CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Principal cross sections

Cross section (barns)

Energy (MeV)

- total
- absorption
- elastic
- gamma production

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Heating

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Principal cross sections

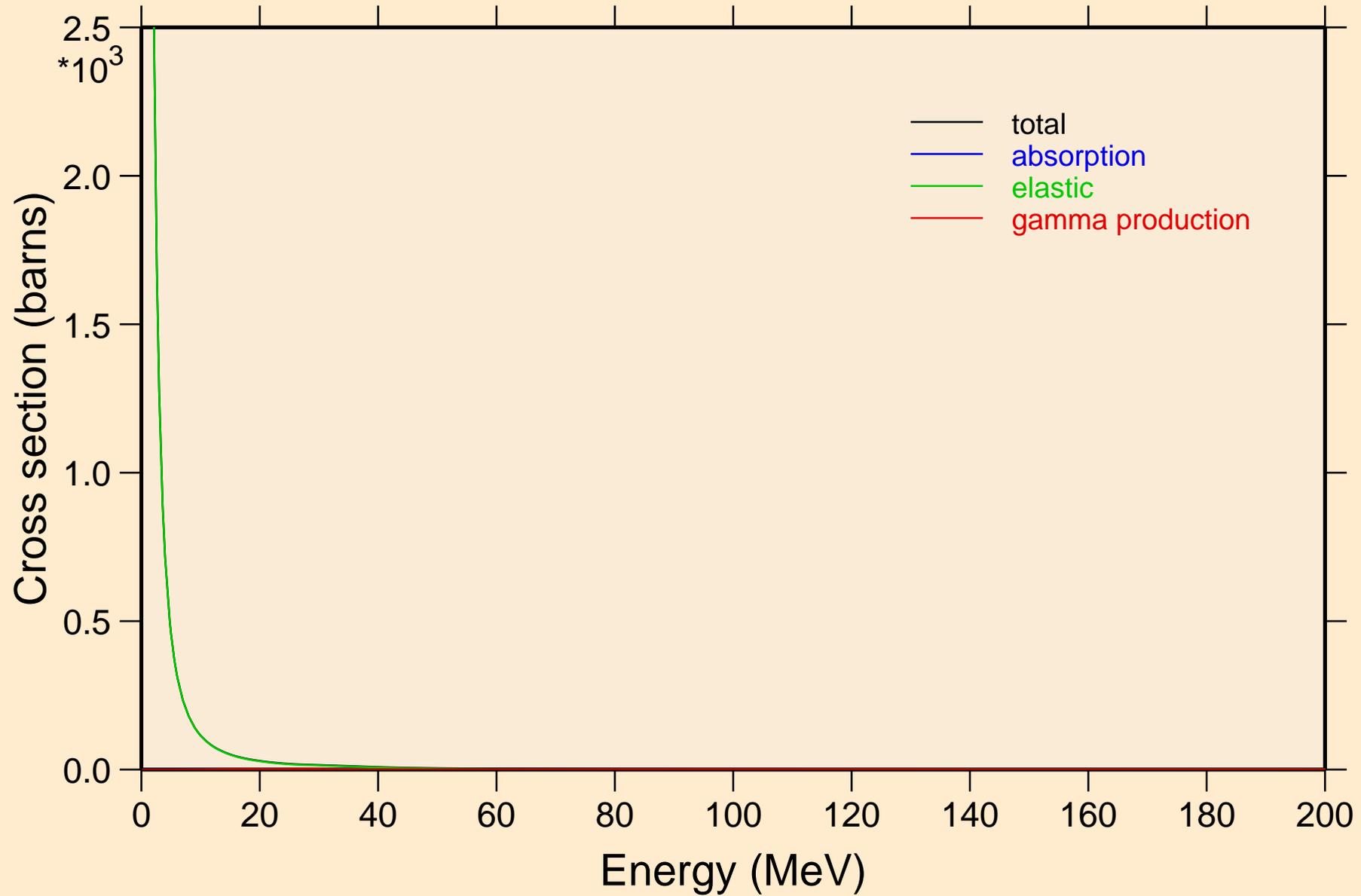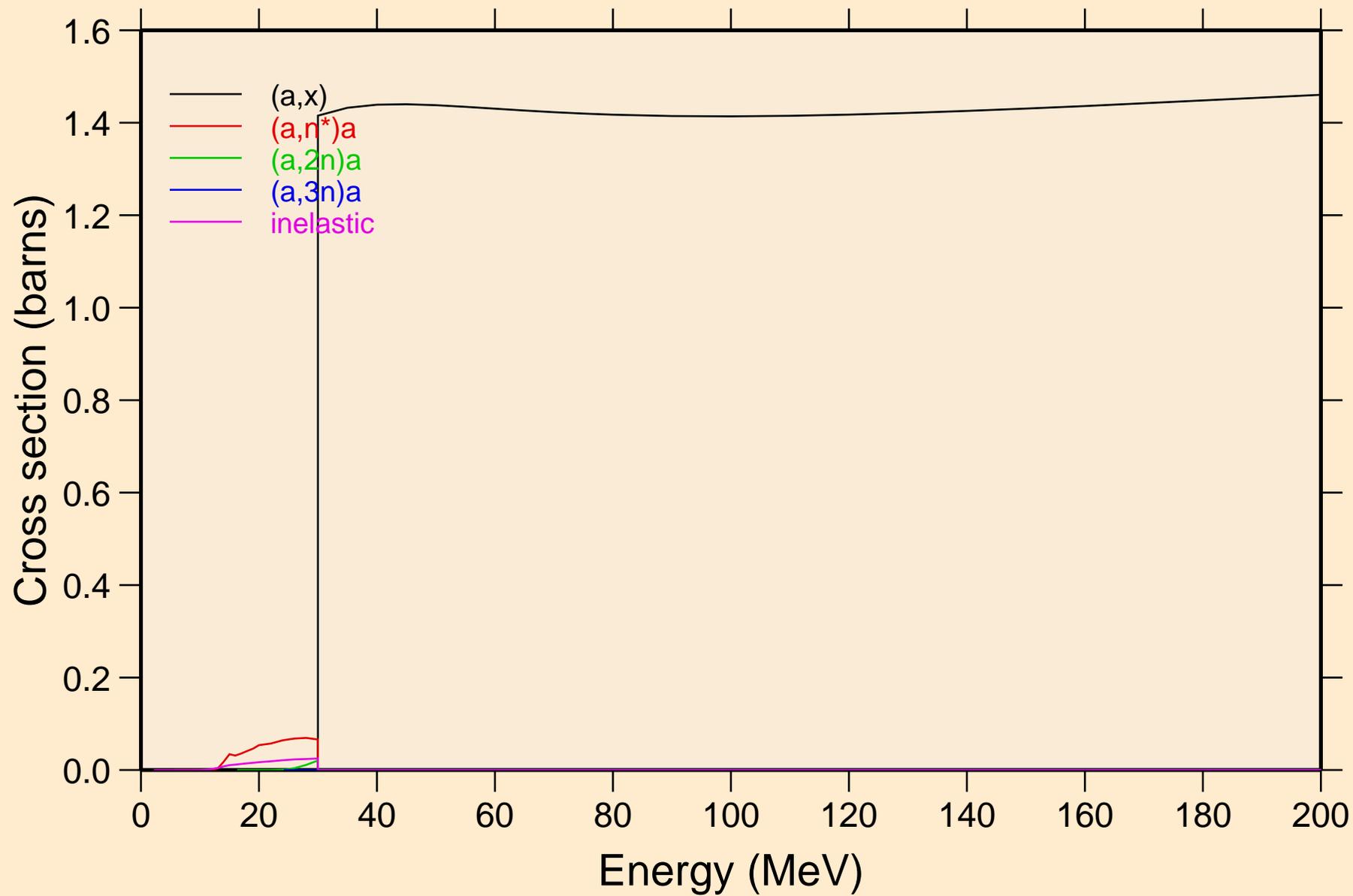Cross section (barns)

Energy (MeV)

total
absorption
elastic
gamma production

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Heating

Heating (MeV/reaction)

heating

Energy (MeV)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

(a,x)
(a,n*)a
(a,2n)a
(a,3n)a
inelastic

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

Legend:
- (a,2a)
- (a,pa)
- (a,da)
- (a,2p)
- (a,pd)

X-axis: Energy (MeV)
Y-axis: Cross section (barns) *10^-6

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

(a,da)
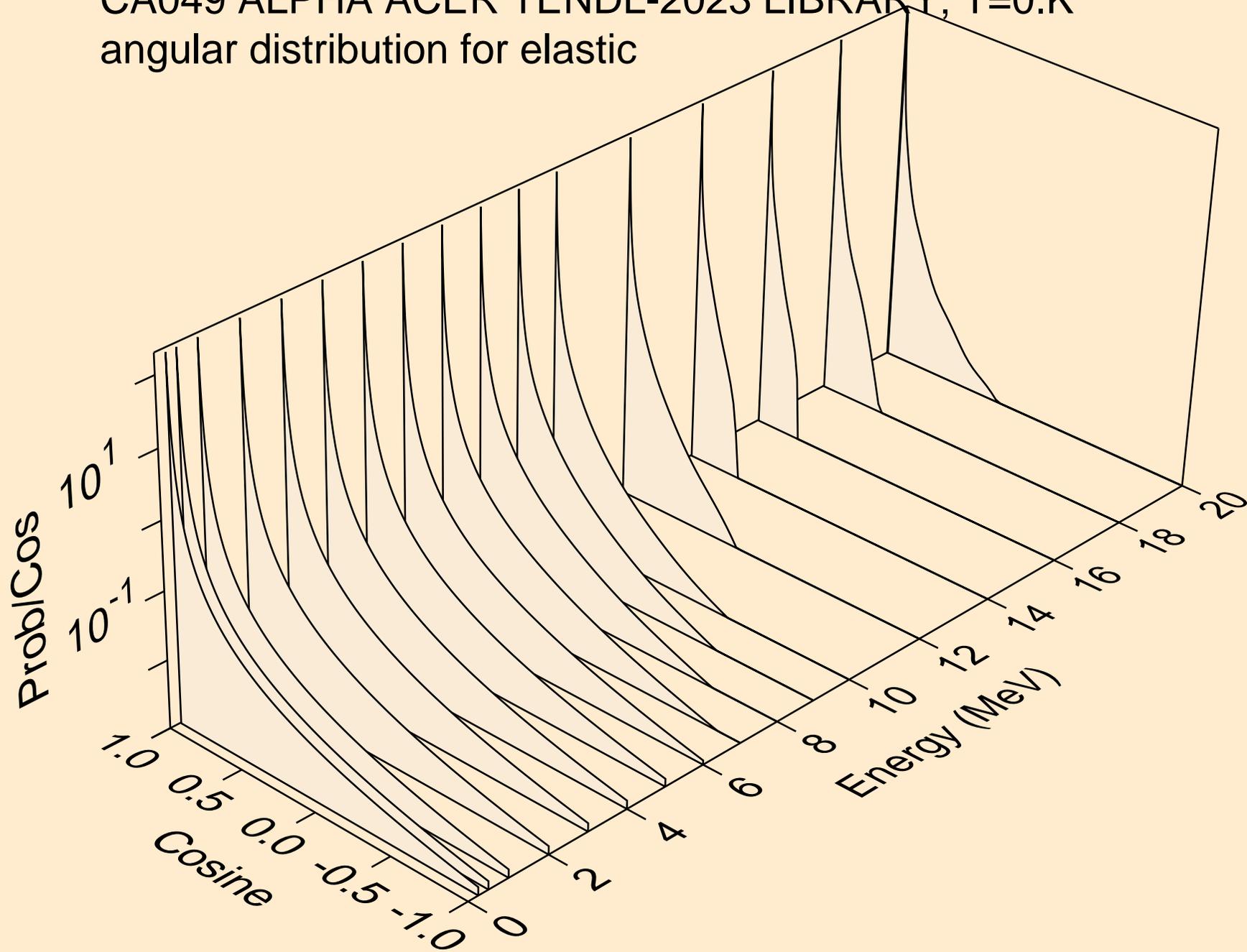(a,pt)

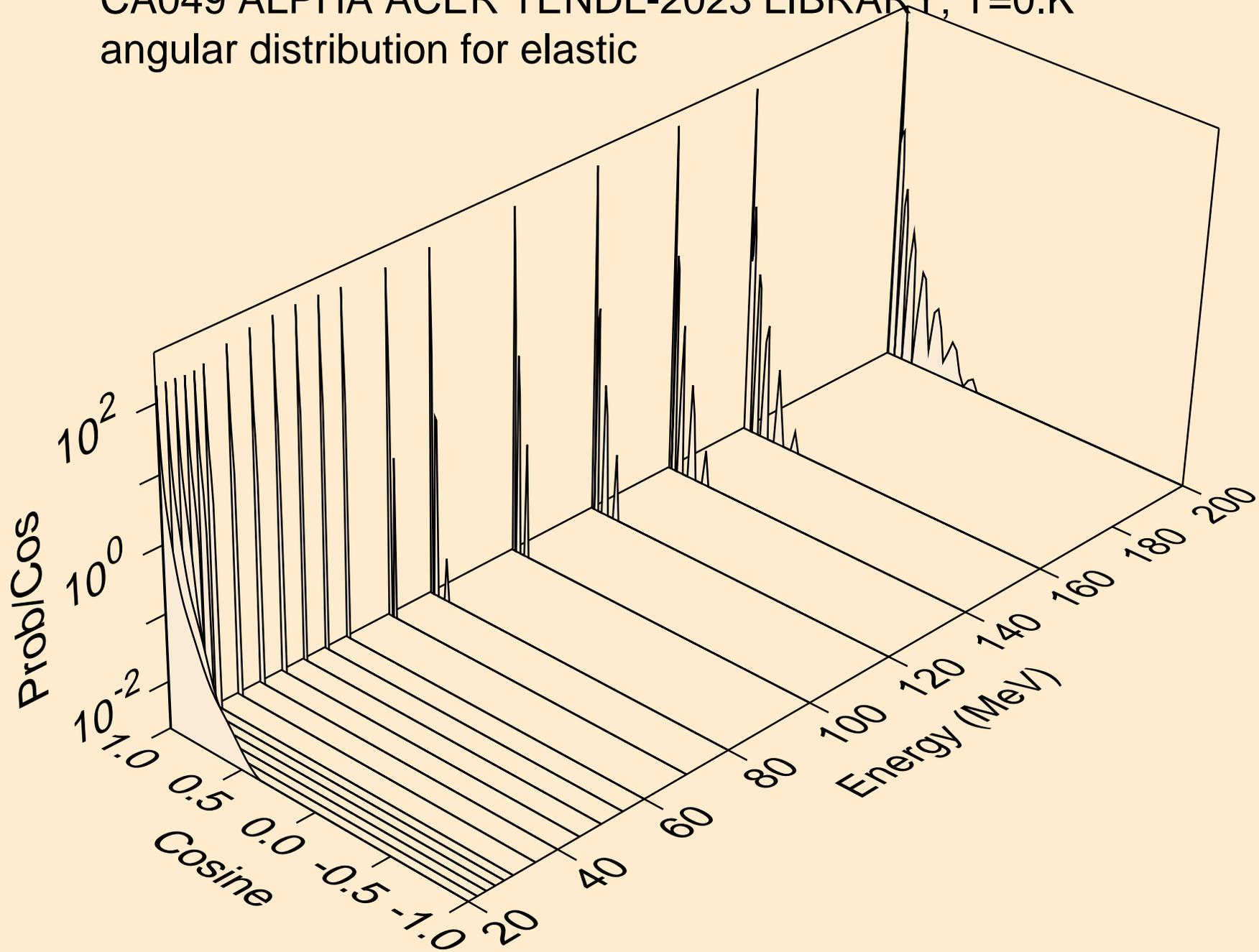Cross section (barns)

Energy (MeV)
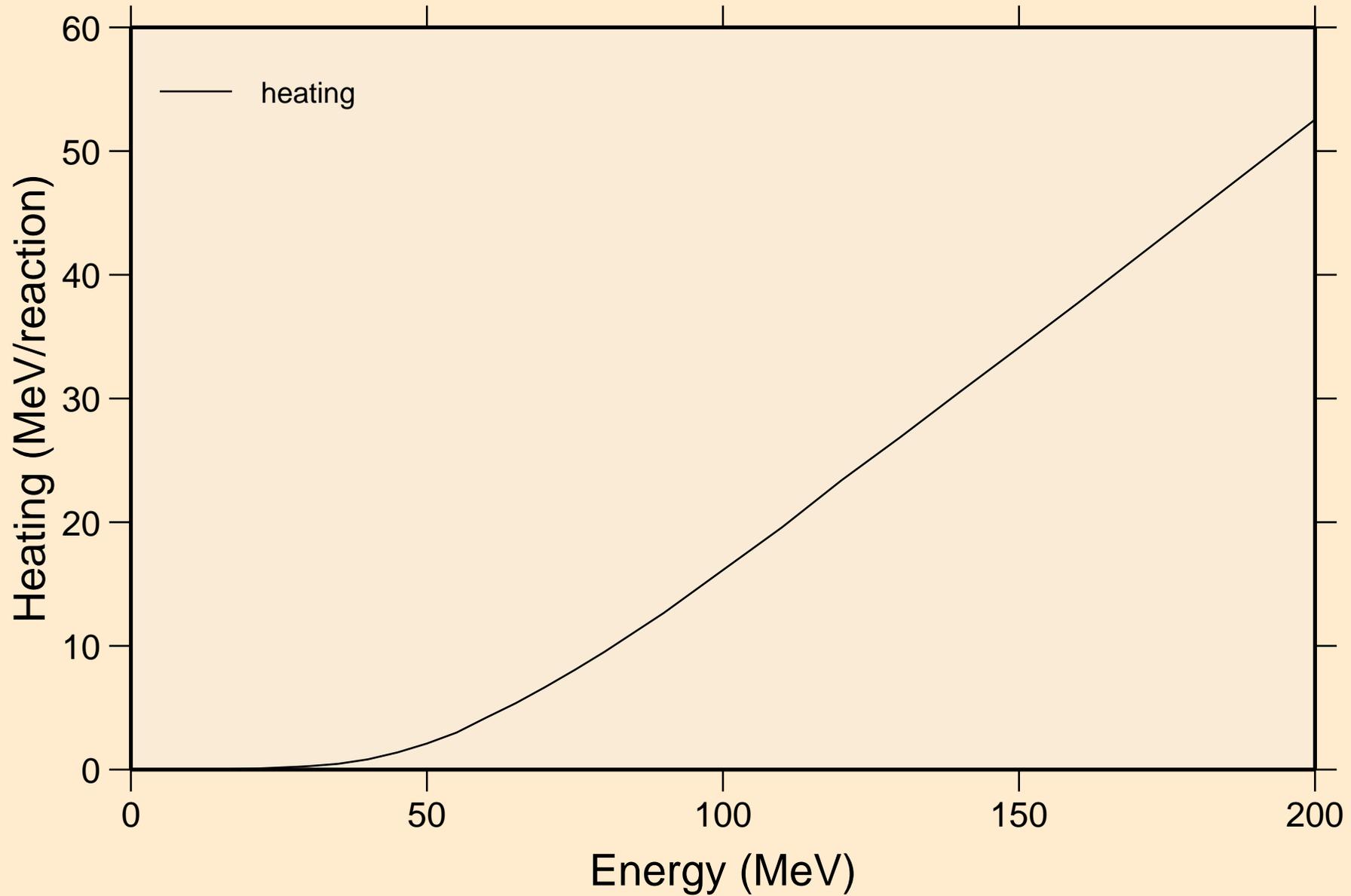
CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
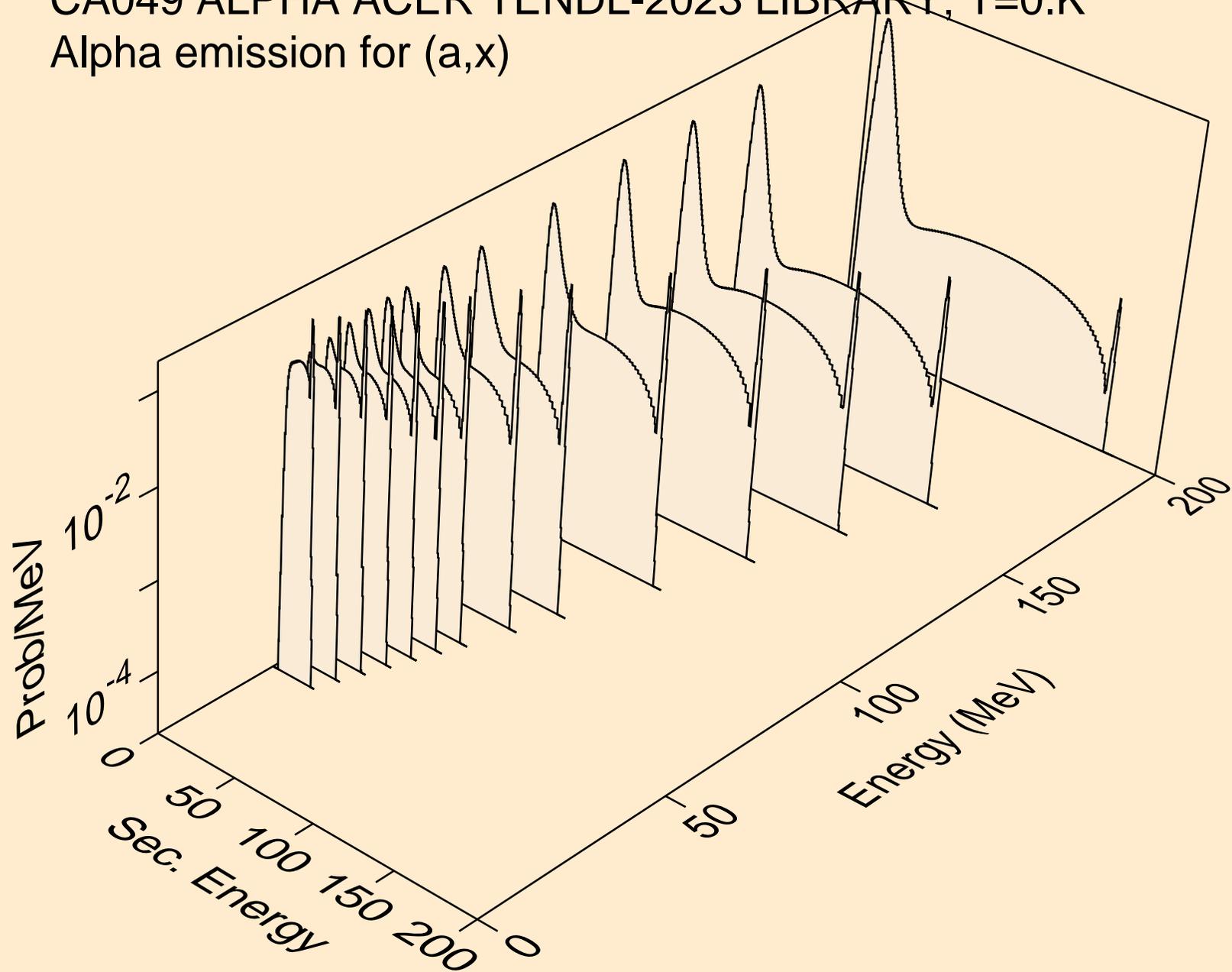Threshold reactions

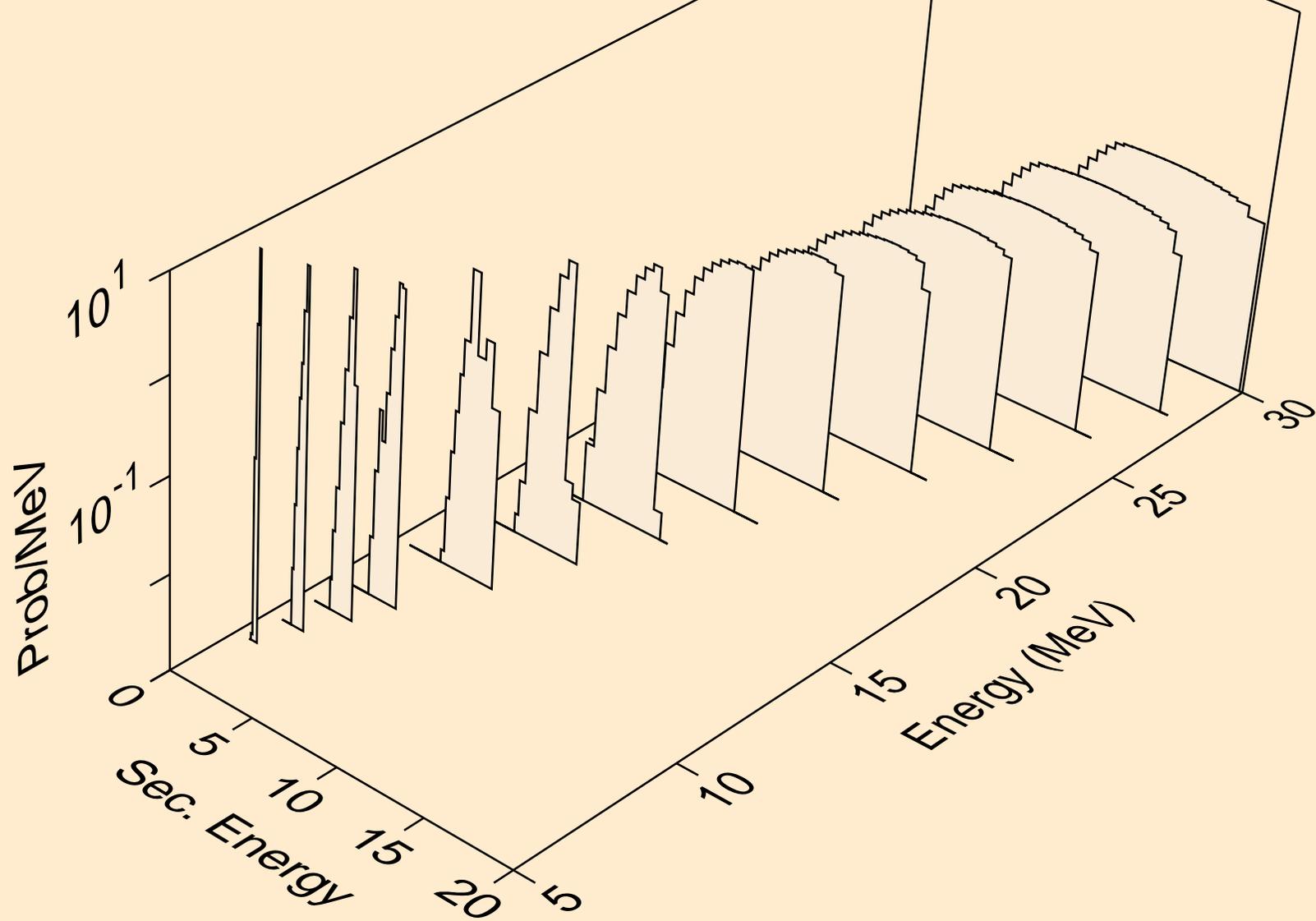CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
angular distribution for elastic
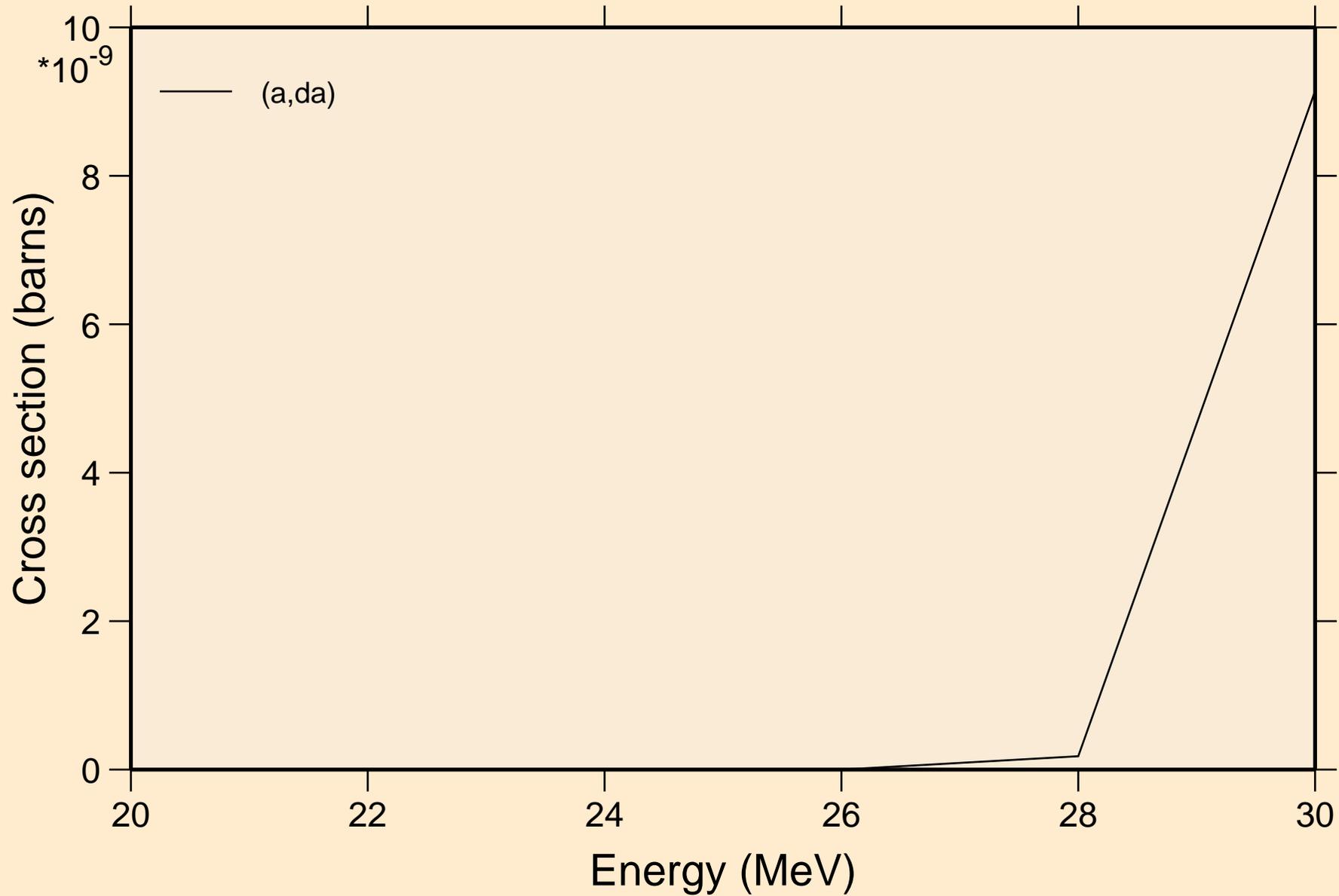
CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
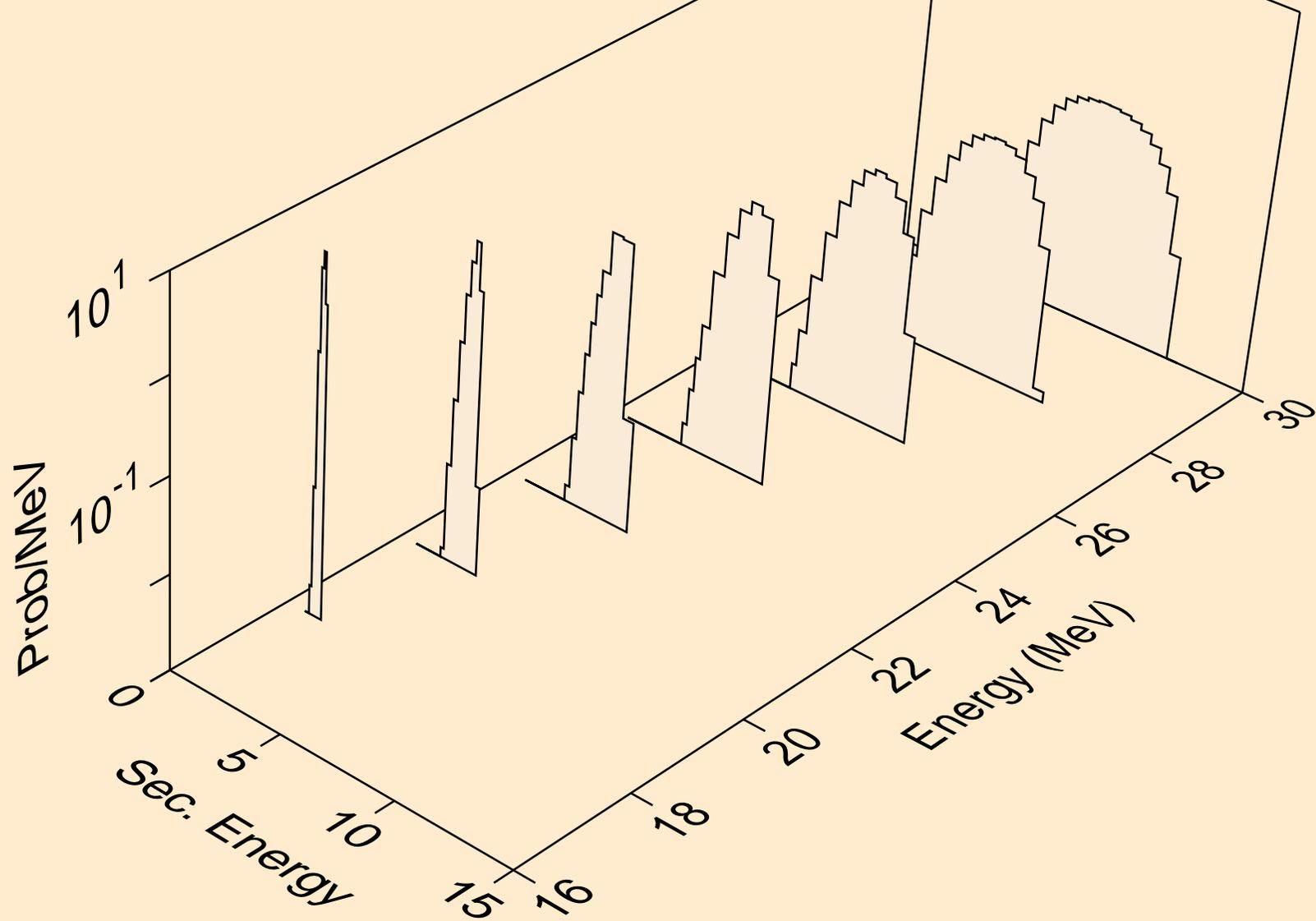angular distribution for elastic

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
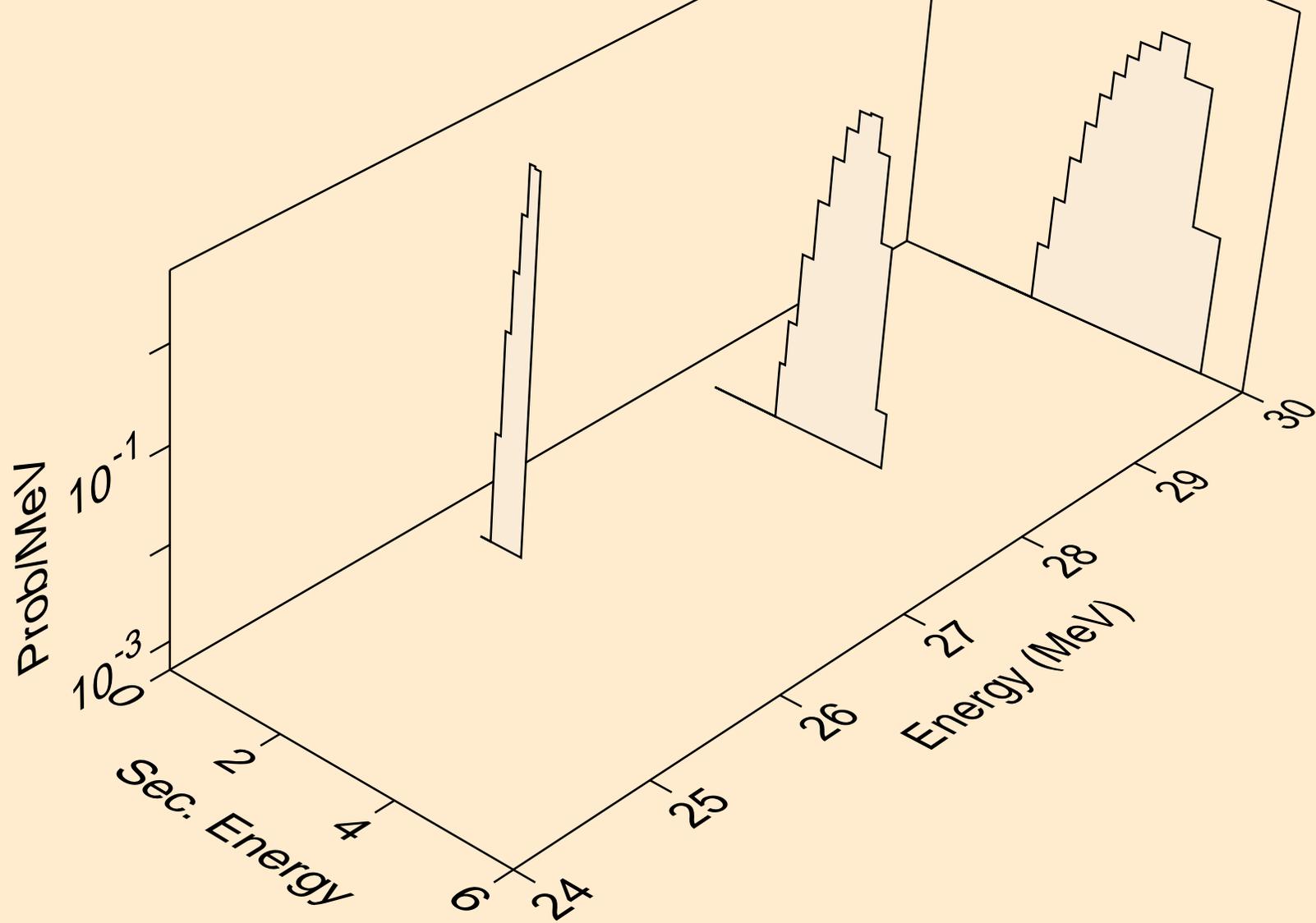Alpha emission for (a,x)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
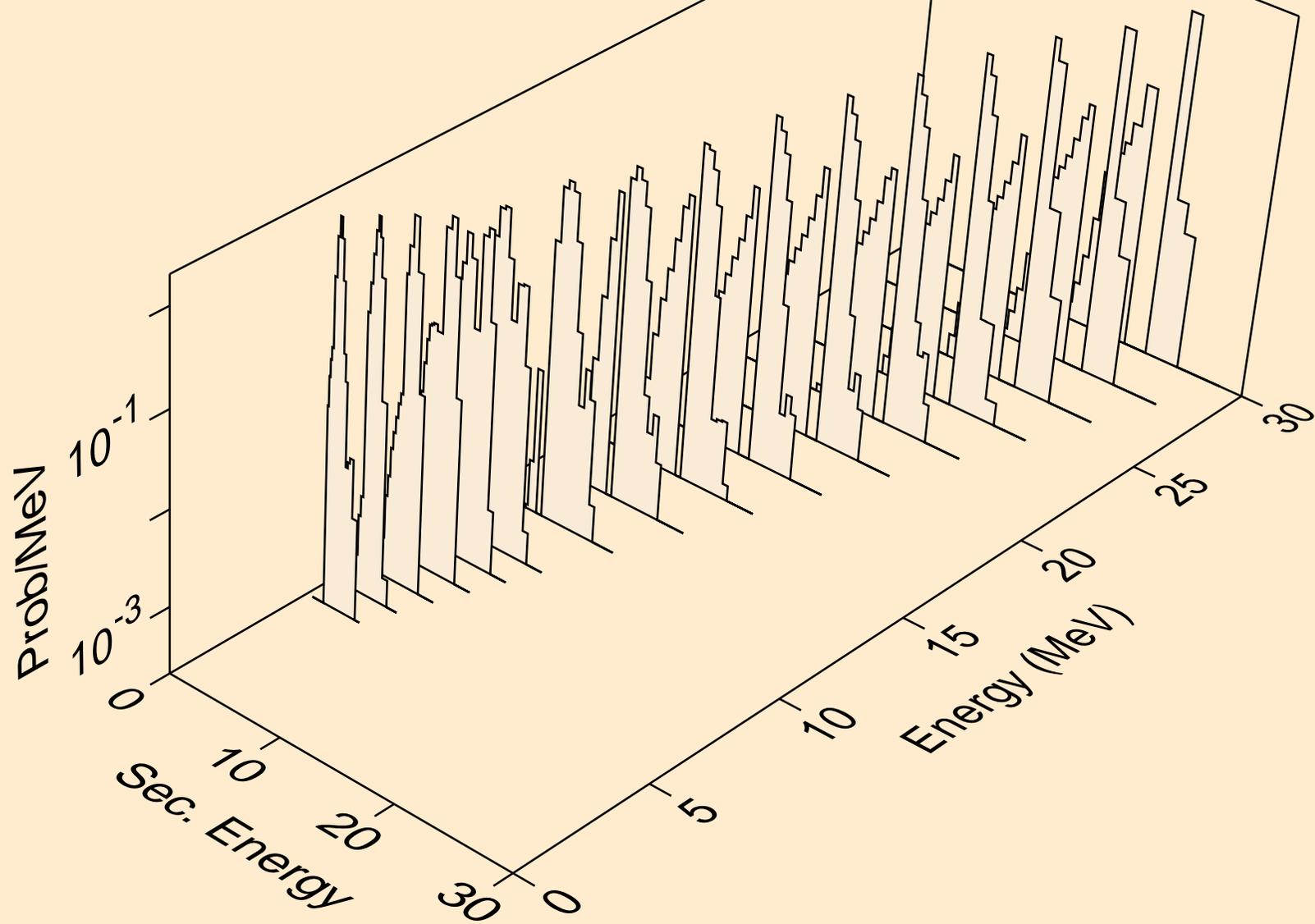Alpha emission for (a,n*)a

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
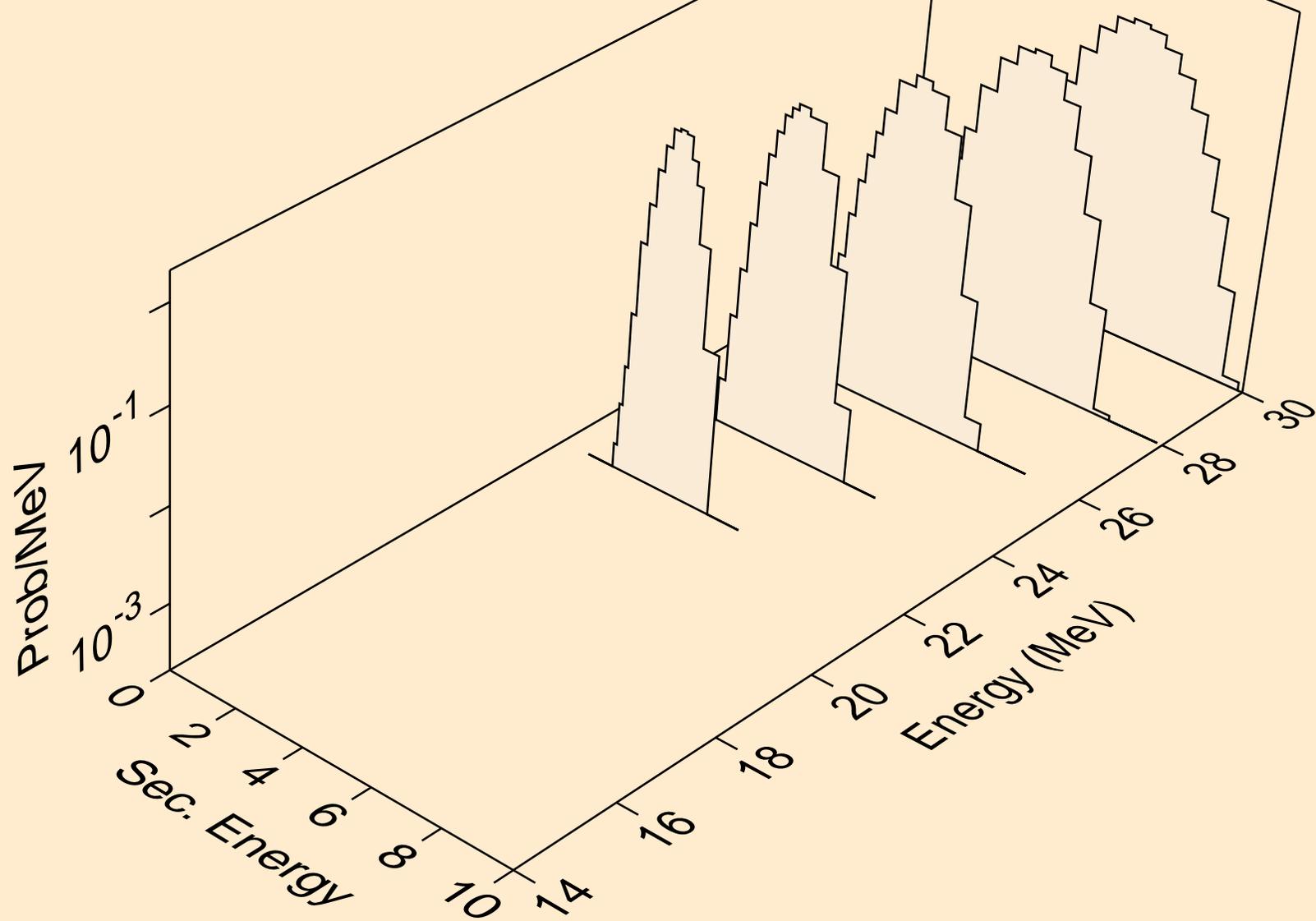Alpha emission for (a,2n)a

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
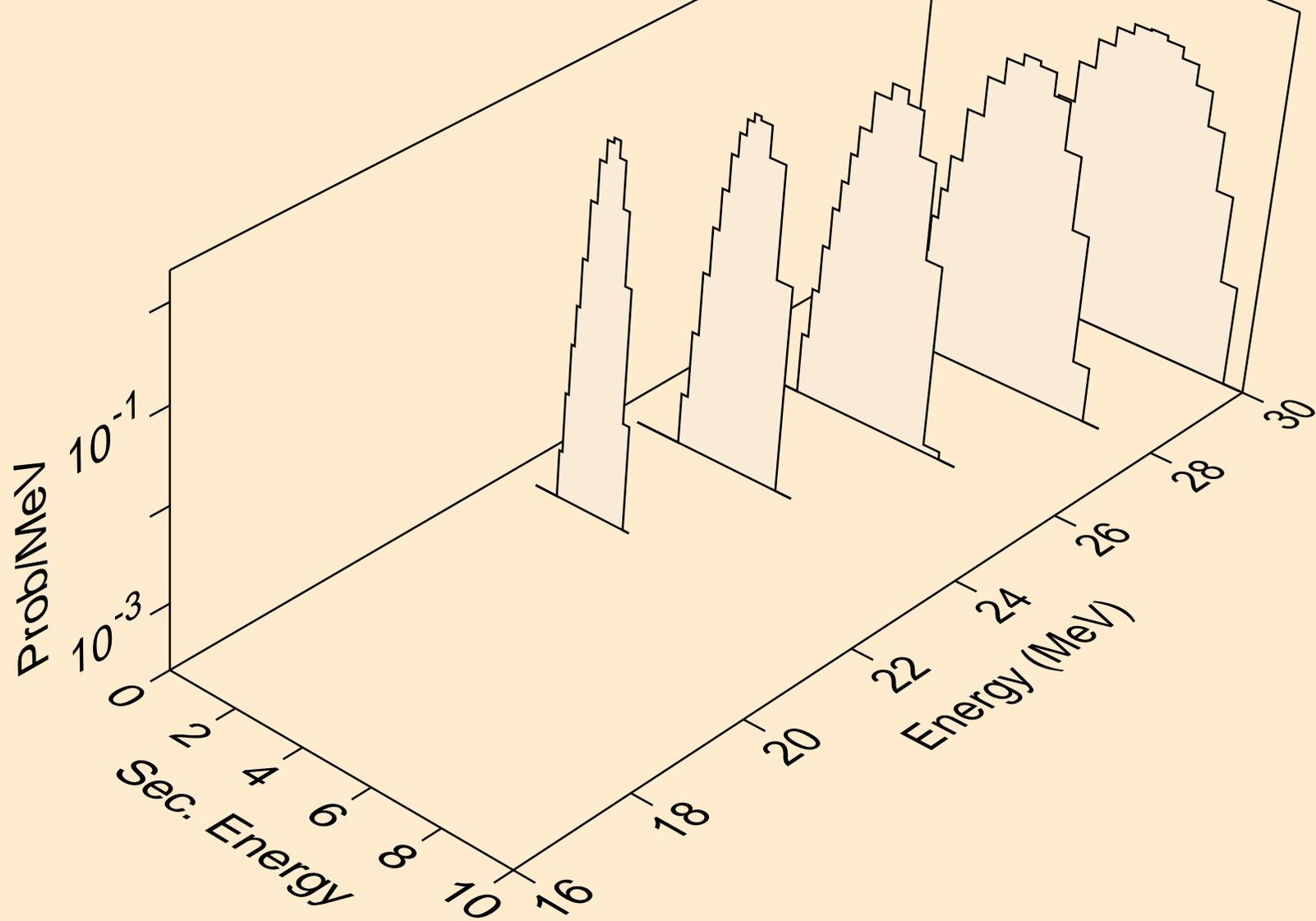Alpha emission for (a,3n)a

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
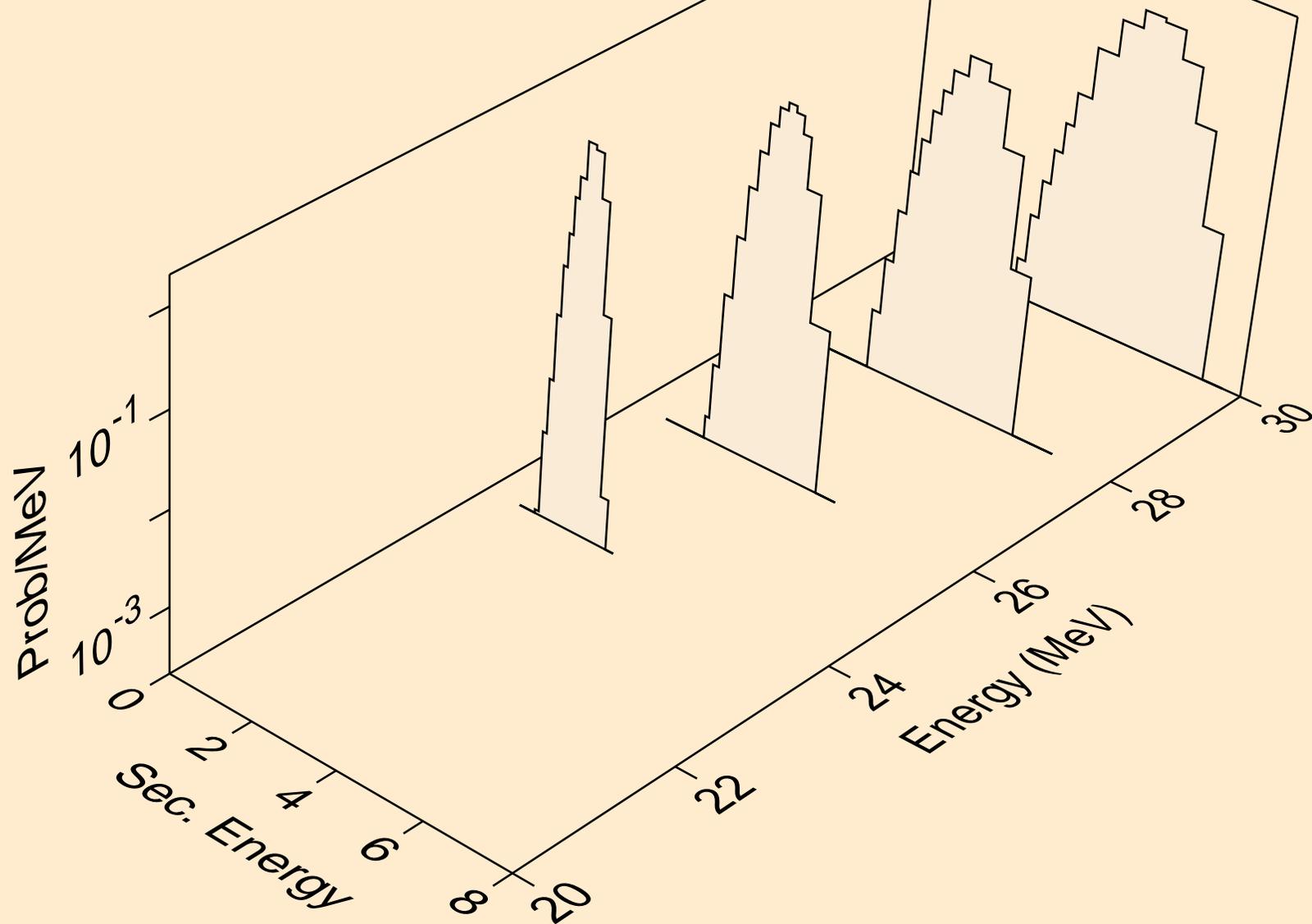Alpha emission for inelastic

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
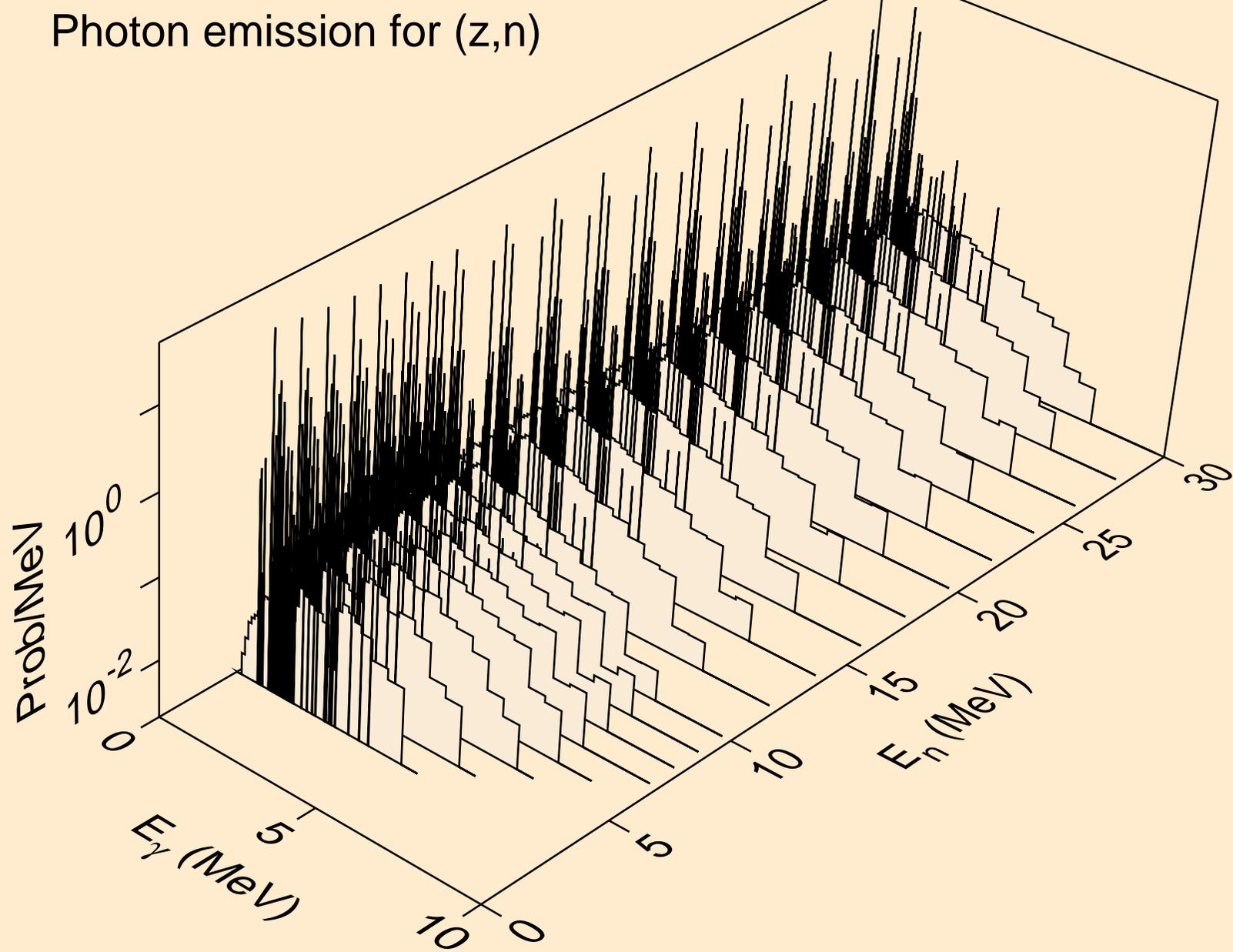Alpha emission for (a,2a)

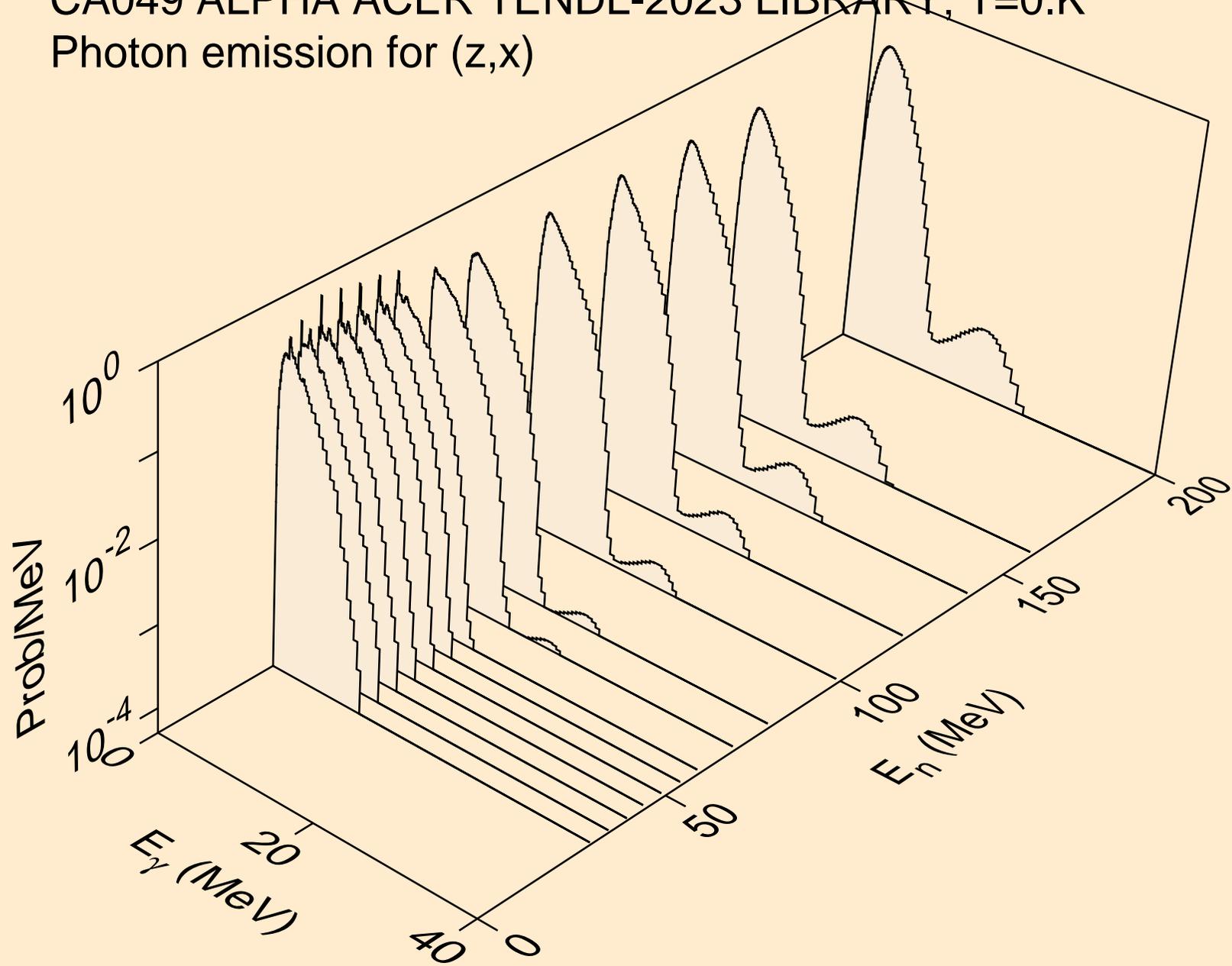CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Alpha emission for (a,pa)

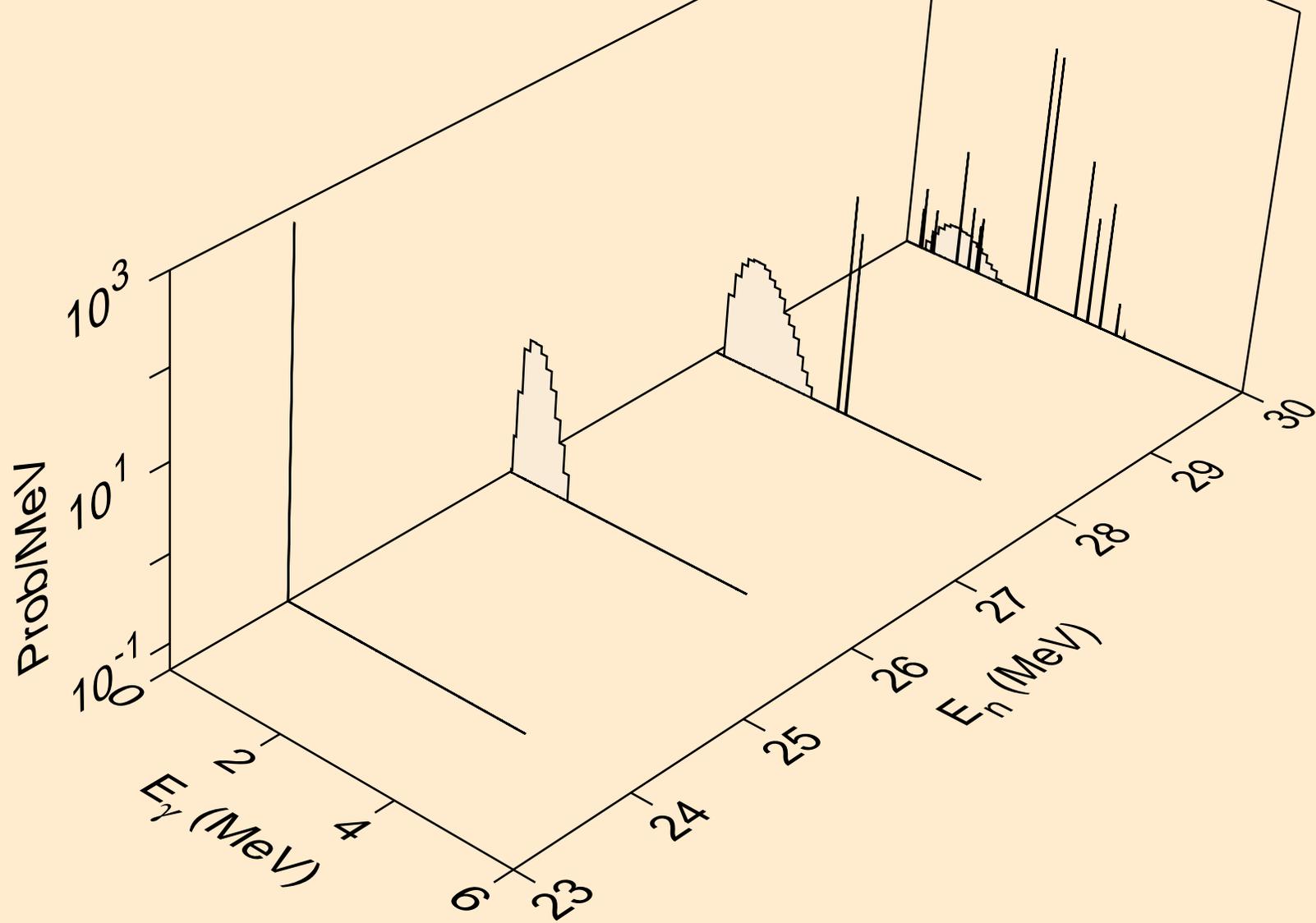CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Alpha emission for (a,da)

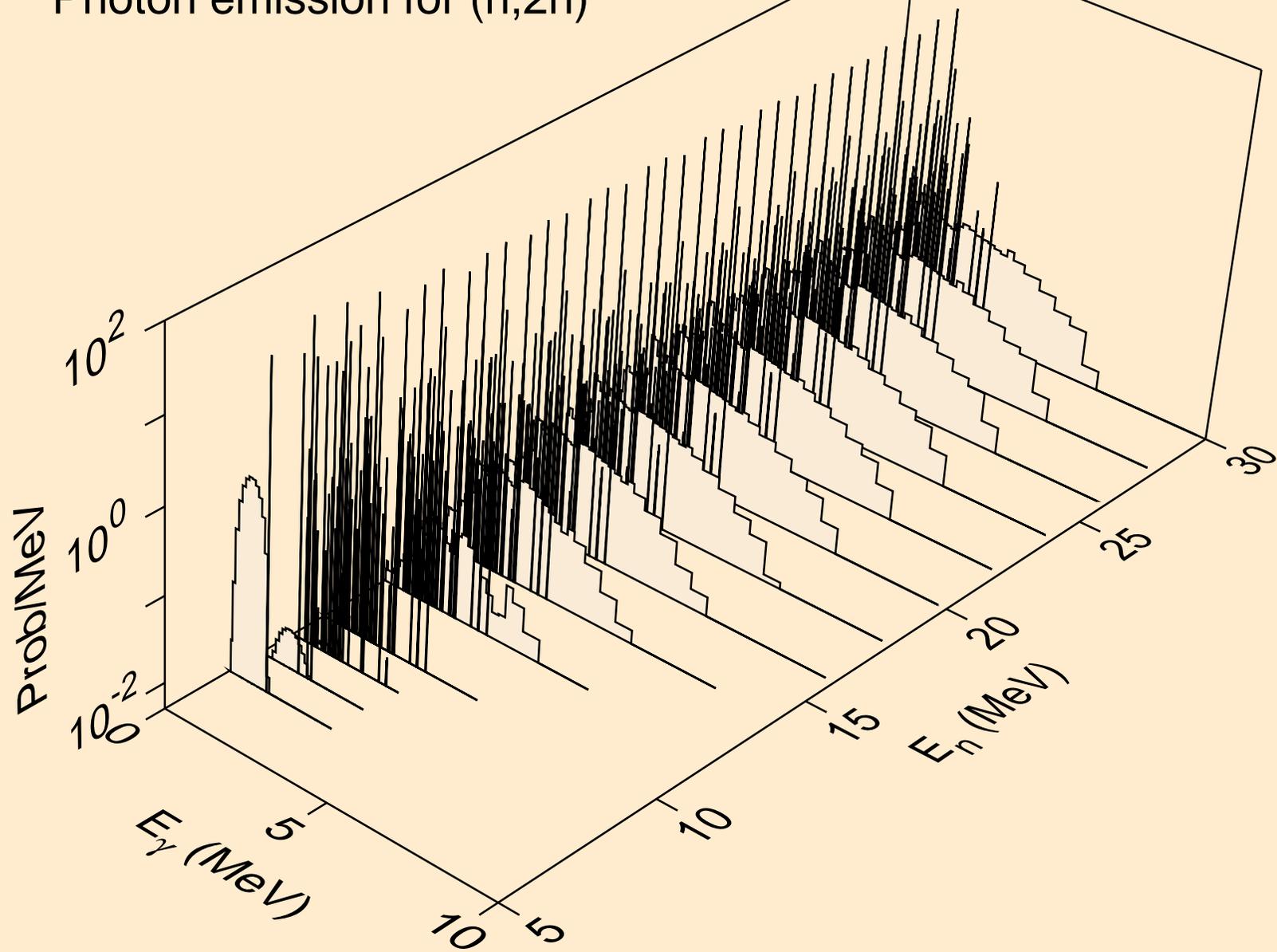CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (z,n)

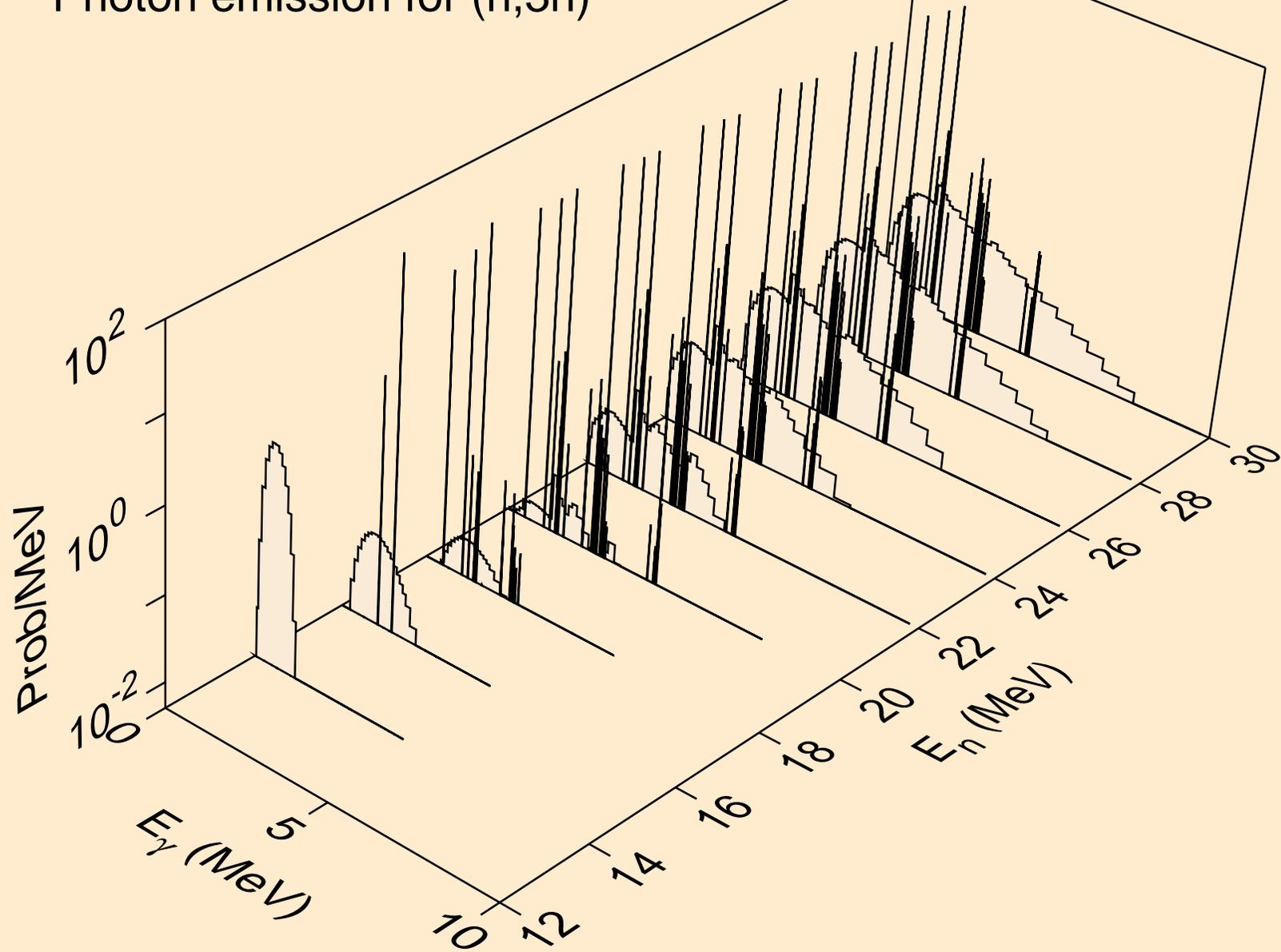CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (z,x)

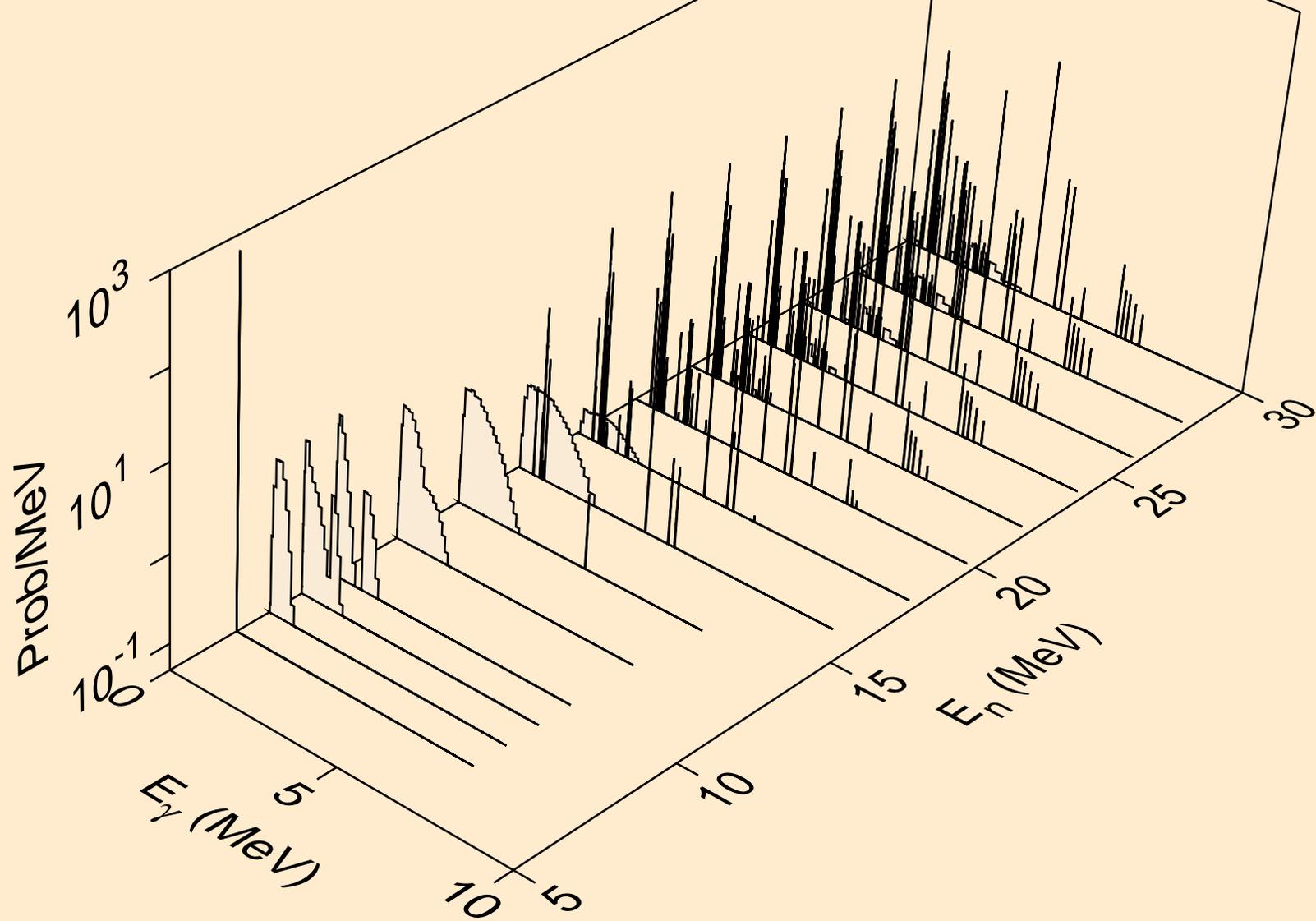CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2nd)

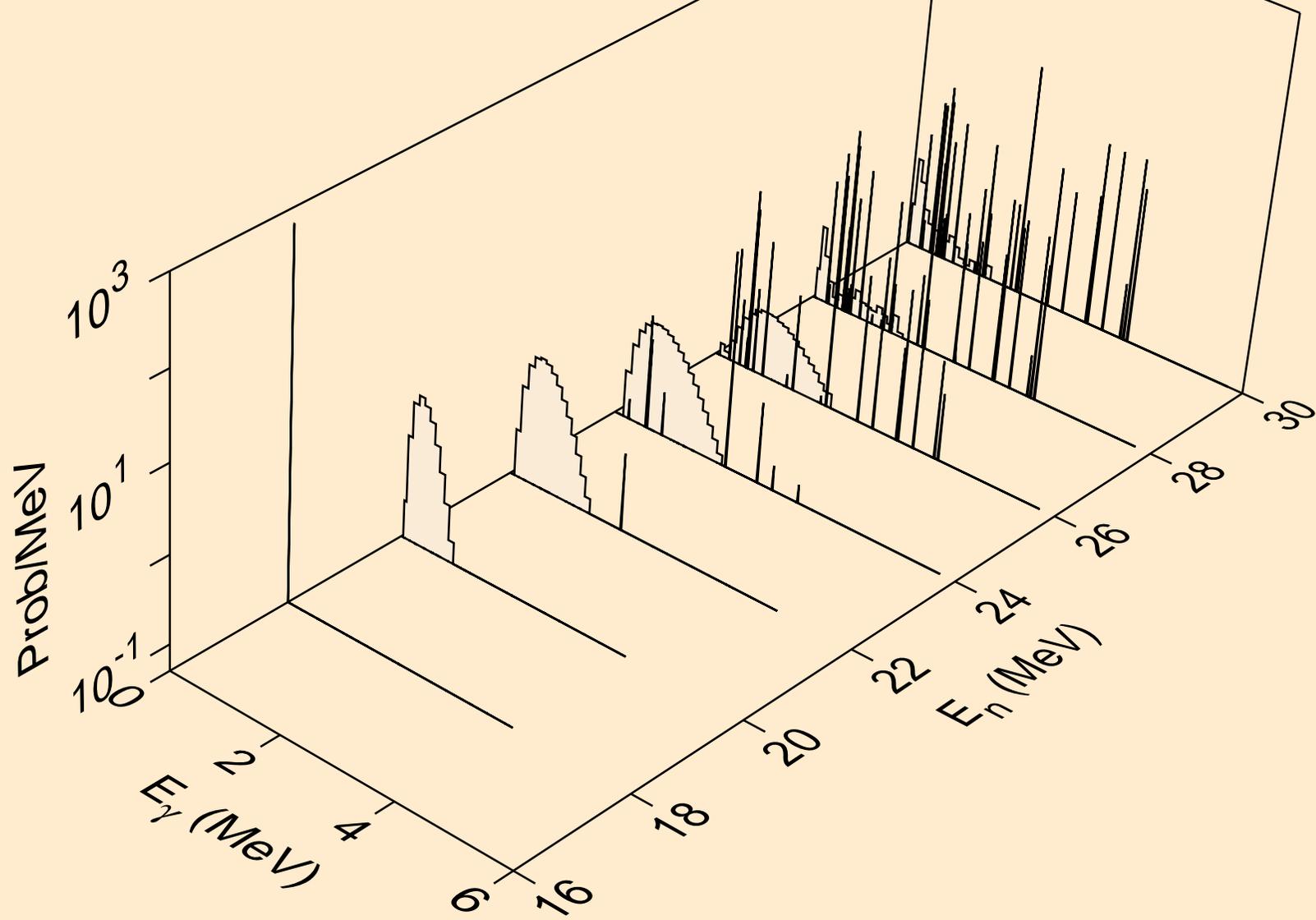CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2n)

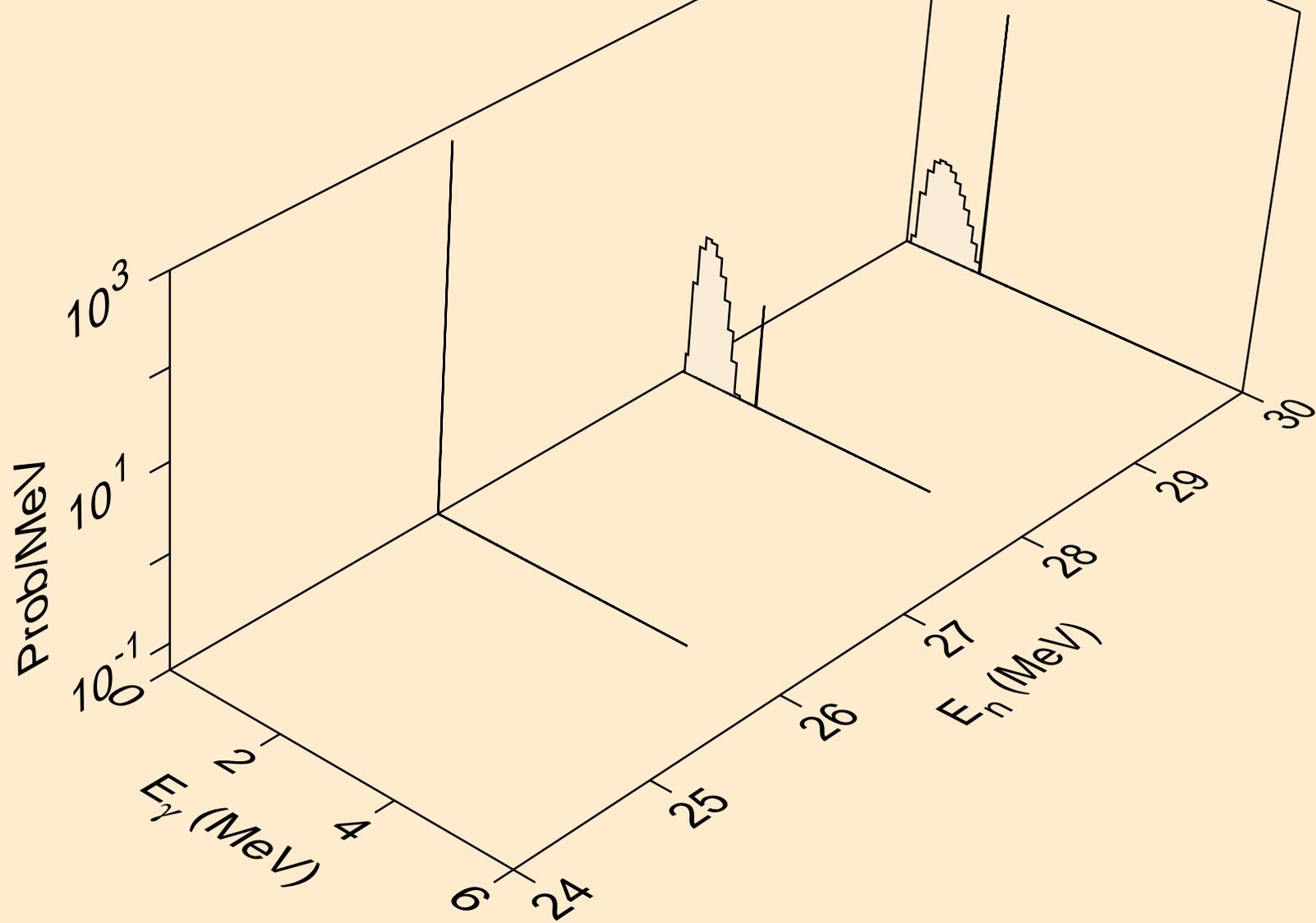CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,3n)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
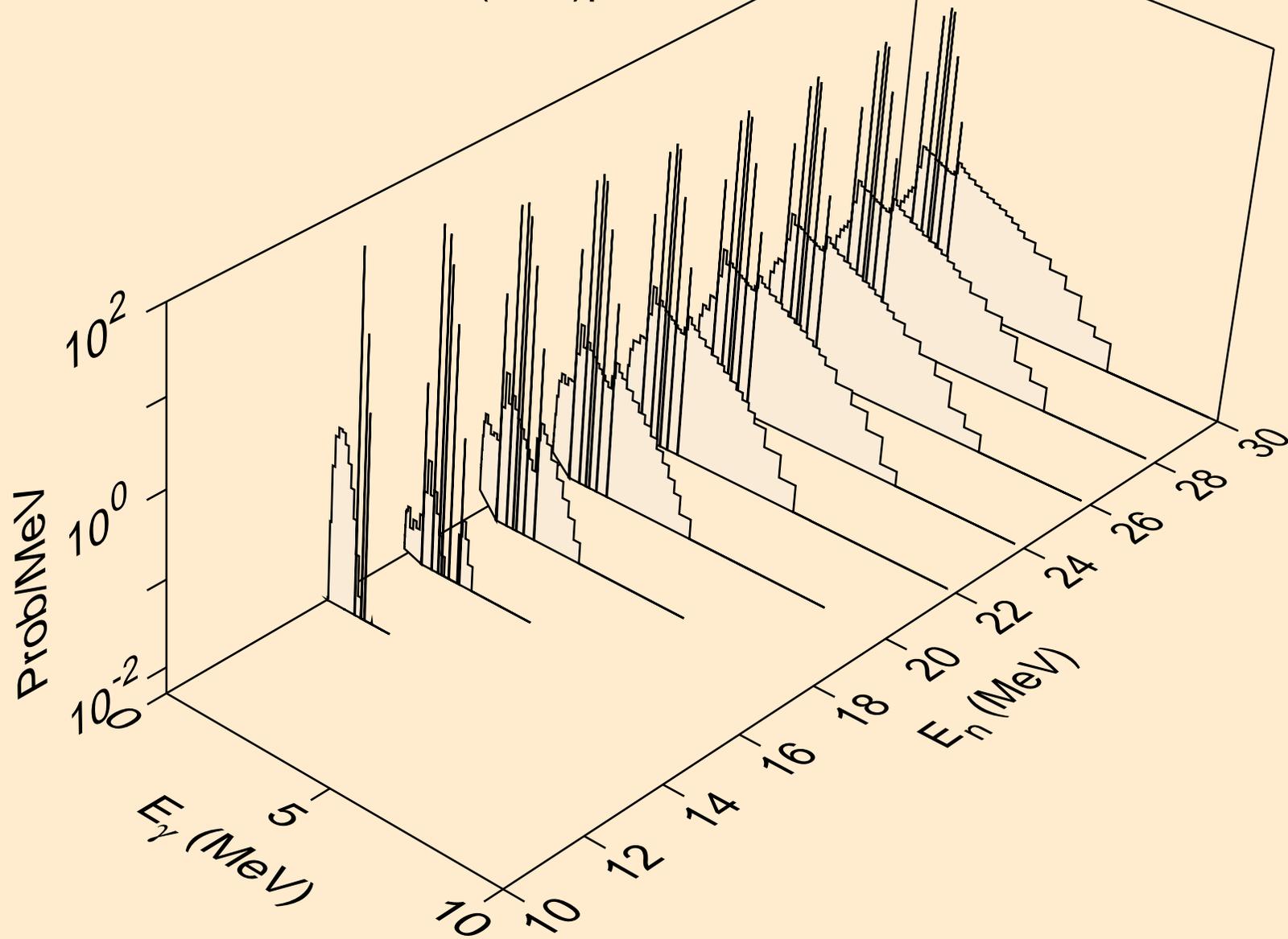Photon emission for (n,n*)a

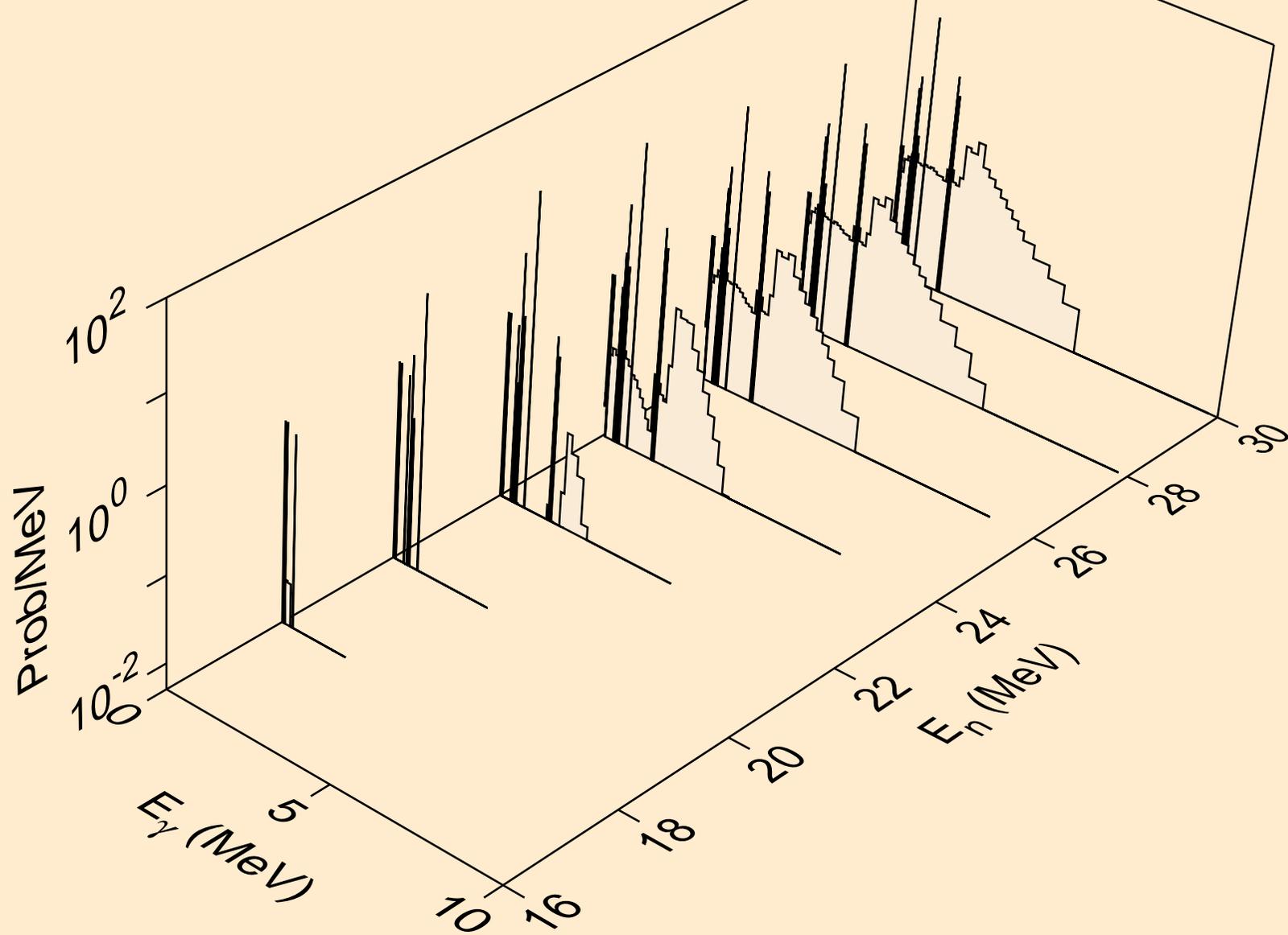CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2n)a

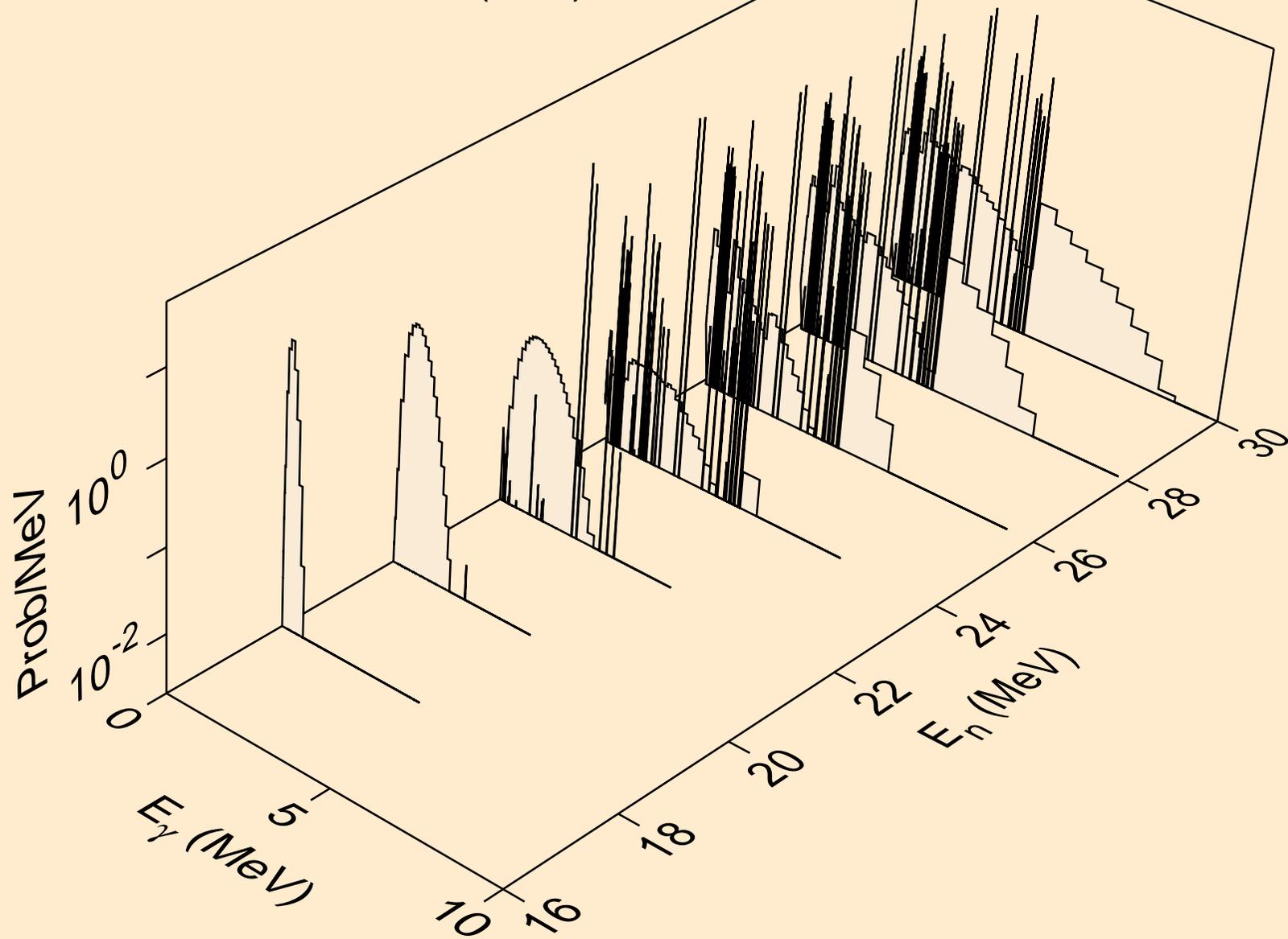CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,3n)a

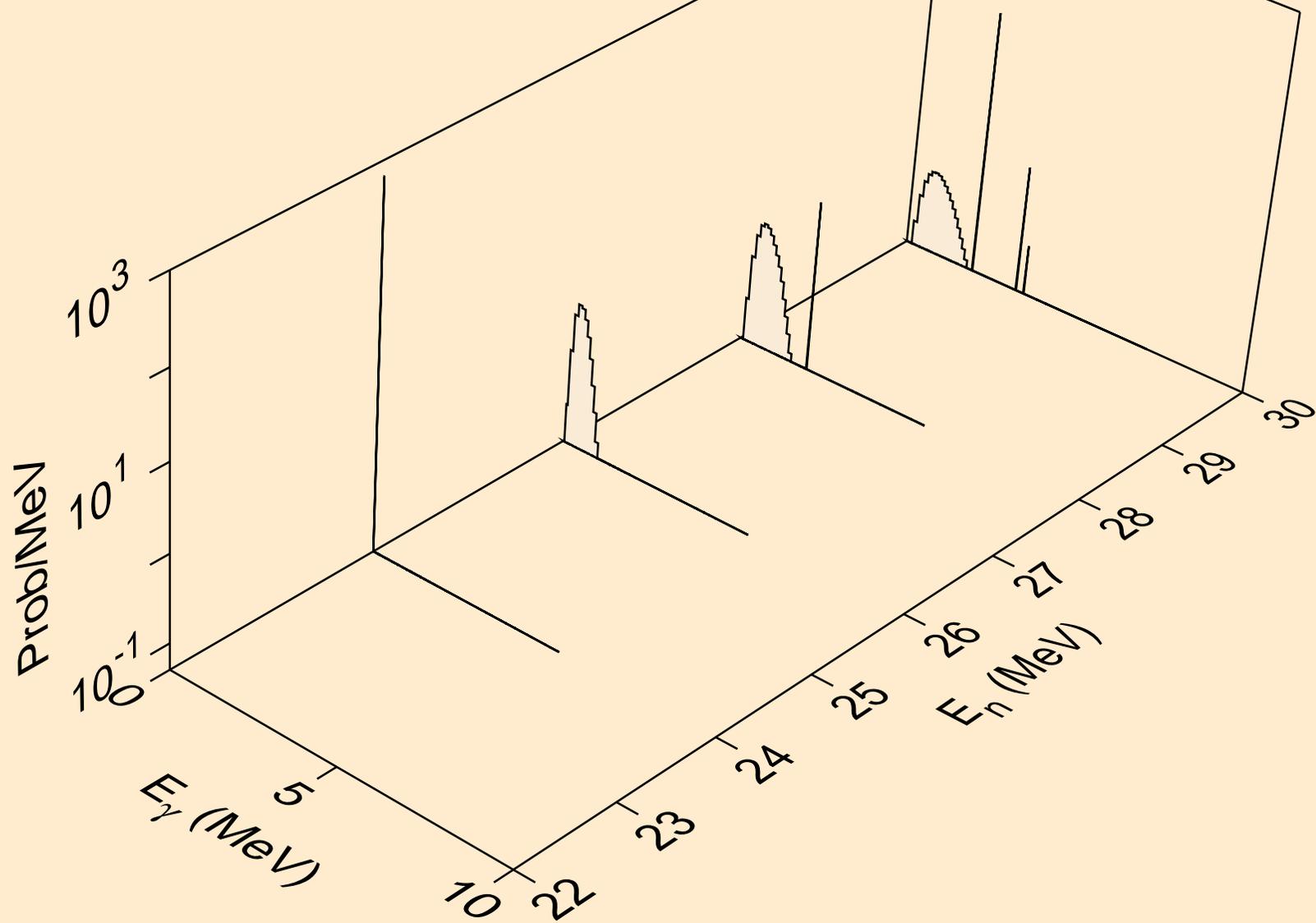CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)p

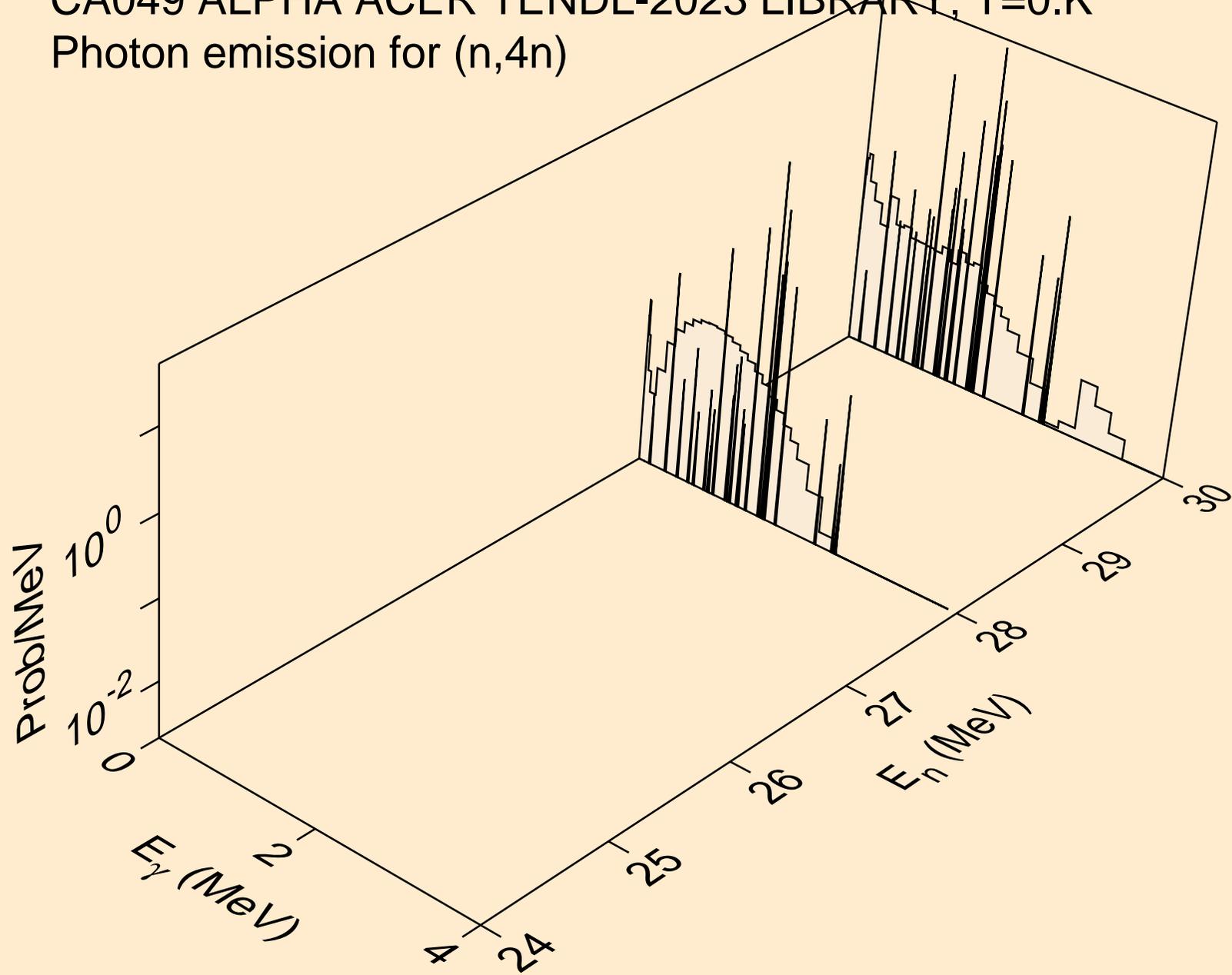CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)d

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)t

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)he3

E_γ (MeV)

E_n (MeV)

Prob/MeV

10^3

10^1

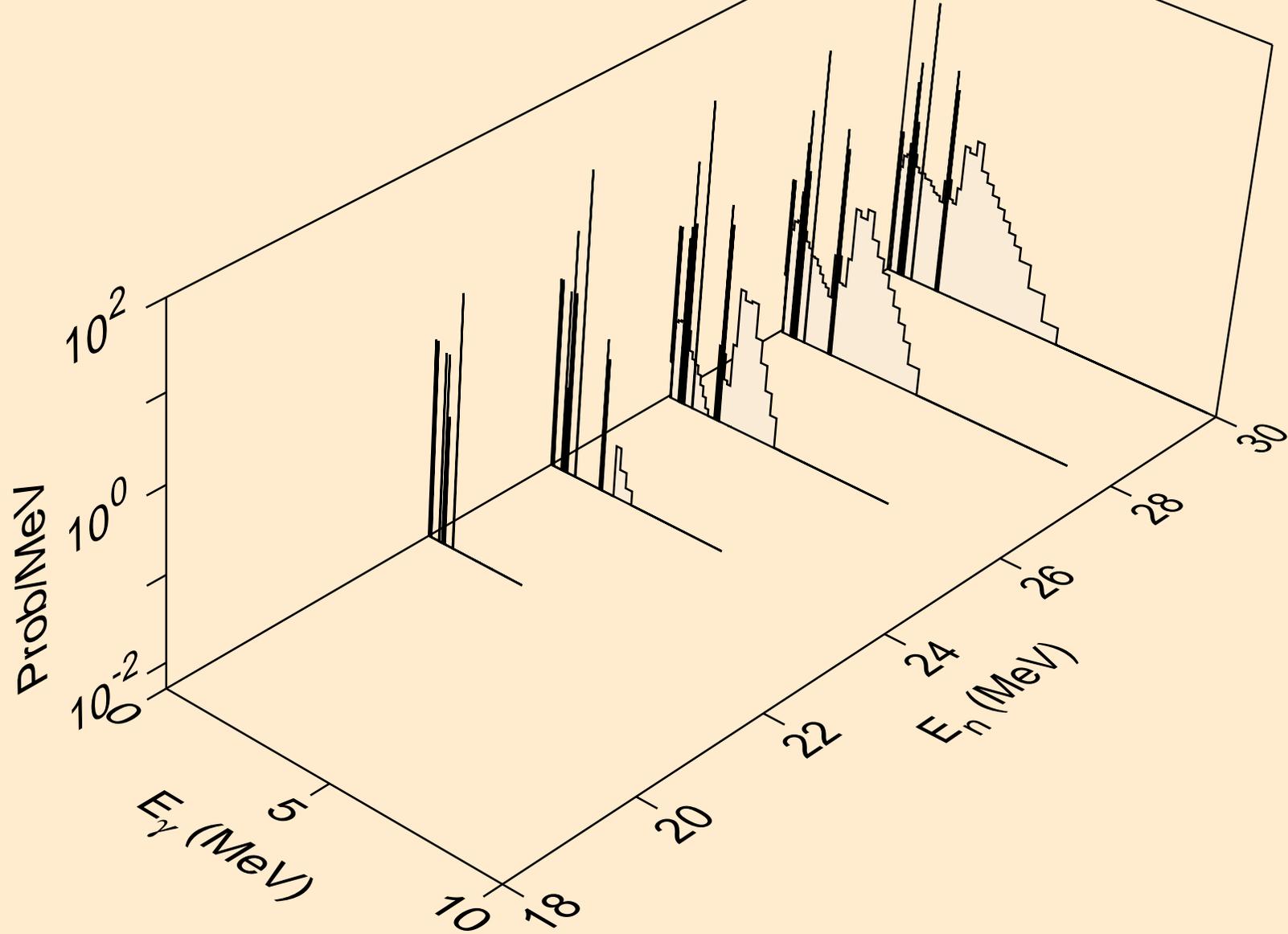10^{-1}
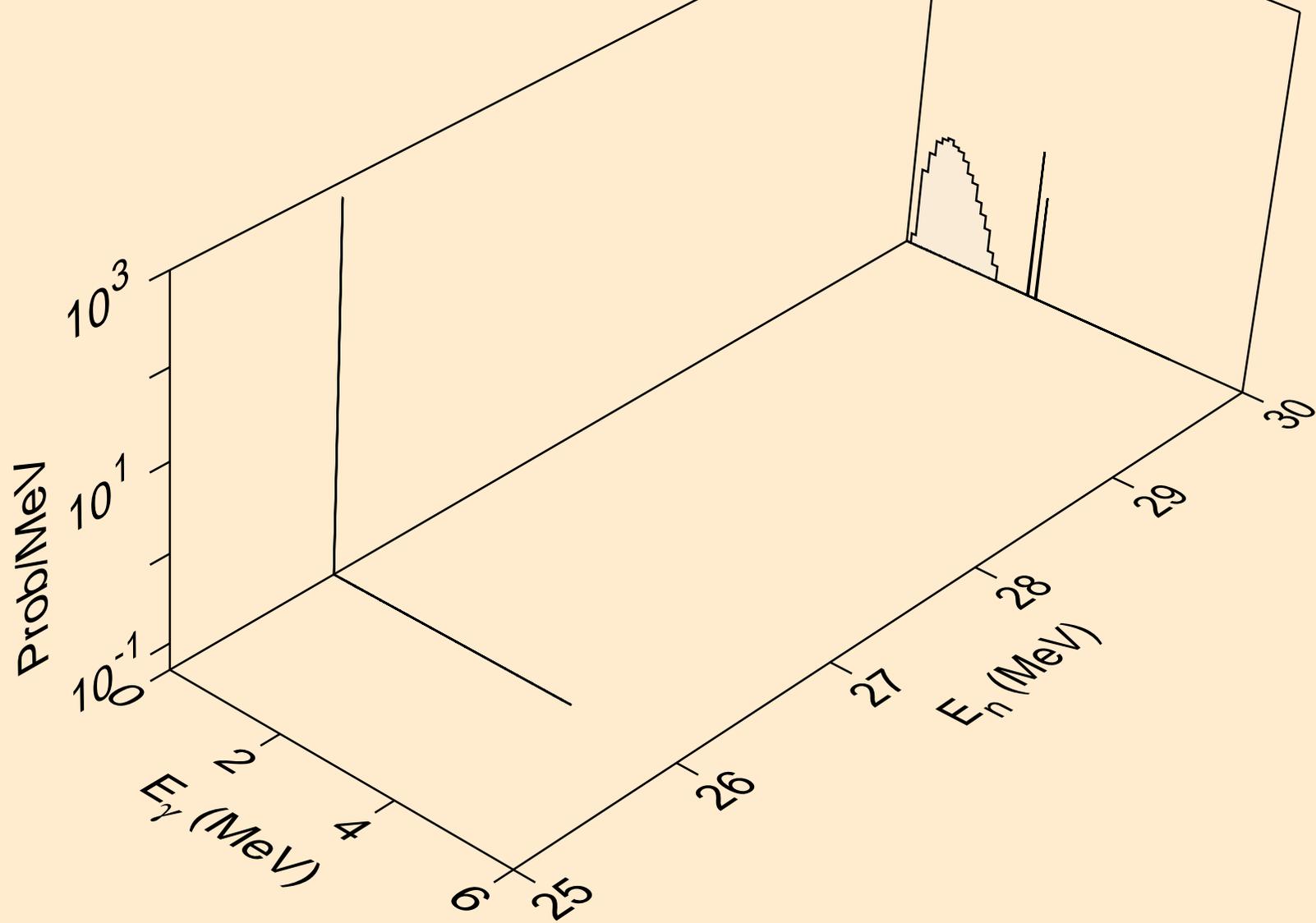
10^0

5

10

22

23

24

25

26

27

28

29

30

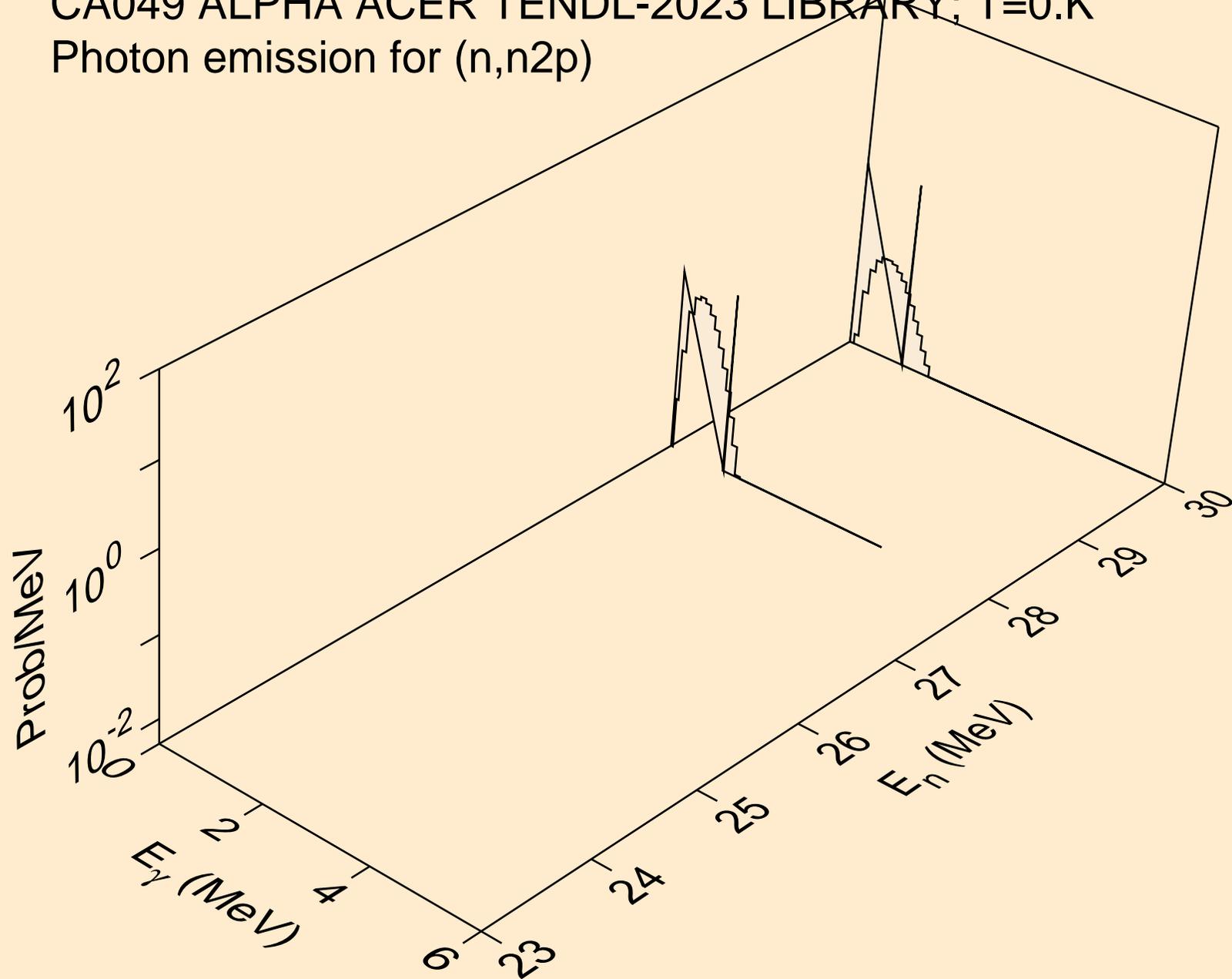CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,4n)

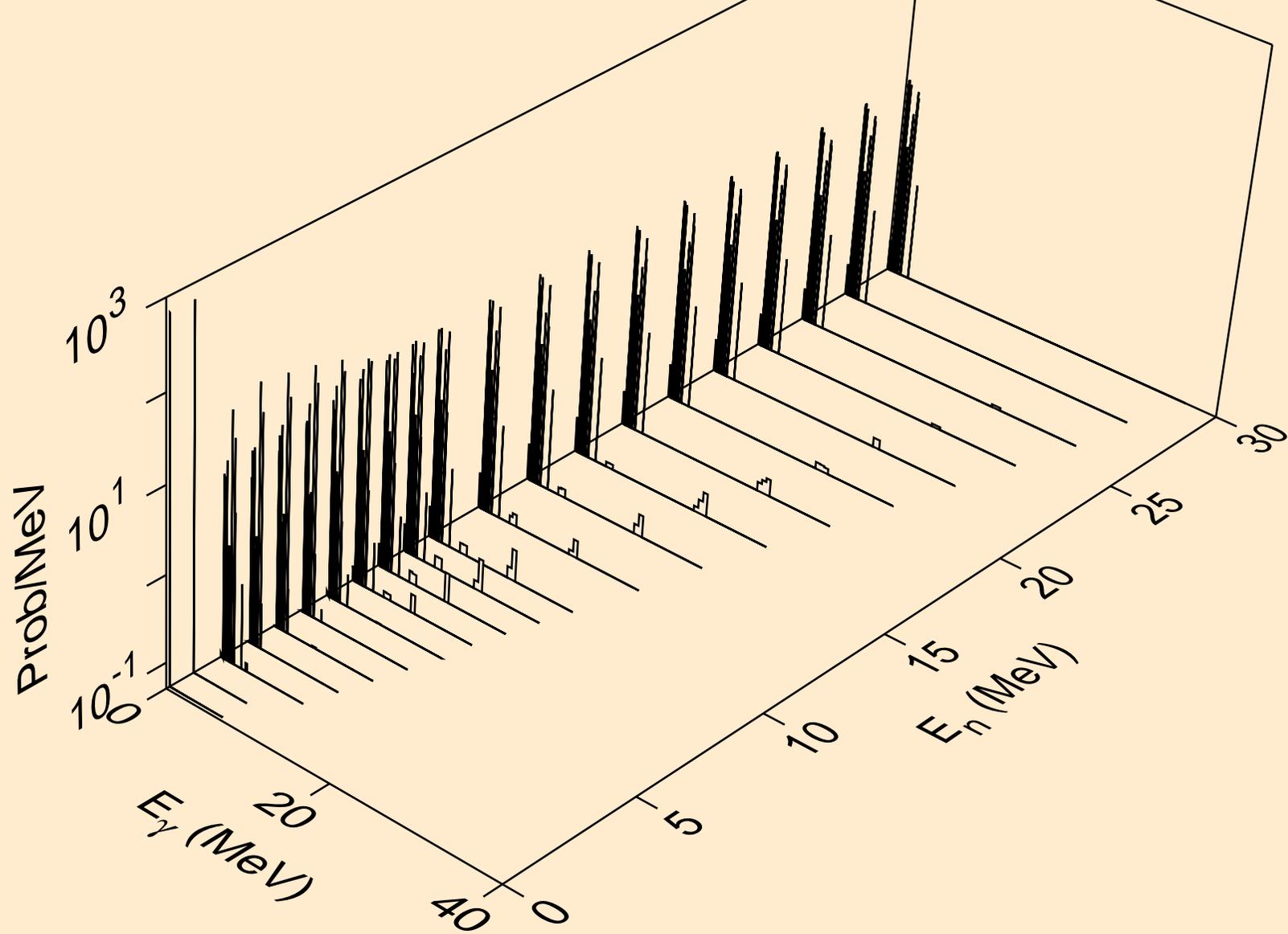CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2np)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
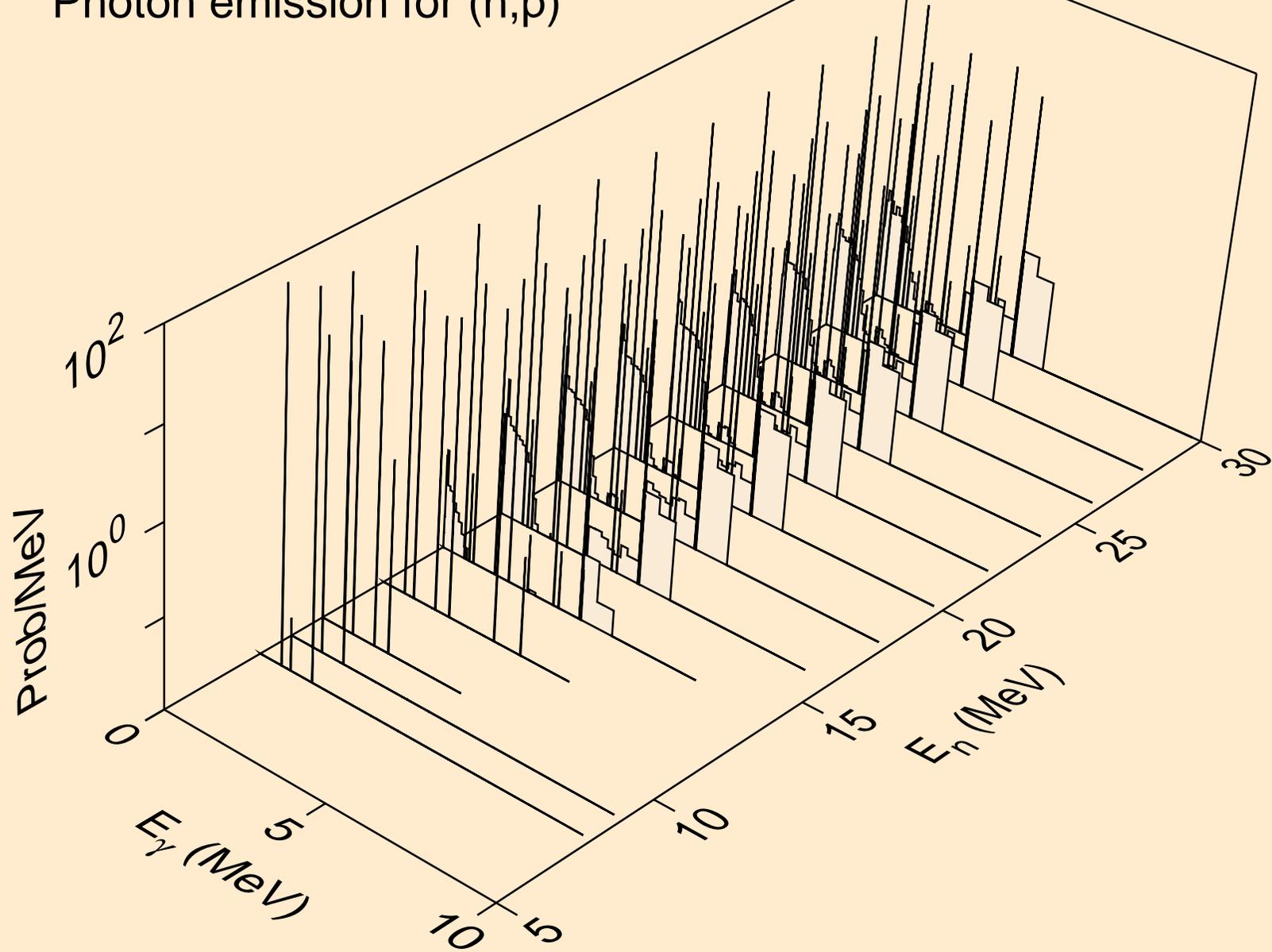Photon emission for (n,3np)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
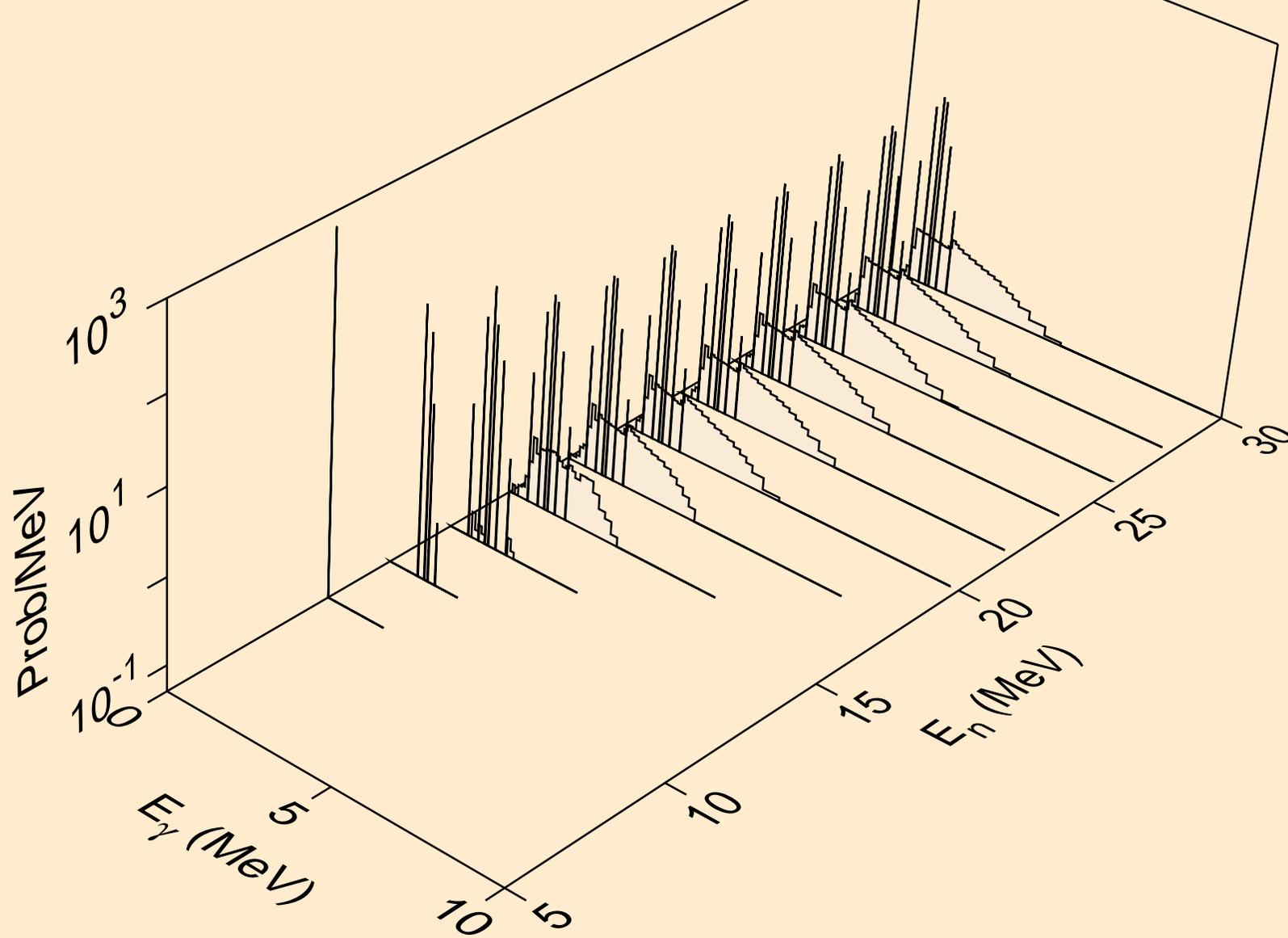Photon emission for (n,n2p)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
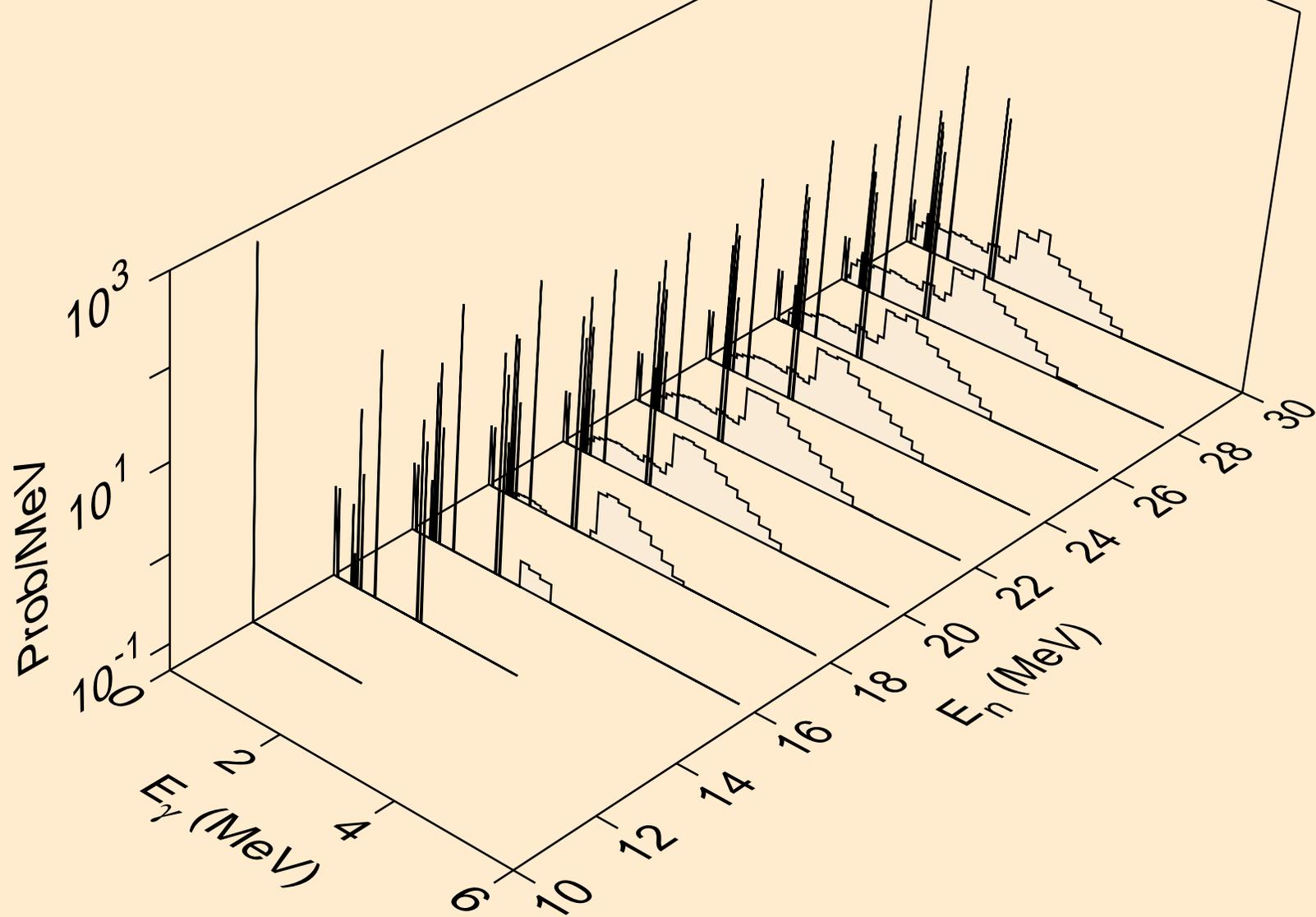Photon emission for (n,gma)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
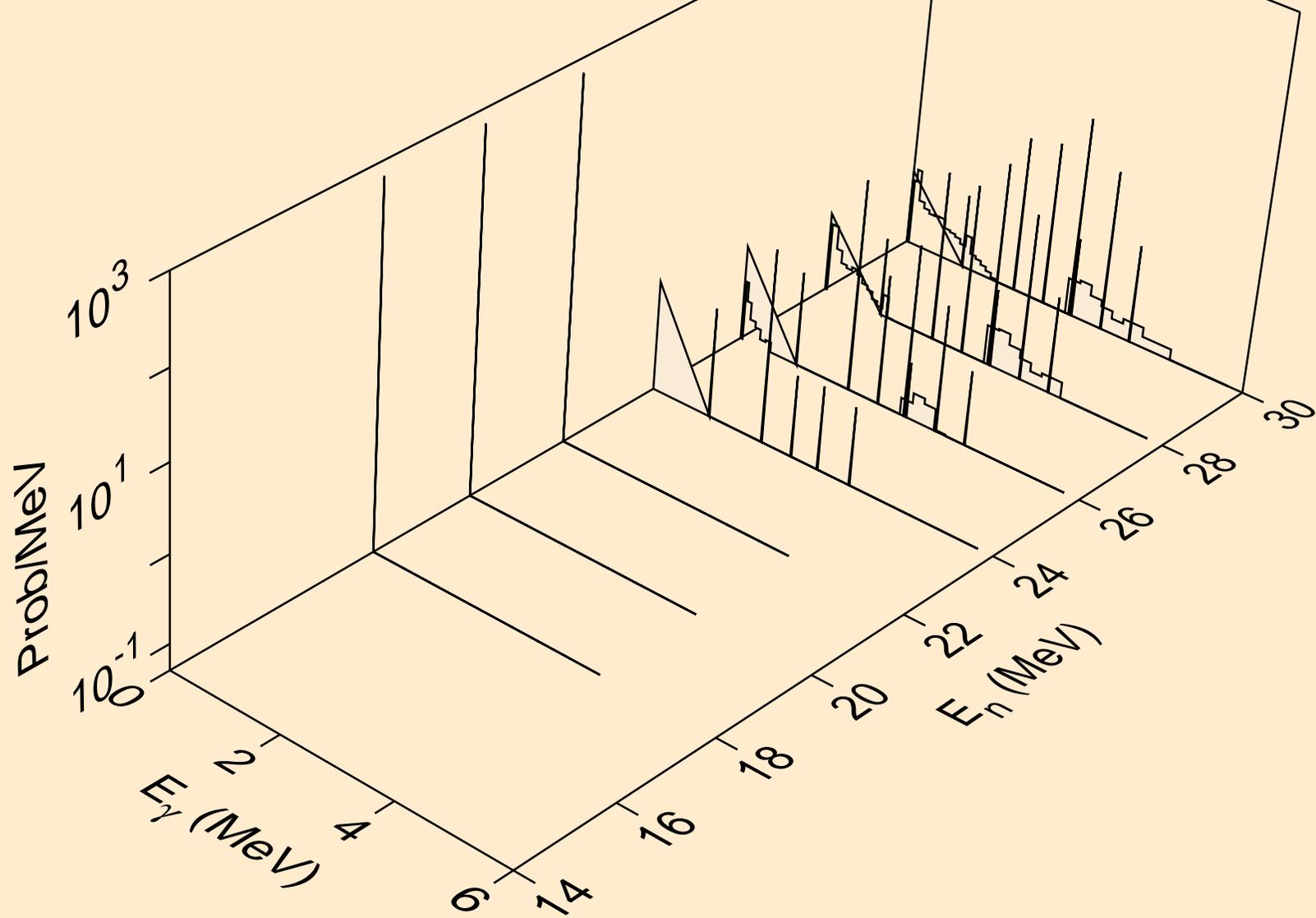Photon emission for (n,p)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
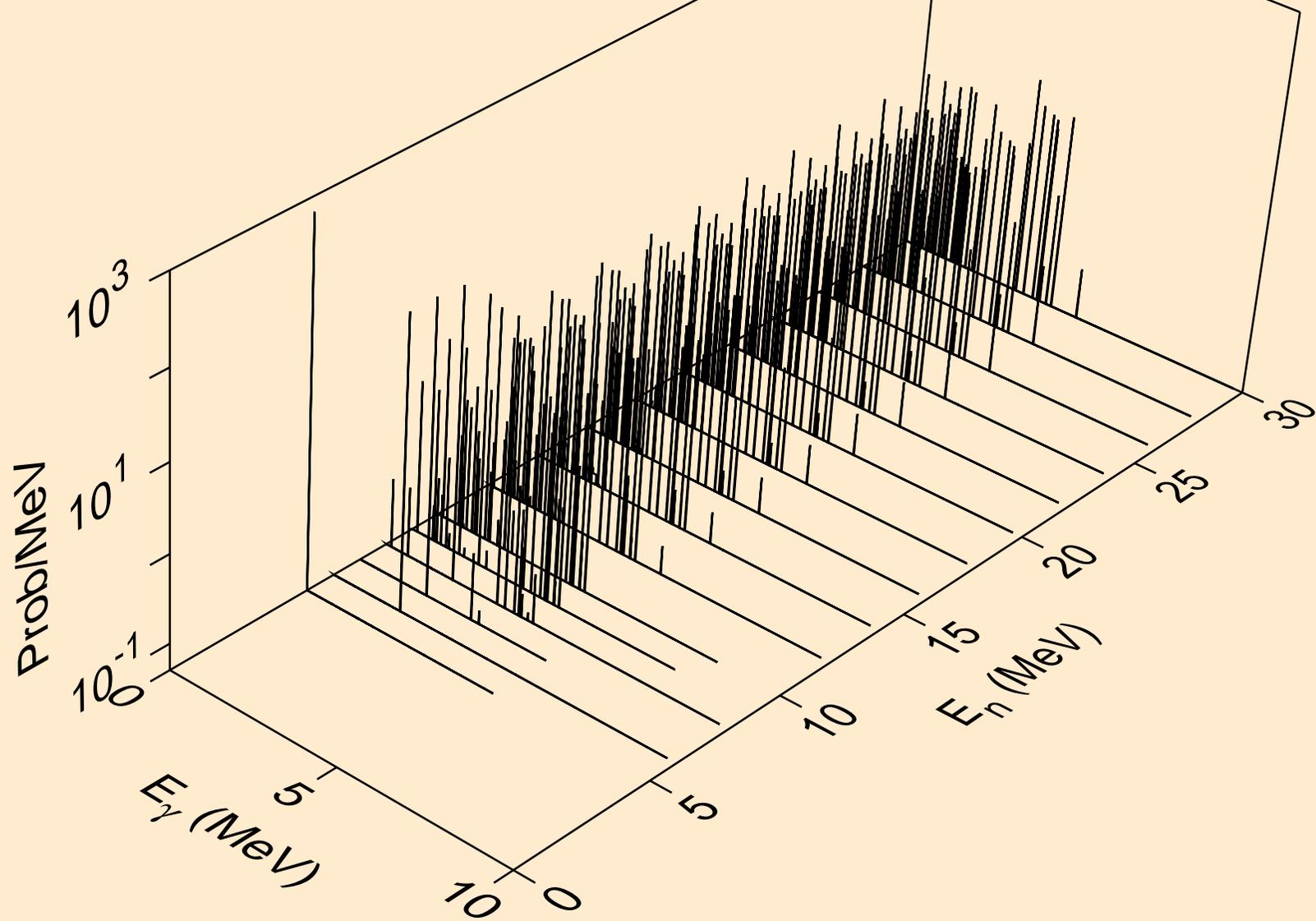Photon emission for (n,d)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,t)

Prob/MeV

10^3

10^1

10^{-1}

10^0

E_γ (MeV)

2

4

6
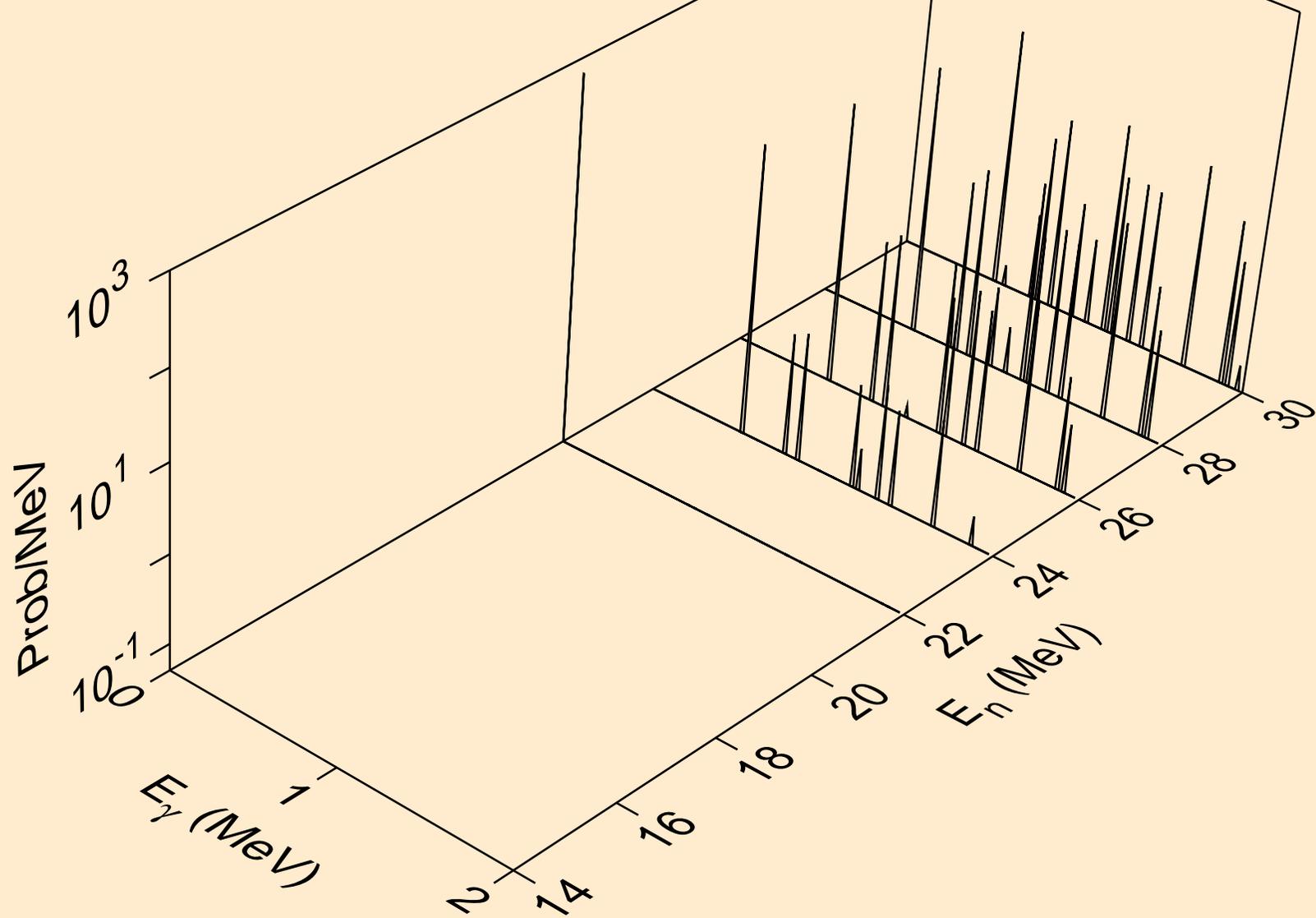
E_n (MeV)

10

12

14

16

18

20

22

24

26

28

30

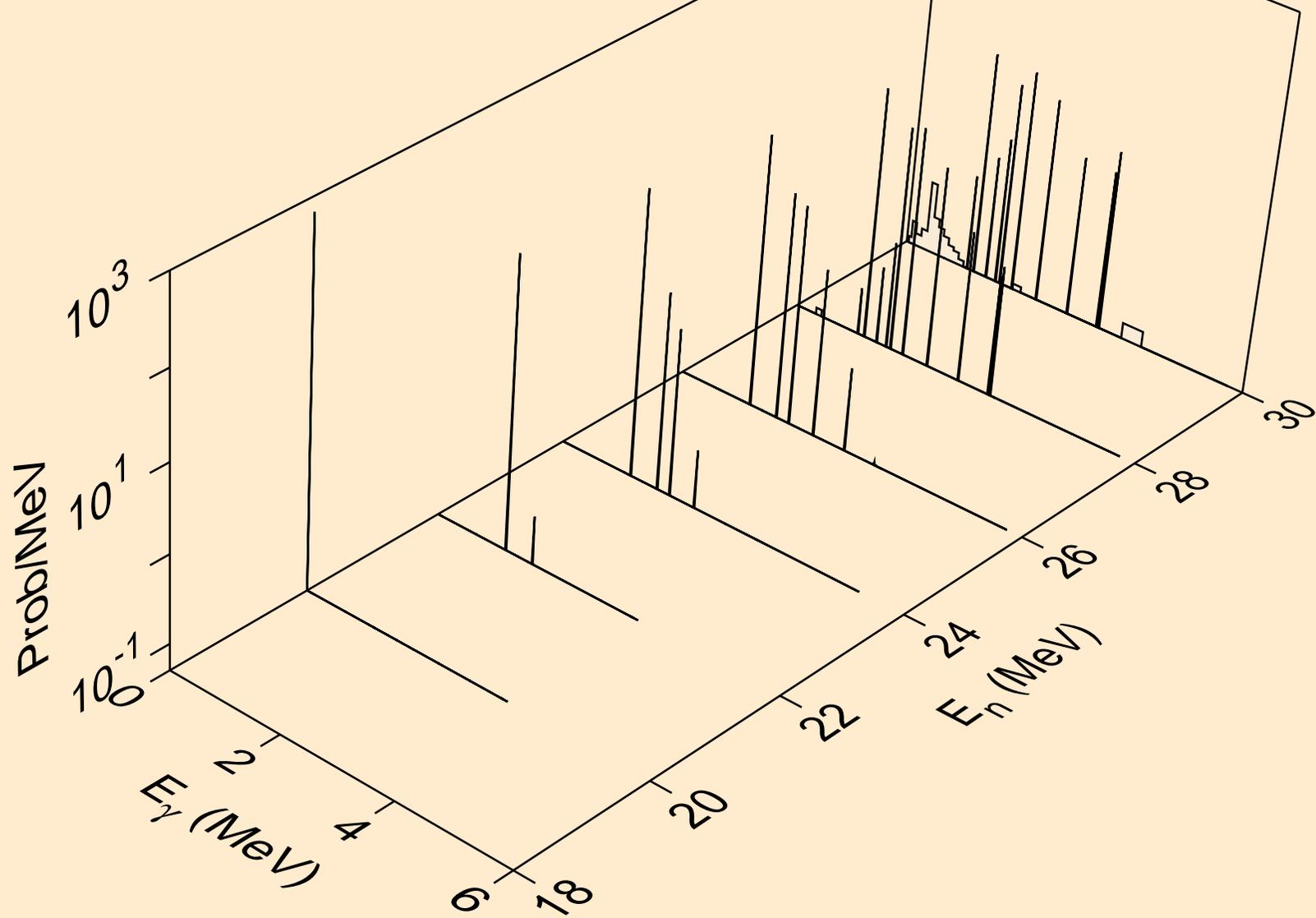CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,he3)

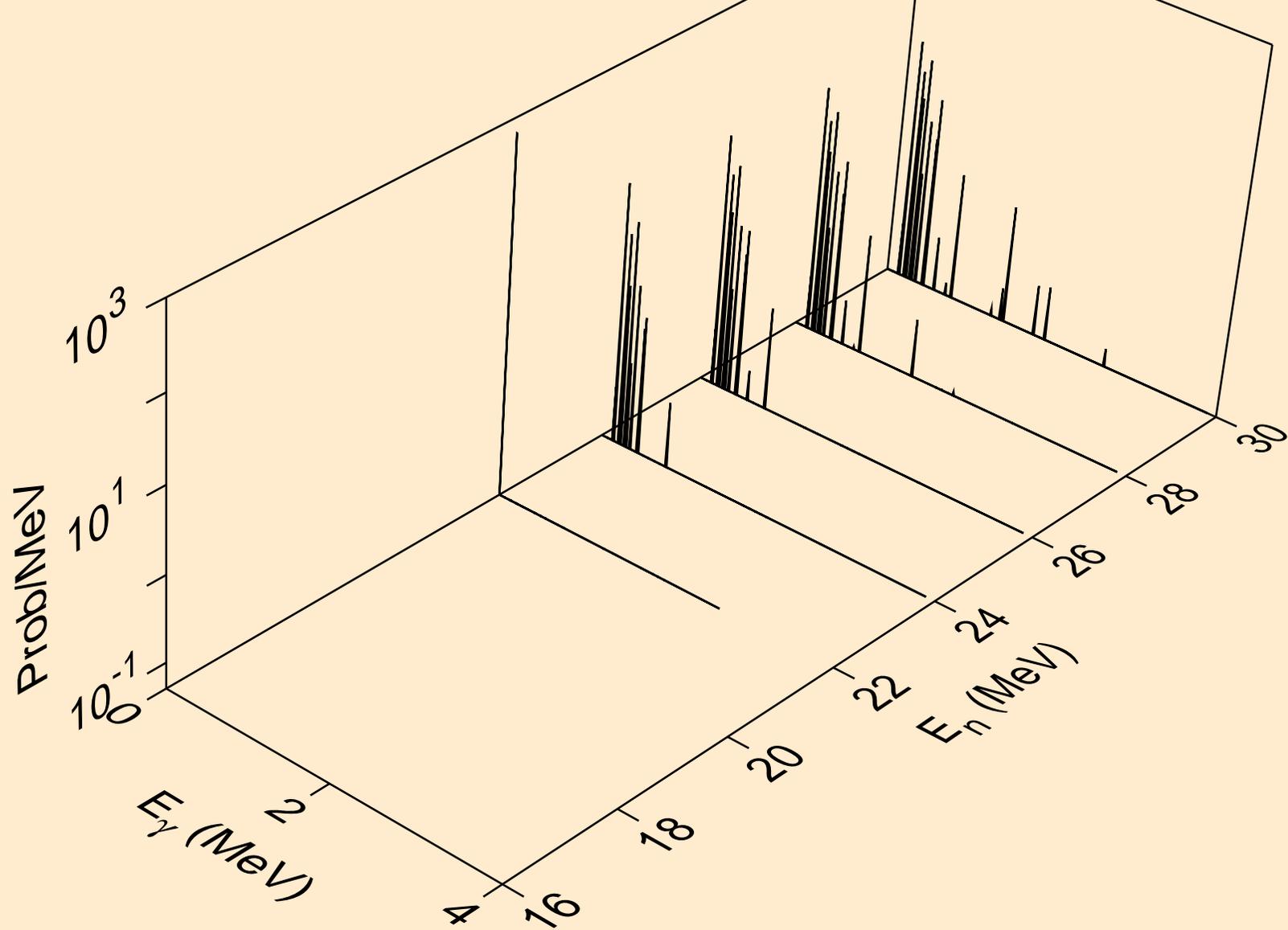CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for inelastic

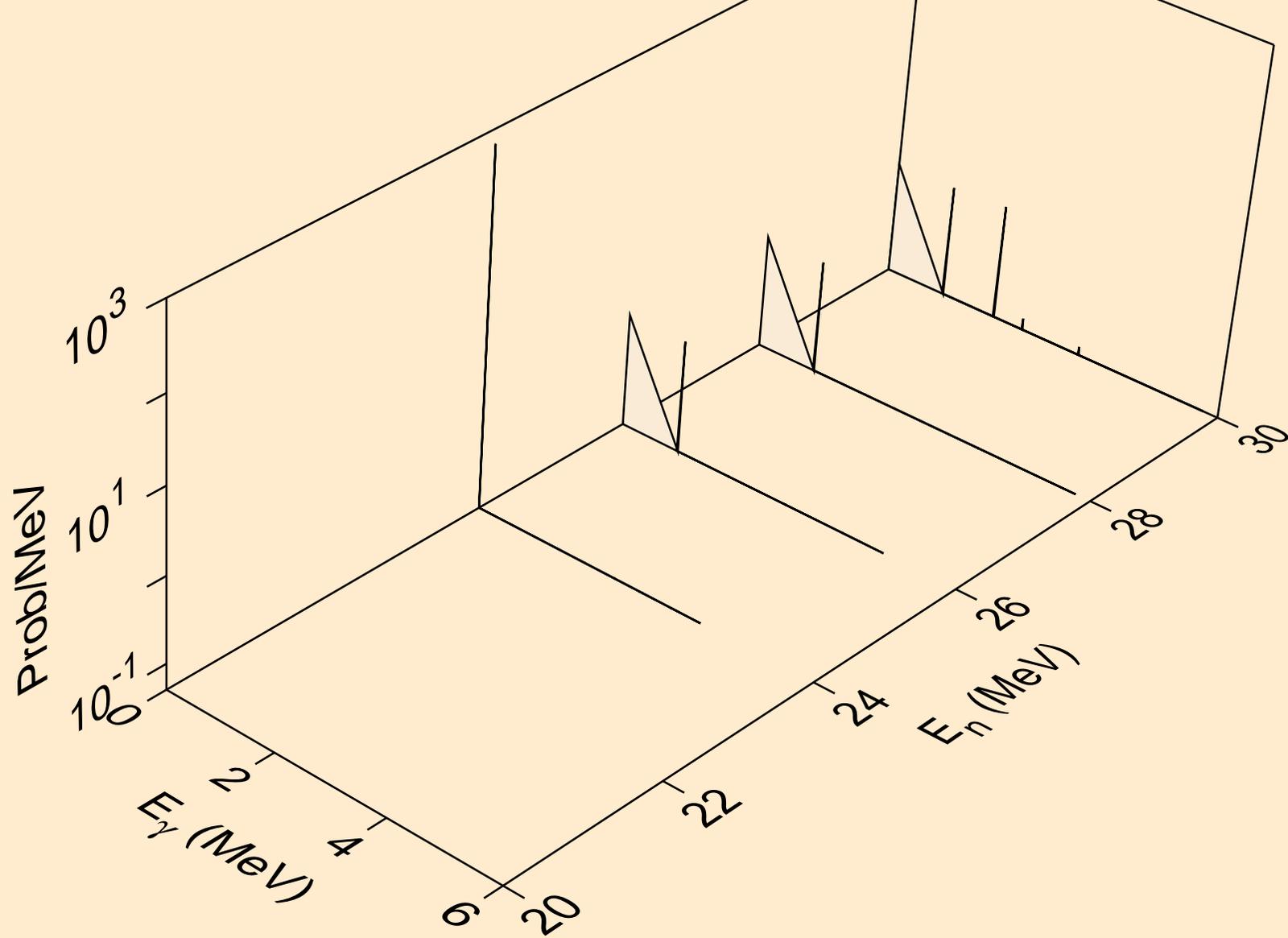CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2a)

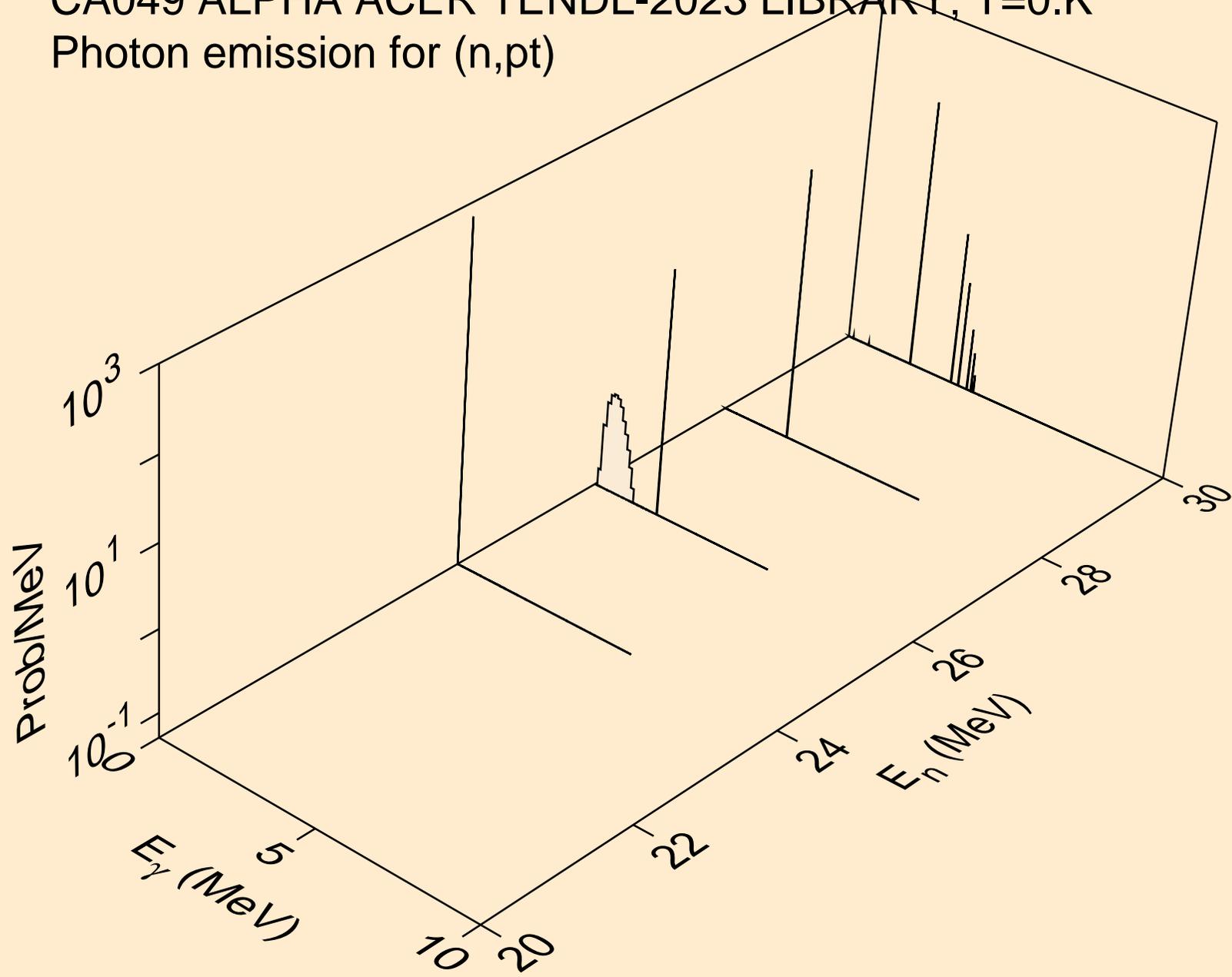CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2p)

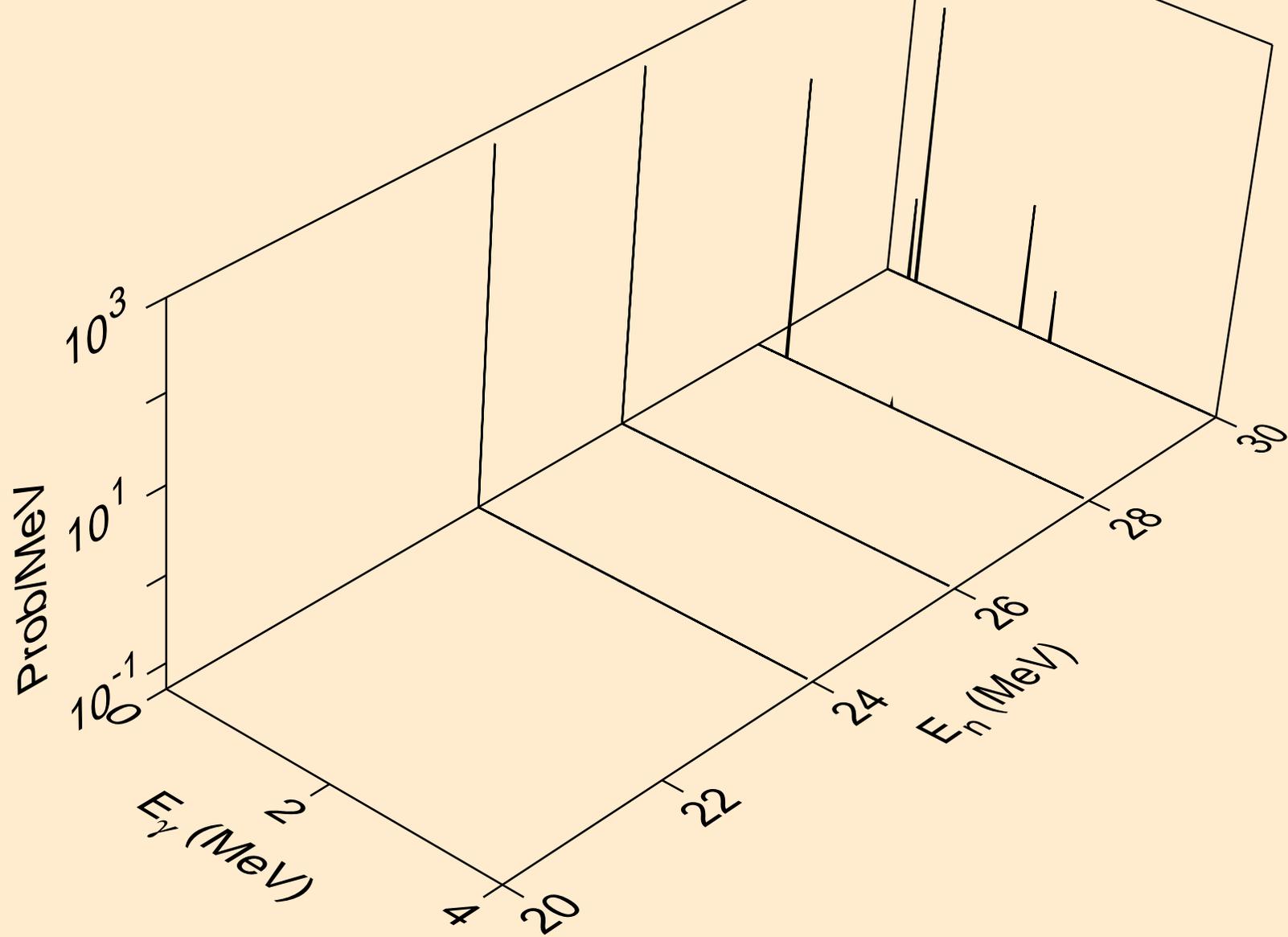CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,pa)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
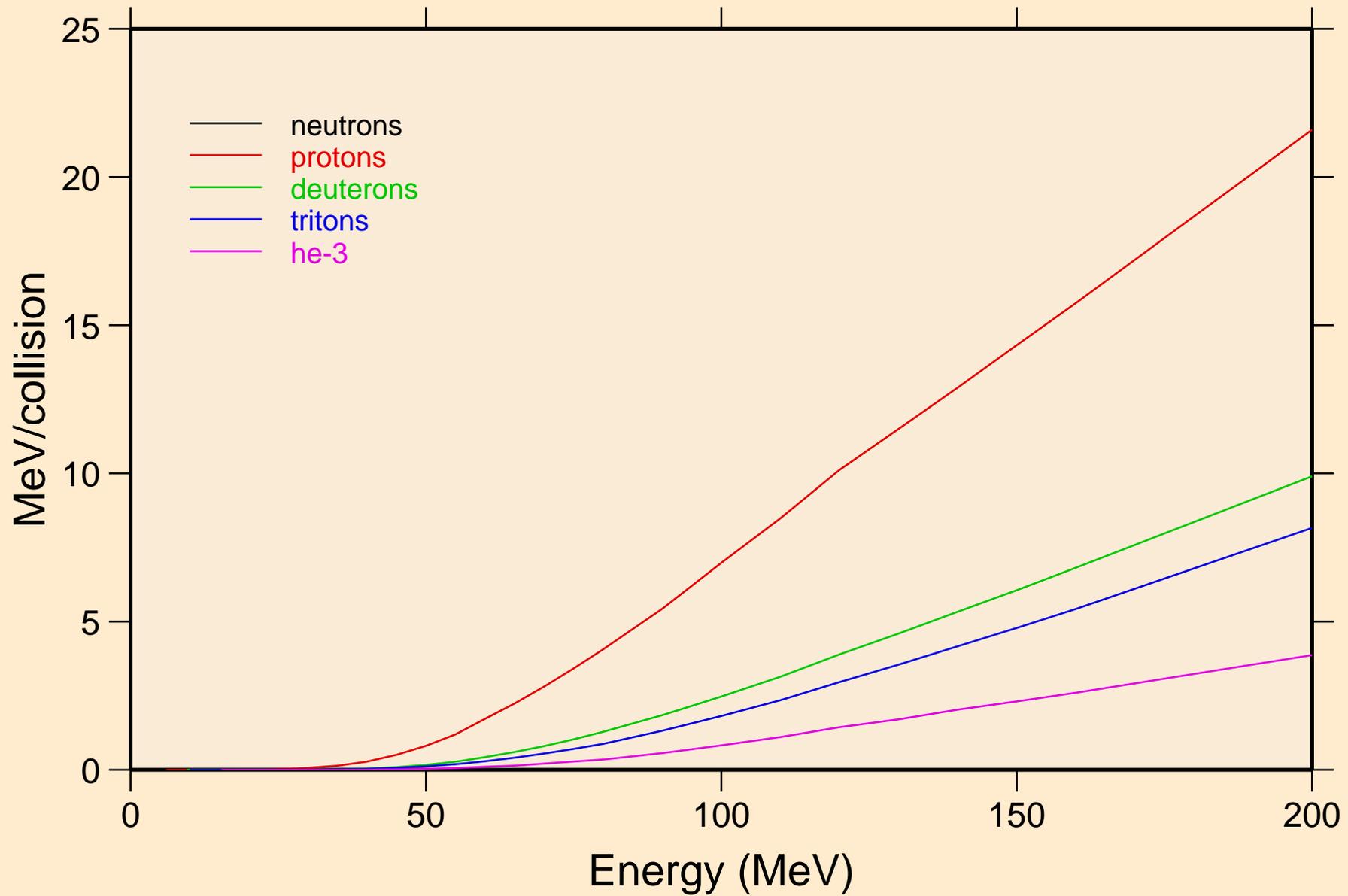Photon emission for (n,pd)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
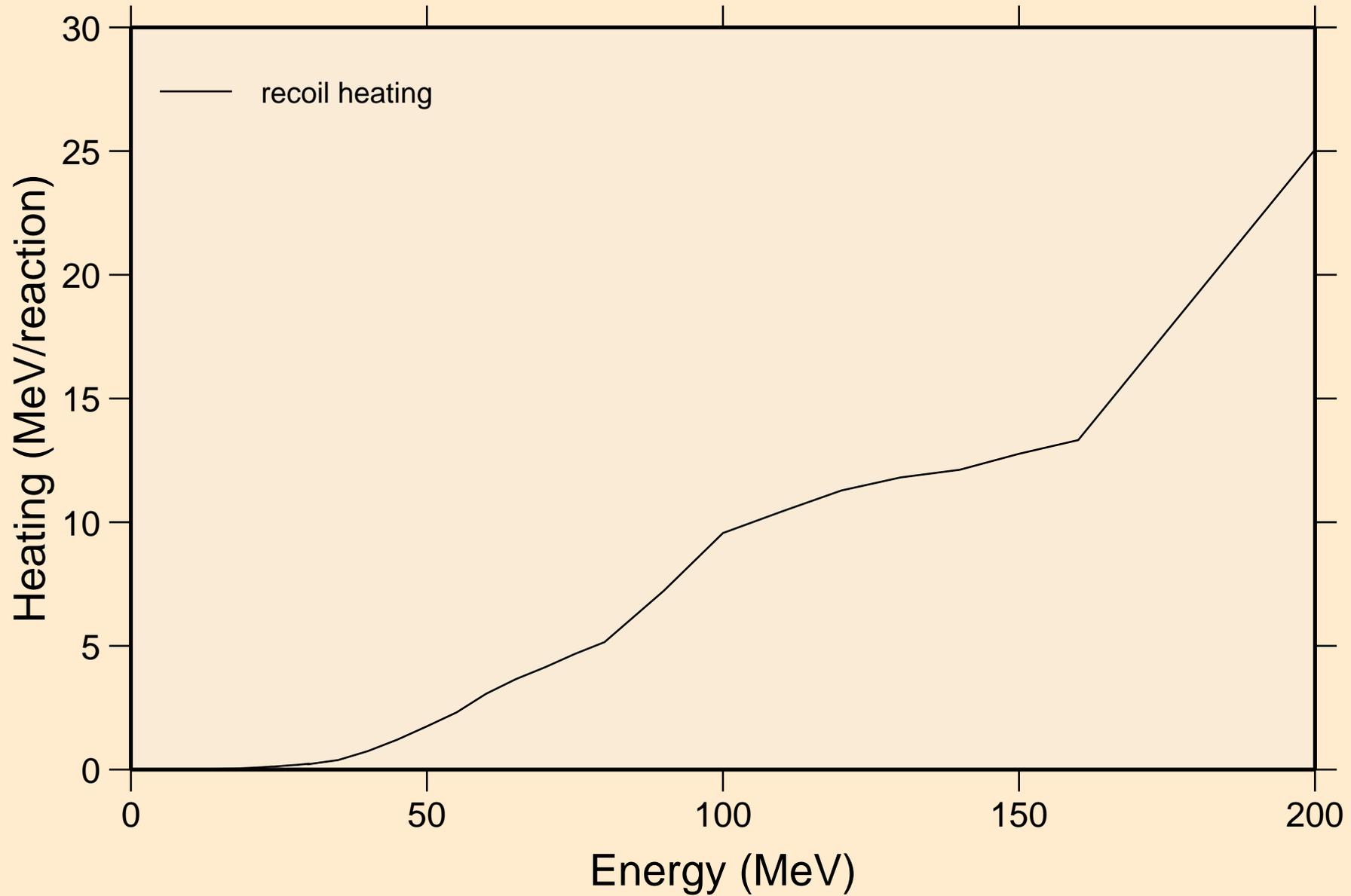Photon emission for (n,pt)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
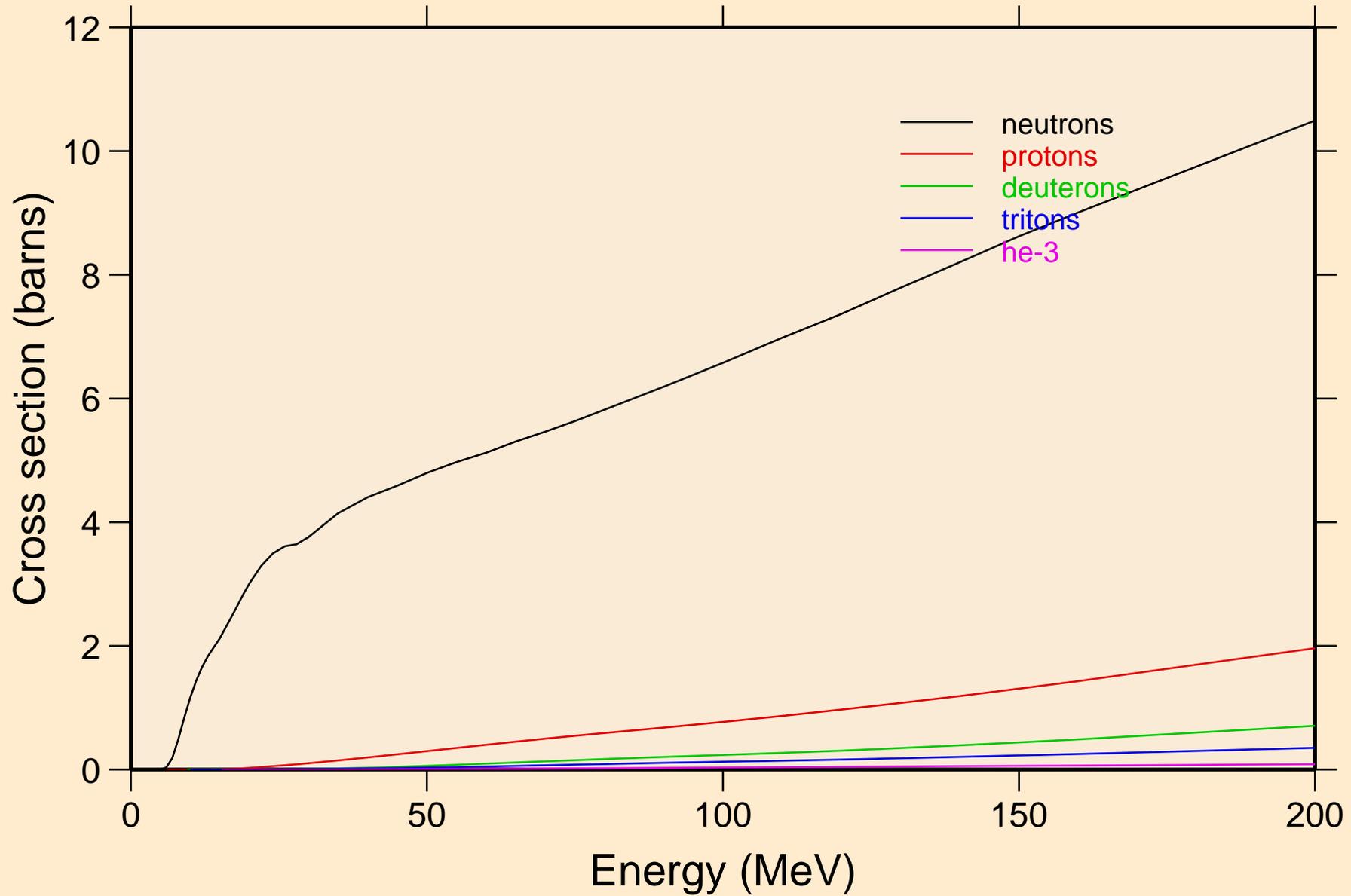Photon emission for (n,da)

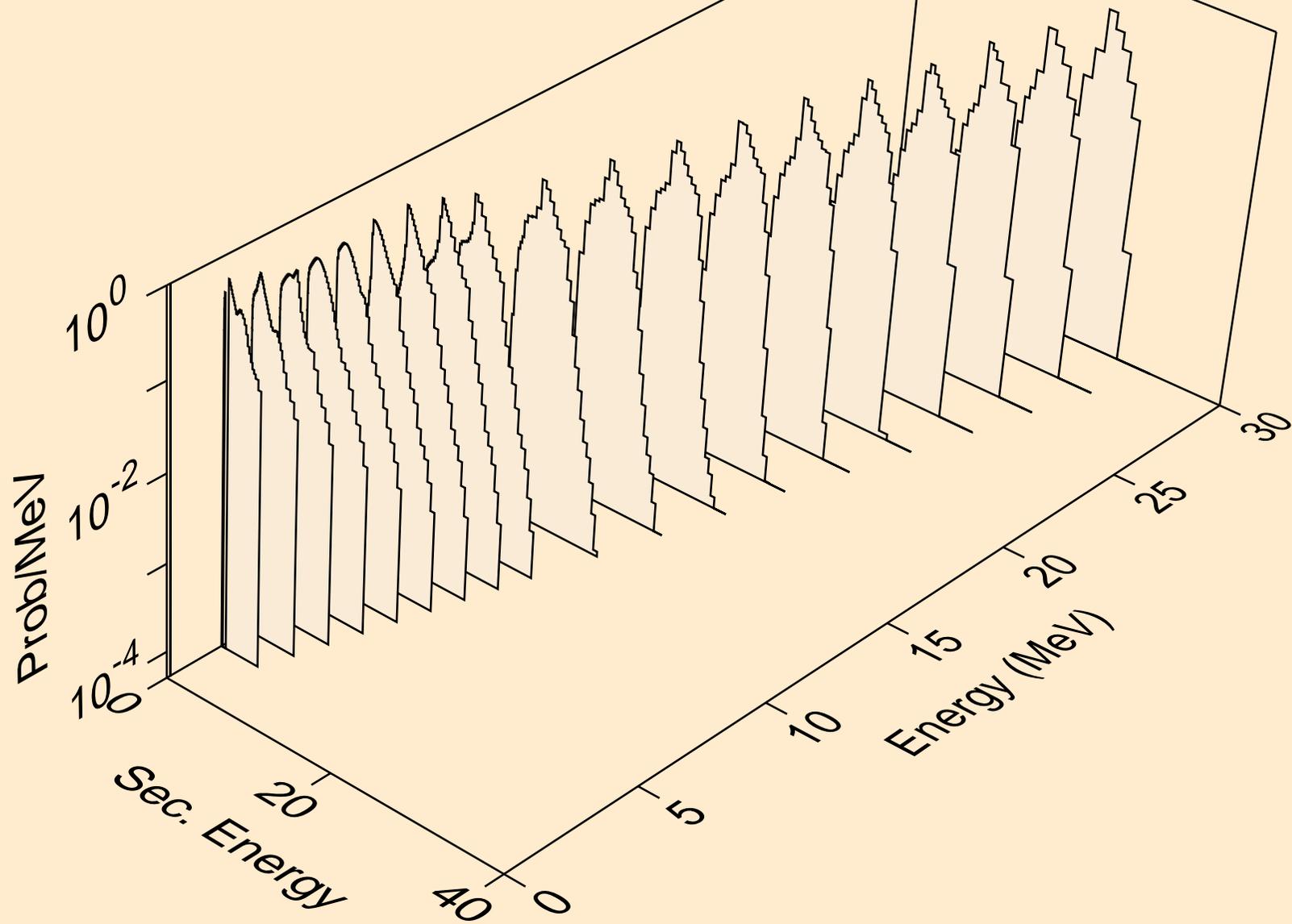CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Particle heating contributions

neutrons
protons
deuterons
tritons
he-3

MeV/collision

Energy (MeV)

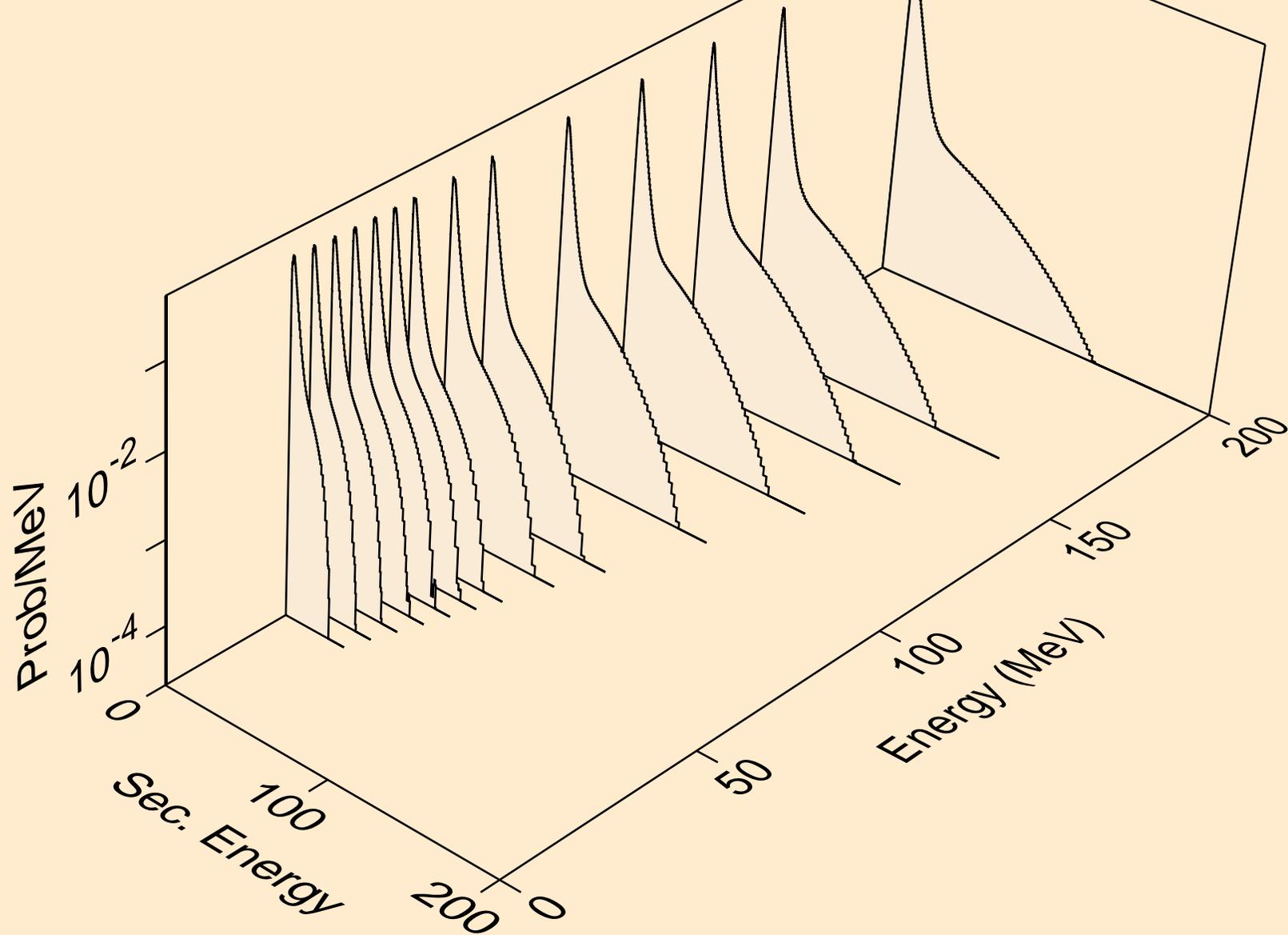CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Recoil Heating

recoil heating

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
Particle production cross sections

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,x)

Prob/MeV

10^{-2}

10^{-4}

0

Sec. Energy

100

200

0

50

100

150

200

Energy (MeV)

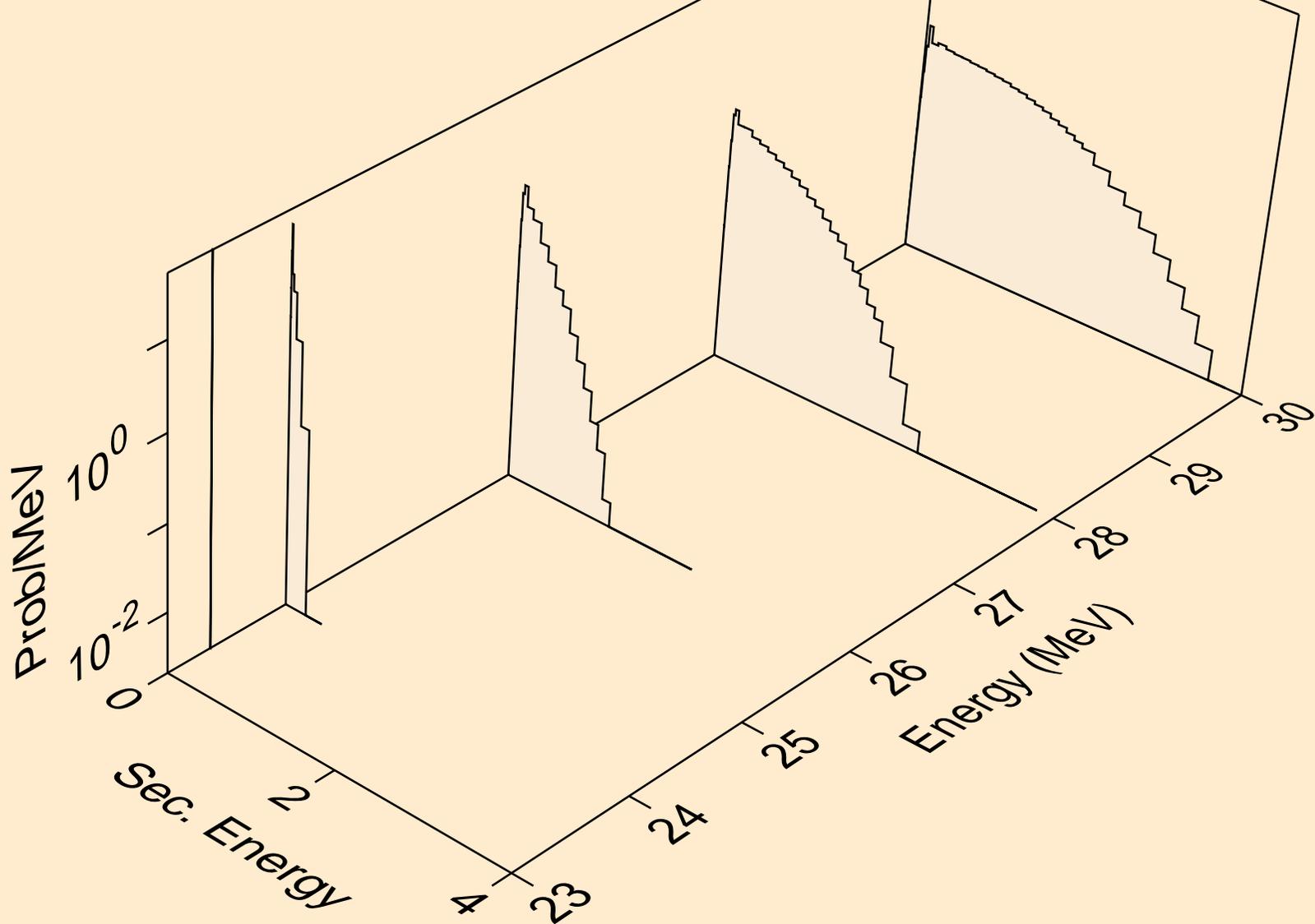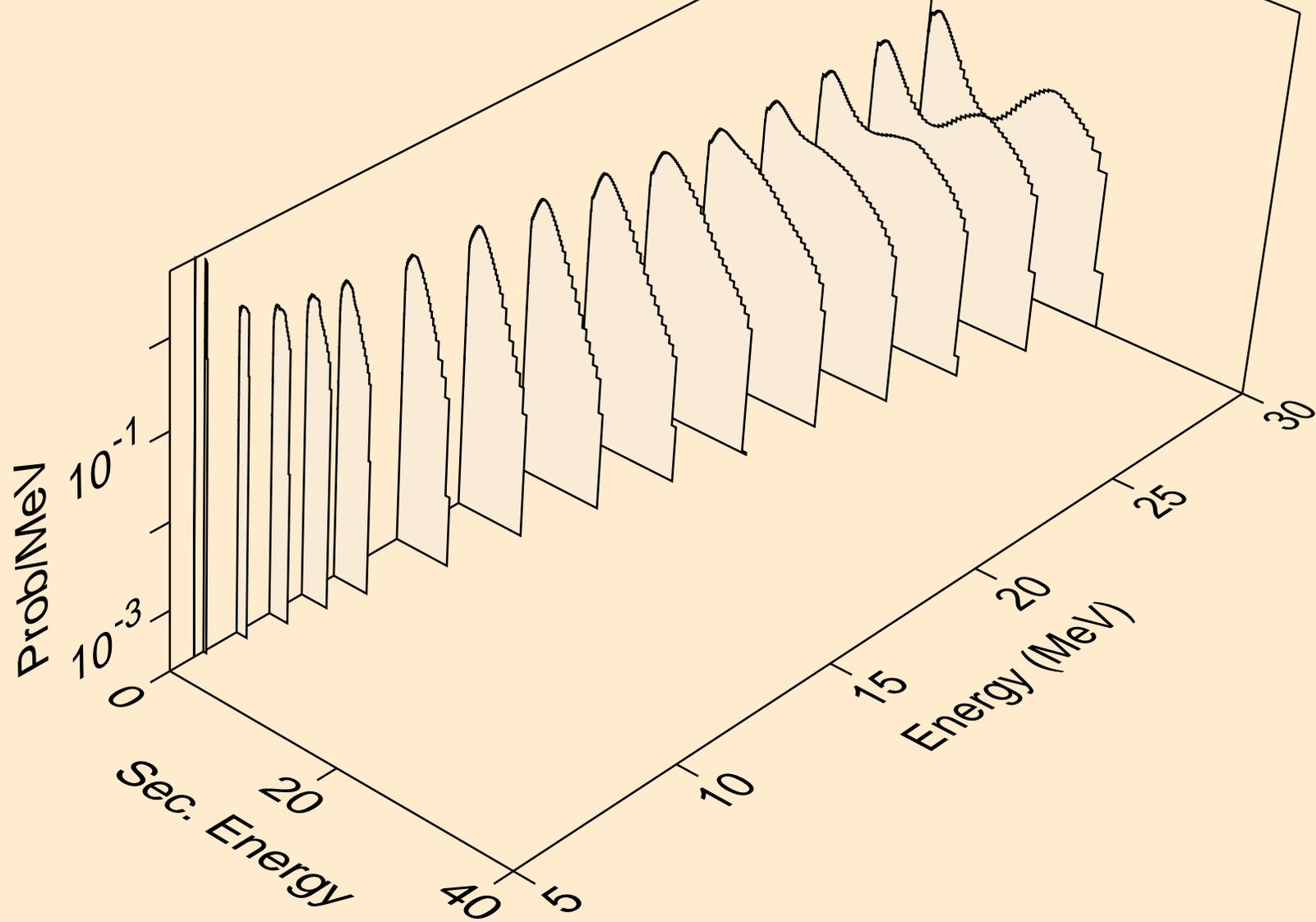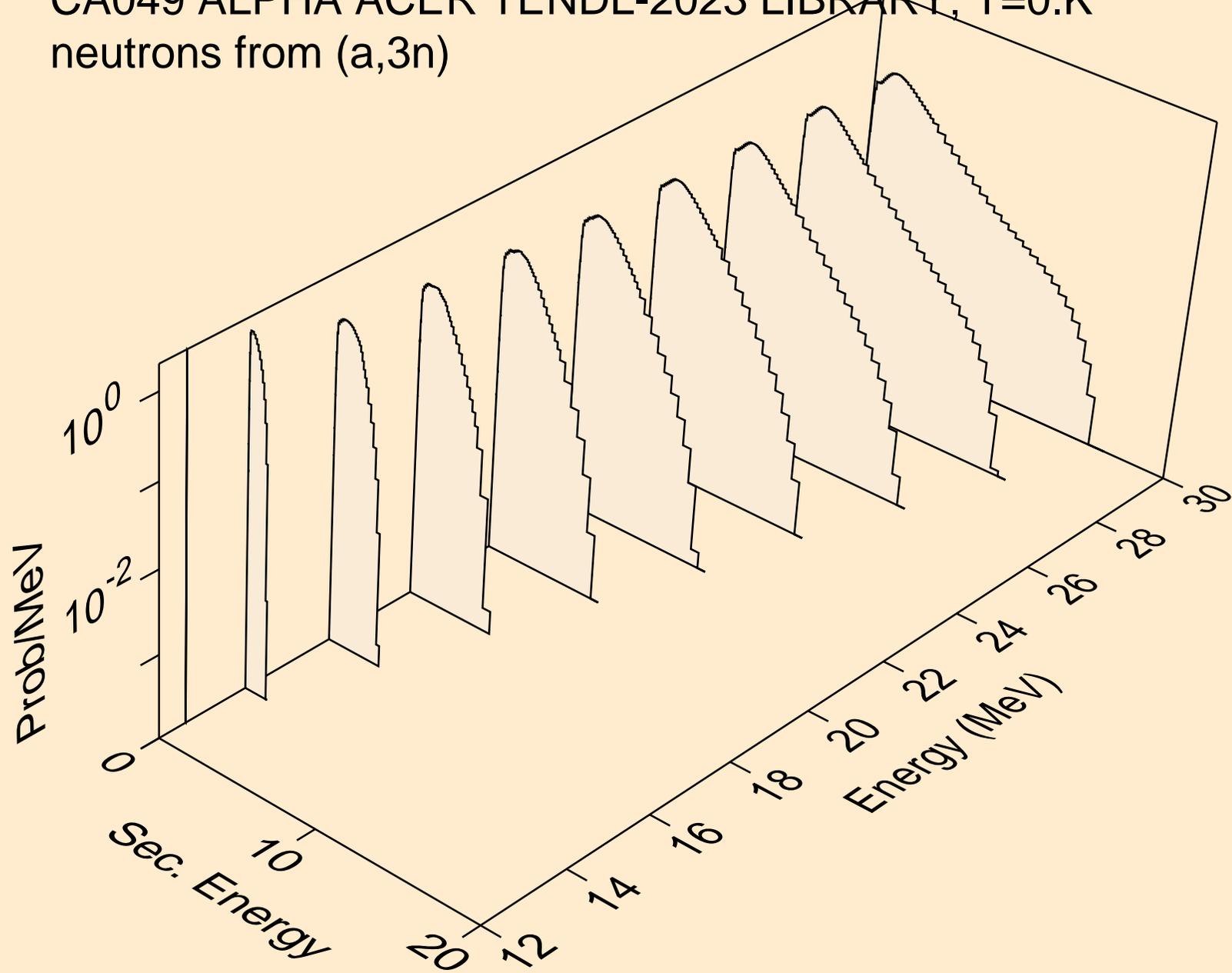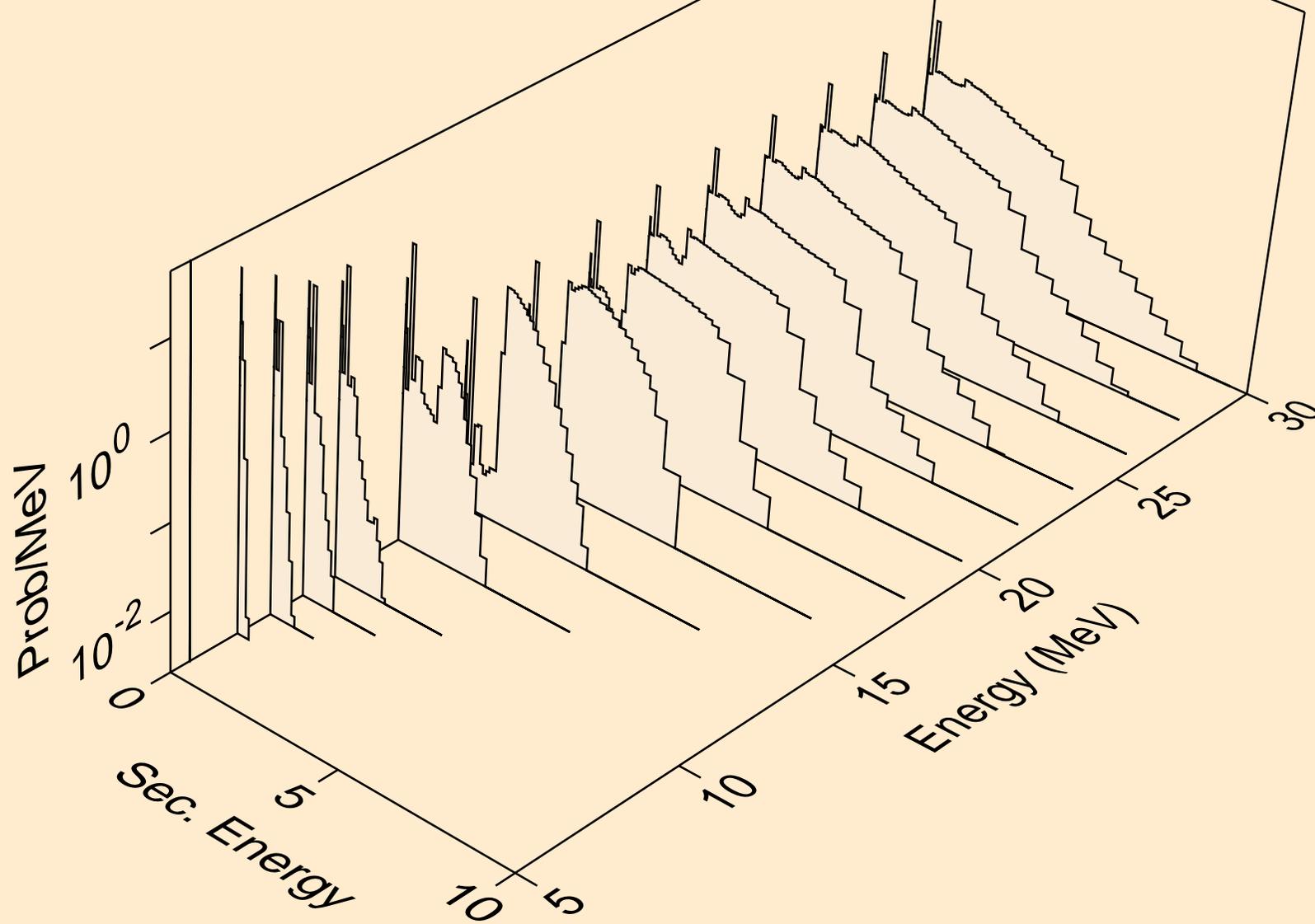CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,2nd)

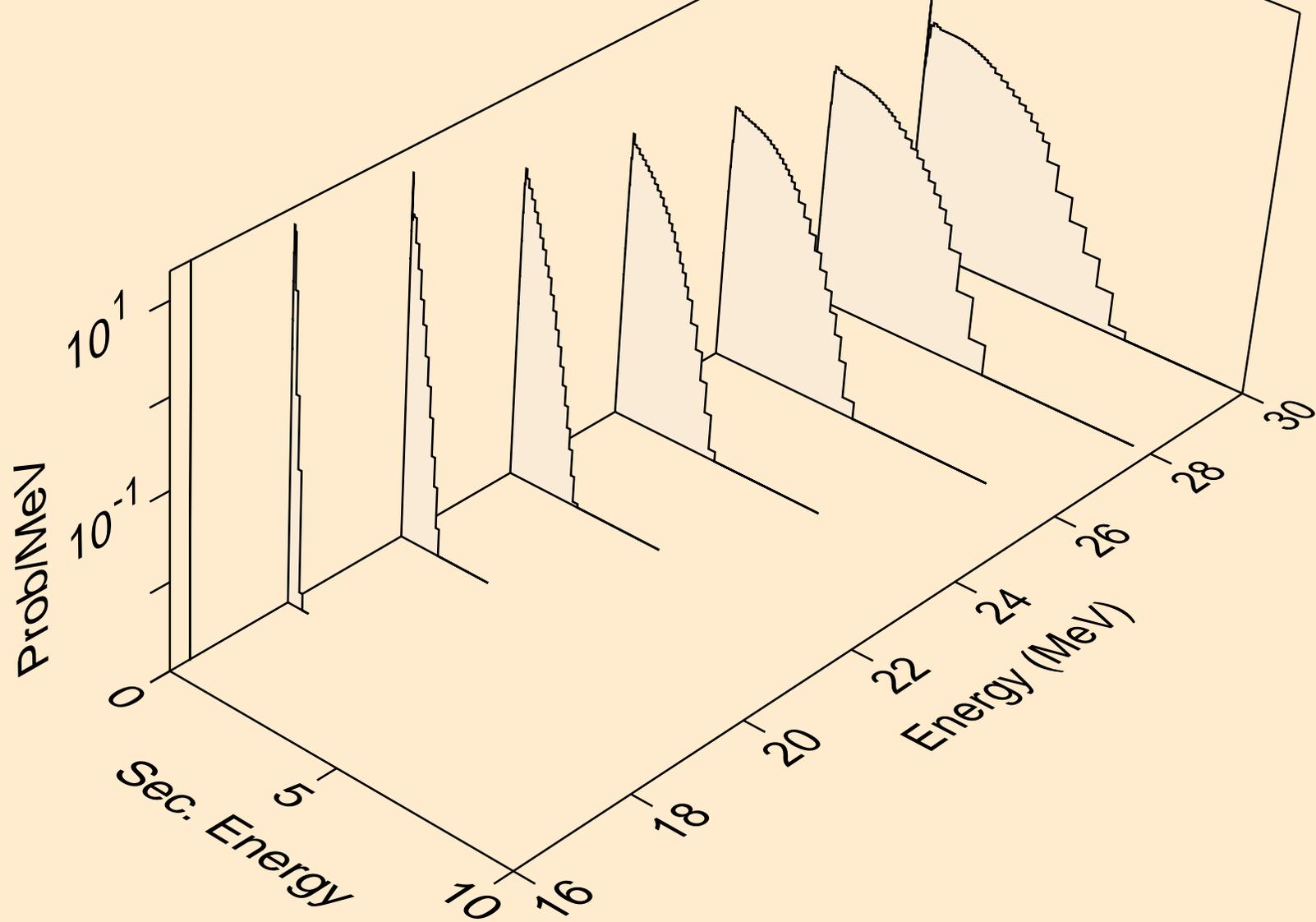CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,2n)

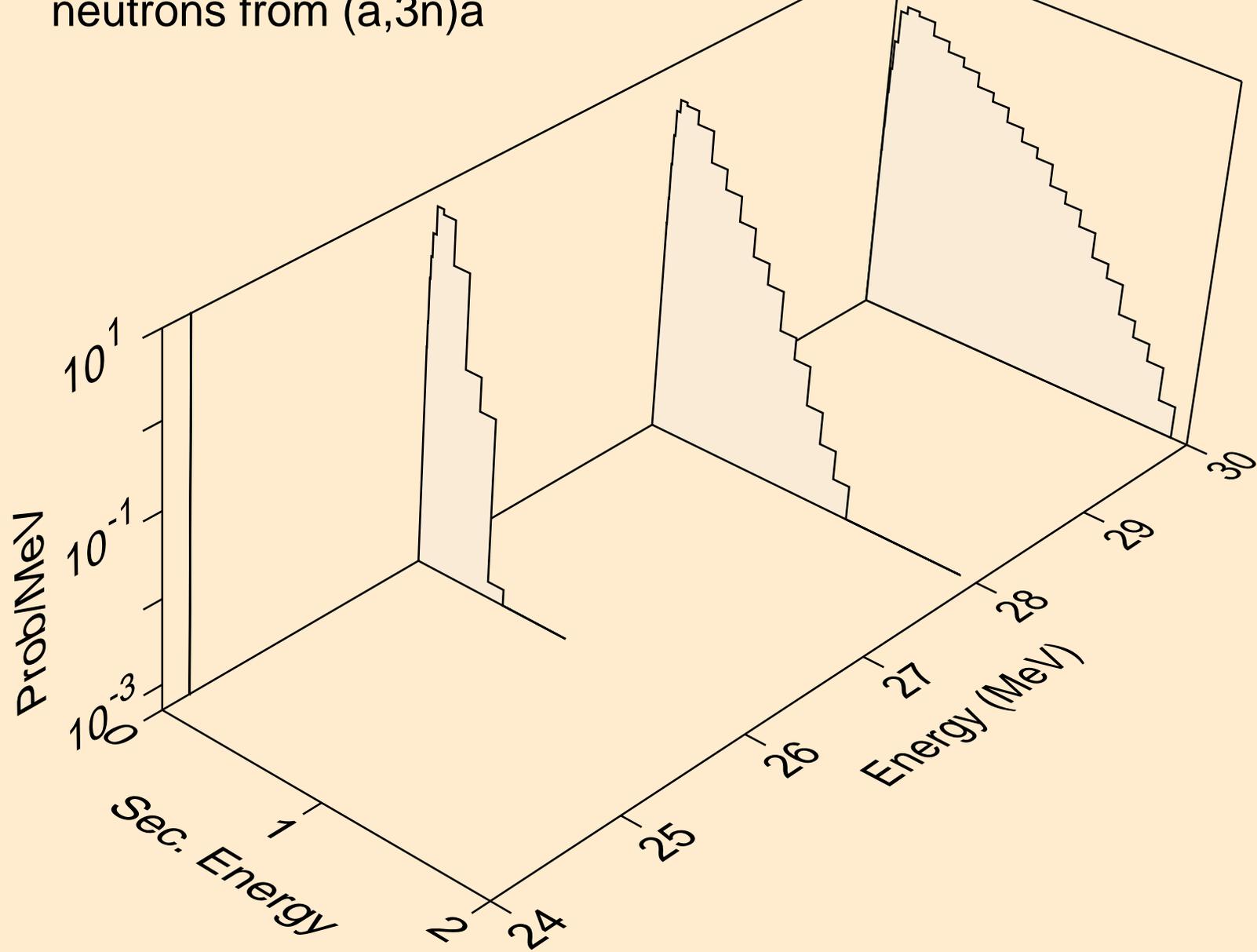CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,3n)

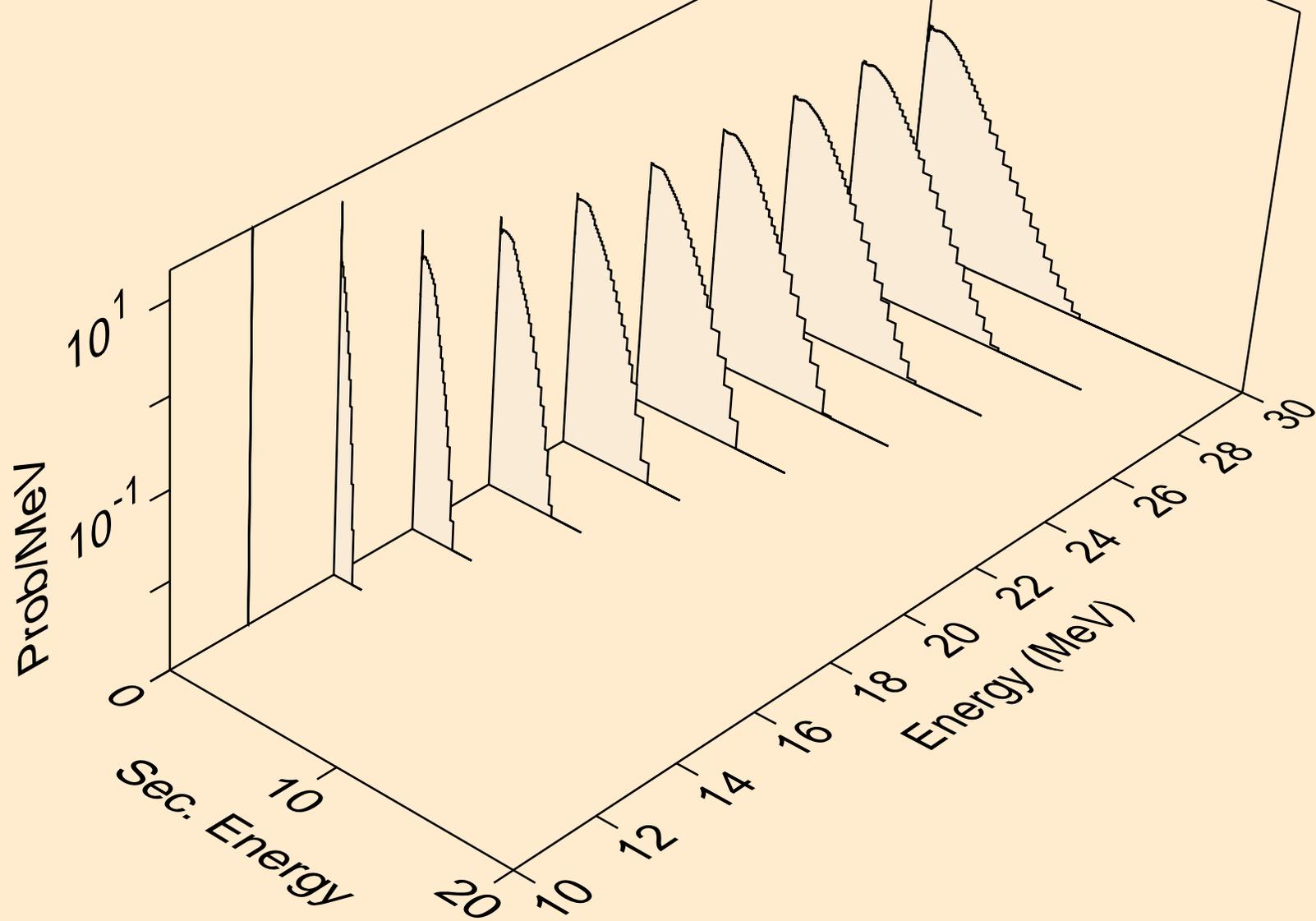CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)a

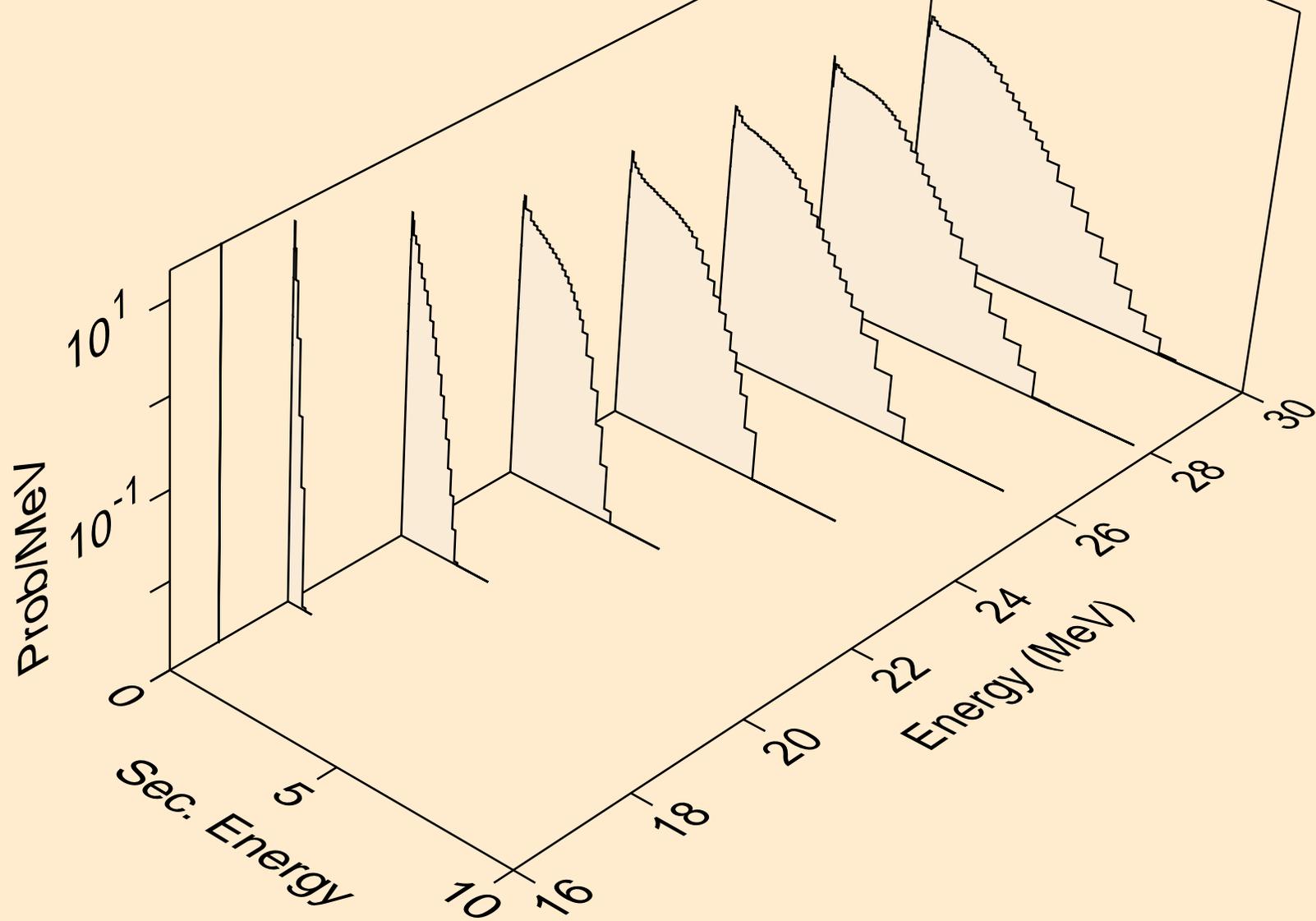CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,2n)a

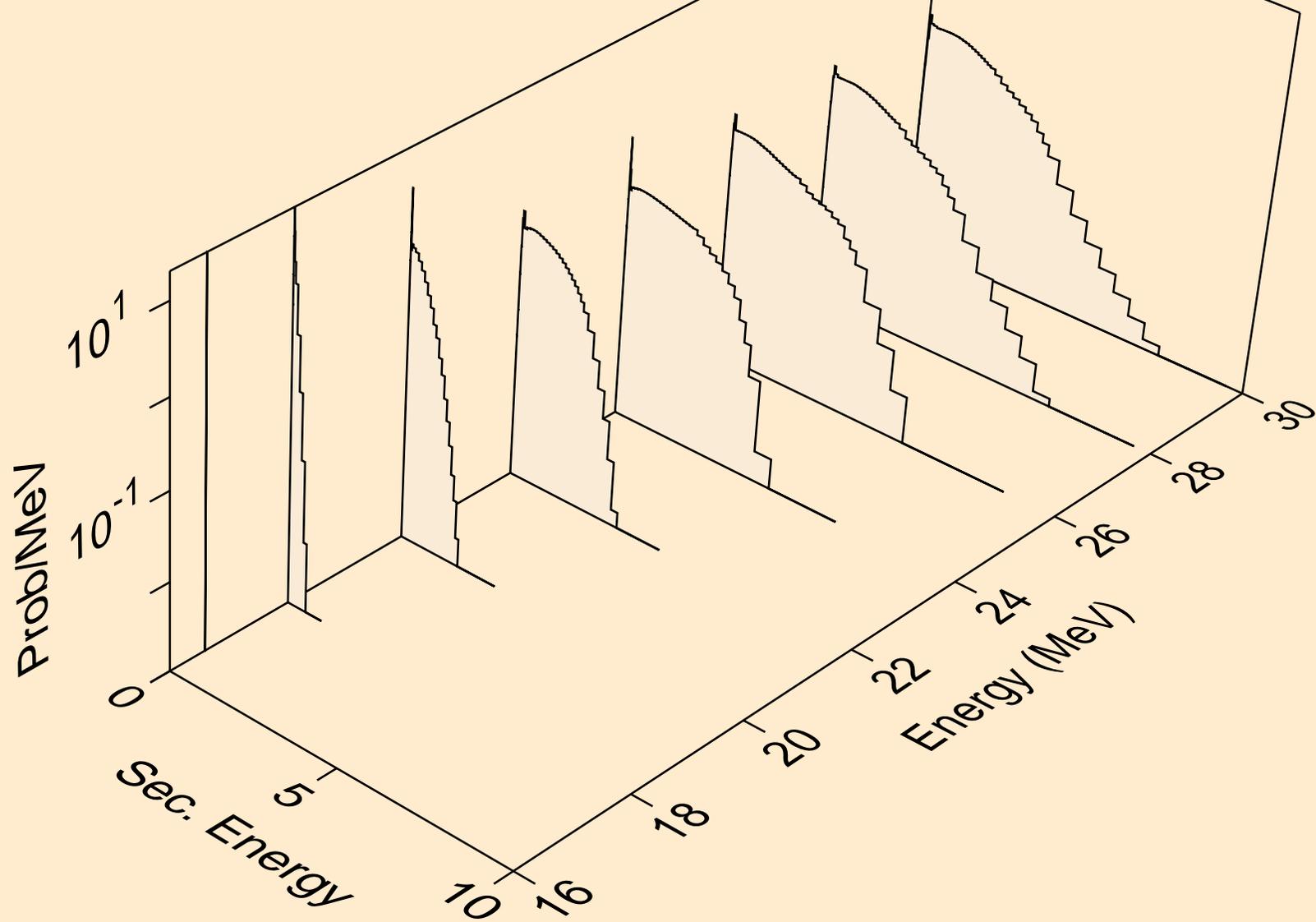CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,3n)a

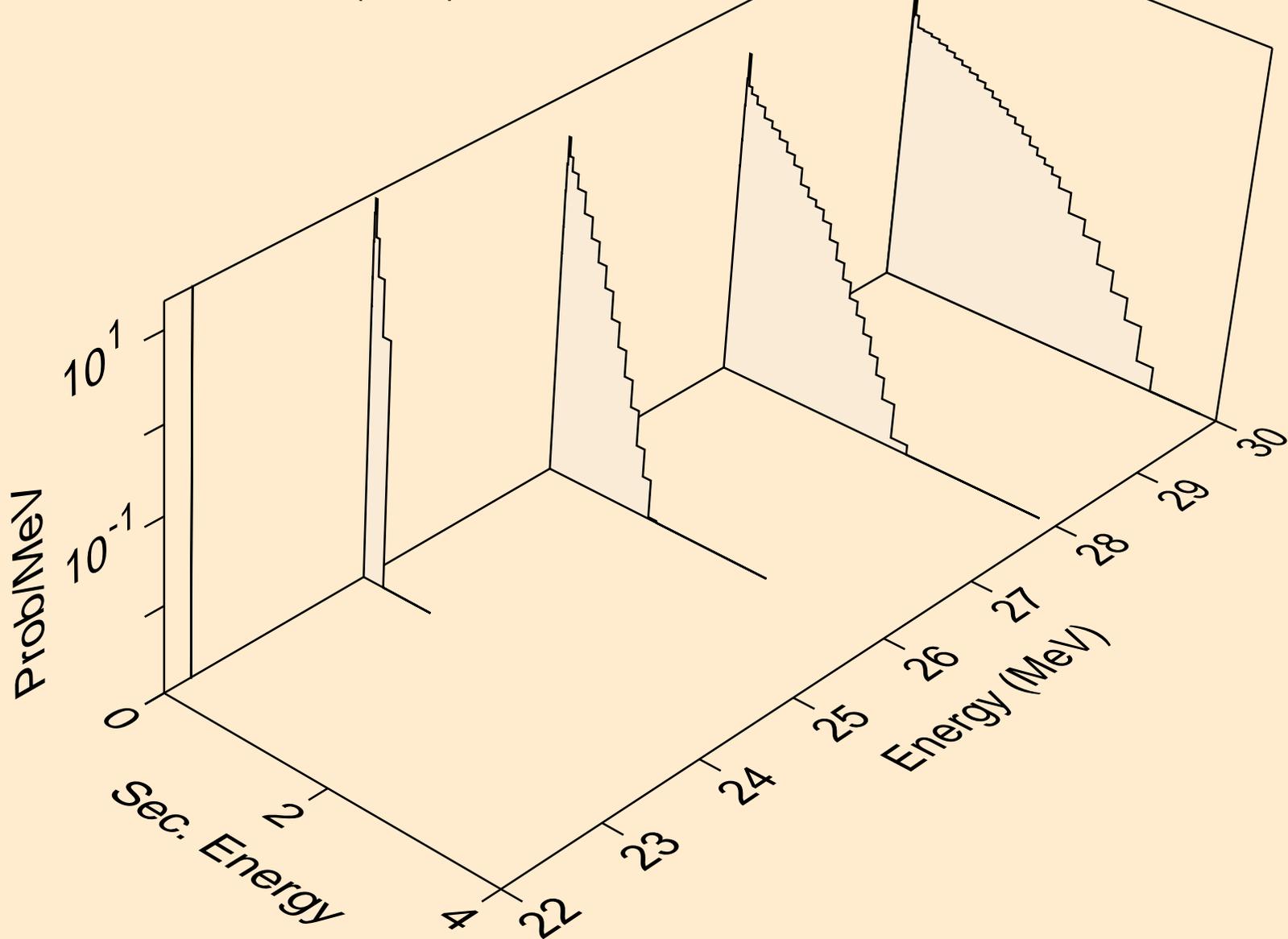CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)p

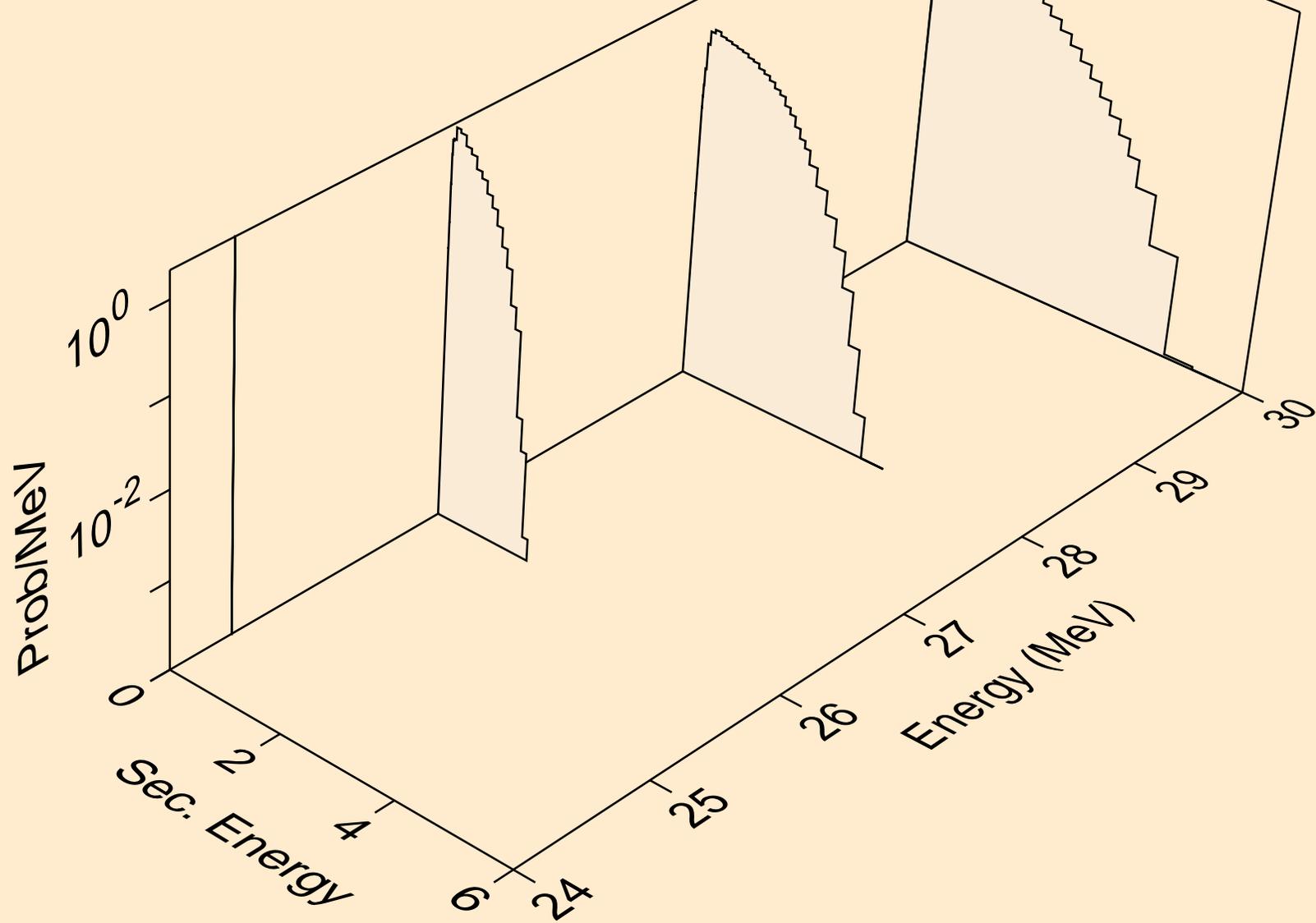CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)d

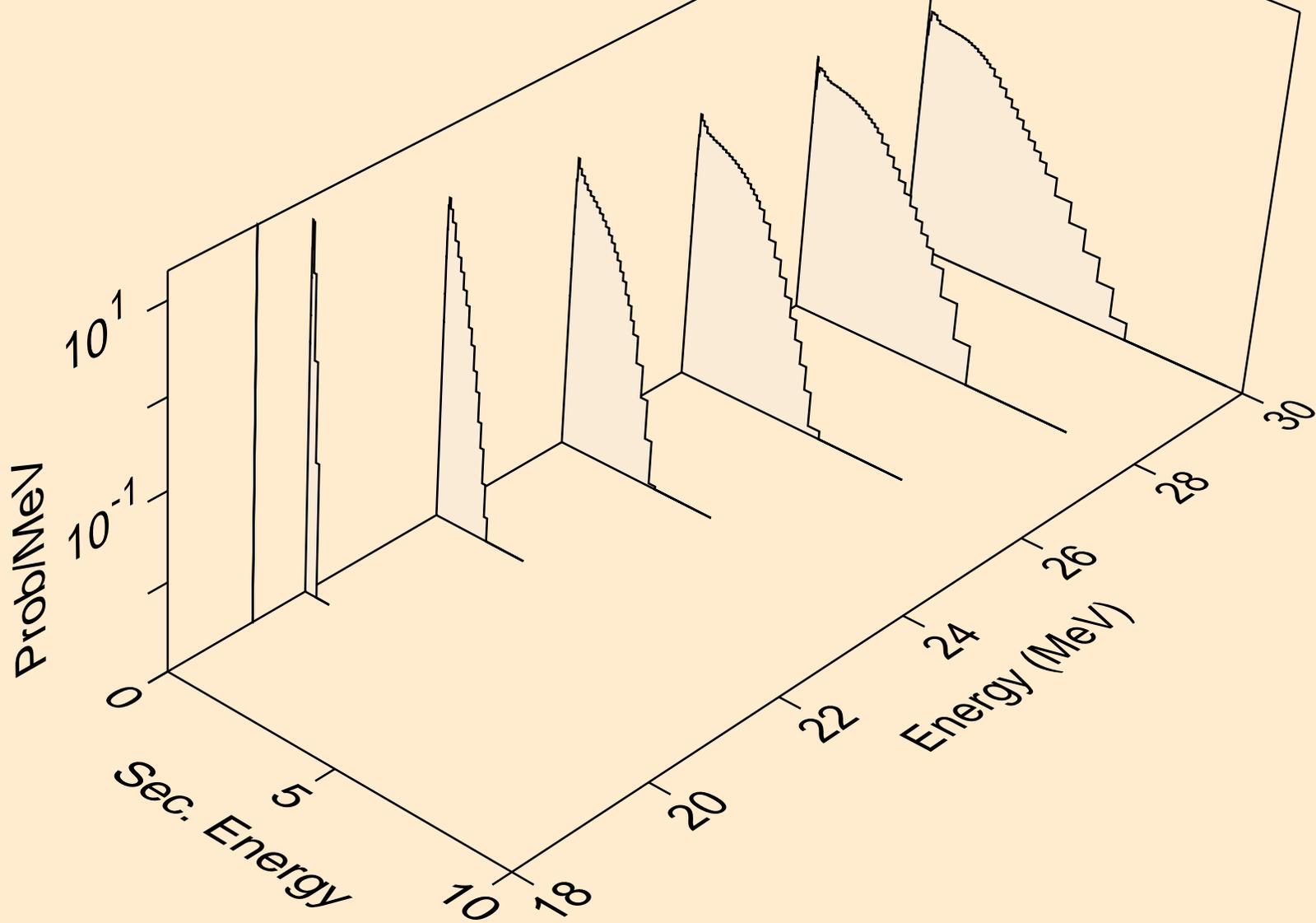CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (a,n*)t

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
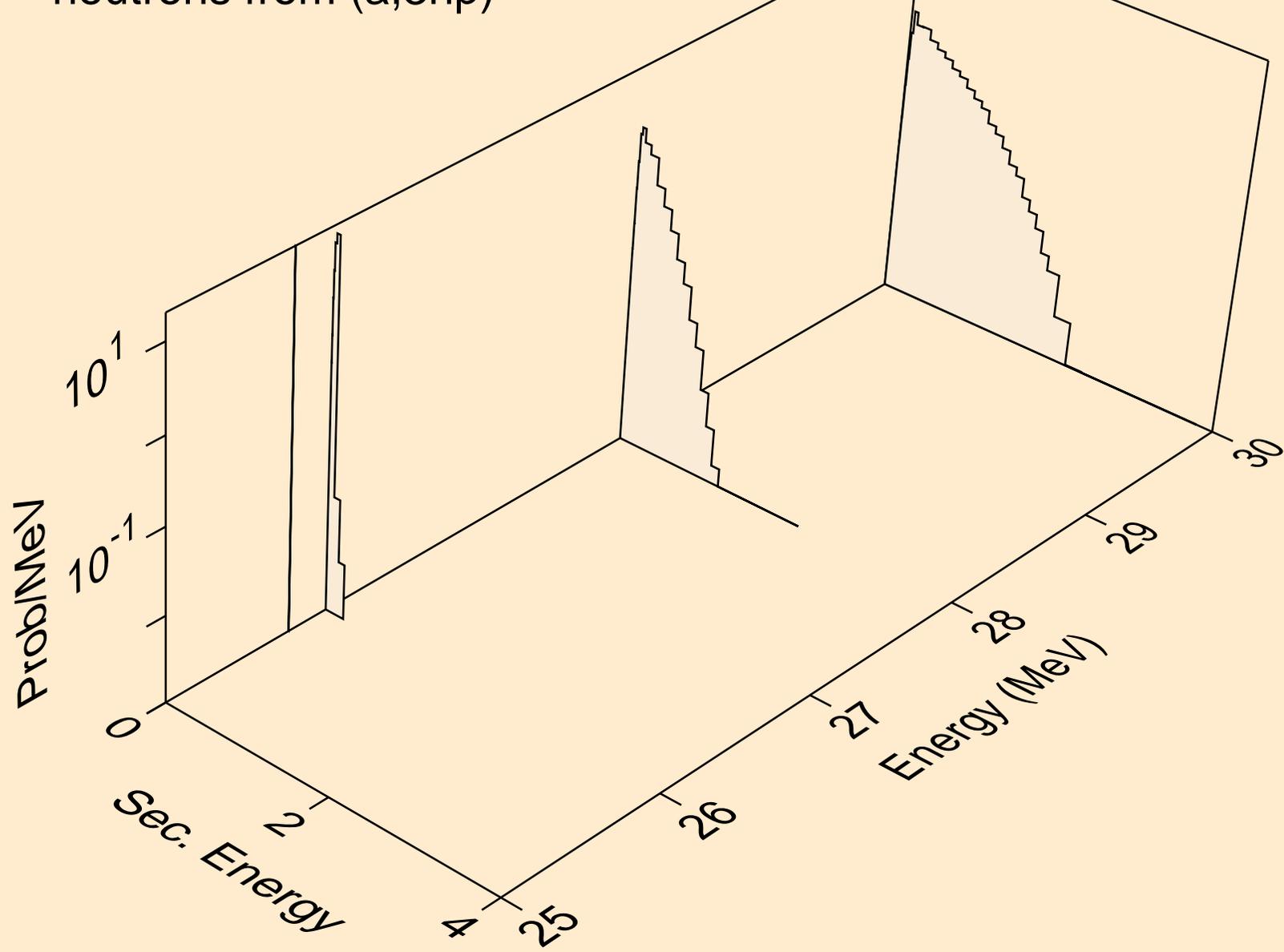neutrons from (a,n*)he3

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
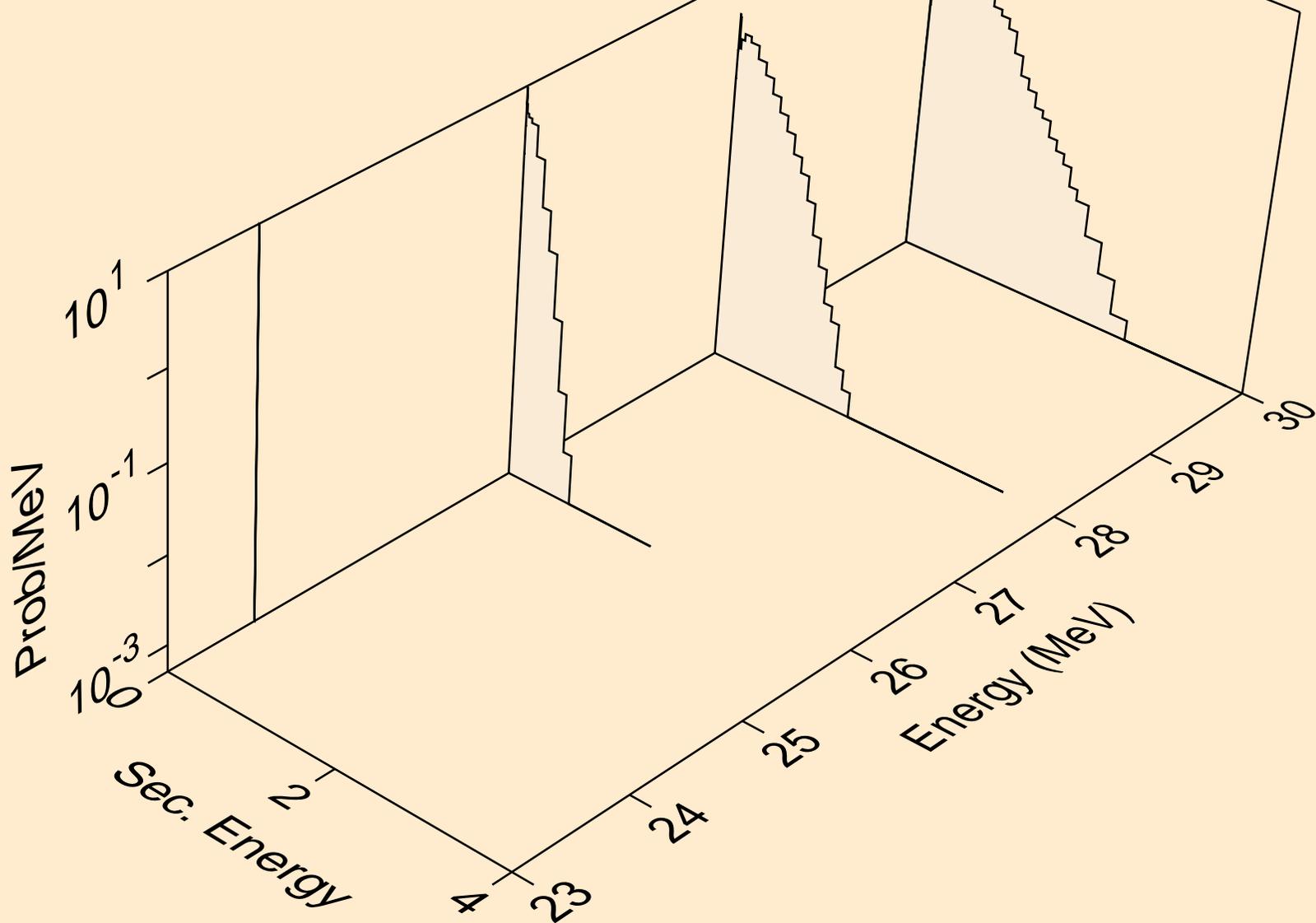neutrons from (a,4n)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
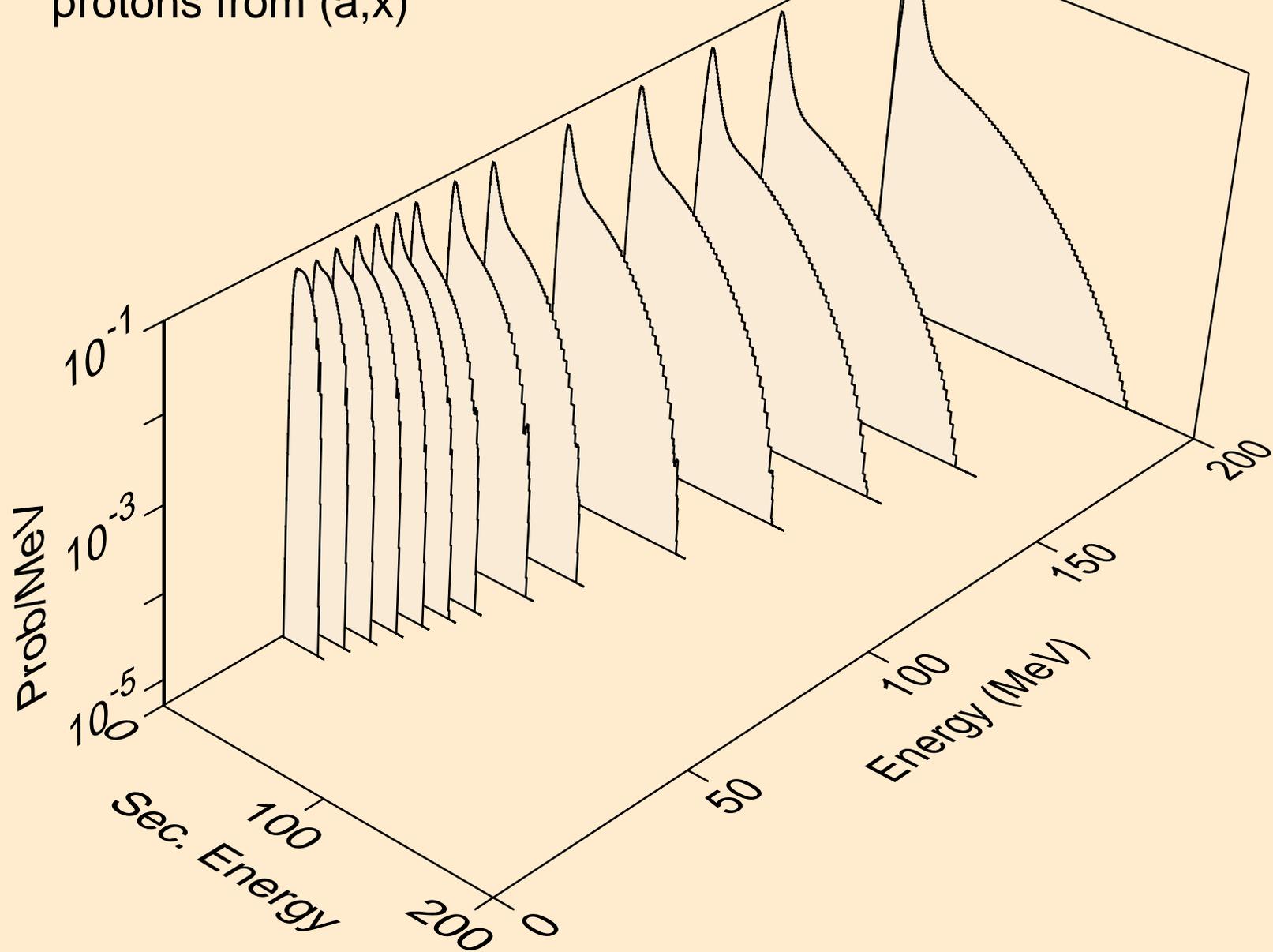neutrons from (a,2np)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
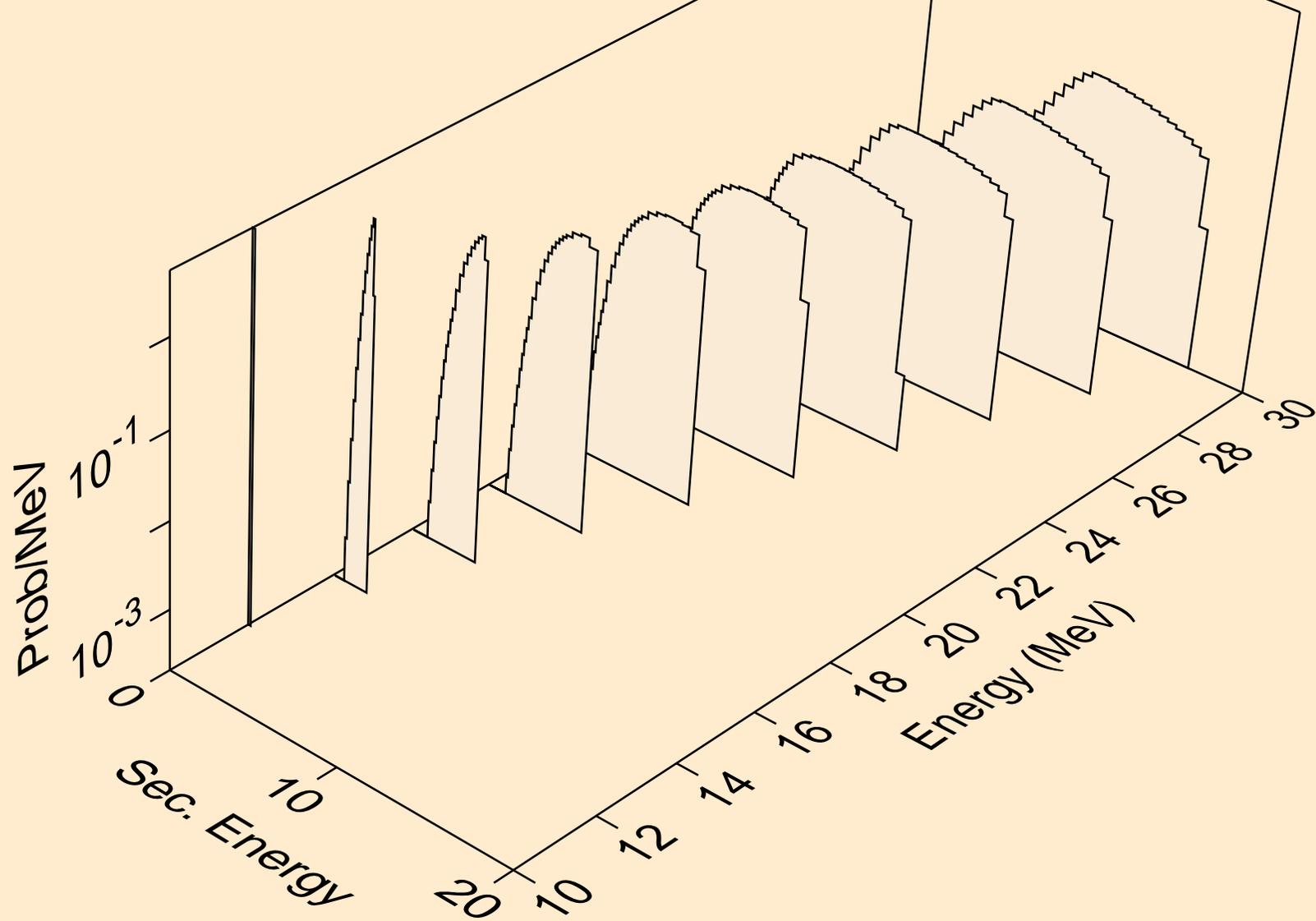neutrons from (a,3np)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
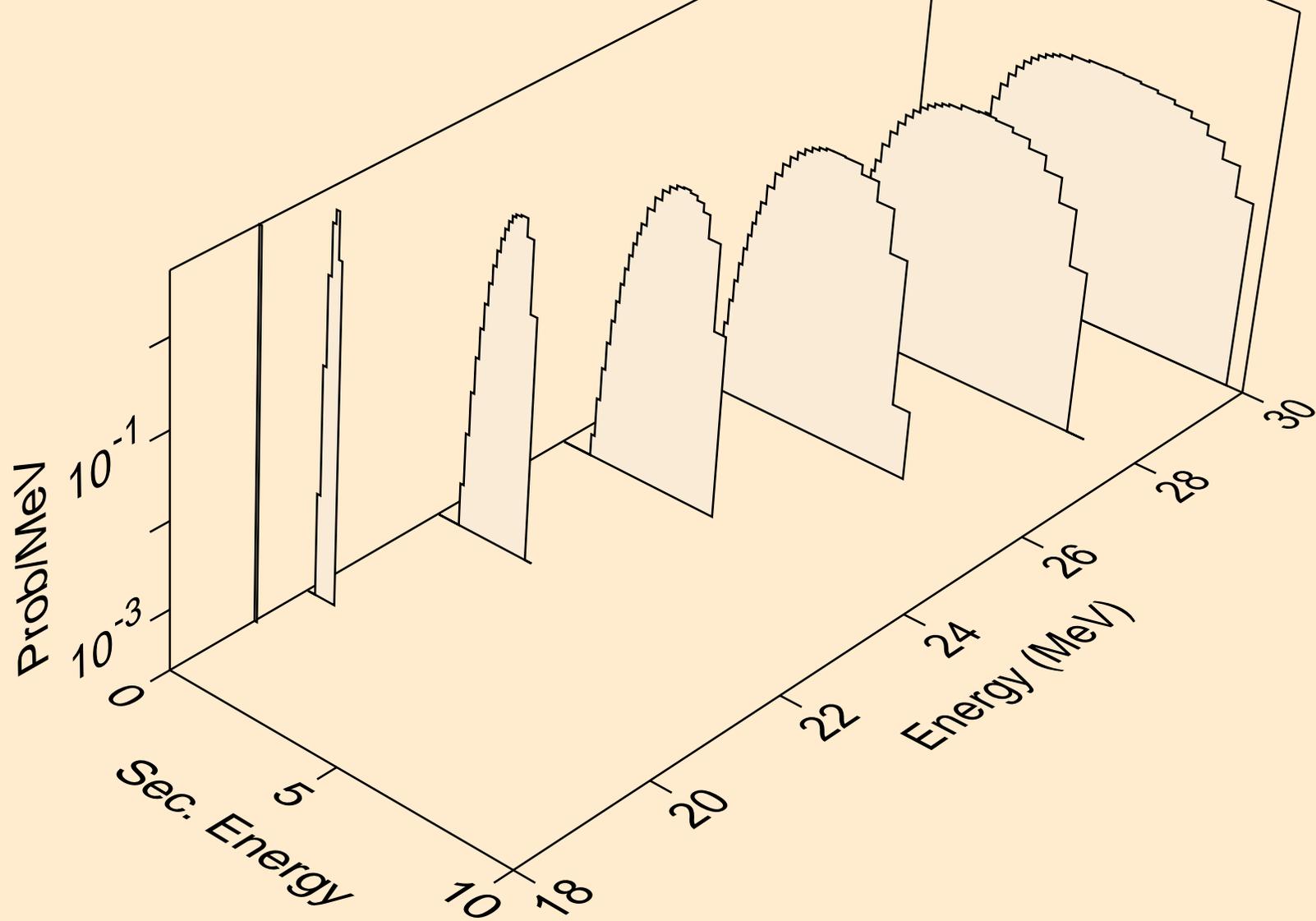neutrons from (a,n2p)

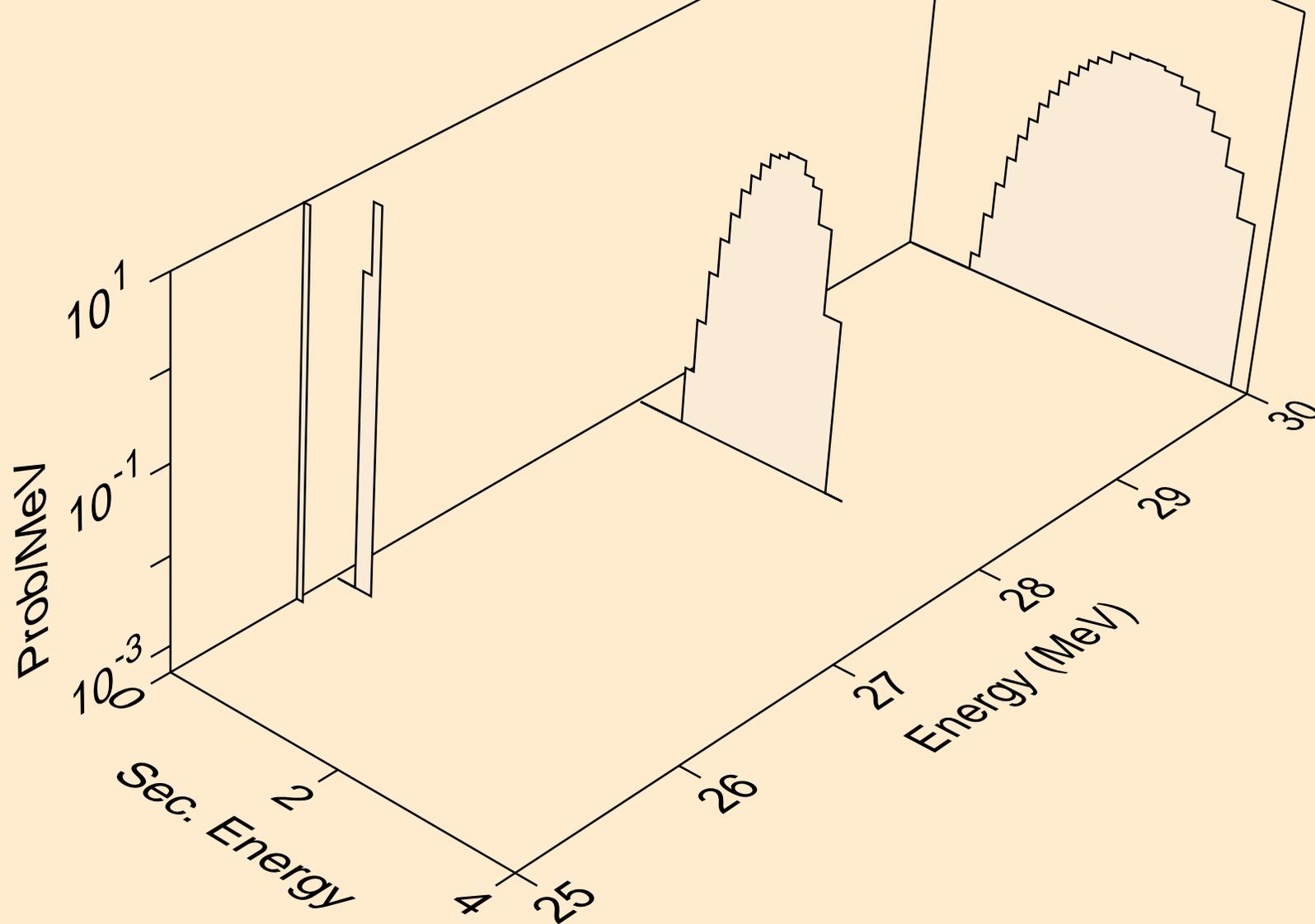CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,x)

Prob/MeV

10^{-1}

10^{-3}

10^{-5}

Sec. Energy

100

200

50

100

150

200

Energy (MeV)

0

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
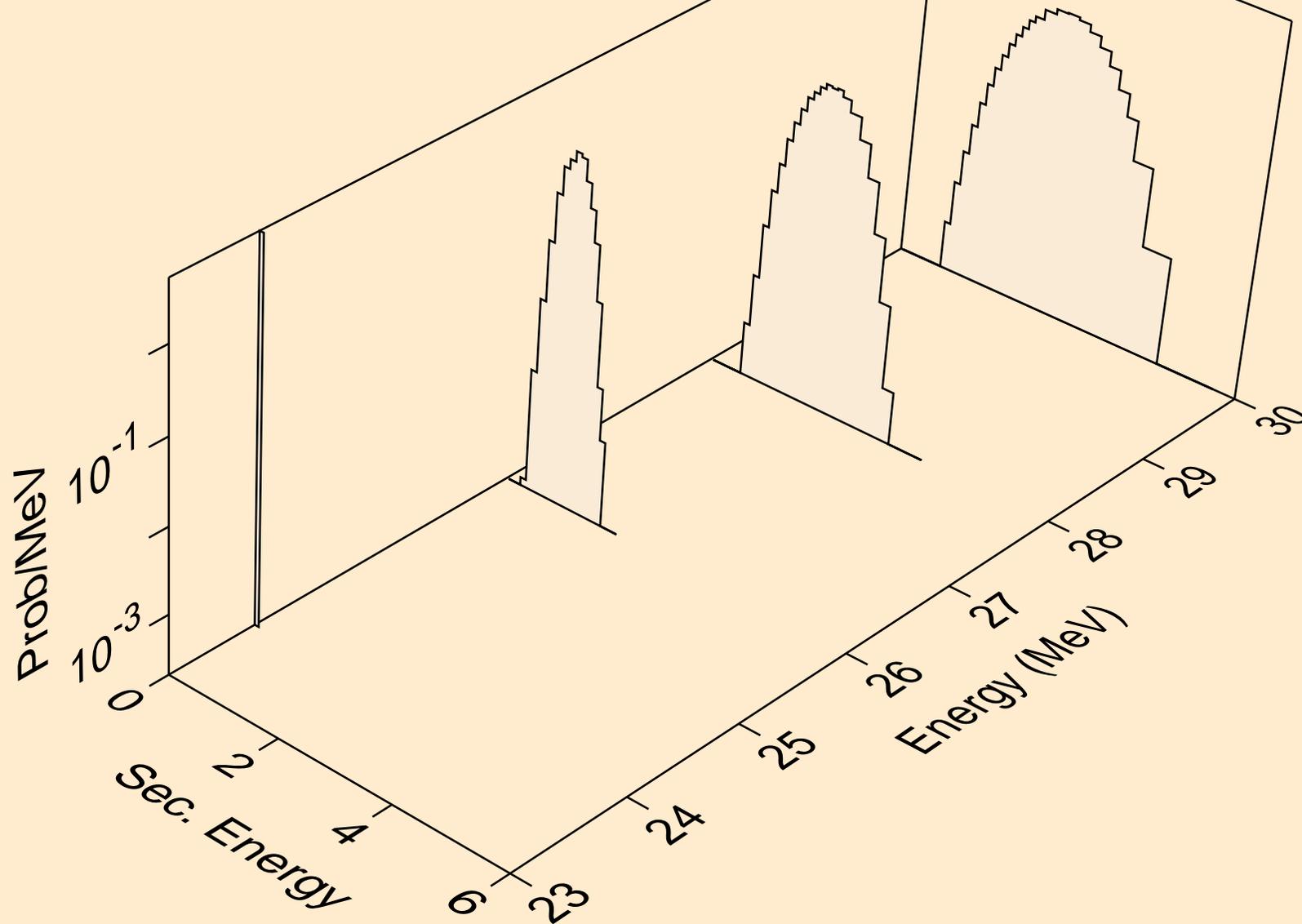protons from (a,n*)p

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,2np)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,3np)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,n2p)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,p)
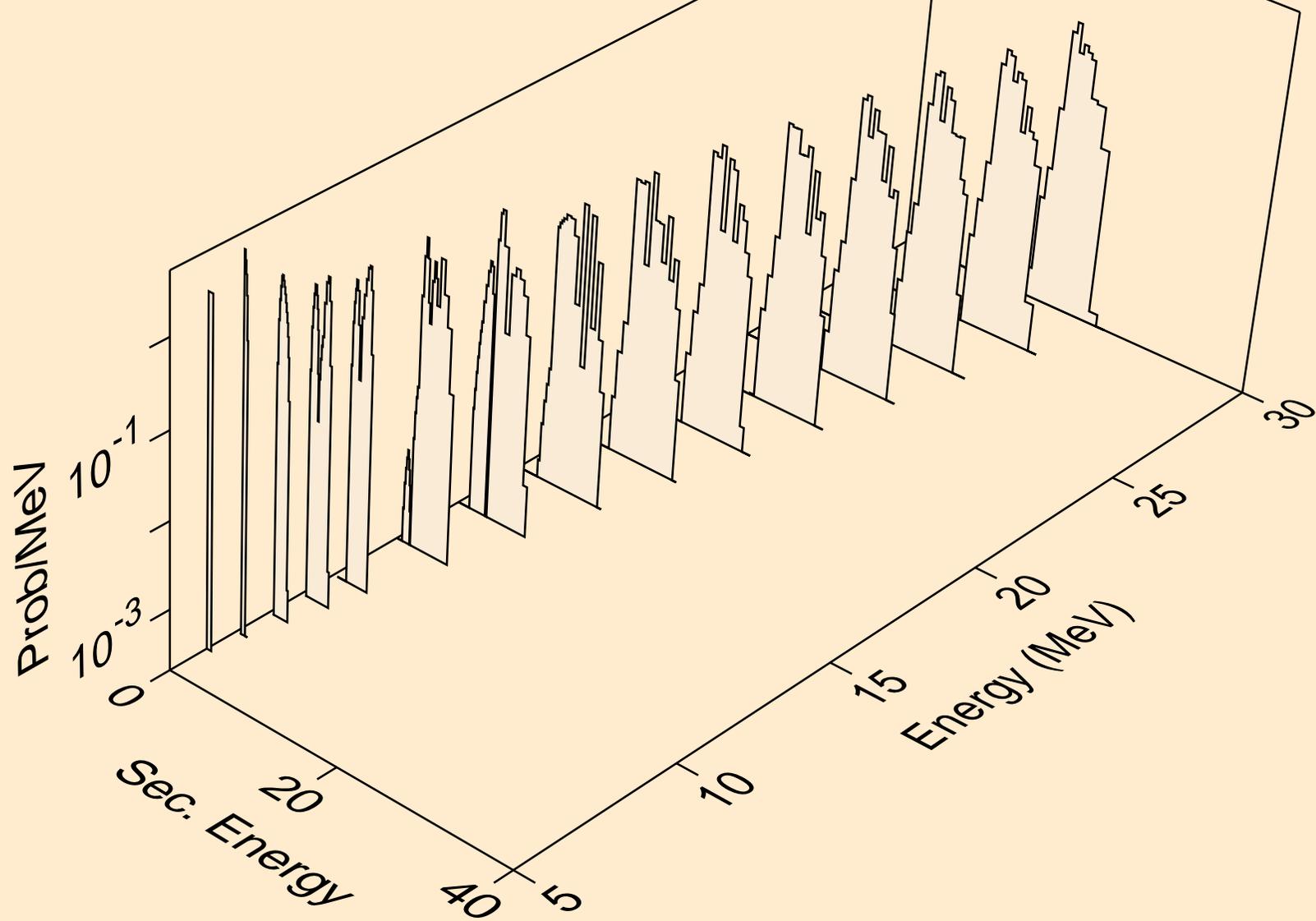
CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
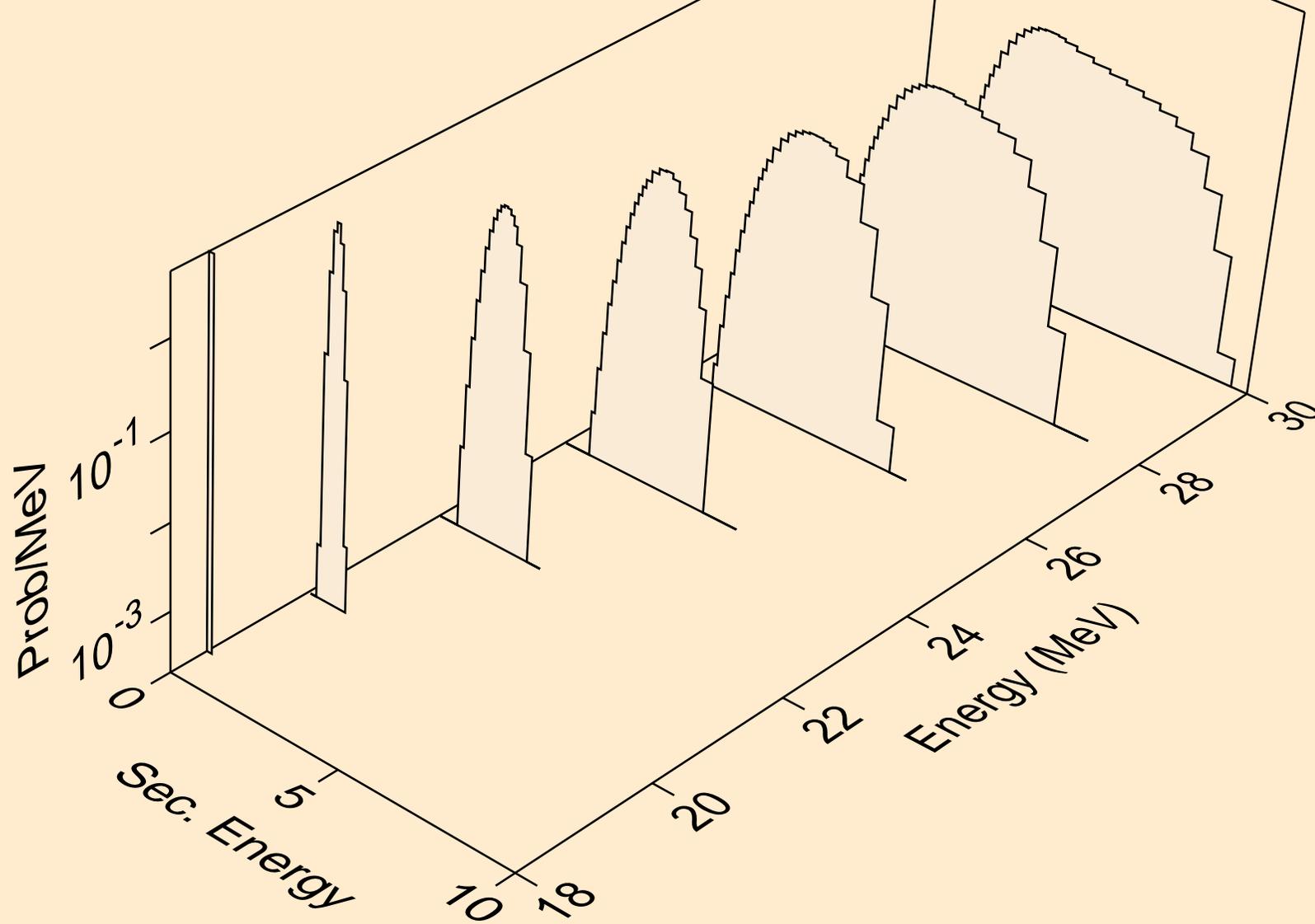protons from (a,2p)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
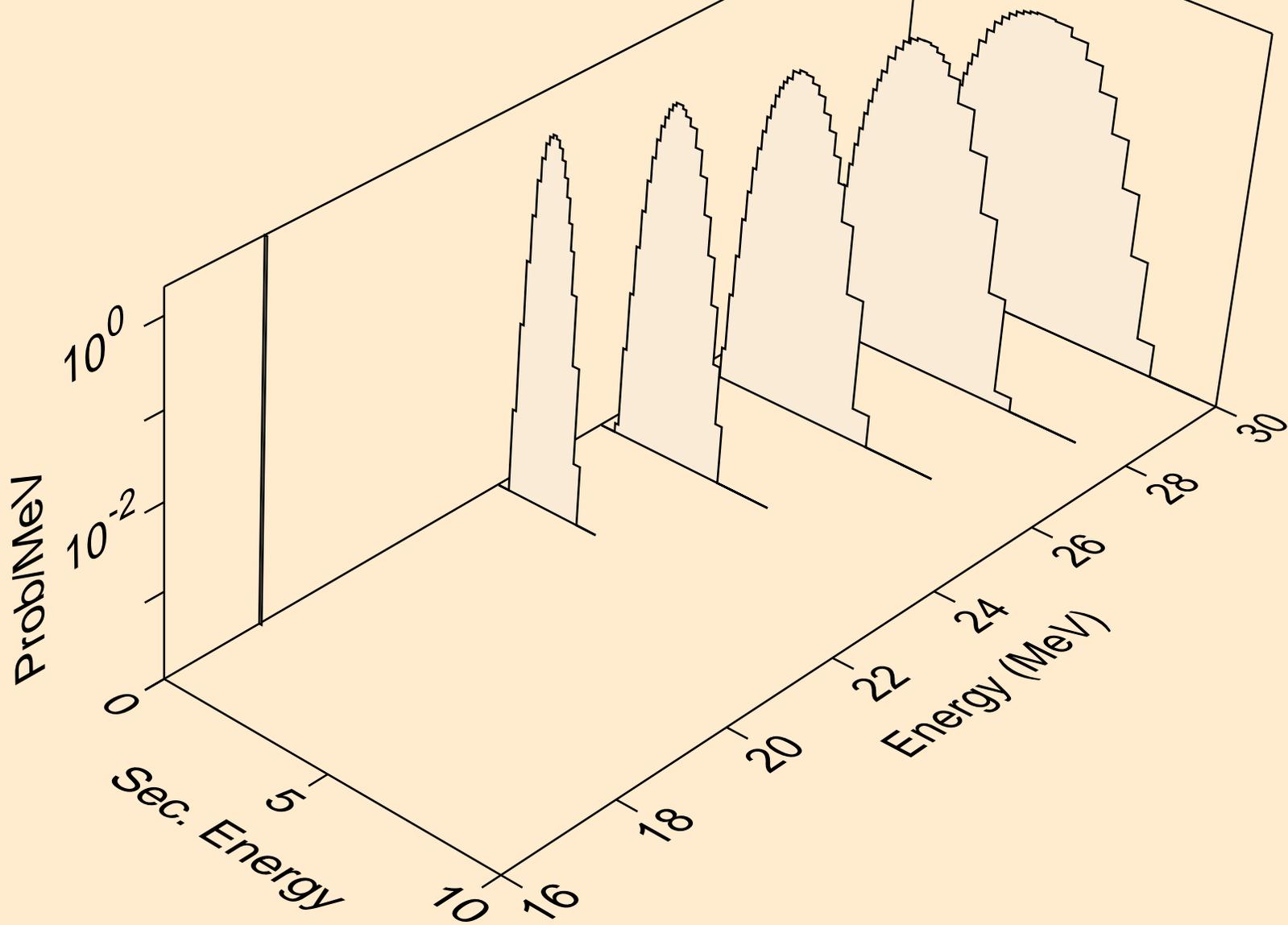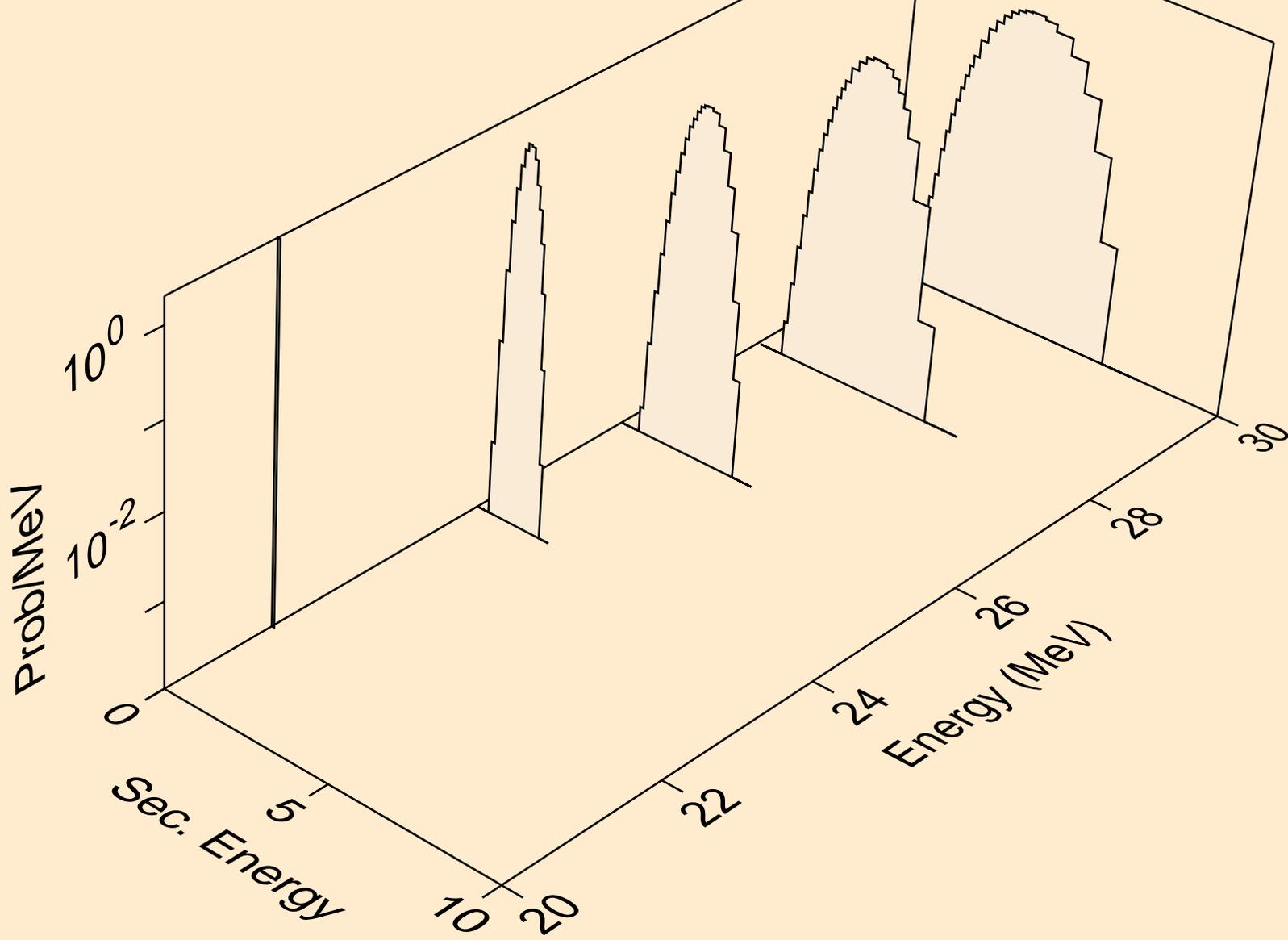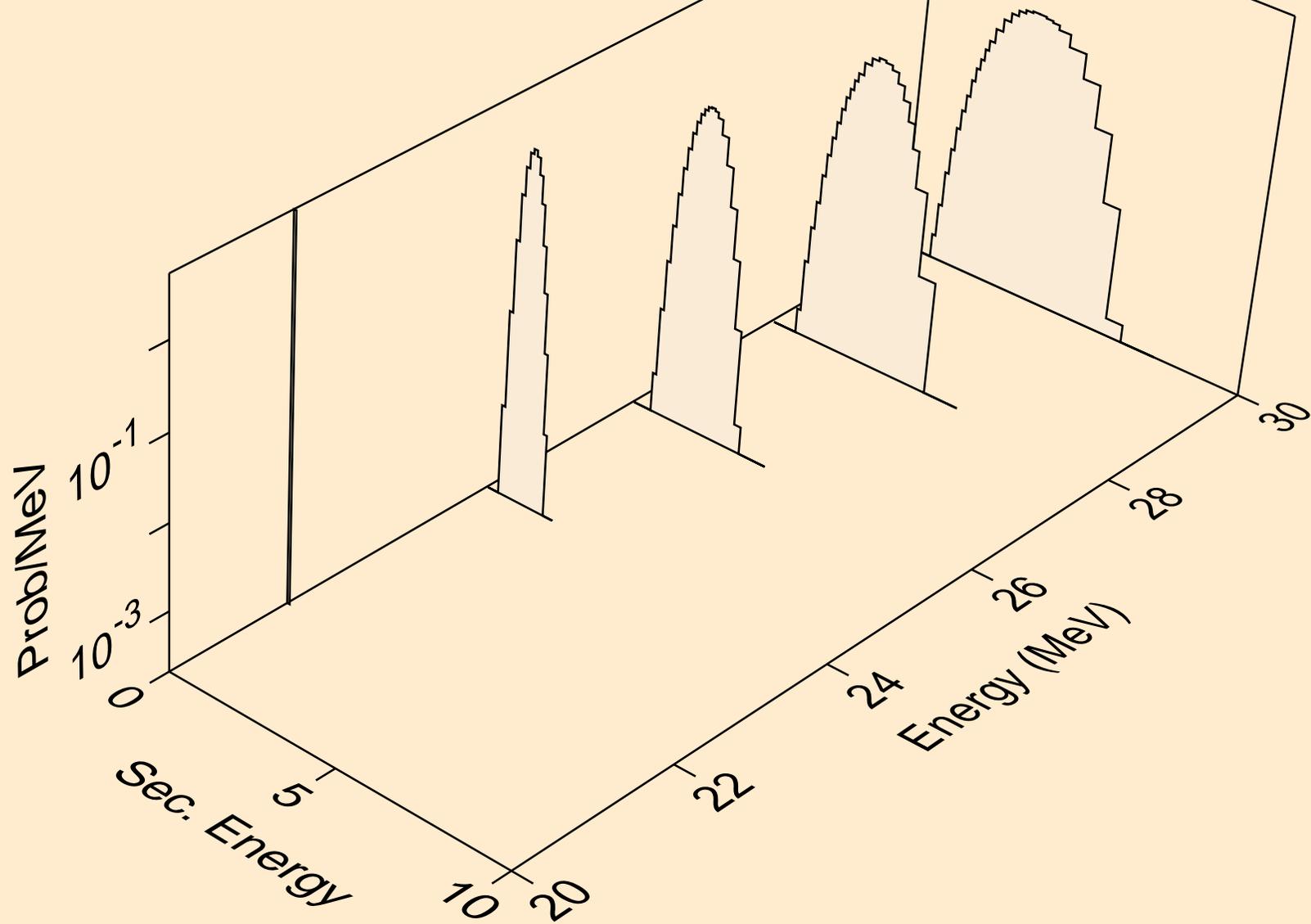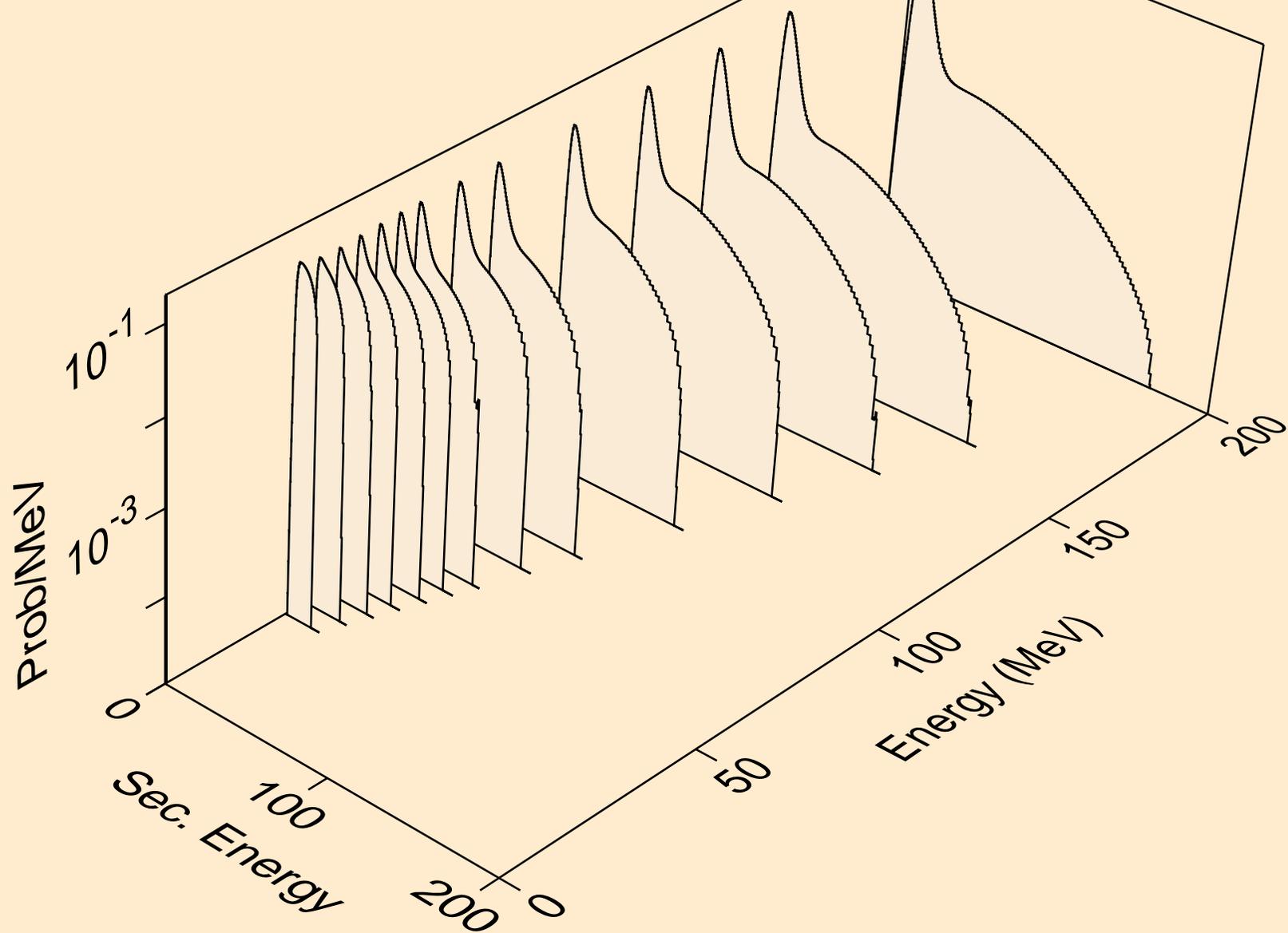protons from (a,pa)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
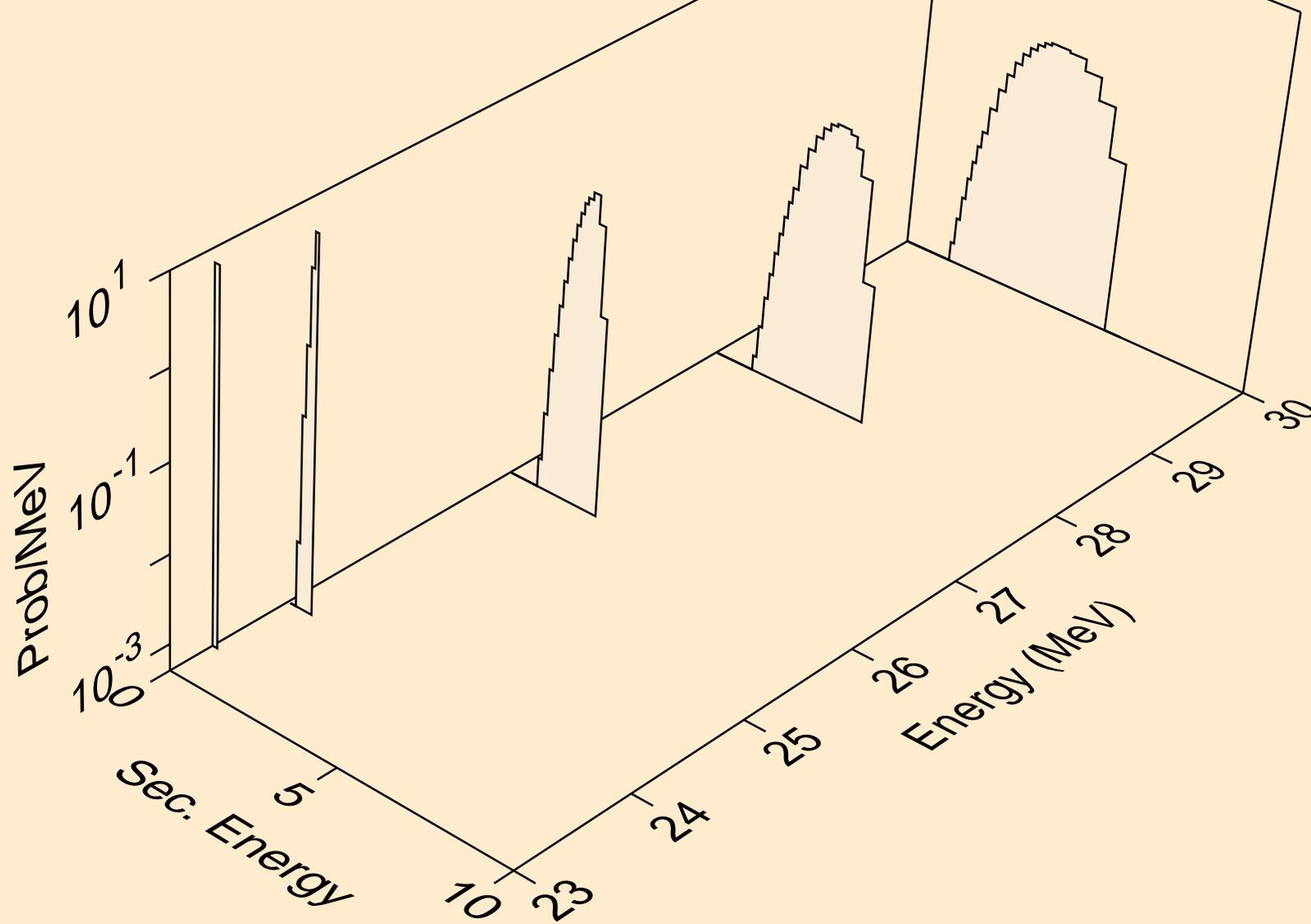protons from (a,pd)

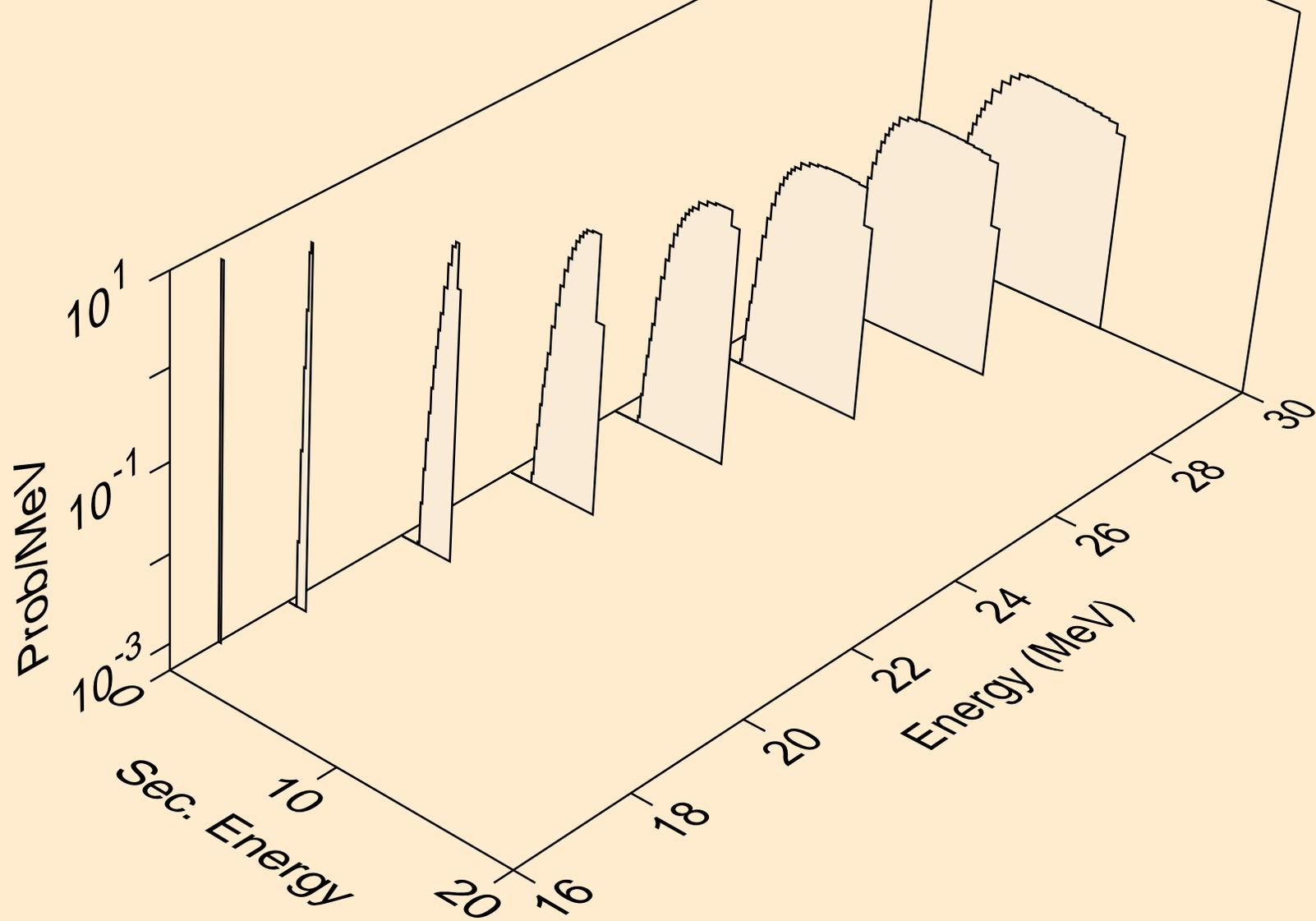CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
protons from (a,pt)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
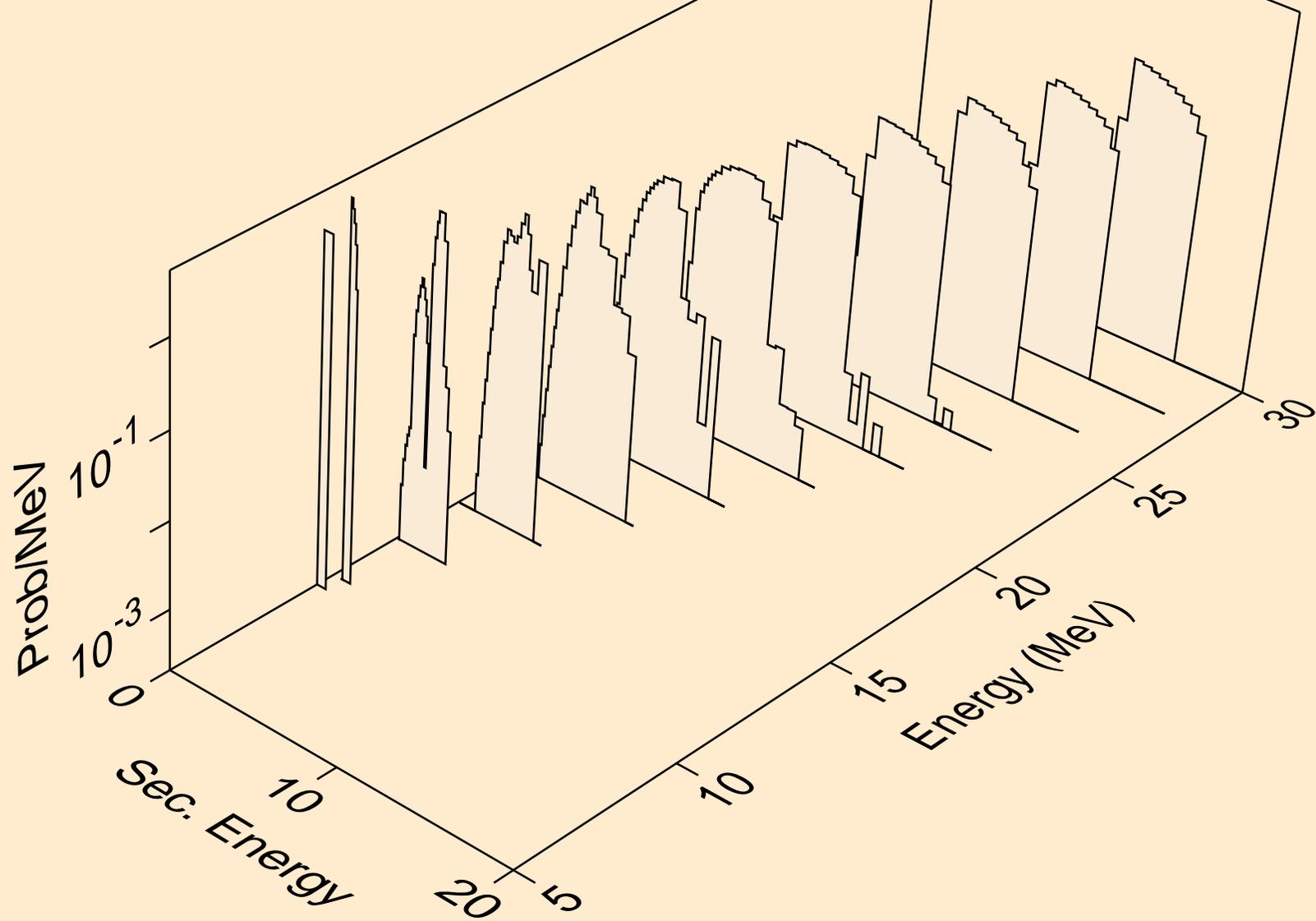deuterons from (a,x)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
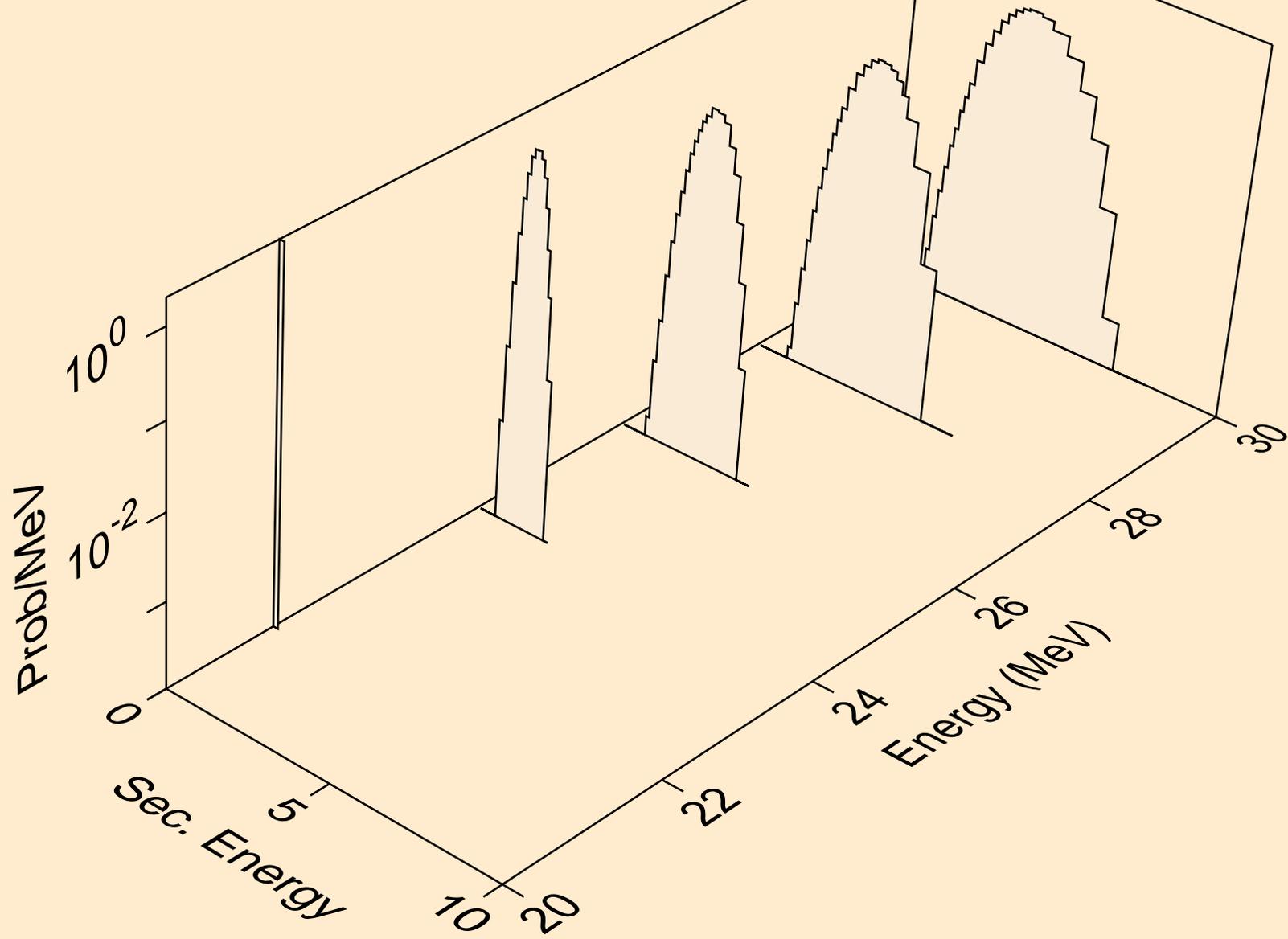deuterons from (a,2nd)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
deuterons from (a,n*)d

Prob/MeV

10^1

10^{-1}

10^{-3}

10^0

Sec. Energy

10

20

Energy (MeV)
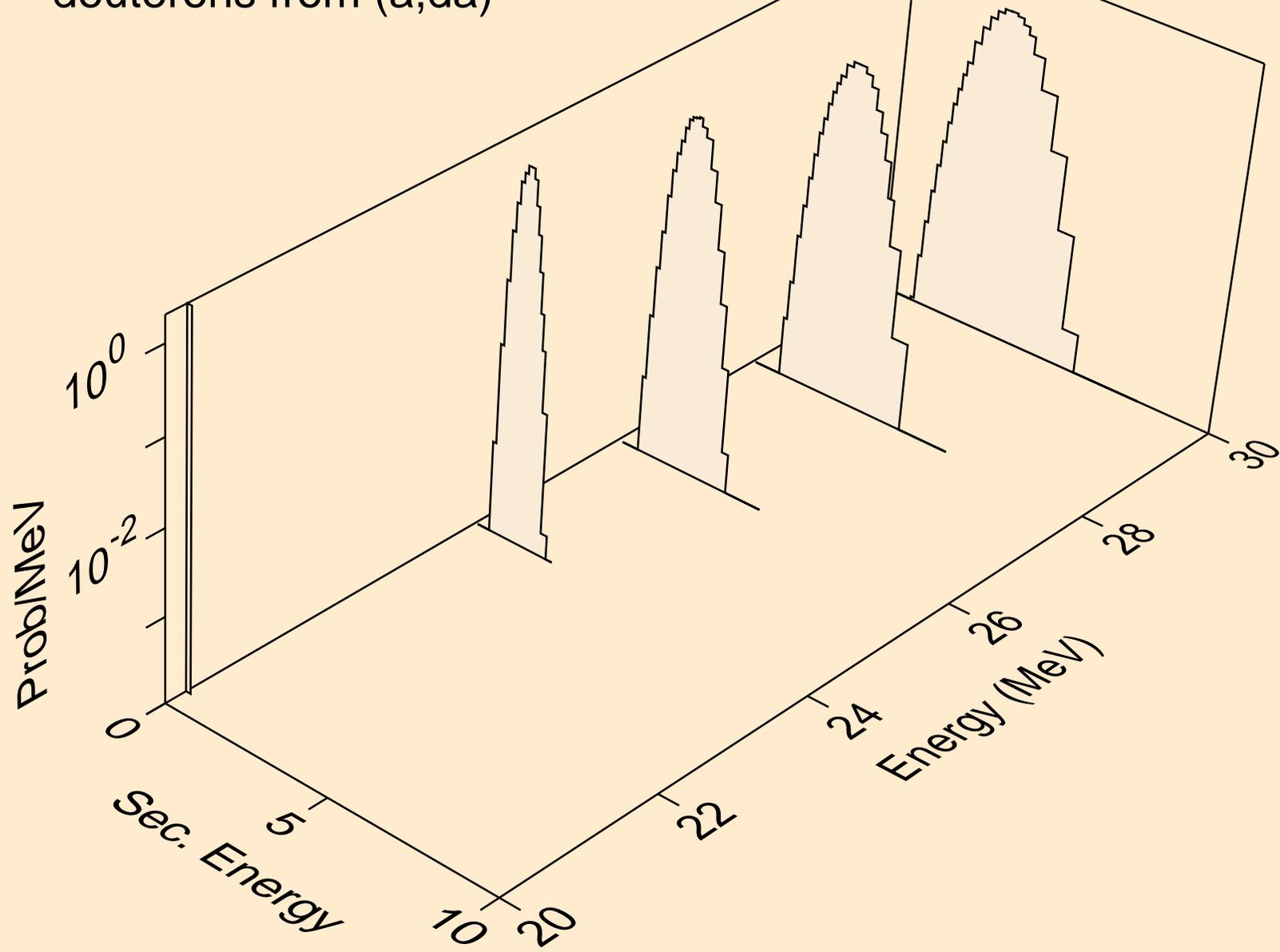
16

18

20

22

24

26

28

30

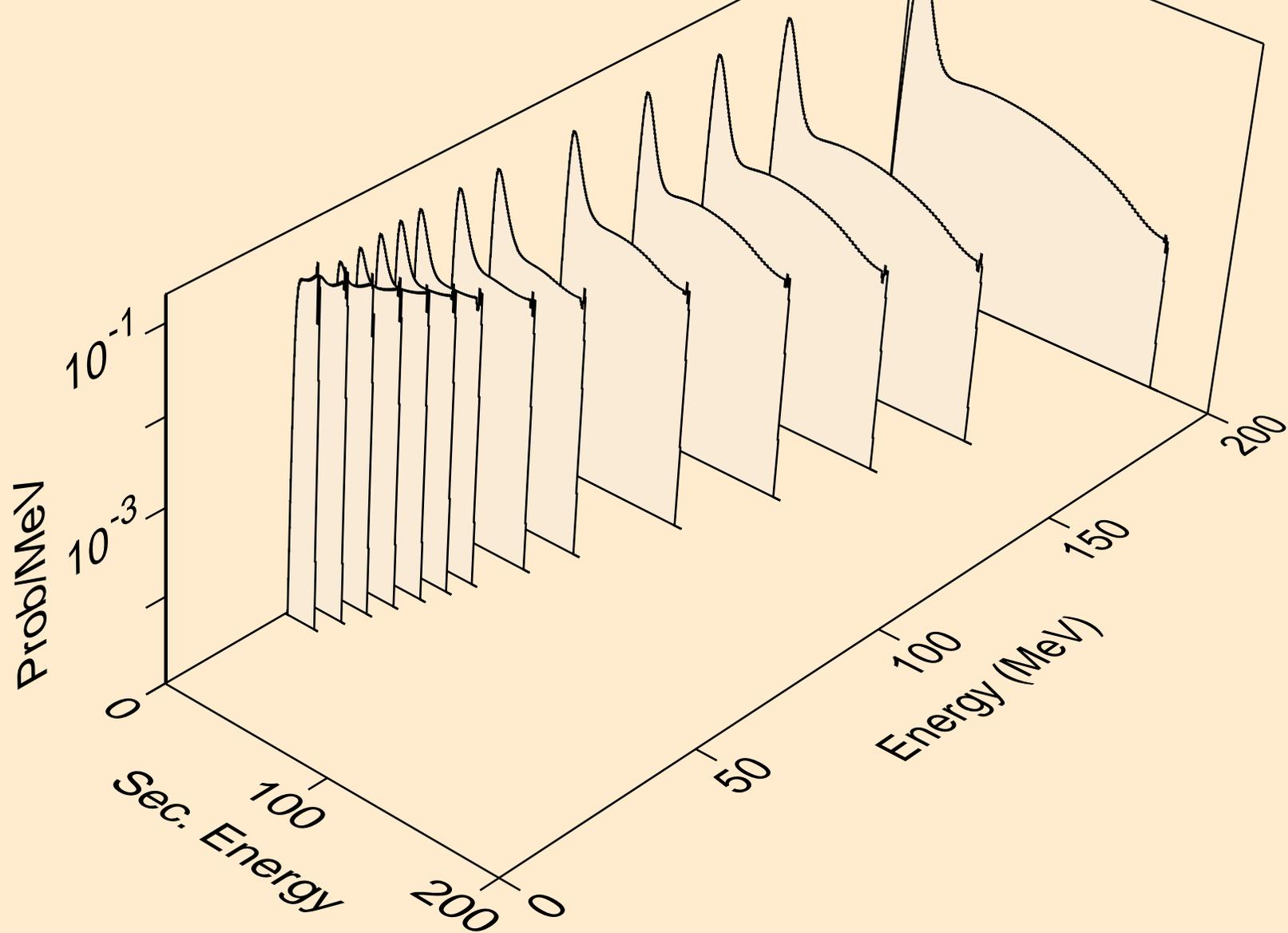CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
deuterons from (a,d)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
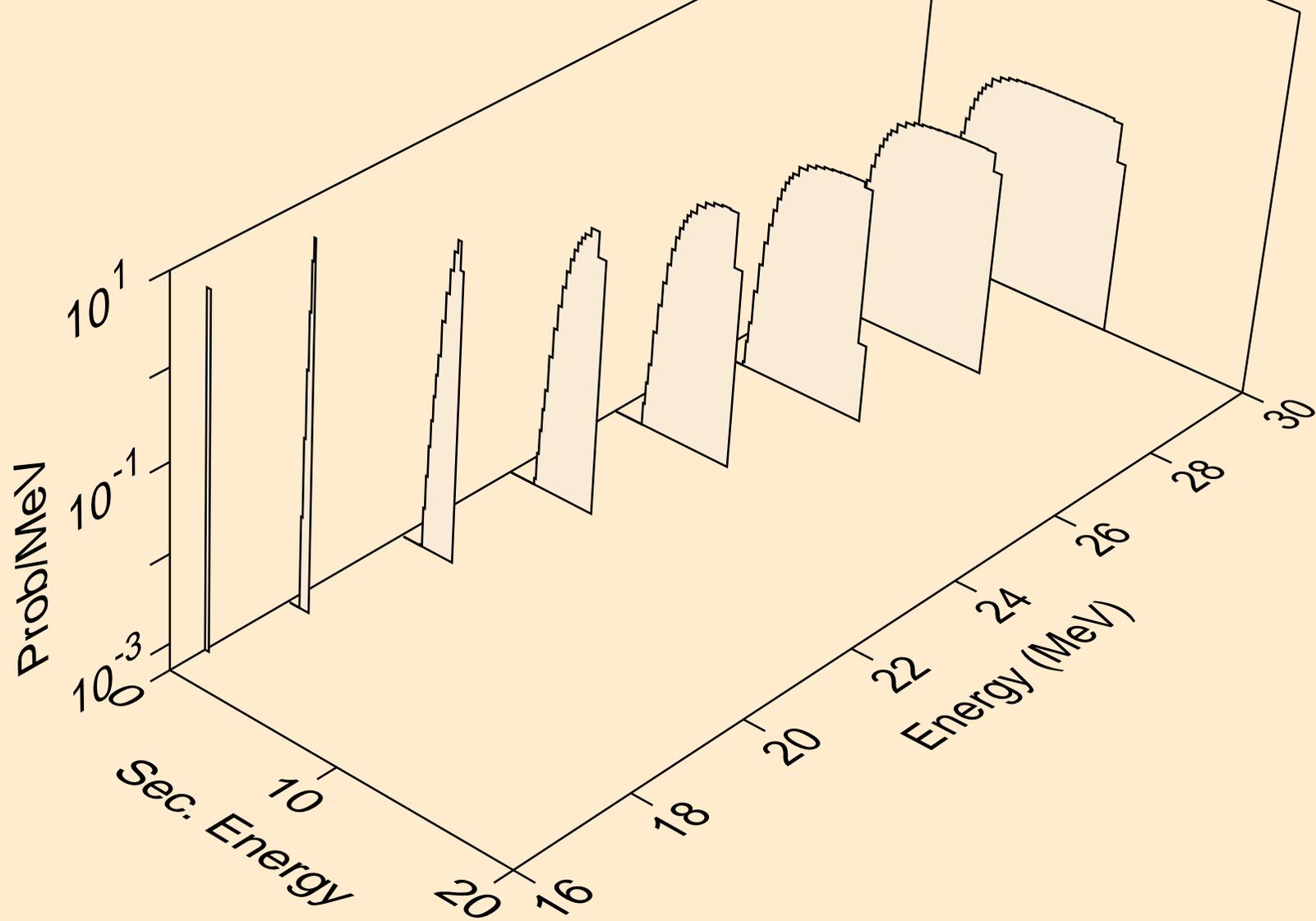deuterons from (a,pd)

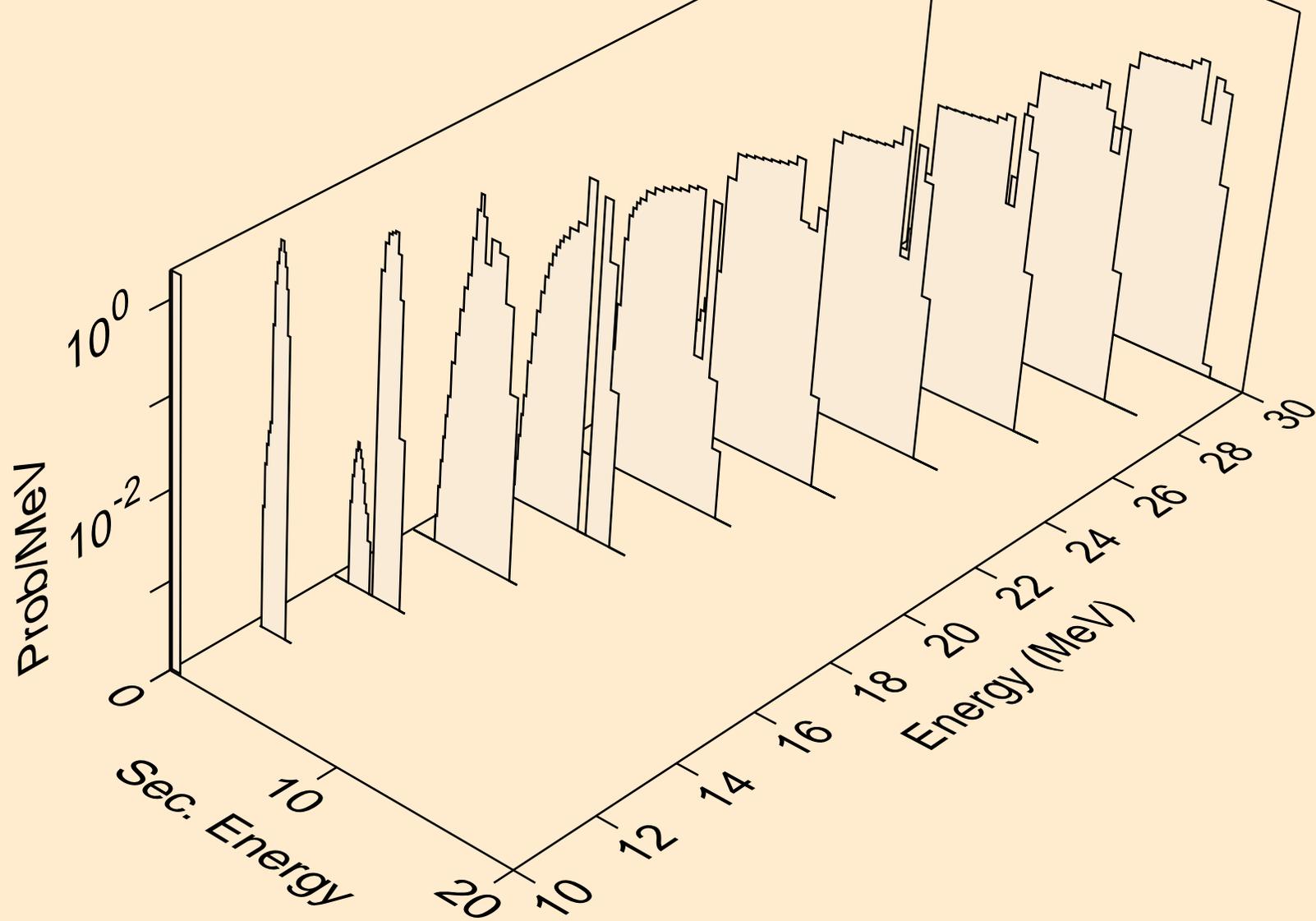CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
deuterons from (a,da)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
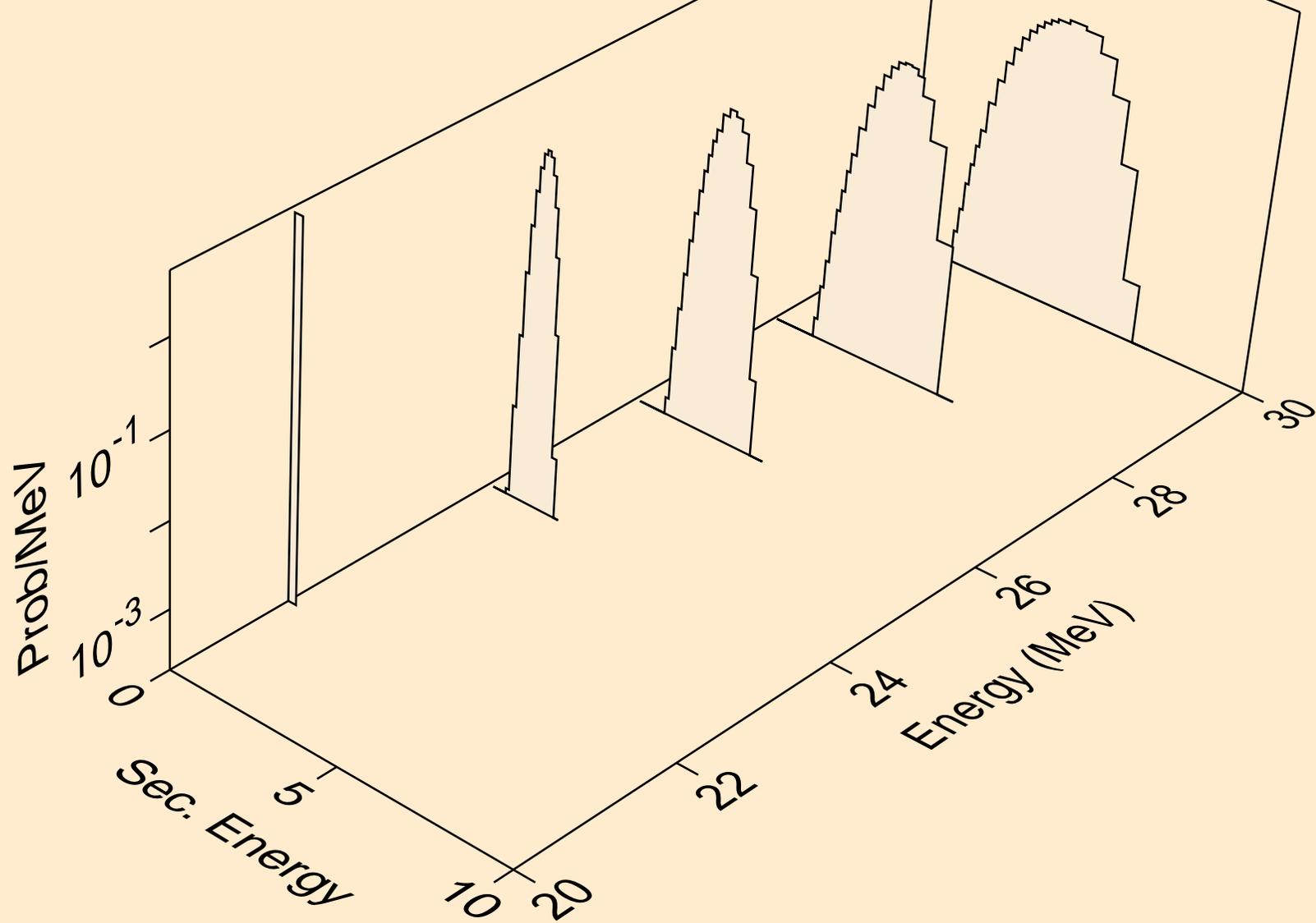tritons from (a,x)

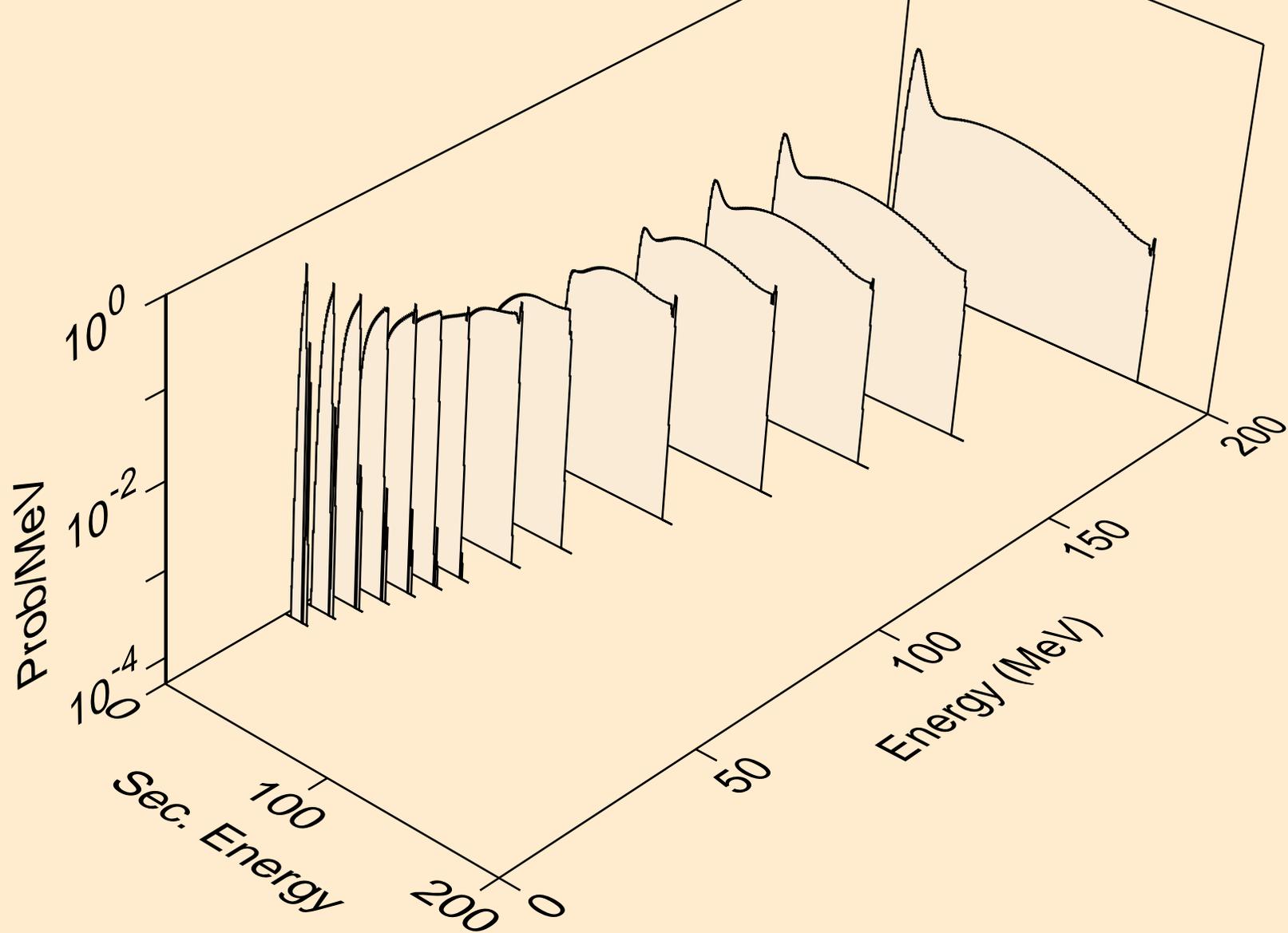CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
tritons from (a,n*)t

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K

tritons from (a,t)

Prob/MeV

10^0

10^{-2}

Sec. Energy

0

10

20

Energy (MeV)

10

12

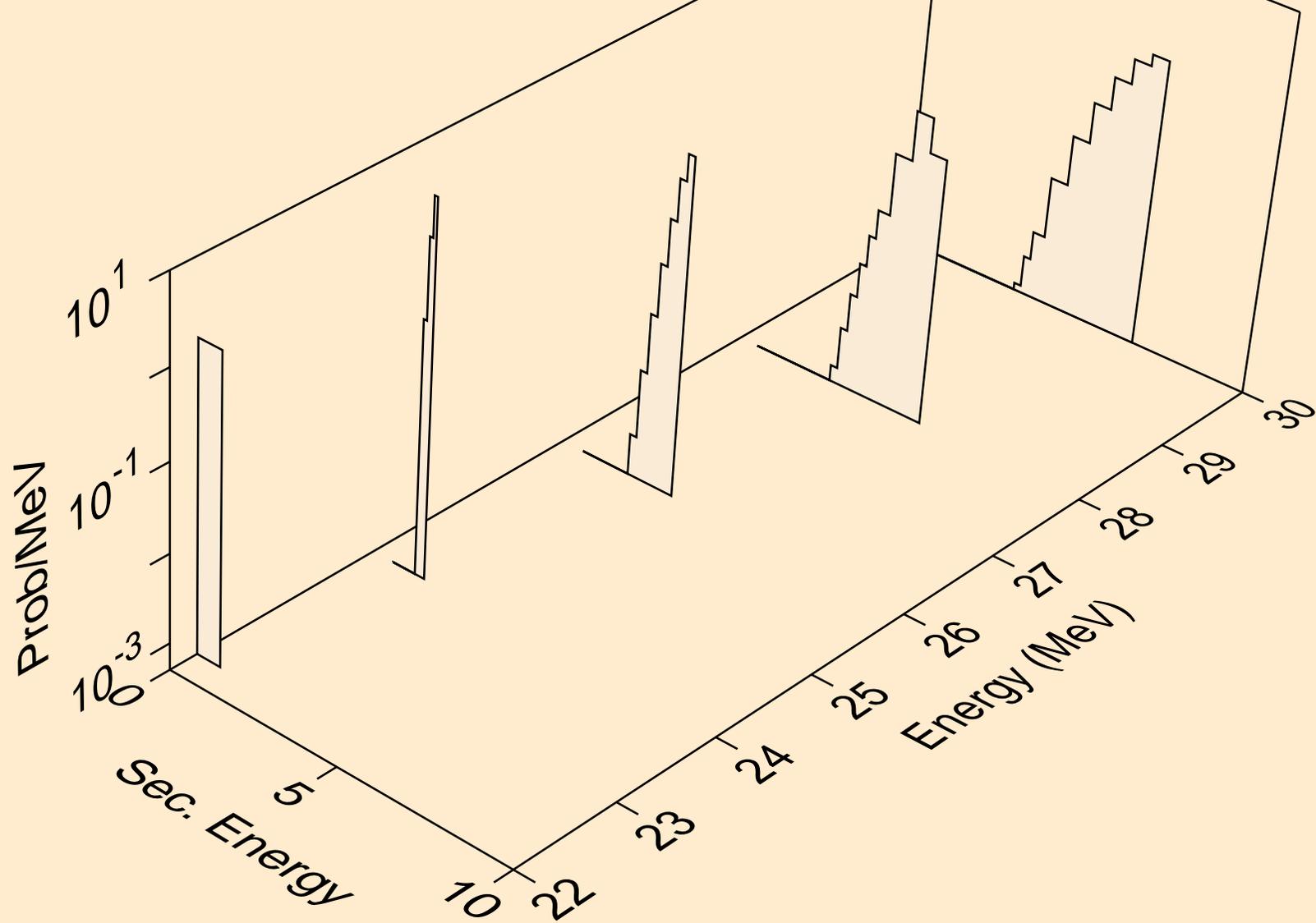14

16

18

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22

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26

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30

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
tritons from (a,pt)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
he3s from (a,x)

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
he3s from (a,n*)he3

CA049 ALPHA ACER TENDL-2023 LIBRARY; T=0.K
he3s from (a,he3)