PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Principal cross sections

Cross section (barns) vs Energy (MeV)

- total
- absorption
- elastic
- gamma production

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Heating

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Principal cross sections

Cross section (barns)
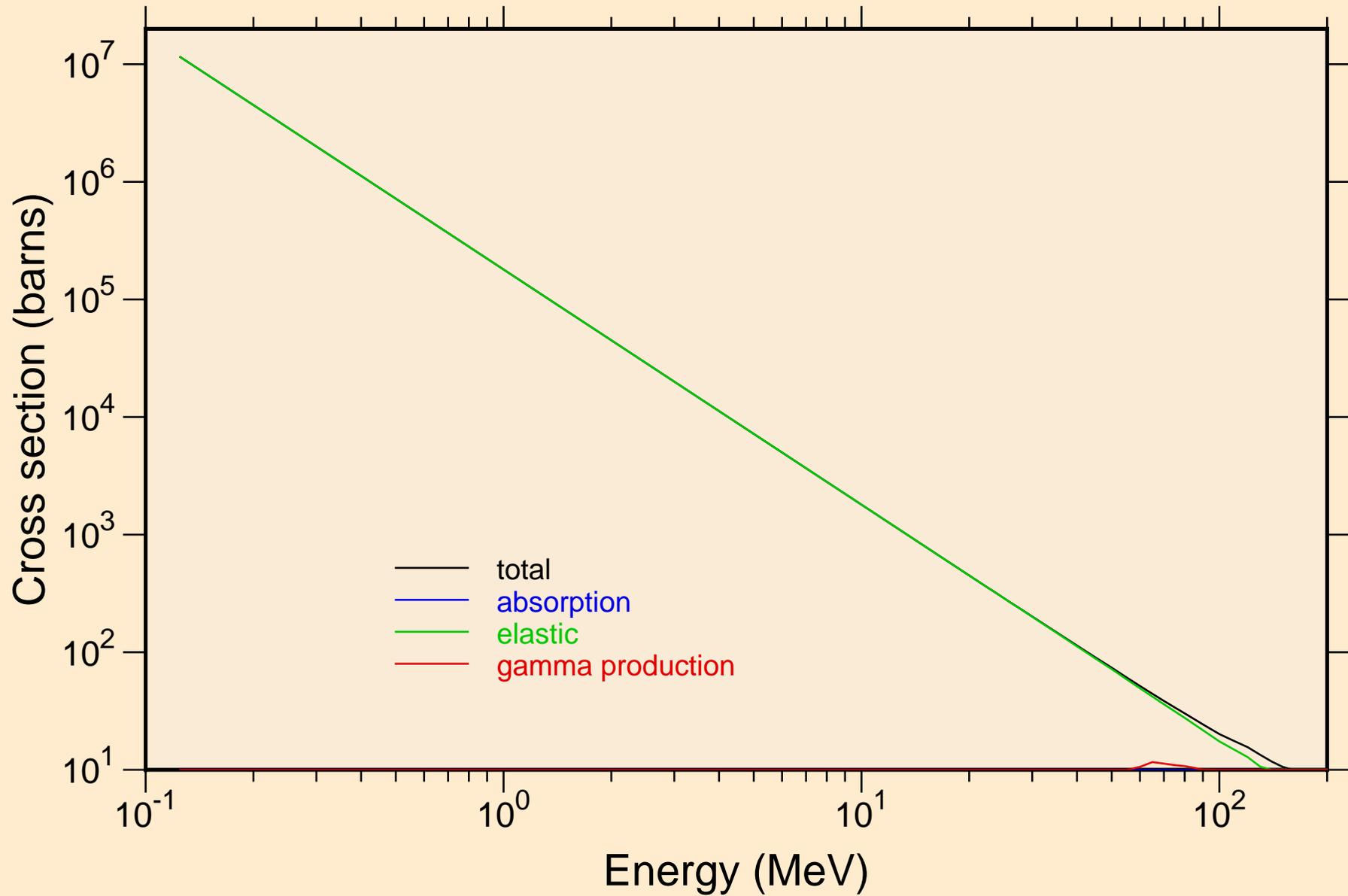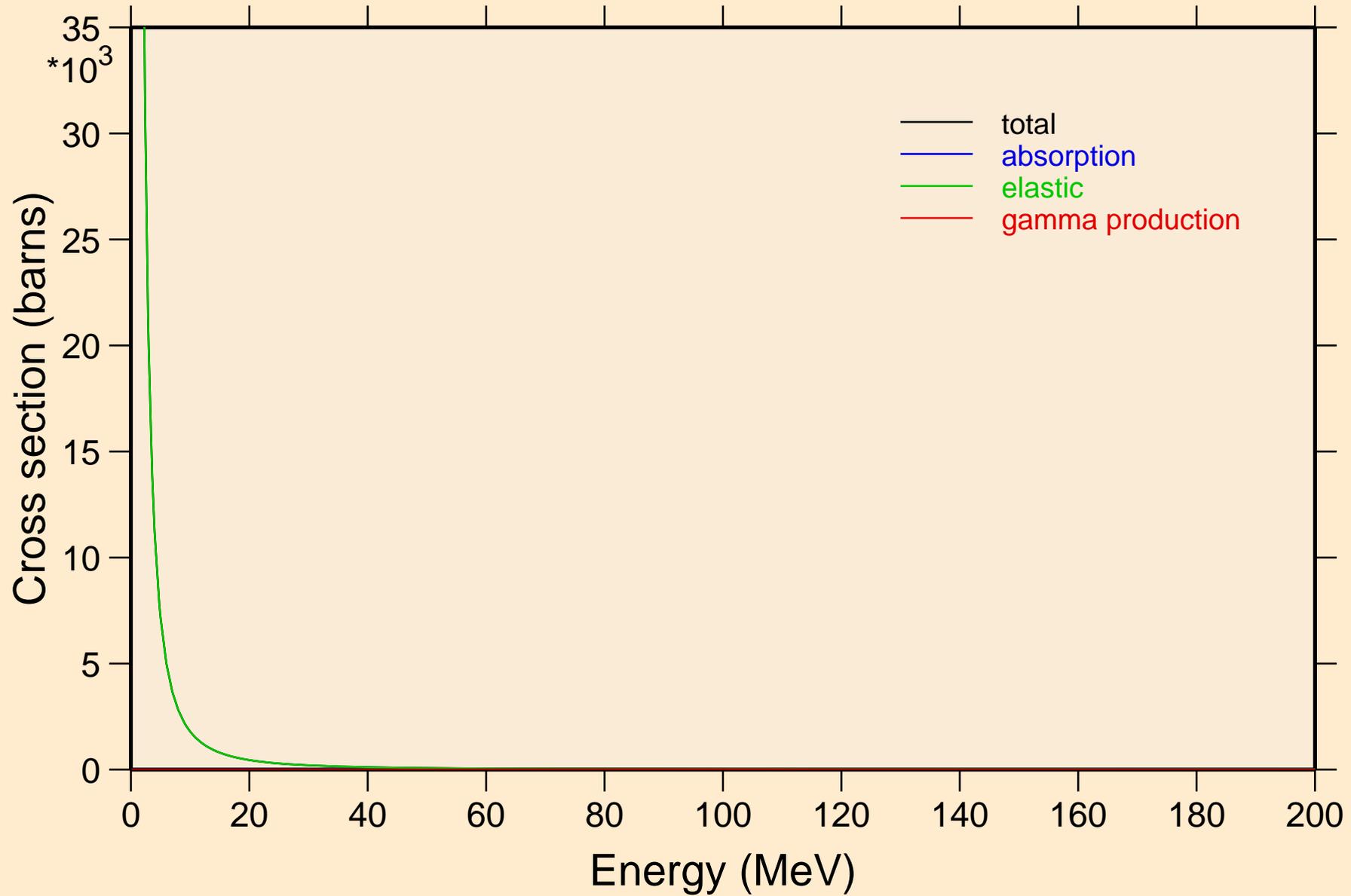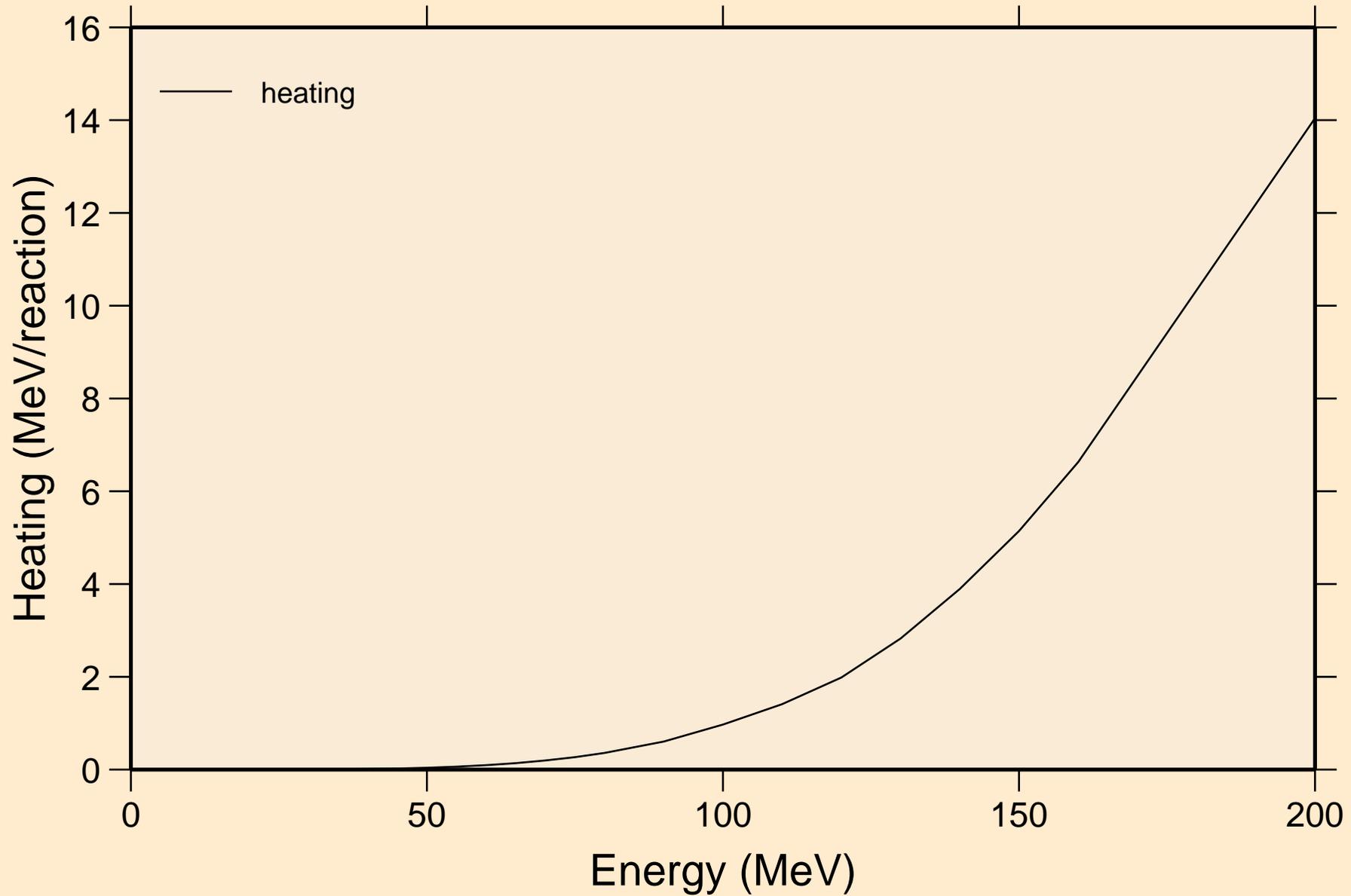
$*10^3$

- total
- absorption
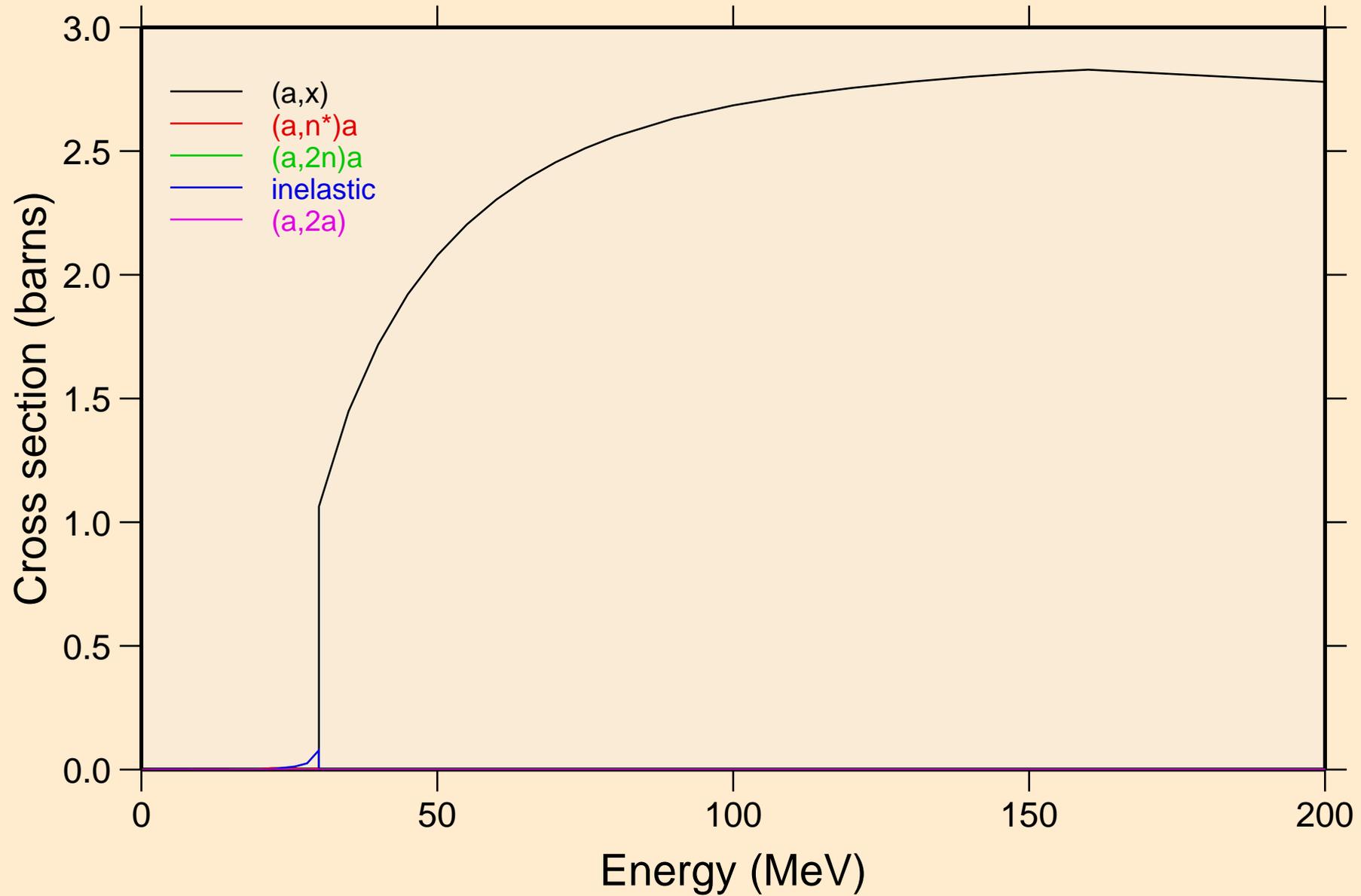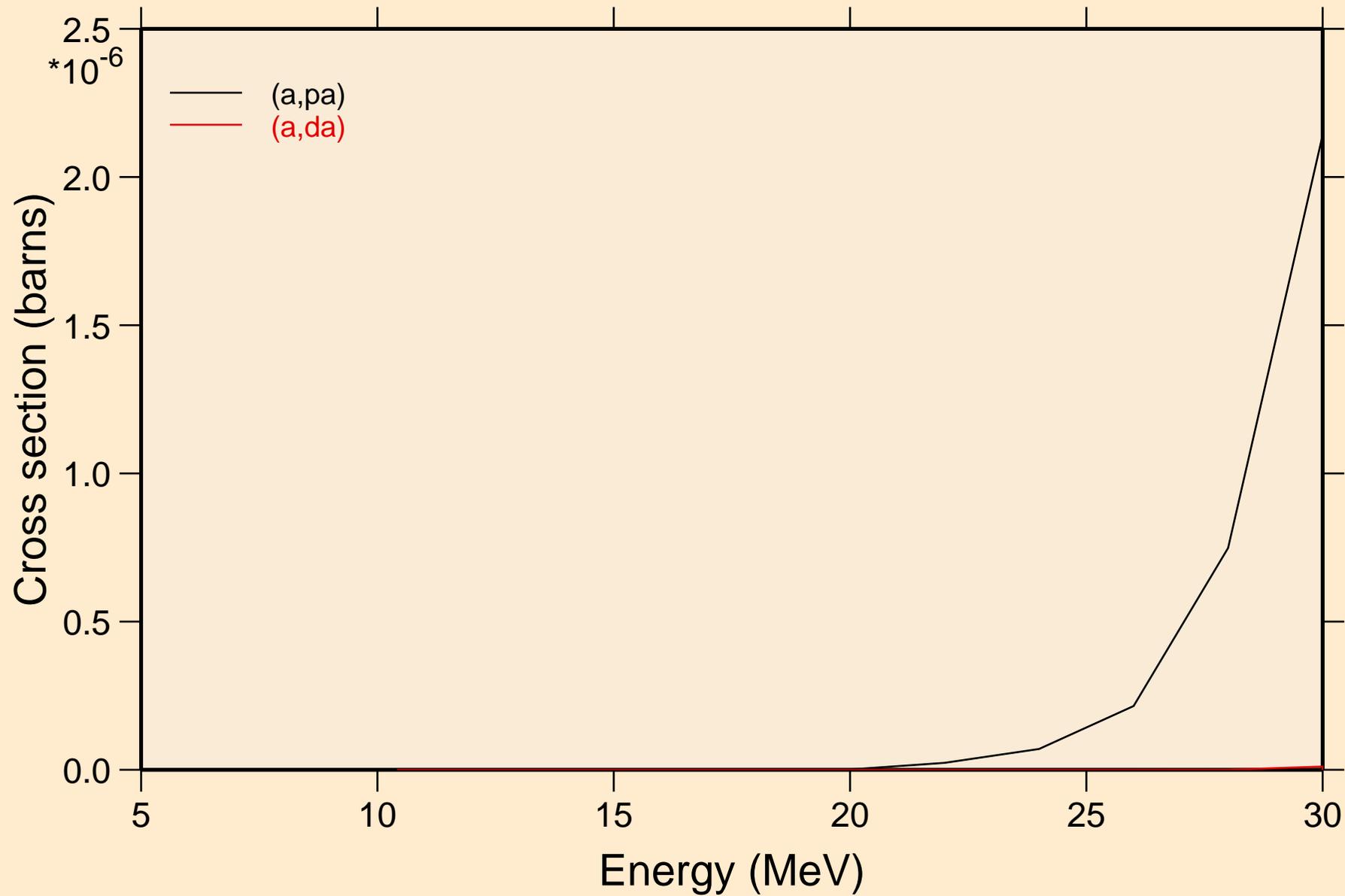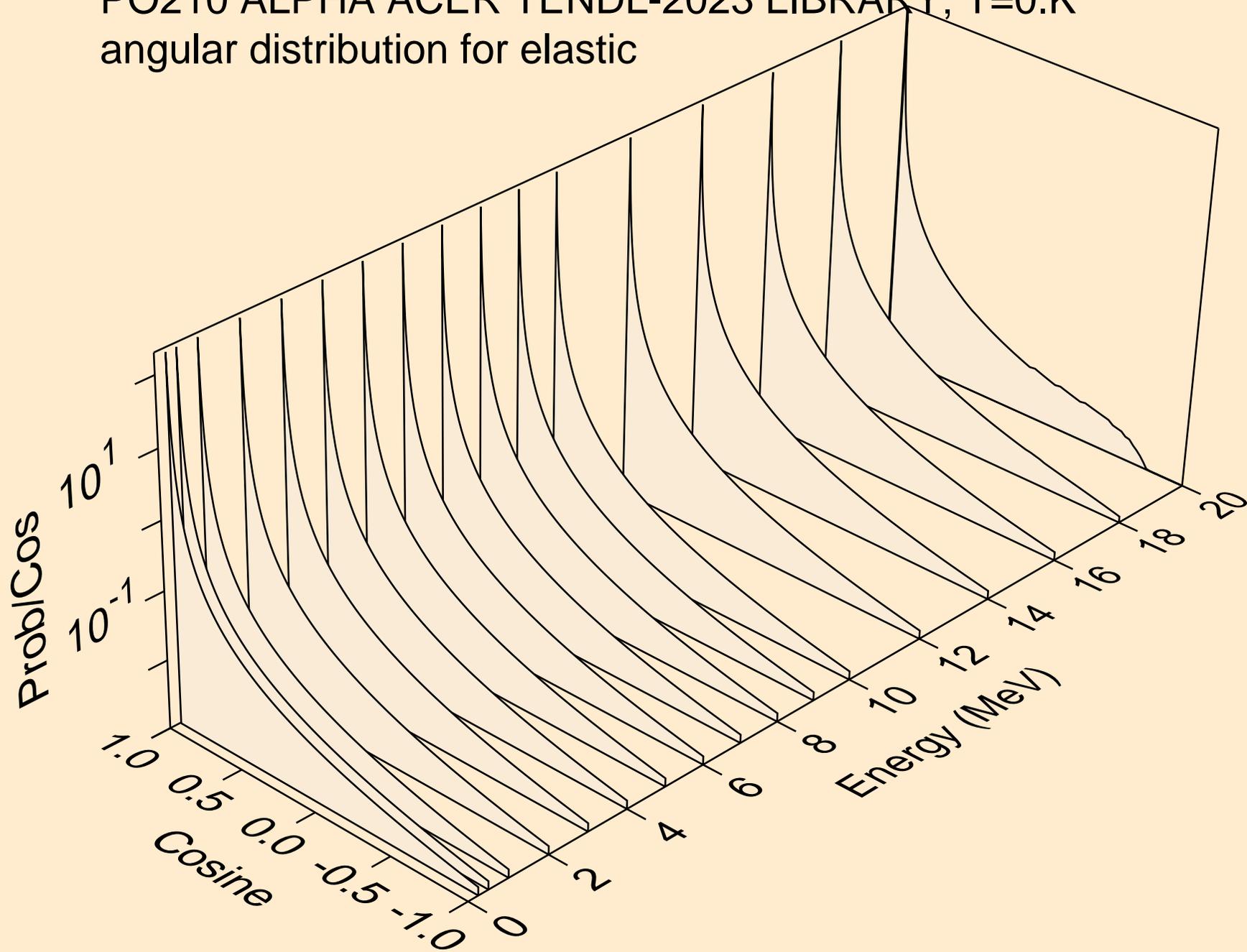- elastic
- gamma production

Energy (MeV)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Heating

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

Legend:
- (a,x) — black
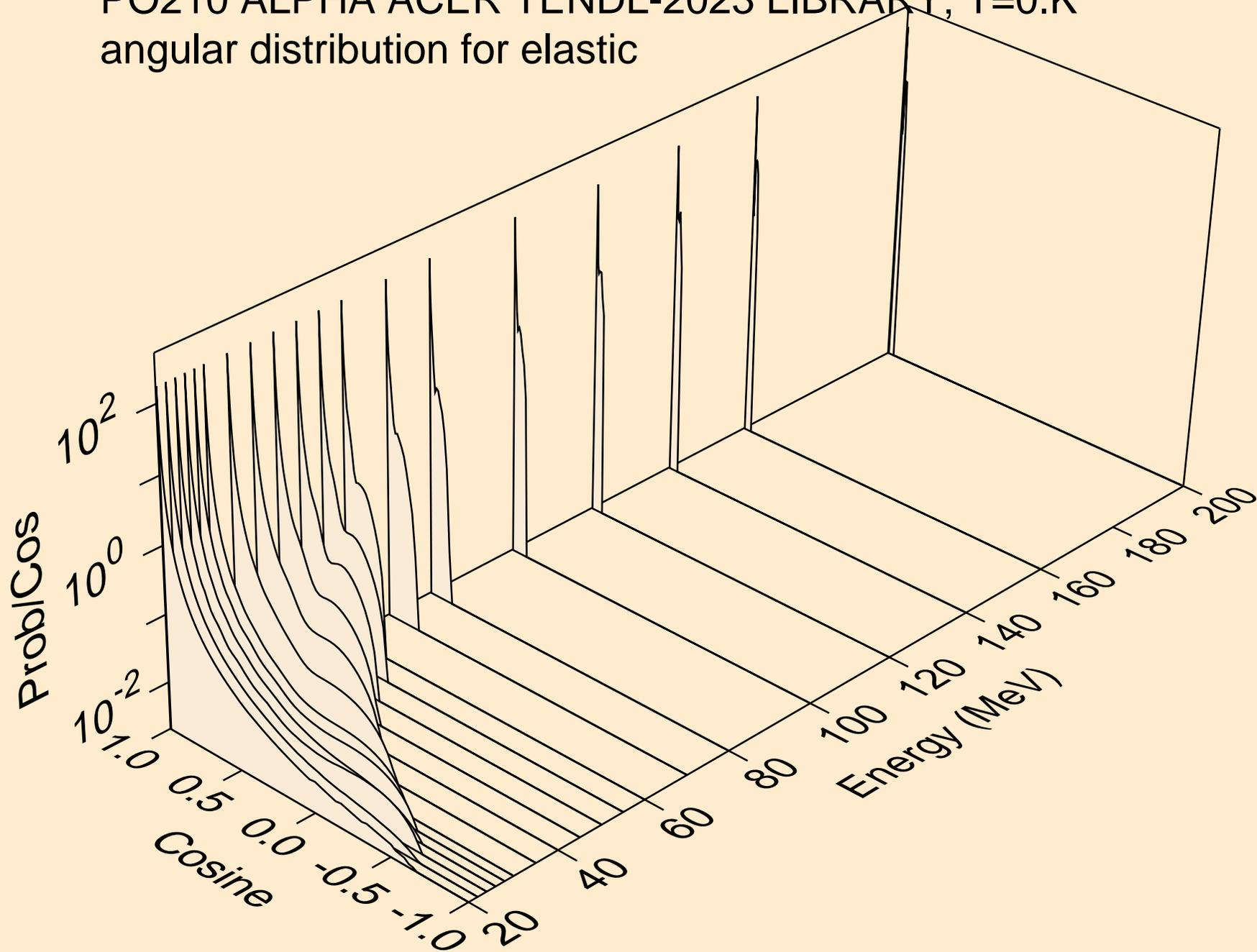- (a,n*)a — red
- (a,2n)a — green
- inelastic — blue
- (a,2a) — magenta

X-axis: Energy (MeV)
Y-axis: Cross section (barns)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

(a,pa)
(a,da)

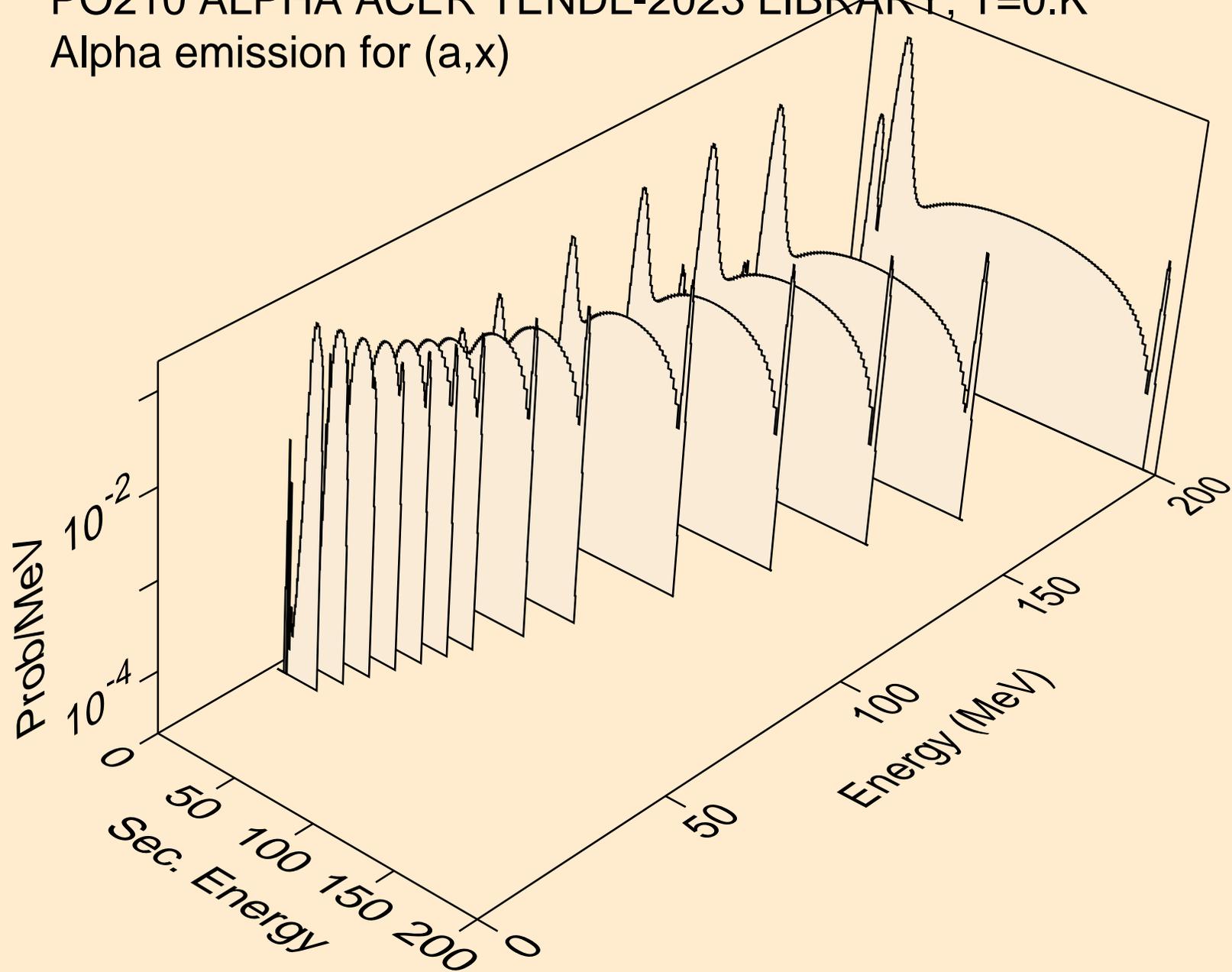Cross section (barns)

Energy (MeV)

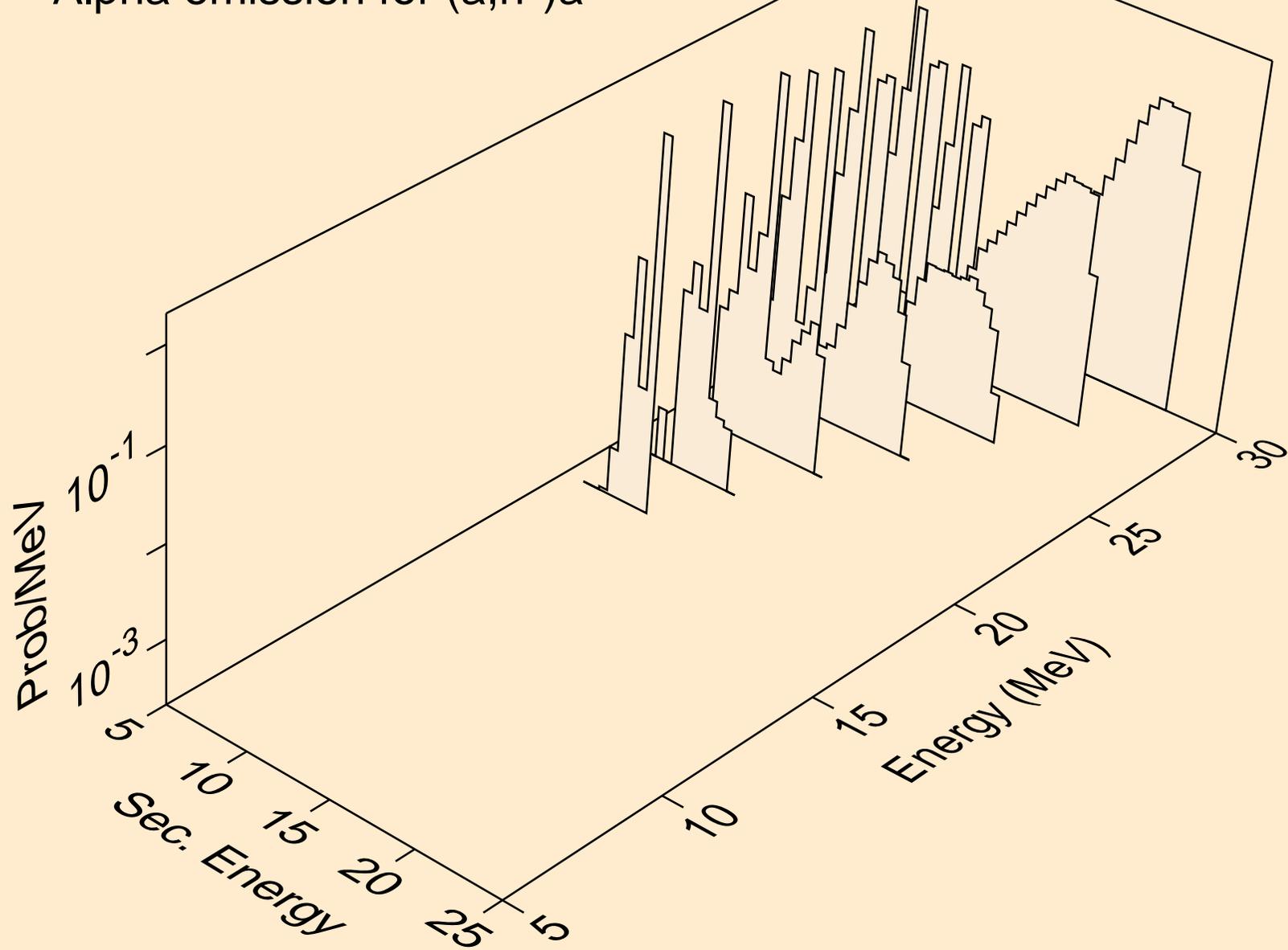PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
angular distribution for elastic

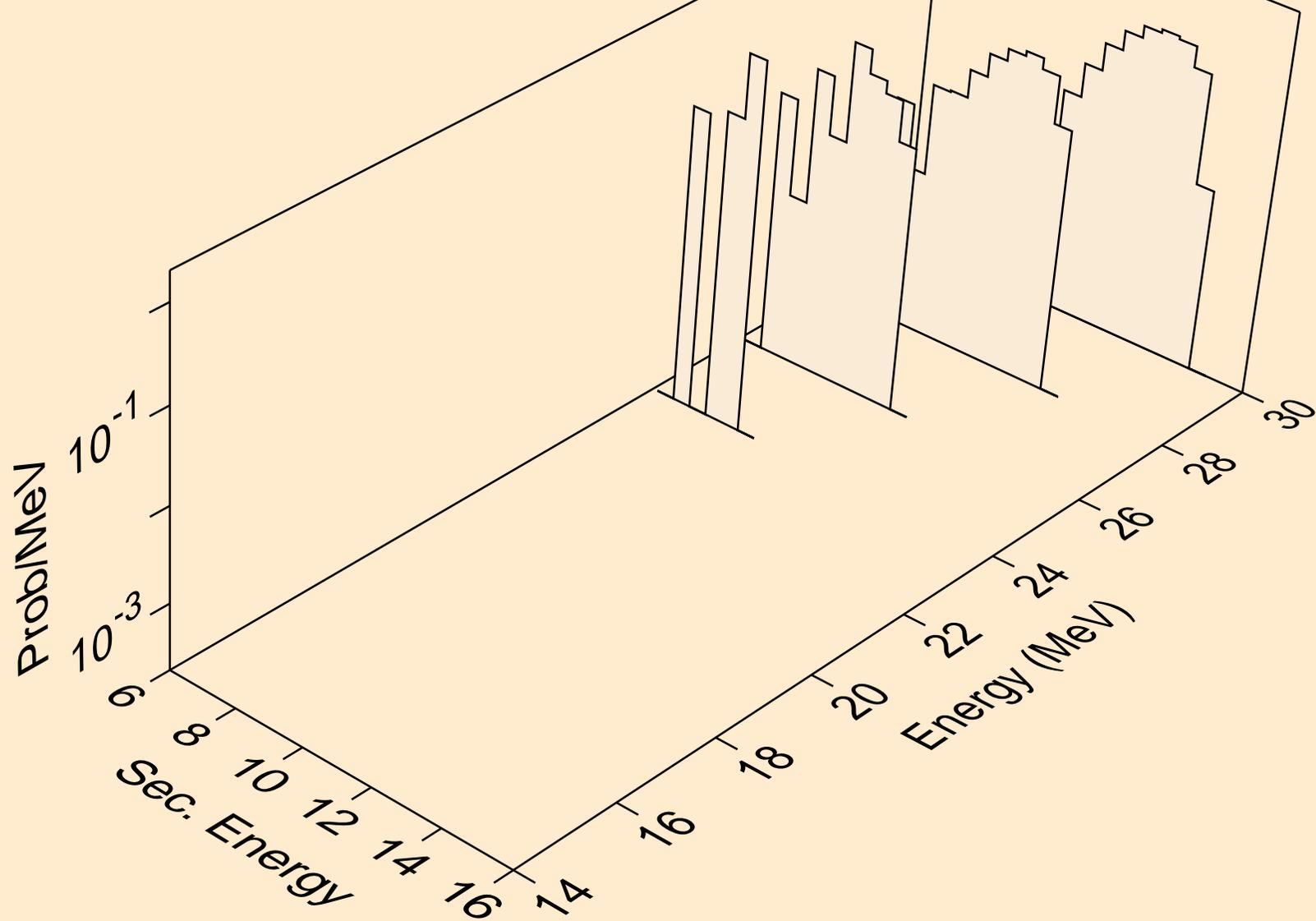PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
angular distribution for elastic

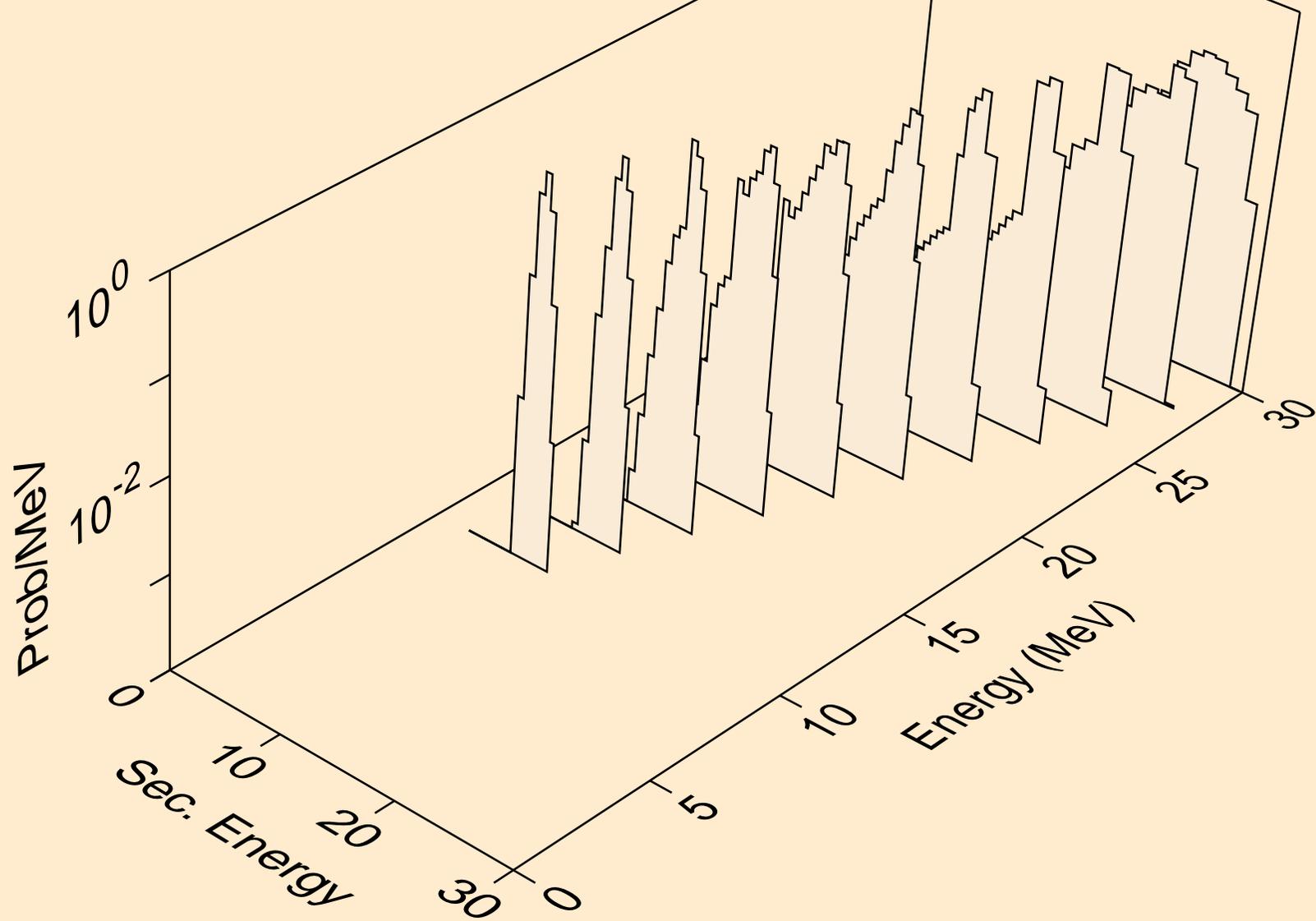PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Alpha emission for (a,x)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
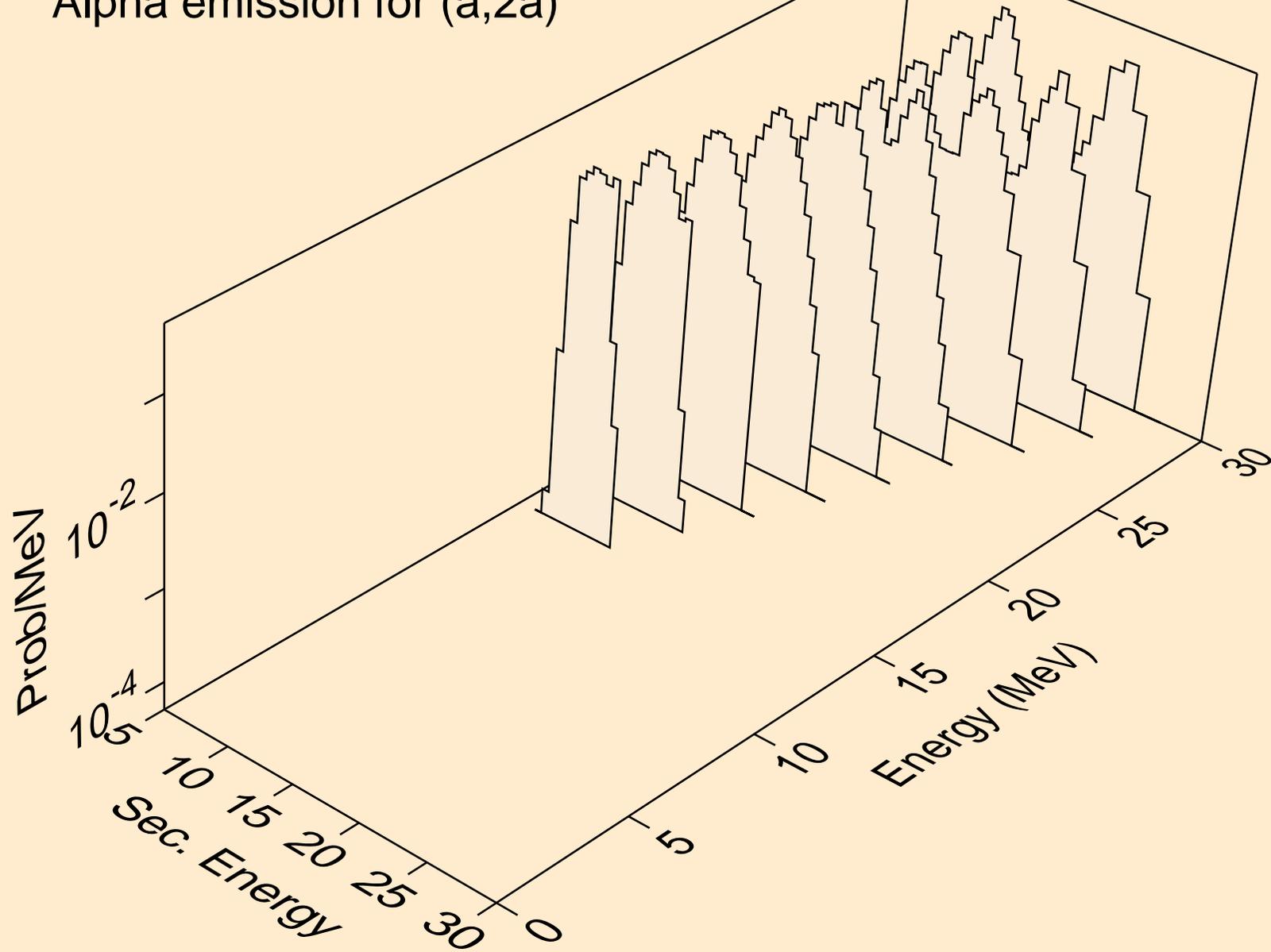Alpha emission for (a,n*)a

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
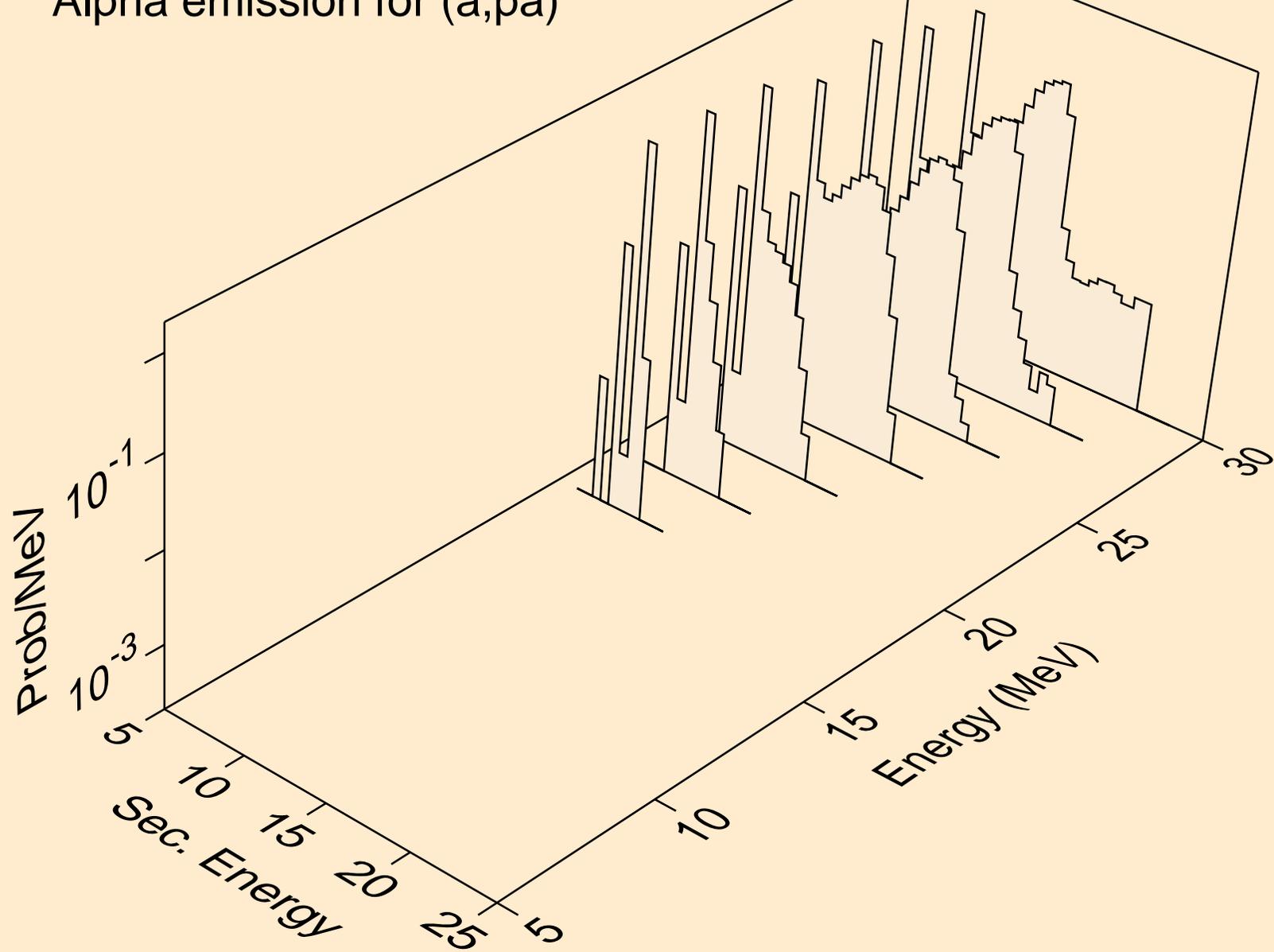Alpha emission for (a,2n)a

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
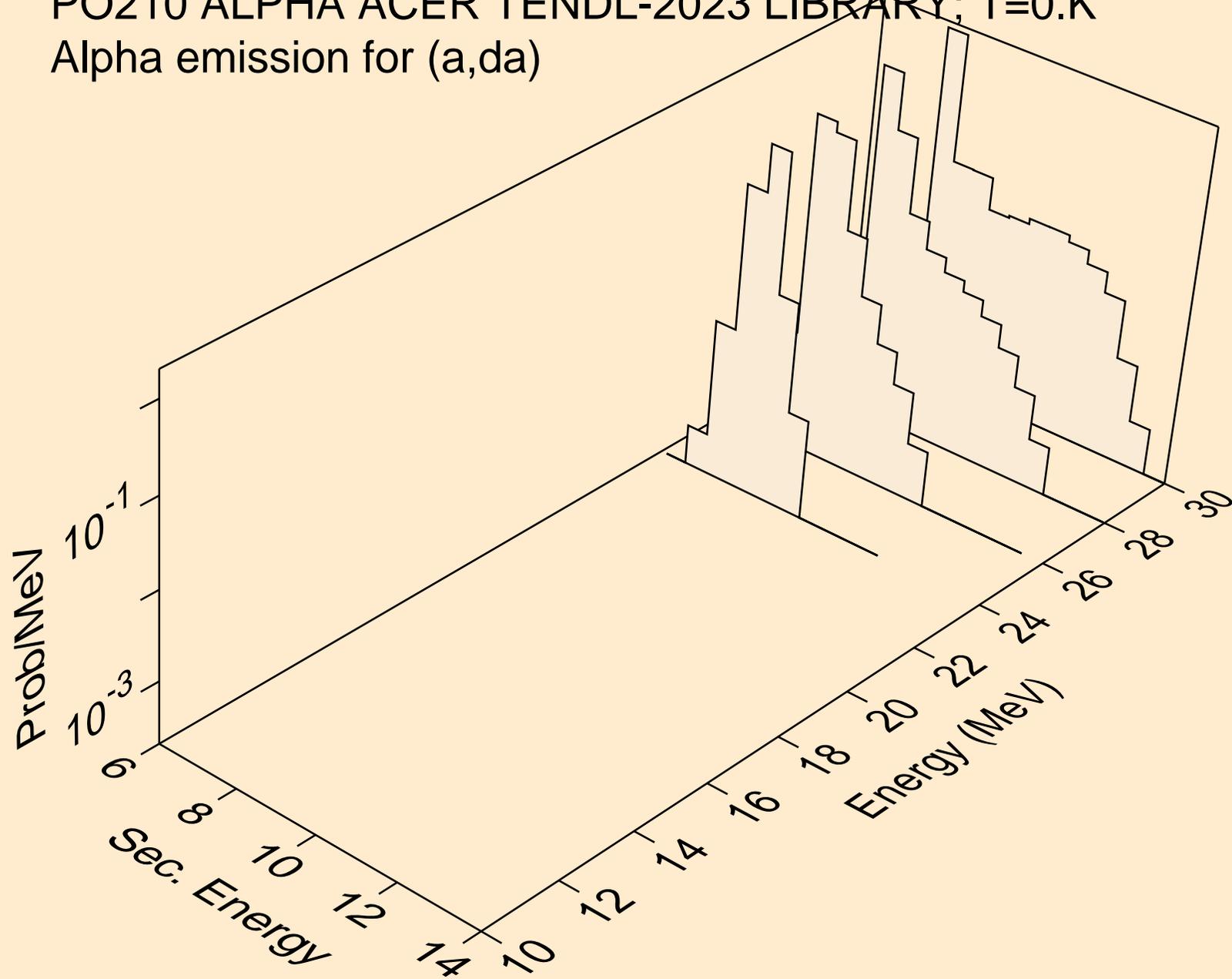Alpha emission for inelastic

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
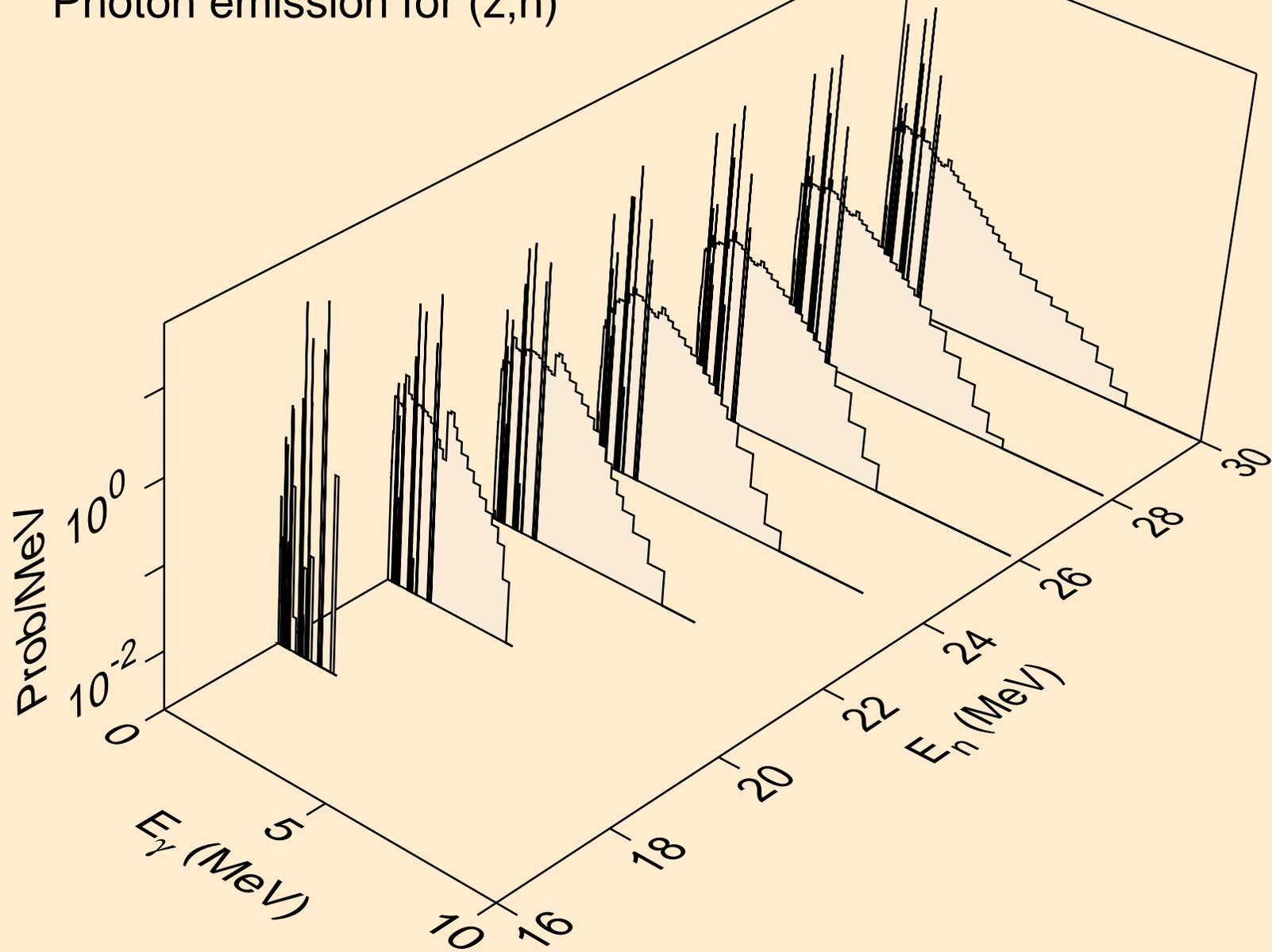Alpha emission for (a,2a)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
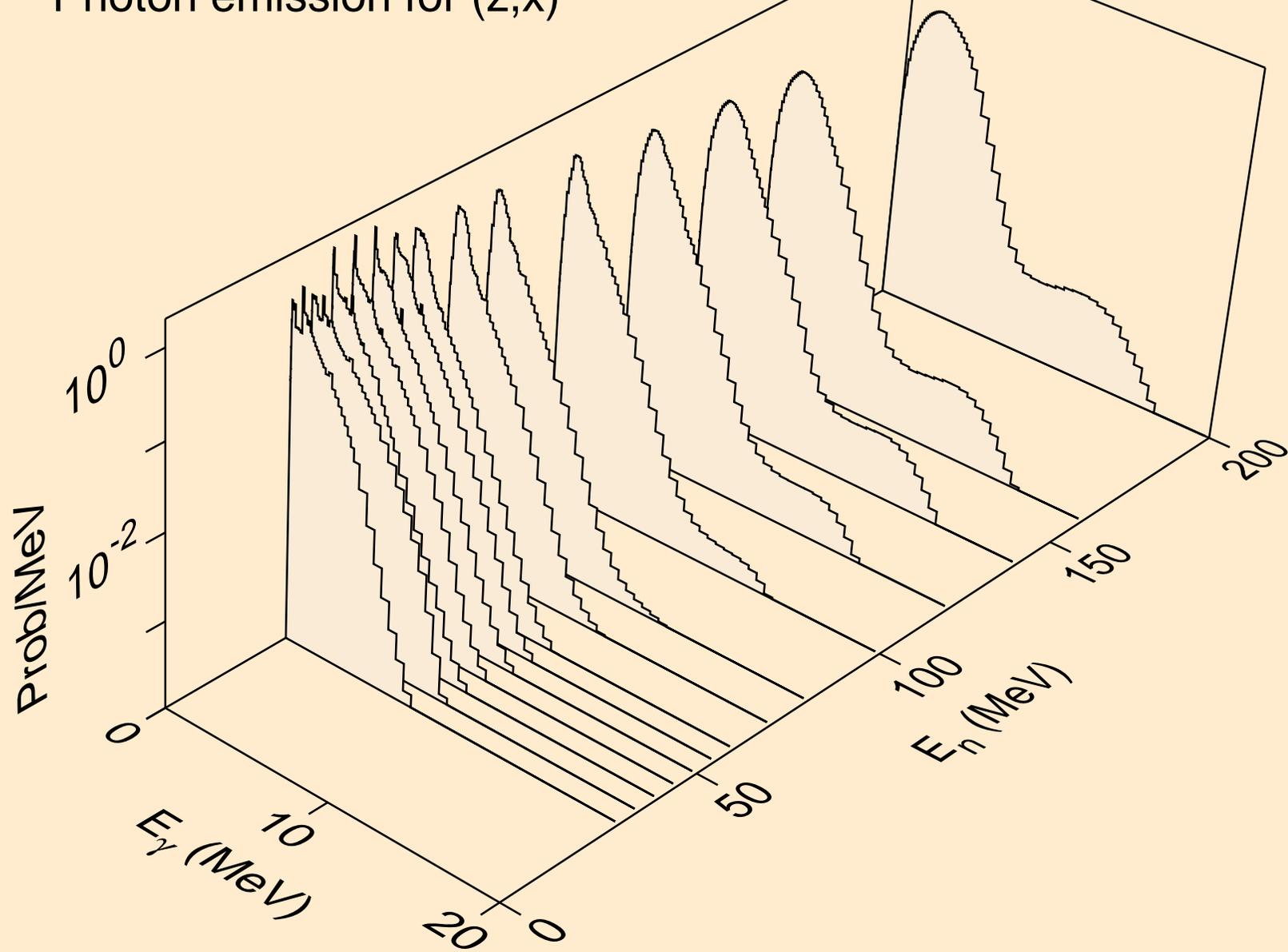Alpha emission for (a,pa)

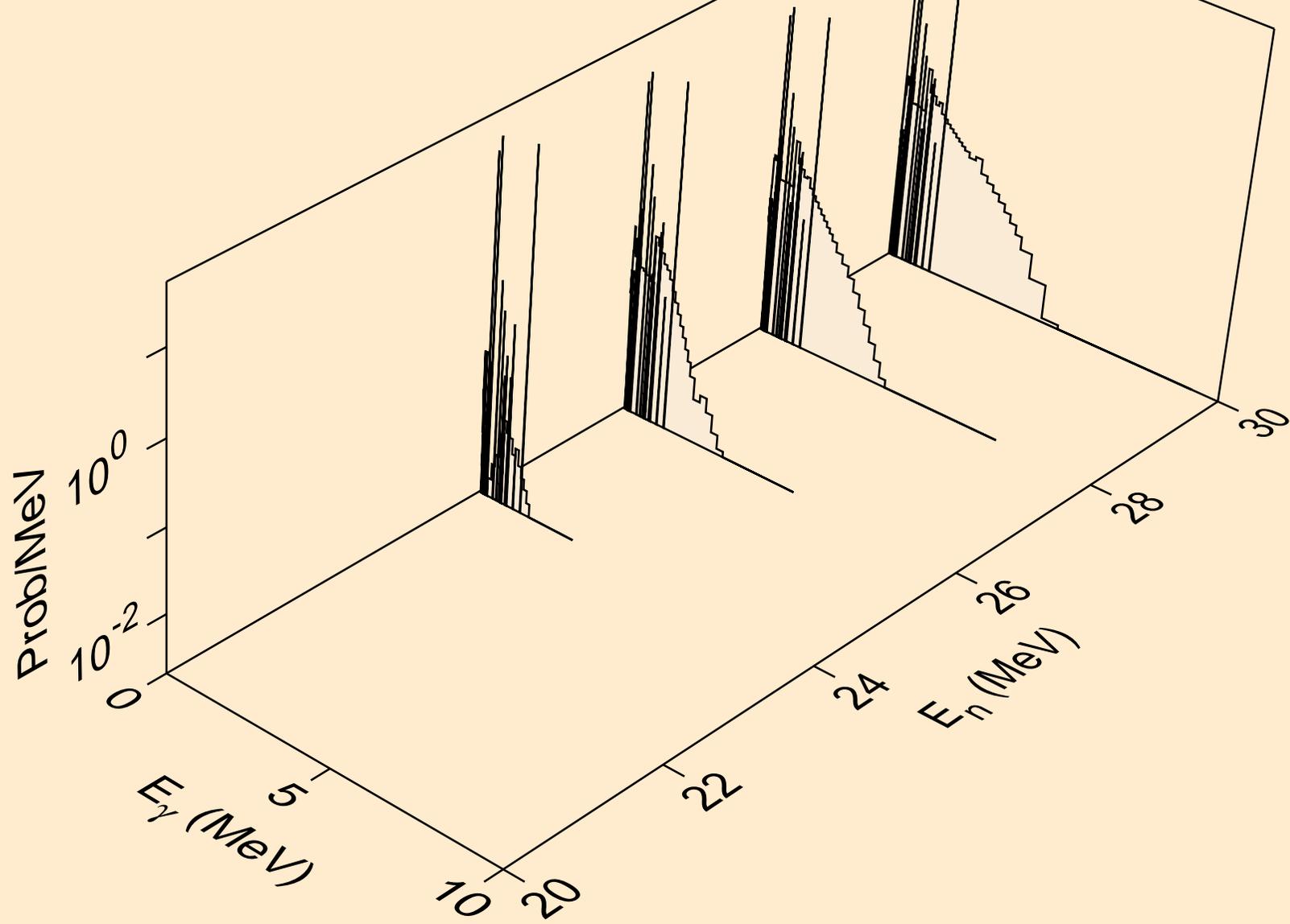PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Alpha emission for (a,da)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
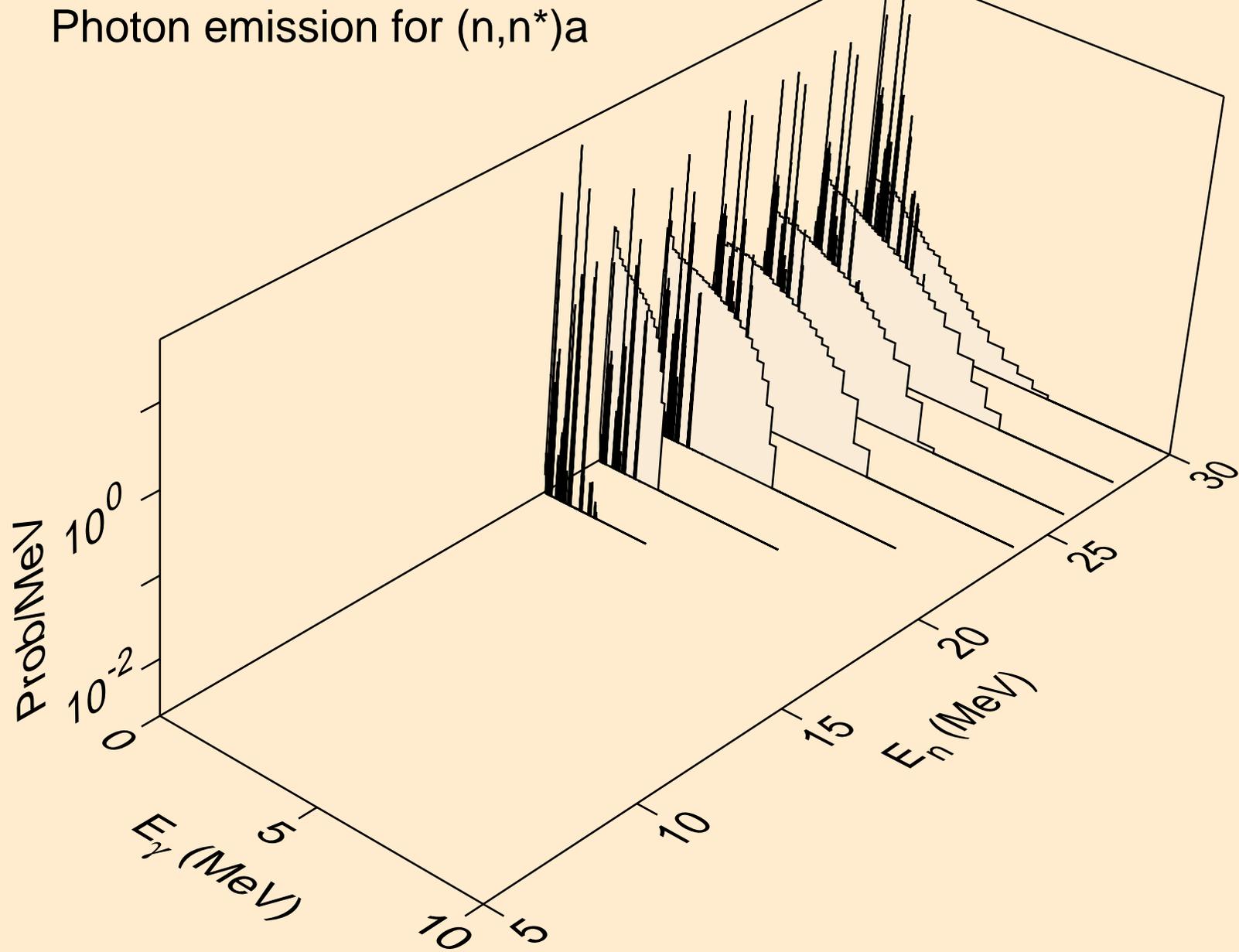Photon emission for (z,n)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (z,x)

Prob/MeV

10^0

10^{-2}

0

E_γ (MeV)

10

20

0

50

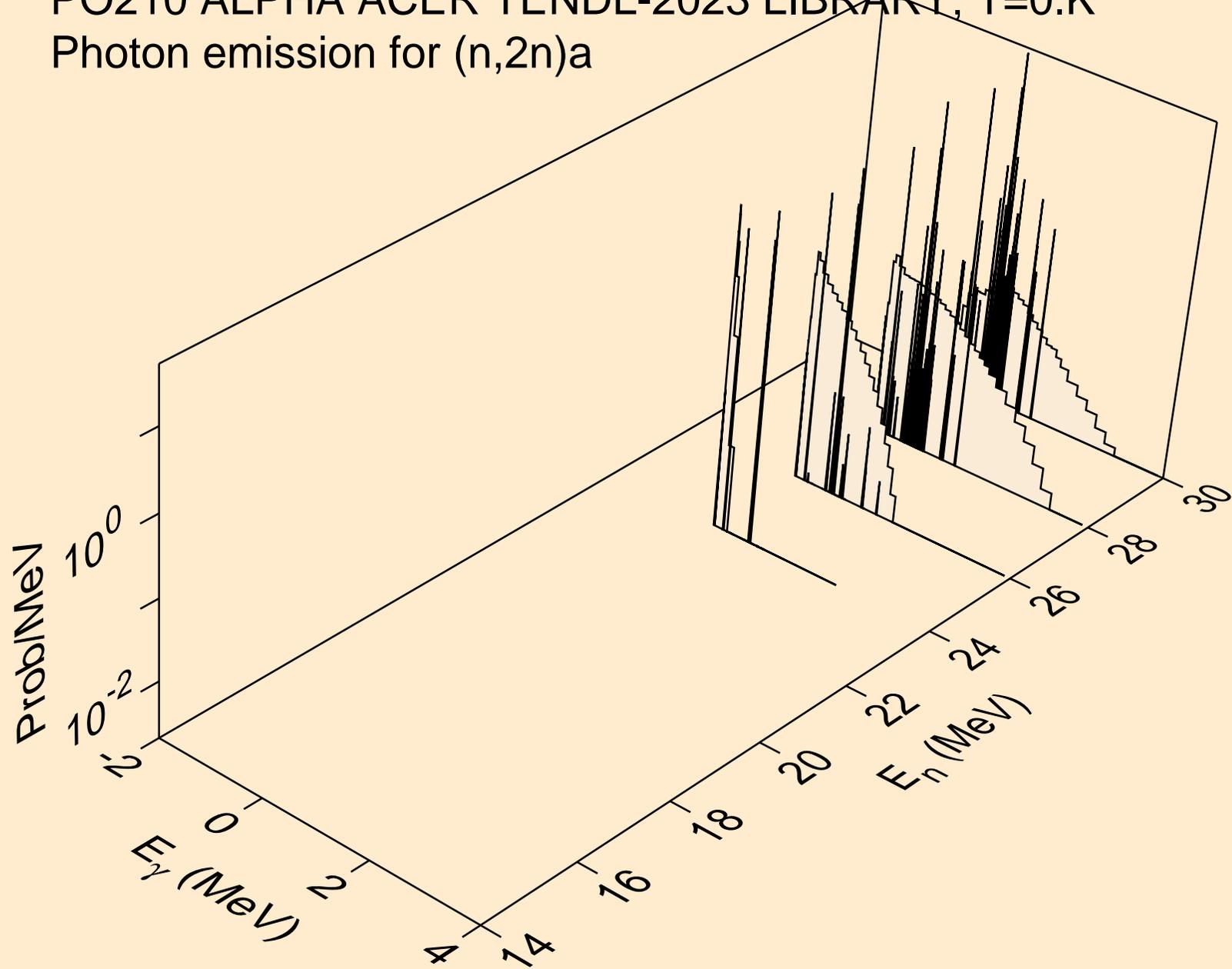100

150

200

E_n (MeV)

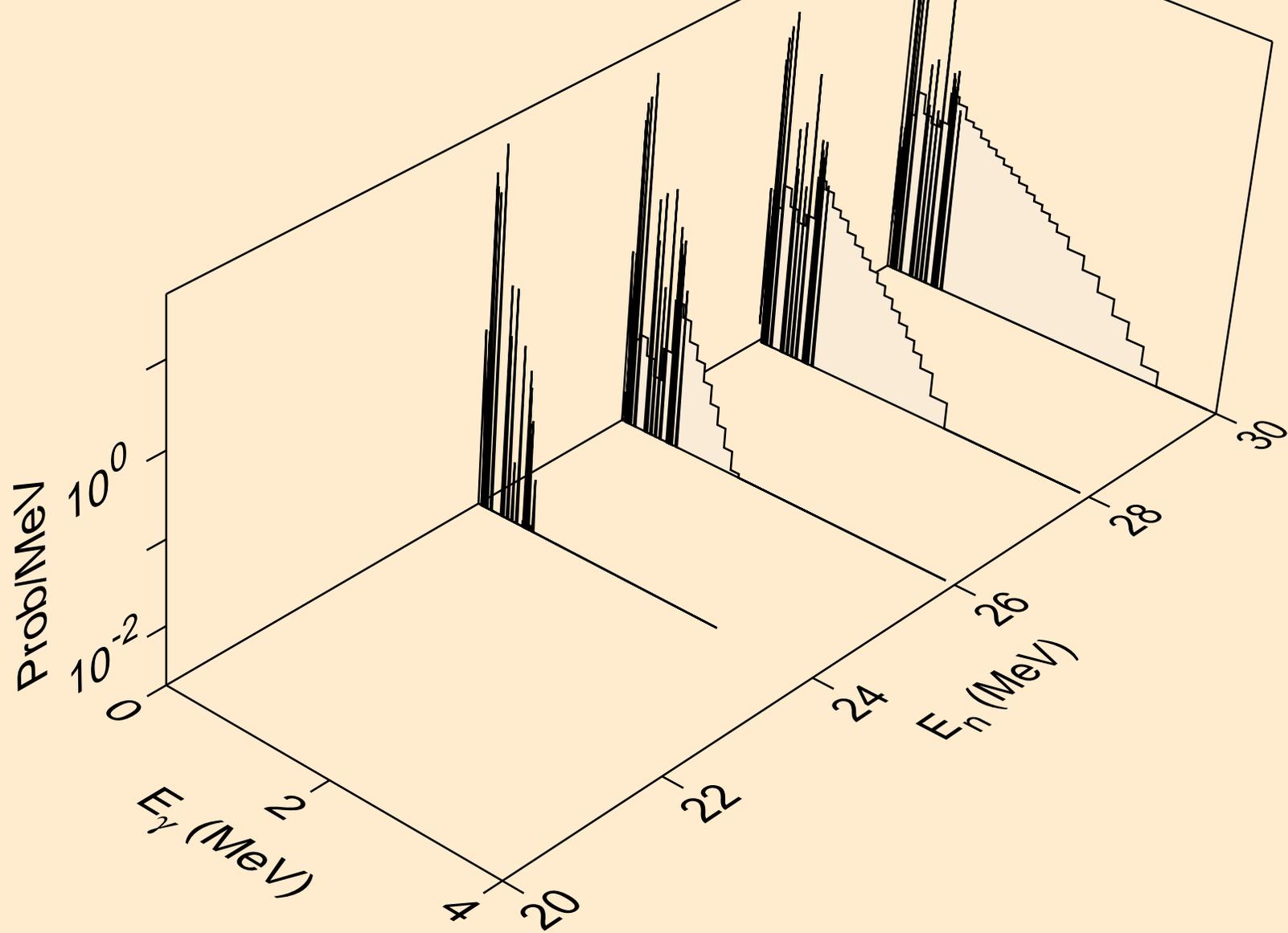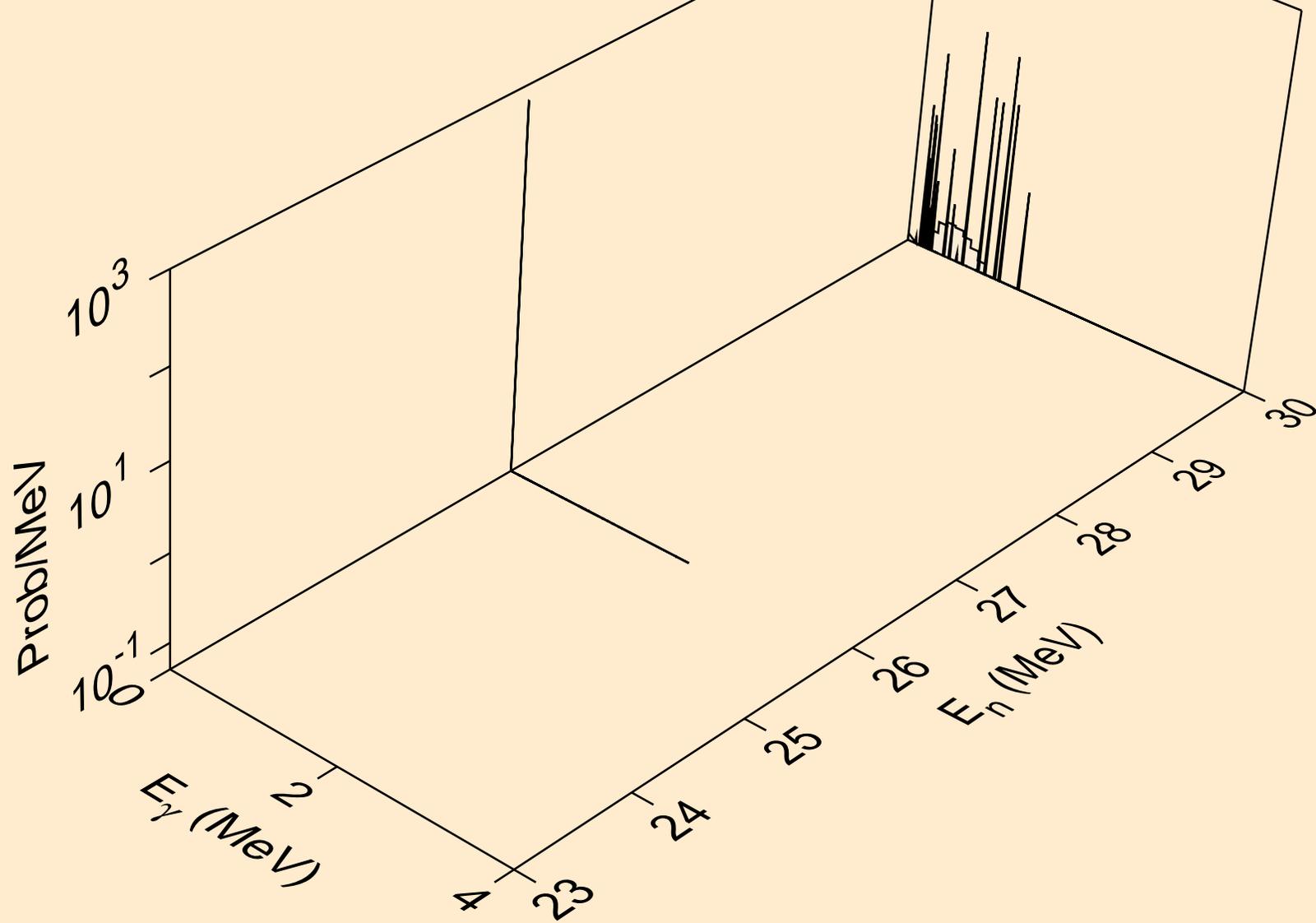PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2n)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)a

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
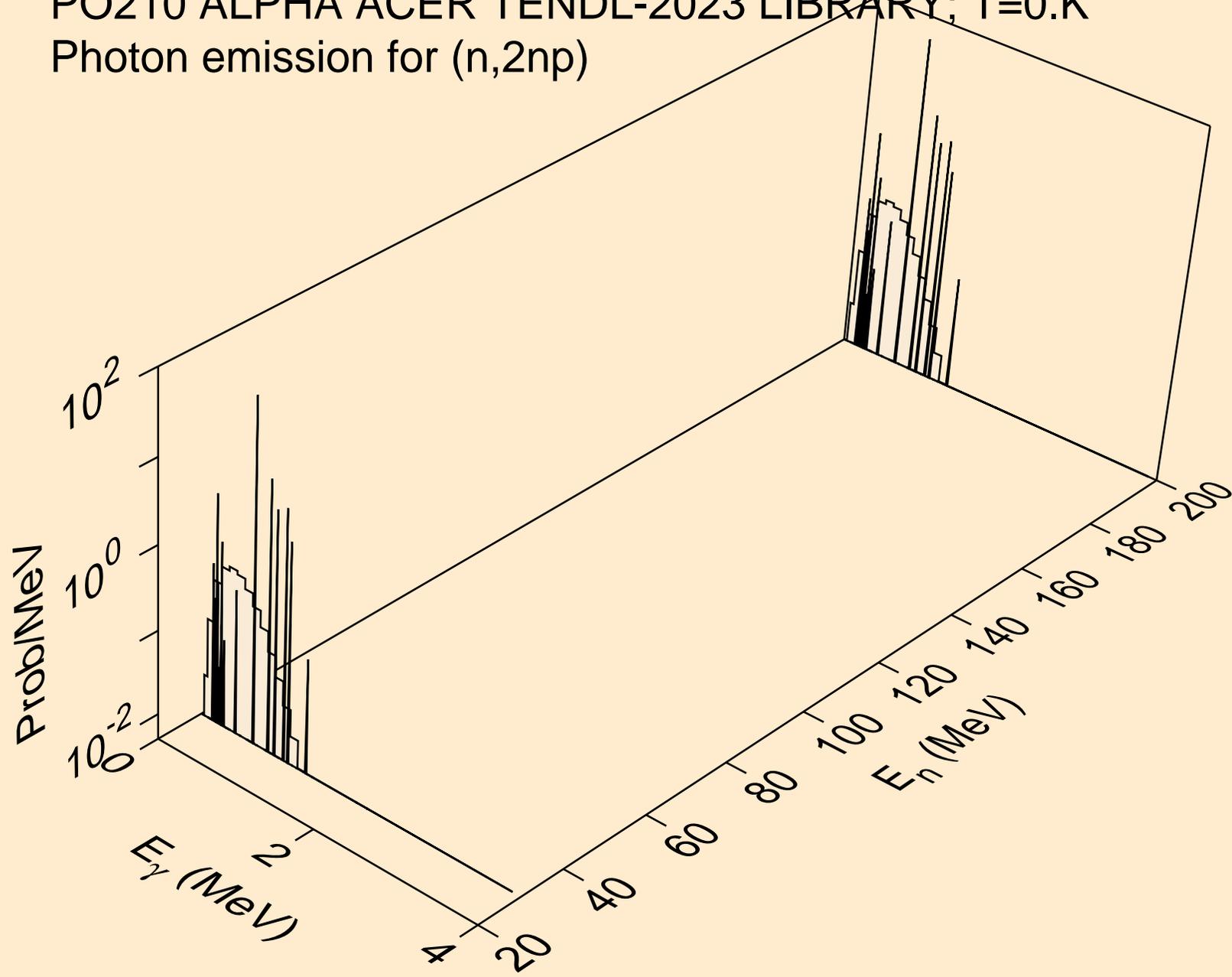Photon emission for (n,2n)a

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
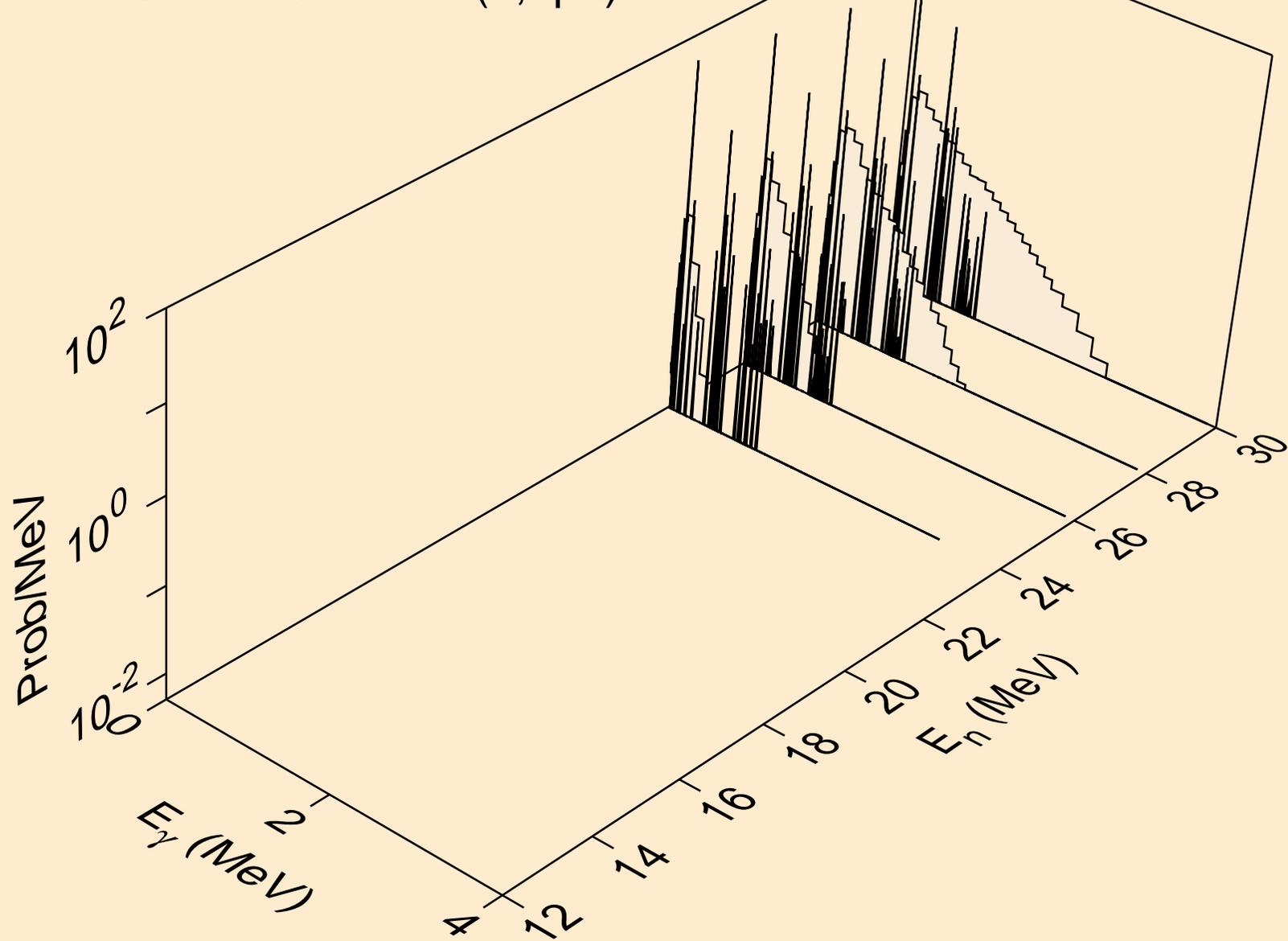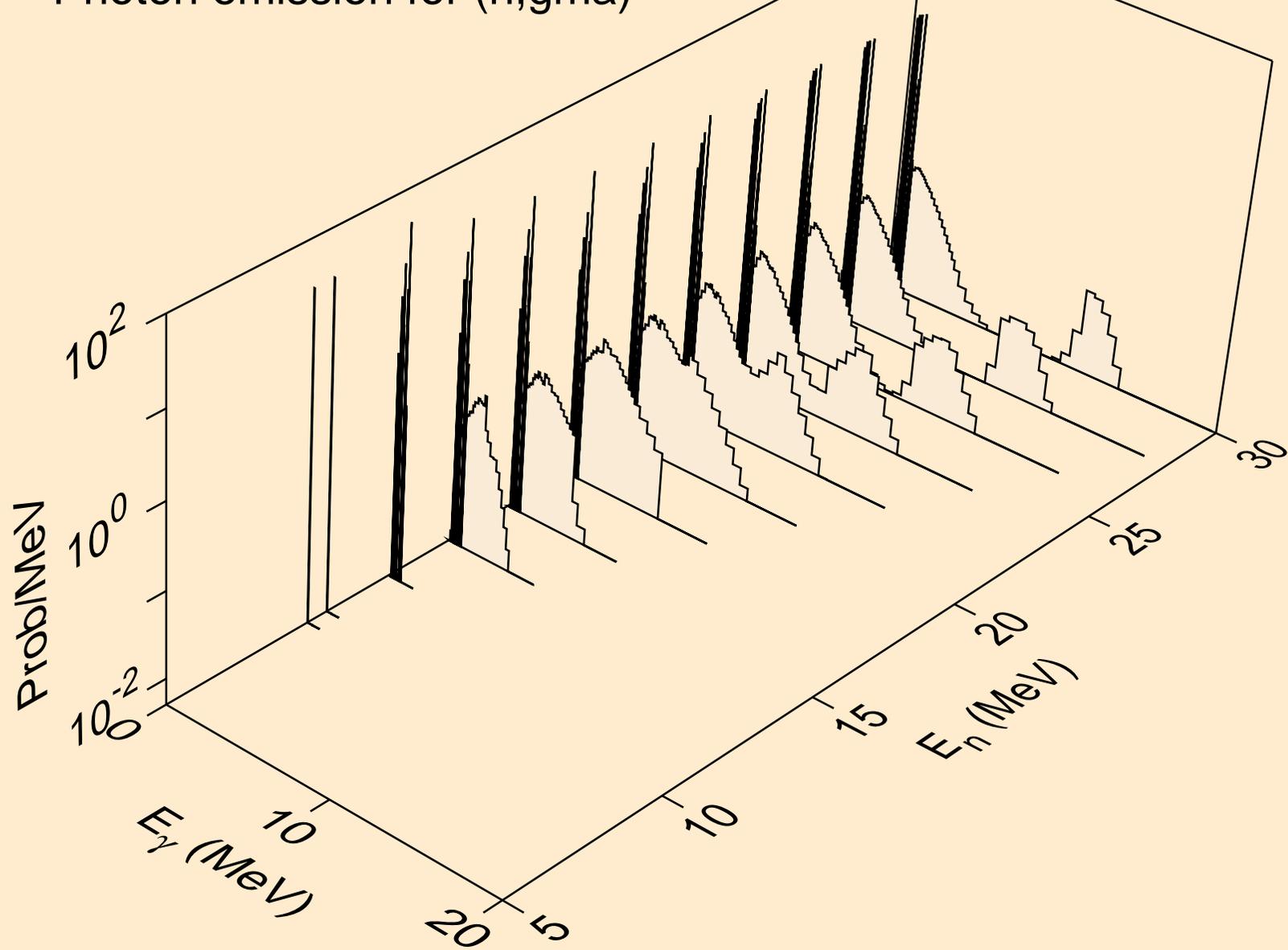Photon emission for (n,n*)p

Prob/MeV

10^0

10^{-2}

0

E_γ (MeV)

2

4

20

22

24

26

28

30

E_n (MeV)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)d

Prob/MeV

10^3

10^1

10^{-1}

10^0

E_γ (MeV)

2

4

23

24

25

26

27

28

29

30

E_n (MeV)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2np)

Prob/MeV

E_γ (MeV)

E_n (MeV)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,npa)

ProbMeV

10^2

10^0

10^{-2}

E_γ (MeV)

E_n (MeV)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
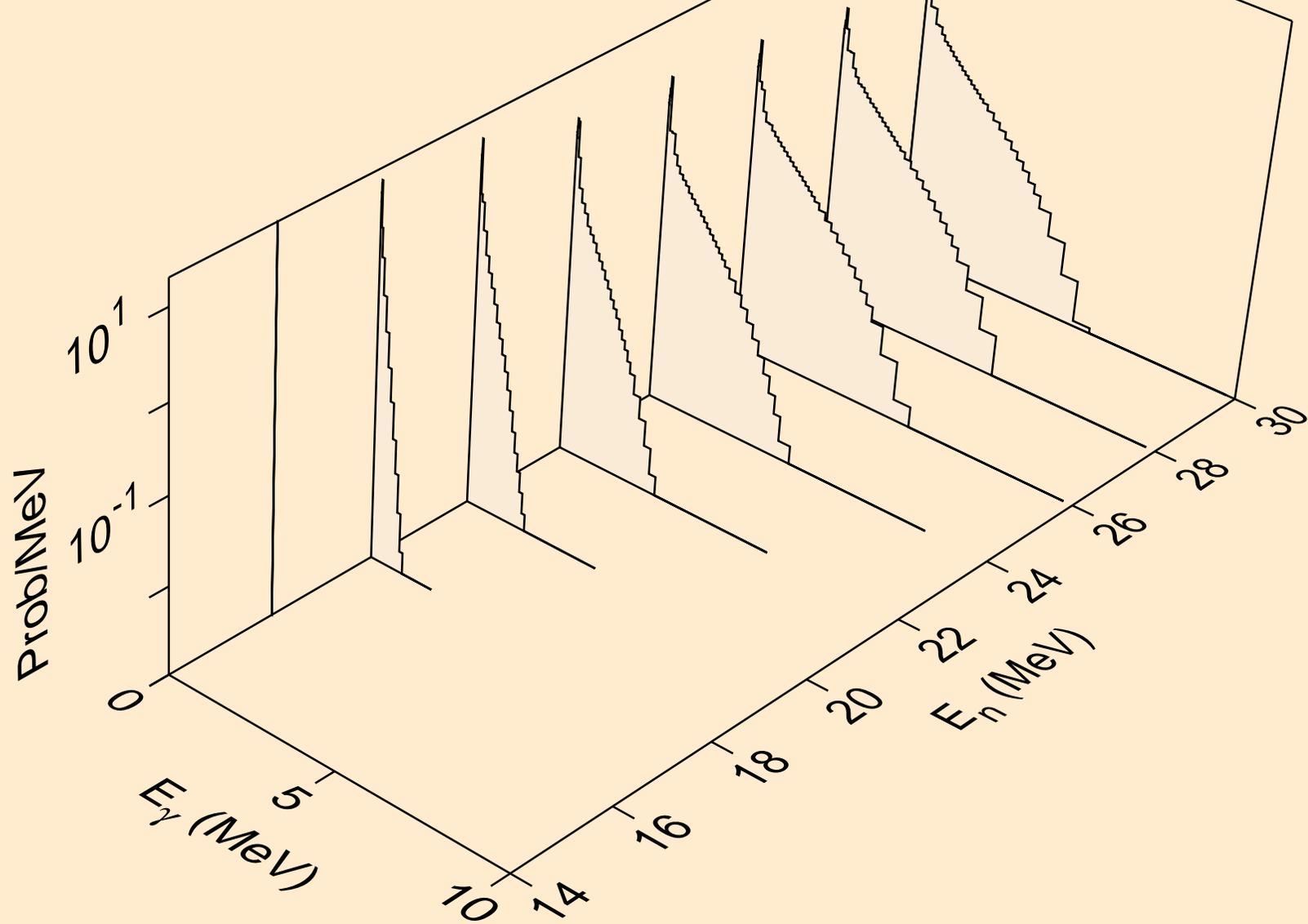Photon emission for (n,gma)

Prob/MeV

E_γ (MeV)

E_n (MeV)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,p)

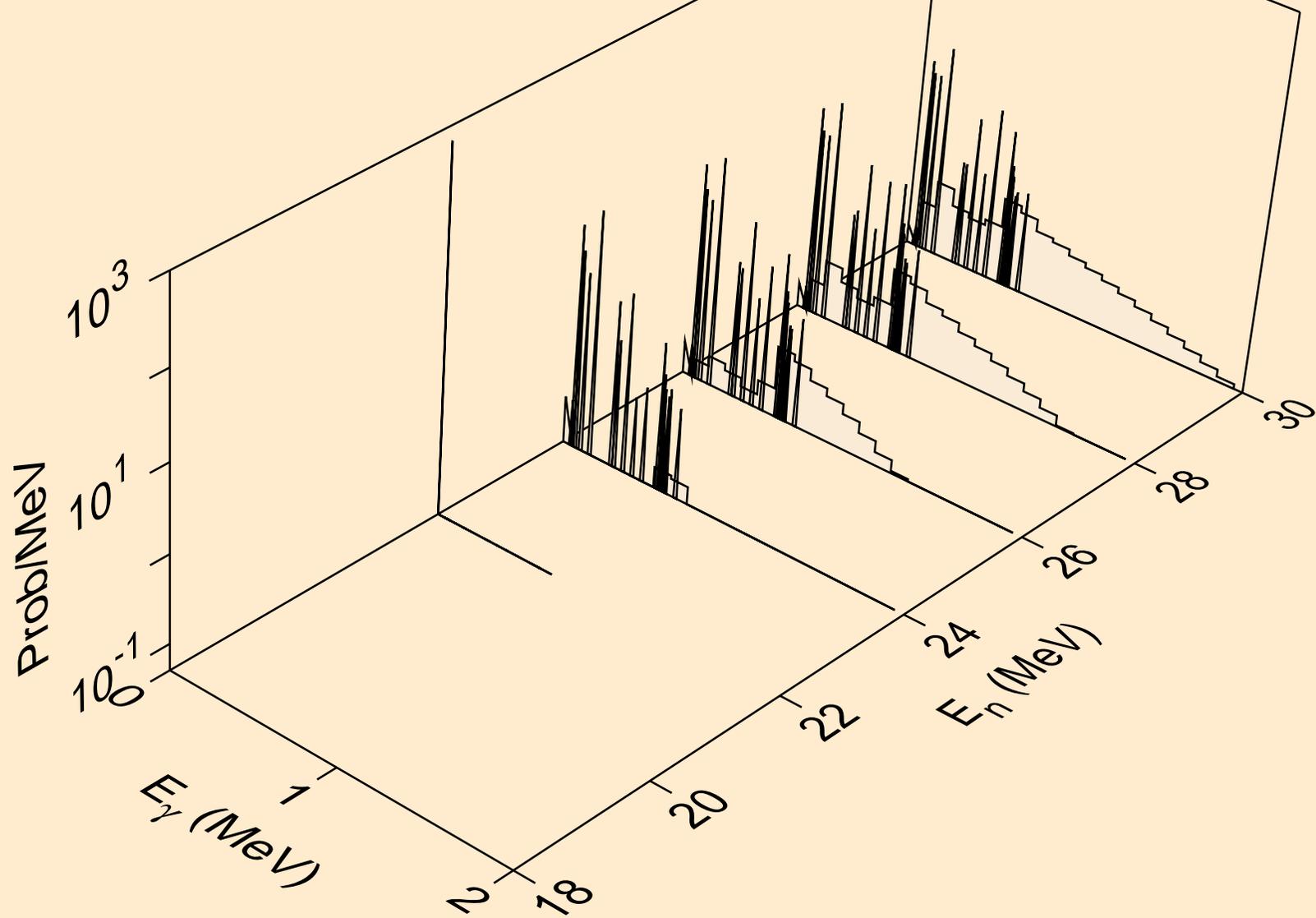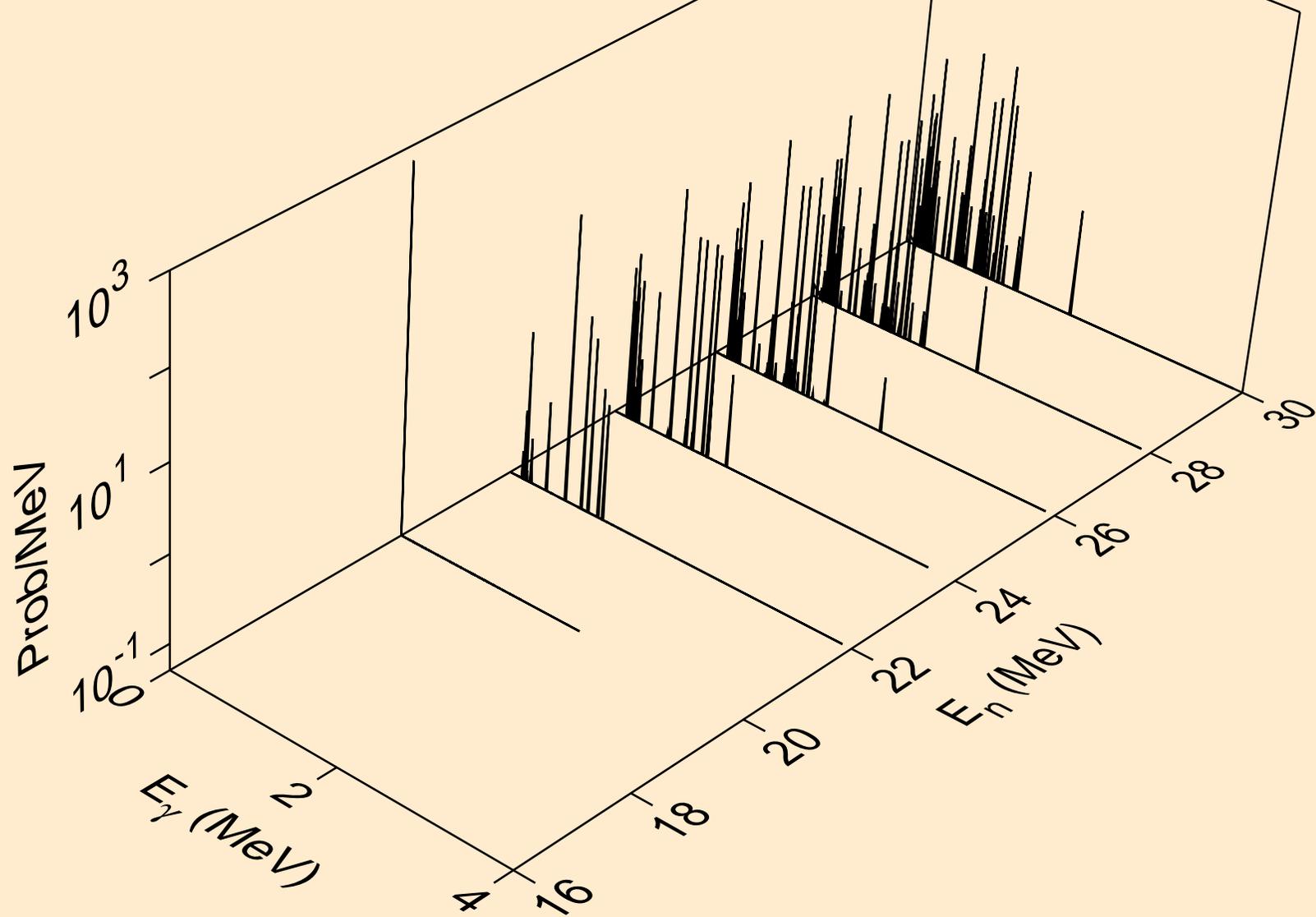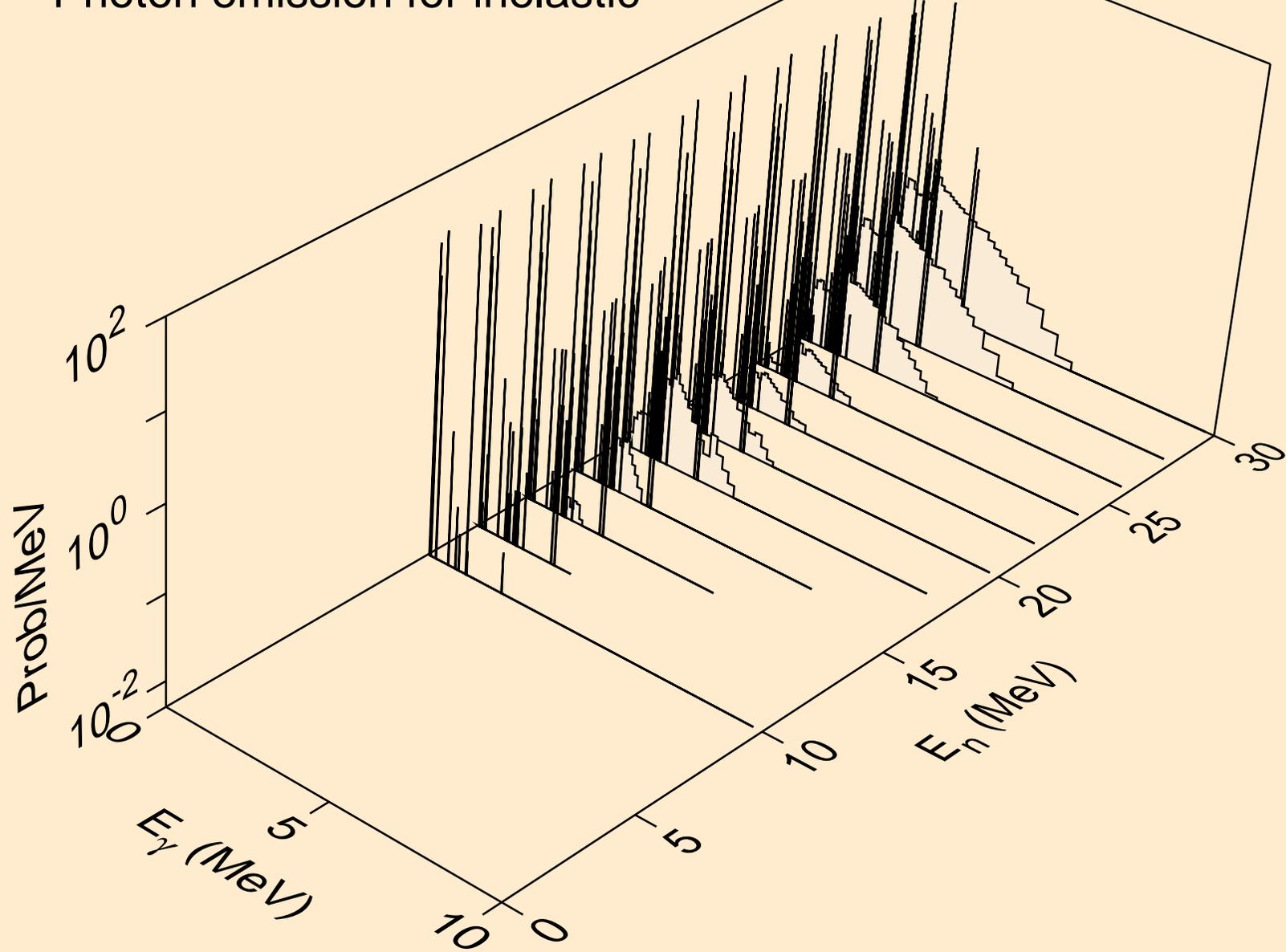PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,d)

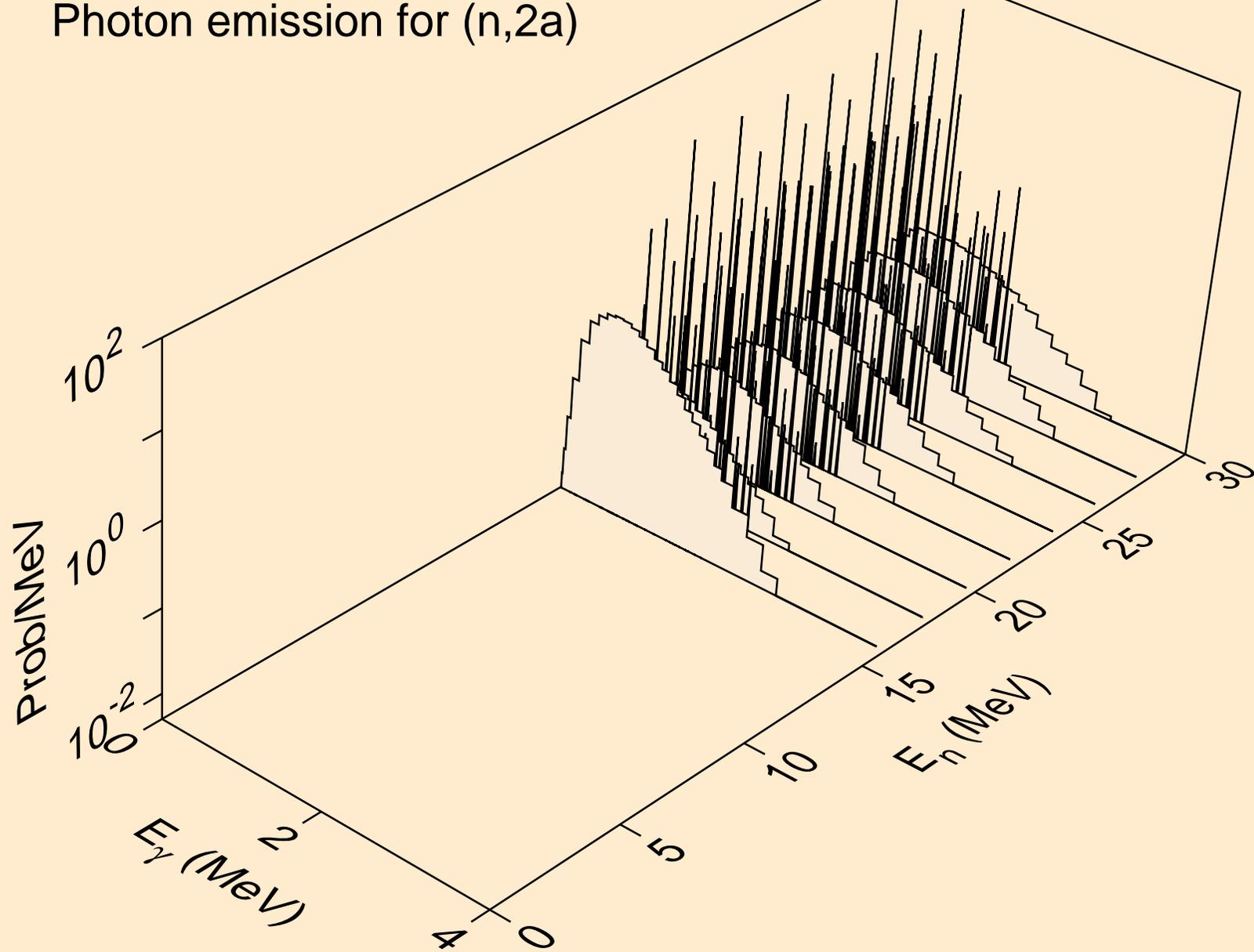ProbI/MeV

10^3

10^1

10^{-1}

E_γ (MeV)

1

2

18

20

22

24

26

28

30

E_n (MeV)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,t)
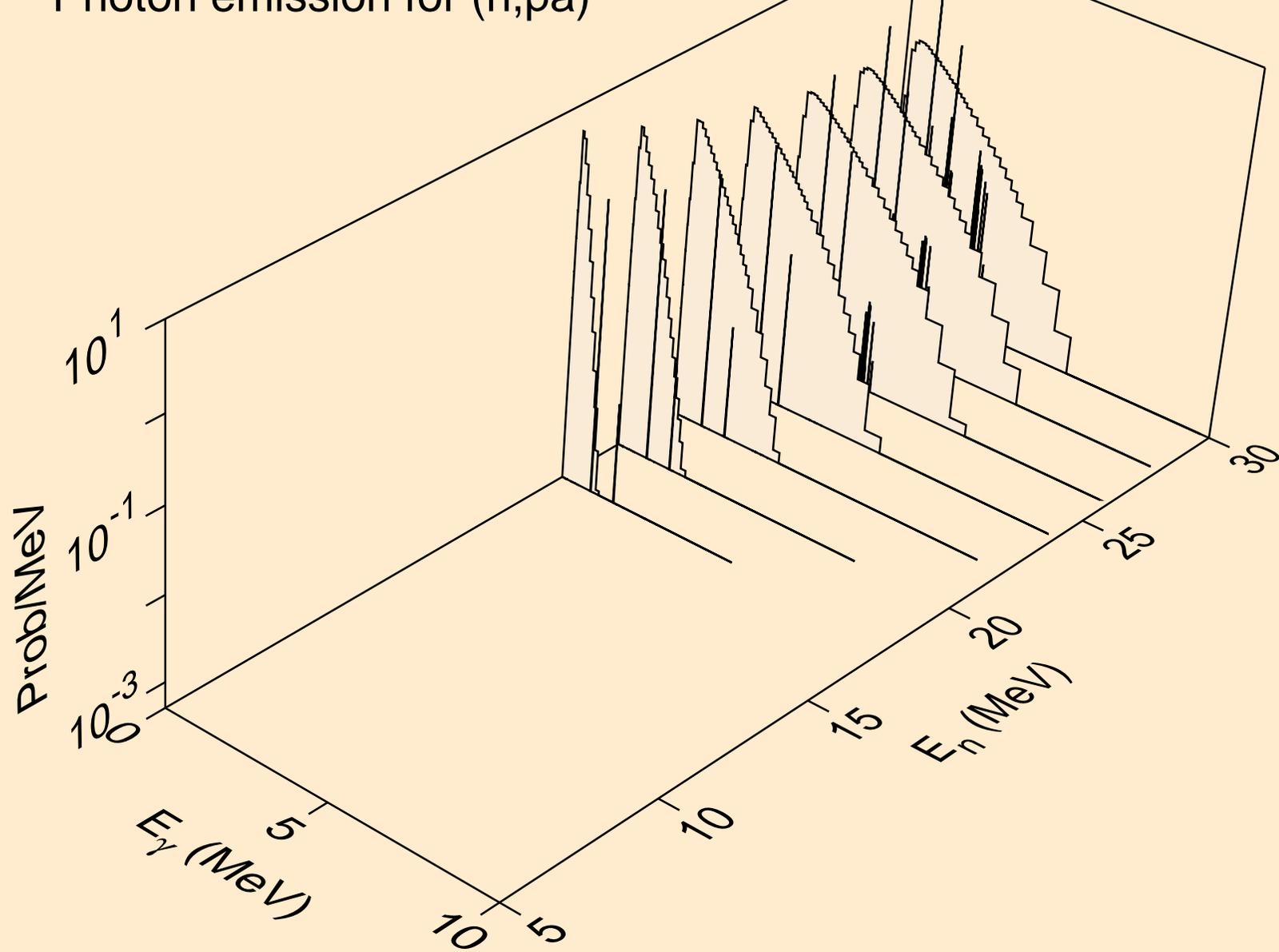
E_γ (MeV)

E_n (MeV)

Prob/MeV

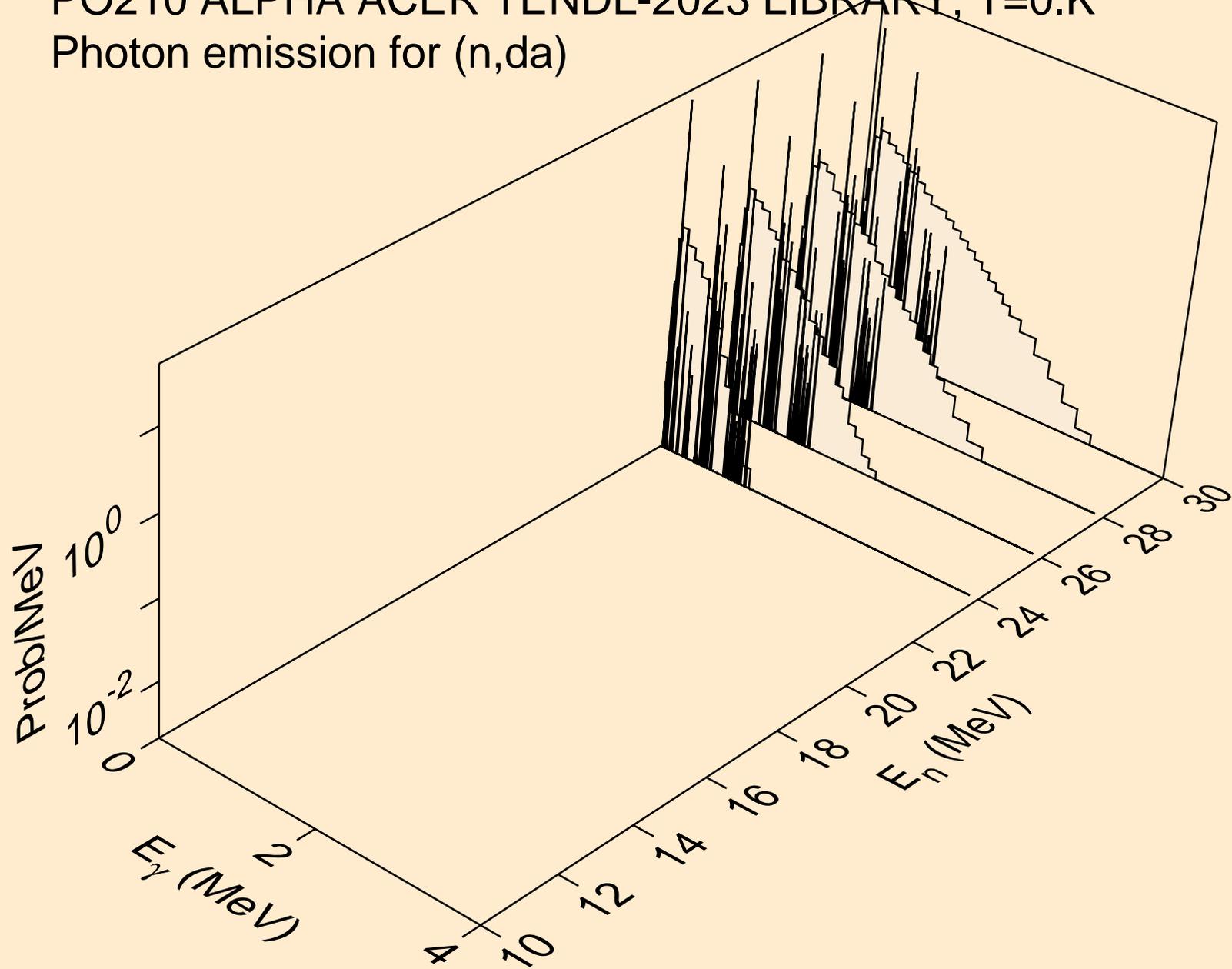PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for inelastic

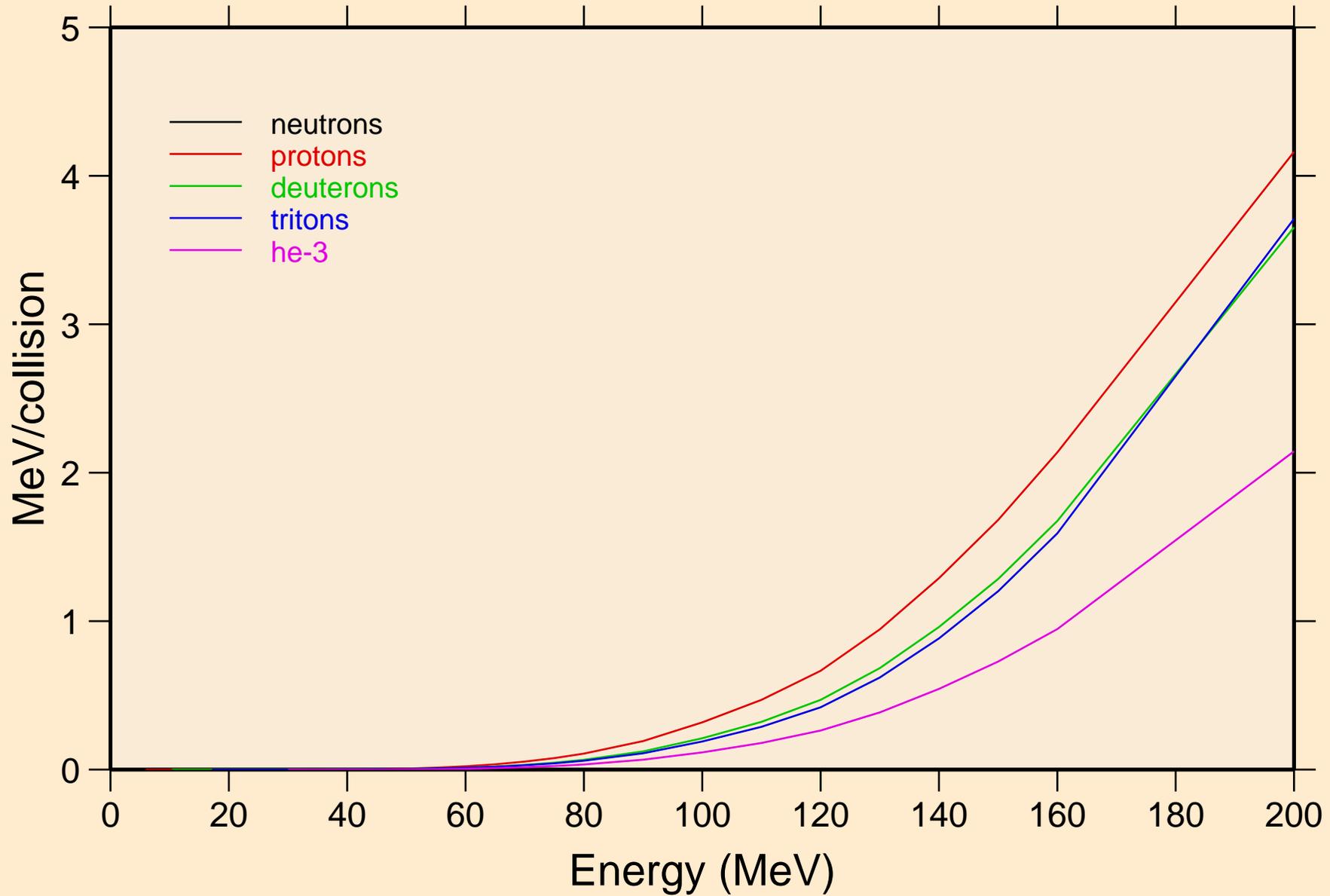PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2a)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,pa)

Prob/MeV

10^1

10^{-1}

10^{-3}

E_γ (MeV)

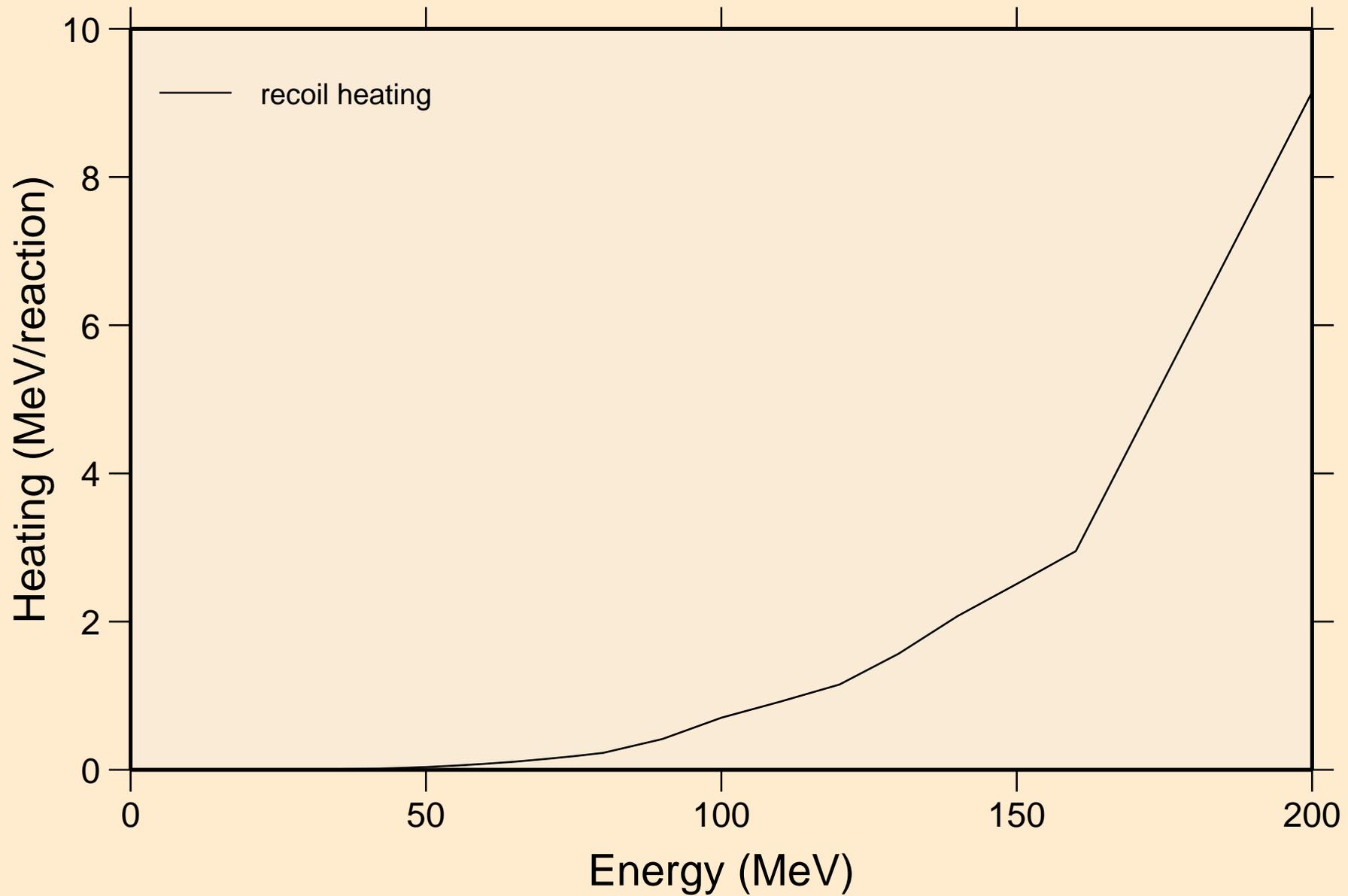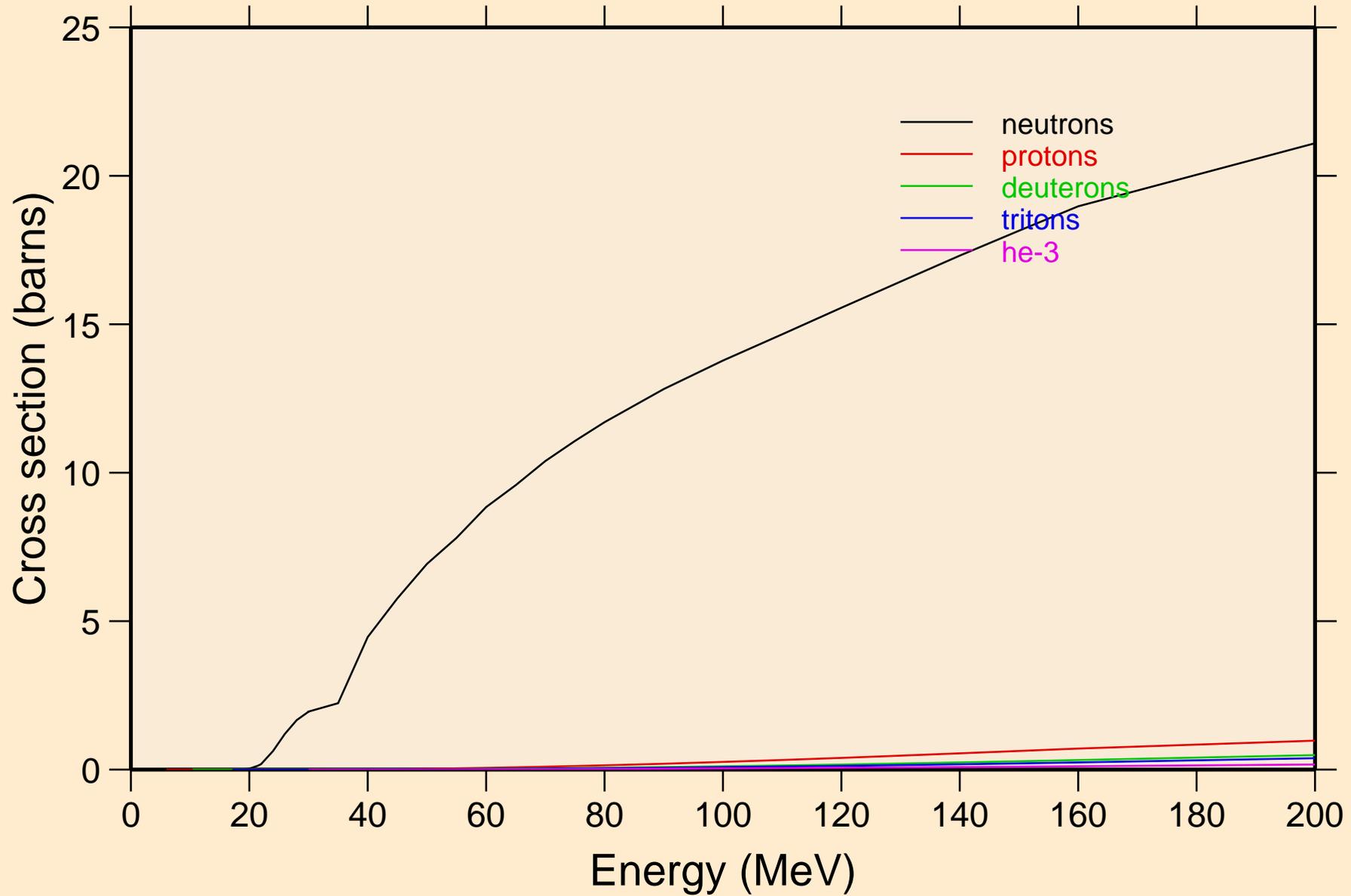E_n (MeV)

5

10

5

10

15

20

25

30

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,da)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Particle heating contributions

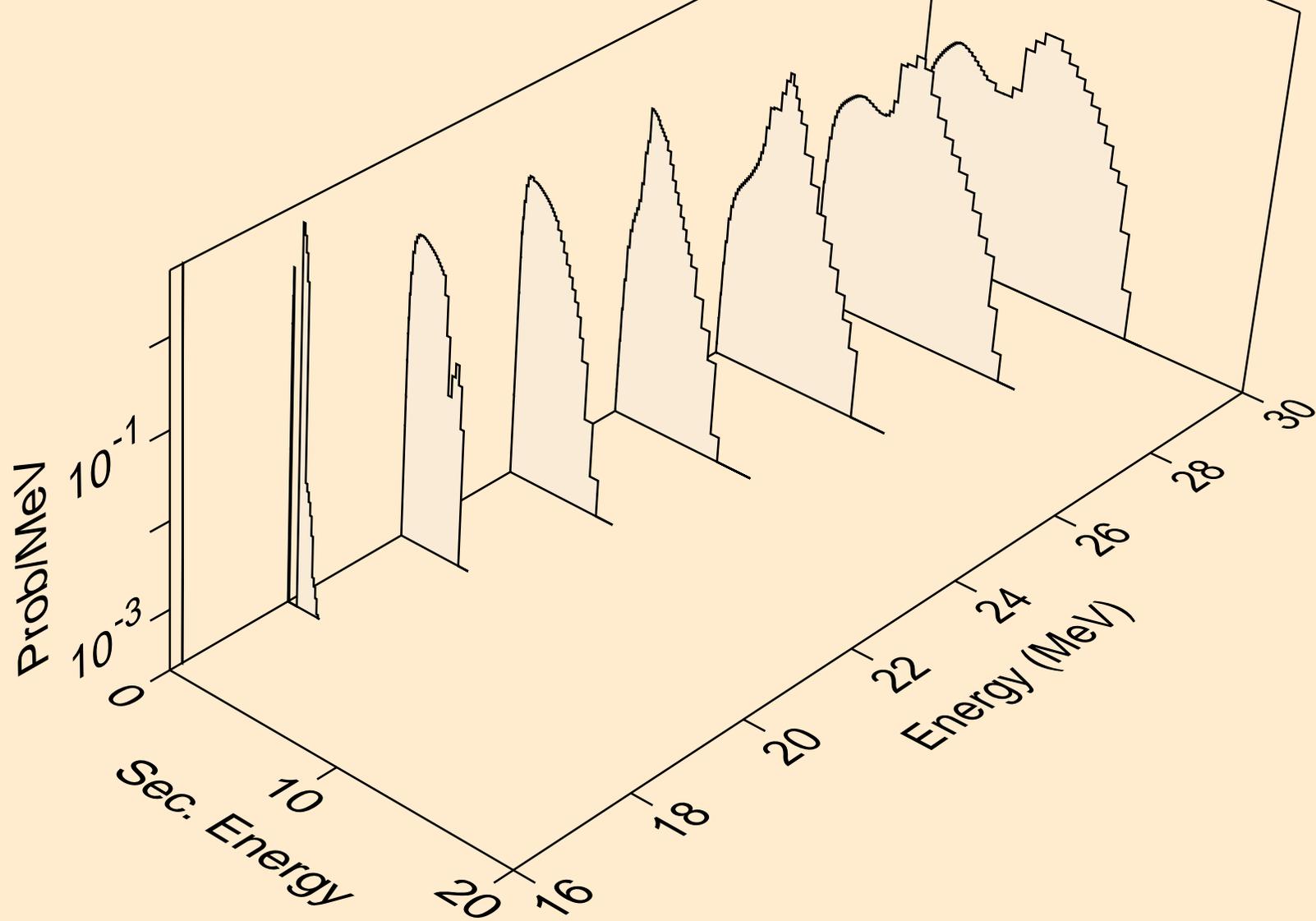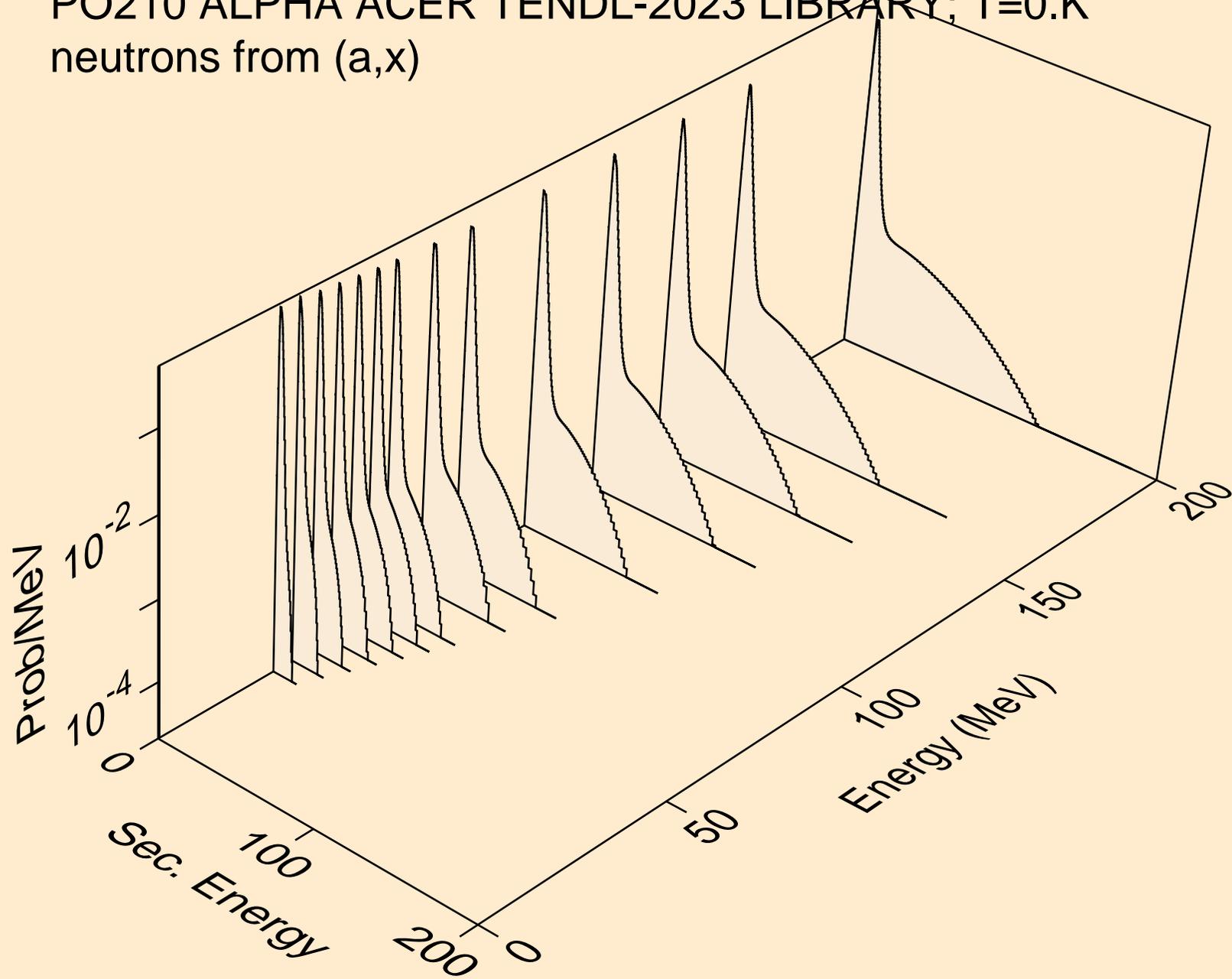PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Recoil Heating

recoil heating

Heating (MeV/reaction)

Energy (MeV)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Particle production cross sections

Cross section (barns) vs Energy (MeV)

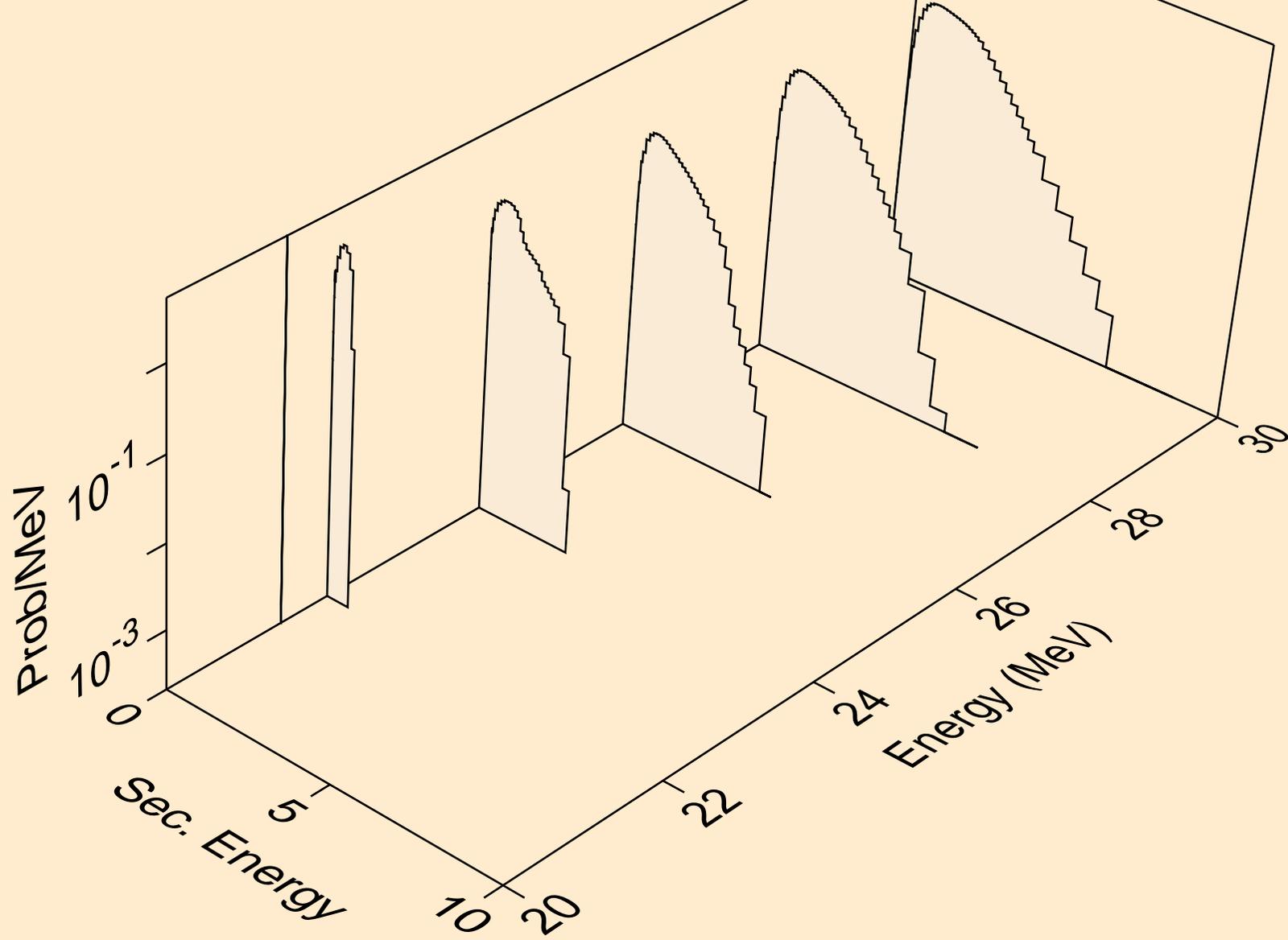- neutrons
- protons
- deuterons
- tritons
- he-3

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
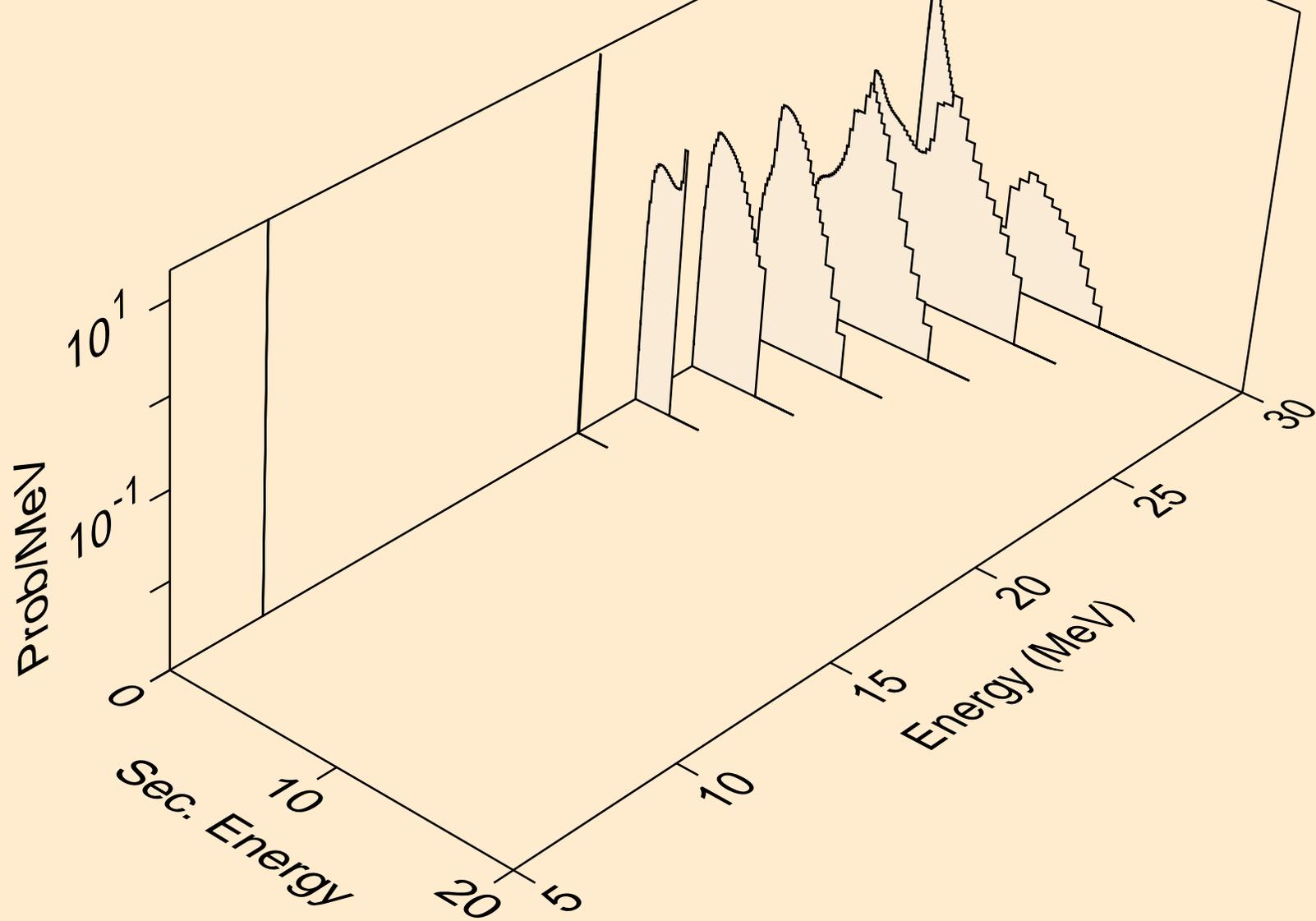neutrons from (a,n)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
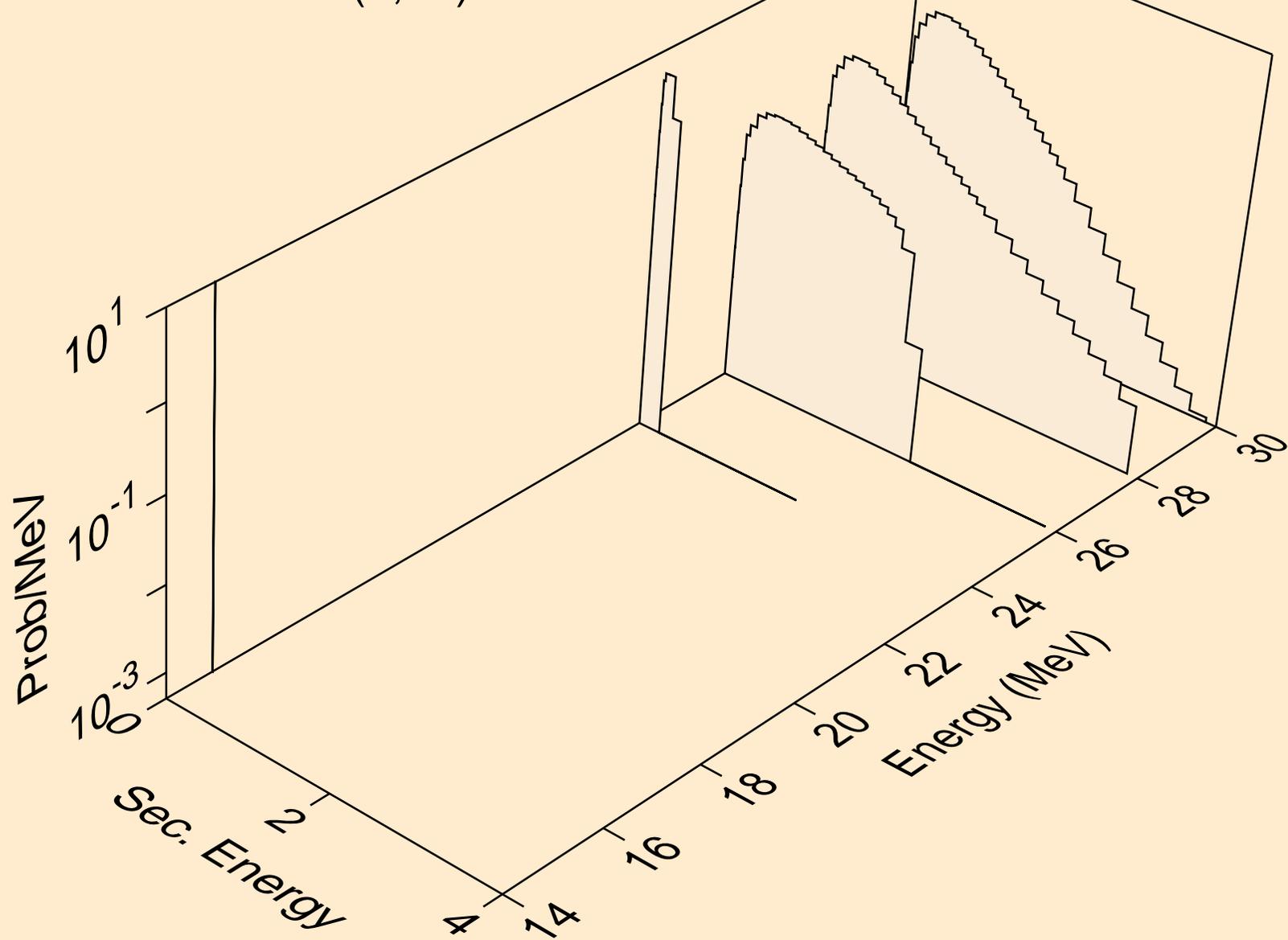neutrons from (a,x)

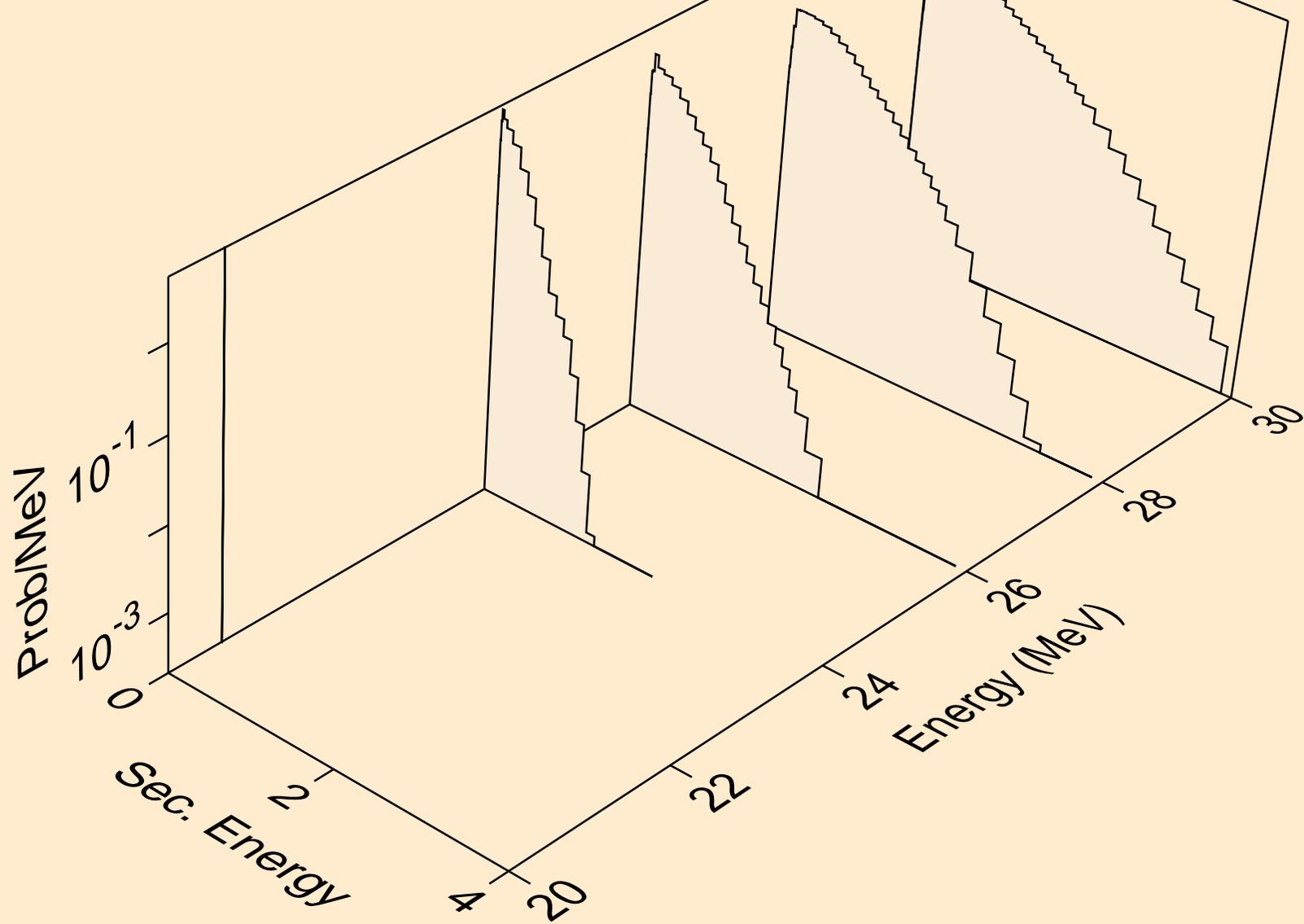PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,2n)

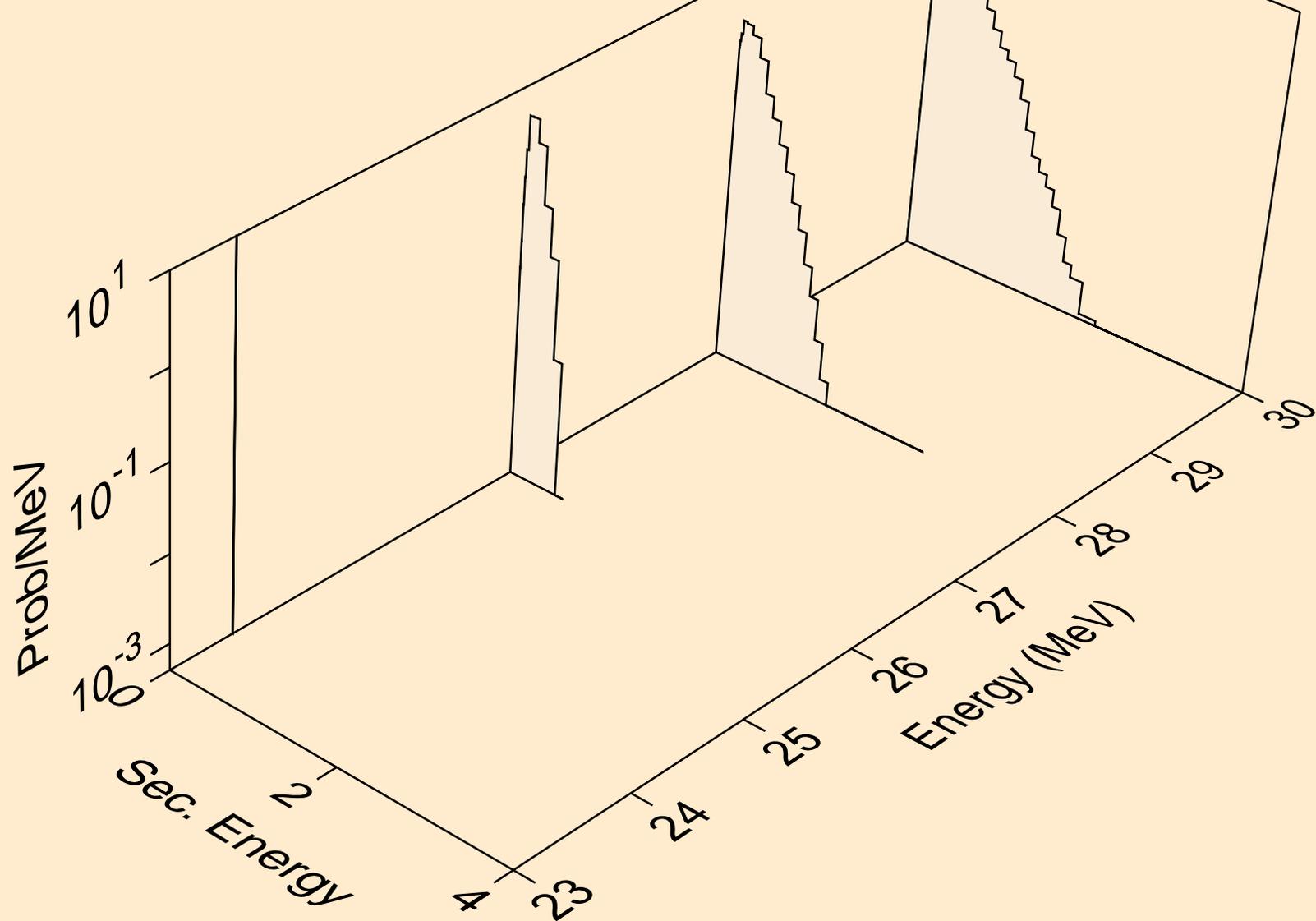PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)a

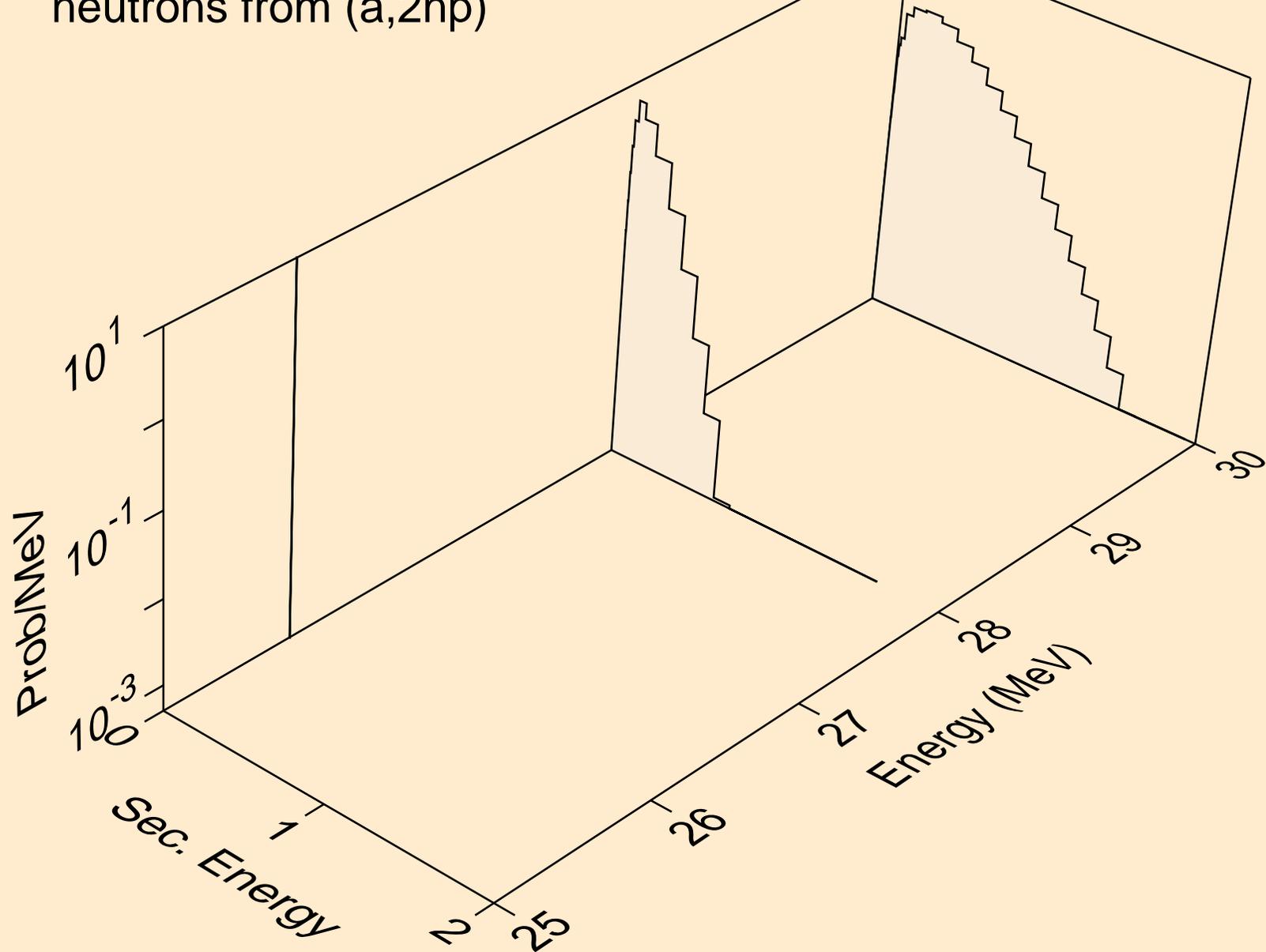PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,2n)a

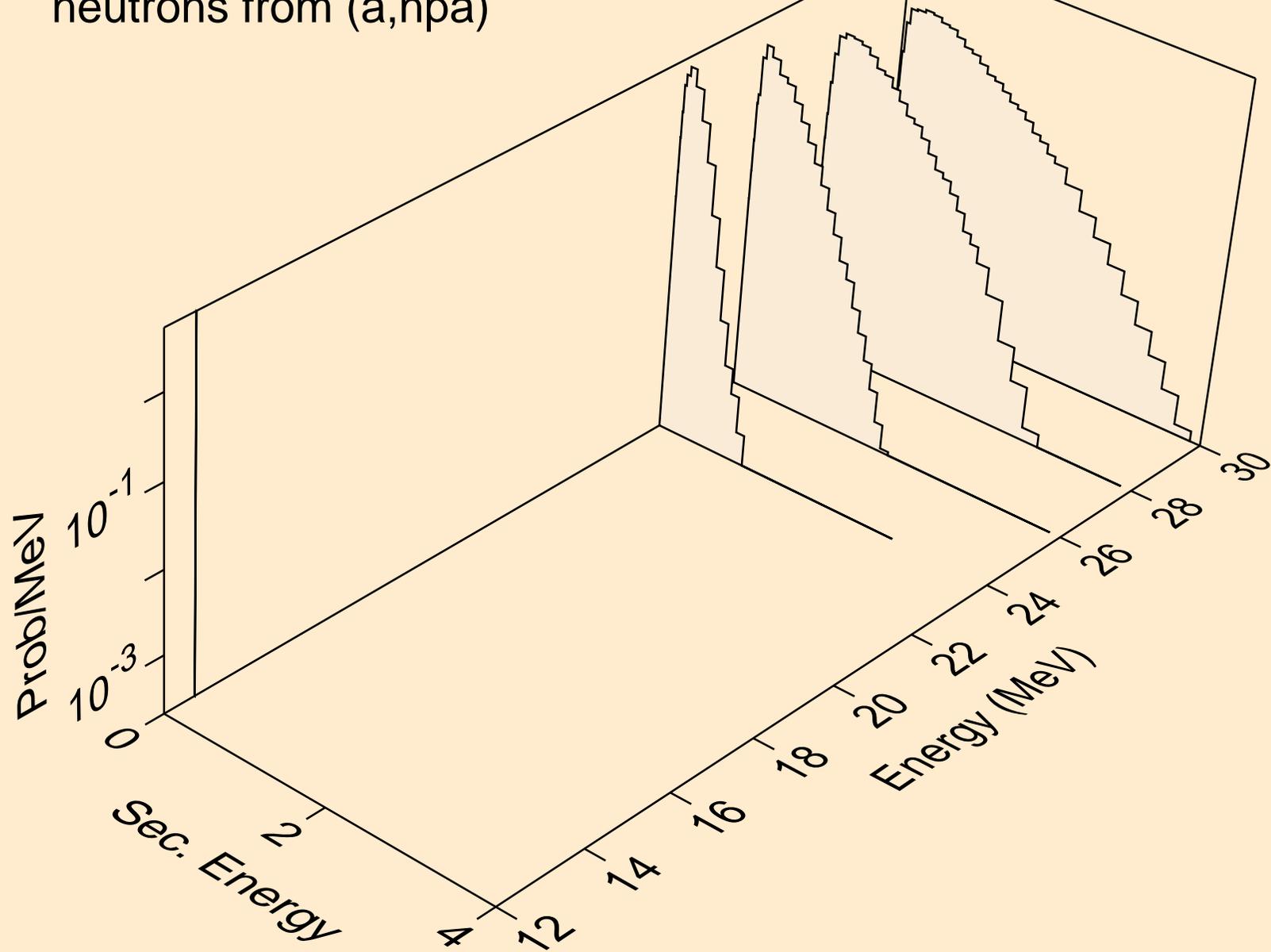PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)p

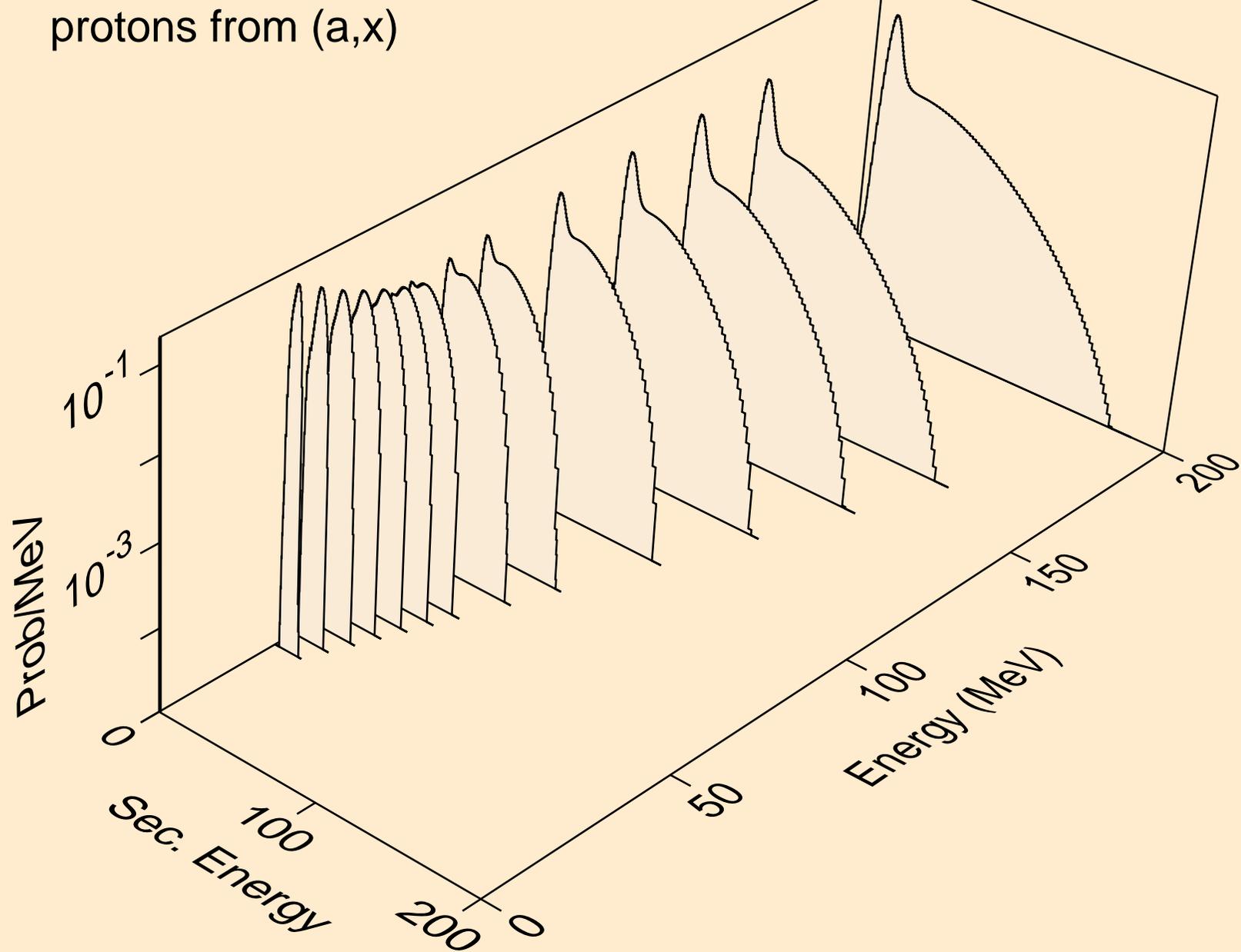PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)d

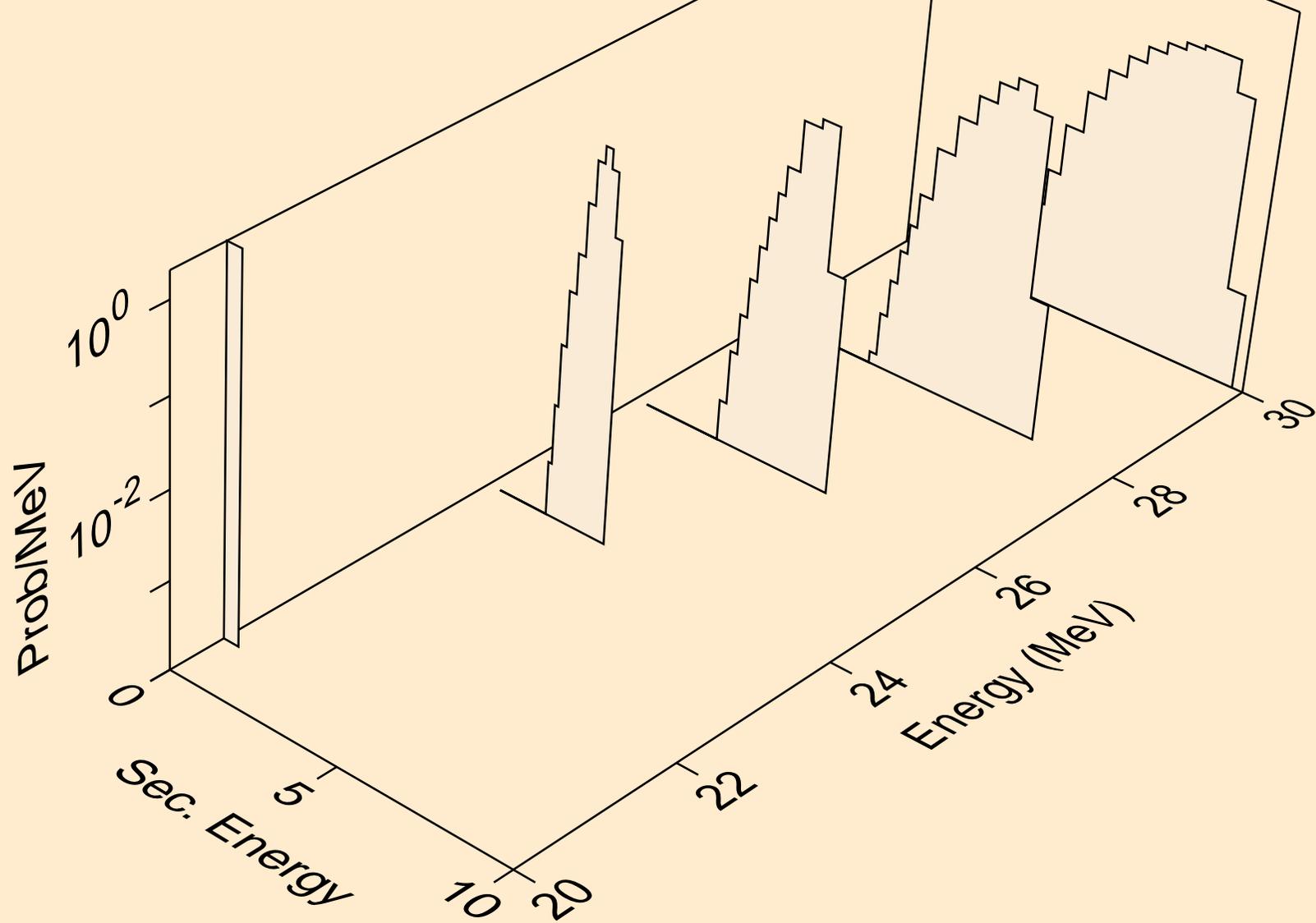PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,2np)

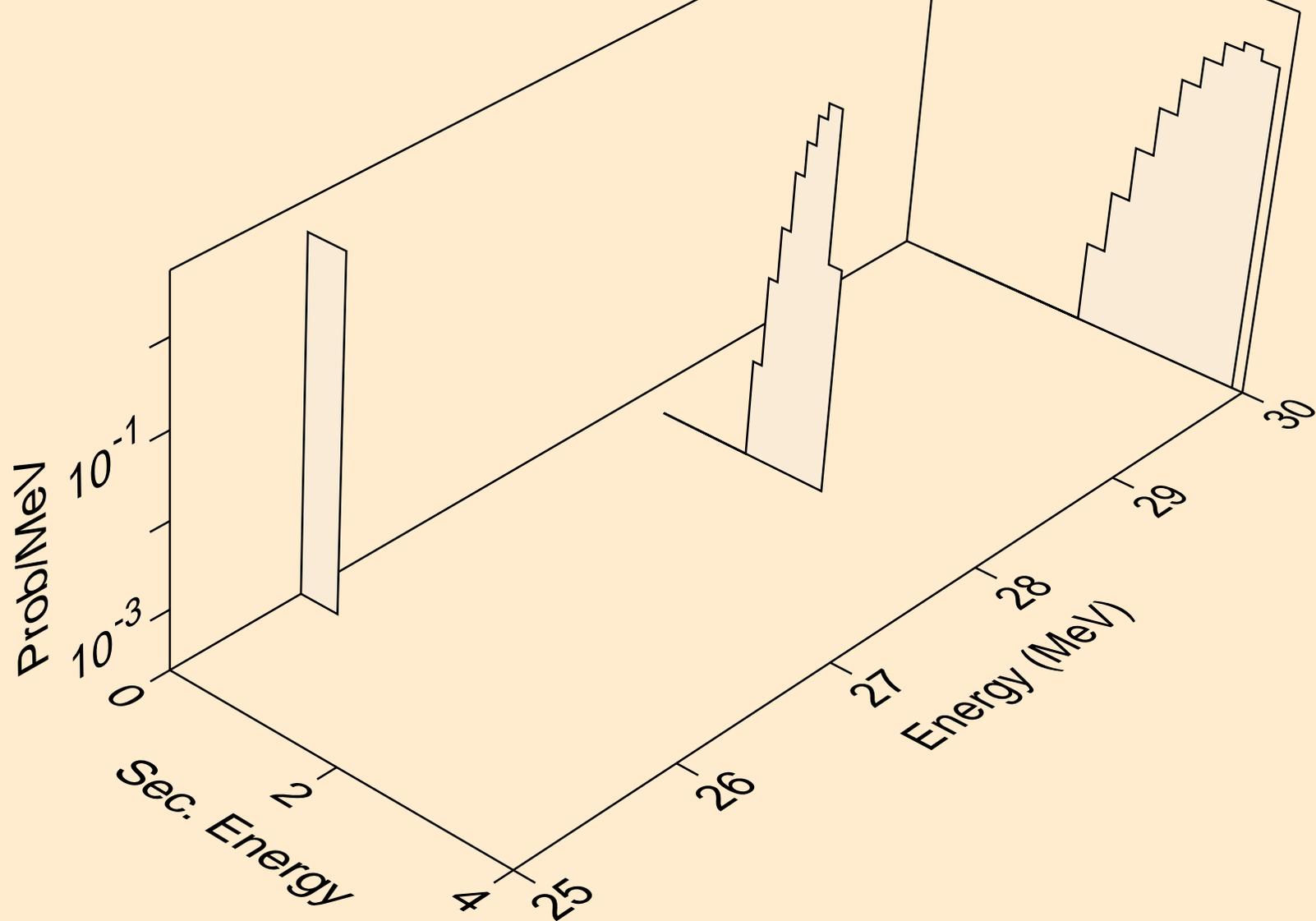PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,npa)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
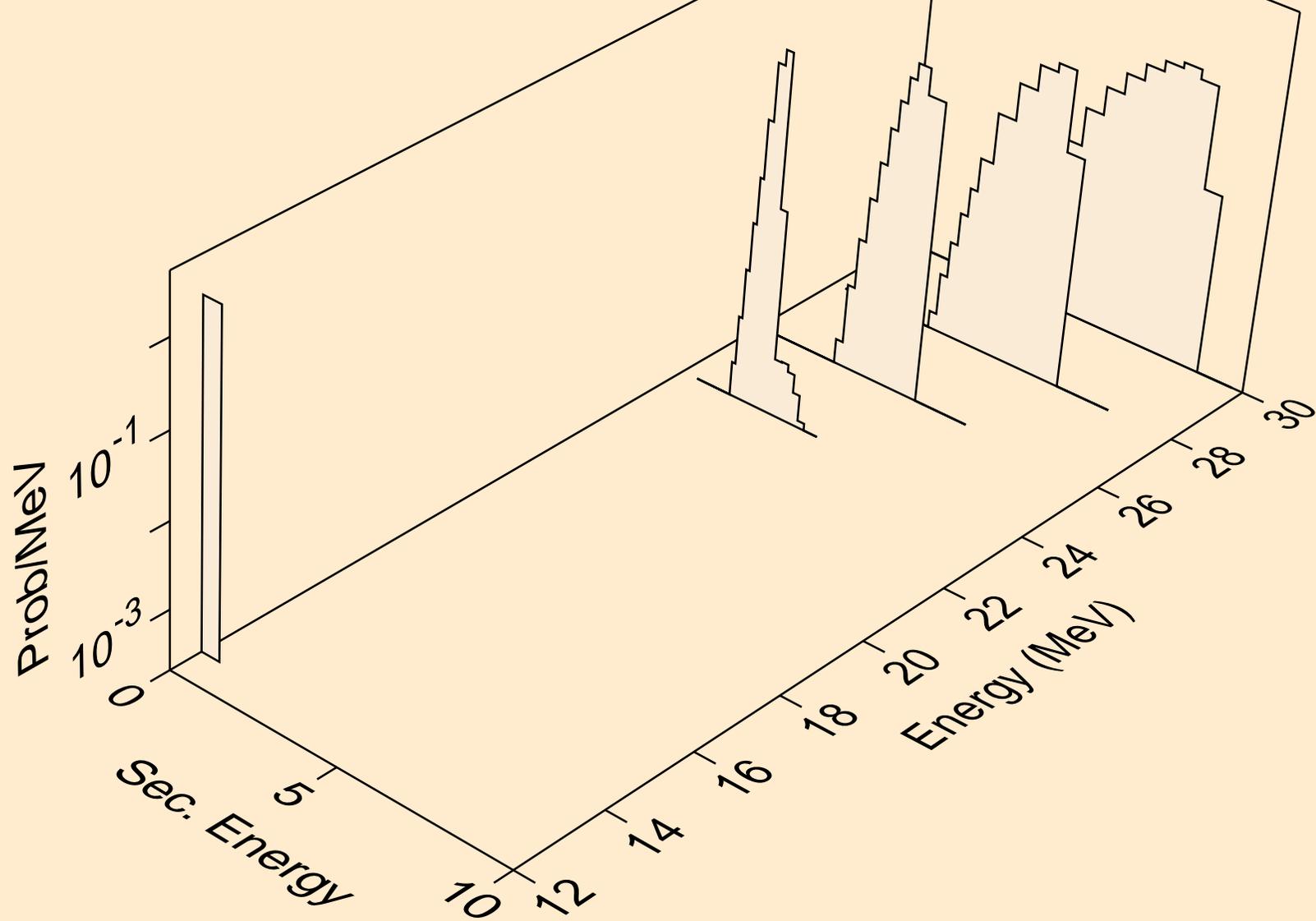protons from (a,x)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
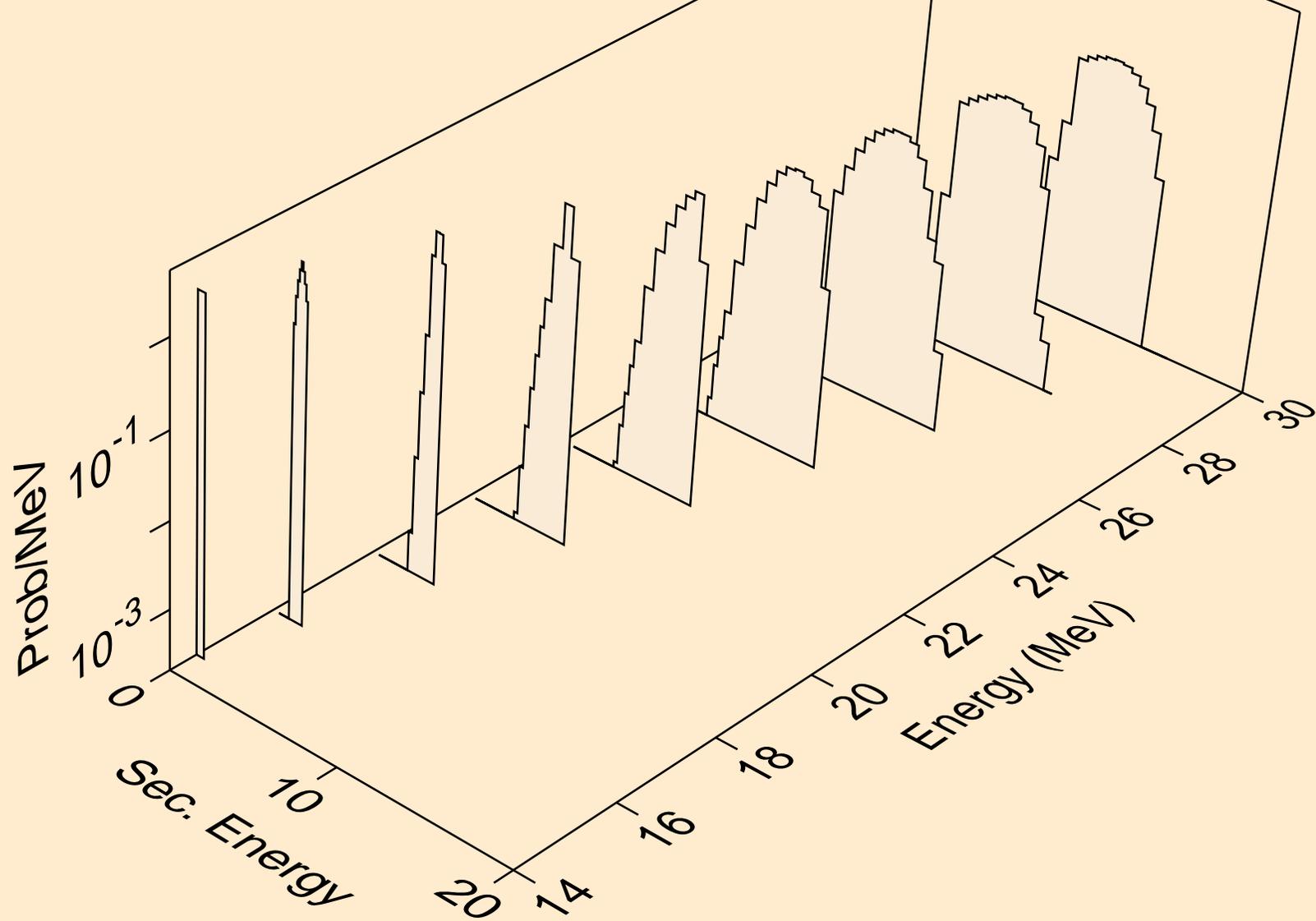protons from (a,n*)p

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
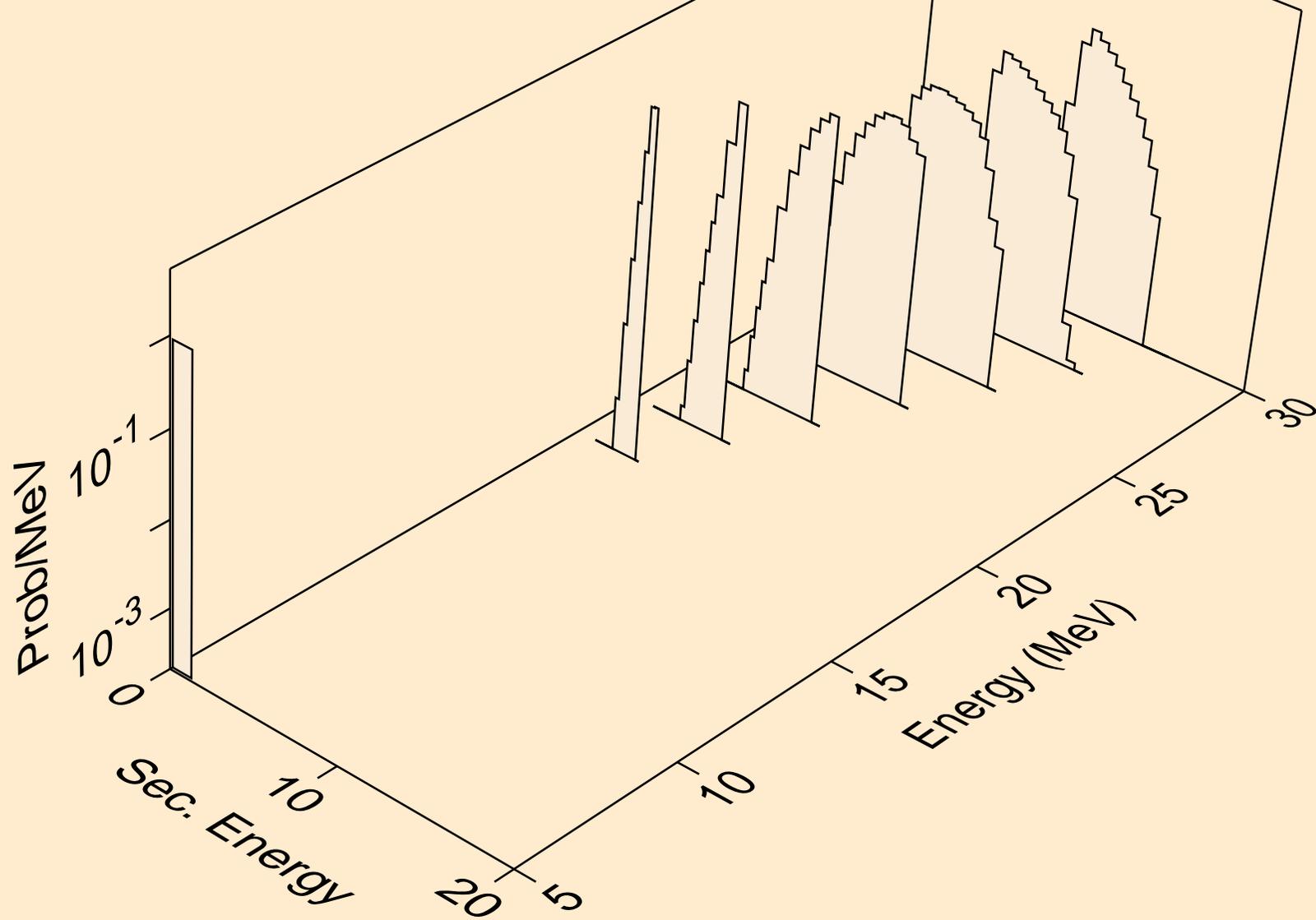protons from (a,2np)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
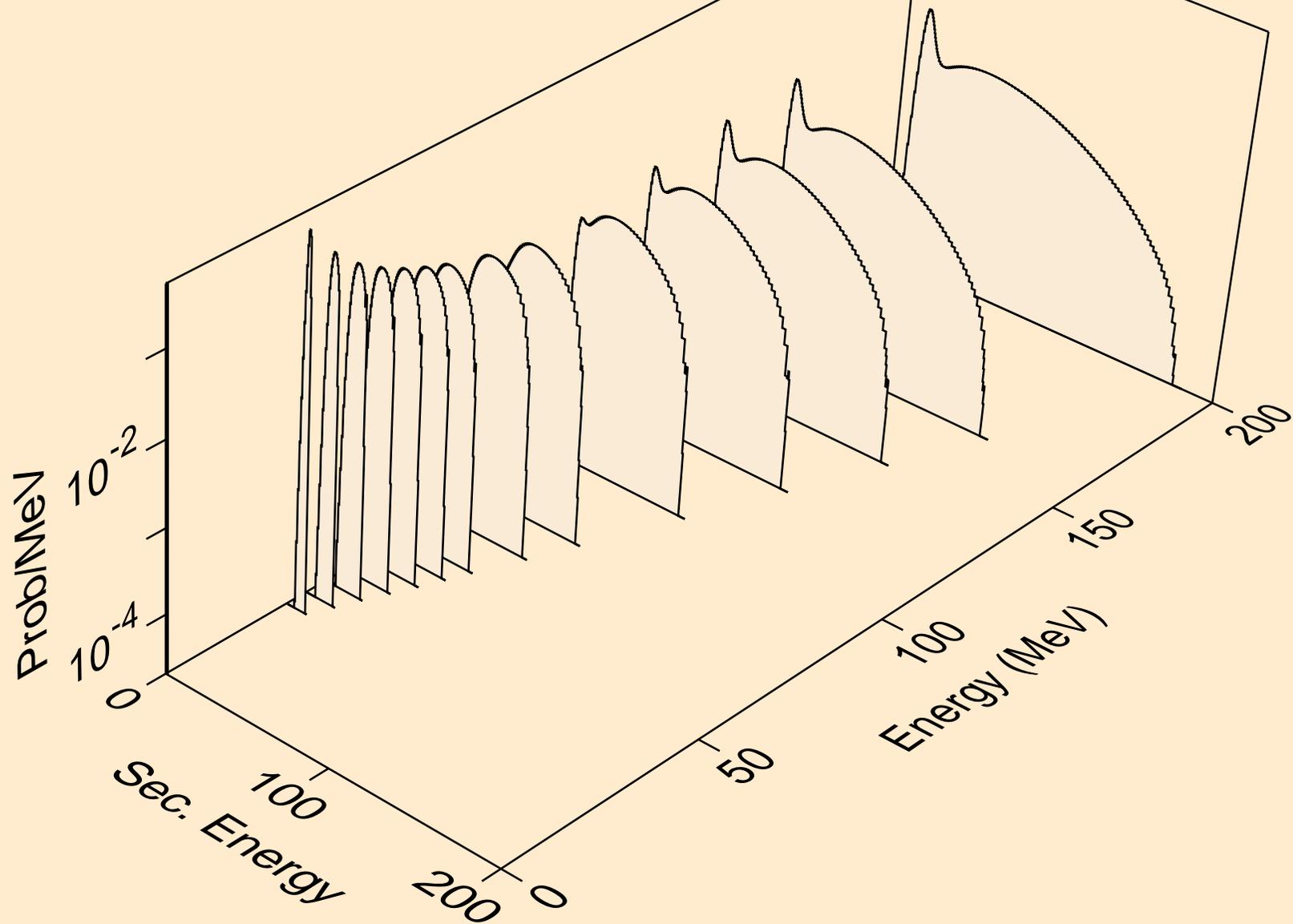protons from (a,npa)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
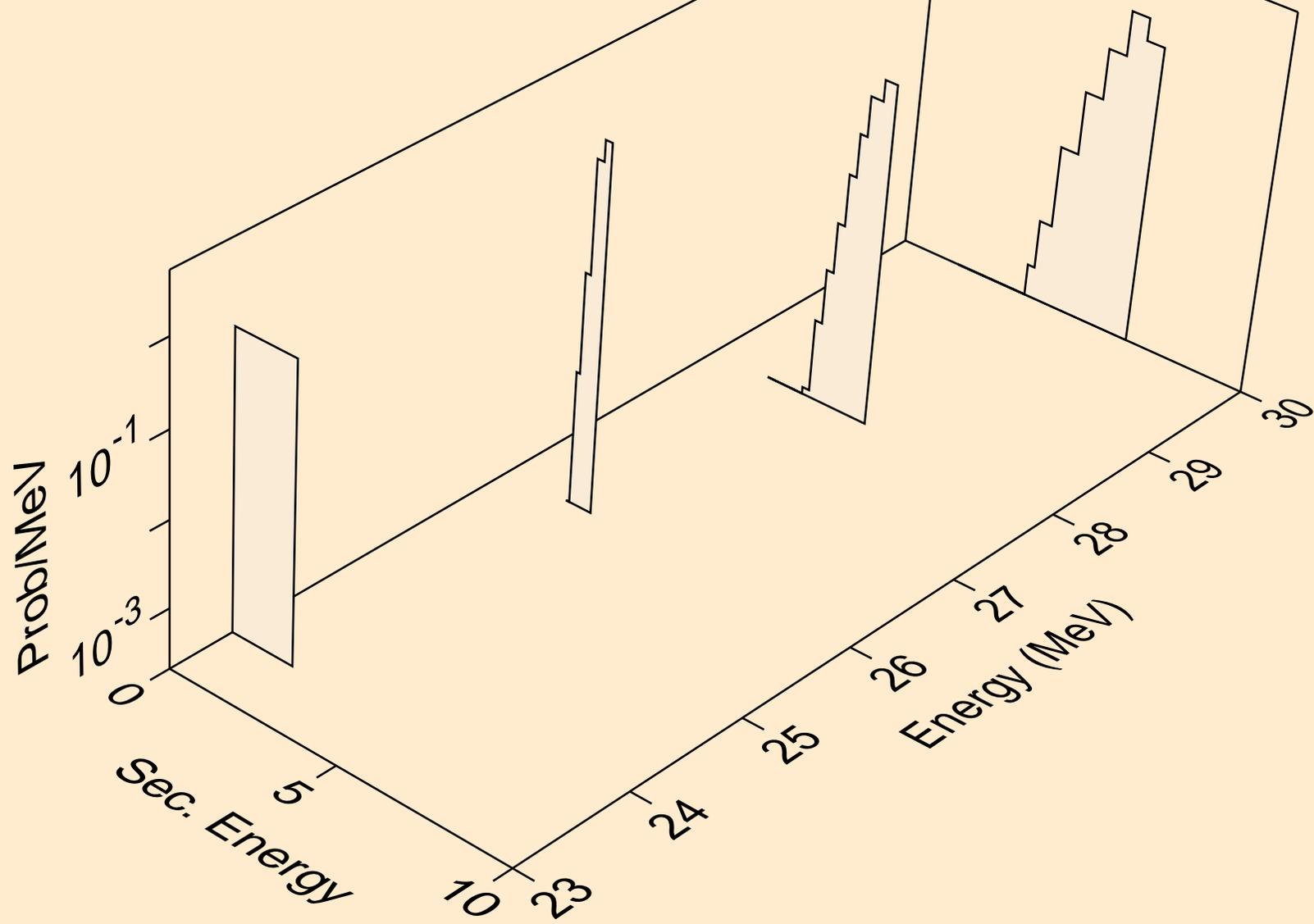protons from (a,p)

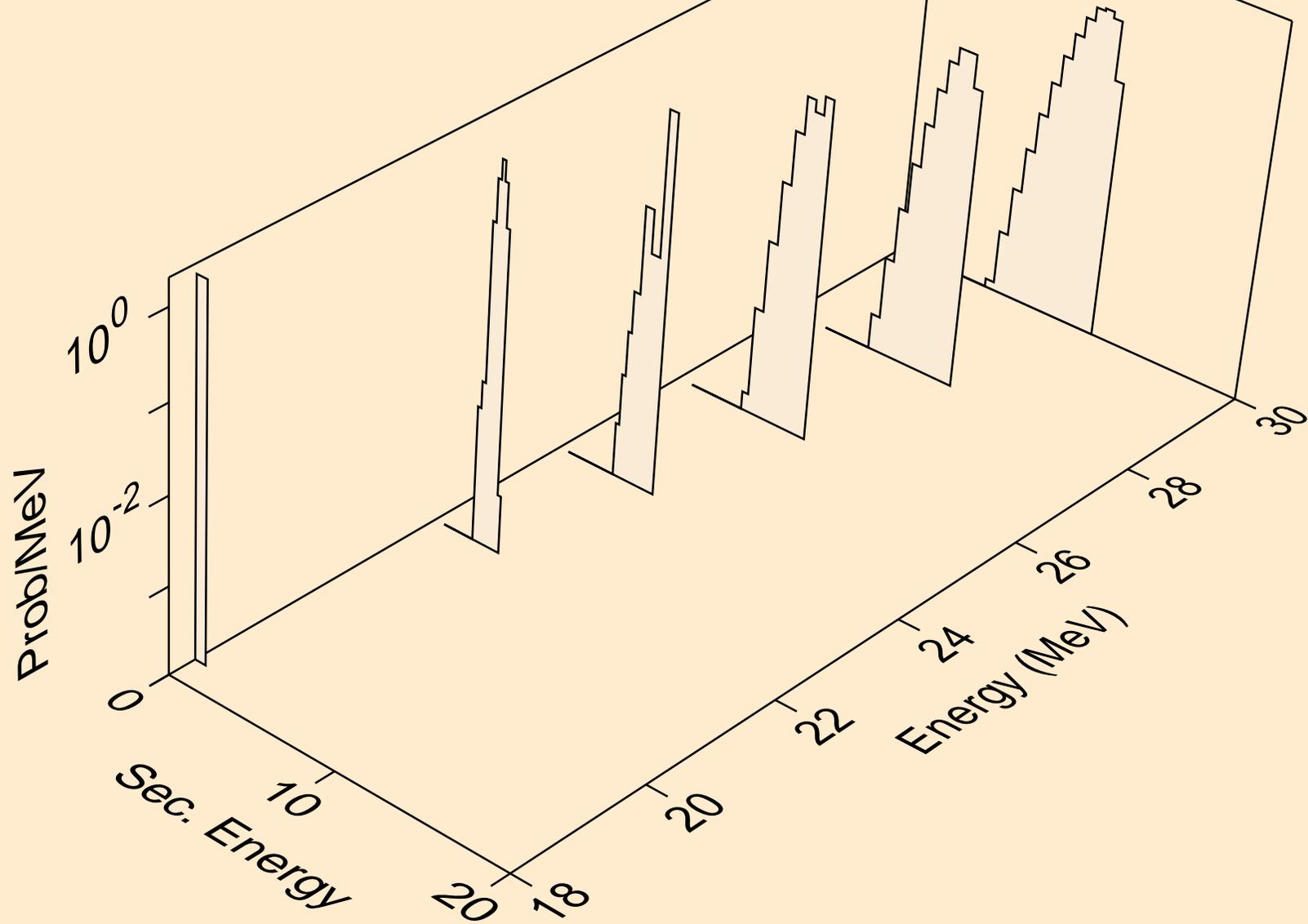PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,pa)

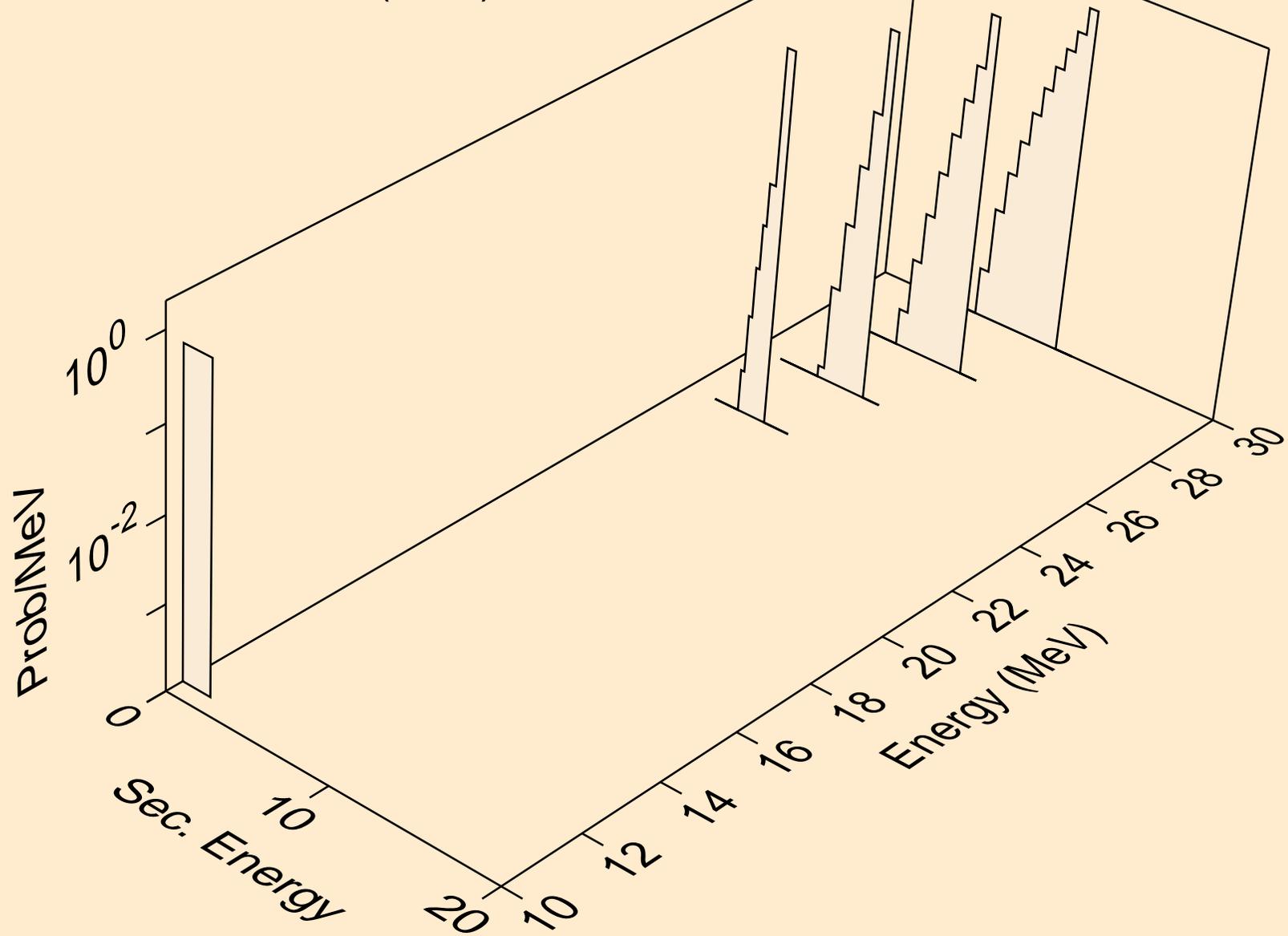PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
deuterons from (a,x)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
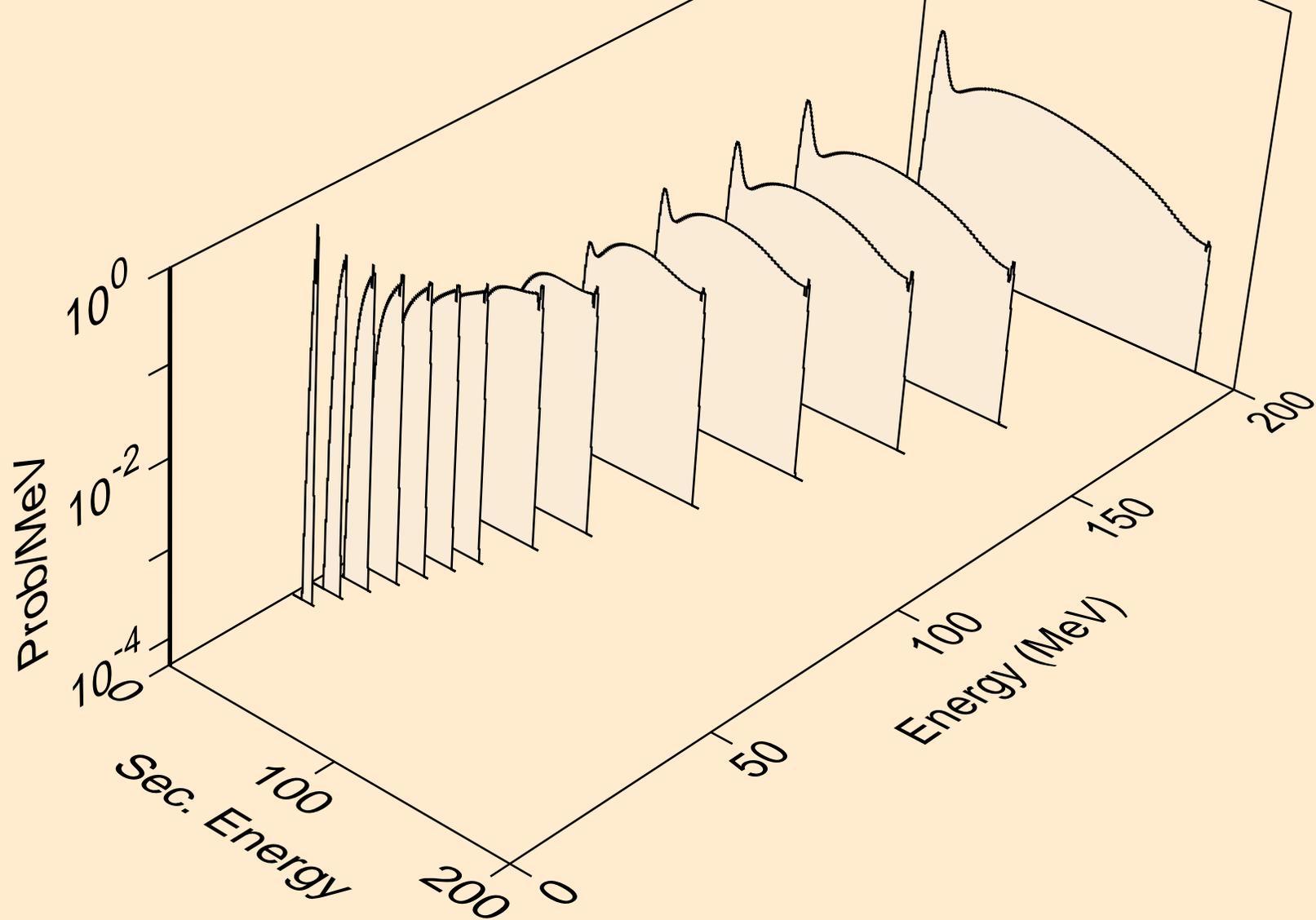deuterons from (a,n*)d

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
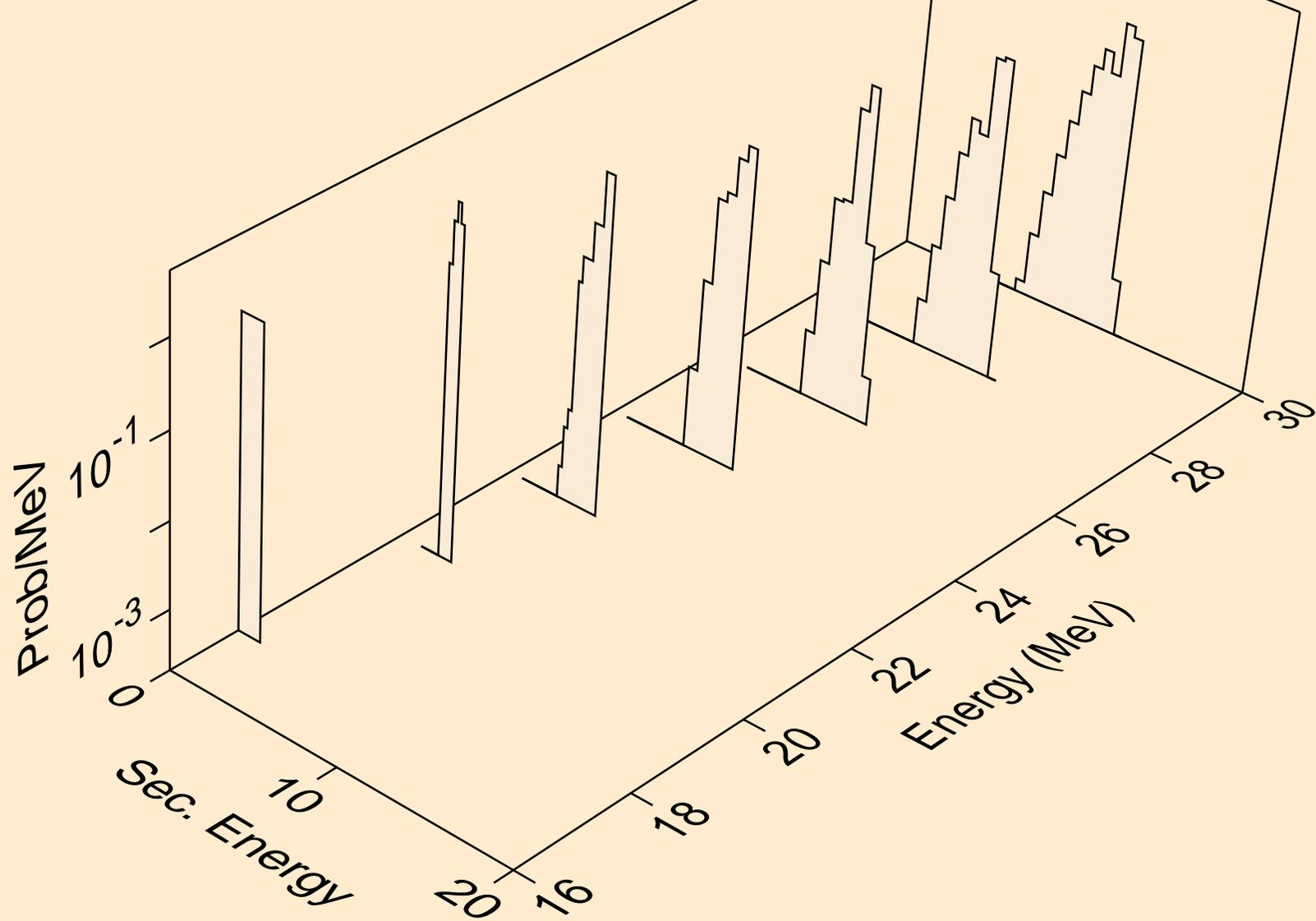deuterons from (a,d)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
deuterons from (a,da)

ProbMeV

10^0

10^{-2}

0

Sec. Energy

10

20

Energy (MeV)

10 12 14 16 18 20 22 24 26 28 30

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
tritons from (a,x)

Prob/MeV

Sec. Energy

Energy (MeV)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
tritons from (a,t)

PO210 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
he3s from (a,x)