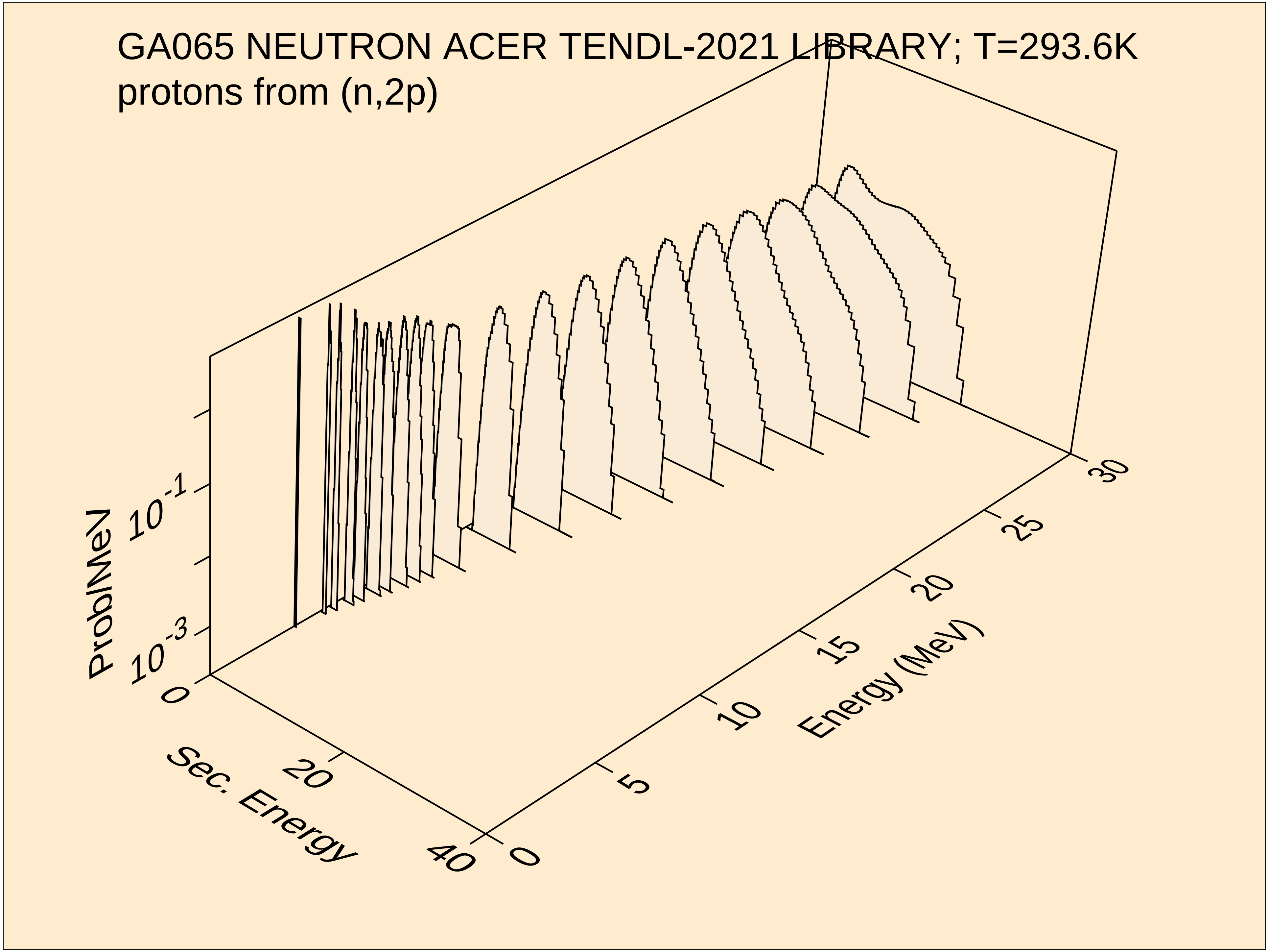

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,3np)
ProbMeV
10^{1}
10^{-1}
10^{-3}
0
2
4
6
Sec. Energy
25
26
27
28
29
30
Energy (MeV)

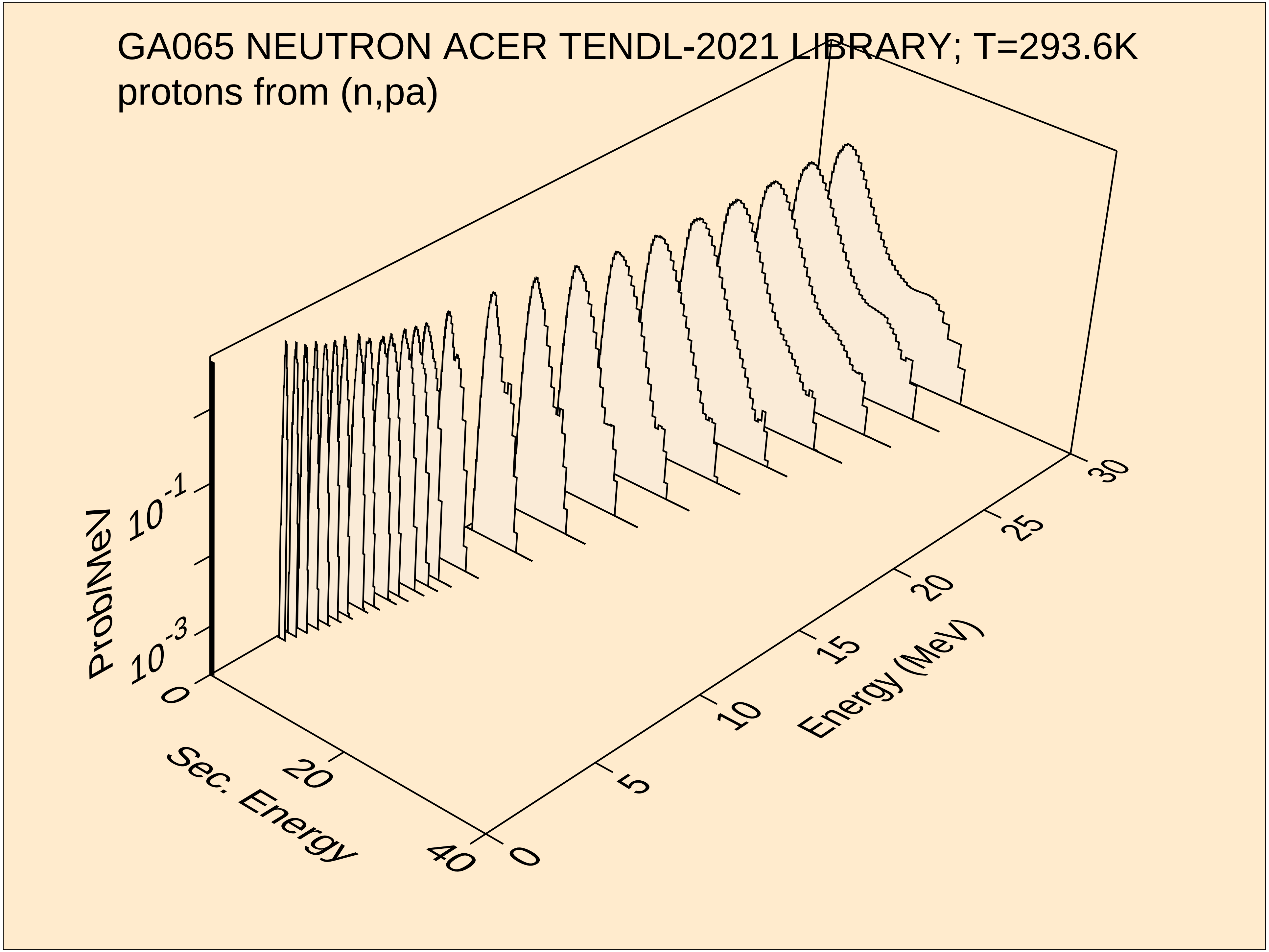

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,2np)
Prob/MeV
10^{-1}
10^{-3}
0
Sec. Energy
10
20
Energy (MeV)
10
12
14
16
18
20
22
24
26
28
30



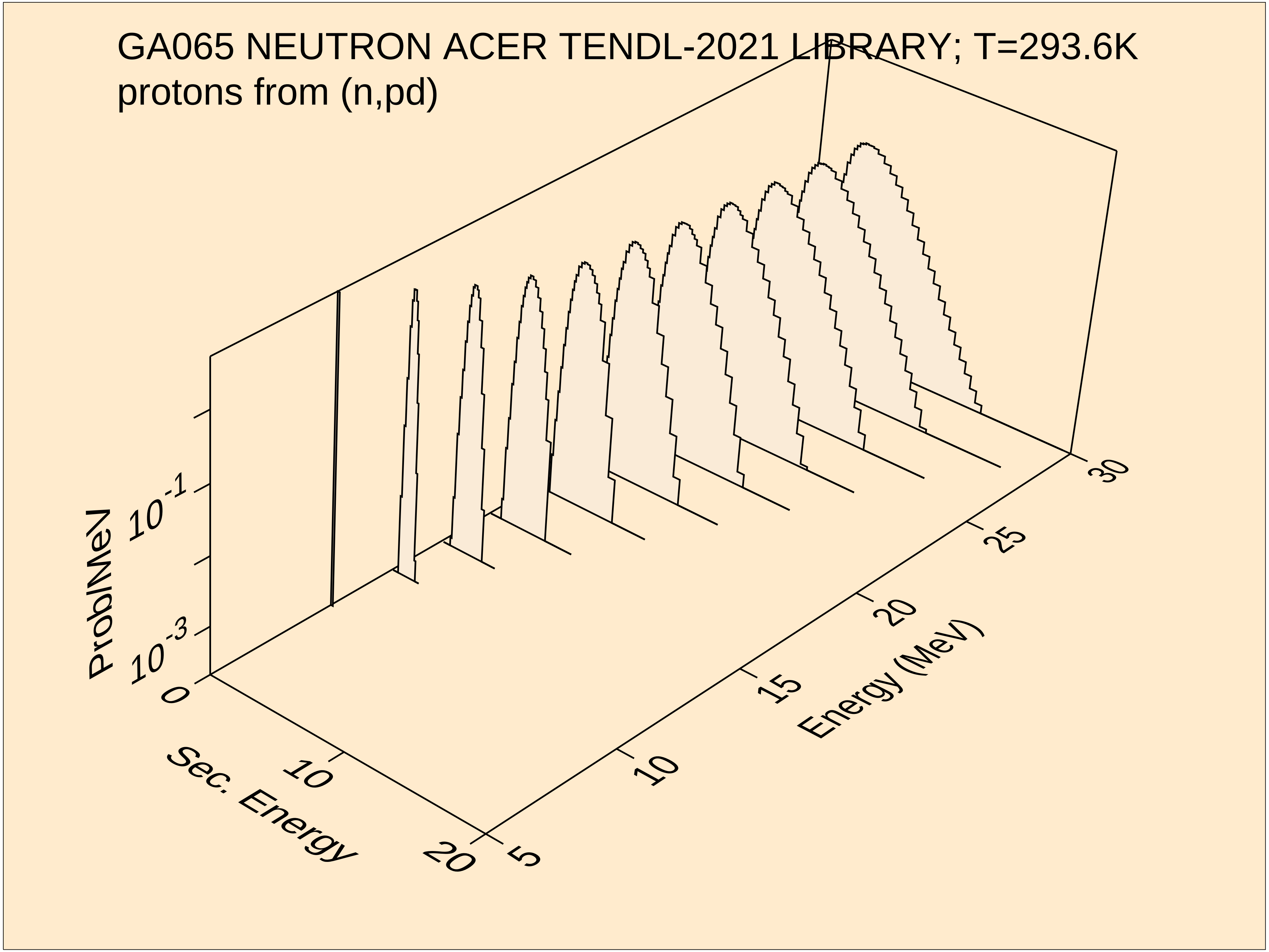
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,npa)
Prob/MeV
10^-1
10^-3
0
Sec. Energy
10
20
Energy (MeV)
5
10
15
20
25
30


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,p)
ProblMeV
10^{0}
10^{-2}
0
20
40
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)

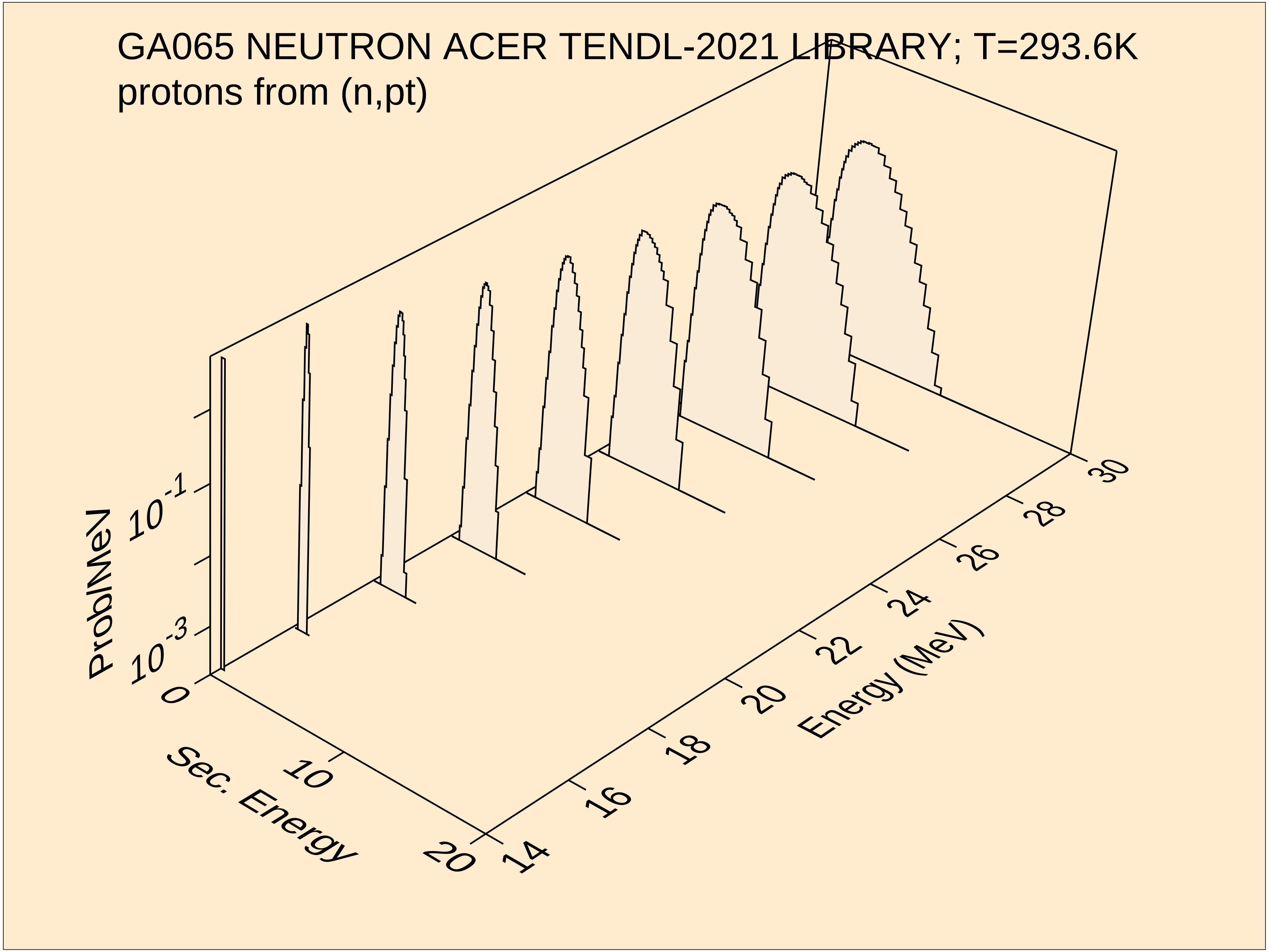

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,2p)
ProbMeV
10^{-1}
10^{-3}
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)

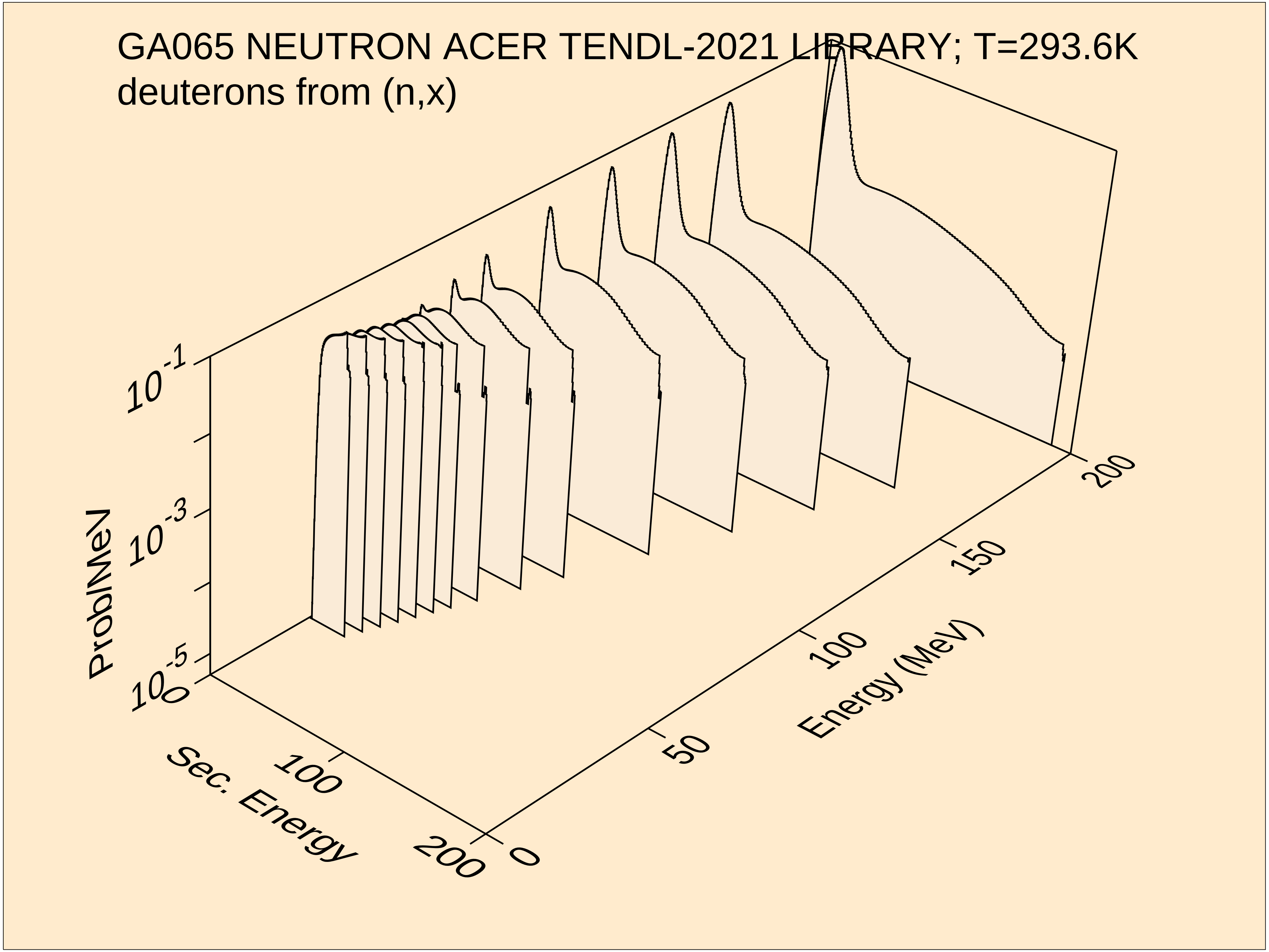


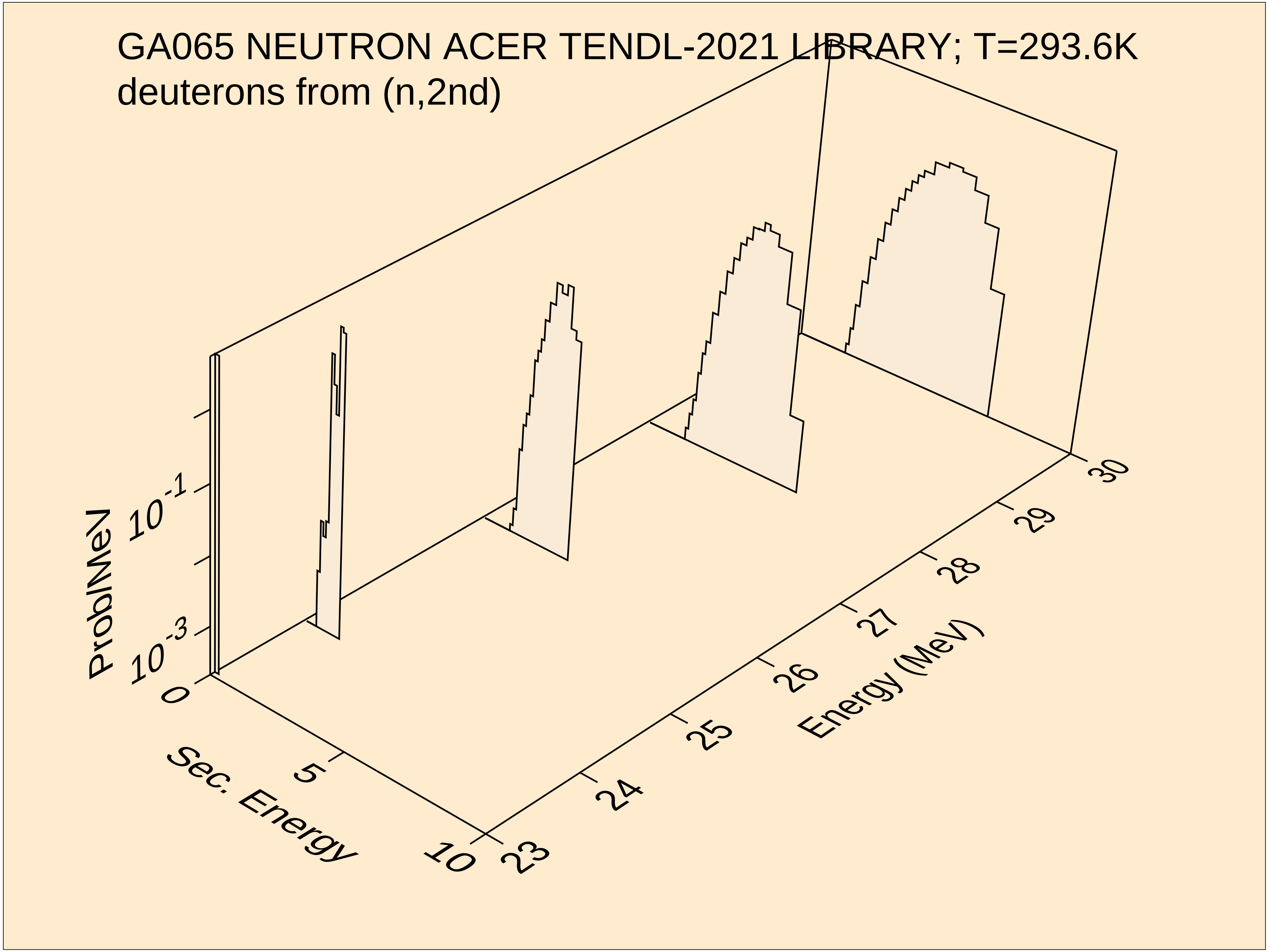
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,pa)
ProbMeV
10-1
10-3
0
20
40
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)



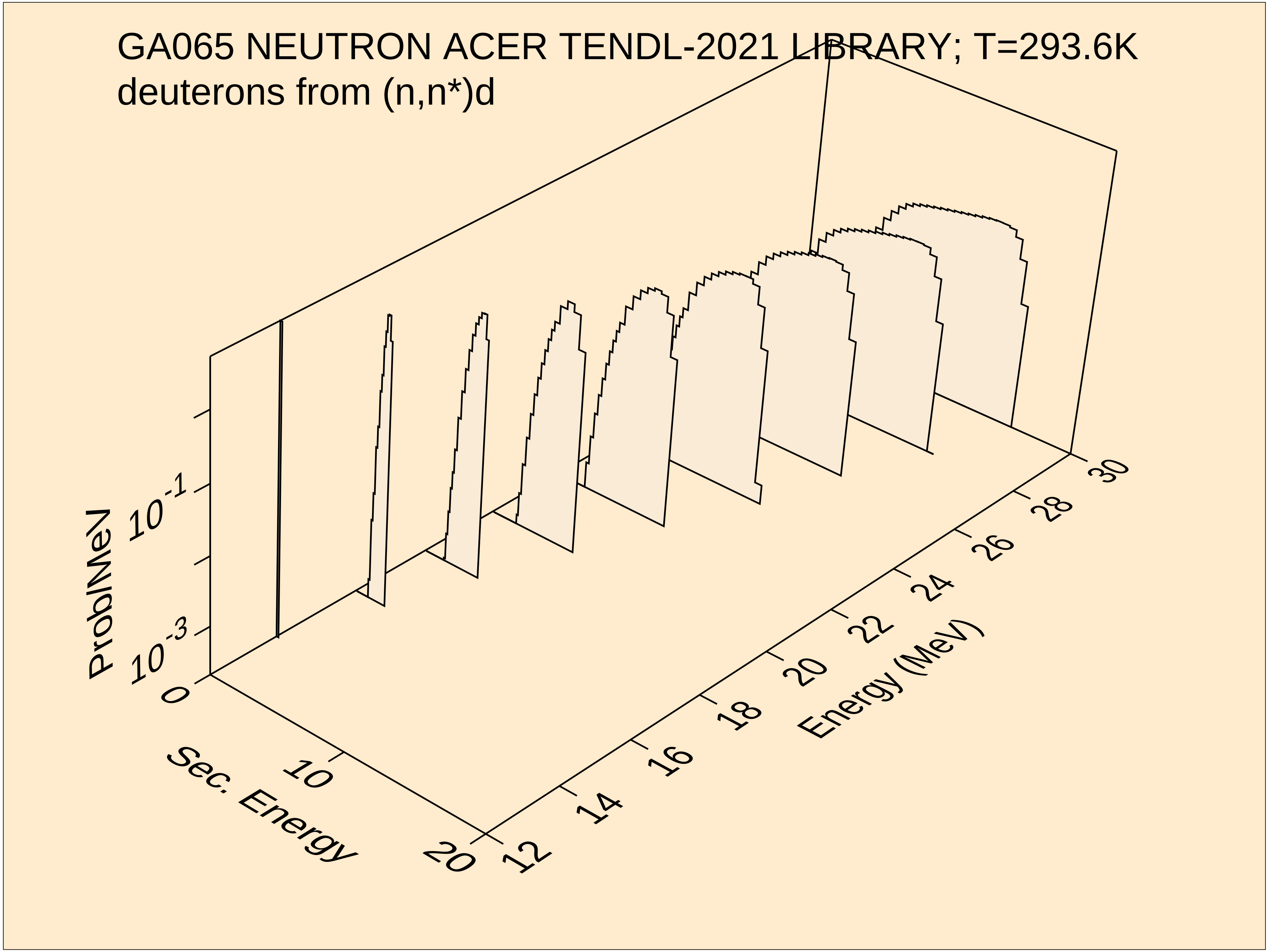
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,pd)
ProbMeV
10^{-1}
10^{-3}
0
Sec. Energy
10
20
5
10
15
20
25
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
protons from (n,pt)
Prob/MeV
10^-1
10^-3
0
Sec. Energy
10
20
14
16
18
20
22
24
26
28
30
Energy (MeV)

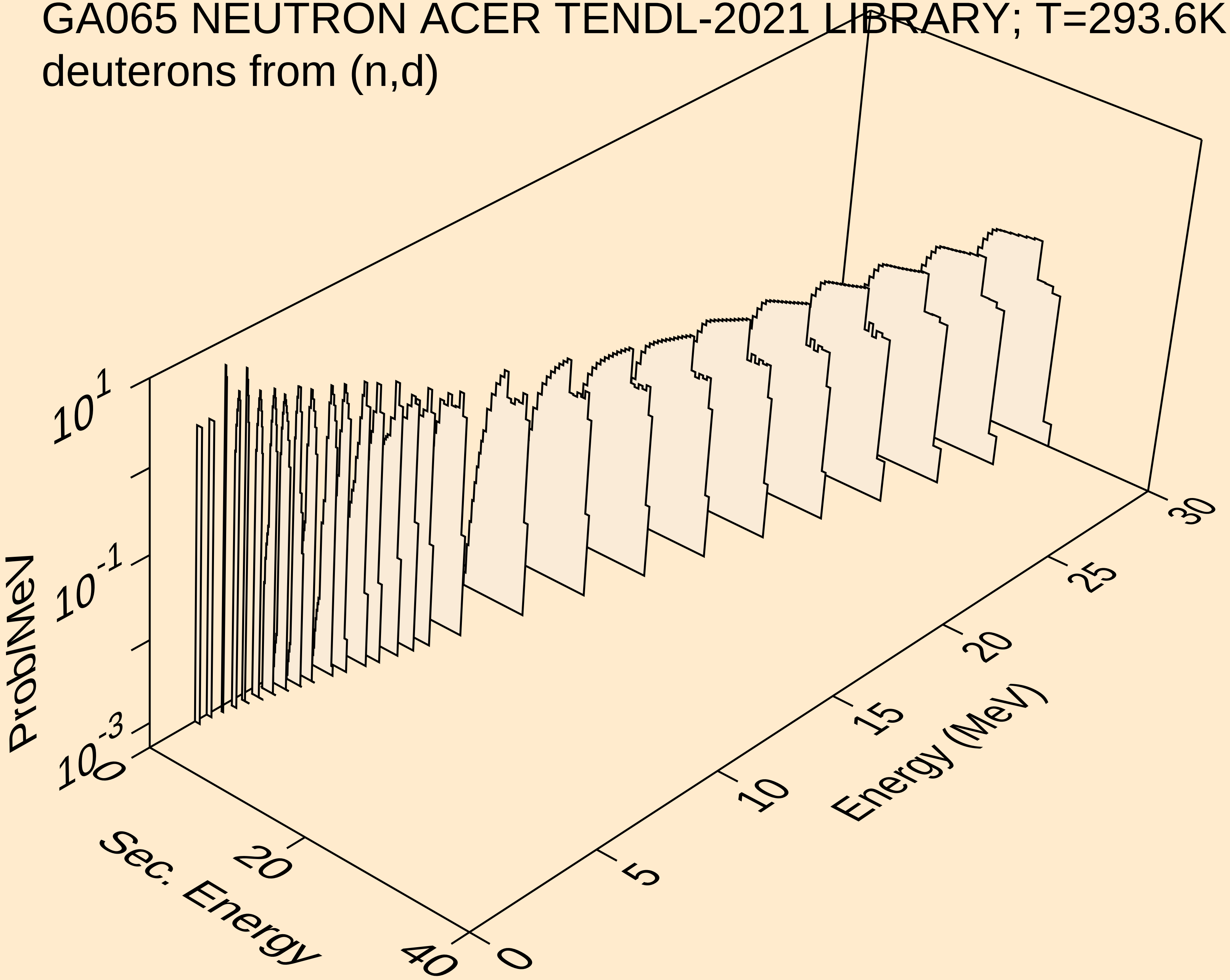

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
deuterons from (n,x)
ProbMeV
10-1
10-3
10-5
0
100
200
Sec. Energy
0
50
100
150
200
Energy (MeV)

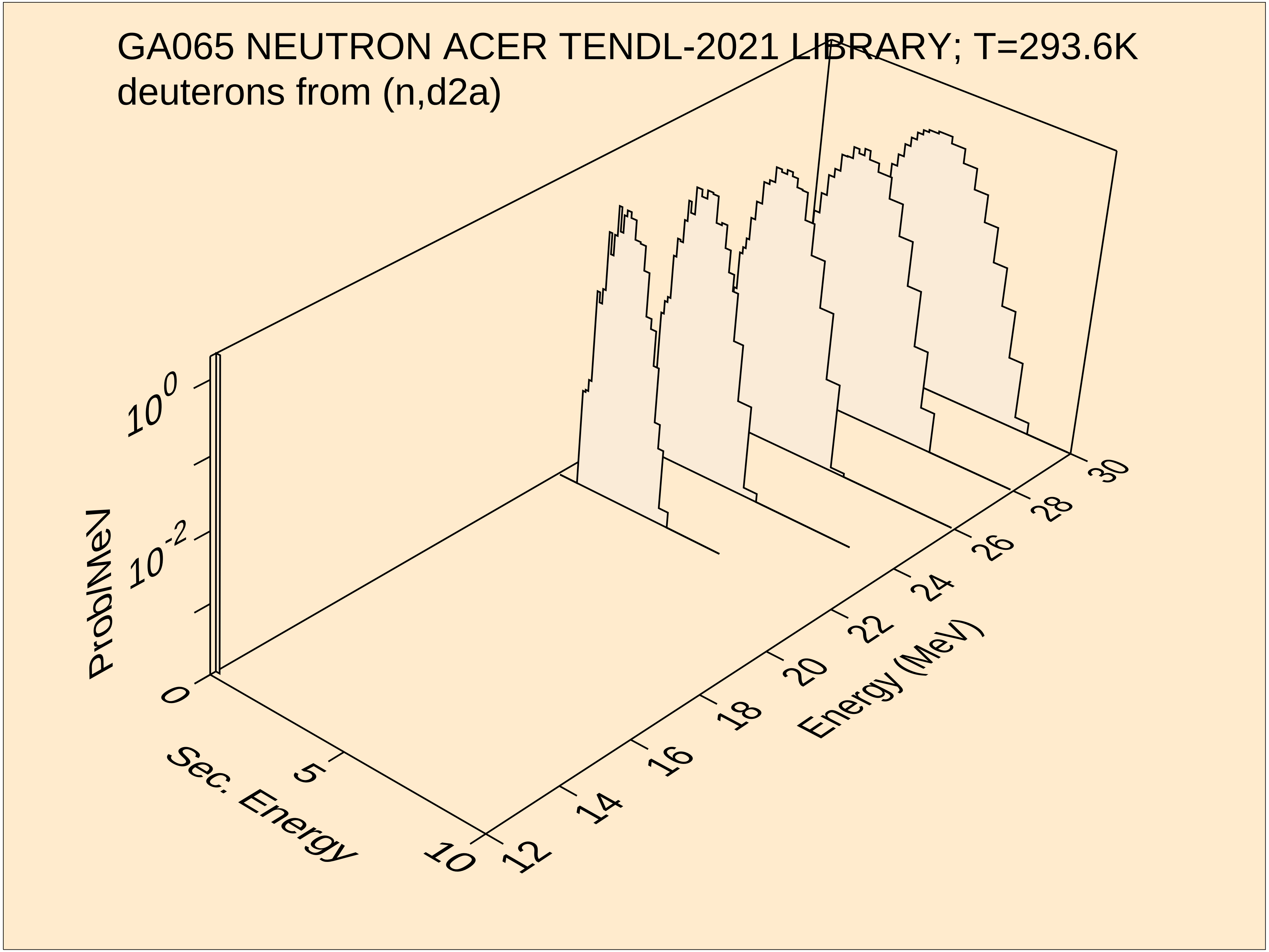


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
deuterons from (n,2nd)
ProbIMeV
10^-1
10^-3
0
5
10
Sec. Energy
23
24
25
26
27
28
29
30
Energy (MeV)

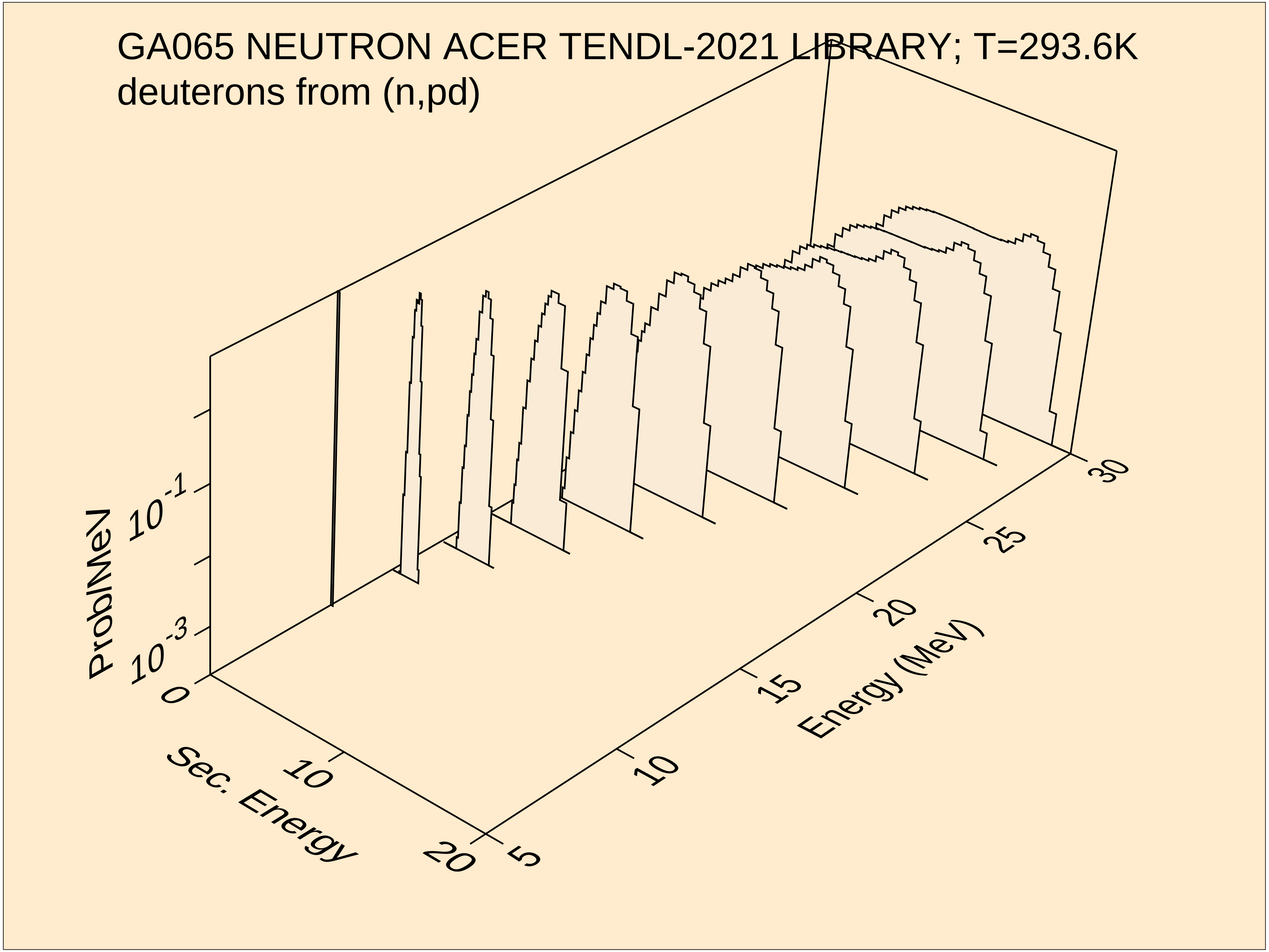

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
deuterons from (n,n*)d
ProbMeV
10^{-1}
10^{-3}
0
Sec. Energy
10
20
12
14
16
18
20
22
24
26
28
30
Energy (MeV)

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
deuterons from (n,d)

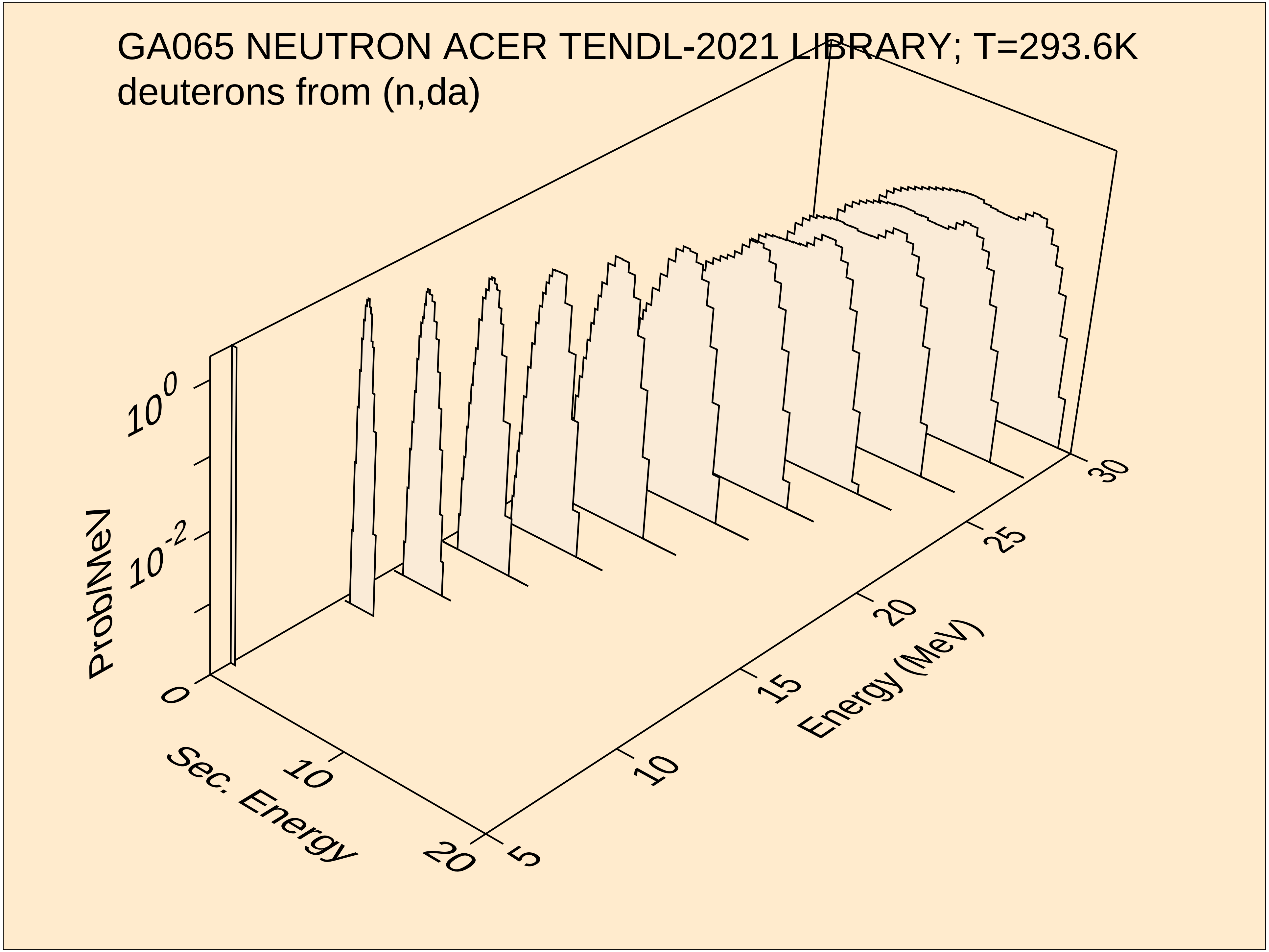


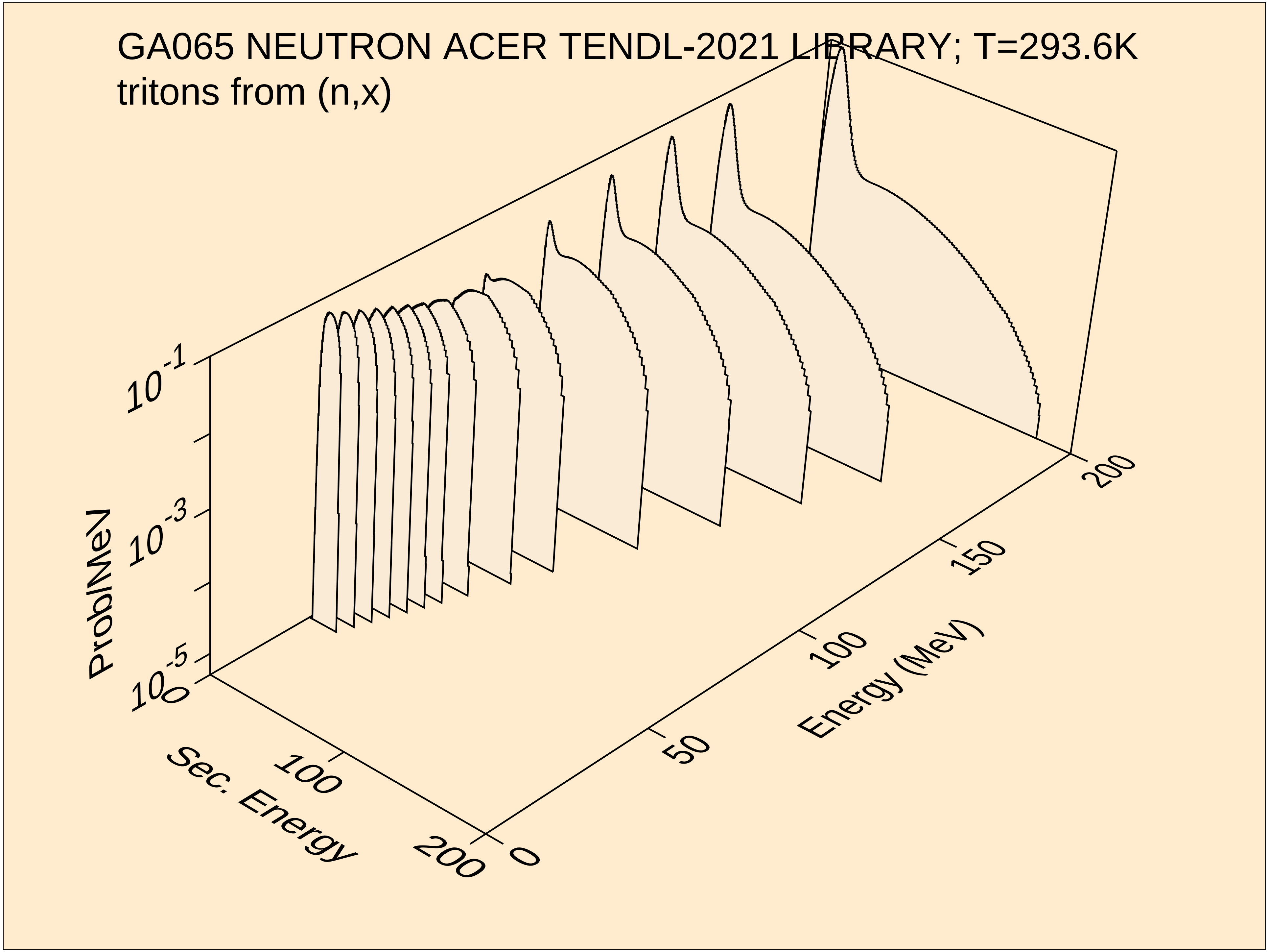


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
deuterons from (n,d2a)
ProbMeV
10^{0}
10^{-2}
0
5
10
Sec. Energy
12
14
16
18
20
22
24
26
28
30
Energy (MeV)

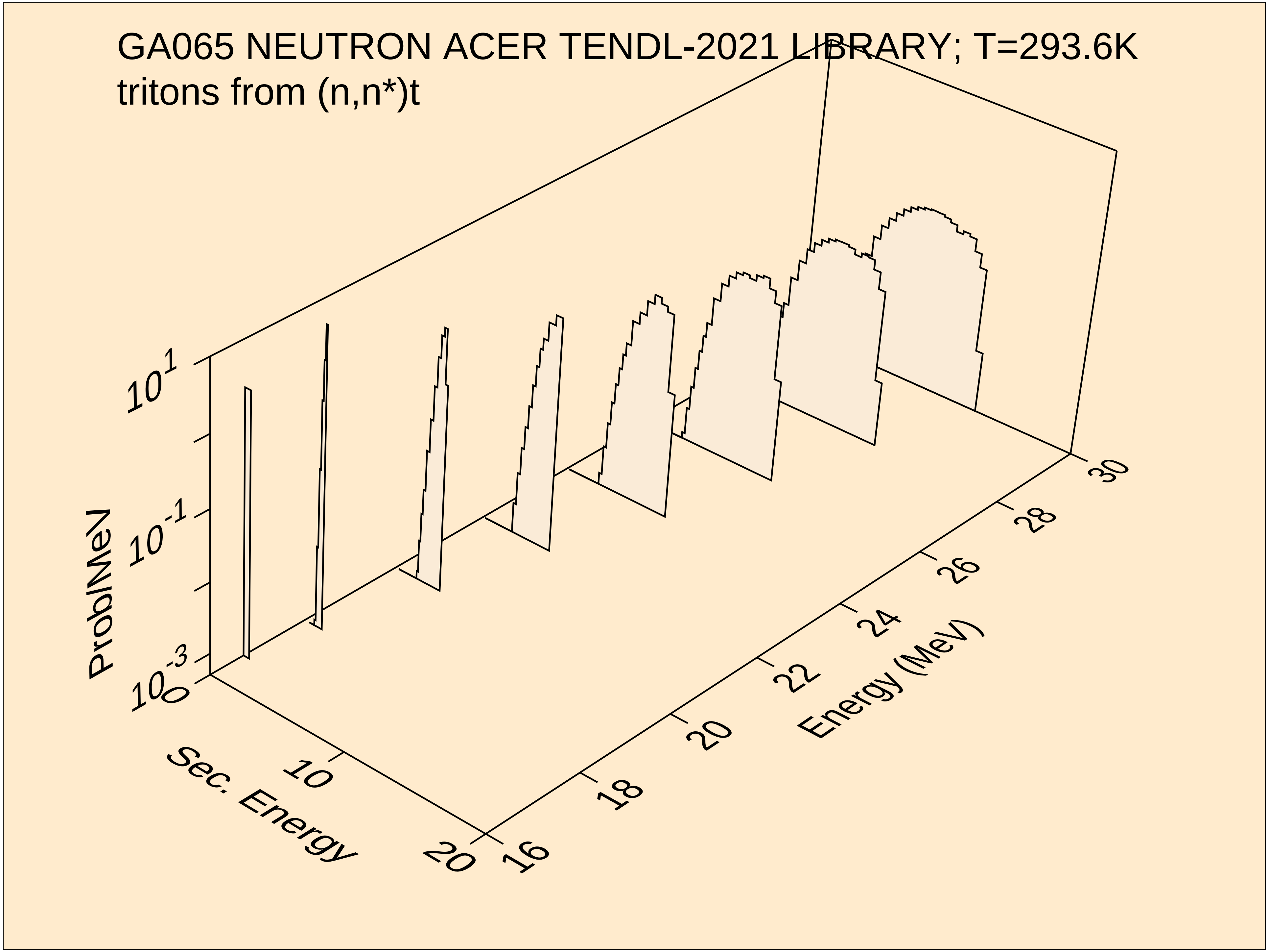


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
deuterons from (n,pd)
Prob/MeV
10^{-1}
10^{-3}
0
10
20
Sec. Energy
5
10
15
20
25
30
Energy (MeV)

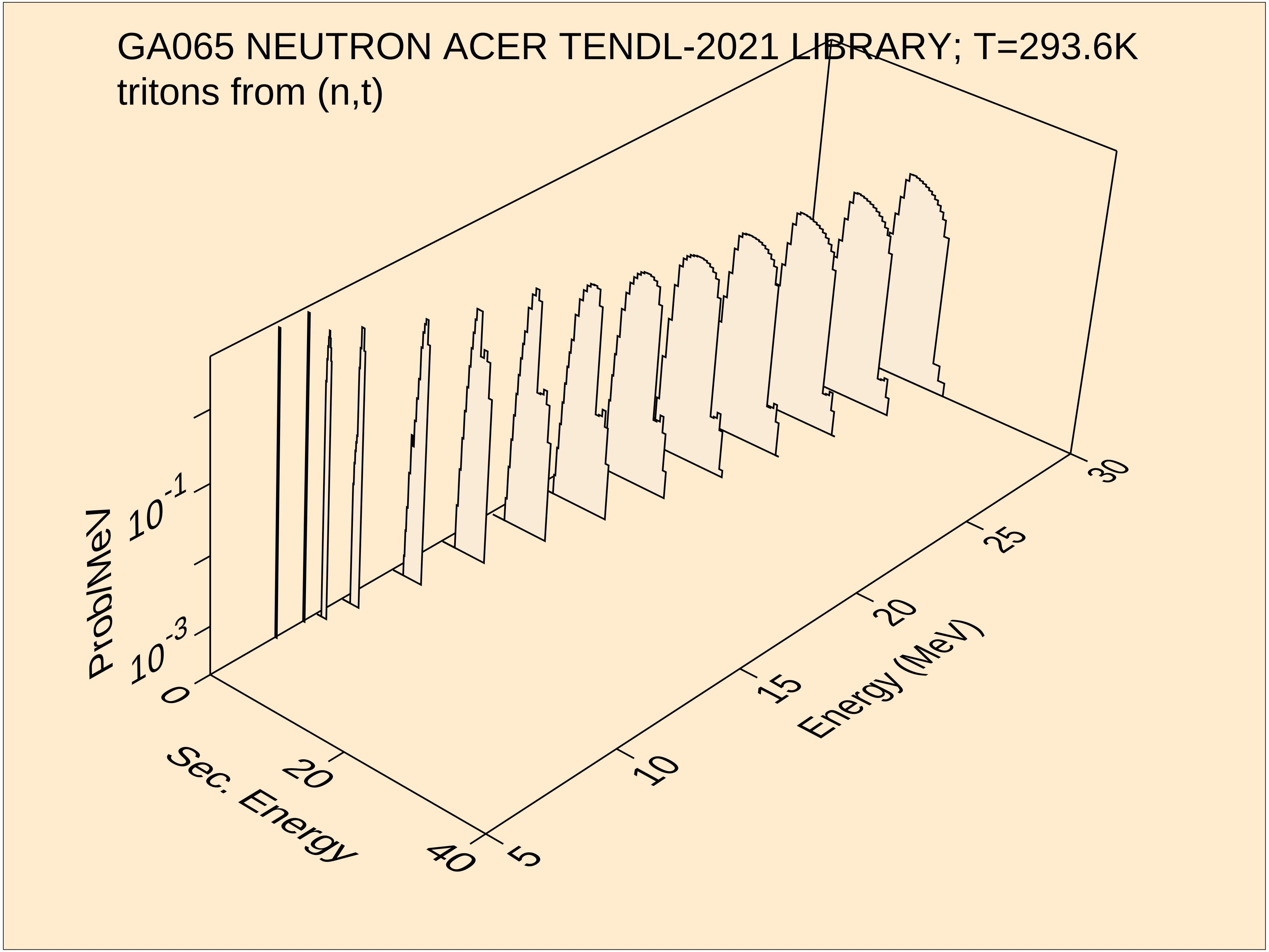

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
deuterons from (n,da)
10^0
10^-2
Prob/MeV
0
10
20
Sec. Energy
5
10
15
20
25
30
Energy (MeV)



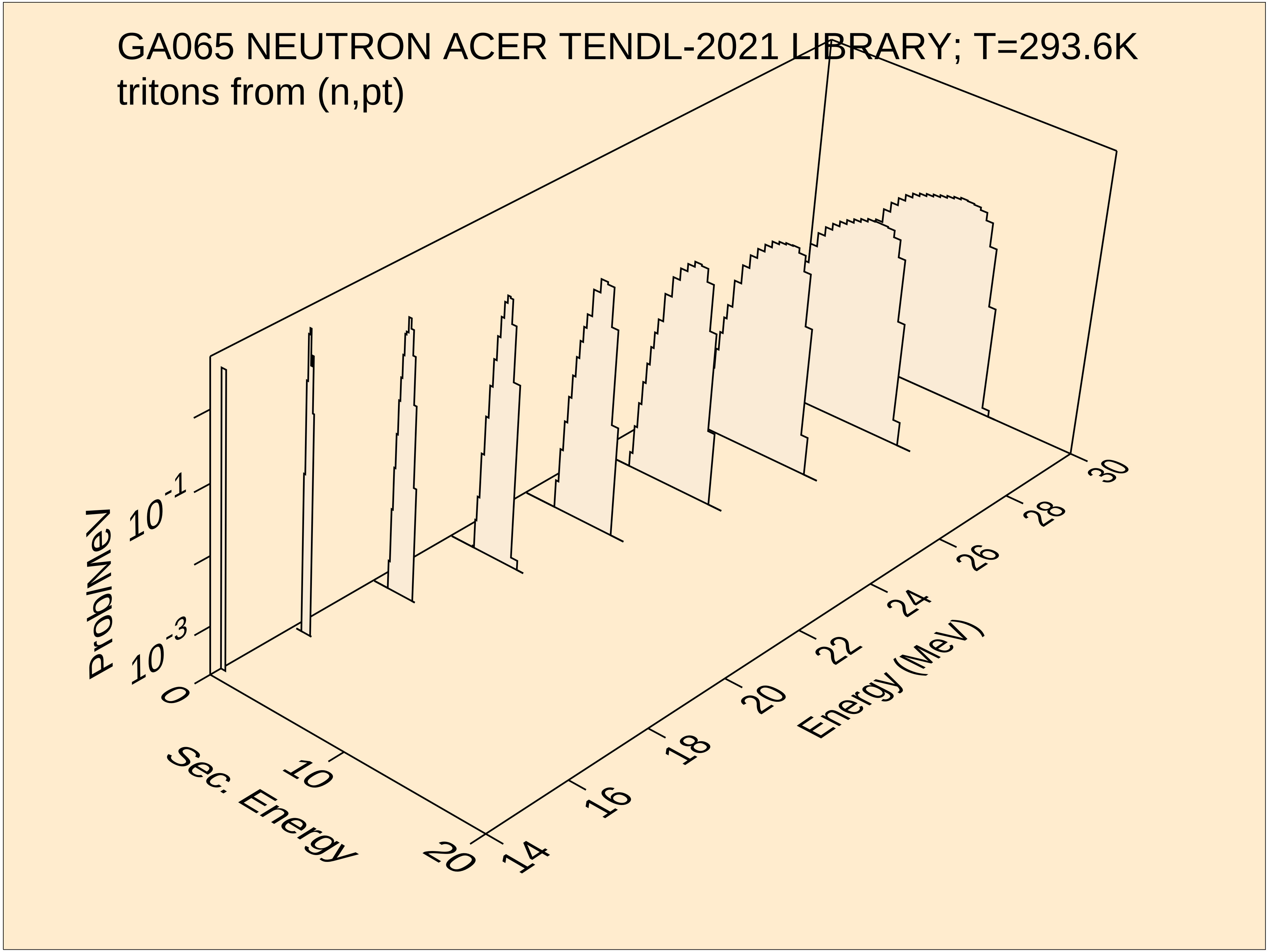
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
tritons from (n,x)
Prob/MeV
10^{-1}
10^{-3}
10^{-5}
0
100
200
Sec. Energy
0
50
100
150
200
Energy (MeV)

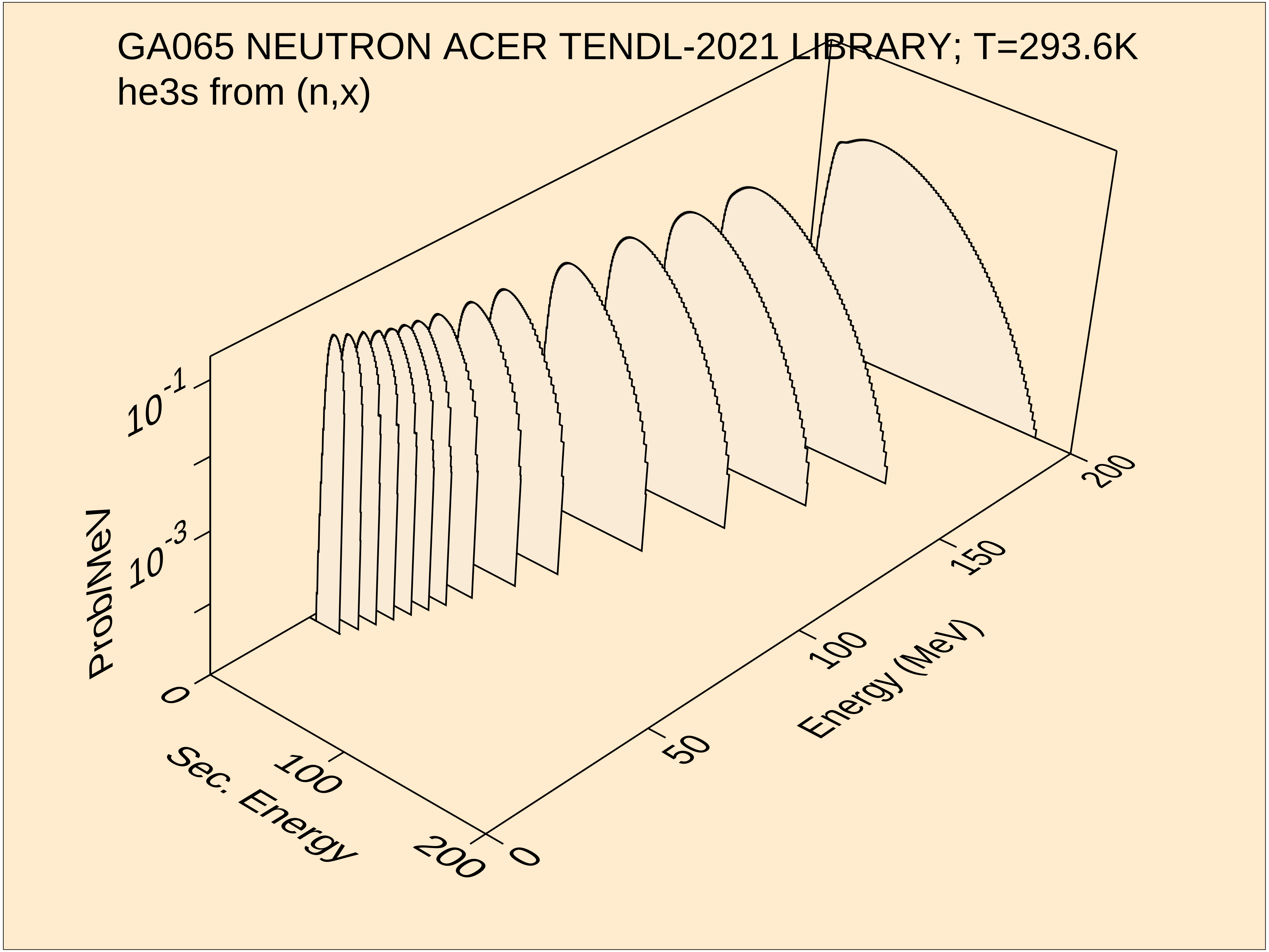


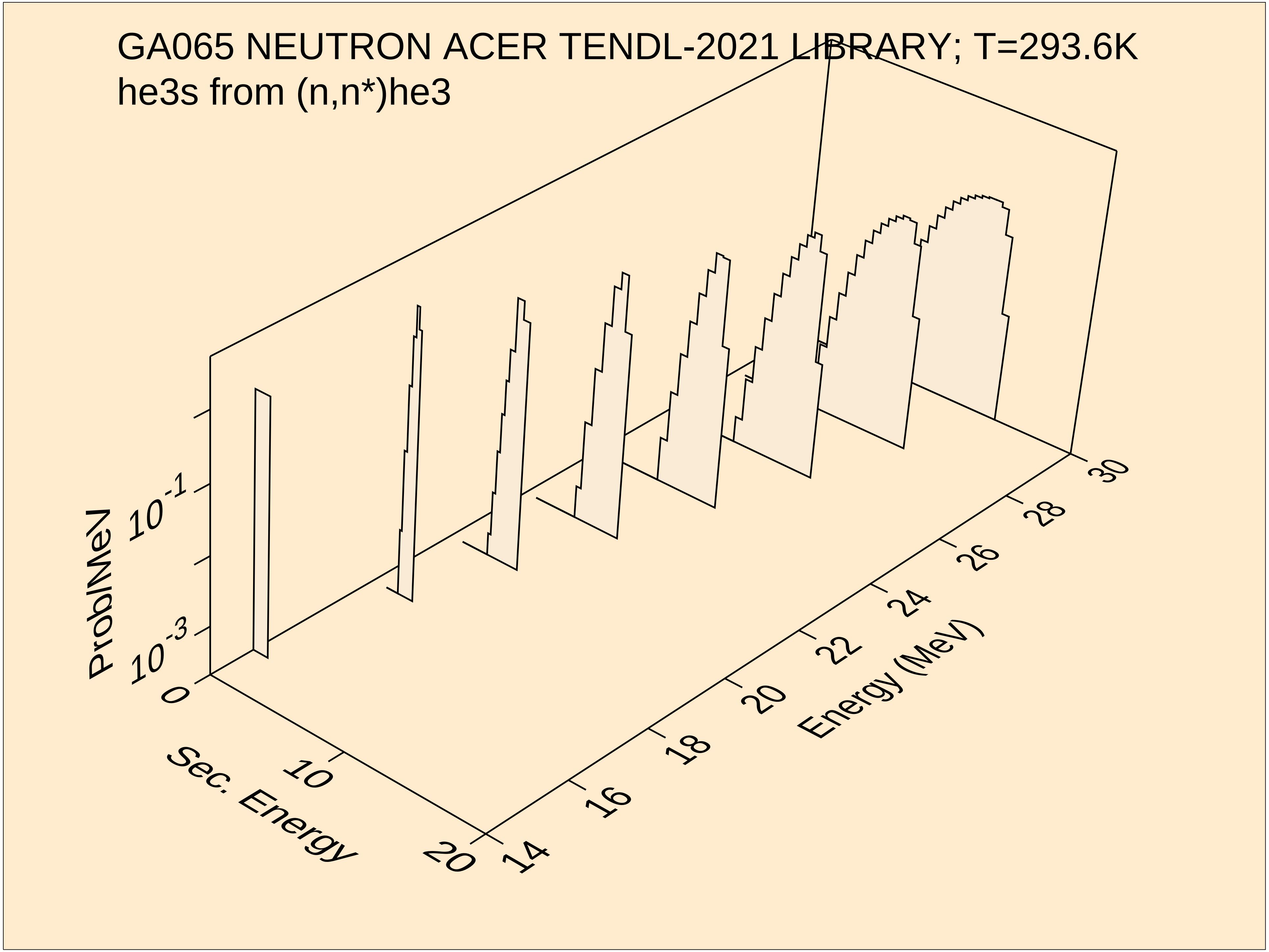
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
tritons from (n,n*)t
ProbMeV
10^{1}
10^{-1}
10^{-3}
0
10
20
Sec. Energy
16
18
20
22
24
26
28
30
Energy (MeV)

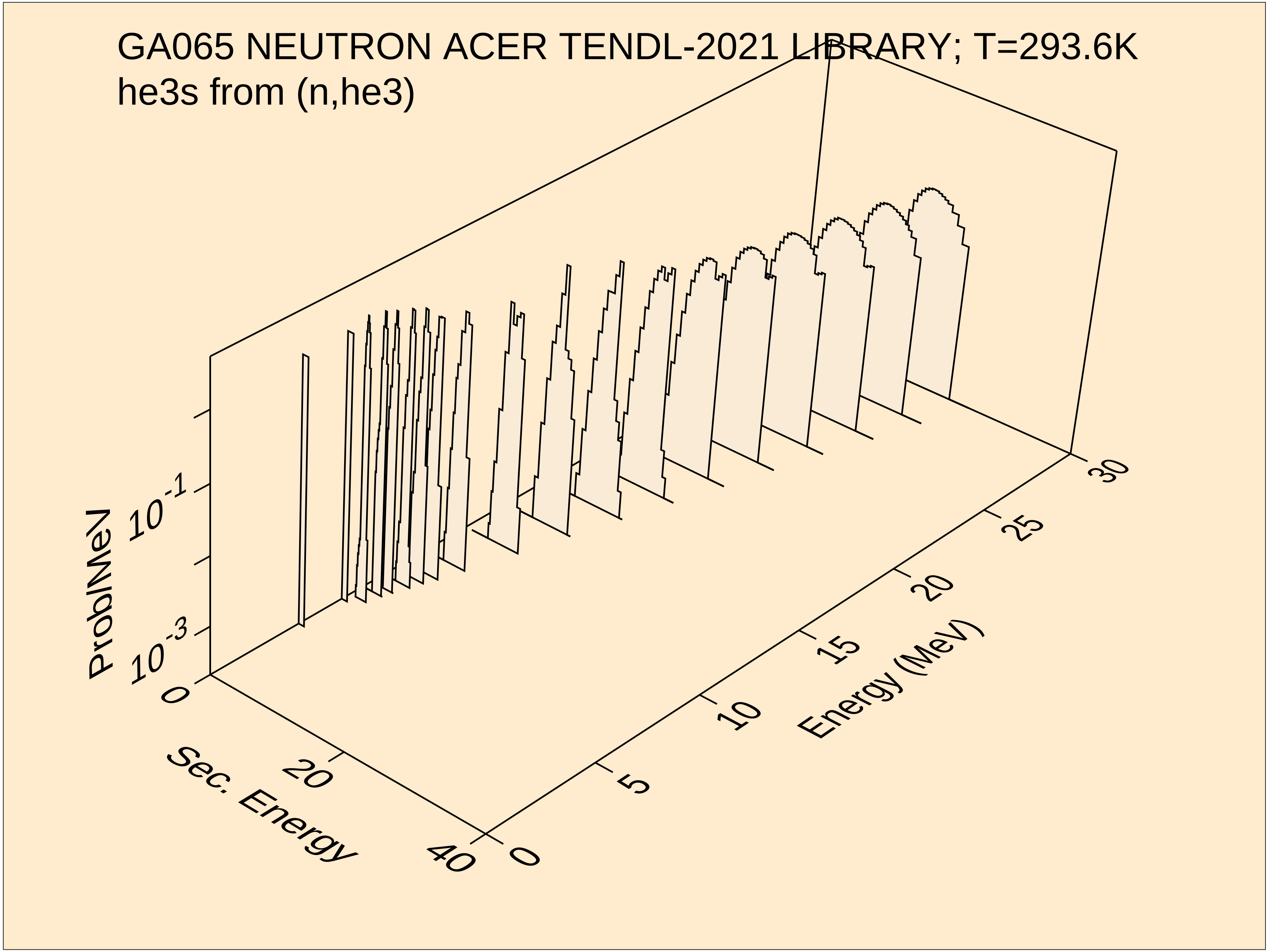


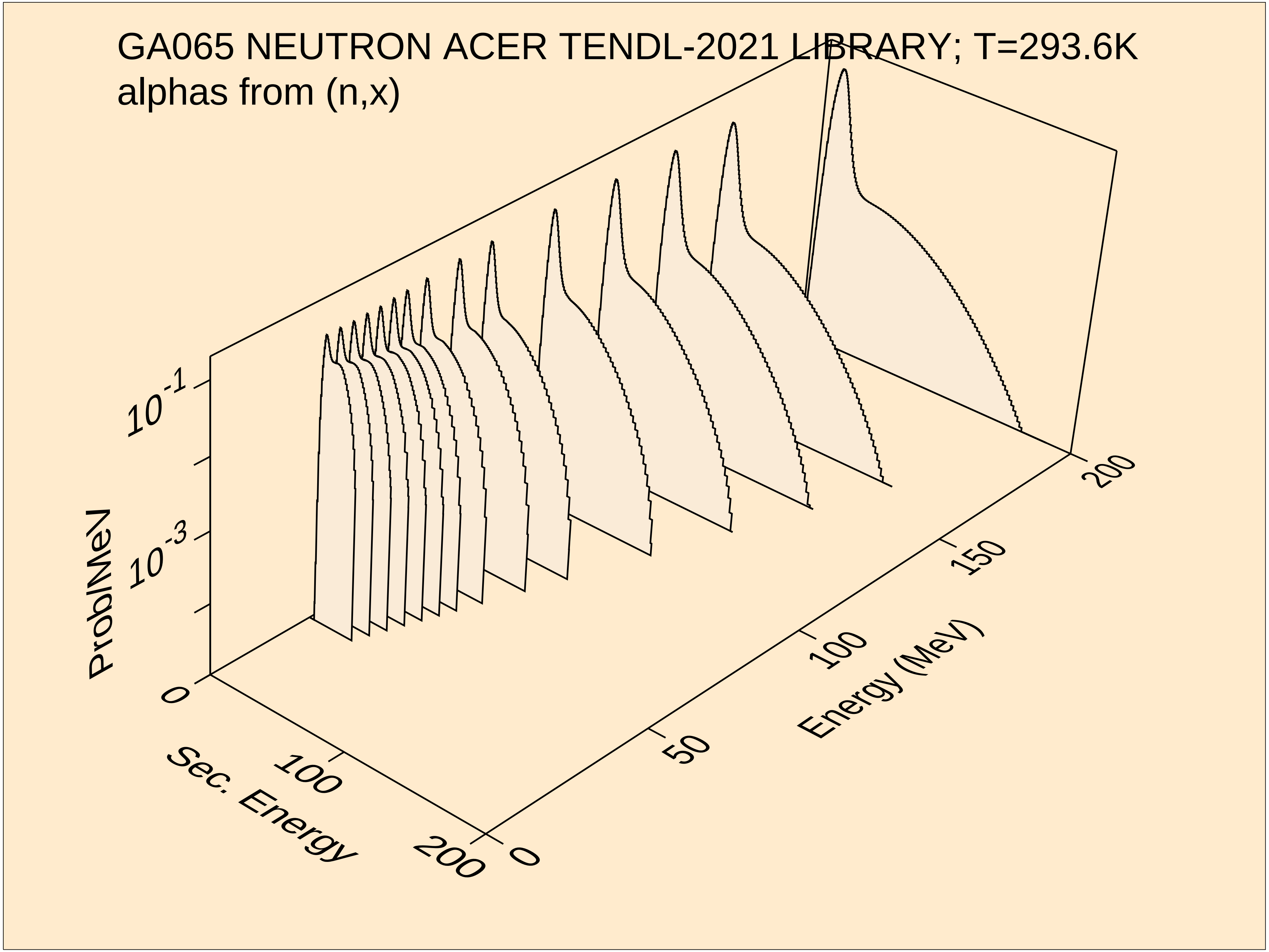
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
tritons from (n,t)
ProbMeV
10^{-1}
10^{-3}
0
Sec. Energy
20
40
5
10
15
20
25
30
Energy (MeV)

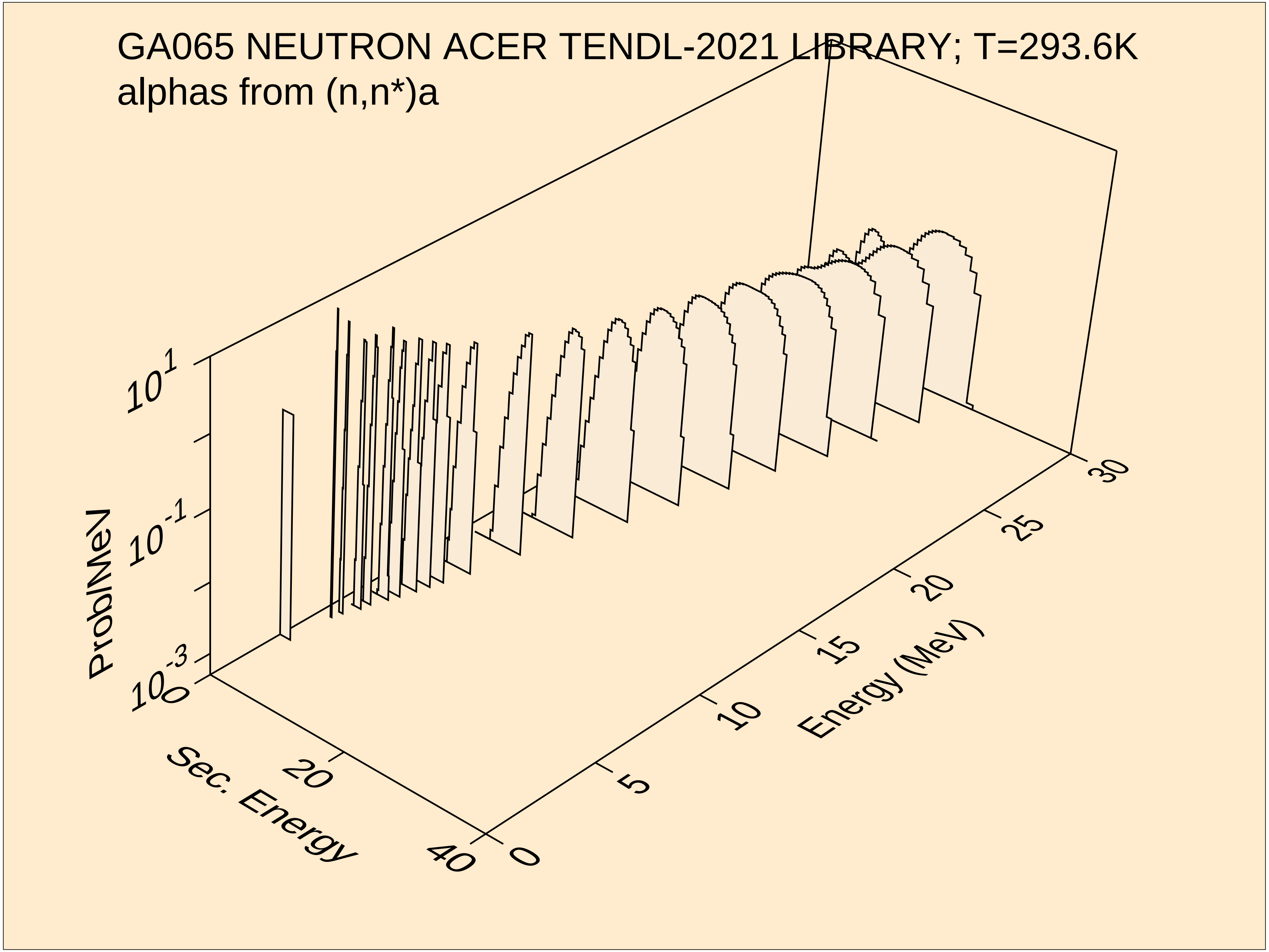

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
tritons from (n,pt)
Prob/MeV
10^{-1}
10^{-3}
0
Sec. Energy
10
20
Energy (MeV)
14
16
18
20
22
24
26
28
30

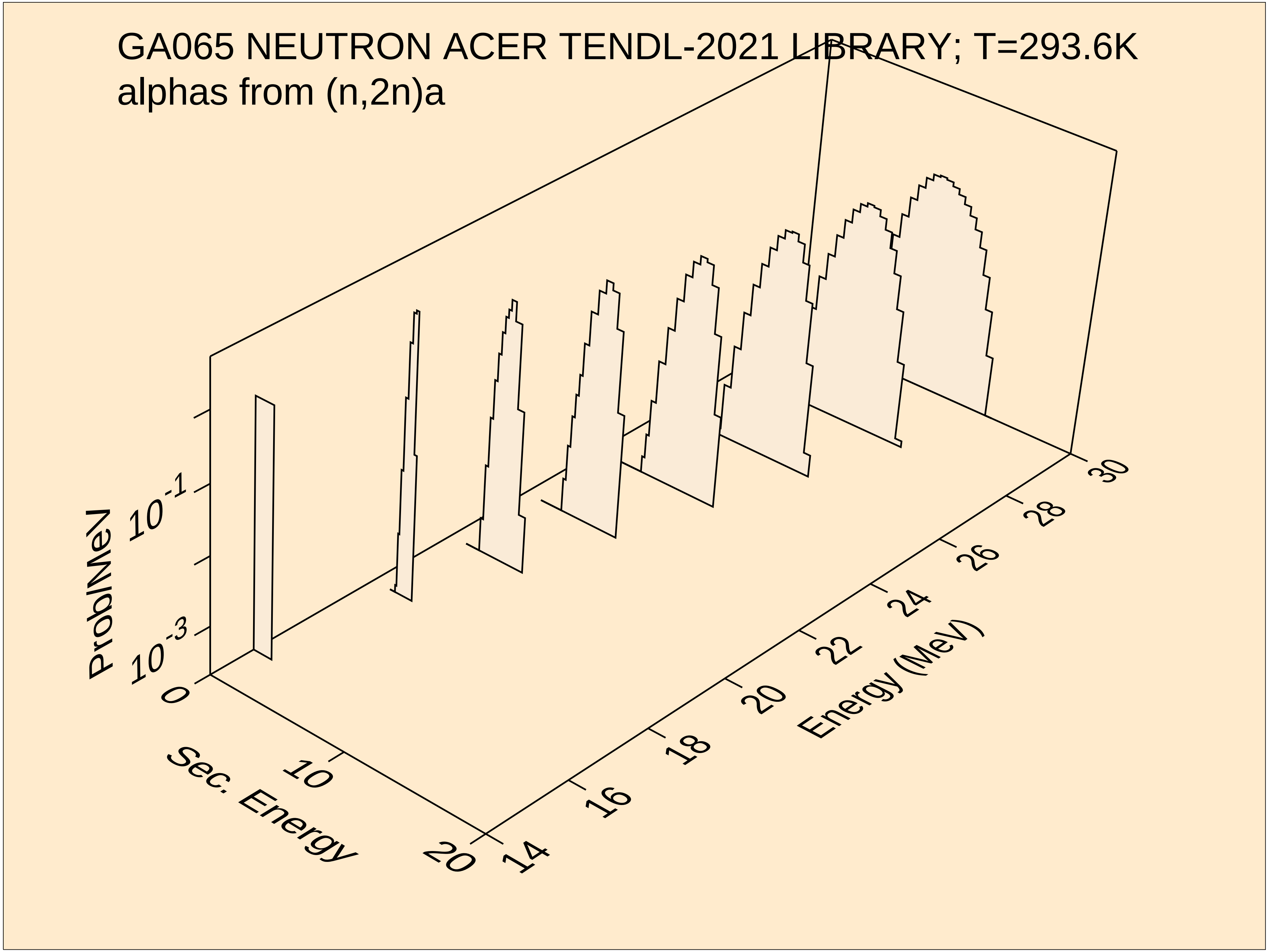

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
he3s from (n,x)
ProblMeV
10^{-1}
10^{-3}
0
100
200
Sec. Energy
0
50
100
150
200
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
he3s from (n,n*)he3
Prob/MeV
10^{-1}
10^{-3}
0
Sec. Energy
10
20
14
16
18
20
22
24
26
28
30
Energy (MeV)

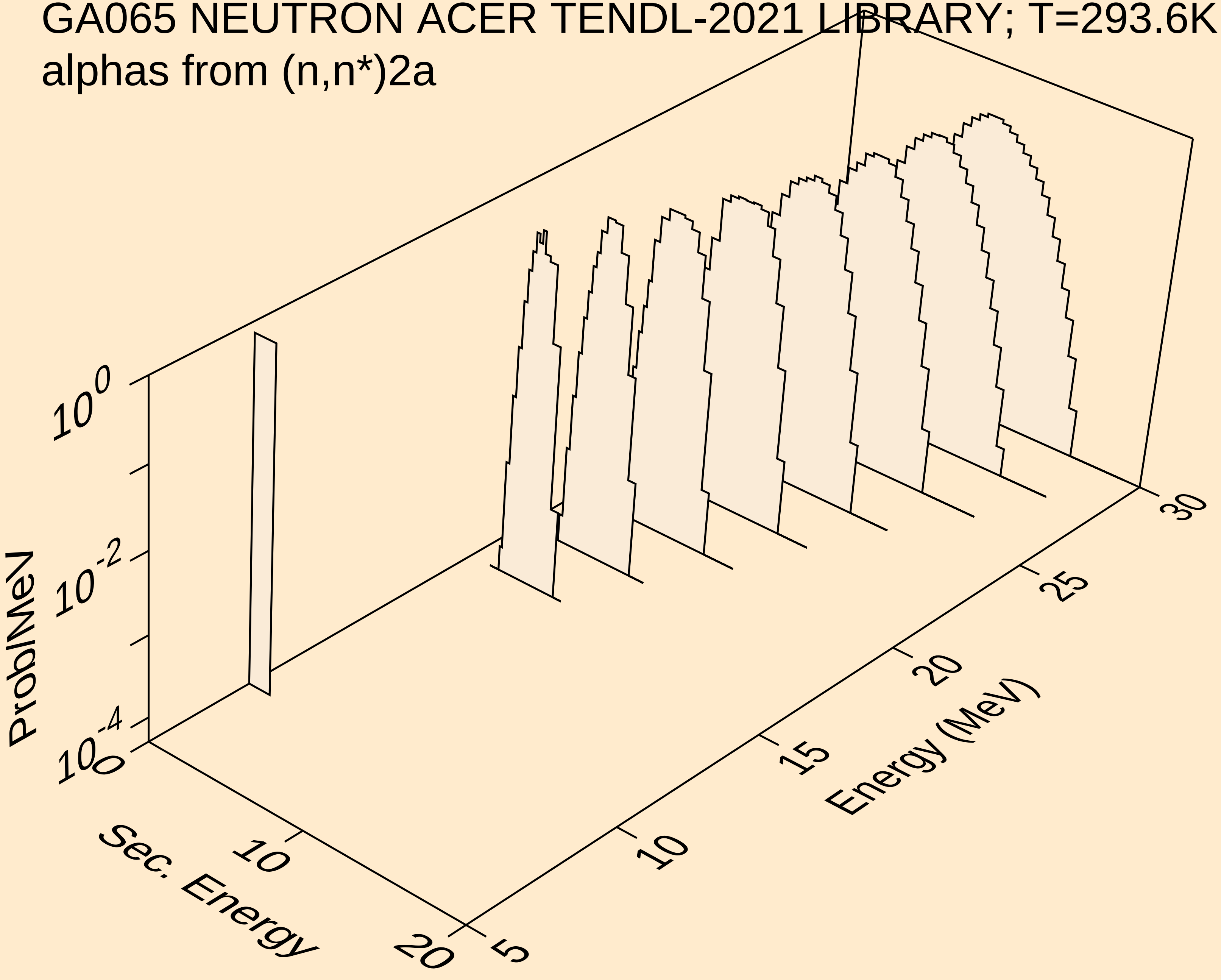

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
he3s from (n,he3)
Prob/MeV
10^{-1}
10^{-3}
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)

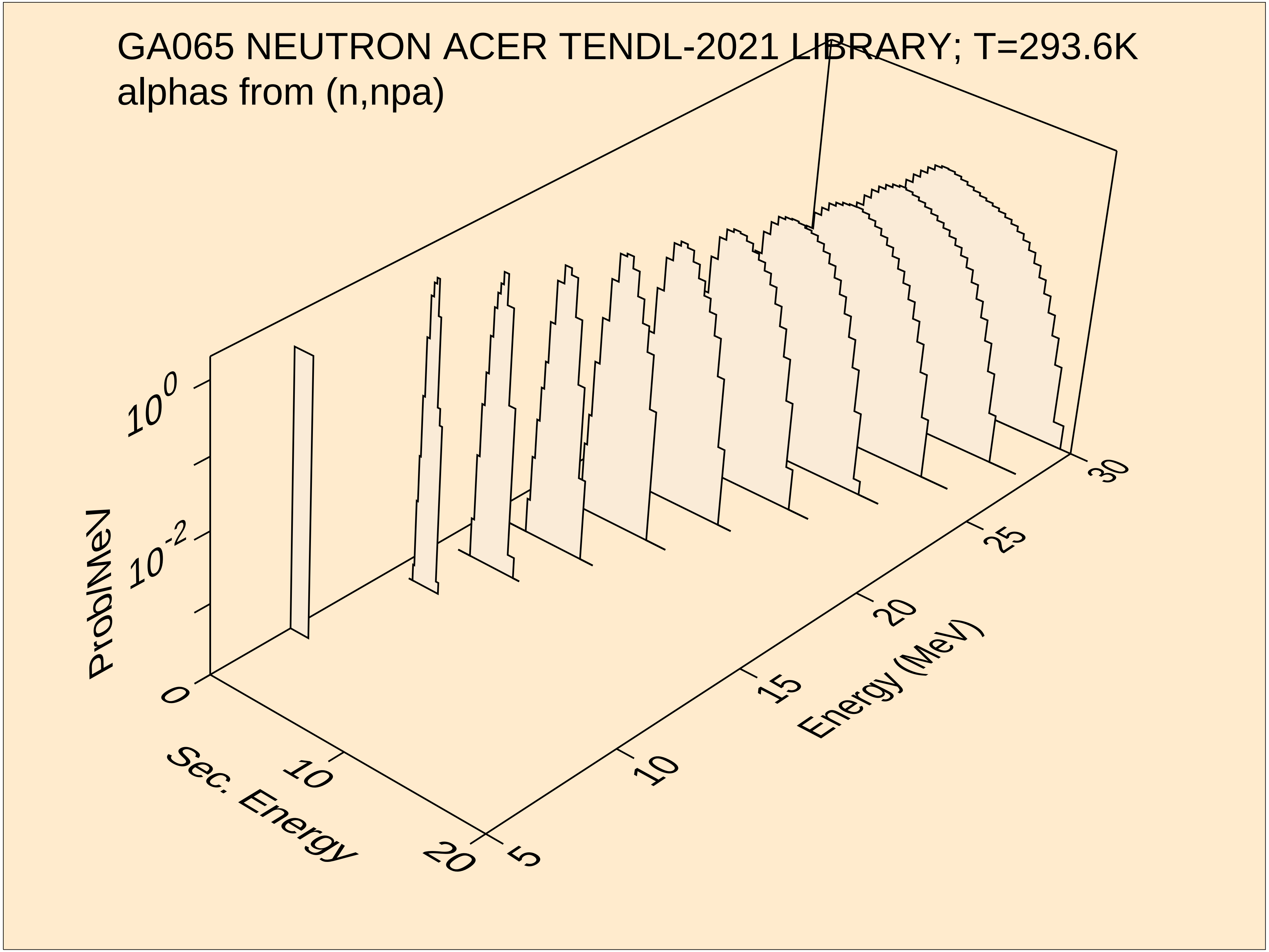

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,x)
ProbMeV
10^{-1}
10^{-3}
0
100
200
Sec. Energy
0
50
100
150
200
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,n*)a
Prob/MeV
10^{1}
10^{-1}
10^{-3}
0
20
40
Sec. Energy
0
5
10
15
20
25
30
Energy (MeV)

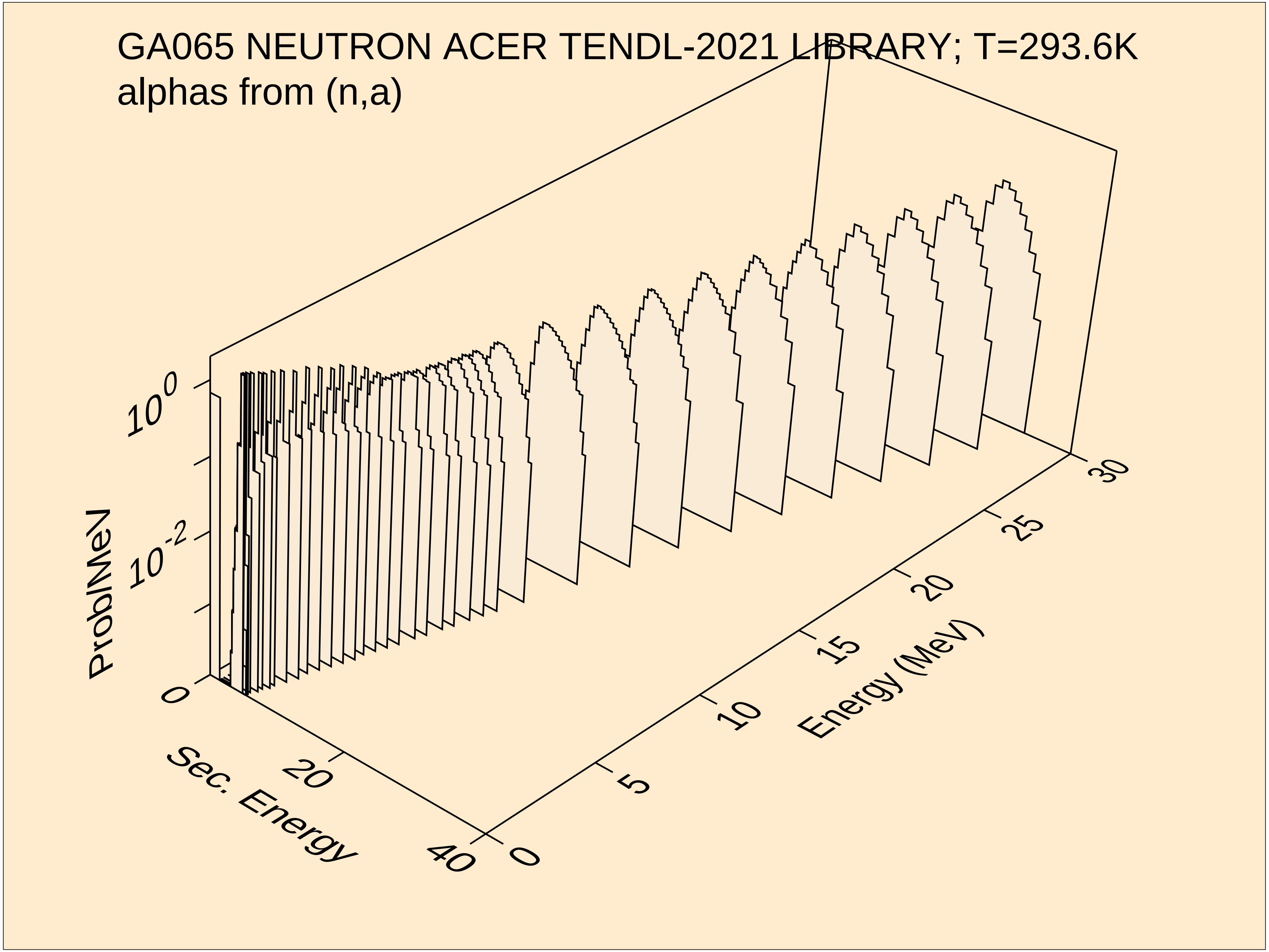

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,2n)a
Prob/MeV
10^-1
10^-3
0
Sec. Energy
10
20
Energy (MeV)
14
16
18
20
22
24
26
28
30

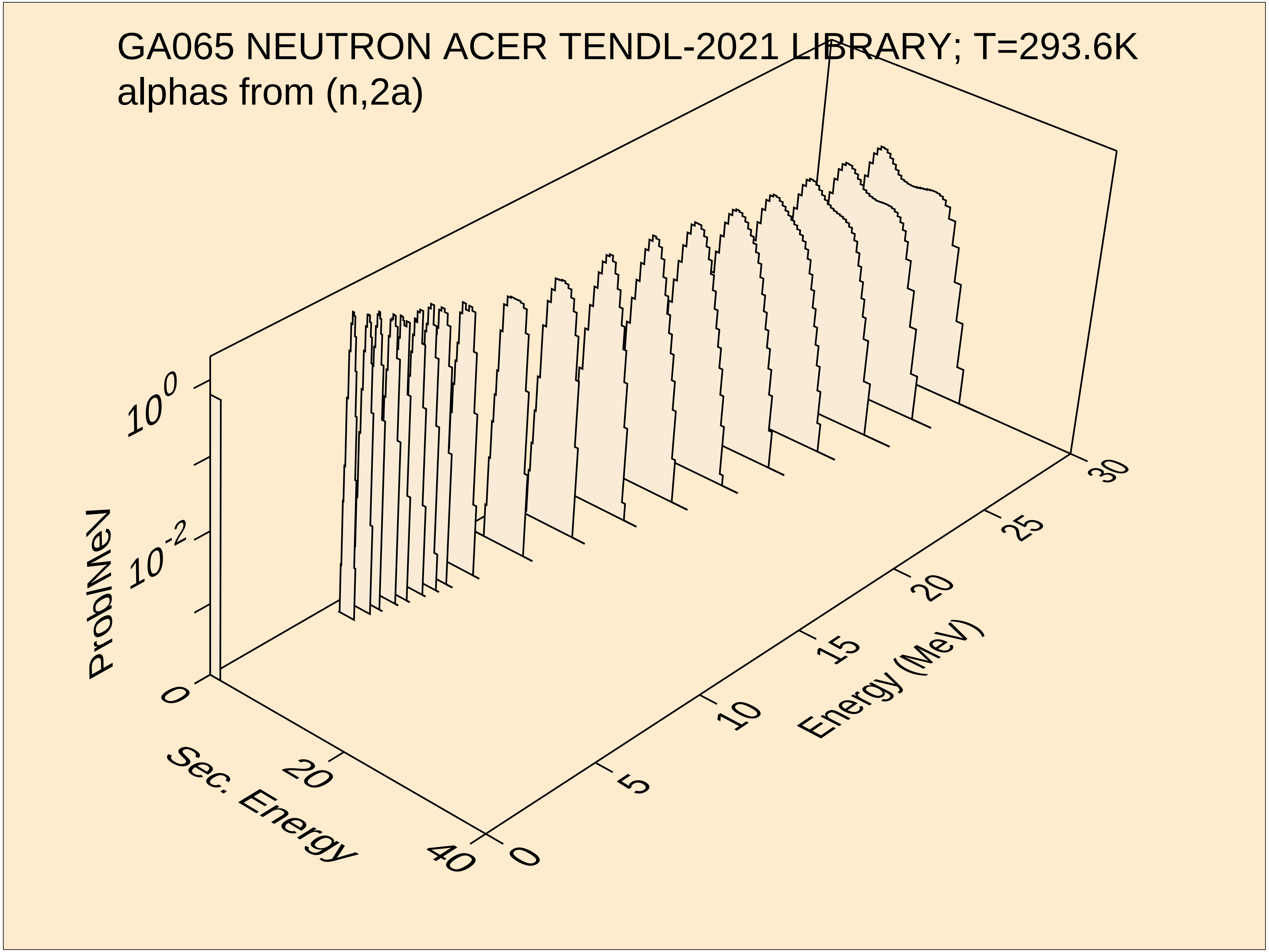
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,n*)2a



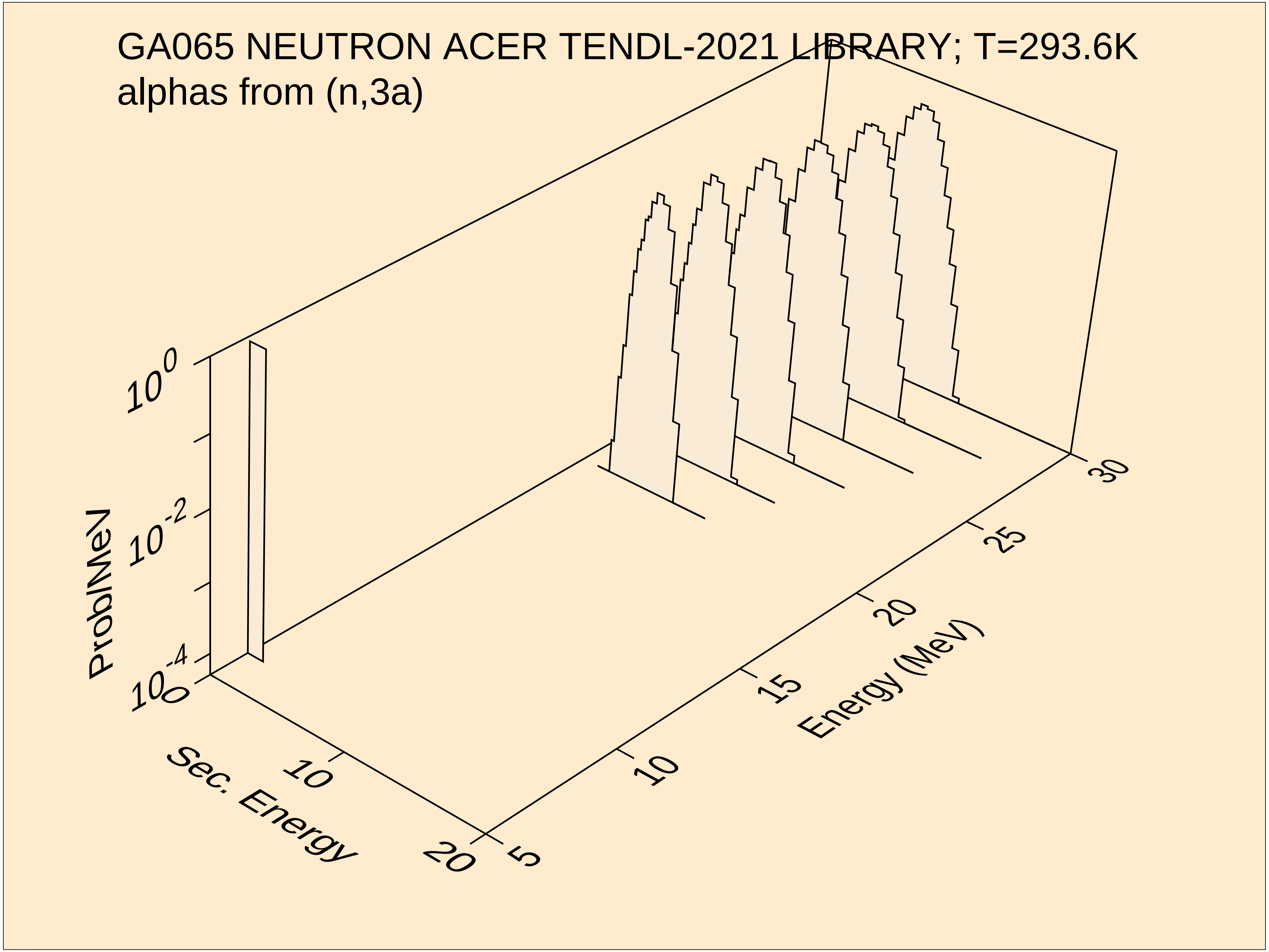


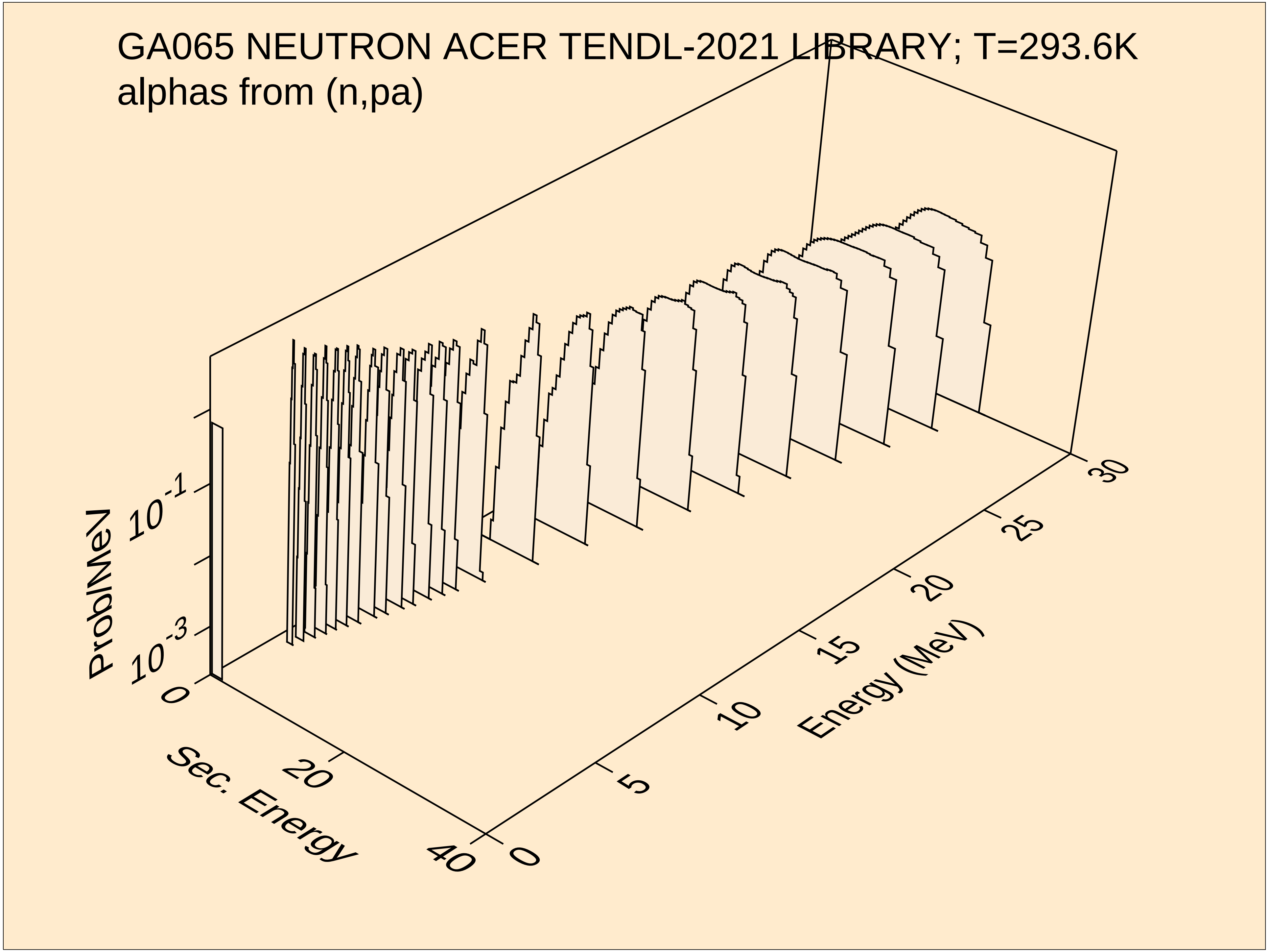
GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,npa)
ProbMeV
10^{0}
10^{-2}
0
10
20
Sec. Energy
5
10
15
20
25
30
Energy (MeV)

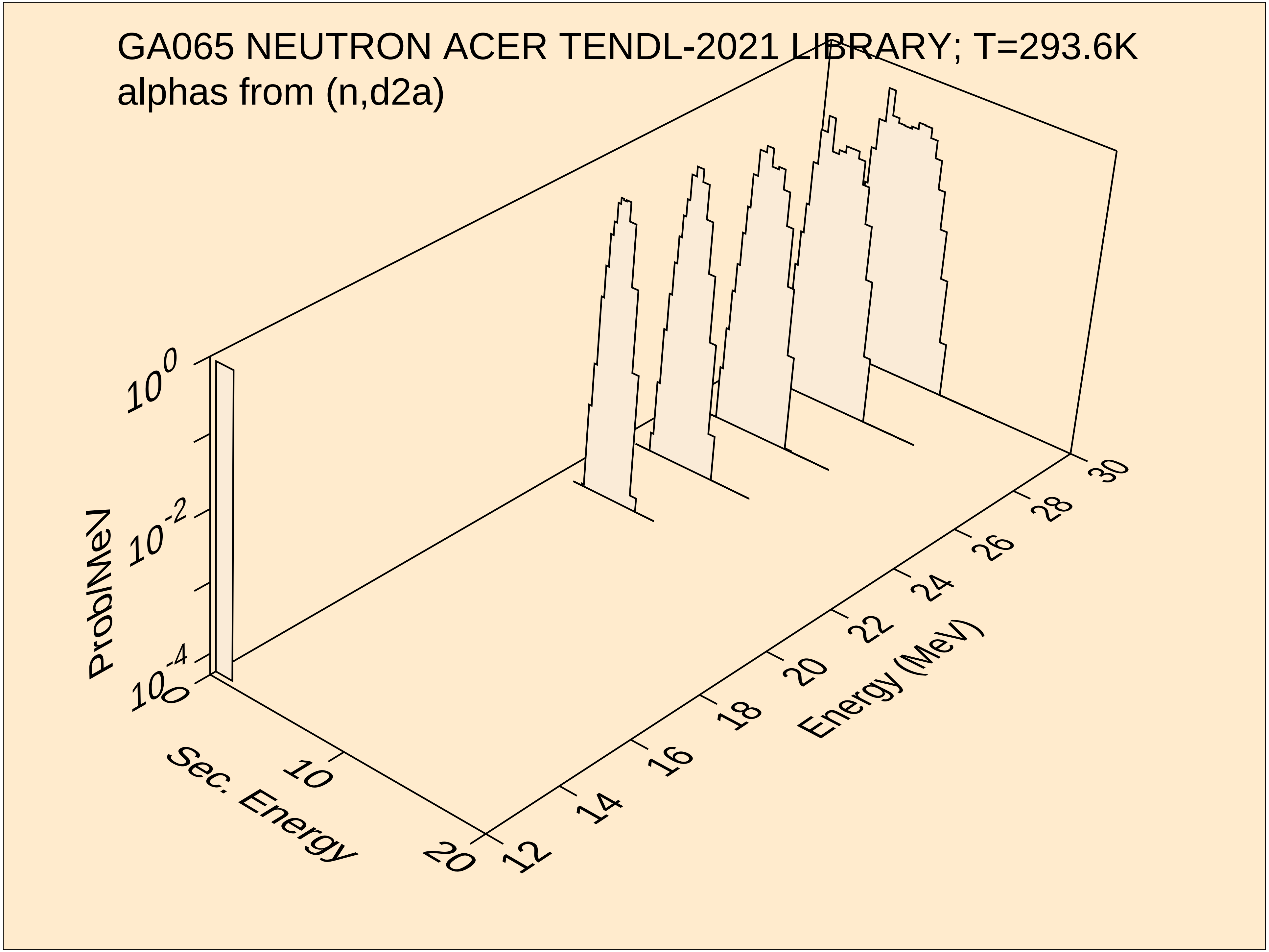

GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,a)
ProbMeV
10^0
10^-2
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)

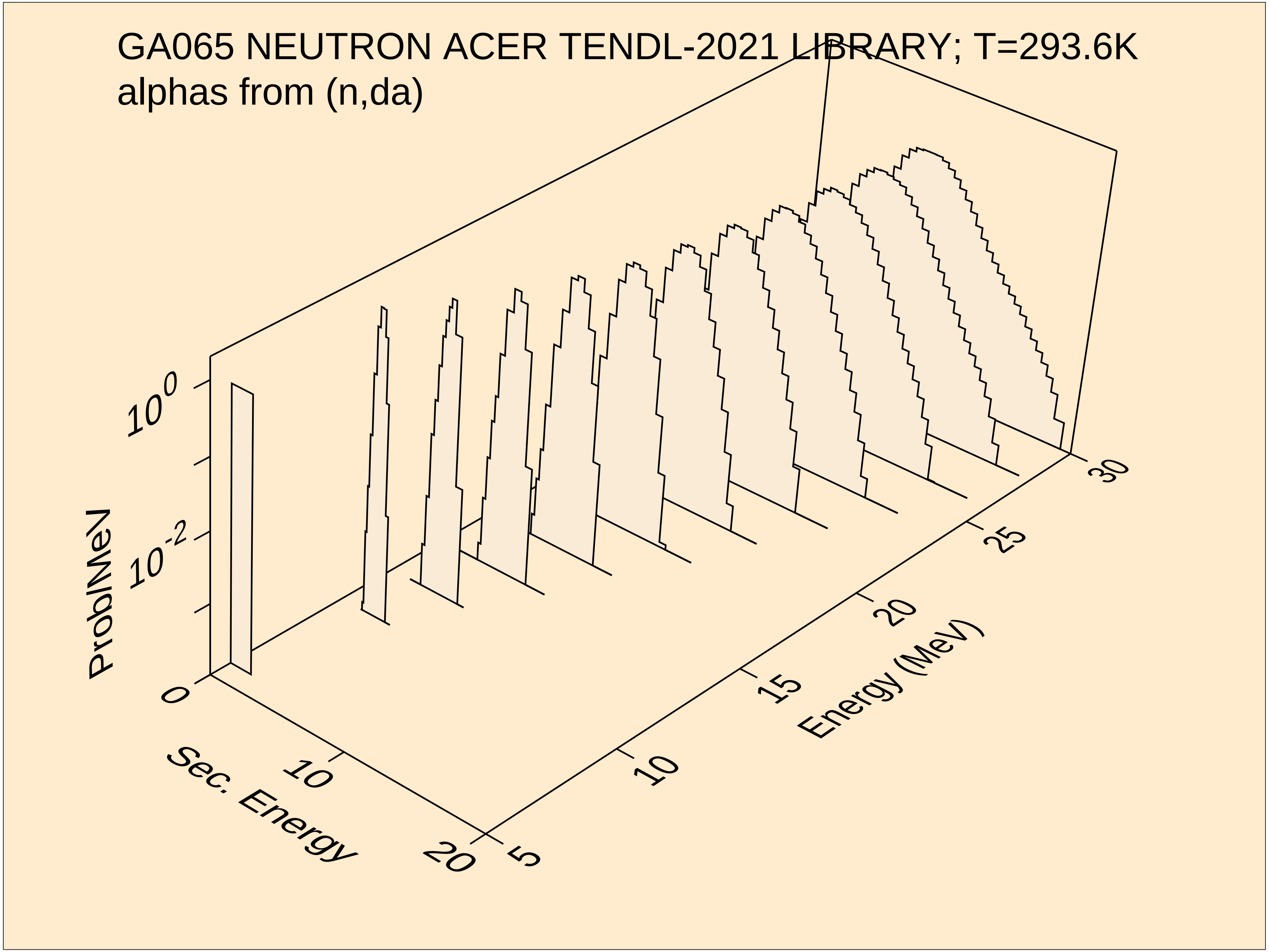


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,2a)
ProbMeV
10^{0}
10^{-2}
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,3a)
ProbMeV
10^{0}
10^{-2}
10^{-4}
0
10
20
Sec. Energy
5
10
15
20
25
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,pa)
Prob/MeV
10^-1
10^-3
0
Sec. Energy
20
40
0
5
10
15
20
25
30
Energy (MeV)


GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,d2a)
ProbMeV
10^0
10^{-2}
10^{-4}
0
10
20
Sec. Energy
12
14
16
18
20
22
24
26
28
30
Energy (MeV)



GA065 NEUTRON ACER TENDL-2021 LIBRARY; T=293.6K
alphas from (n,da)
ProbMeV
10^{0}
10^{-2}
0
10
20
Sec. Energy
5
10
15
20
25
30
Energy (MeV)