IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Principal cross sections

Cross section (barns)

Energy (MeV)

total
absorption
elastic
gamma production

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Heating

heating

Heating (MeV/reaction)

Energy (MeV)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Principal cross sections

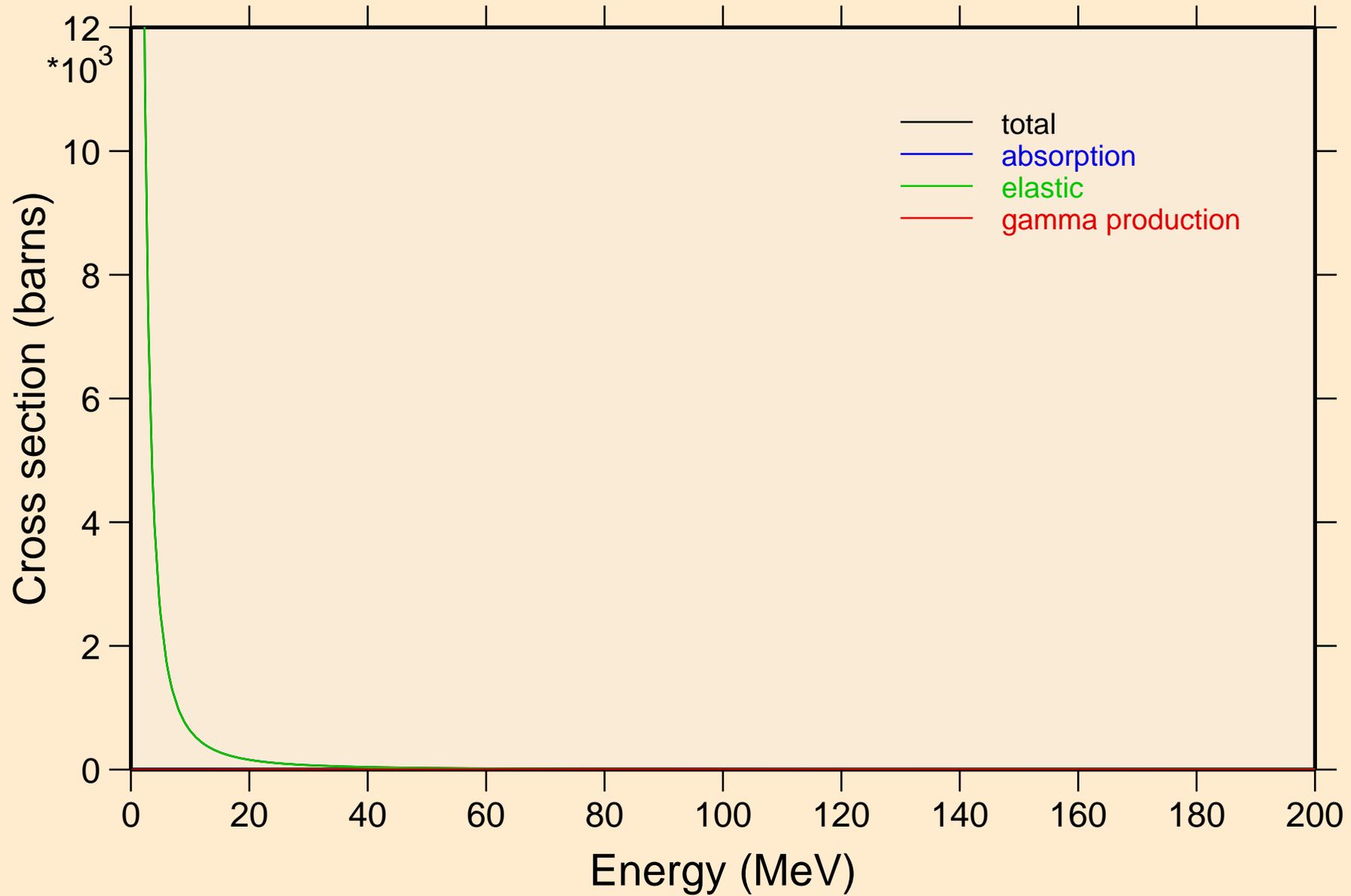- total
- absorption
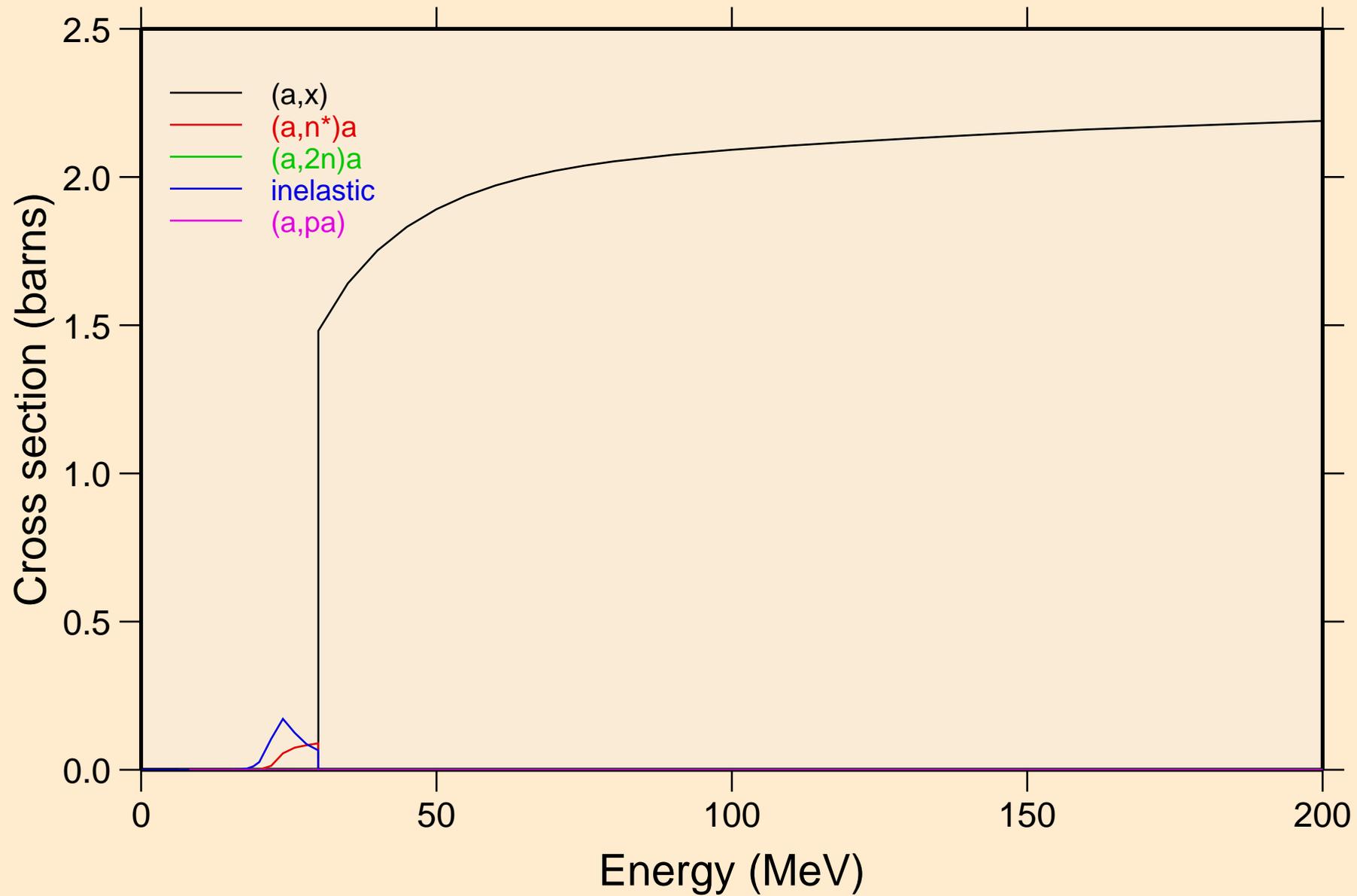- elastic
- gamma production

Cross section (barns)

Energy (MeV)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Heating
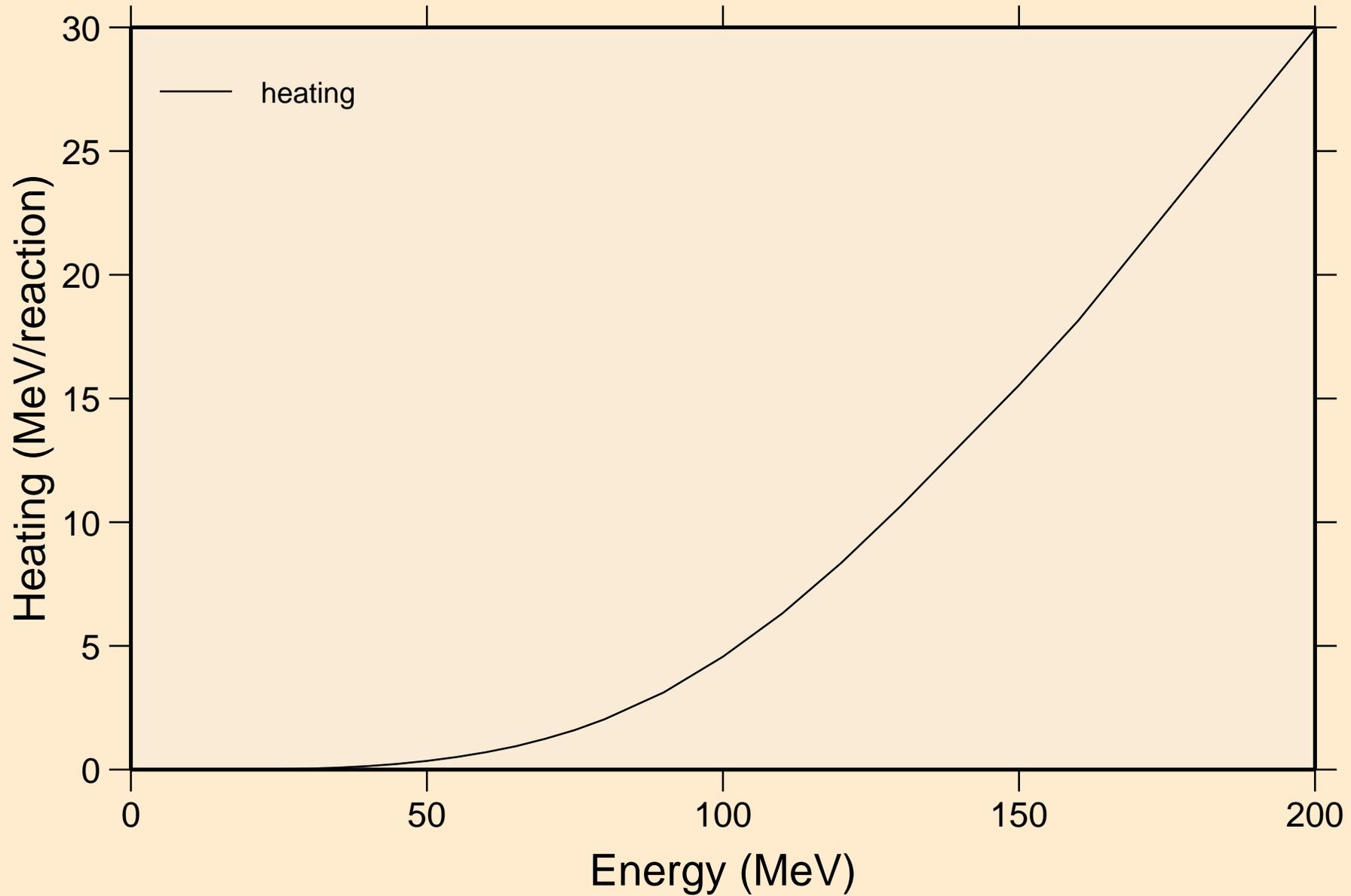
IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

Legend:
- (a,x)
- (a,n*)a
- (a,2n)a
- inelastic
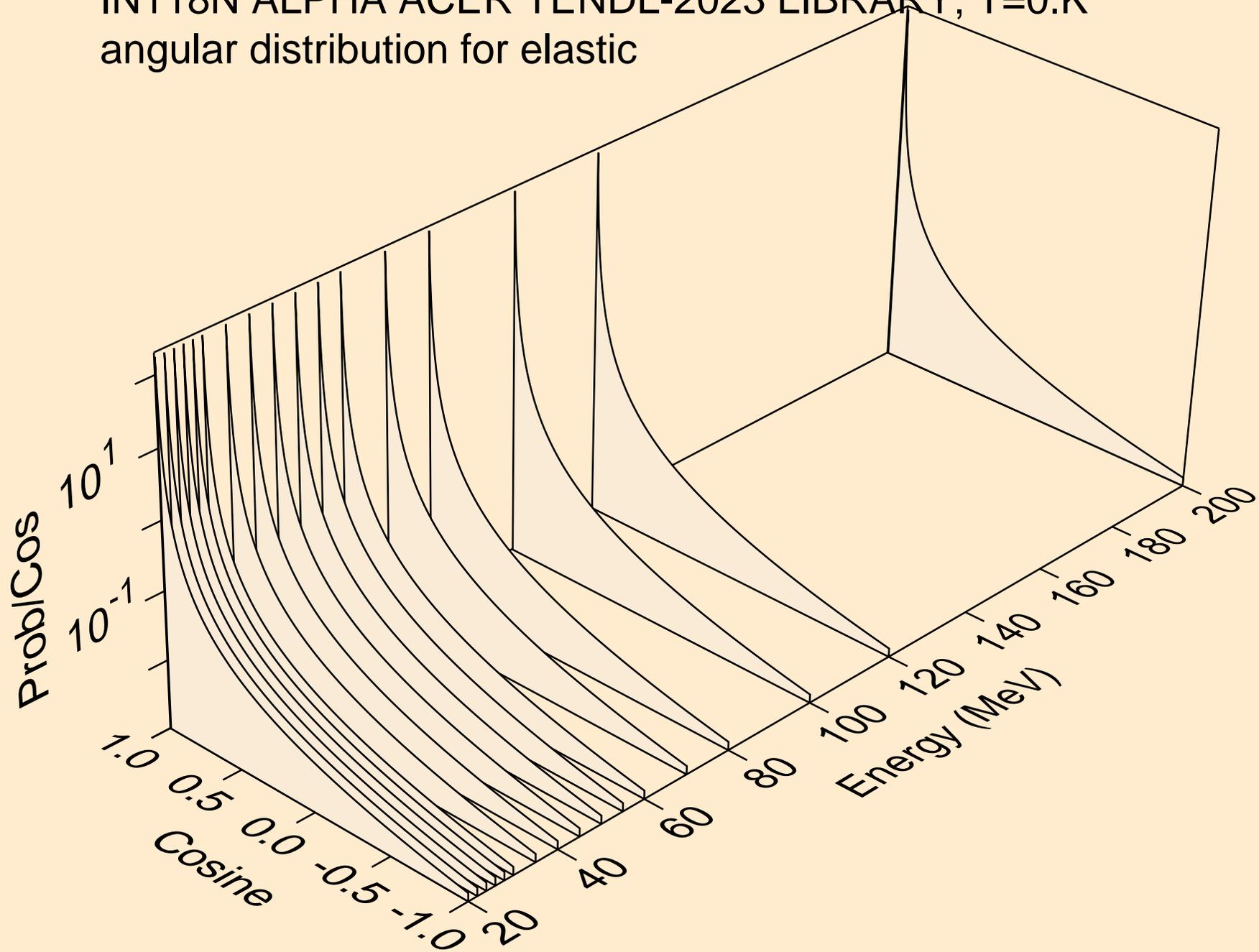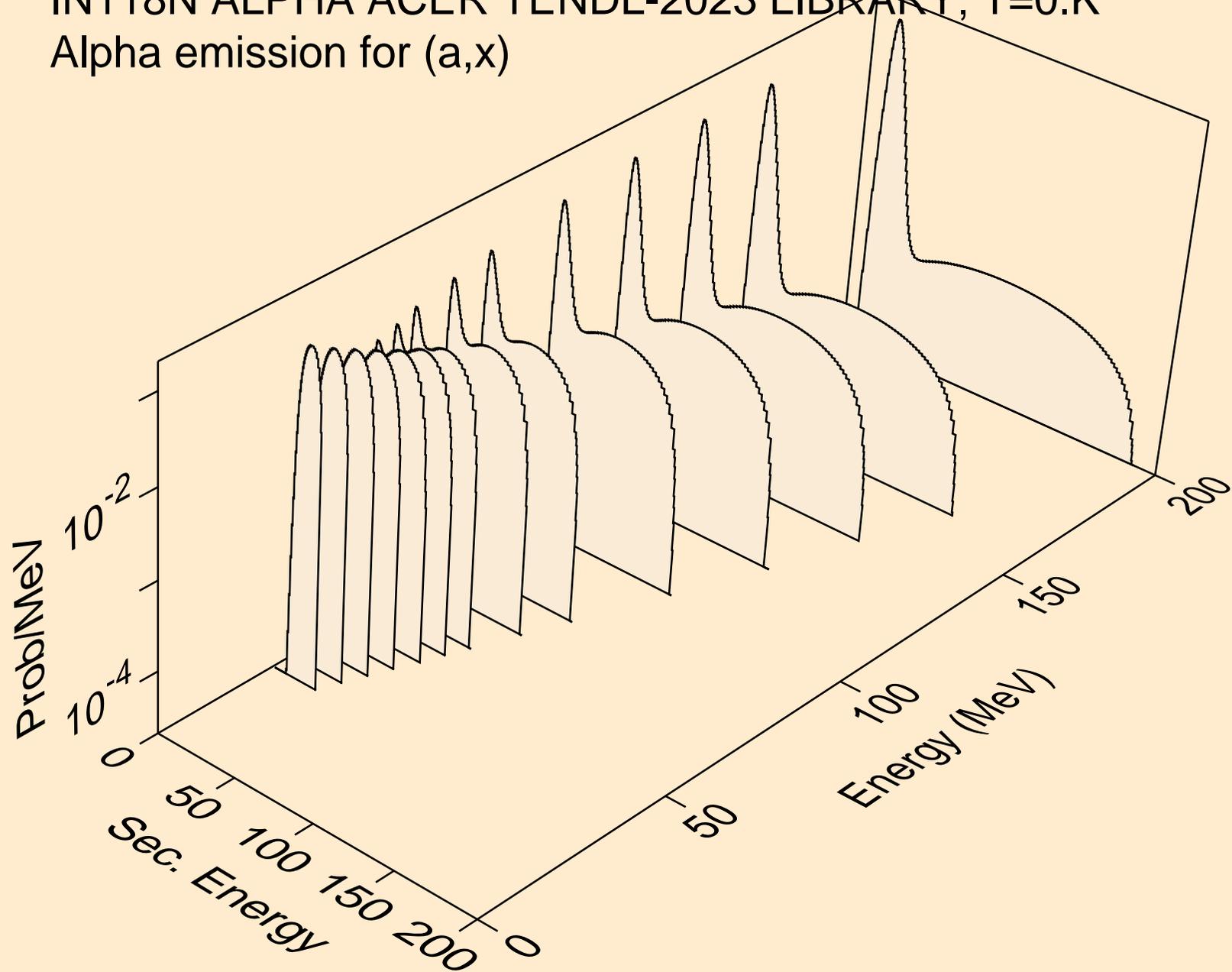- (a,pa)

Cross section (barns) vs Energy (MeV)

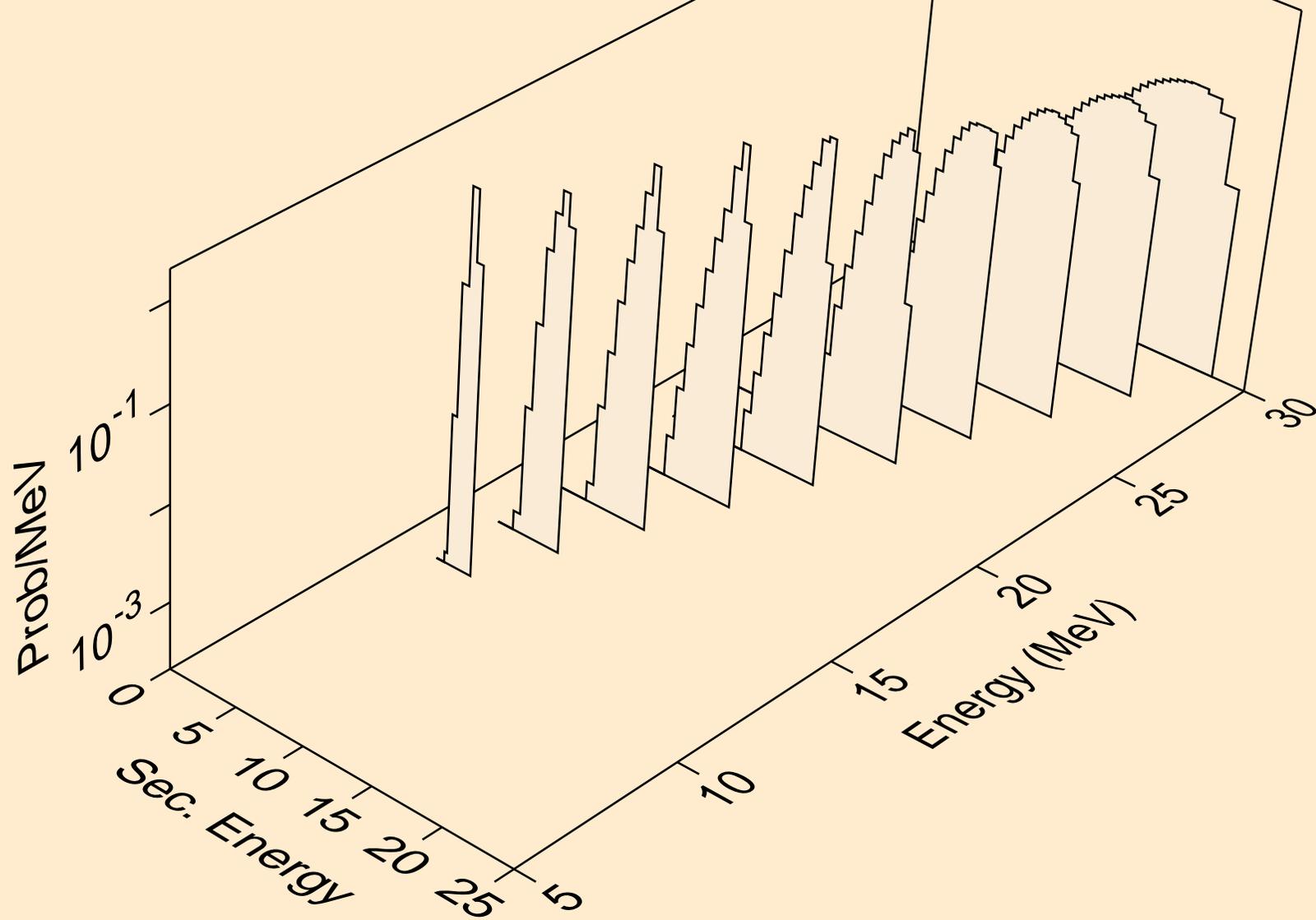IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
angular distribution for elastic
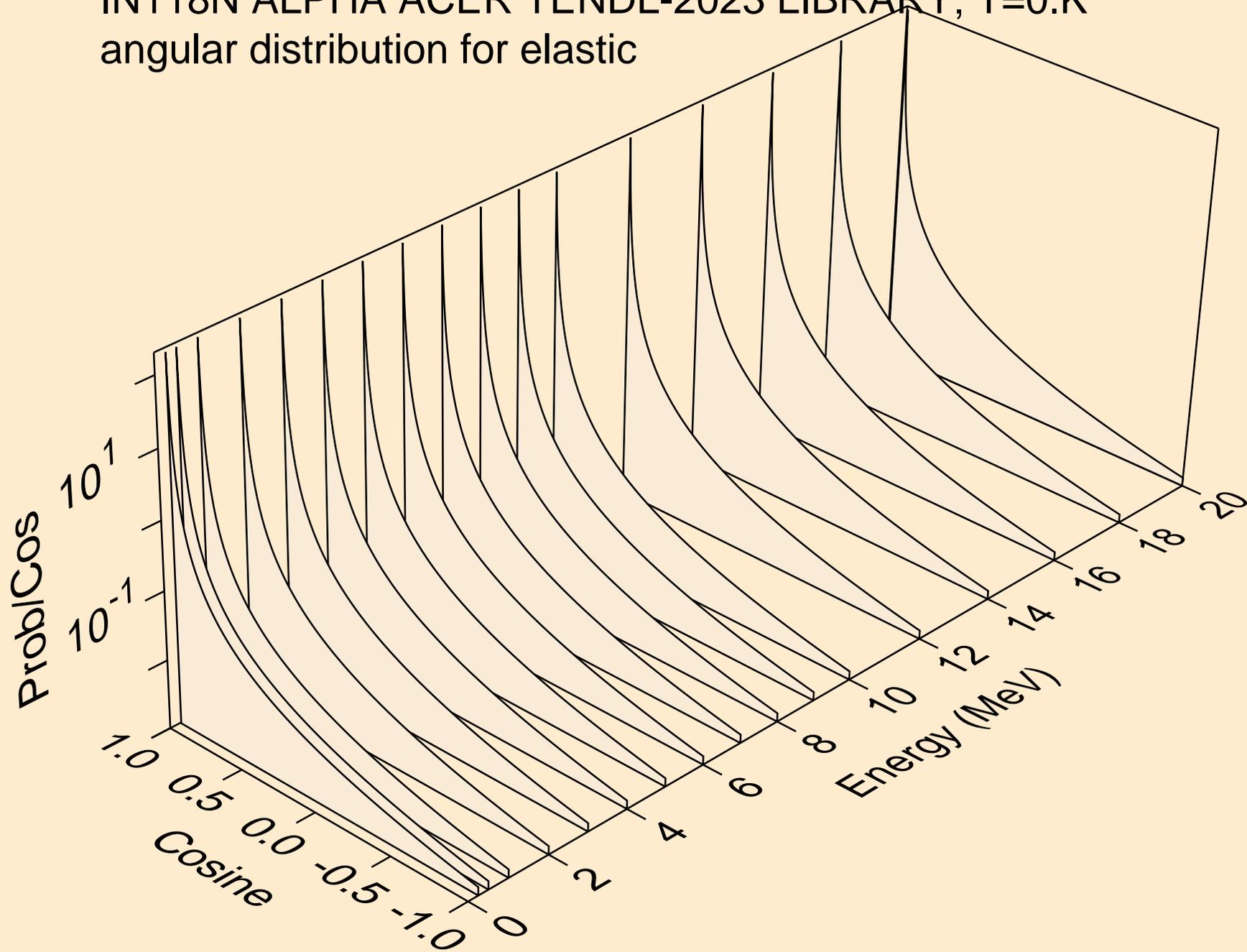
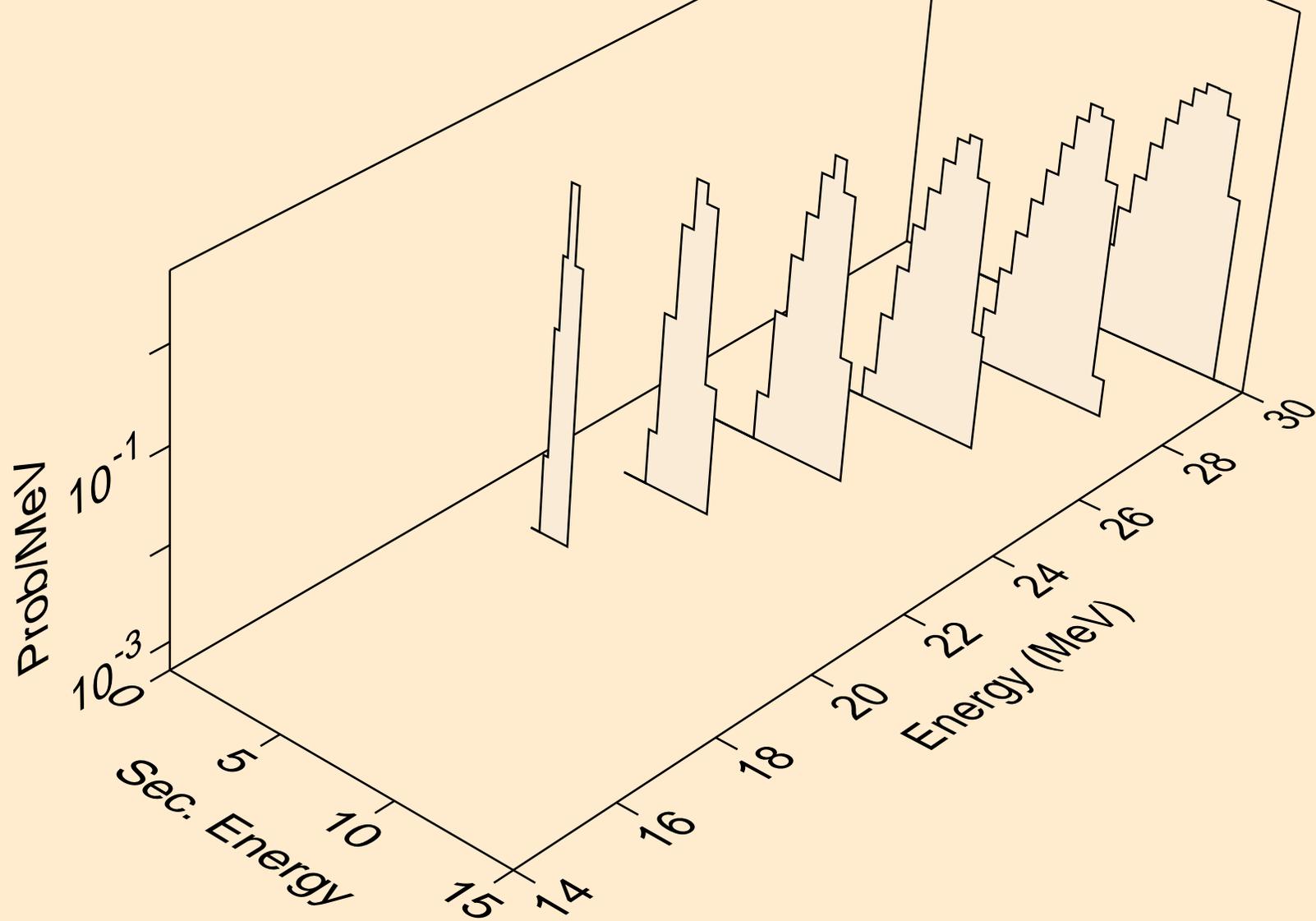IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
angular distribution for elastic

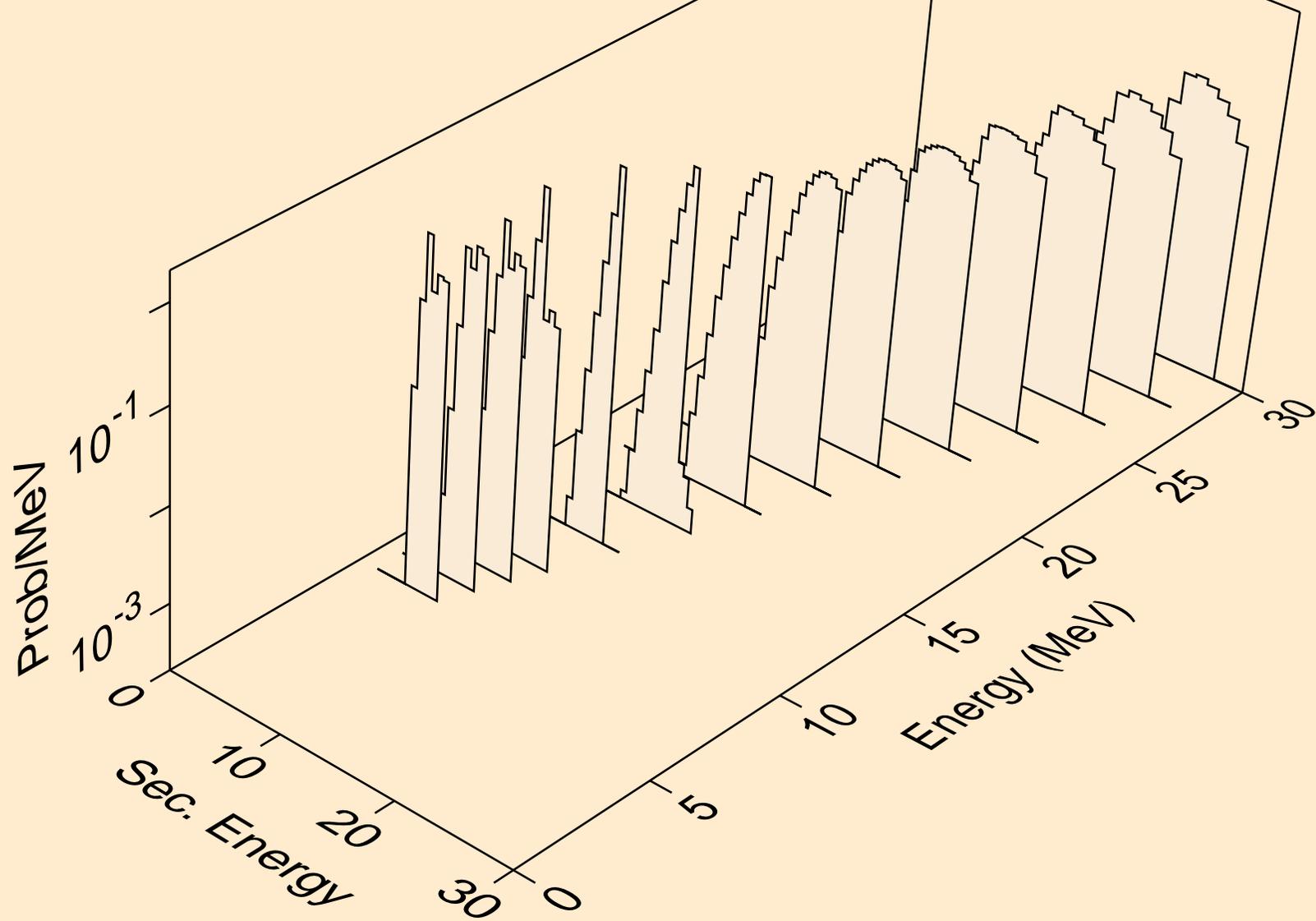IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Alpha emission for (a,x)

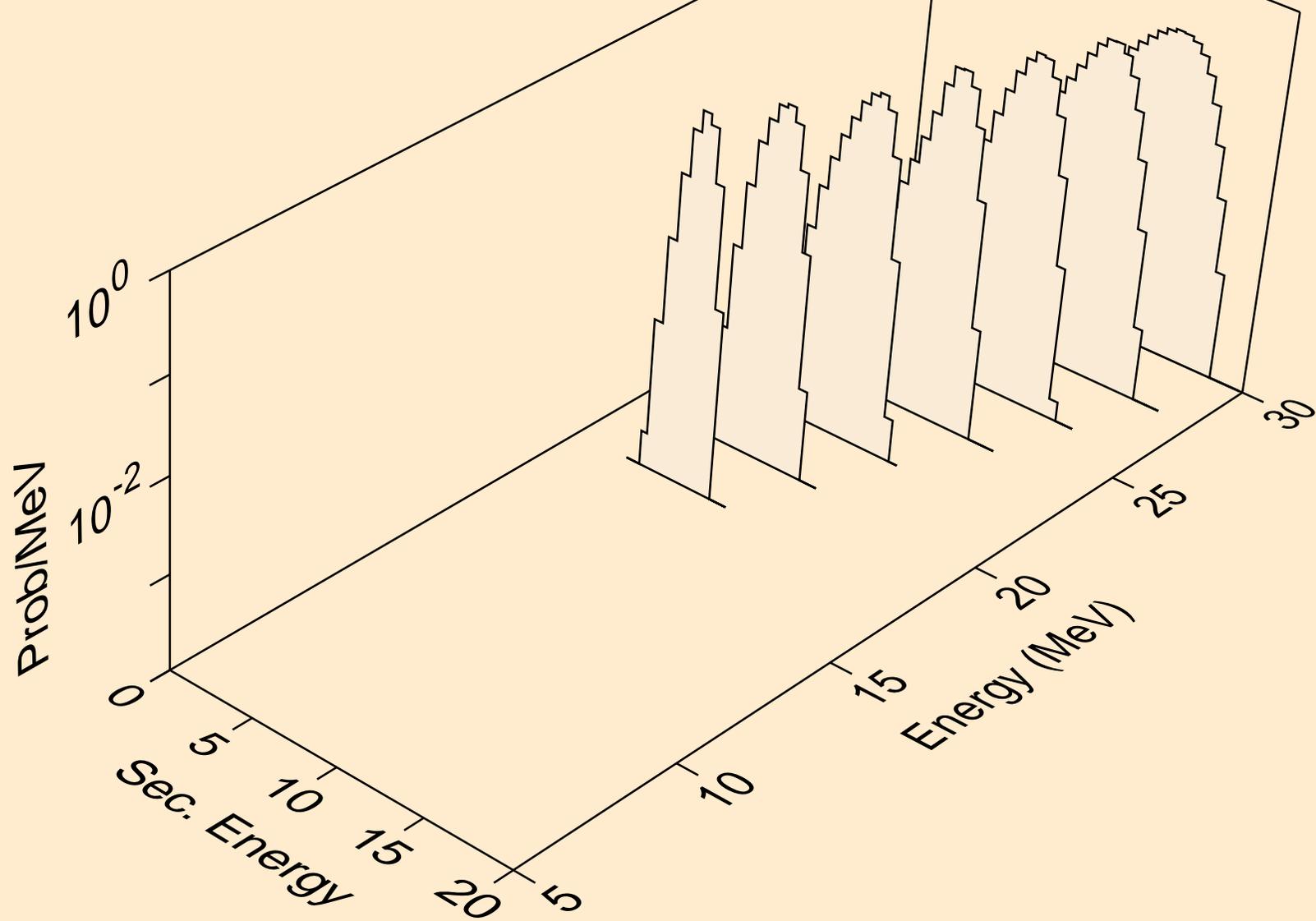IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Alpha emission for (a,n*)a

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
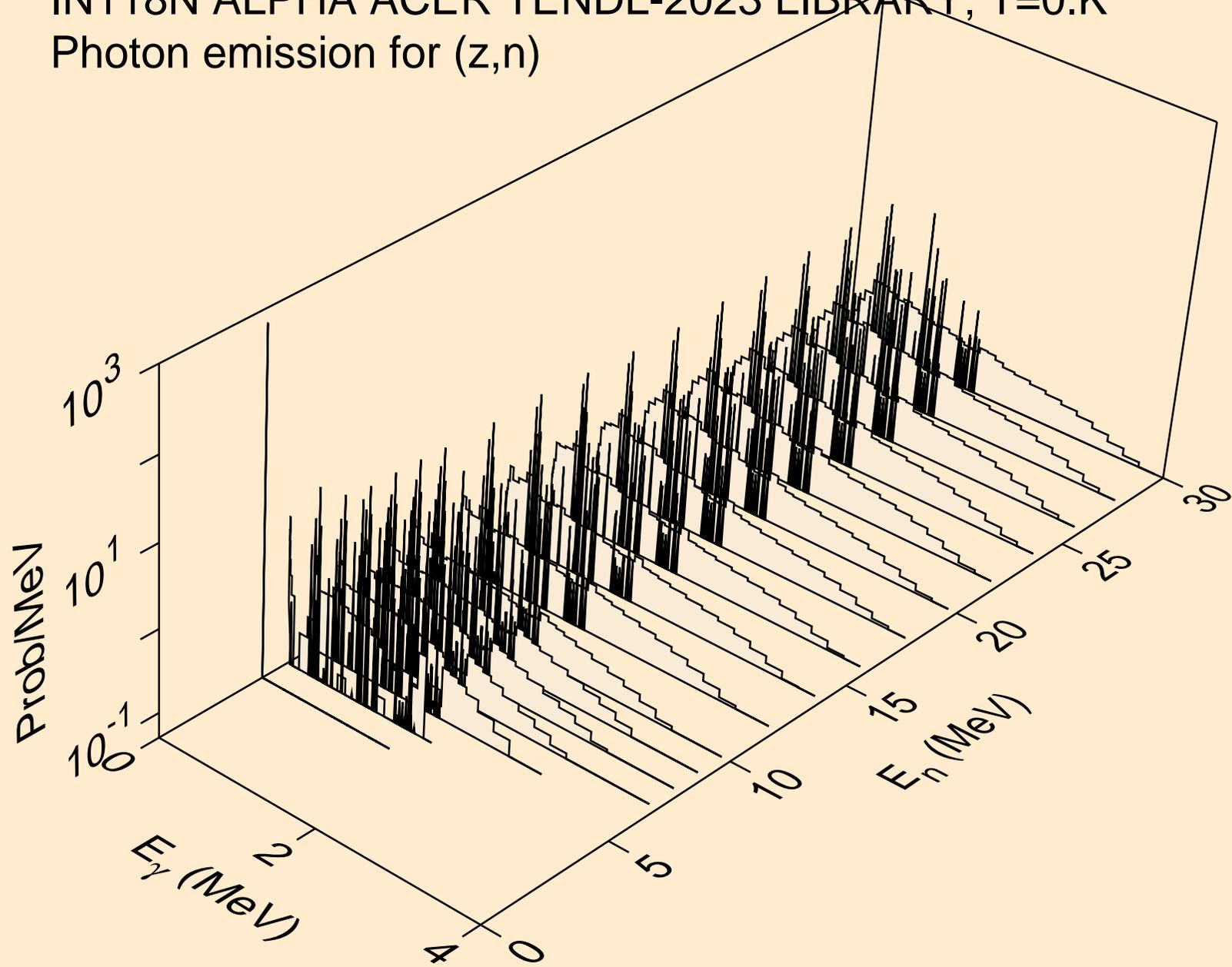Alpha emission for (a,2n)a

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
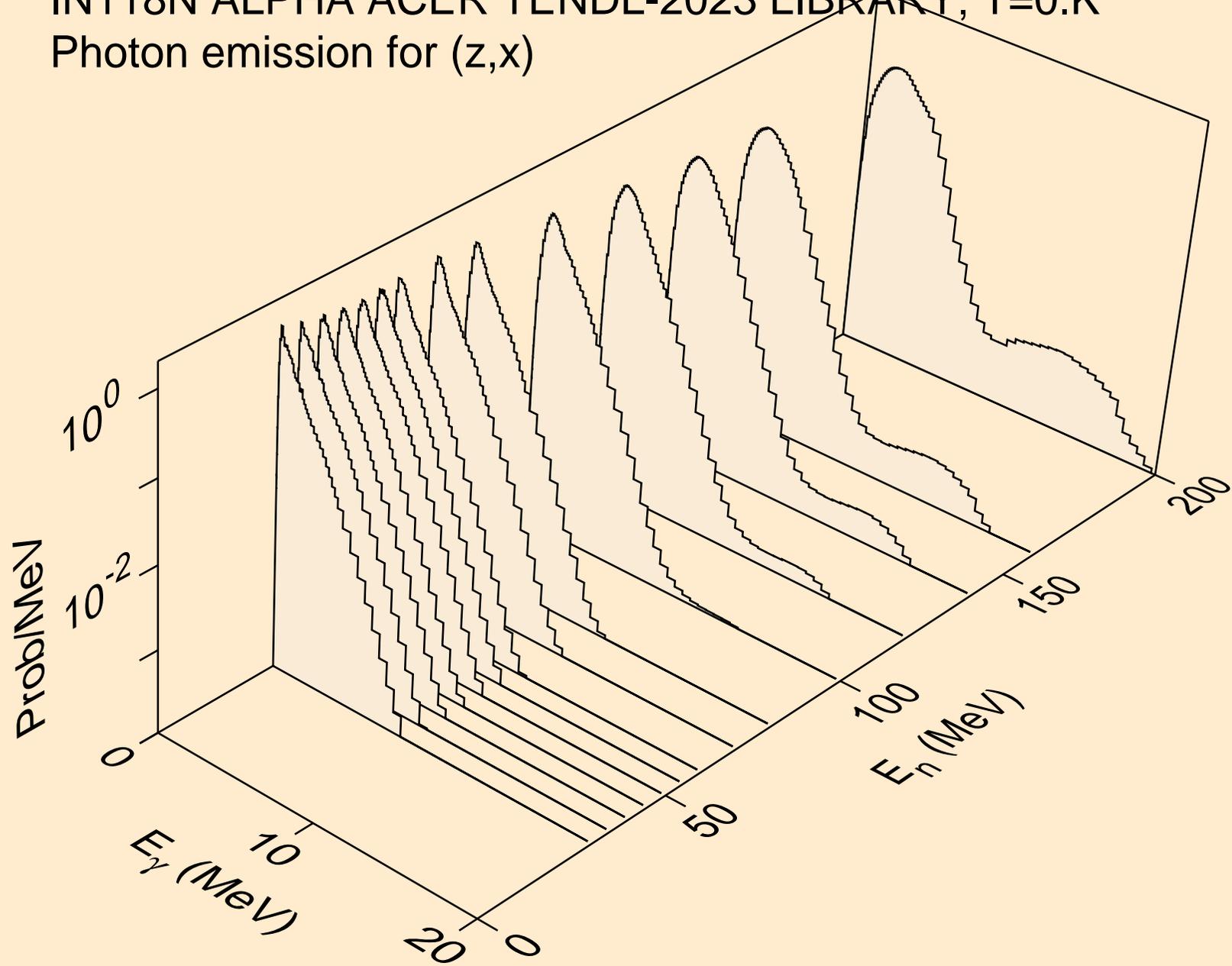Alpha emission for inelastic

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
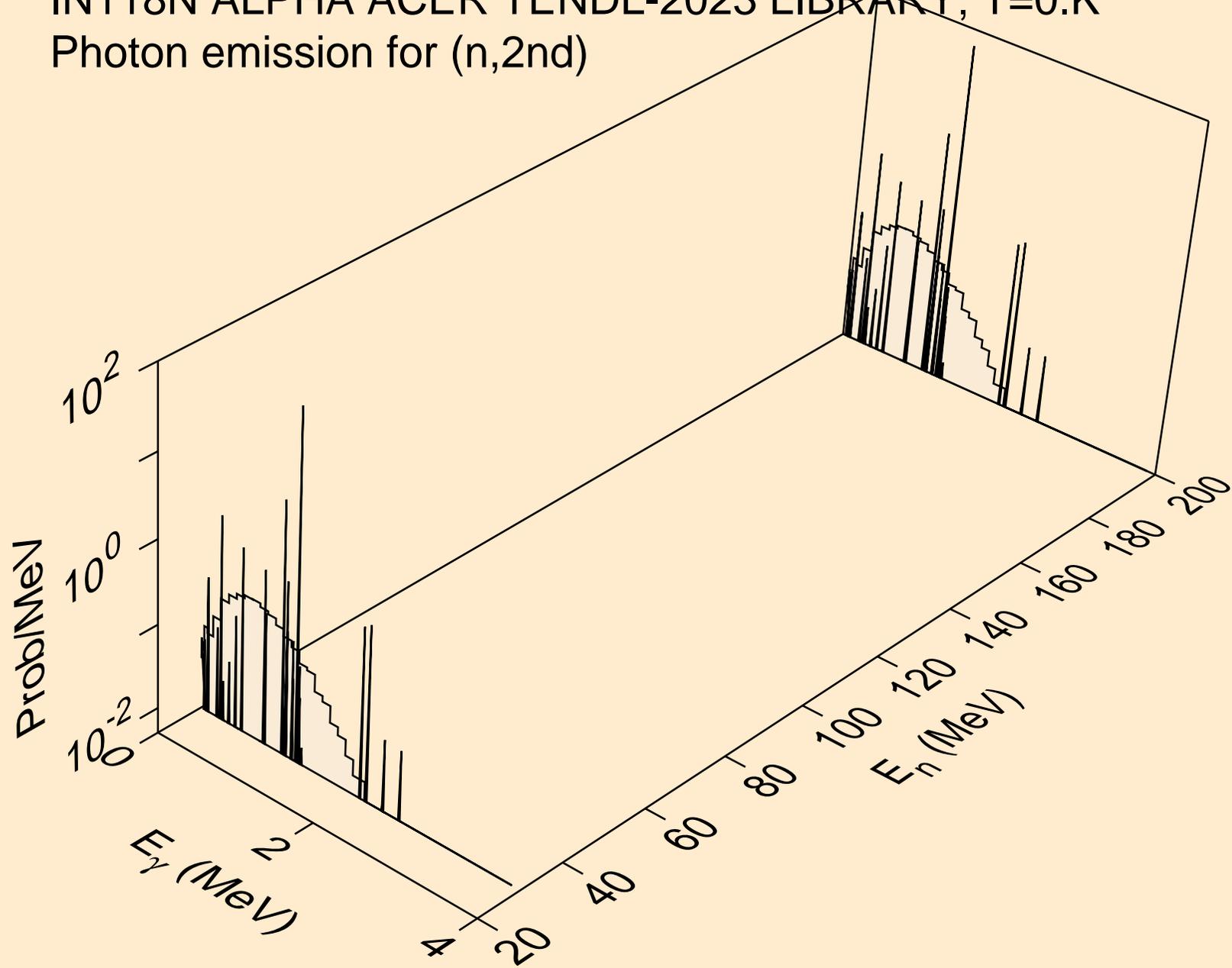Alpha emission for (a,pa)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
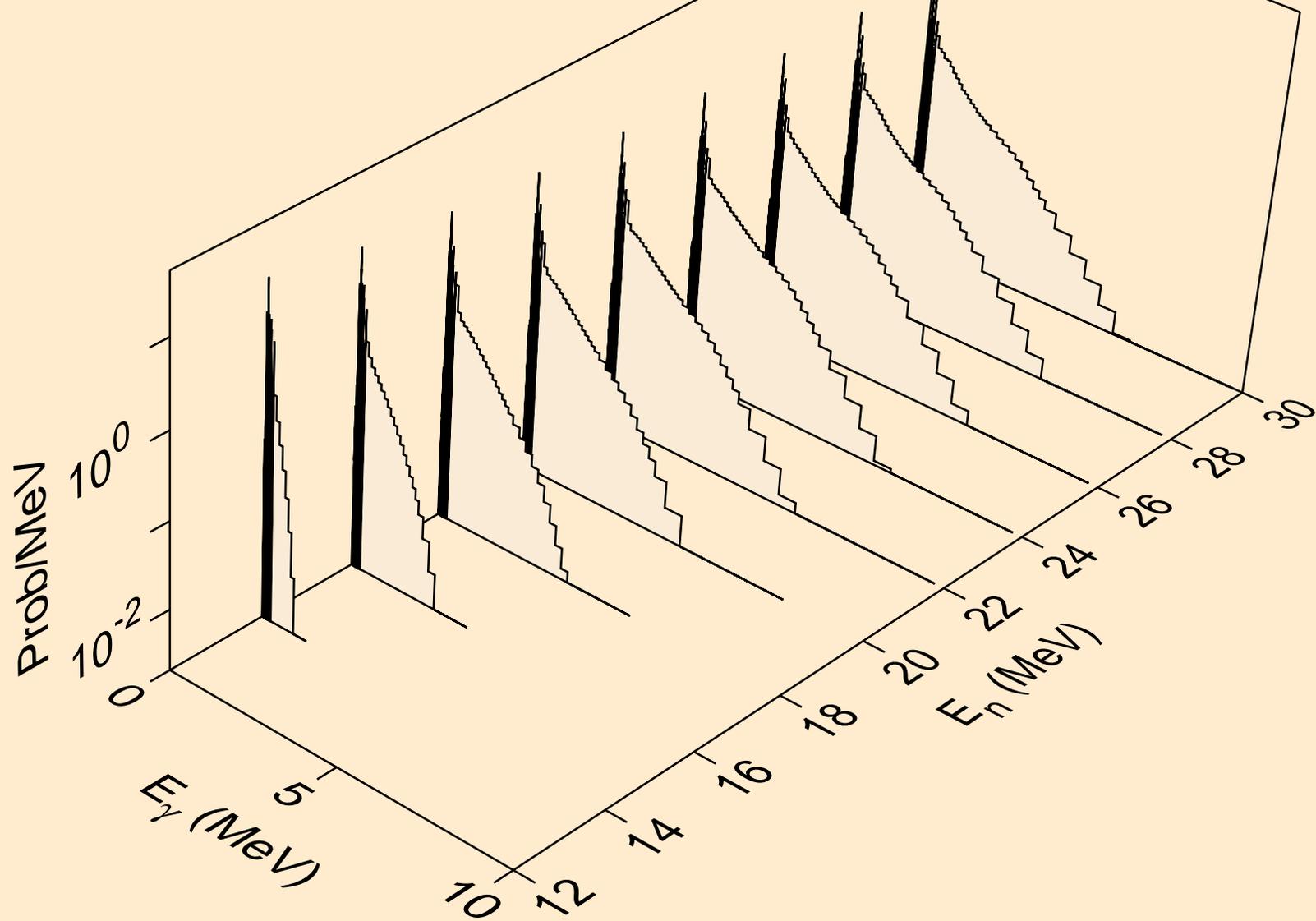Photon emission for (z,n)

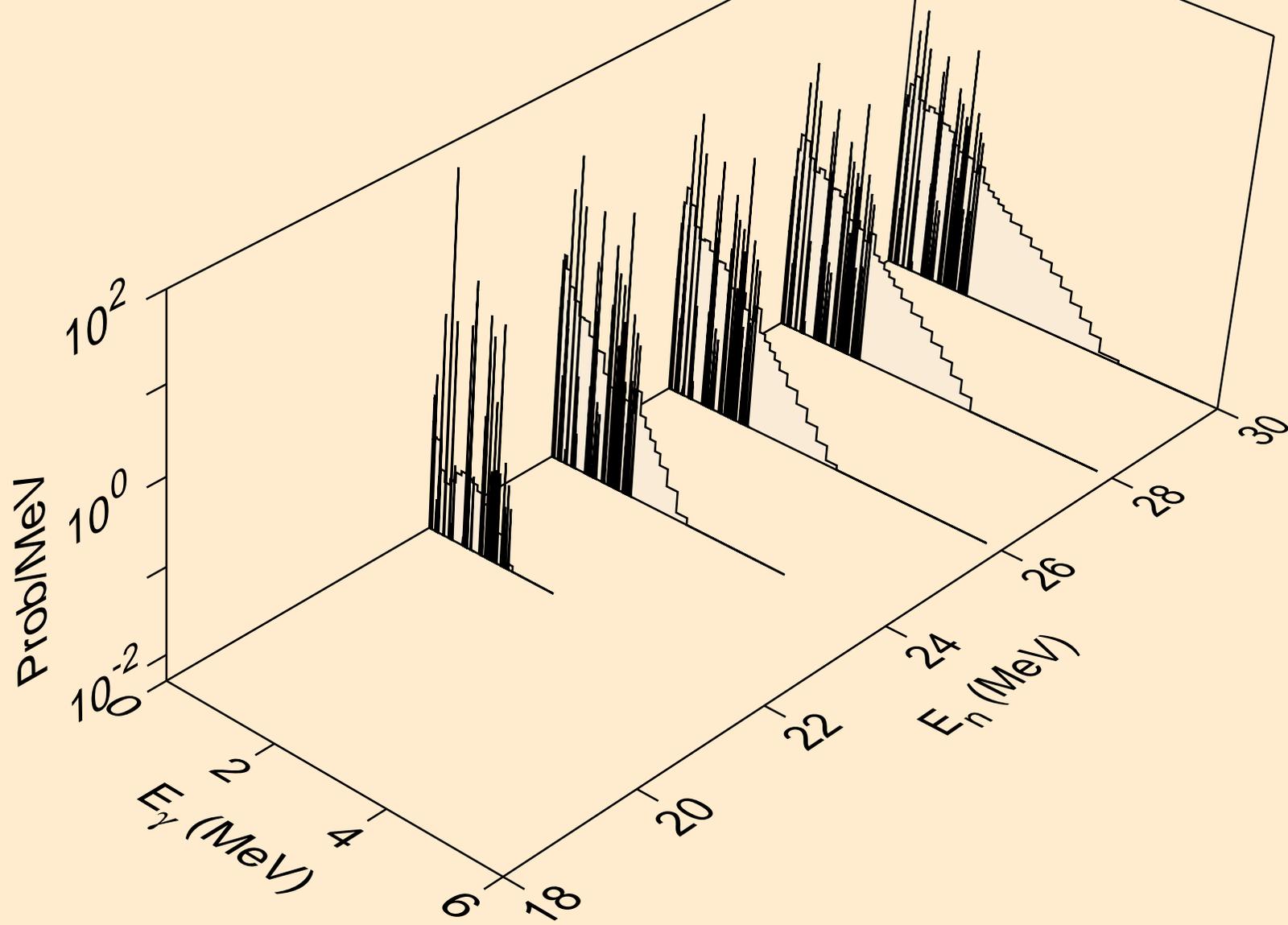IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (z,x)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2nd)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2n)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,3n)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
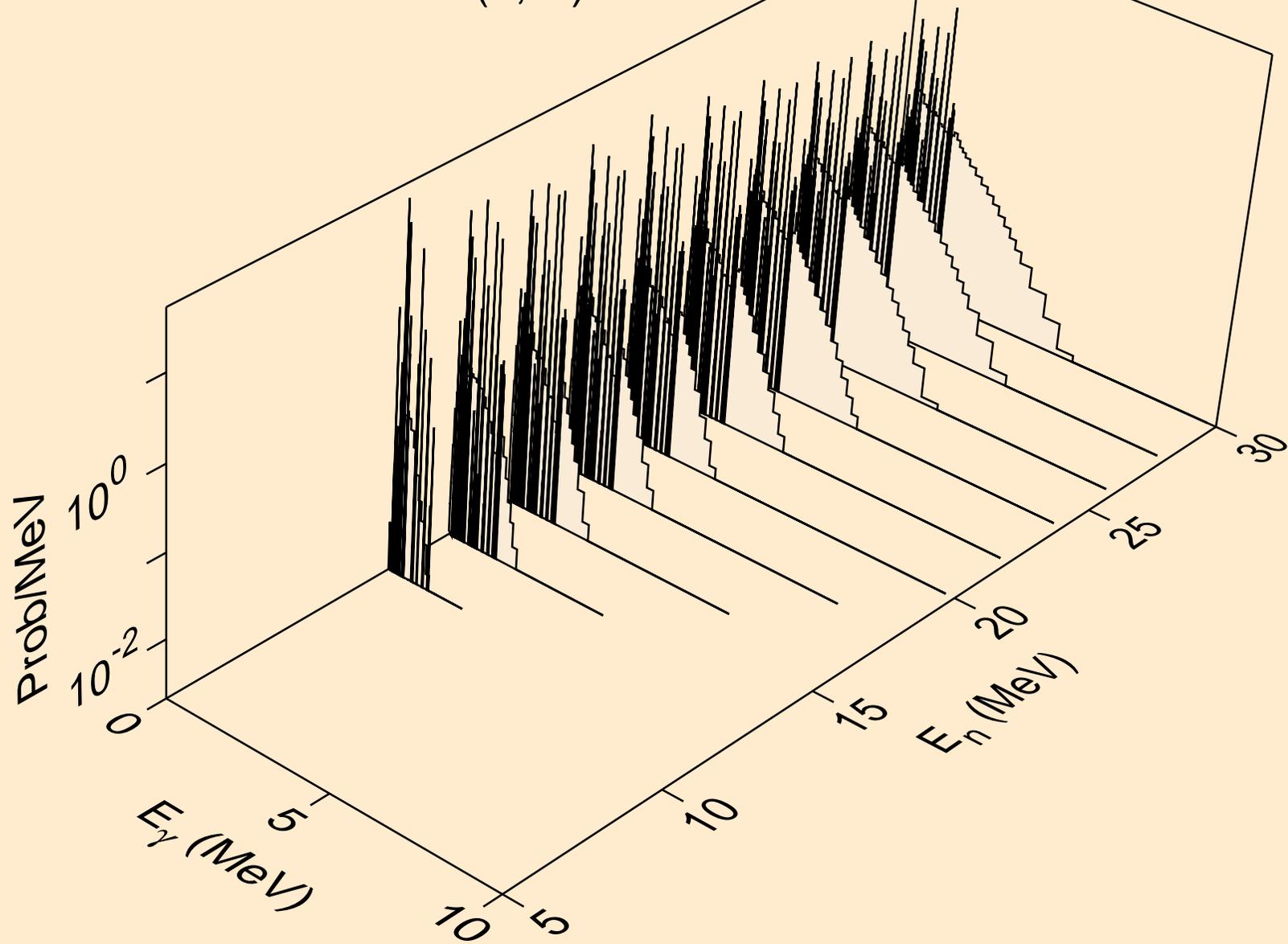Photon emission for (n,n*)a

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
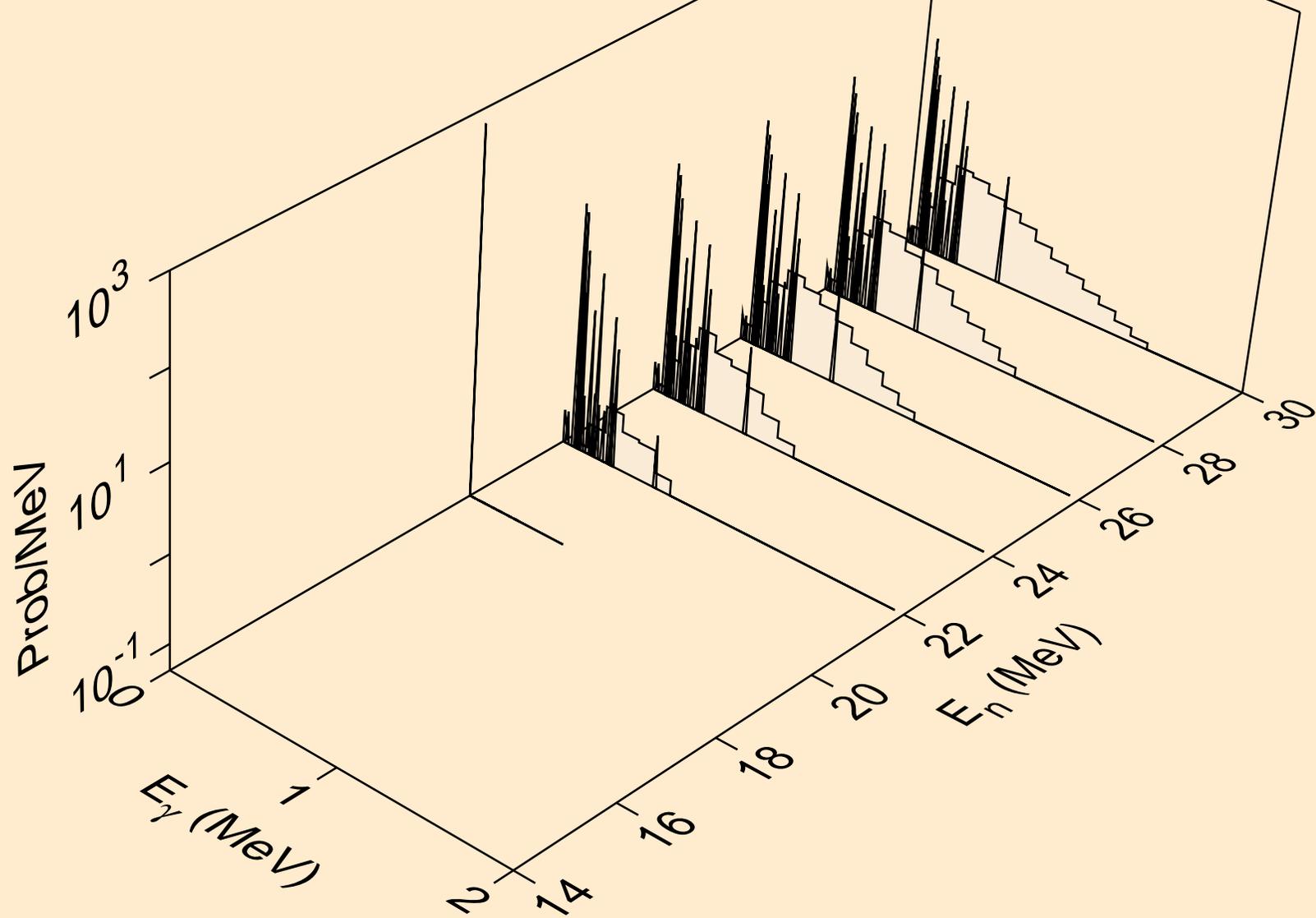Photon emission for (n,2n)a

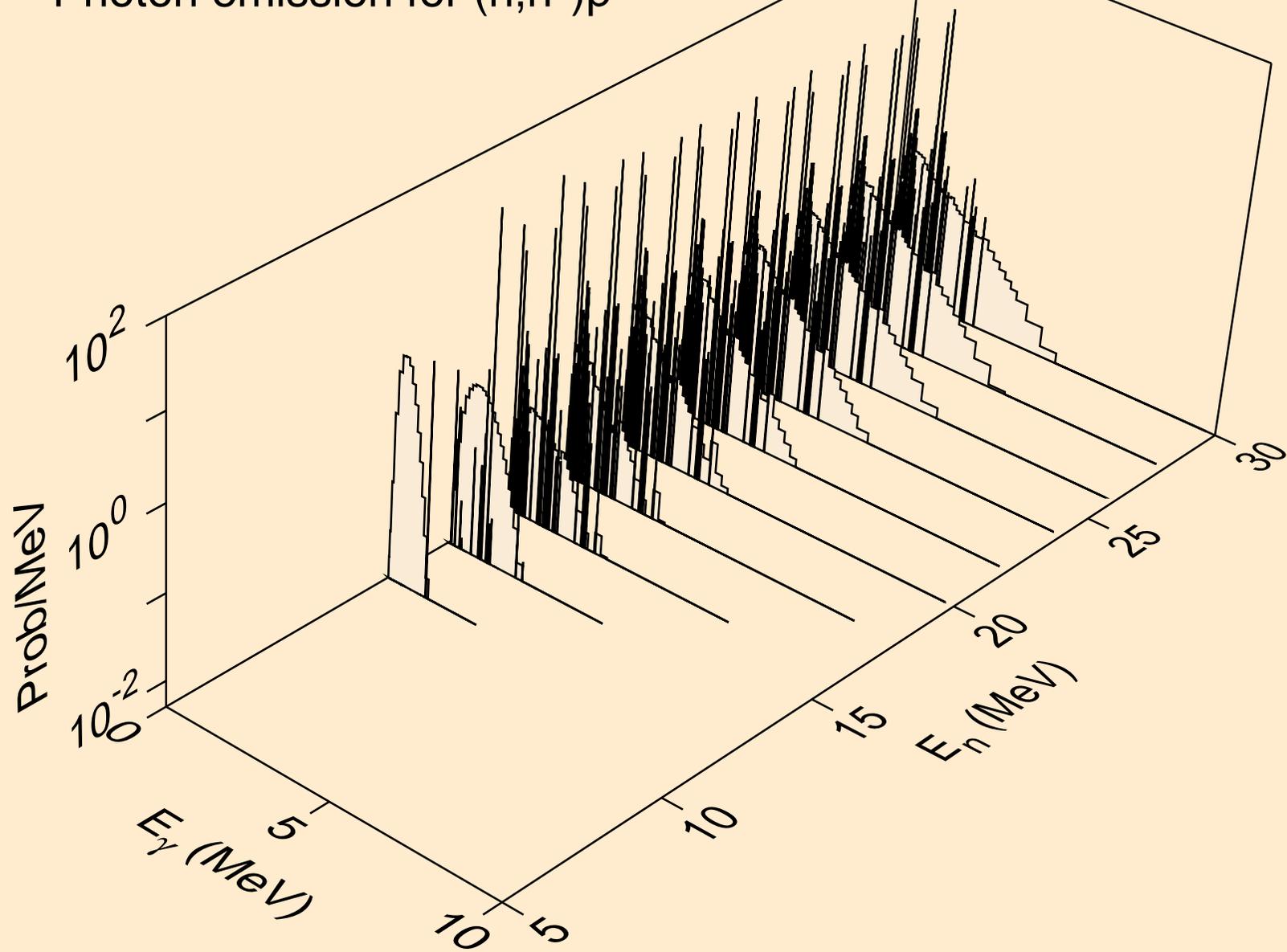IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)p

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
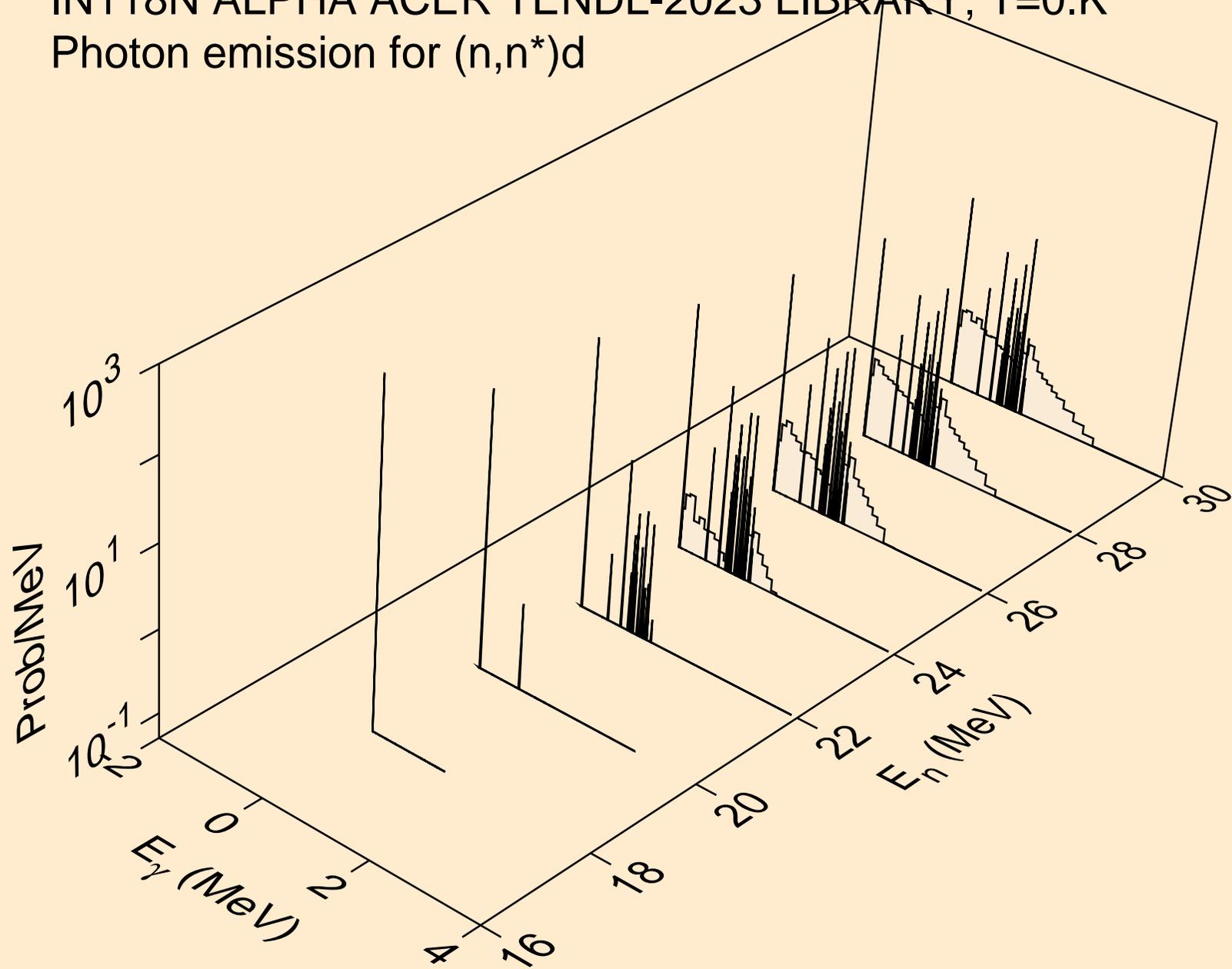Photon emission for (n,n*)d
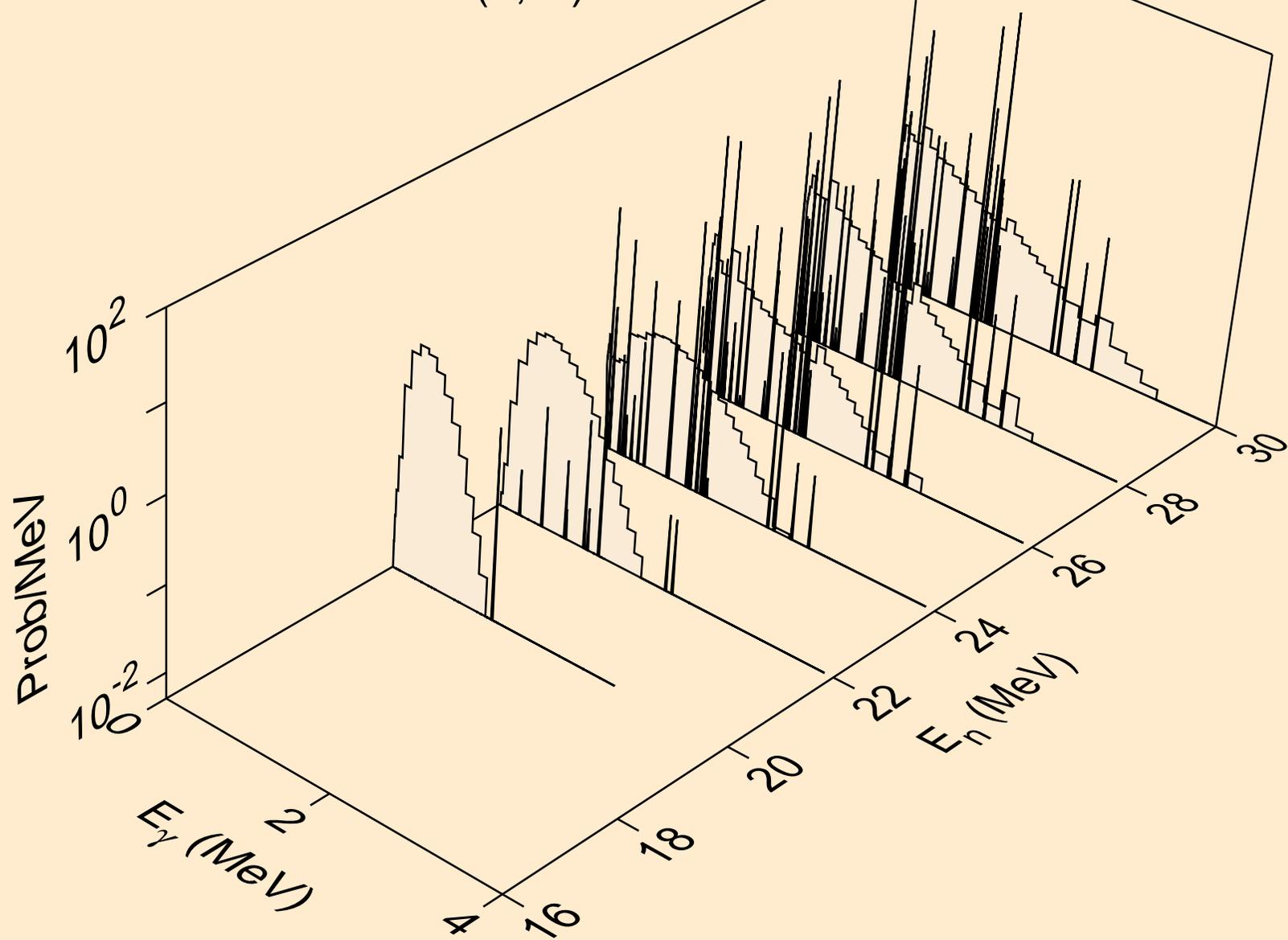
IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)t
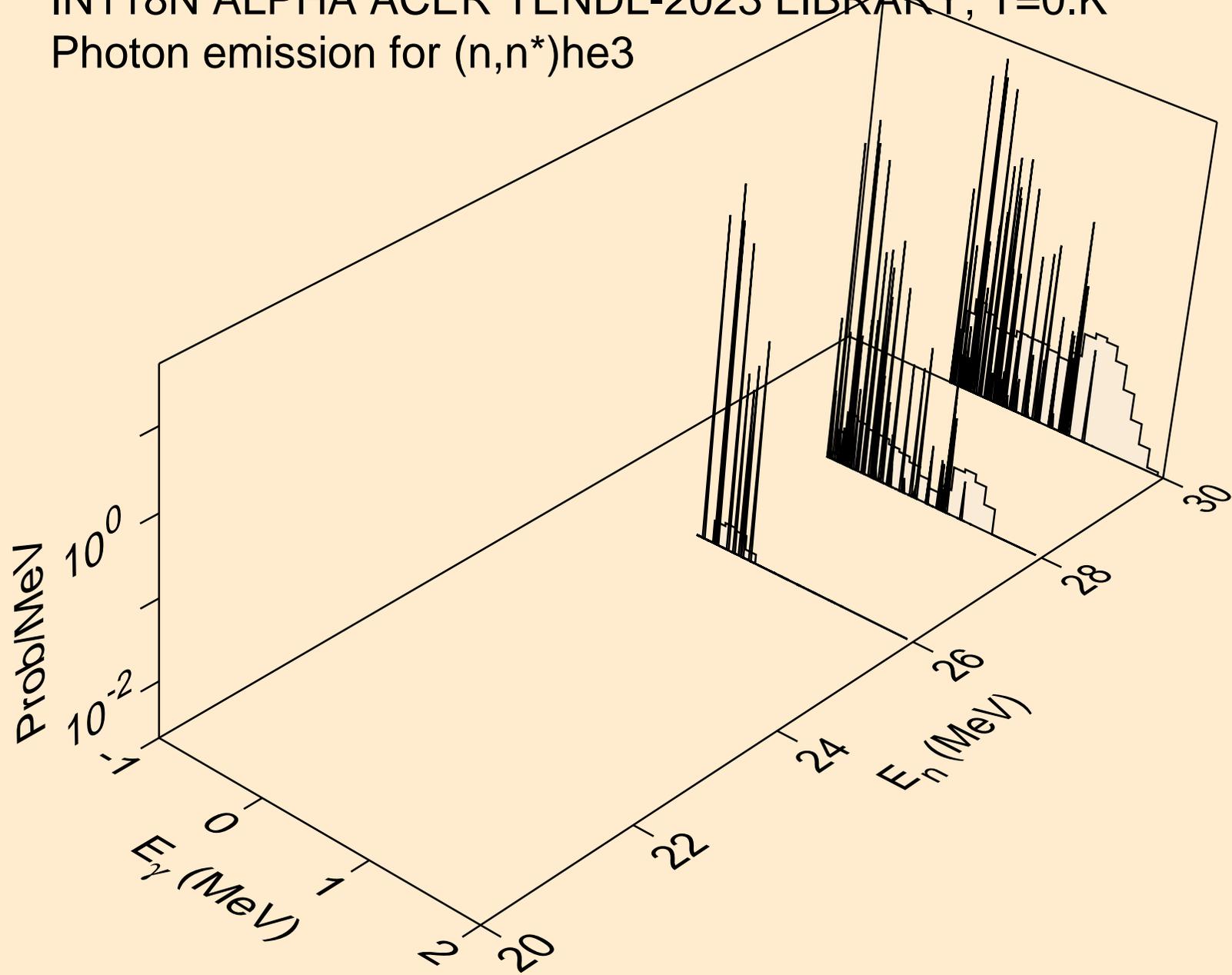
IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)he3
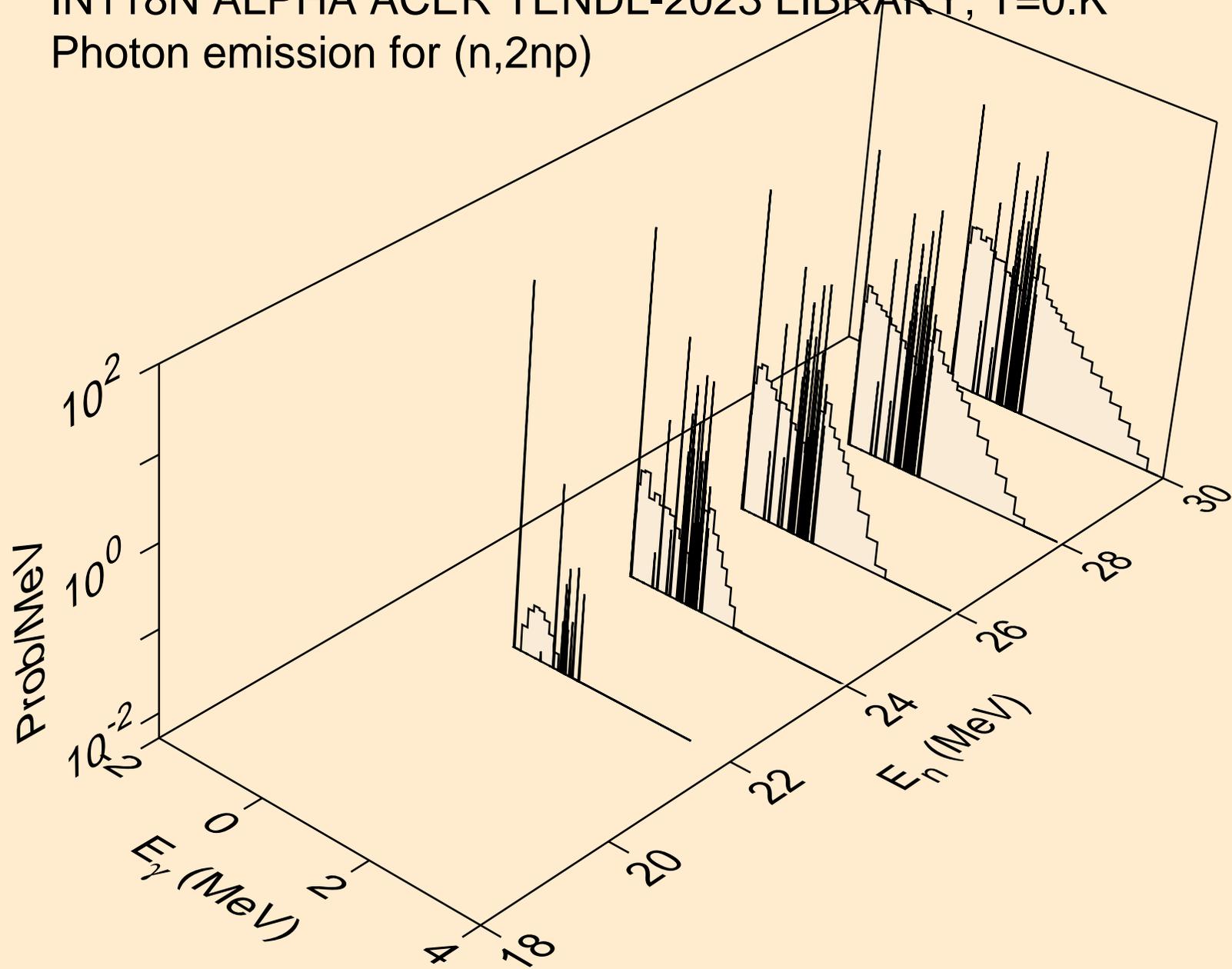
IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2np)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,3np)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n2p)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,gma)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,p)

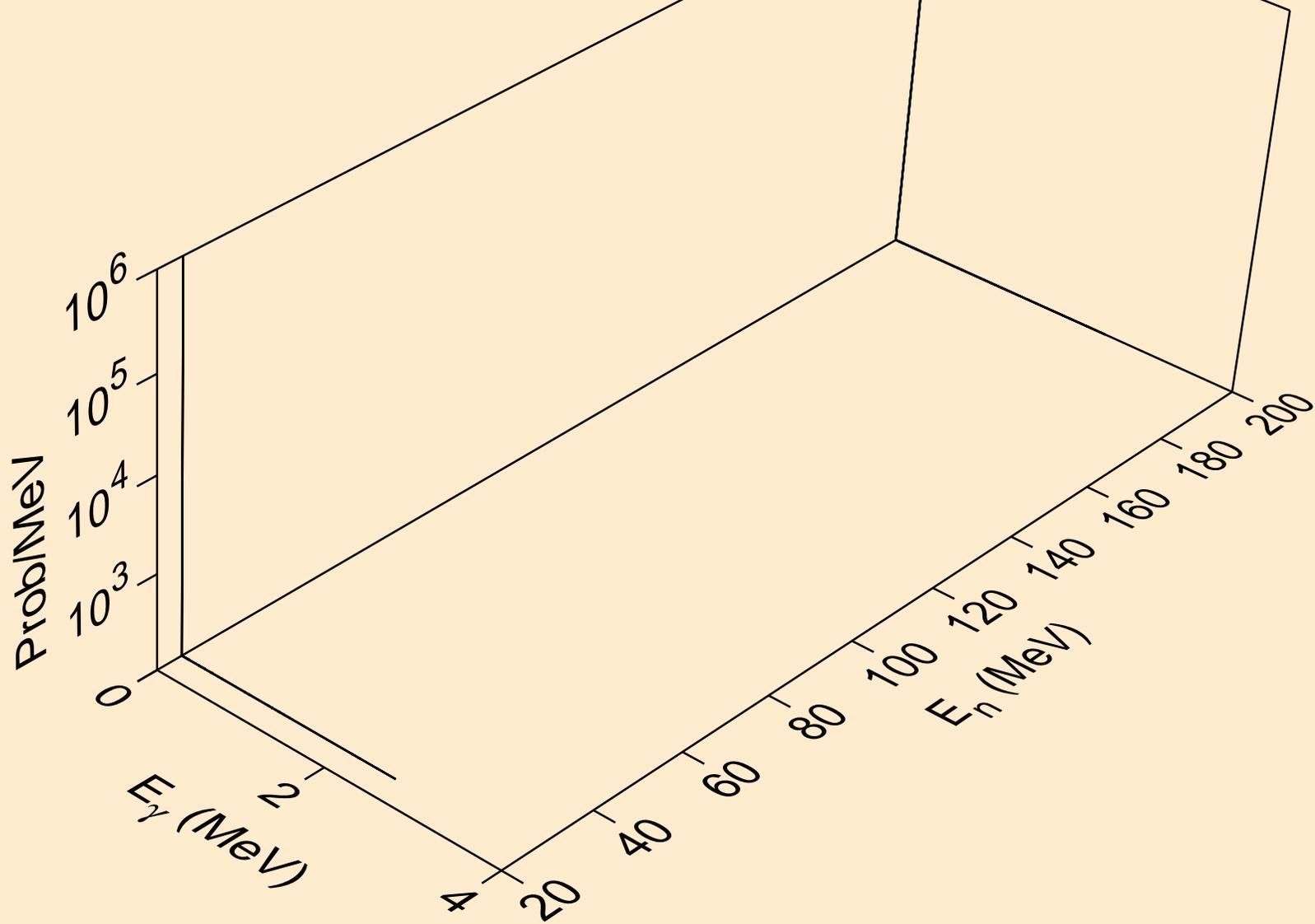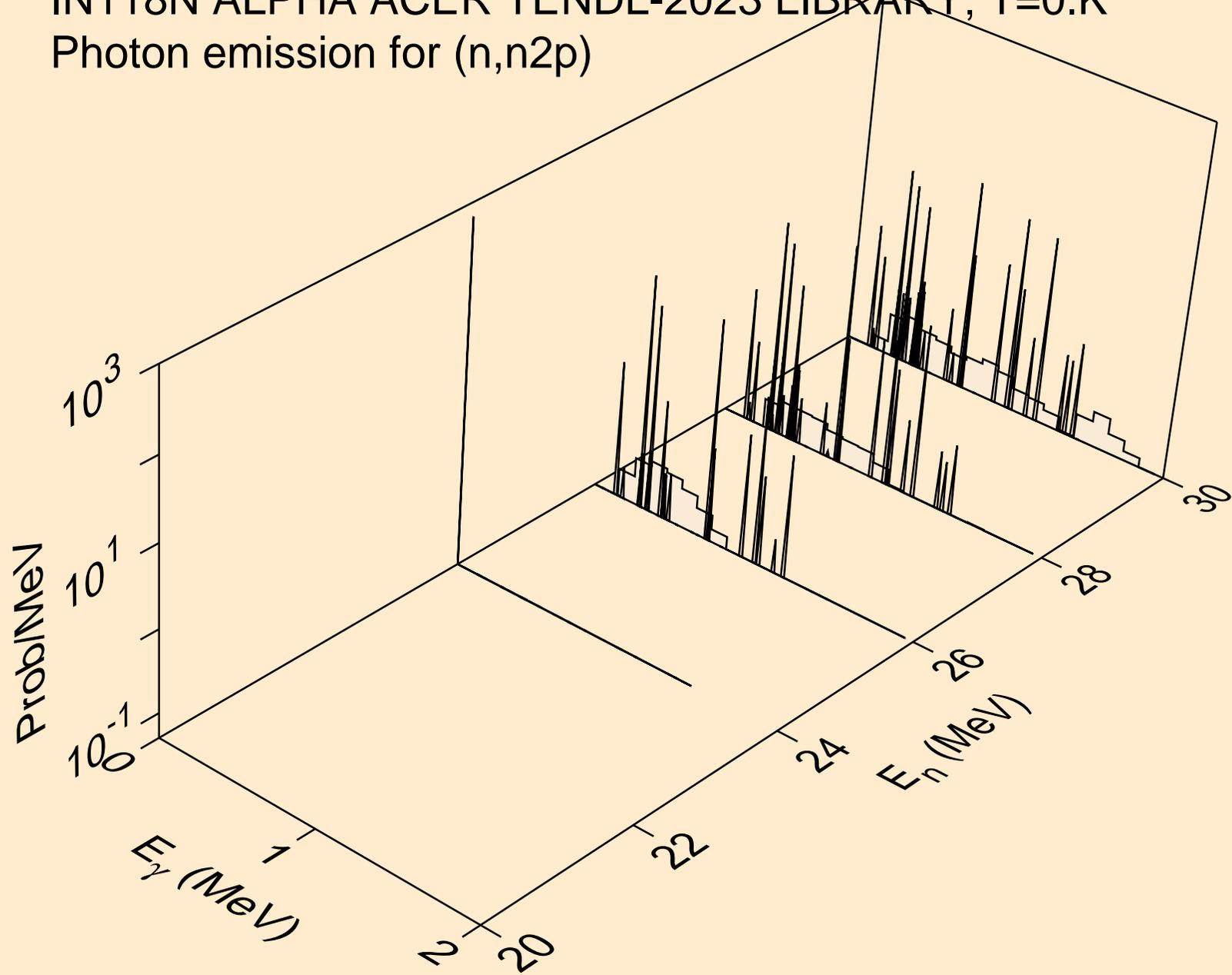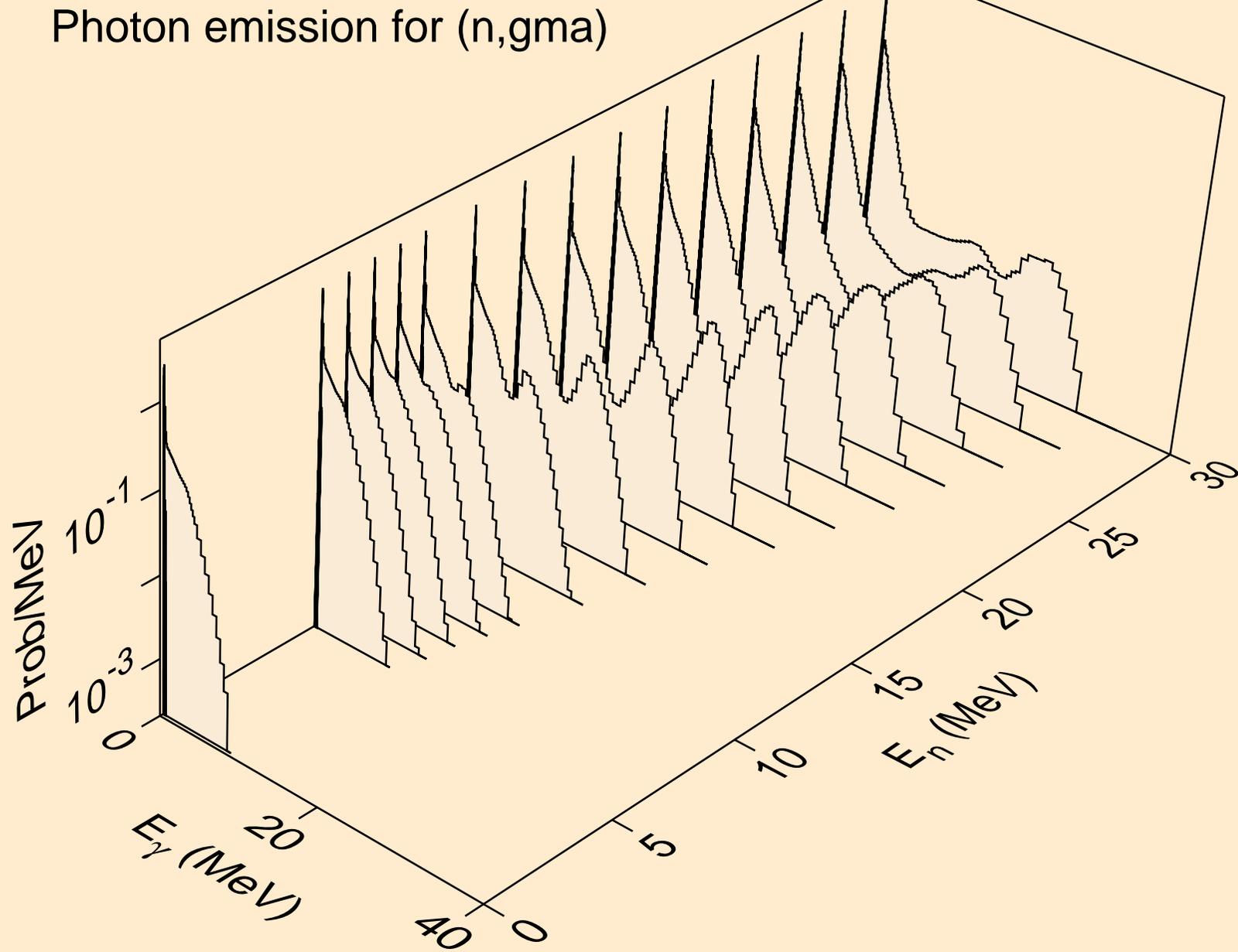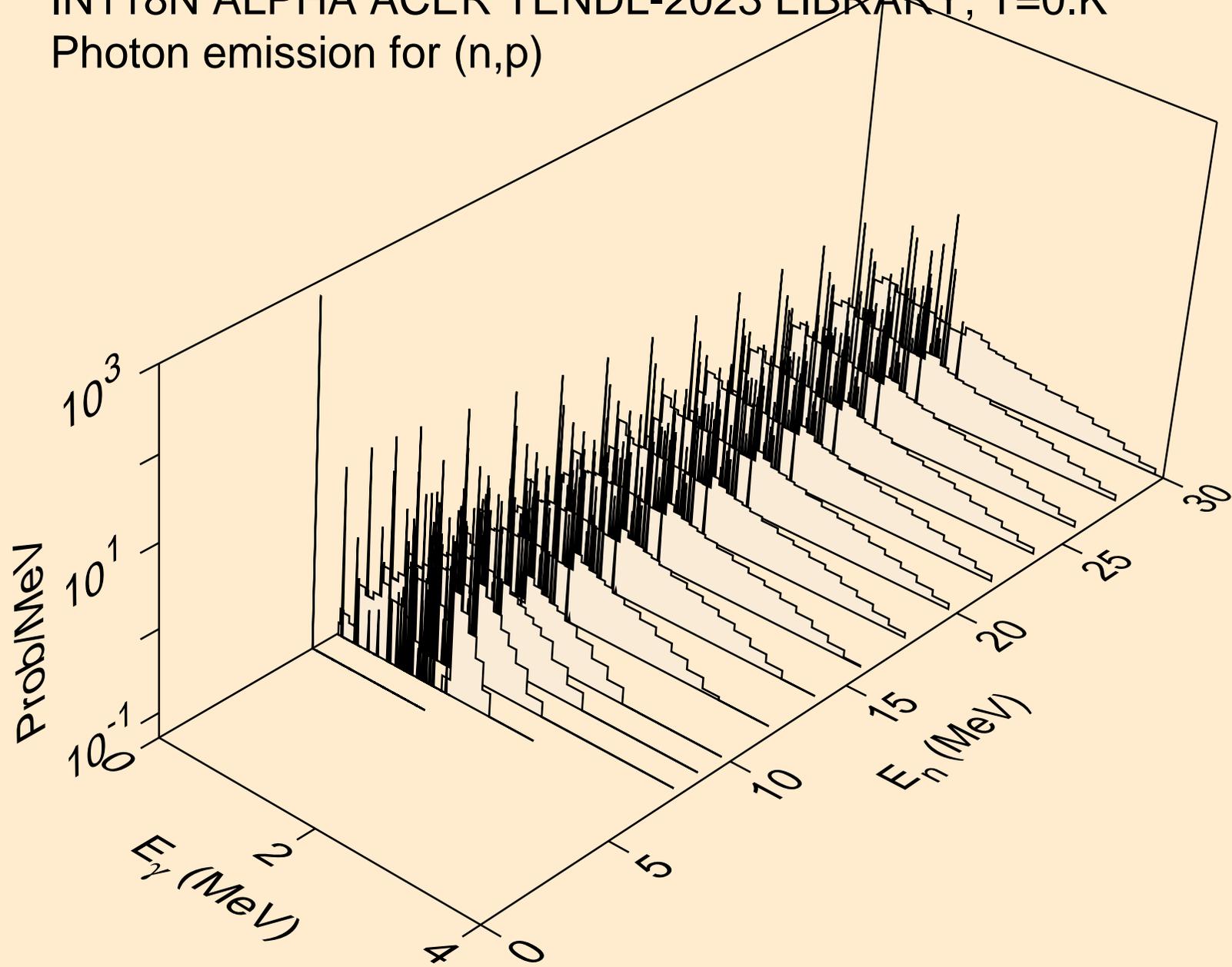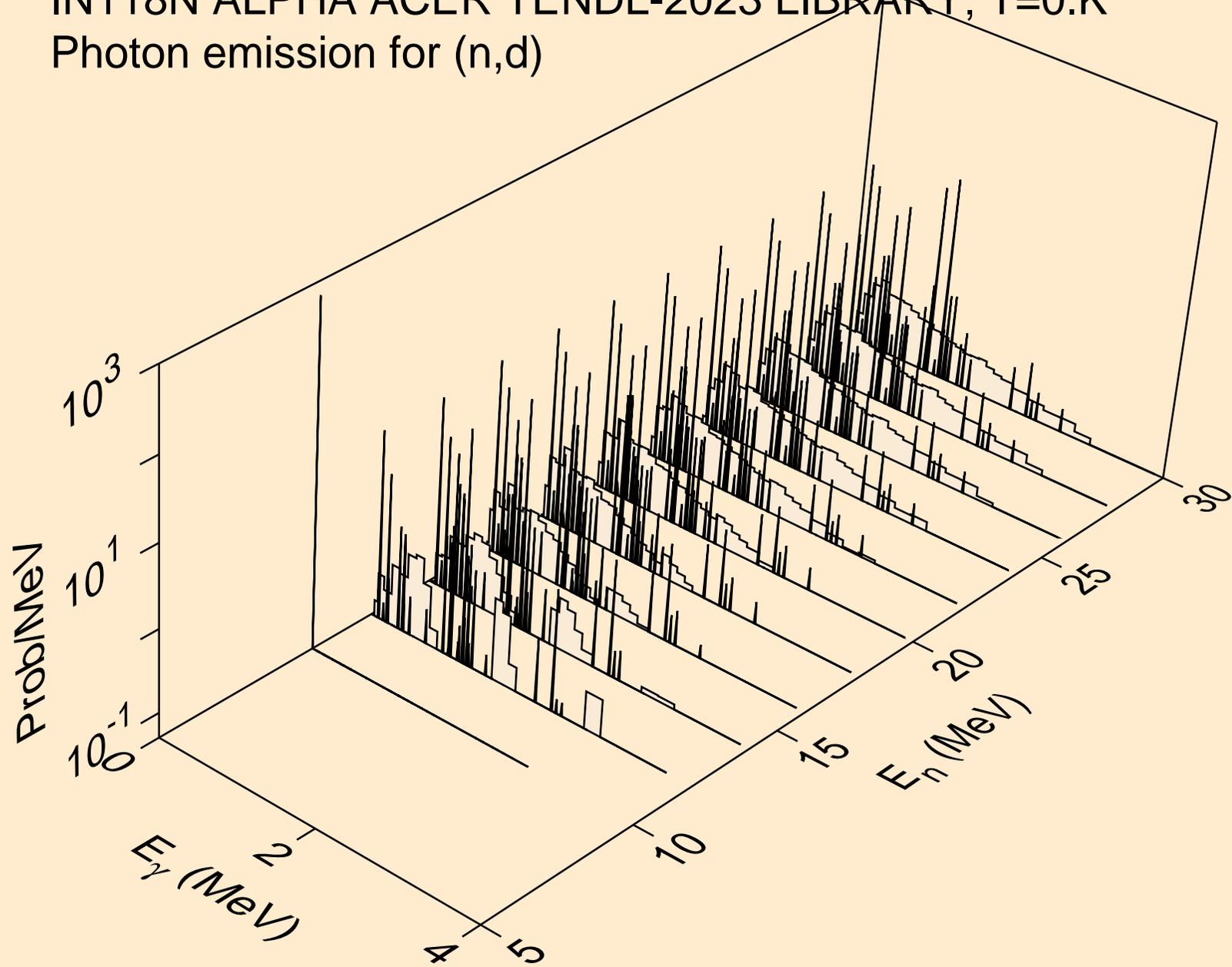IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,d)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,t)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,he3)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for inelastic

Prob/MeV

$10^3$

$10^1$

$10^{-1}$
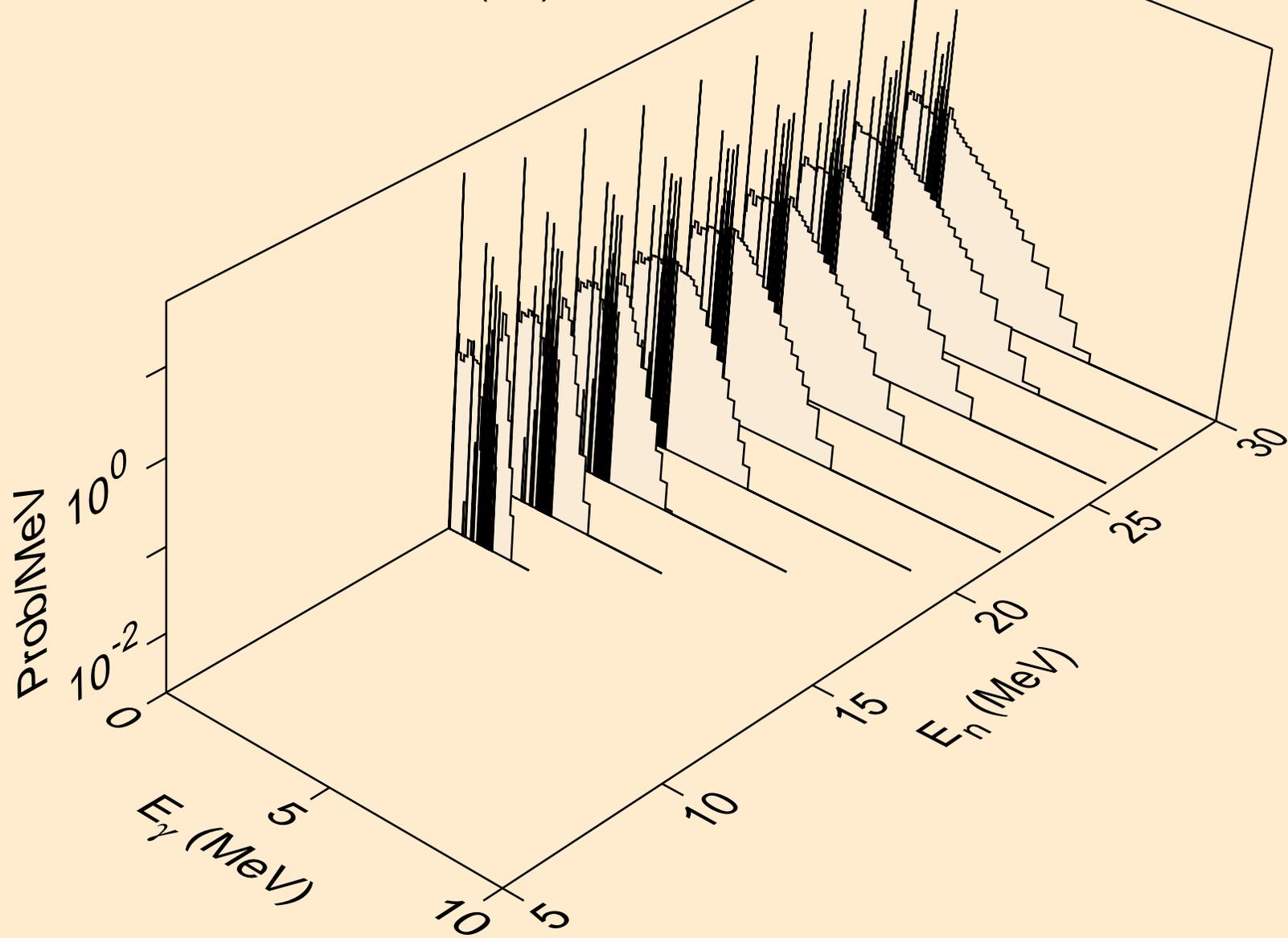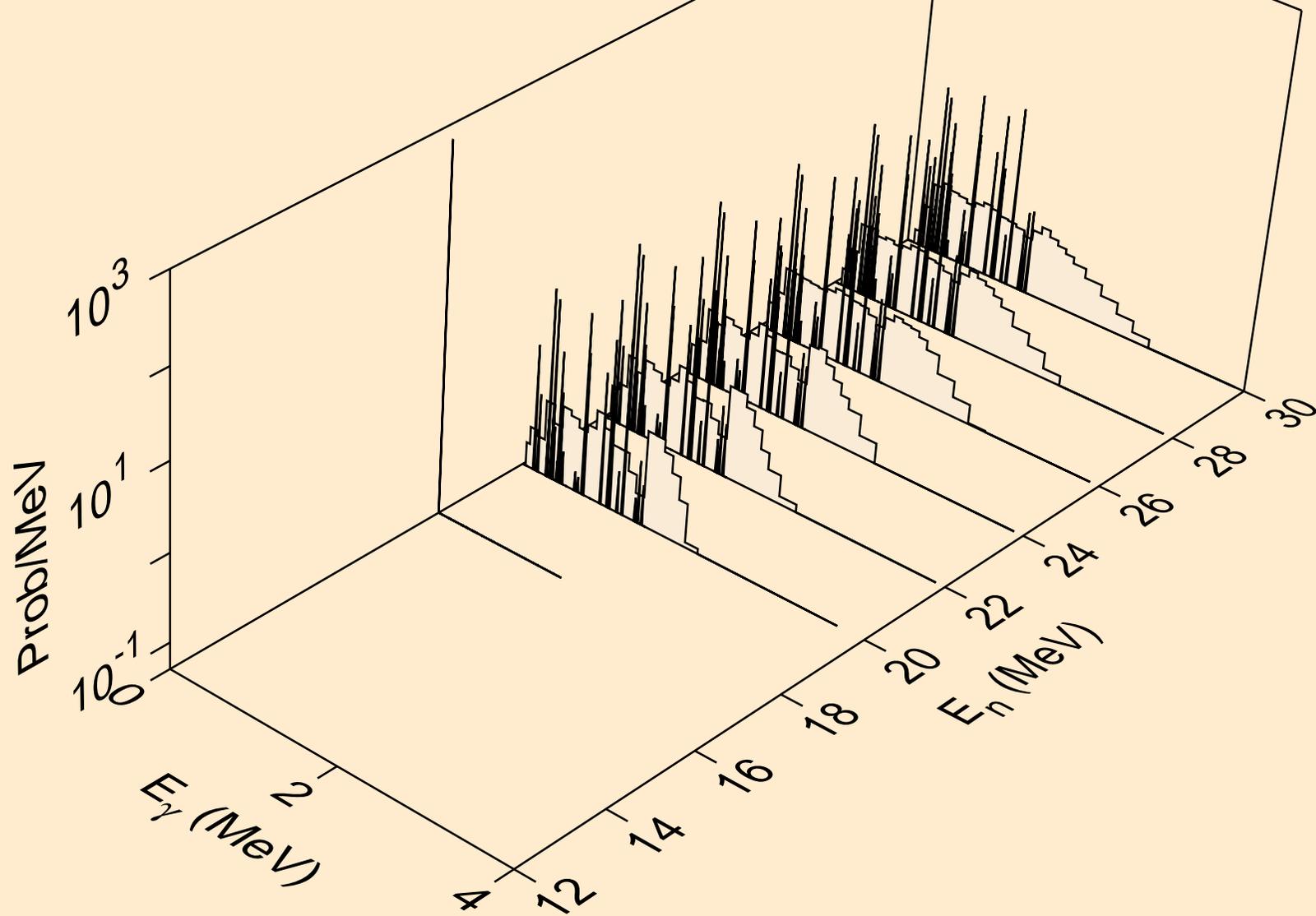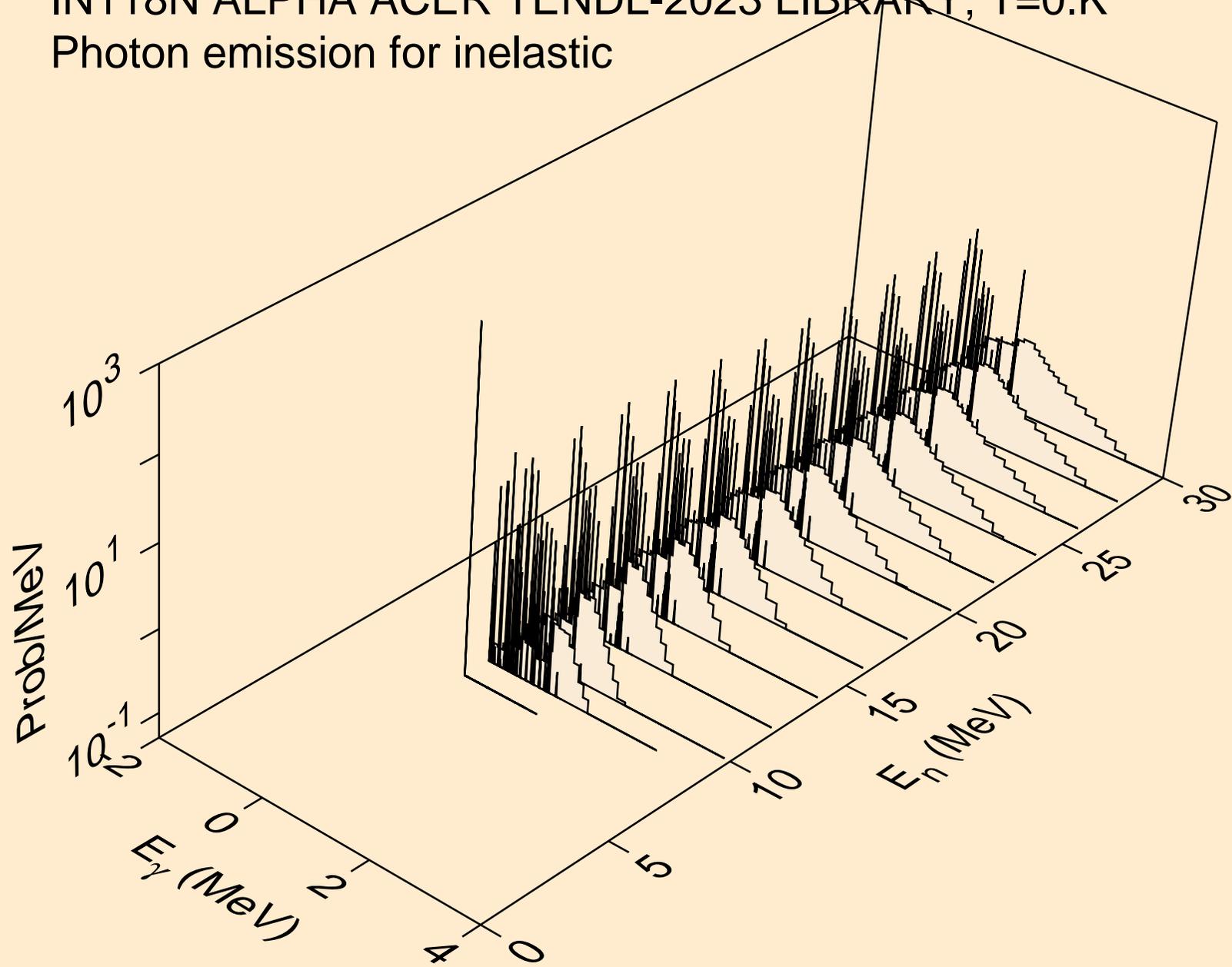
$E_\gamma$ (MeV)

$E_n$ (MeV)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2p)

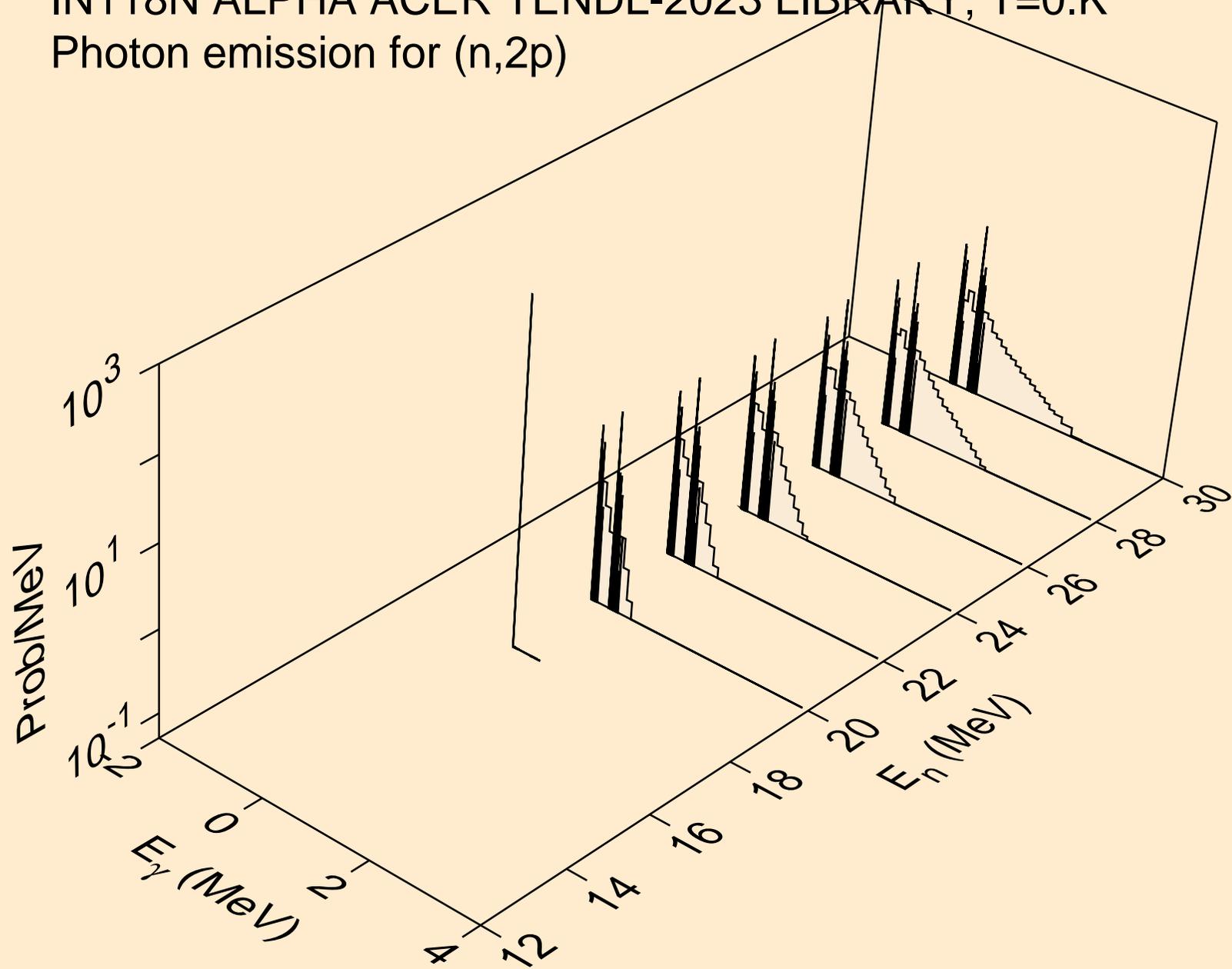IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,pa)

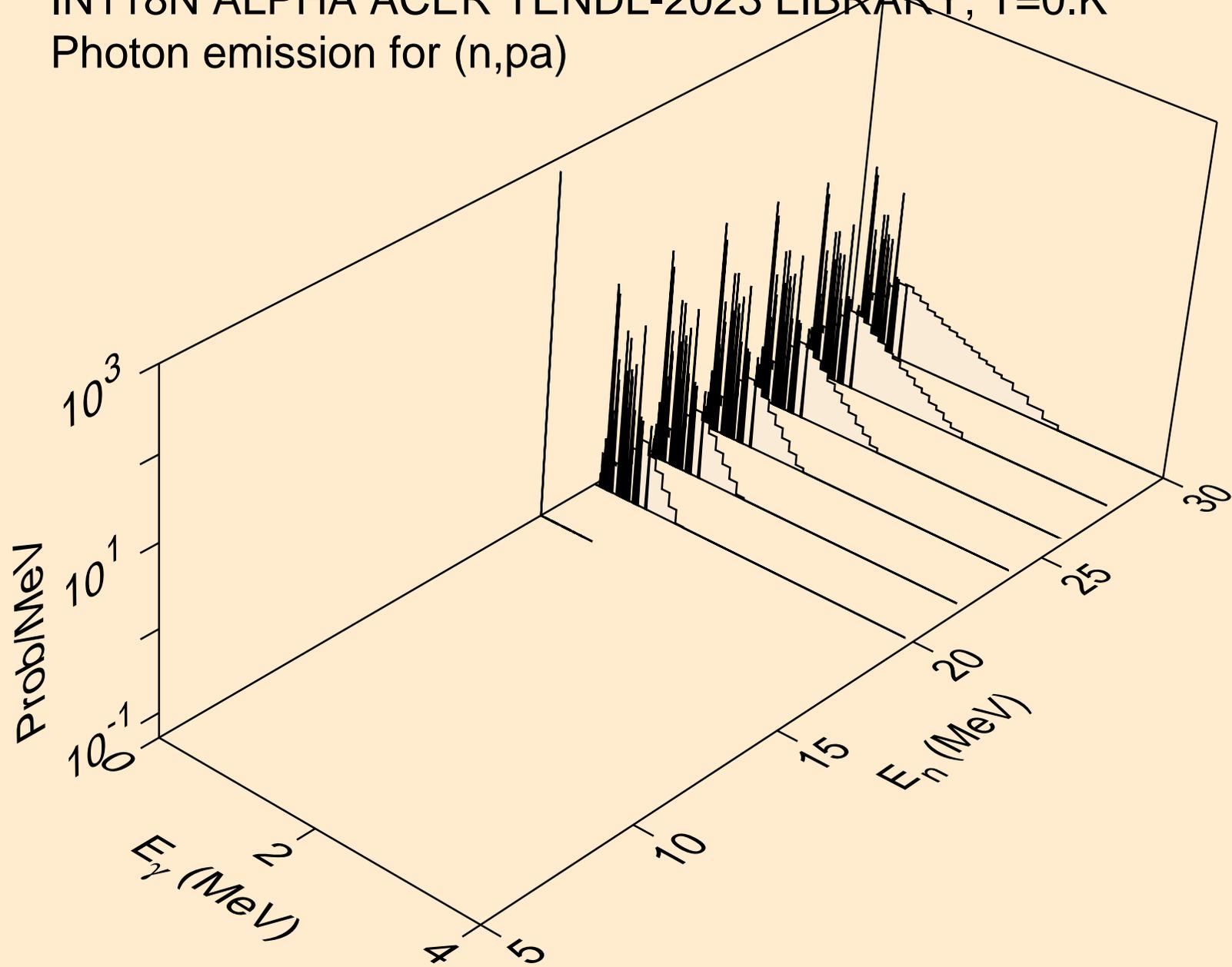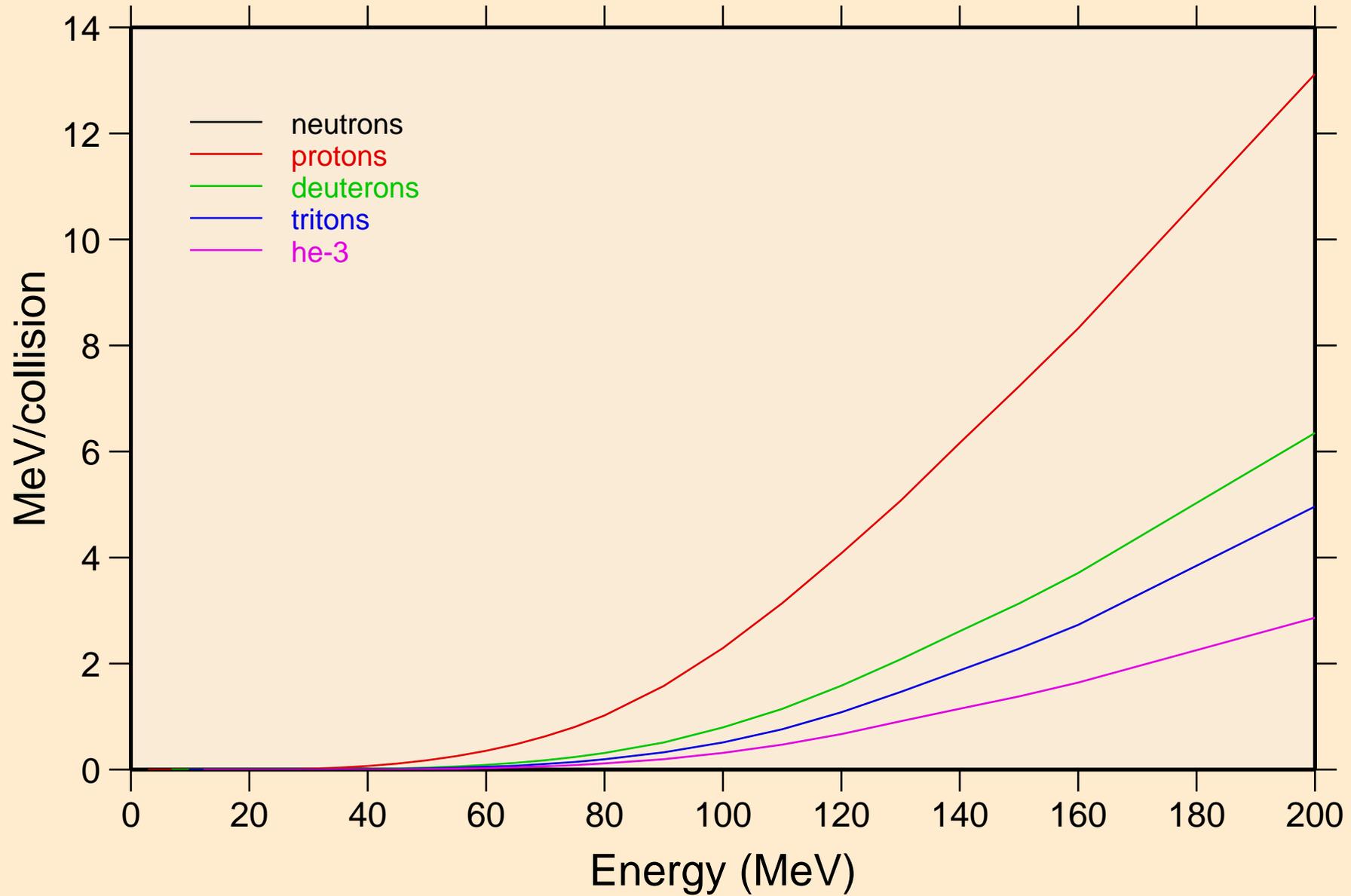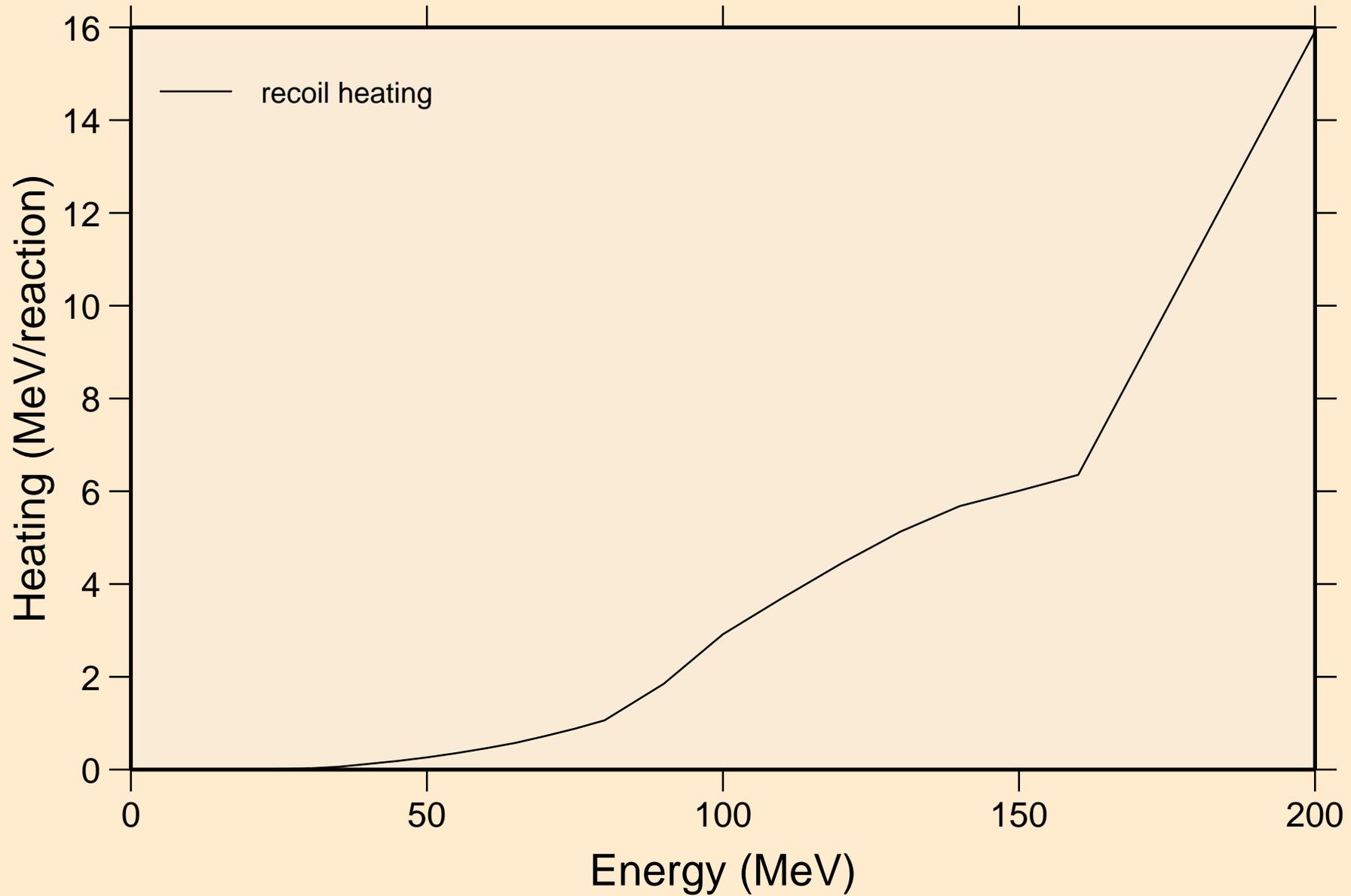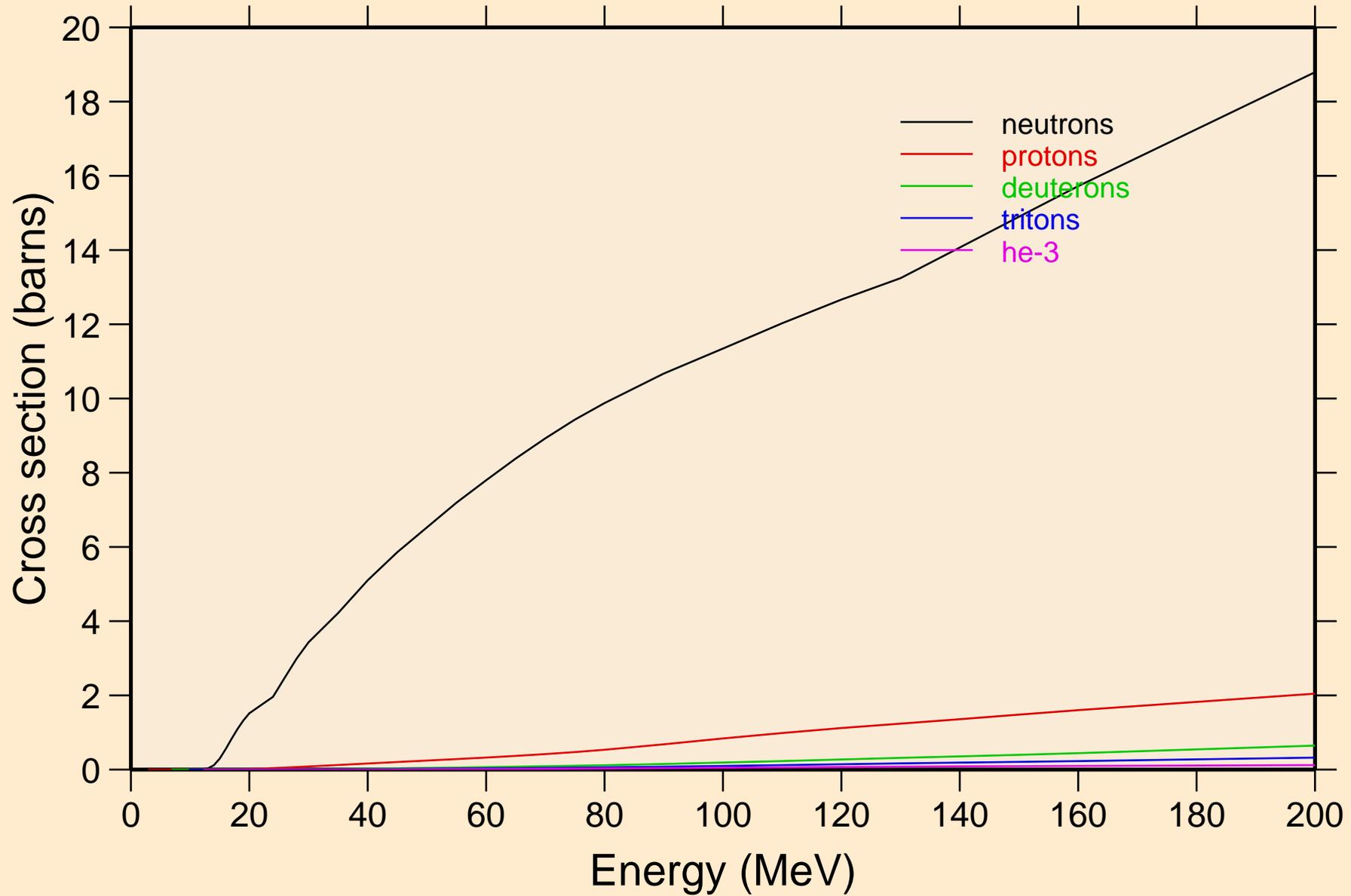IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Particle heating contributions

neutrons
protons
deuterons
tritons
he-3

MeV/collision

Energy (MeV)
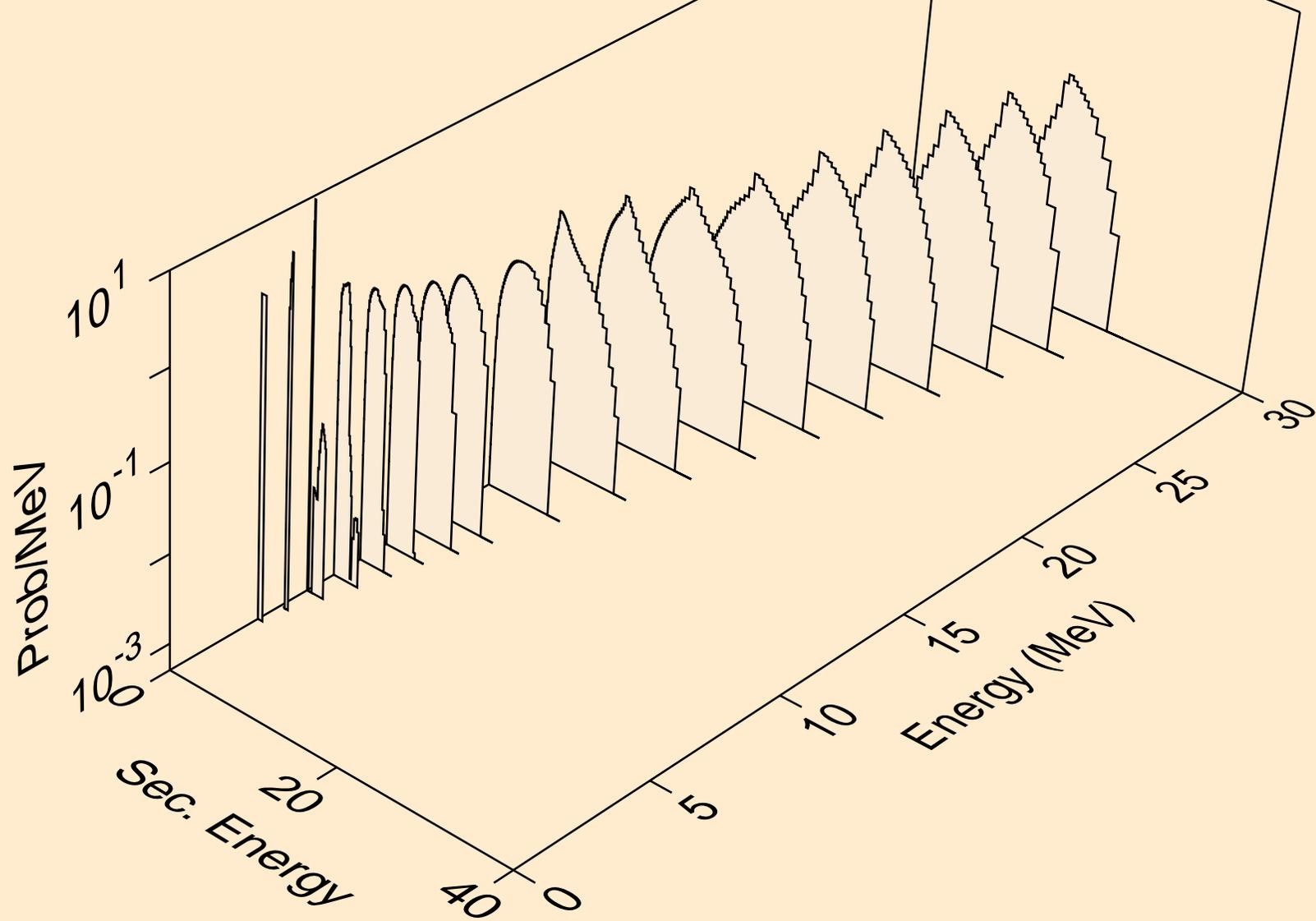
IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Recoil Heating

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Particle production cross sections

neutrons
protons
deuterons
tritons
he-3

Cross section (barns)

Energy (MeV)

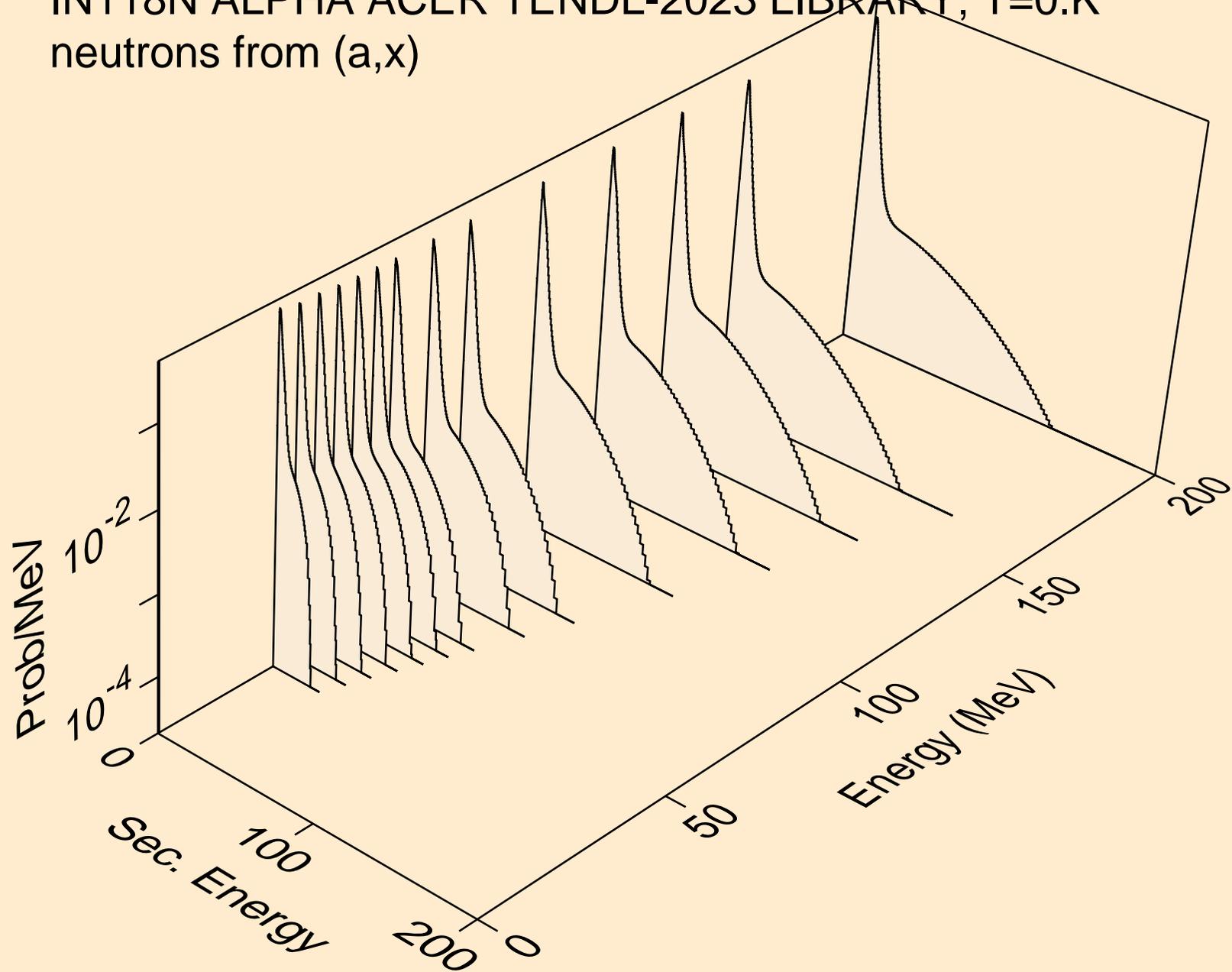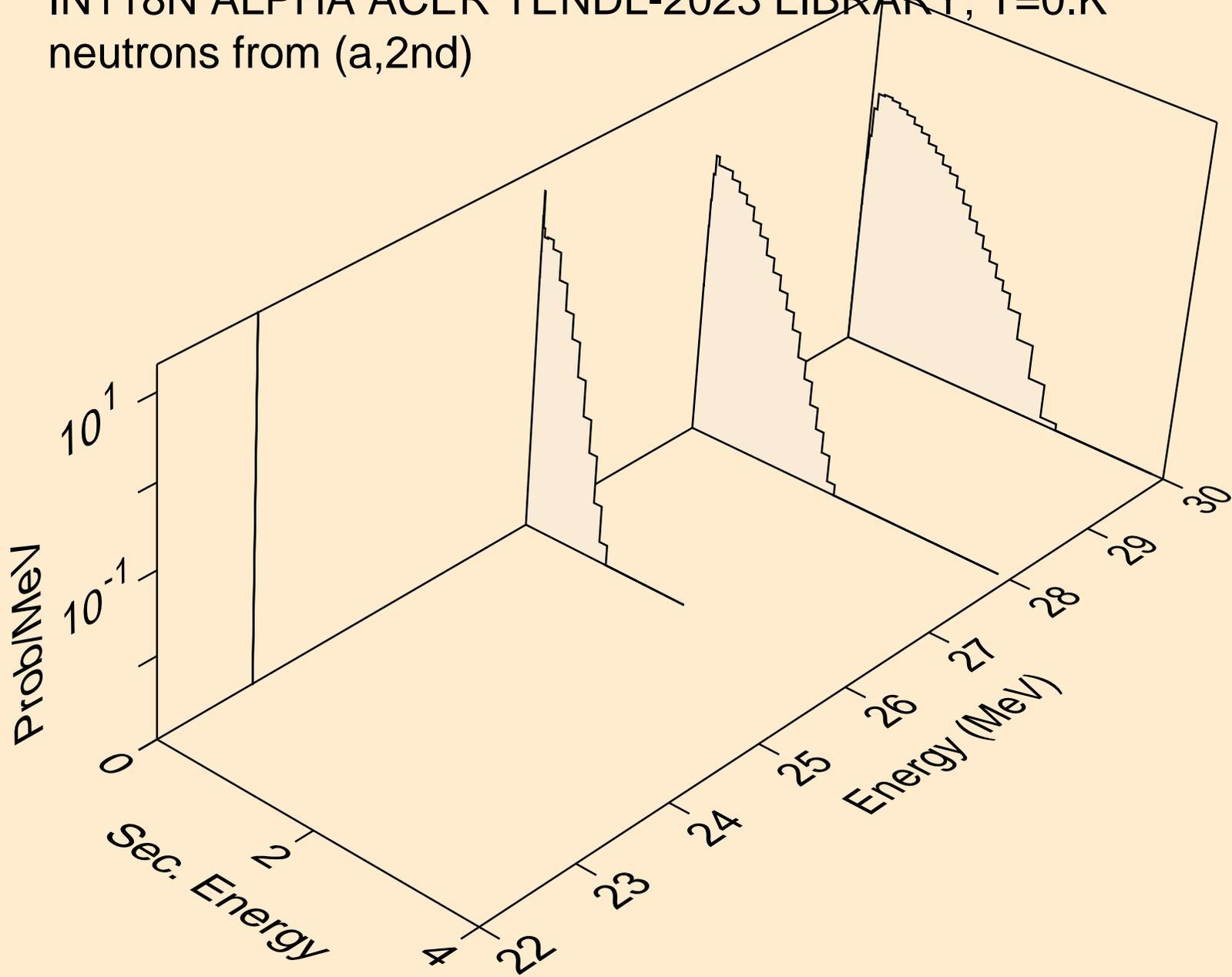IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,x)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,2nd)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,2n)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,3n)

ProbIMeV

$10^0$

$10^{-2}$

Sec. Energy

Energy (MeV)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)a

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,2n)a

ProbIMeV
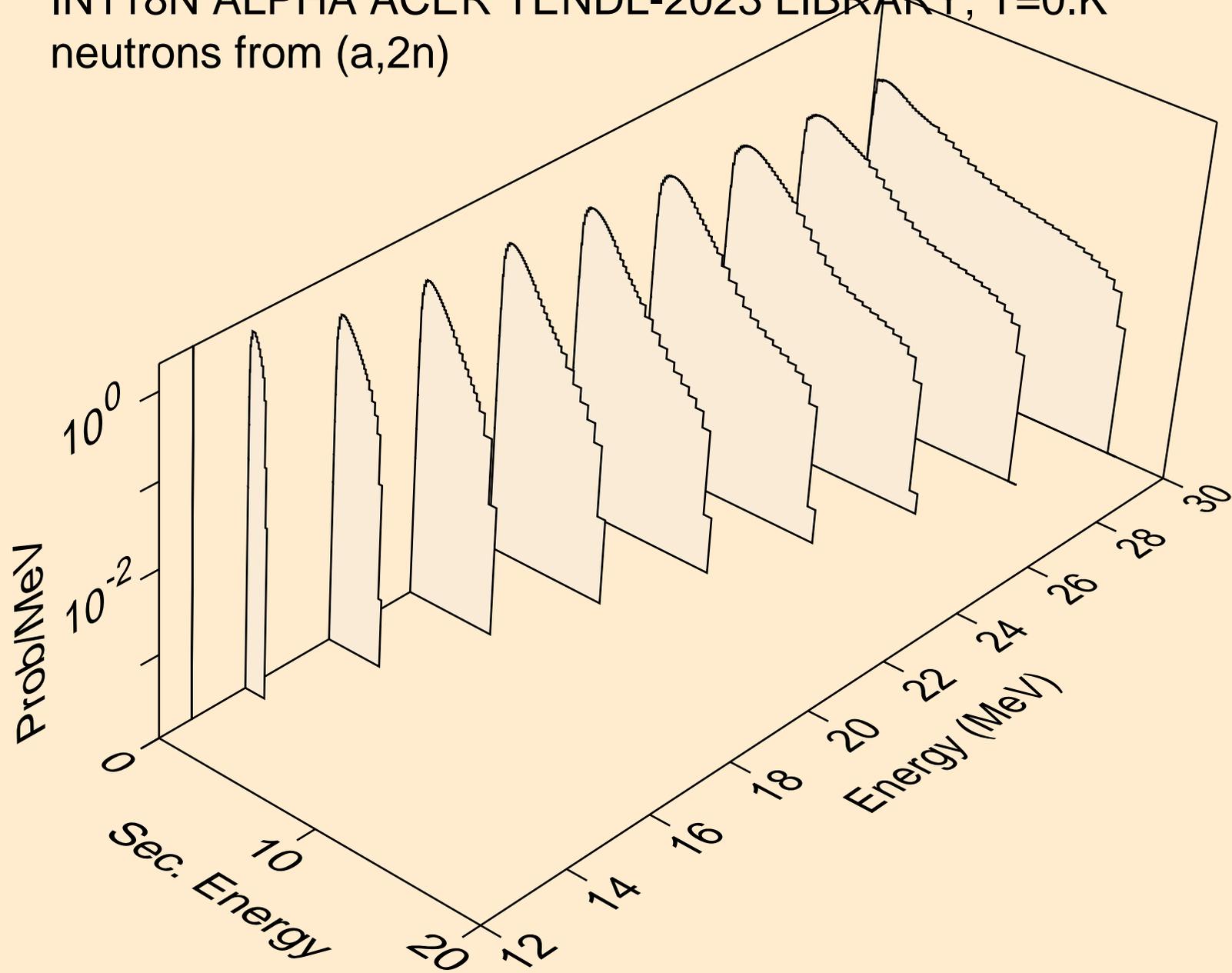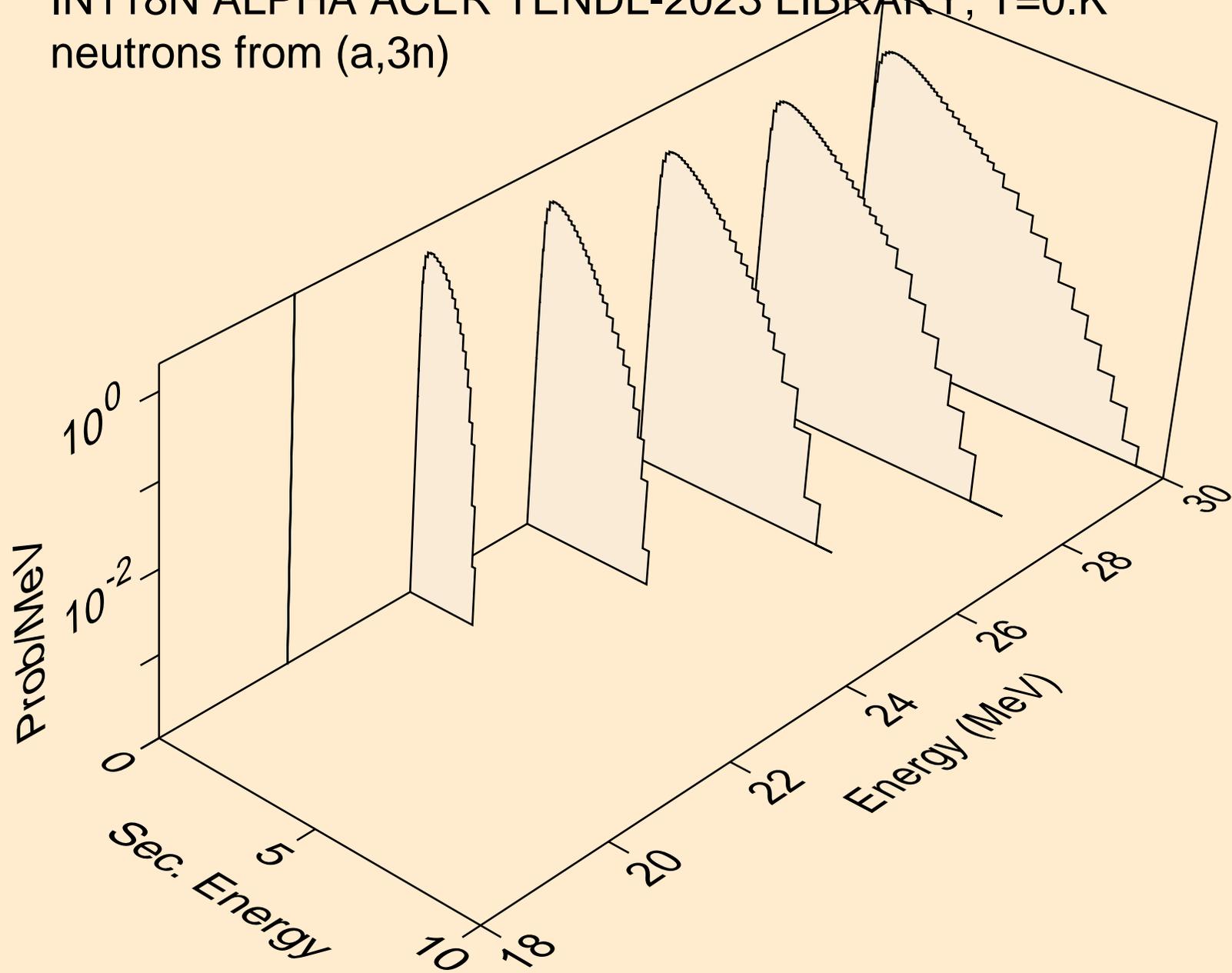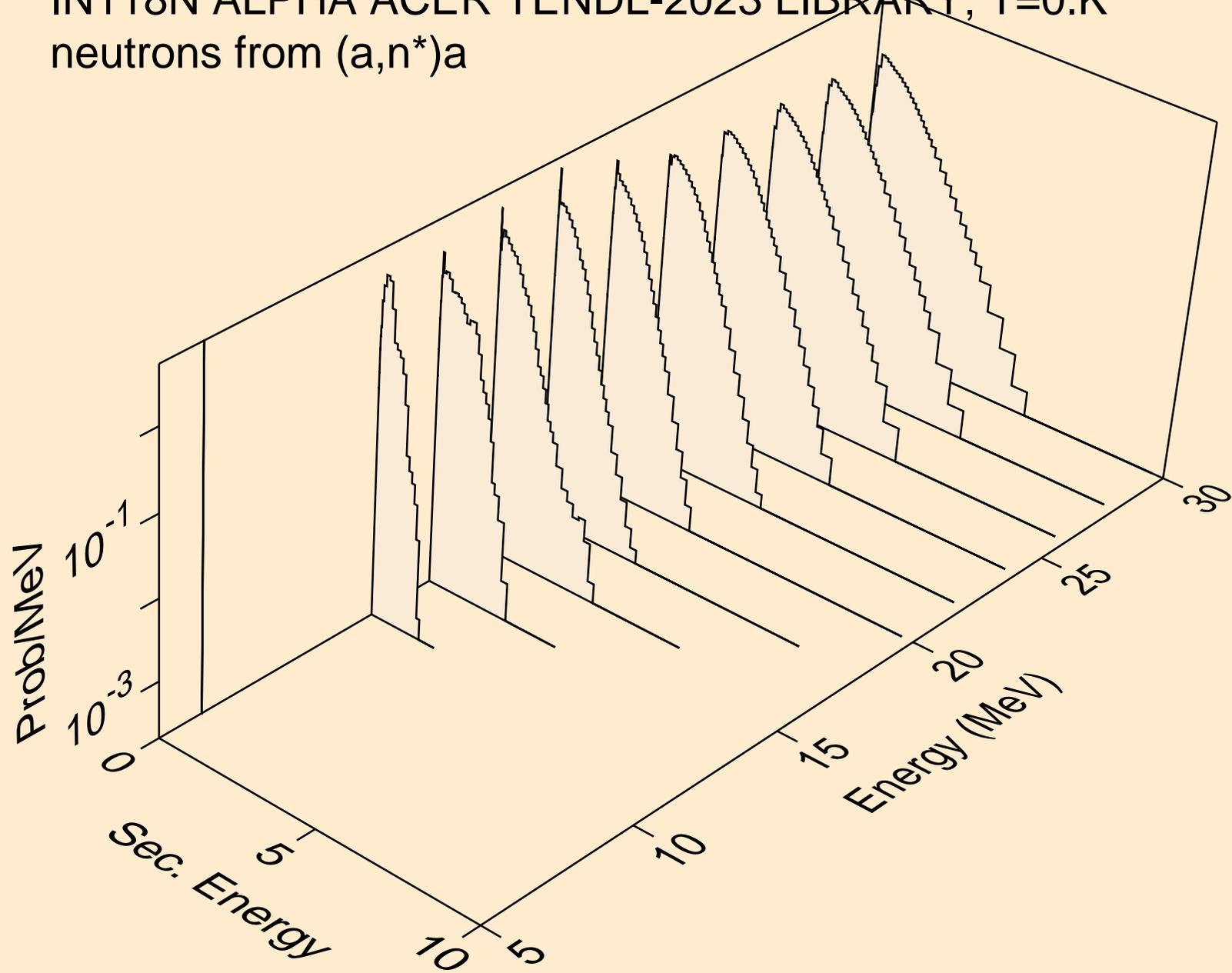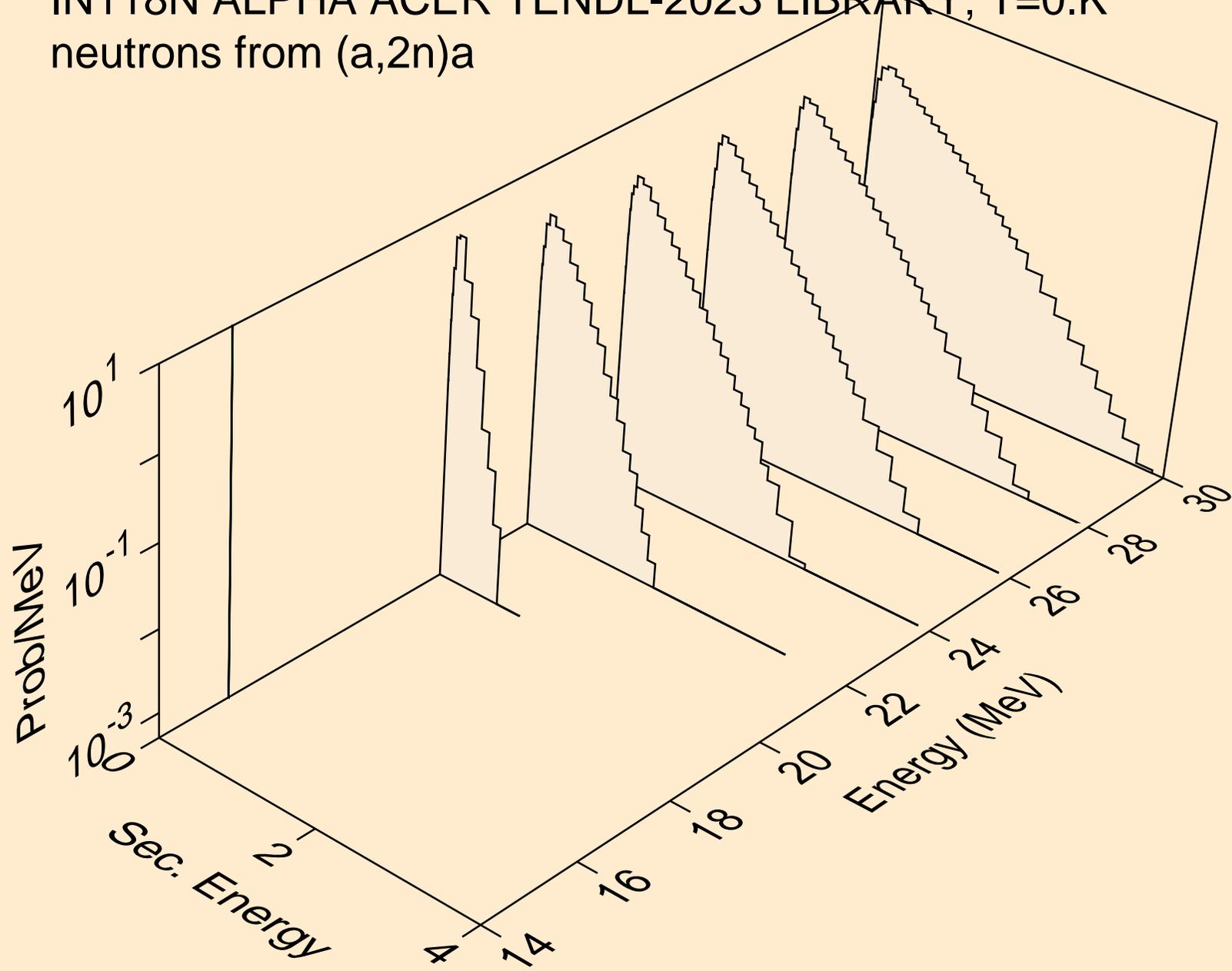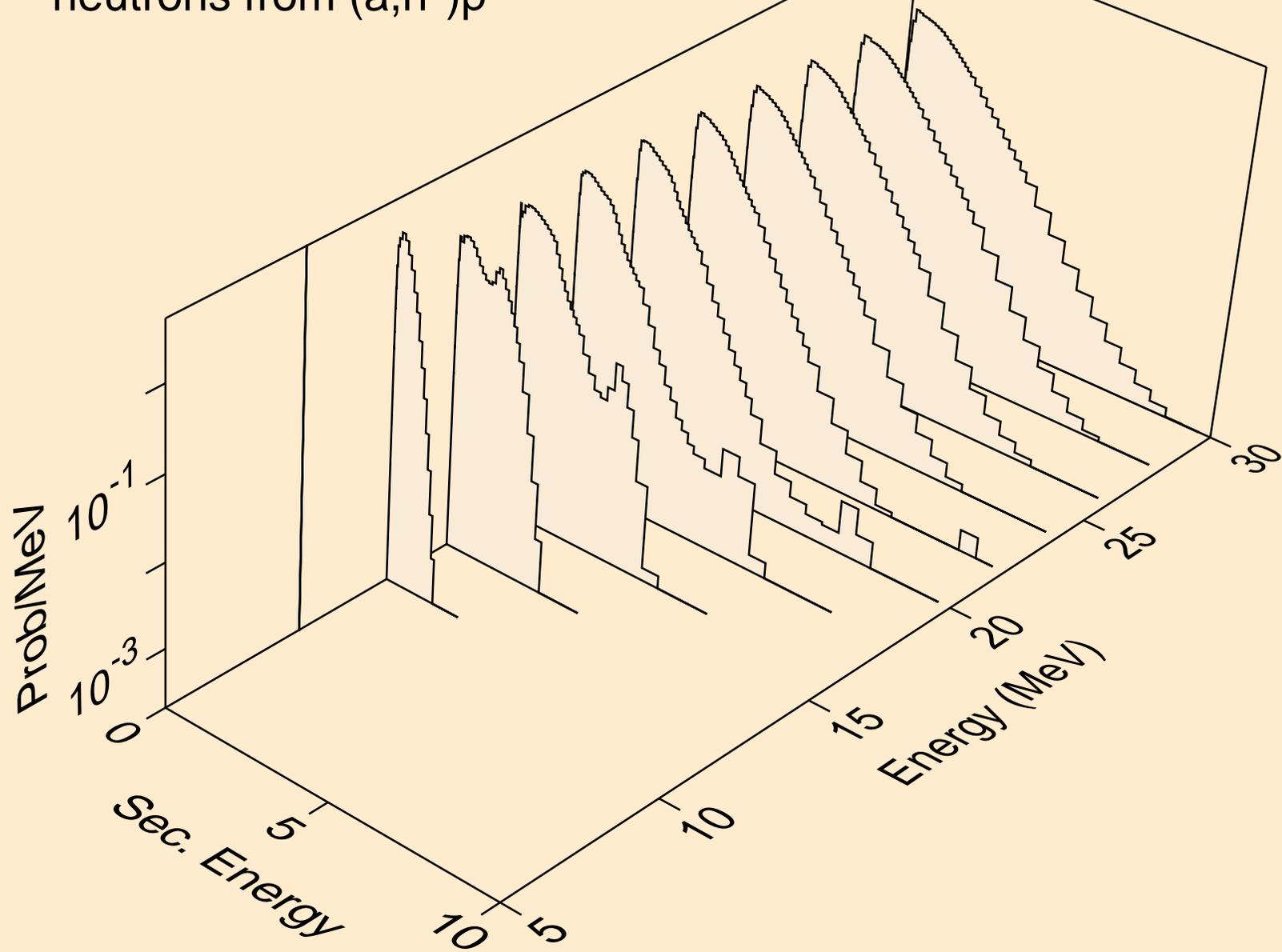
Sec. Energy

Energy (MeV)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)p

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)d

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)t

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)he3

ProbIMeV

$10^1$

$10^{-1}$

$10^{-3}$

$10^0$

Sec. Energy

1

2

20

22

24

26

28

30

Energy (MeV)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,2np)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,3np)

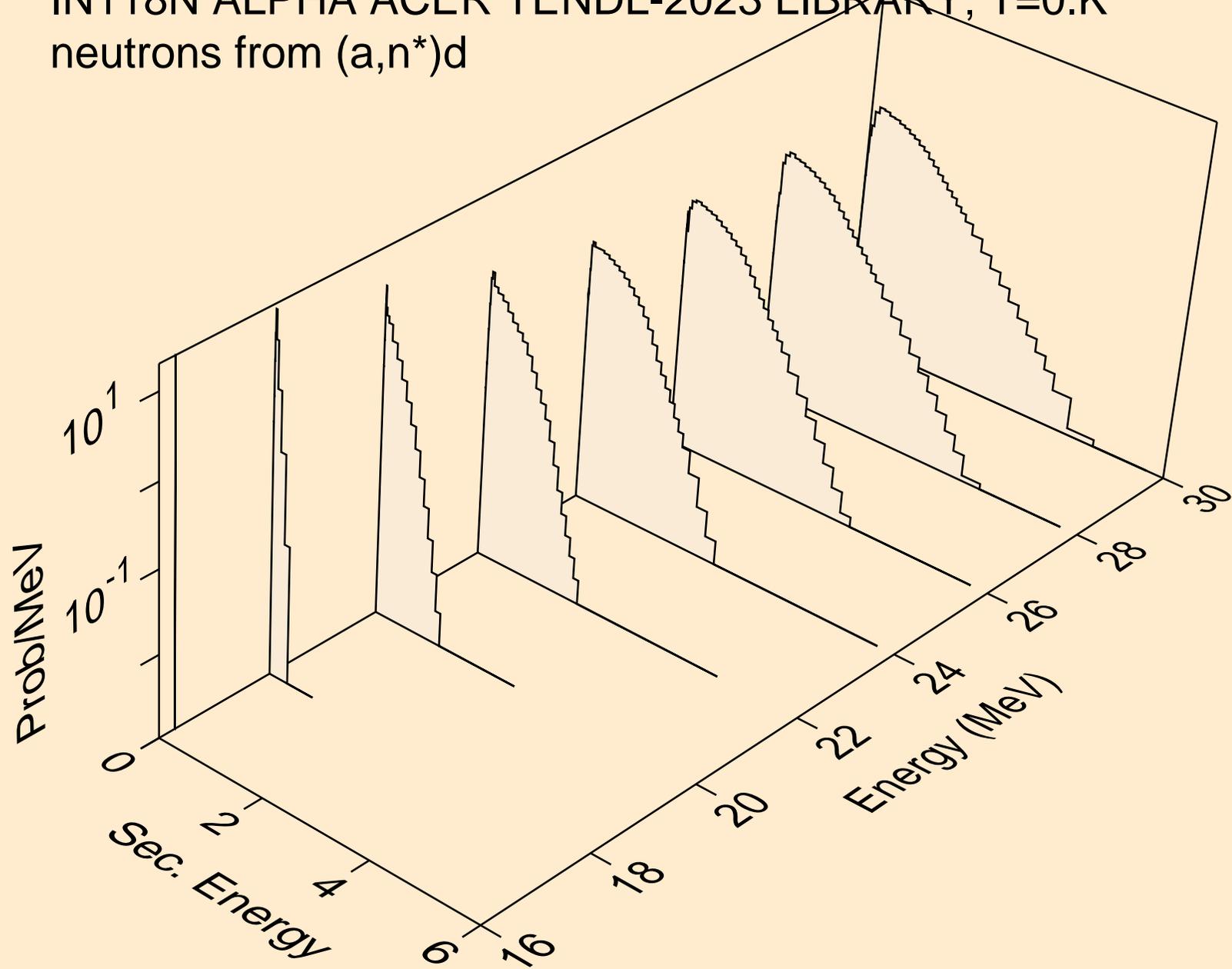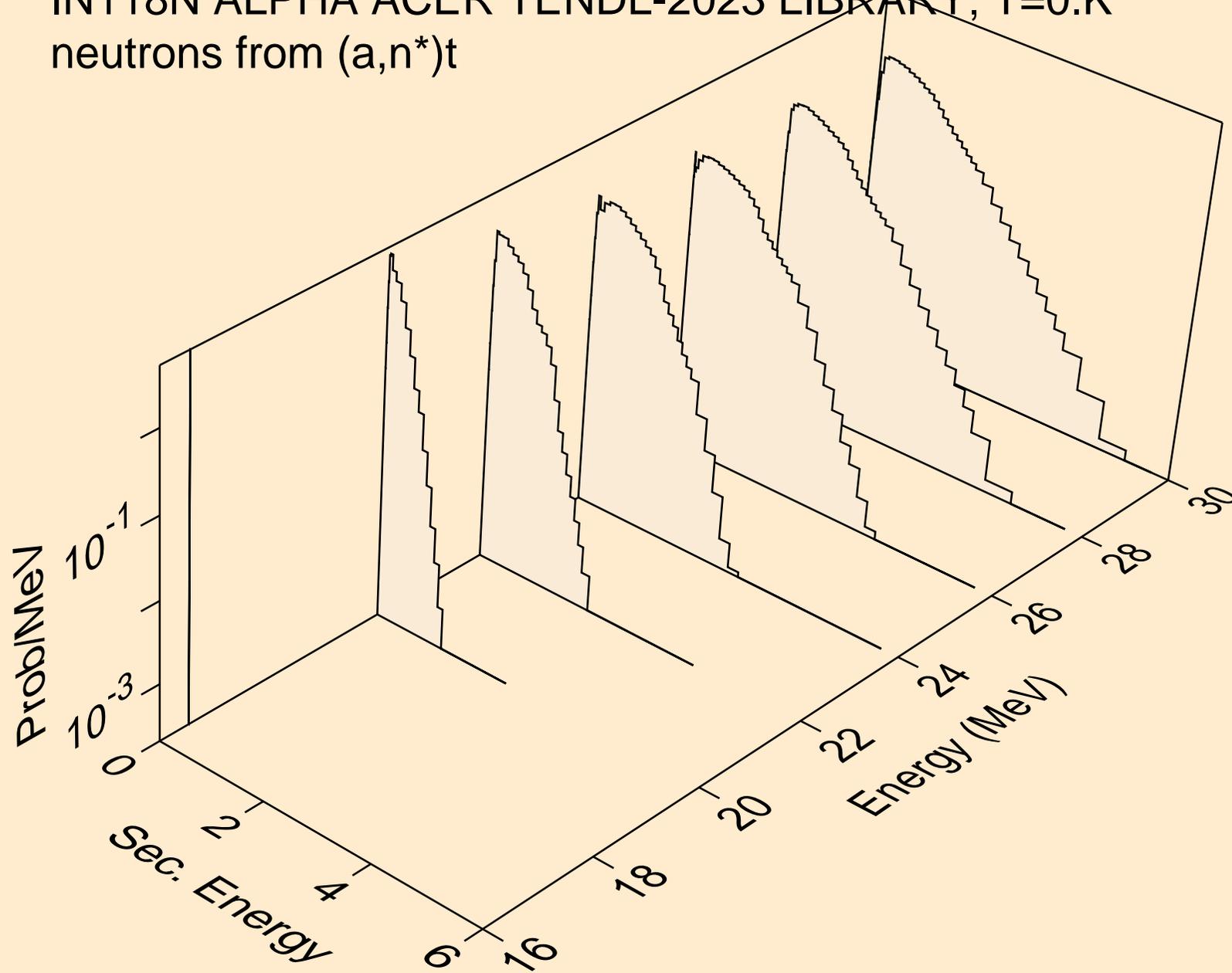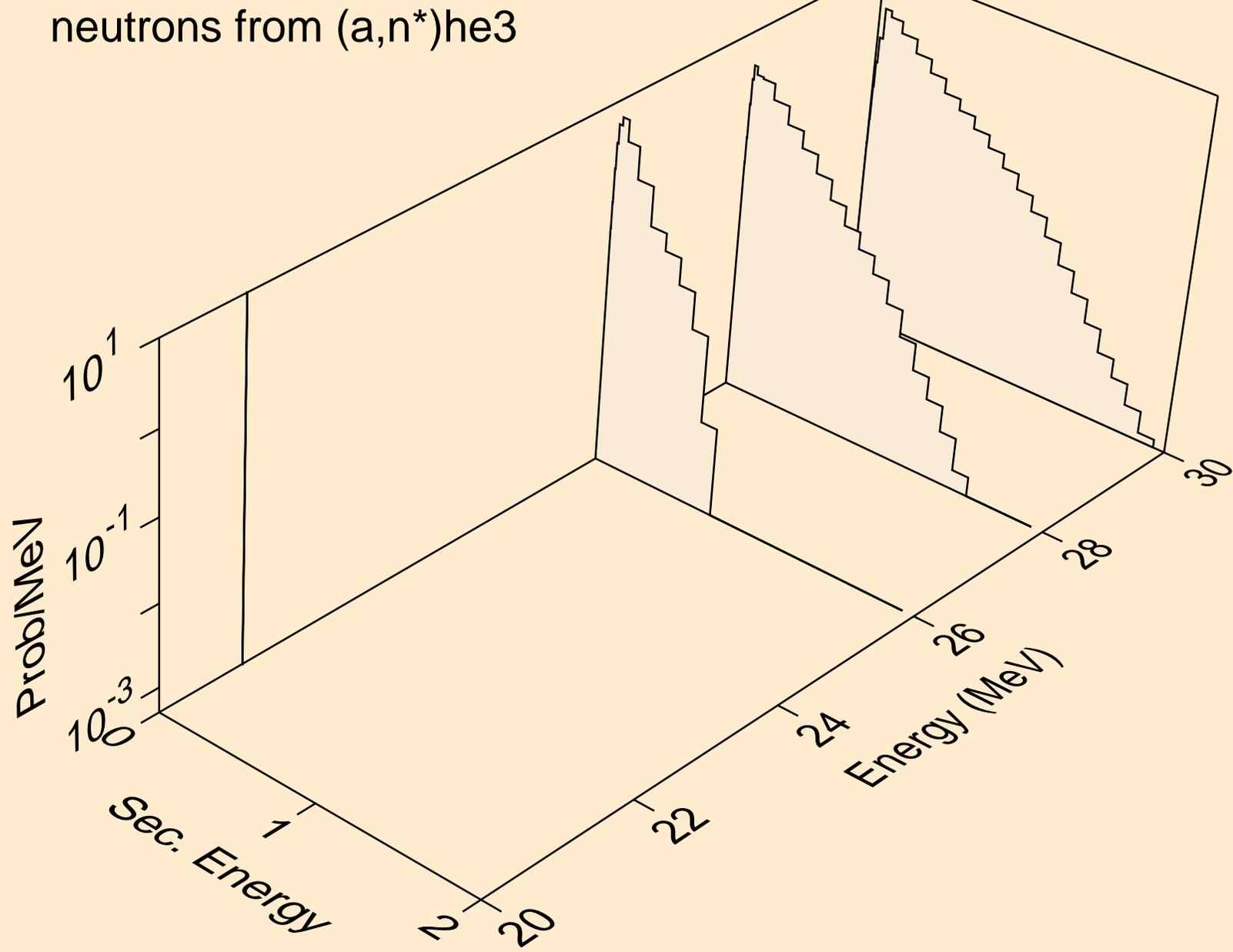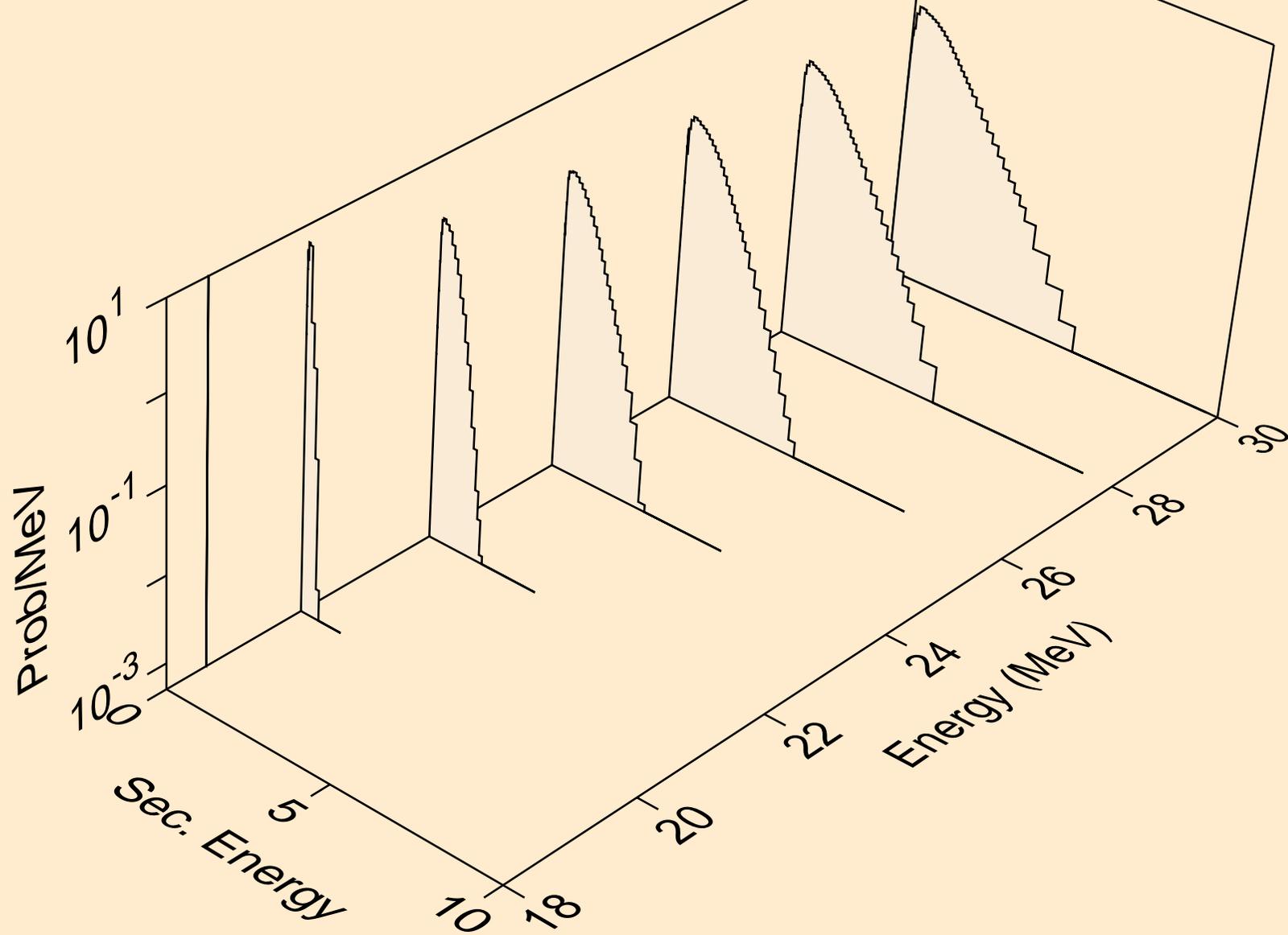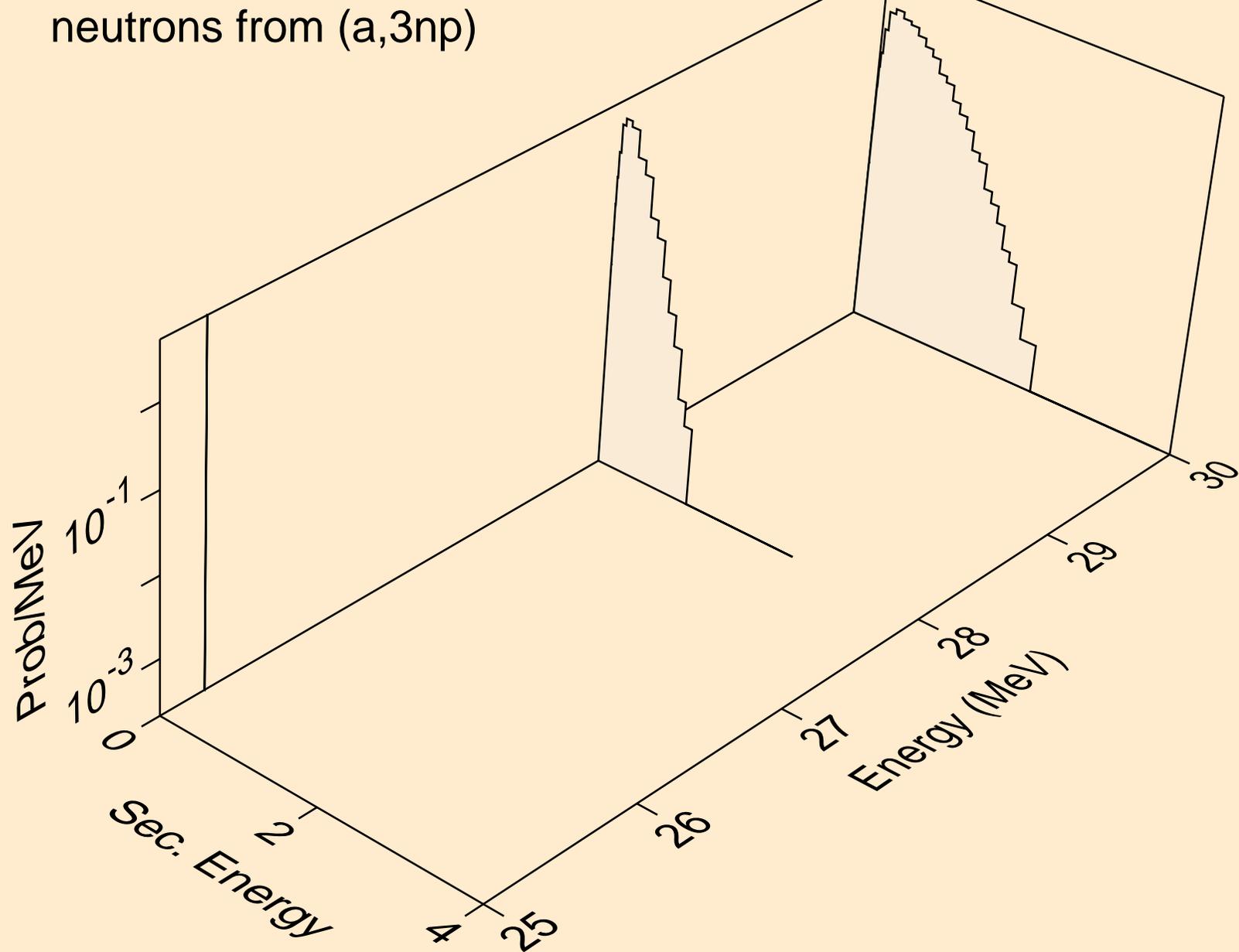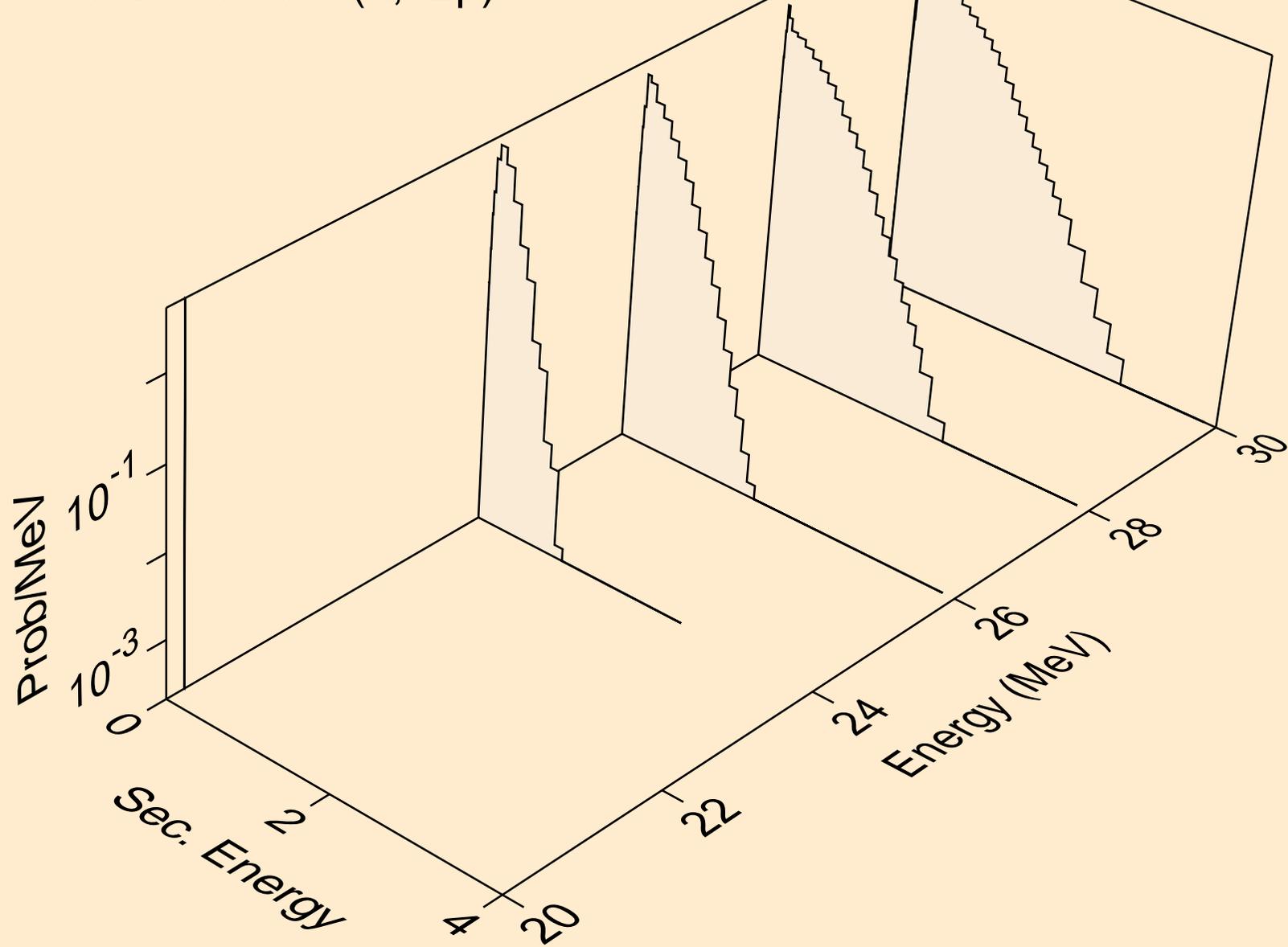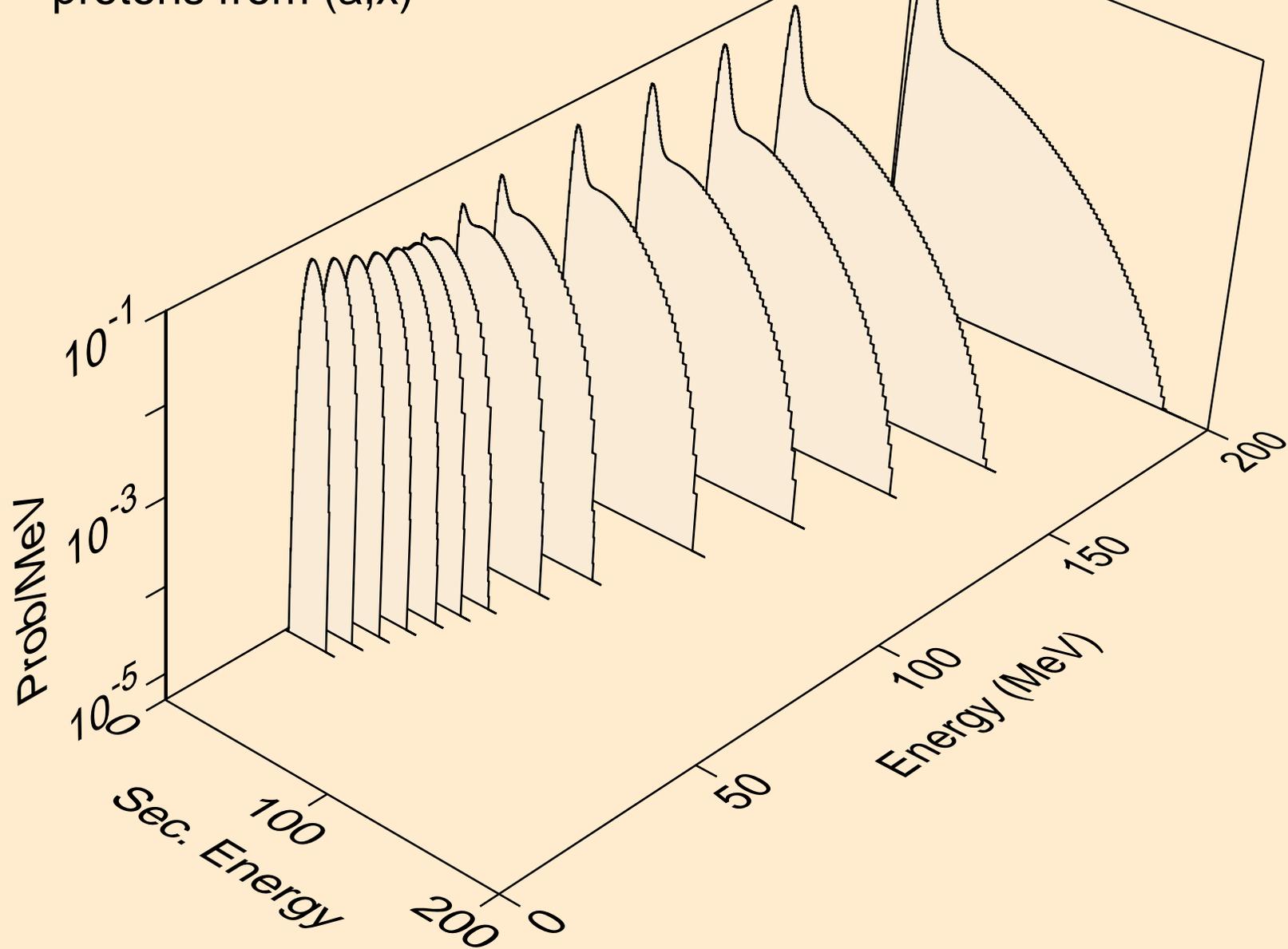IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n2p)

Prob/MeV

$10^{-1}$

$10^{-3}$

Sec. Energy

Energy (MeV)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,x)

Prob/MeV

$10^{-1}$

$10^{-3}$

$10^{-5}$

$10^0$

Sec. Energy

100

200

Energy (MeV)

0

50

100

150

200

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,n*)p

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,2np)

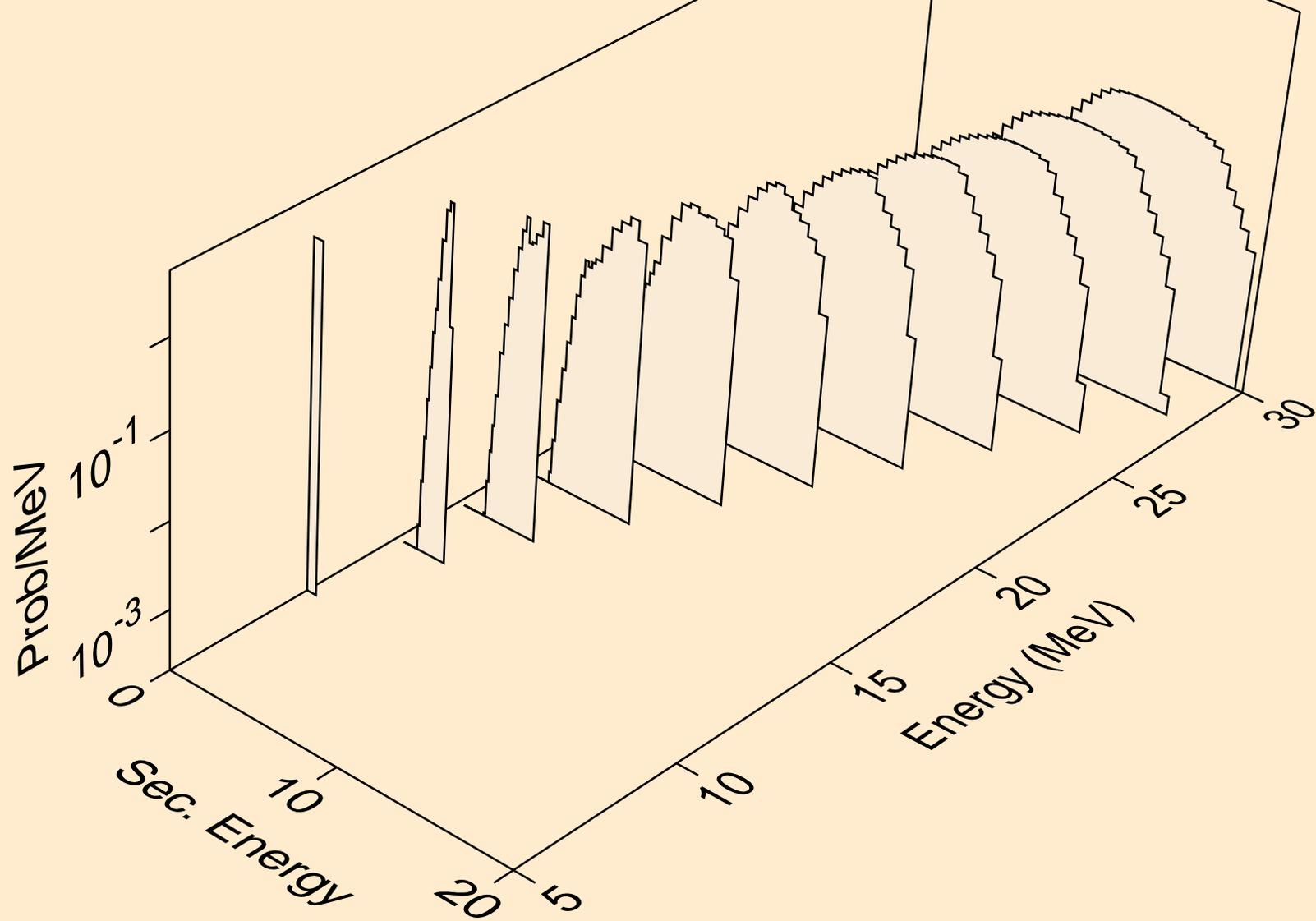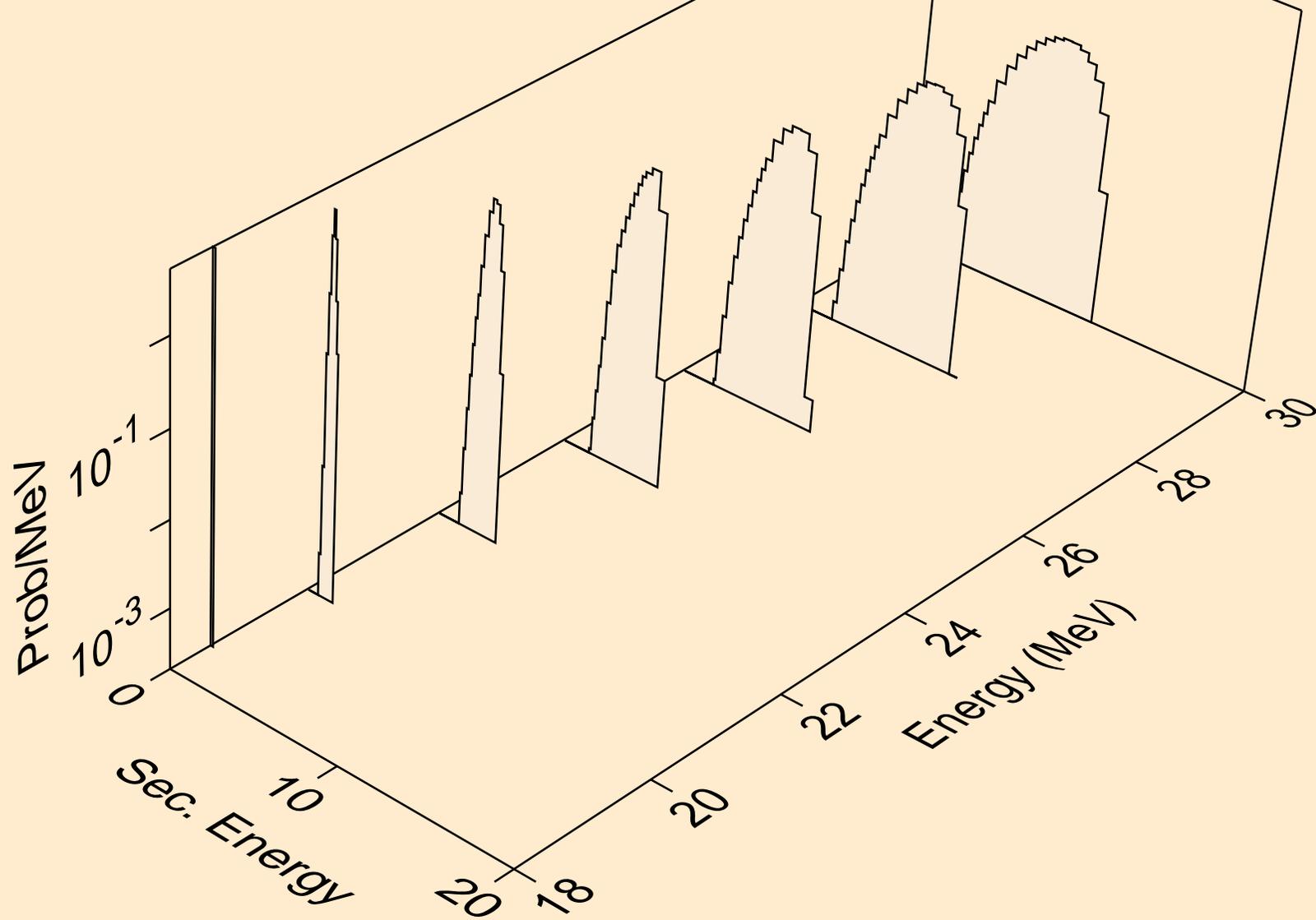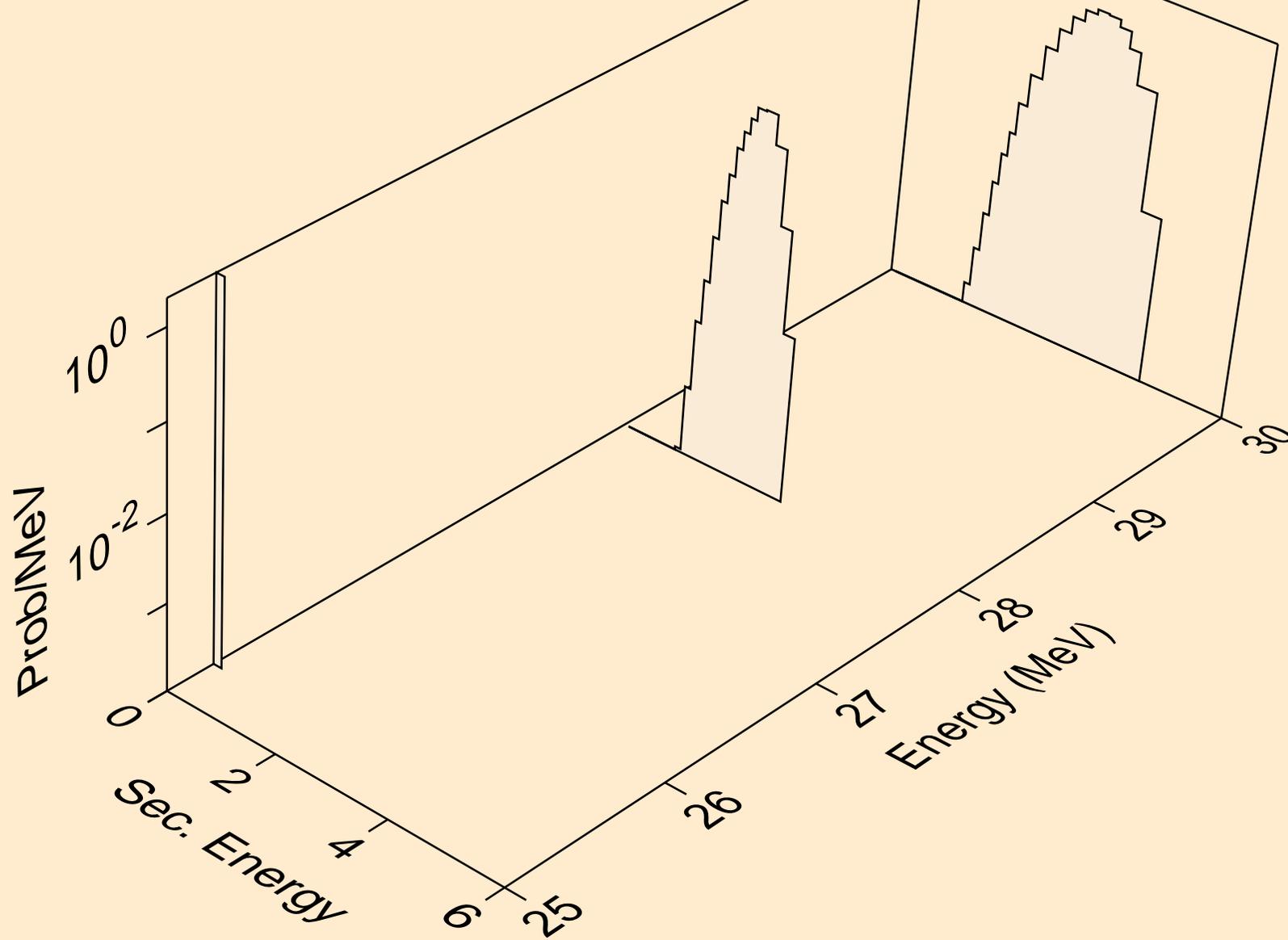IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,3np)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,n2p)

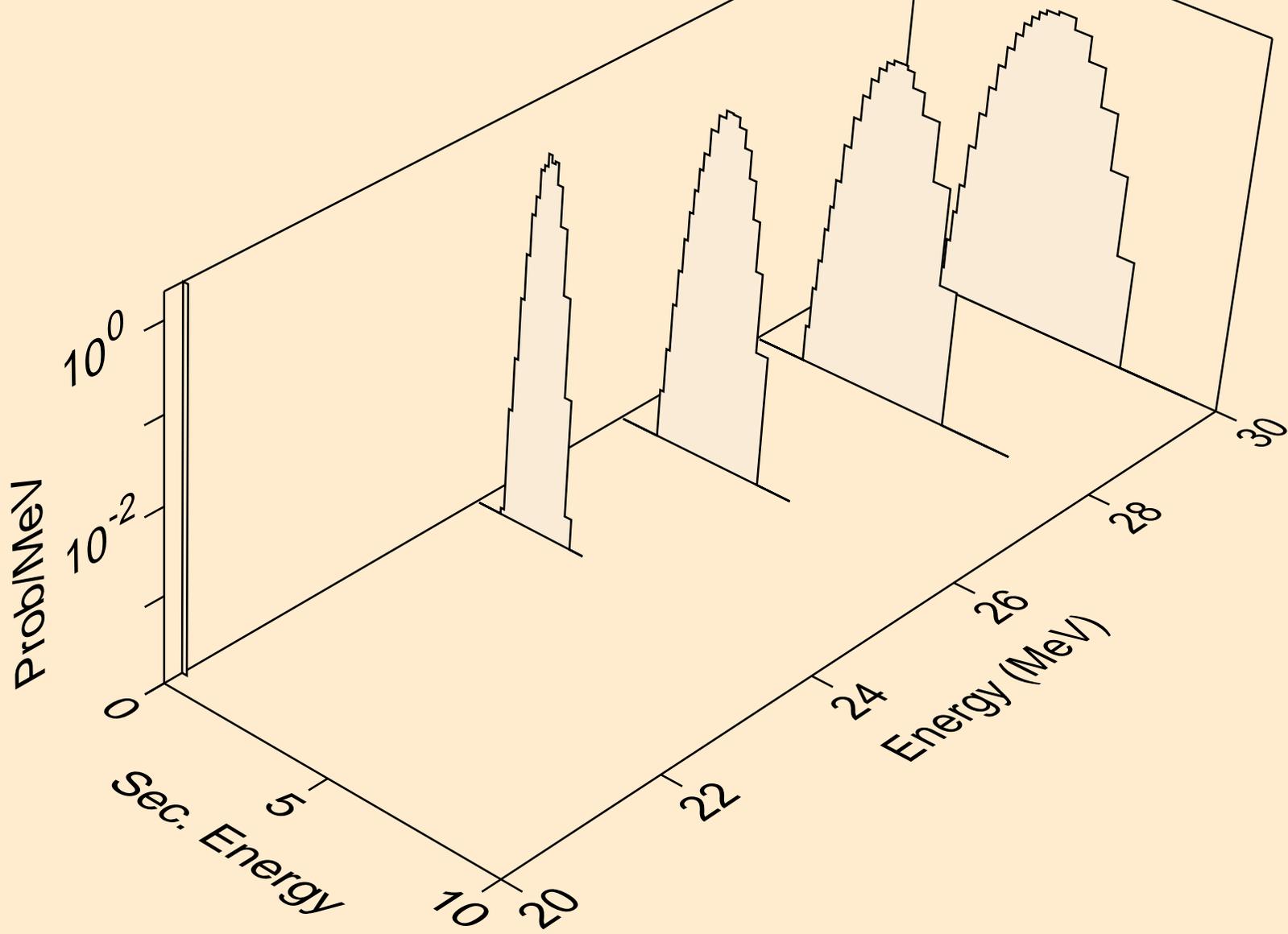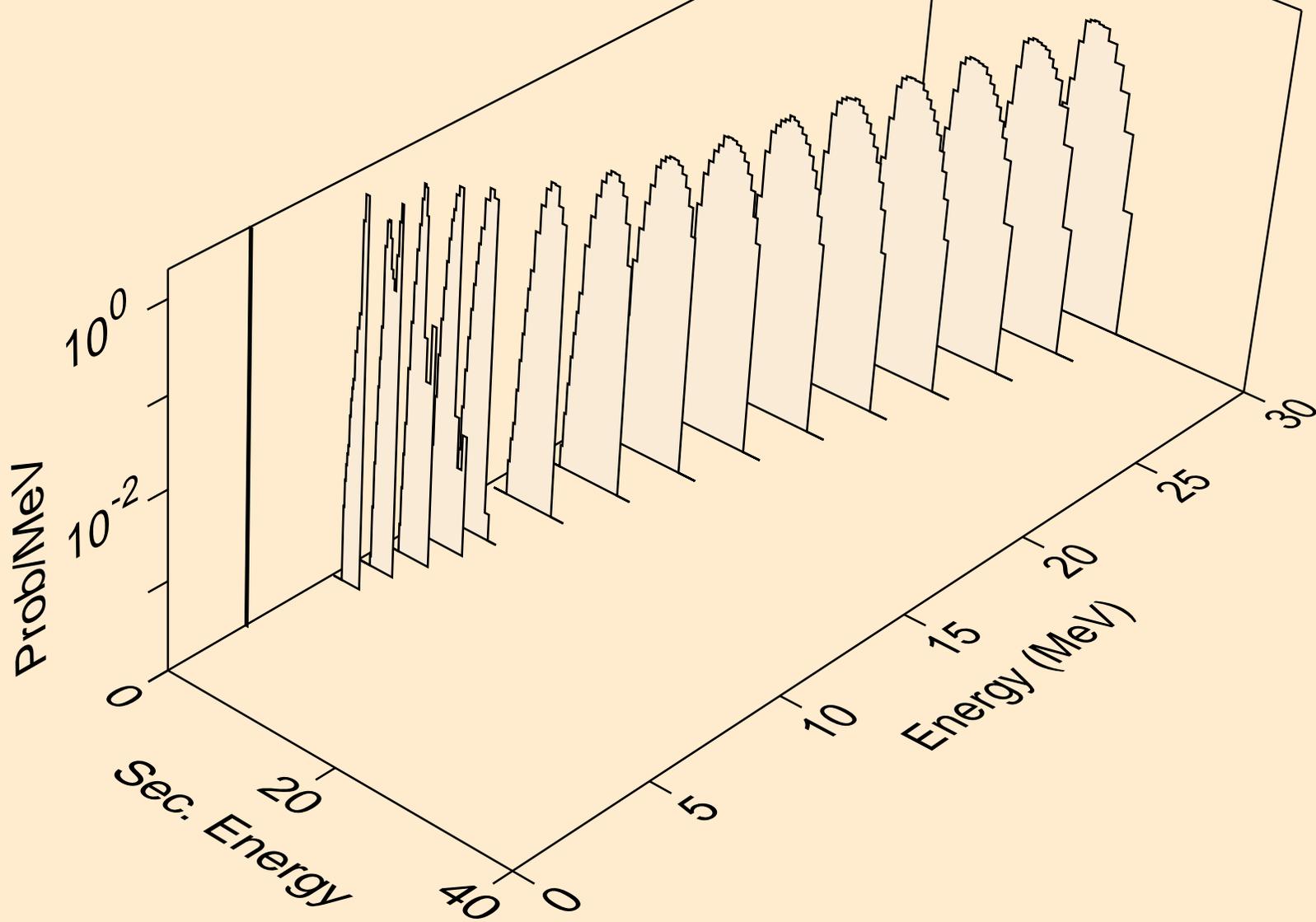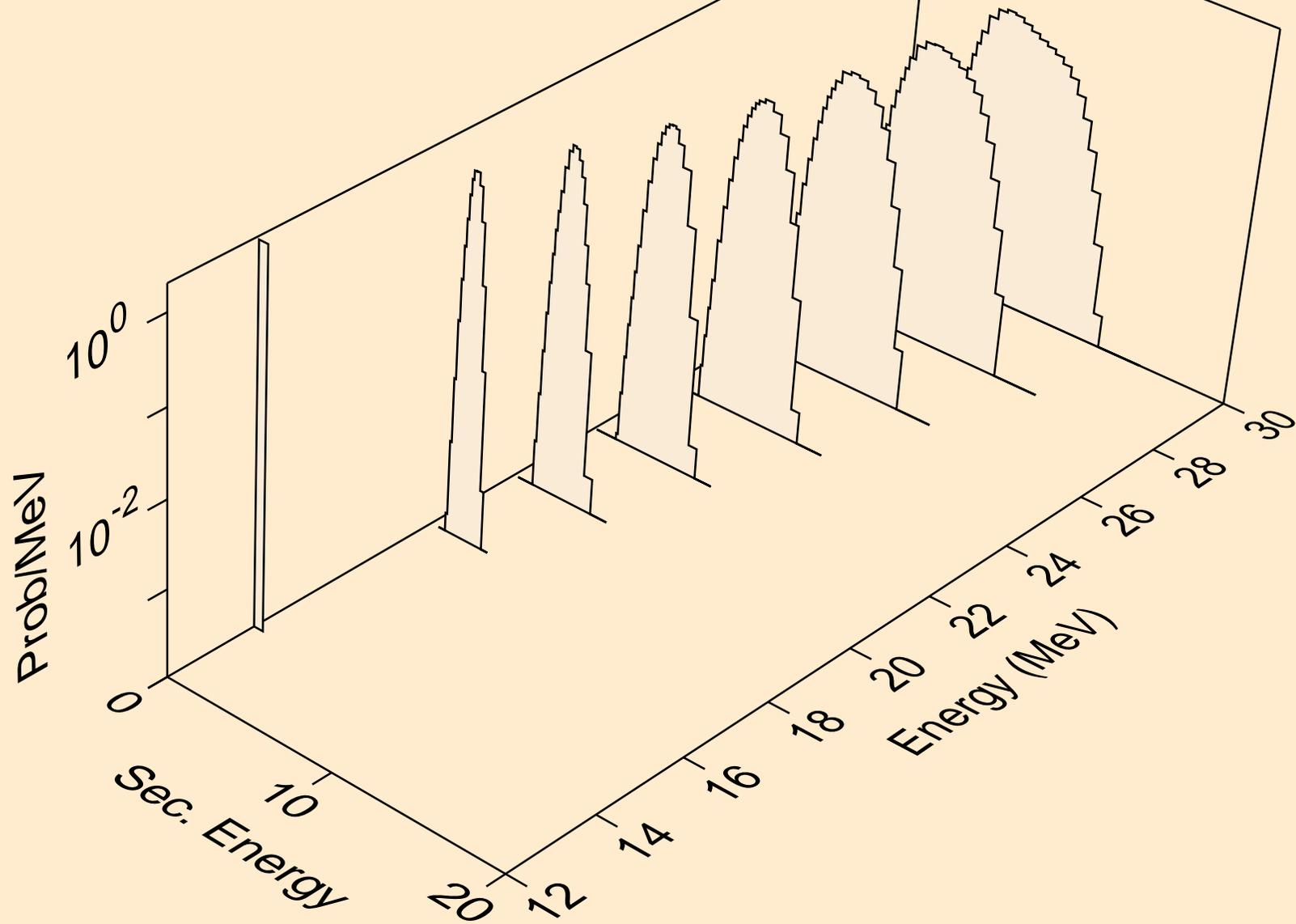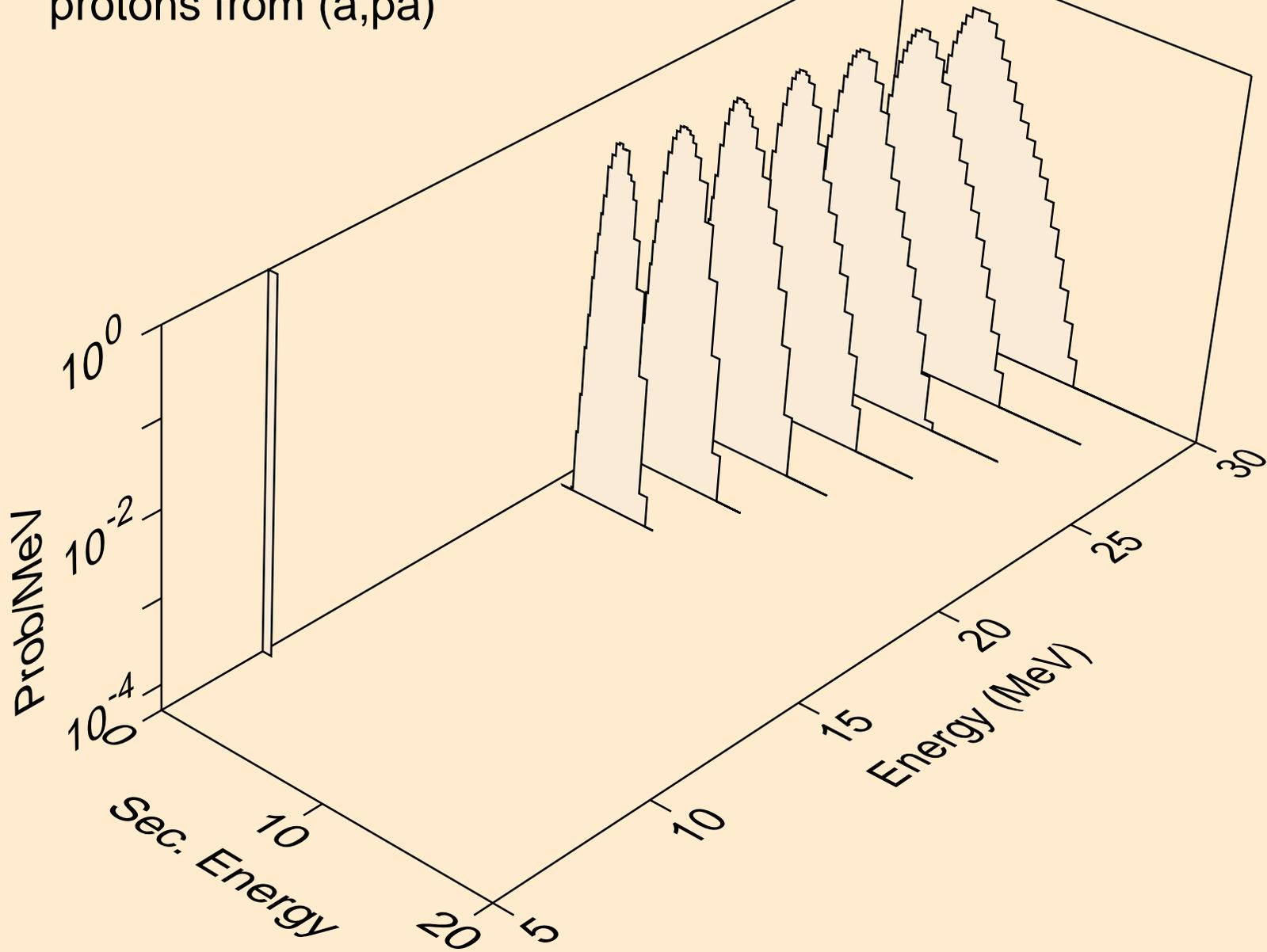IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
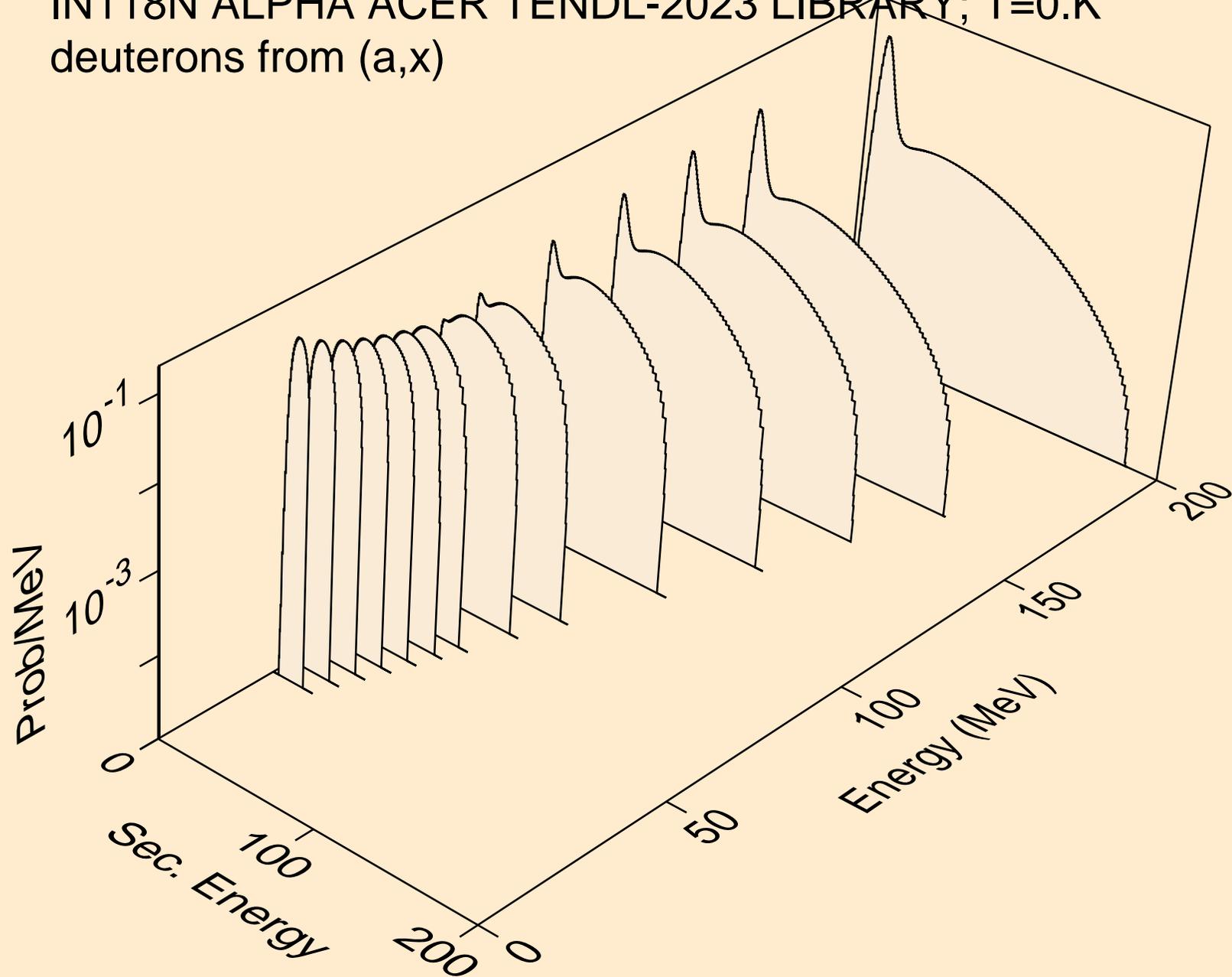protons from (a,p)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,2p)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,pa)
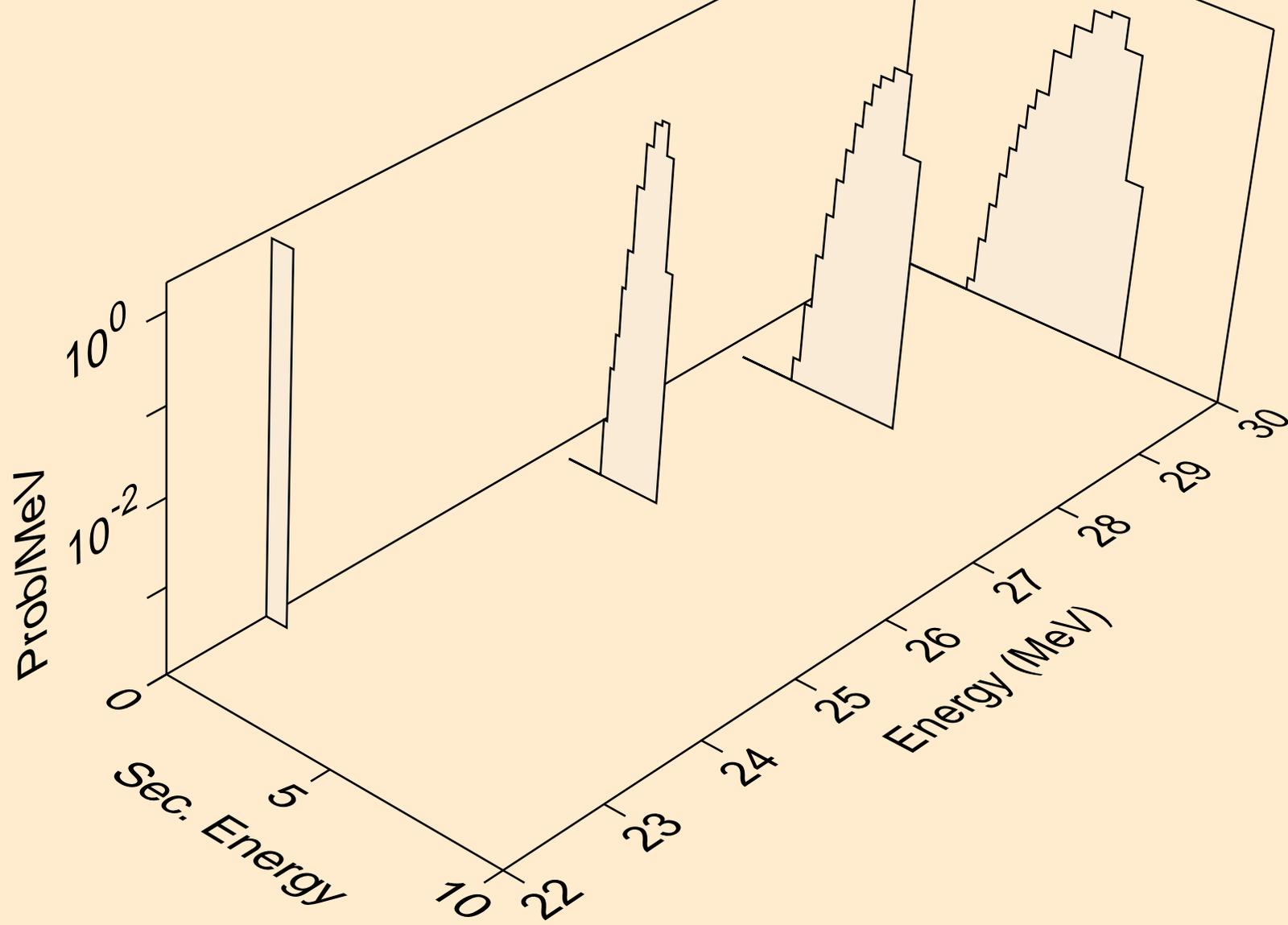
IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
deuterons from (a,x)

ProbI/MeV

$10^{-1}$

$10^{-3}$

0

Sec. Energy

100

200

Energy (MeV)

0

50

100

150

200

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
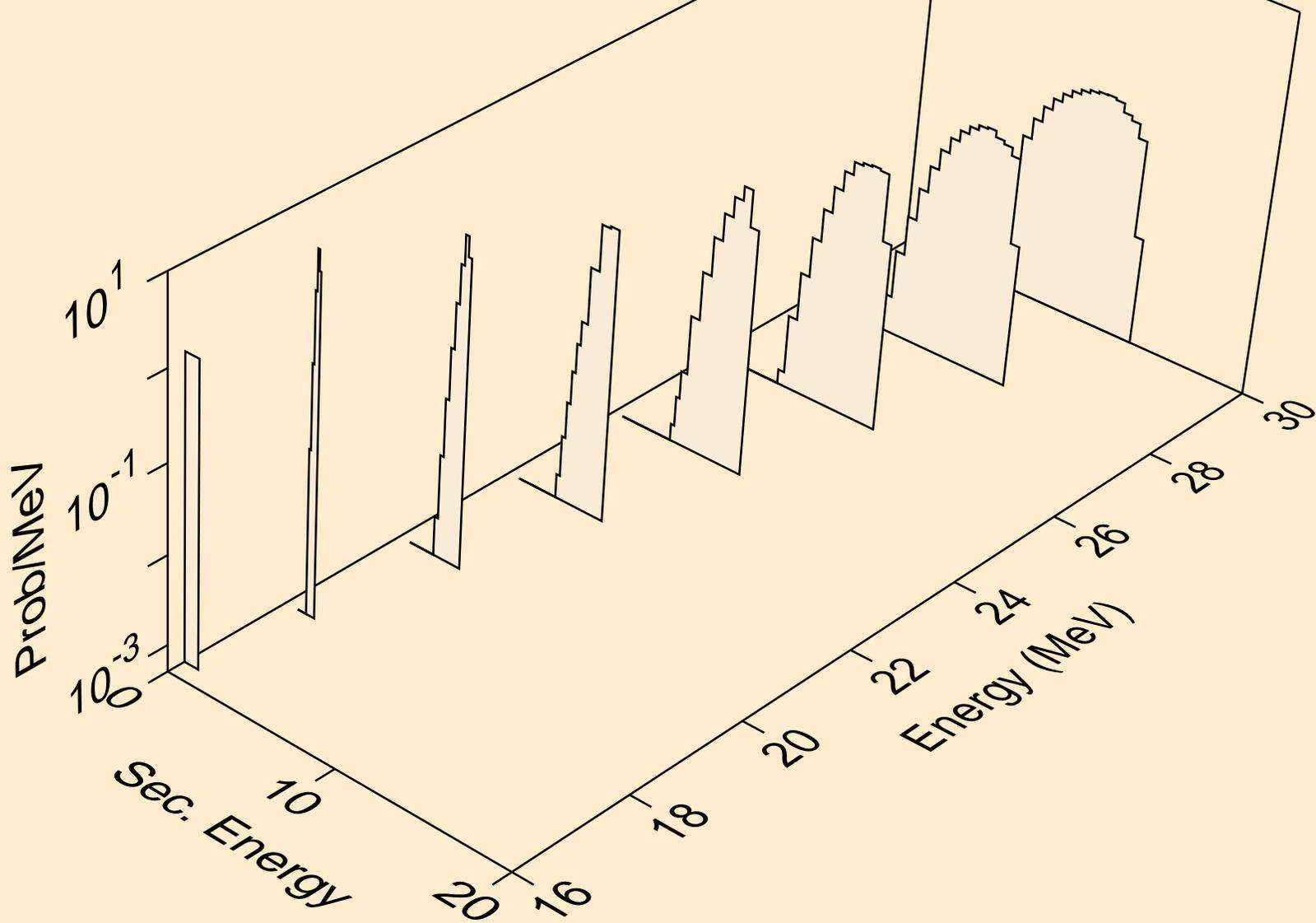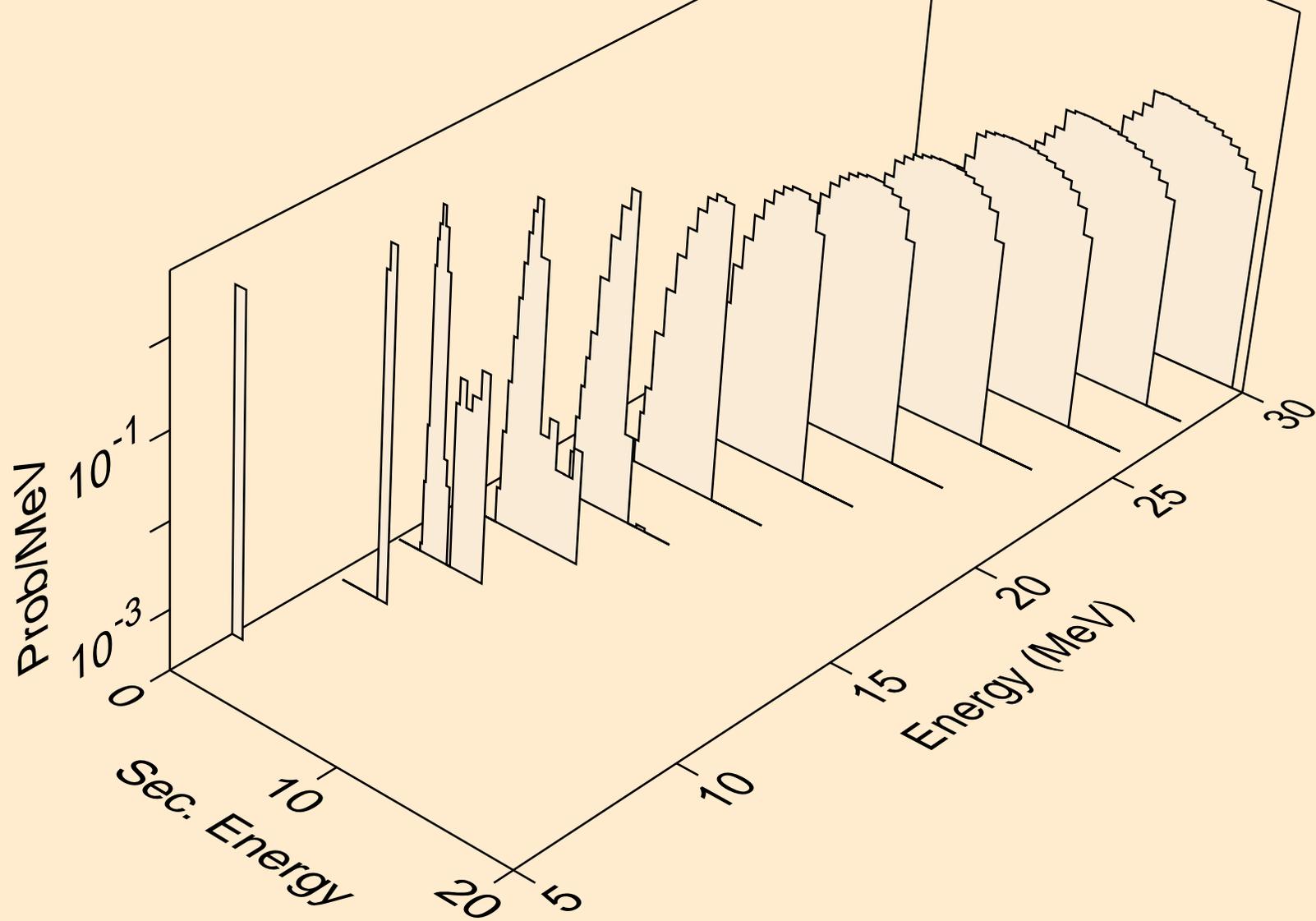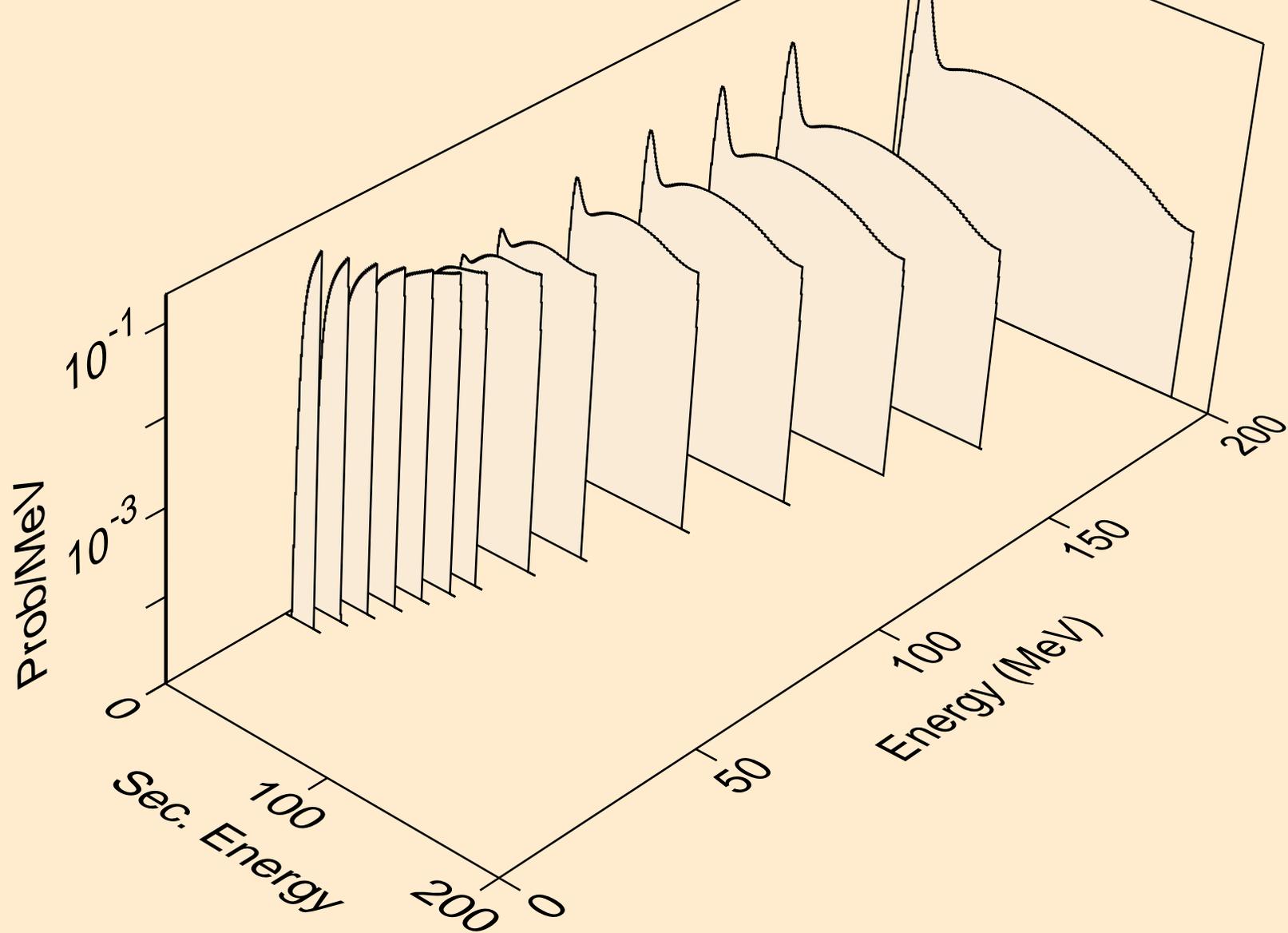deuterons from (a,2nd)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
deuterons from (a,n*)d

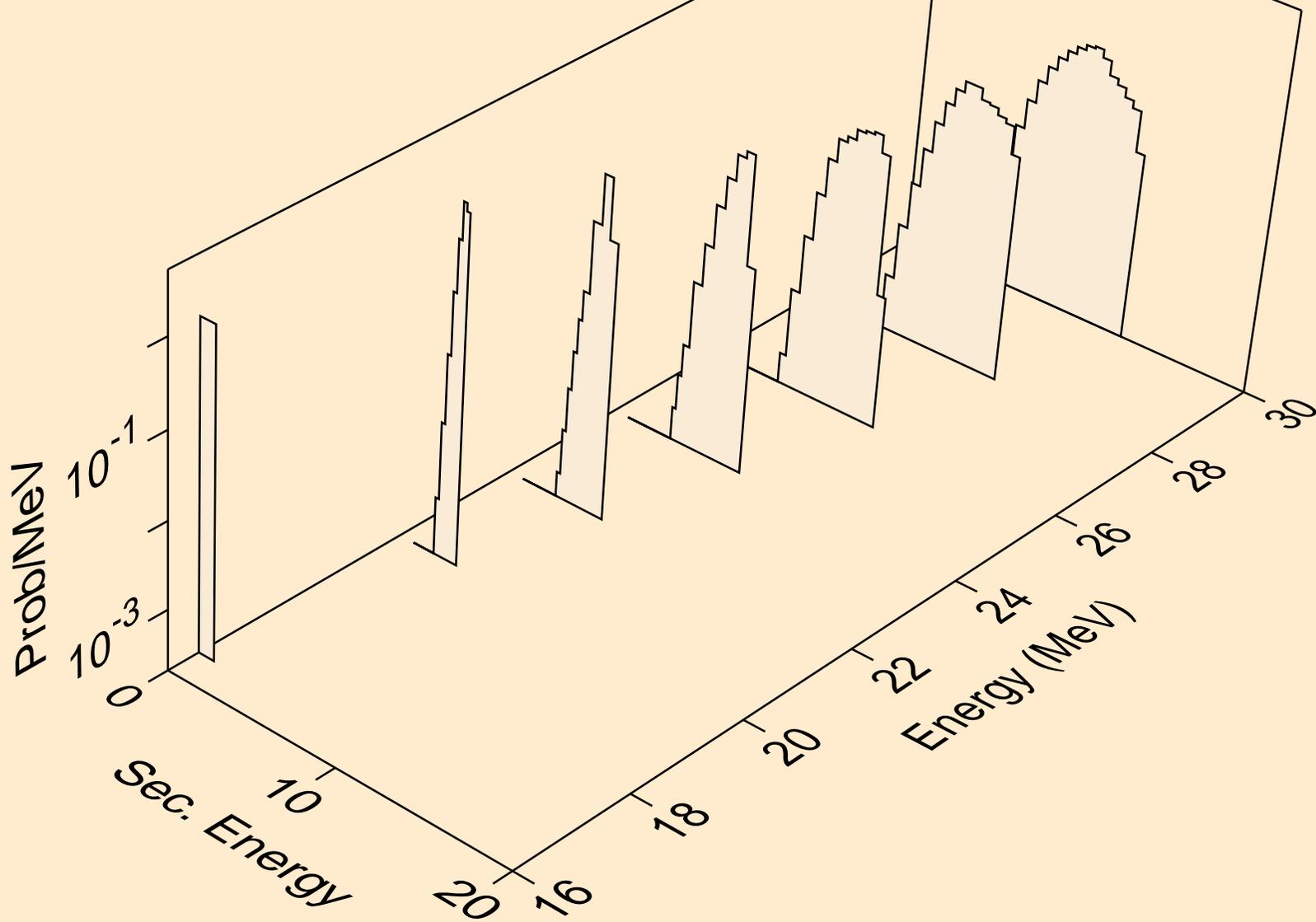IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
deuterons from (a,d)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
tritons from (a,x)

ProblMeV

$10^{-1}$

$10^{-3}$

Sec. Energy

Energy (MeV)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
tritons from (a,n*)t

ProblMeV

$10^{-1}$

$10^{-3}$

0

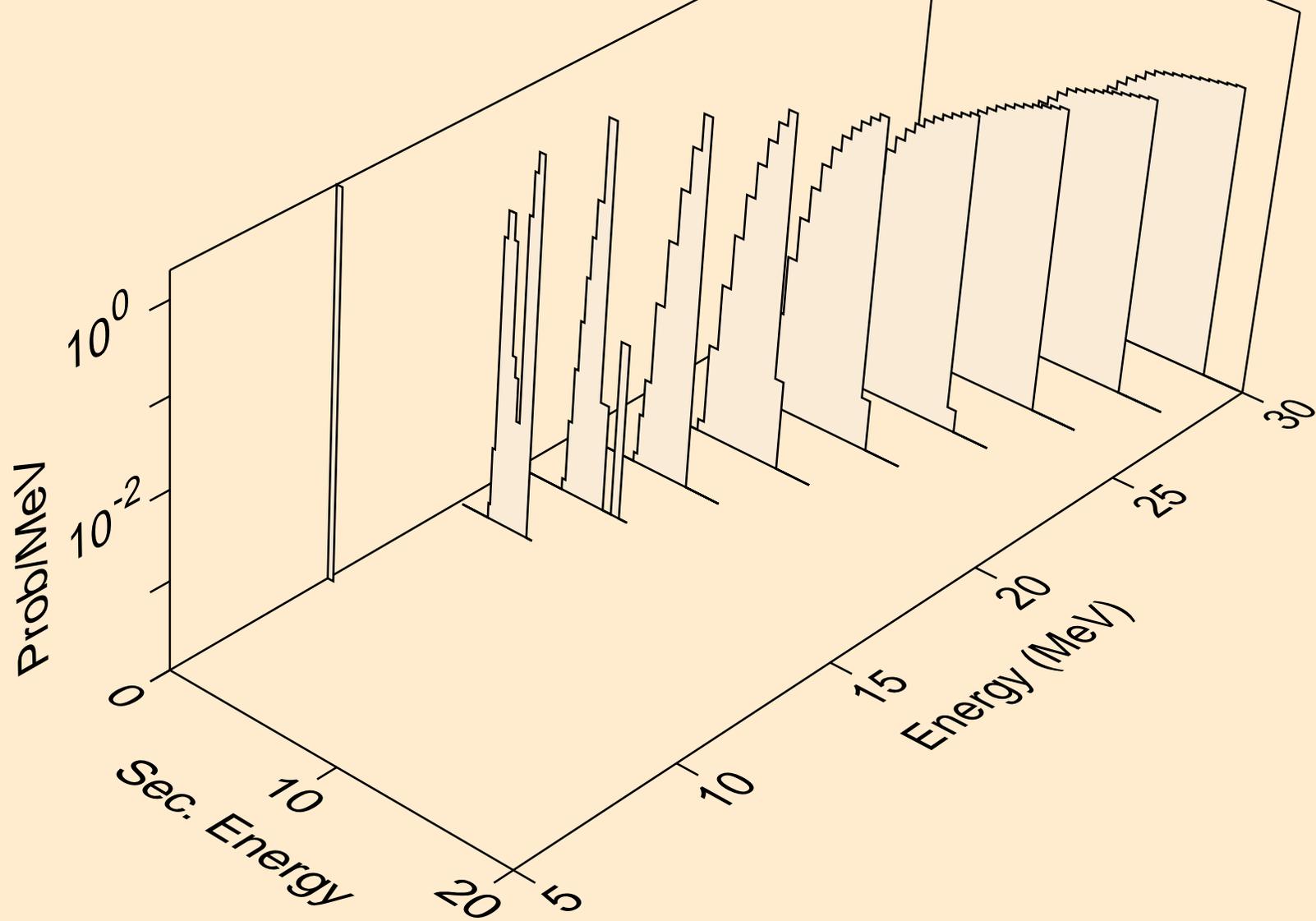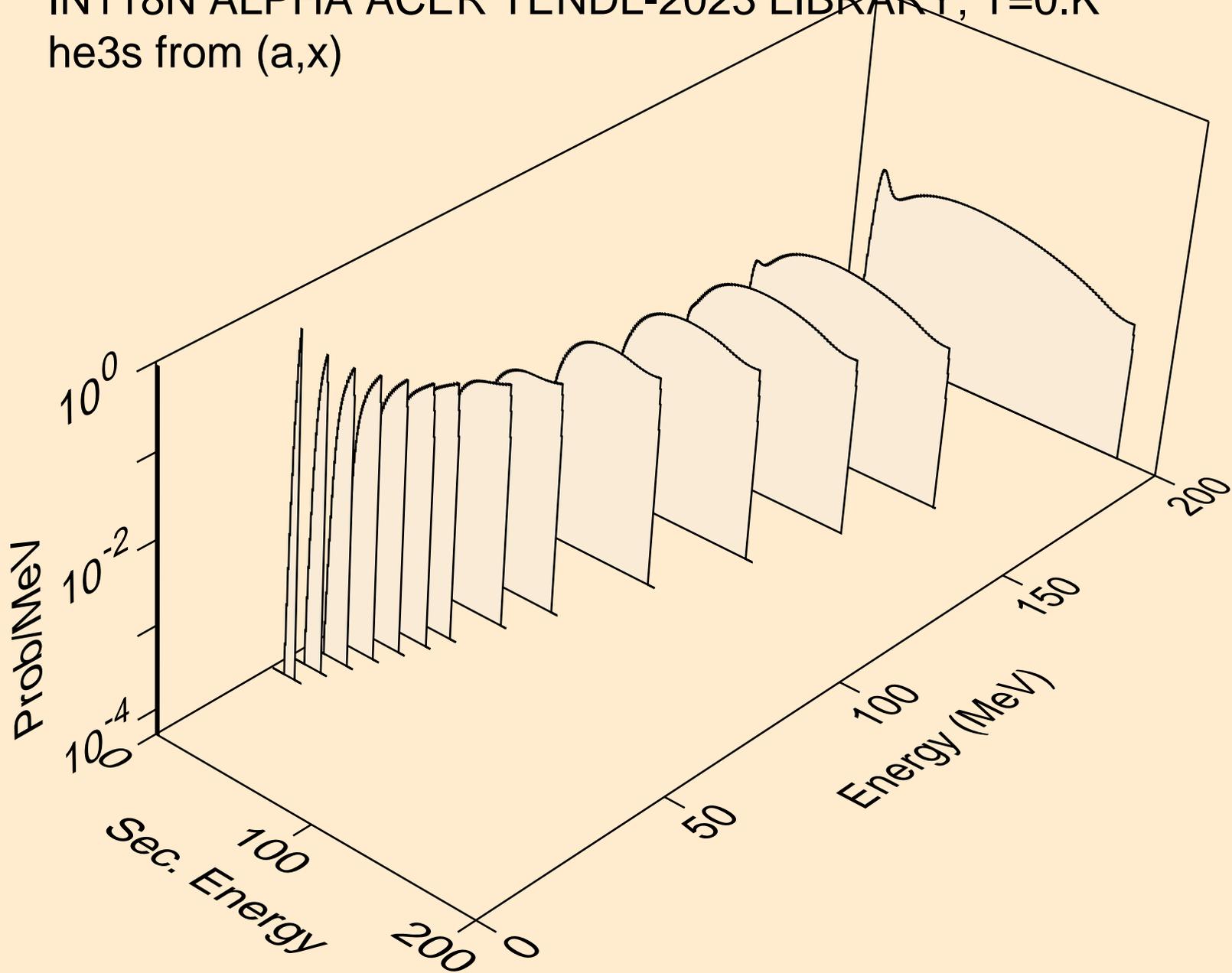Sec. Energy

10

20

16

18

20

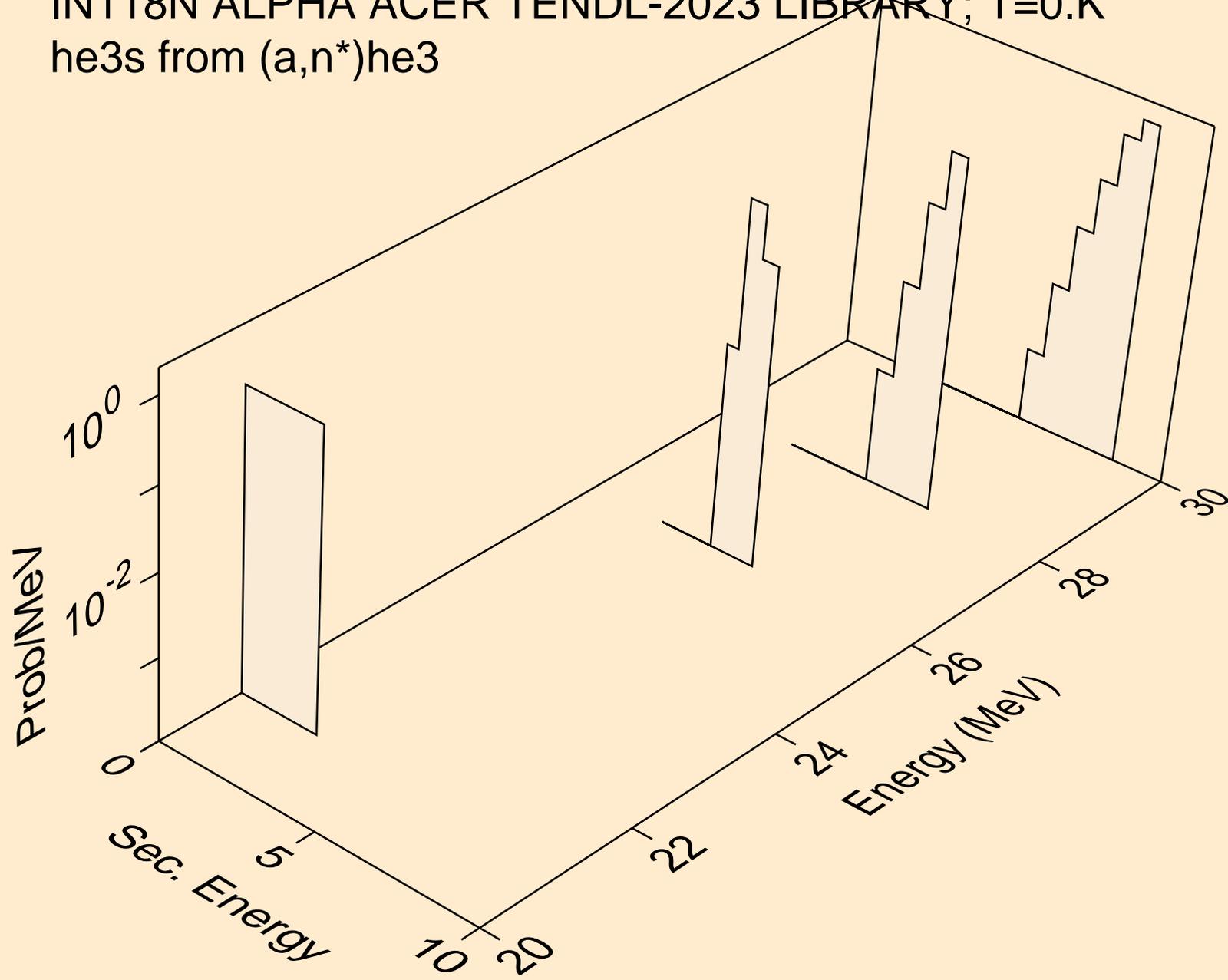22

24

26

28

30

Energy (MeV)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
tritons from (a,t)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
he3s from (a,x)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
he3s from (a,n*)he3

Prob/MeV

$10^0$

$10^{-2}$

0

Sec. Energy

5

10

20

22

24

26

28

30

Energy (MeV)

IN118N ALPHA ACER TENDL-2023 LIBRARY; T=0.K
he3s from (a,he3)