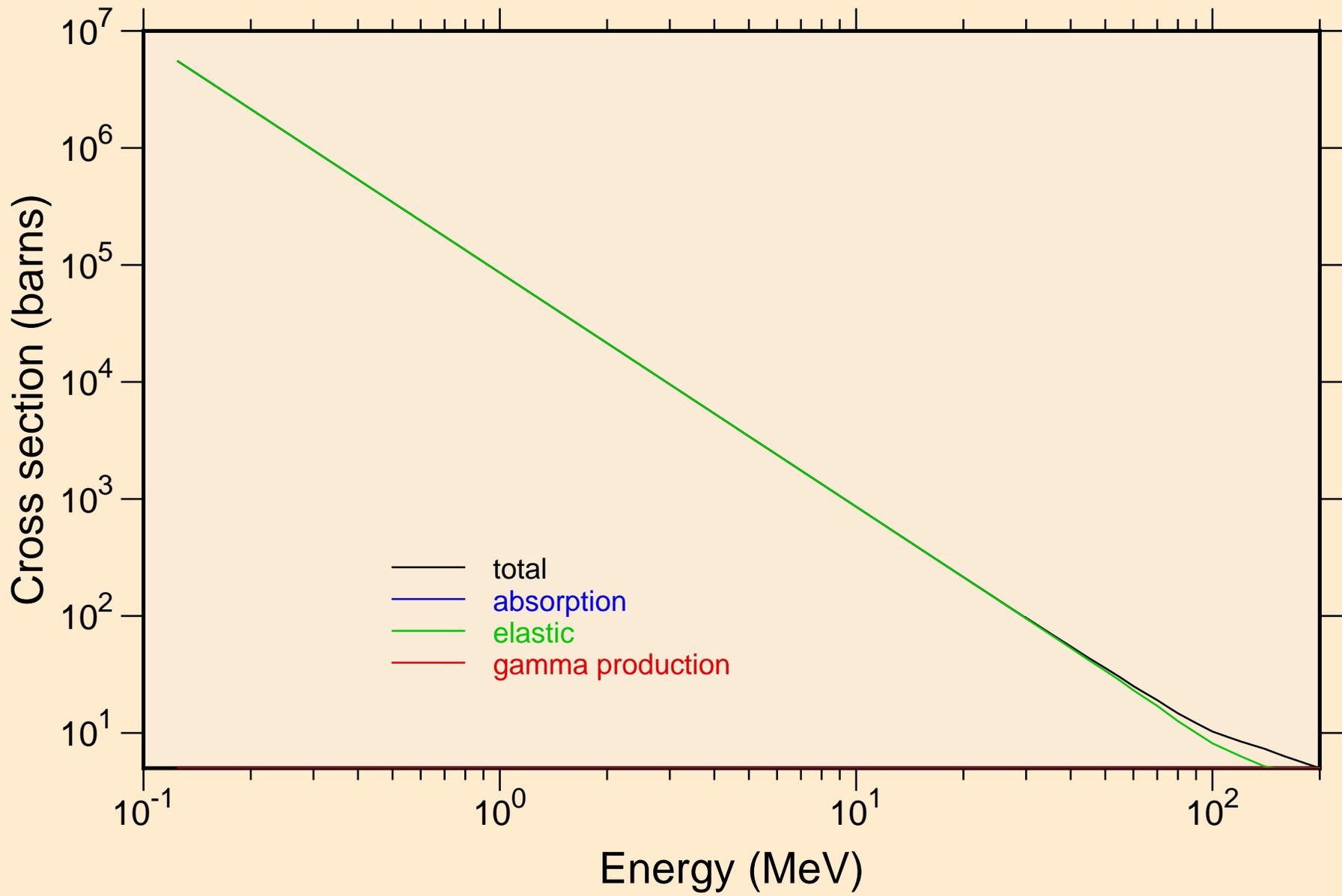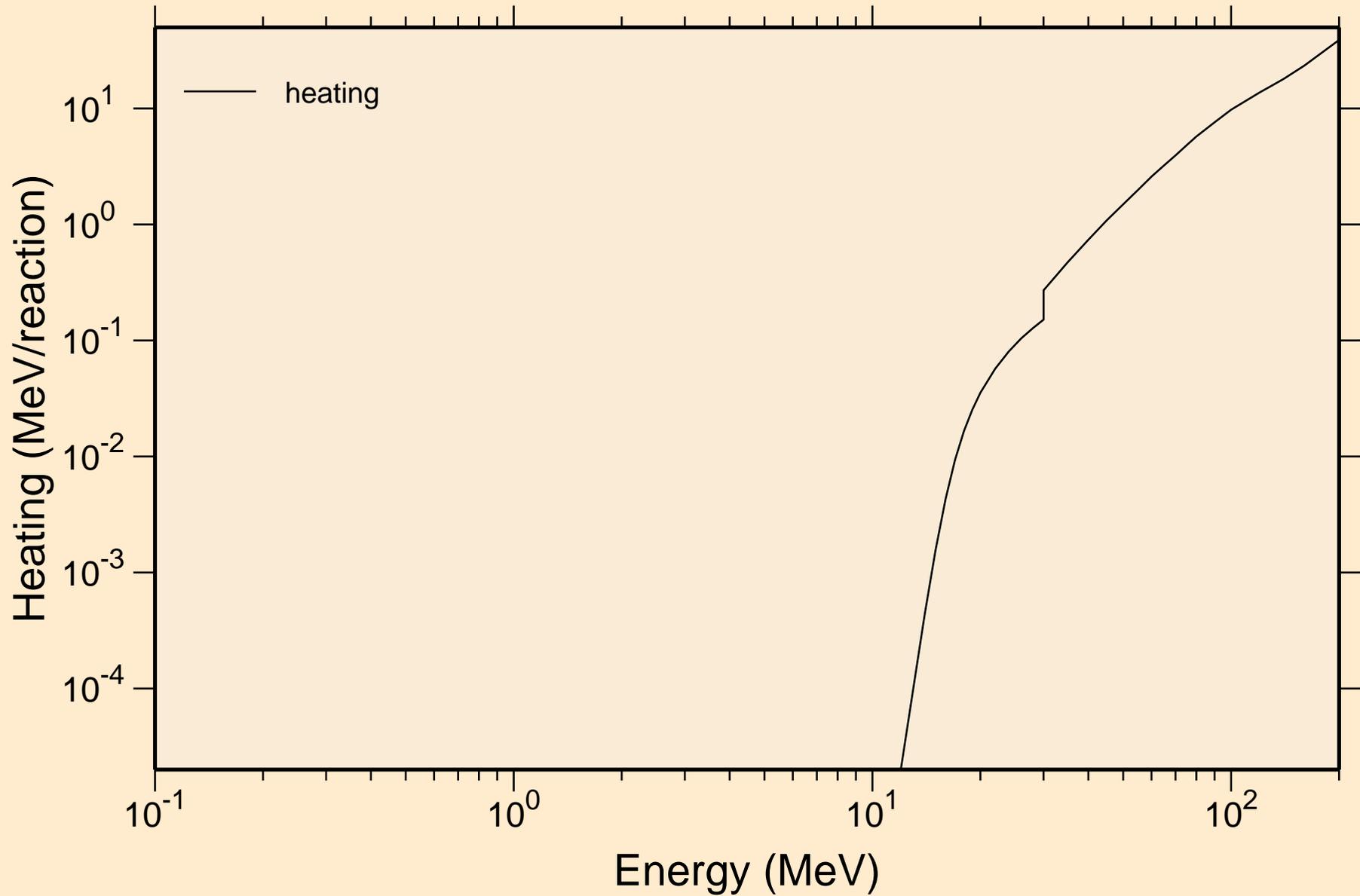CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Principal cross sections
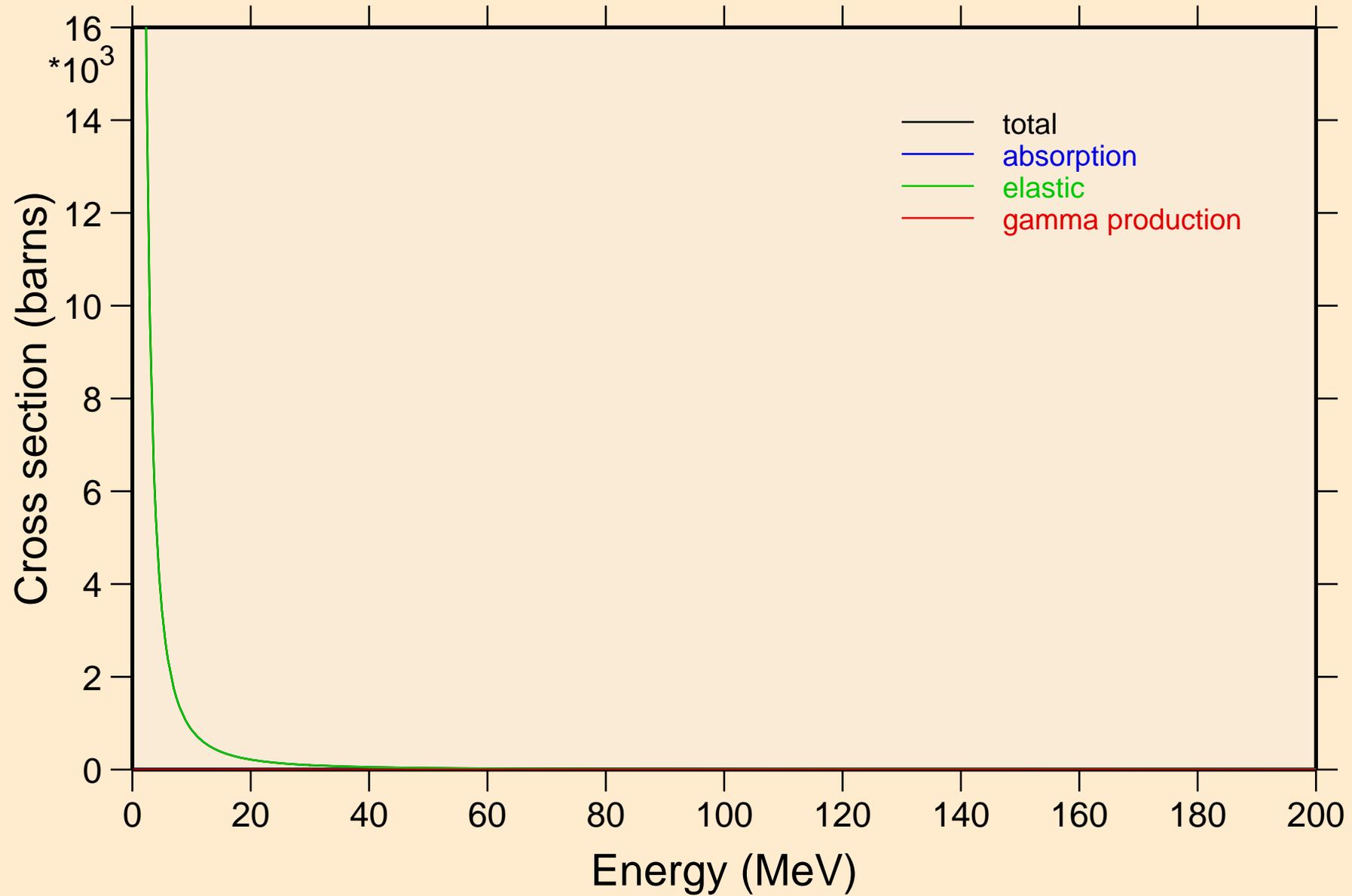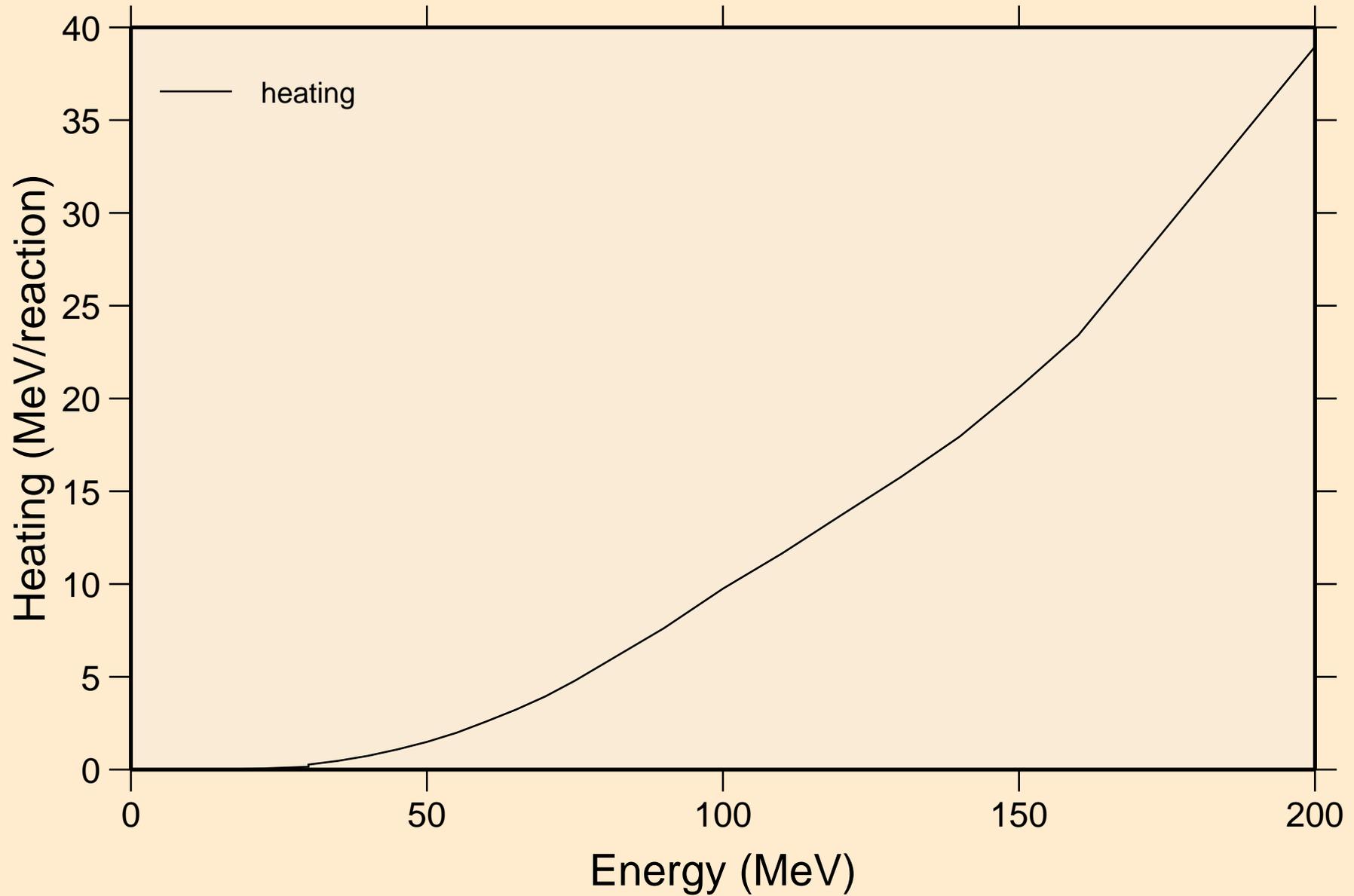
CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Heating

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Principal cross sections

Cross section (barns) vs Energy (MeV)

- total
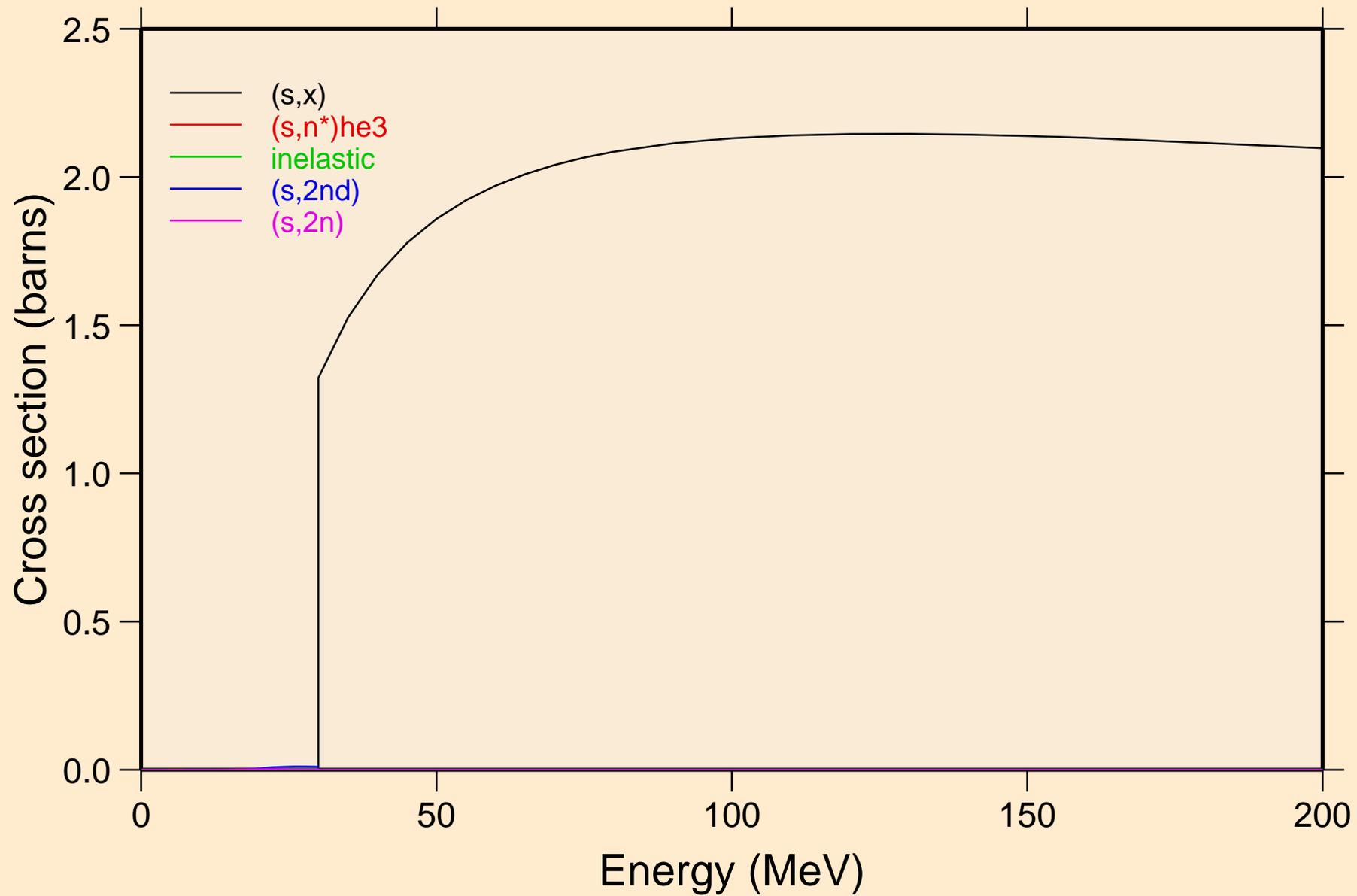- absorption
- elastic
- gamma production

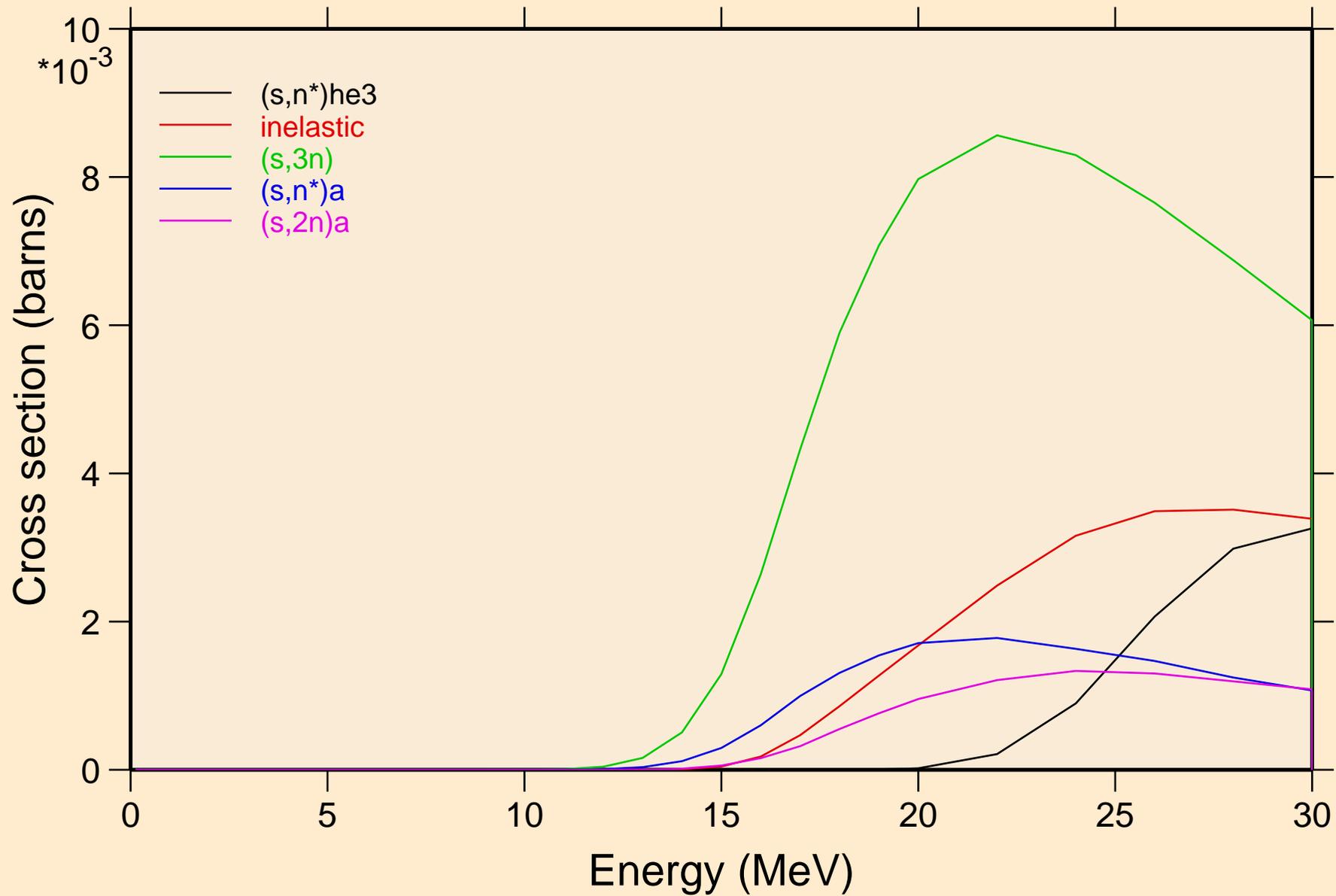CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Heating

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

Legend:
- (s,n*)he3
- inelastic
- (s,3n)
- (s,n*)a
- (s,2n)a

Y-axis: Cross section (barns), $*10^{-3}$
X-axis: Energy (MeV)

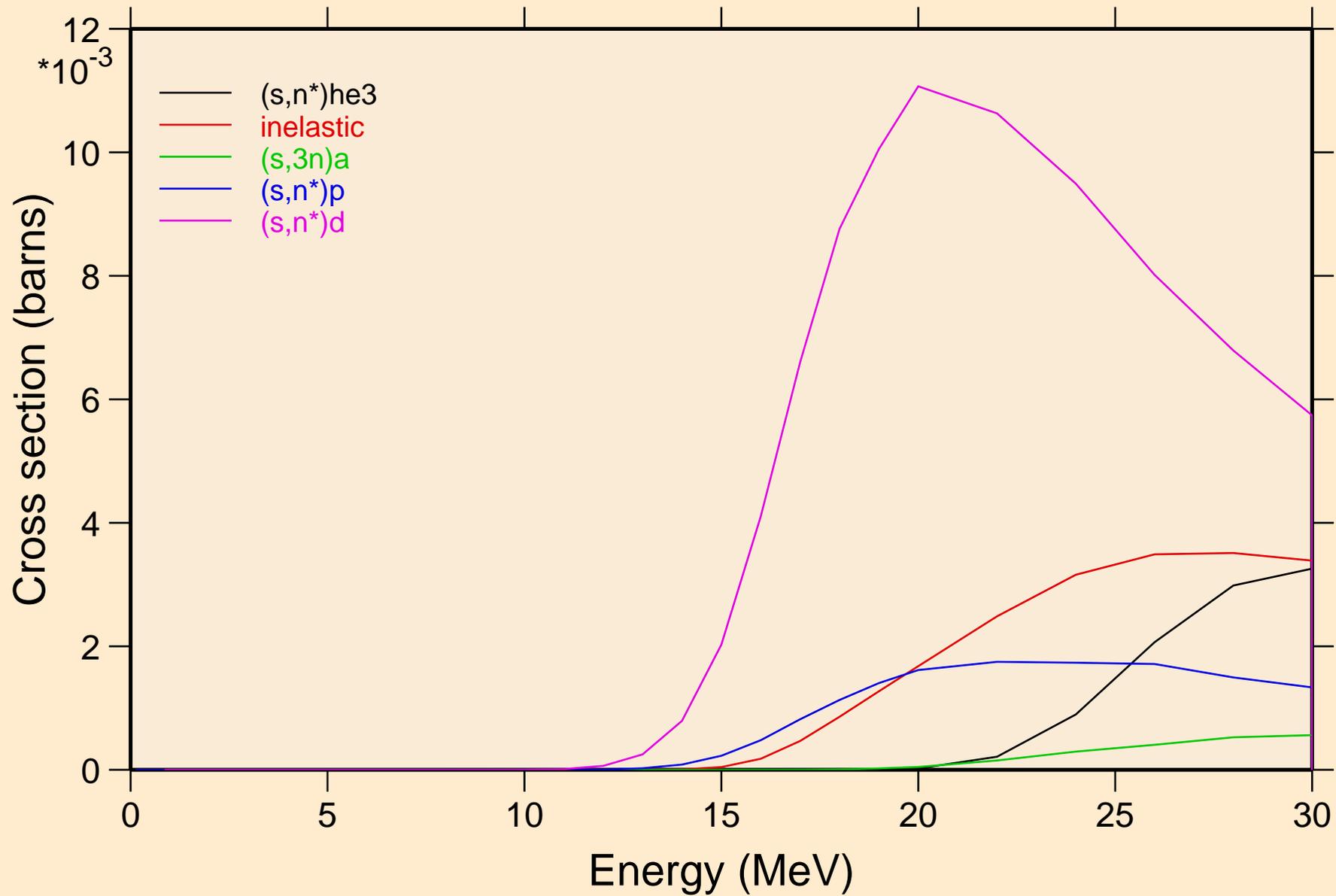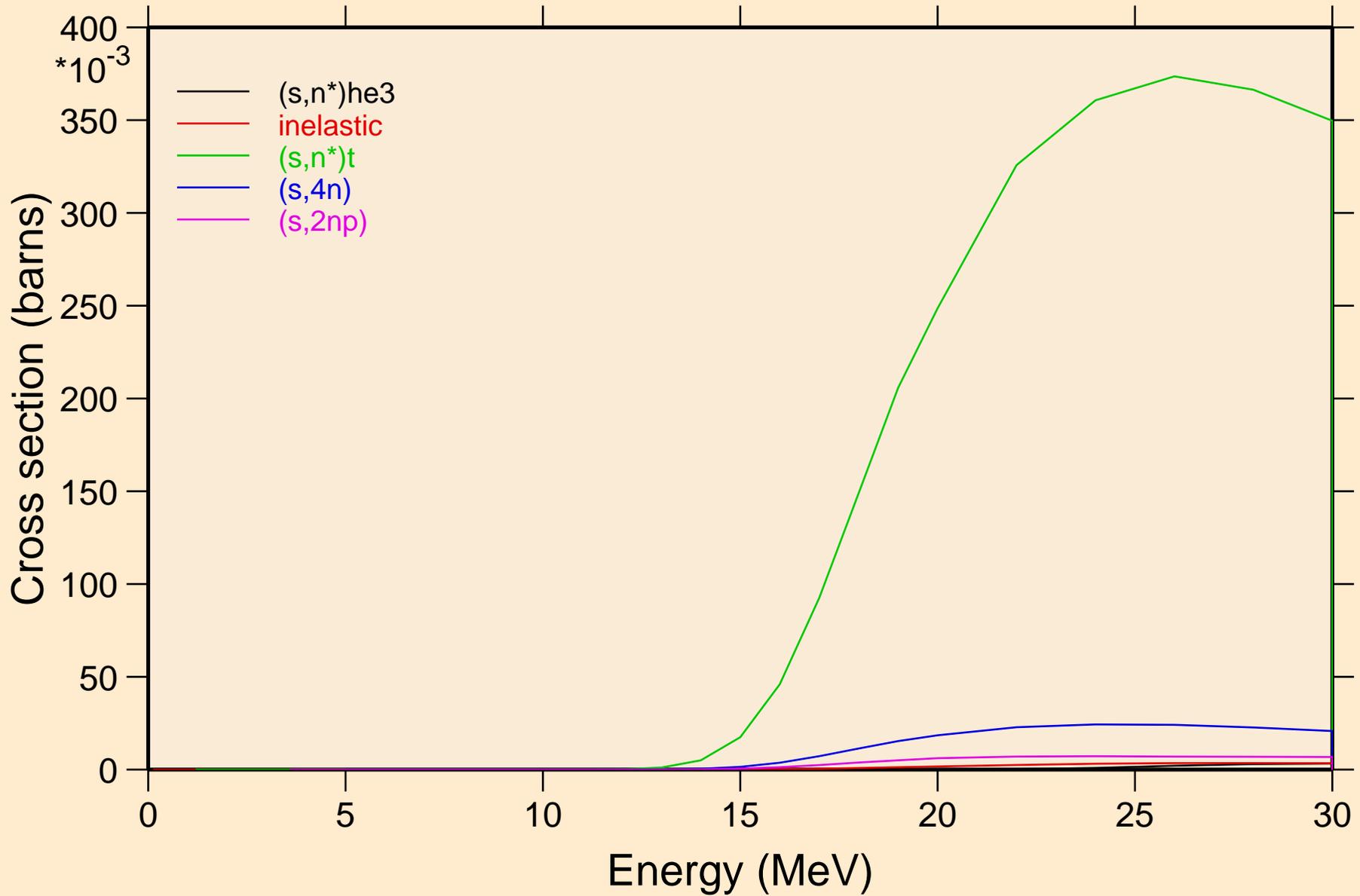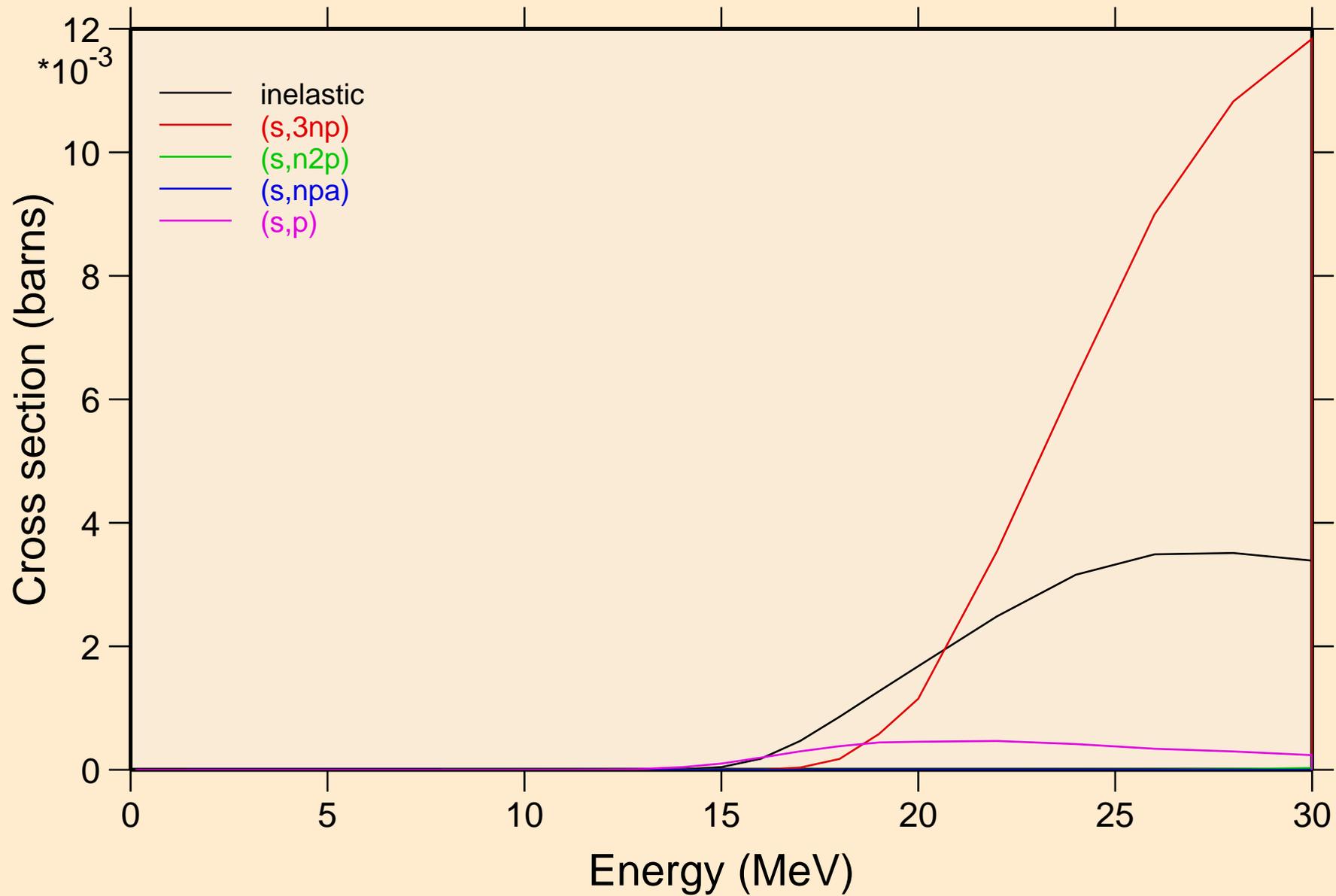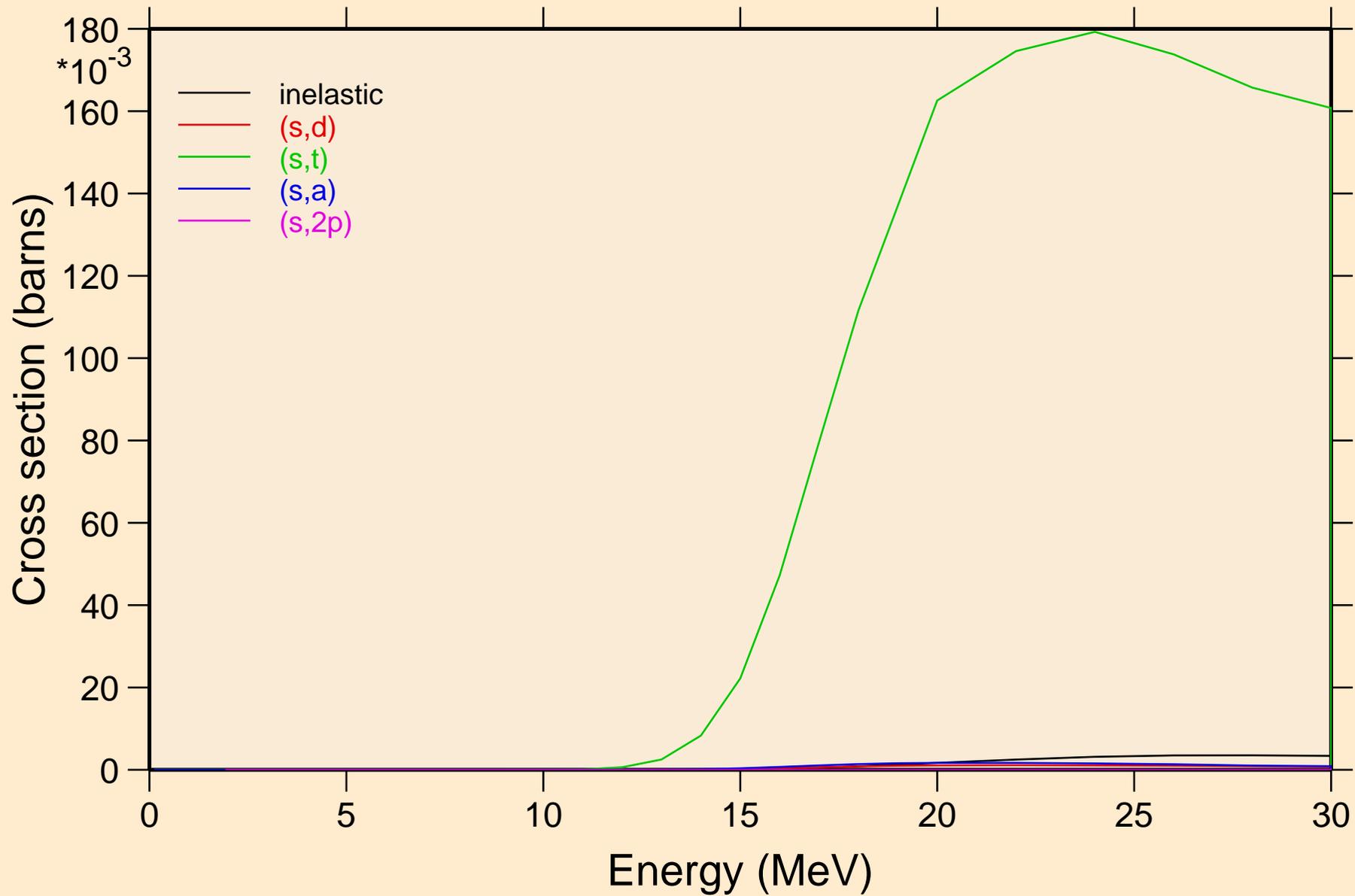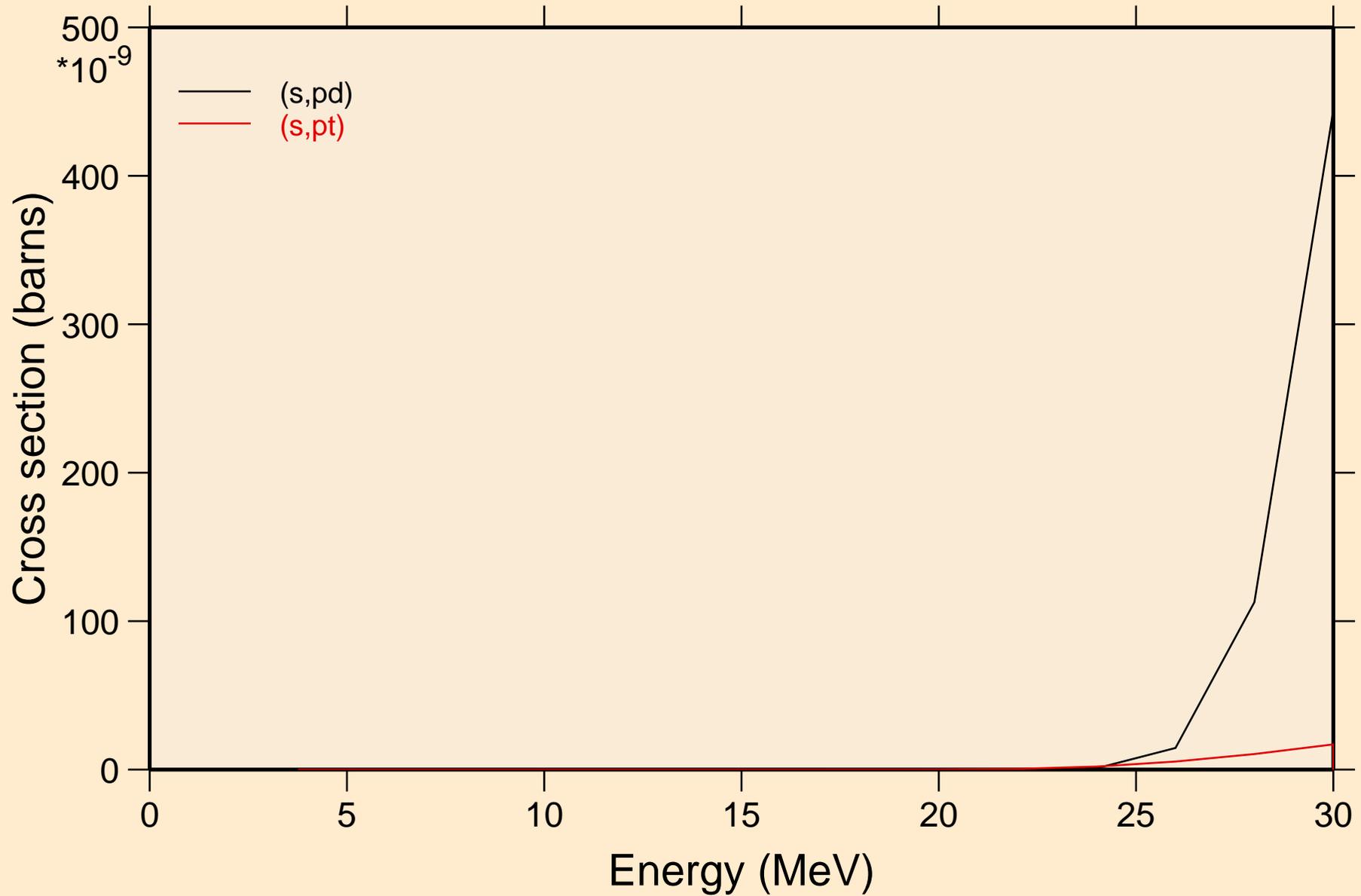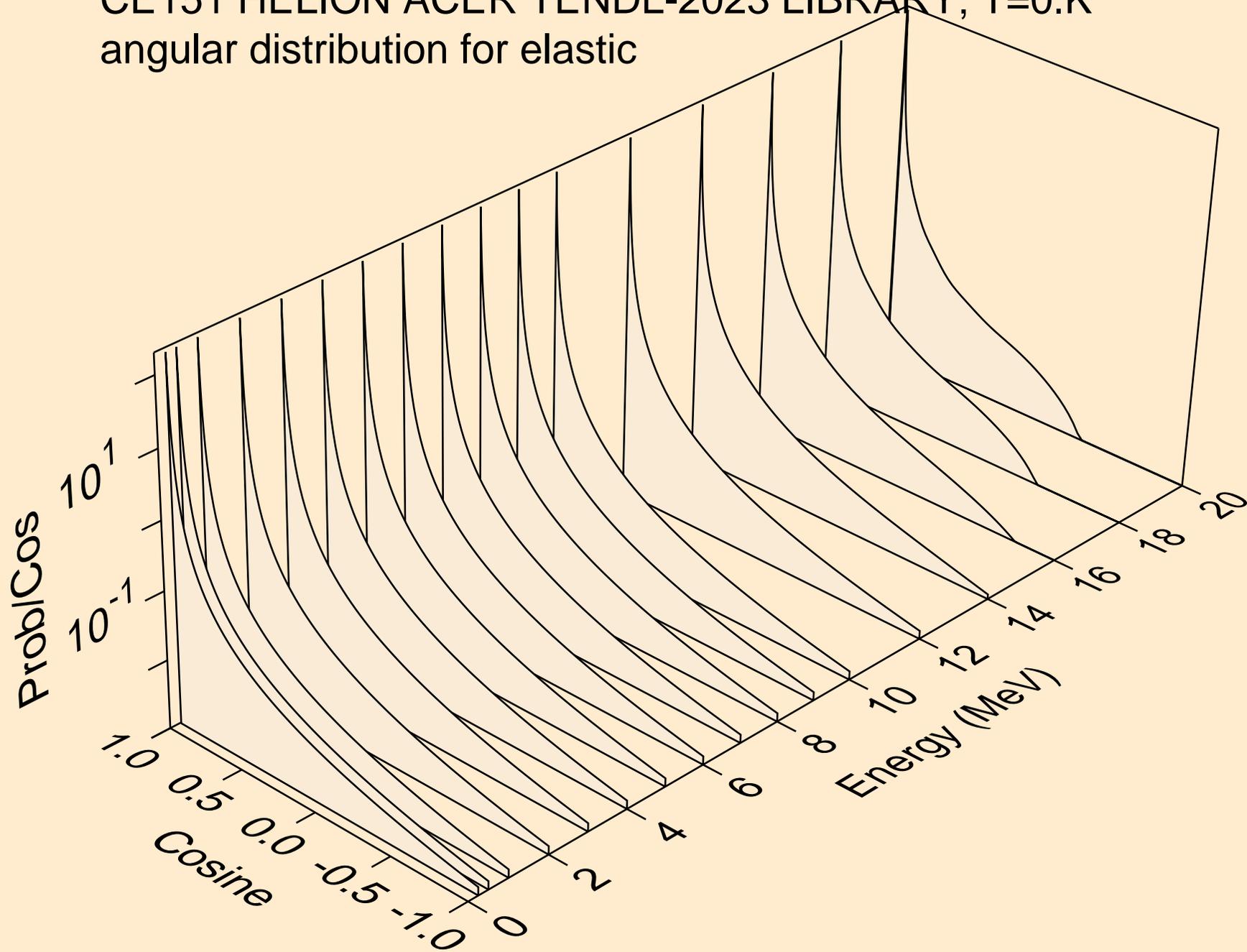CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
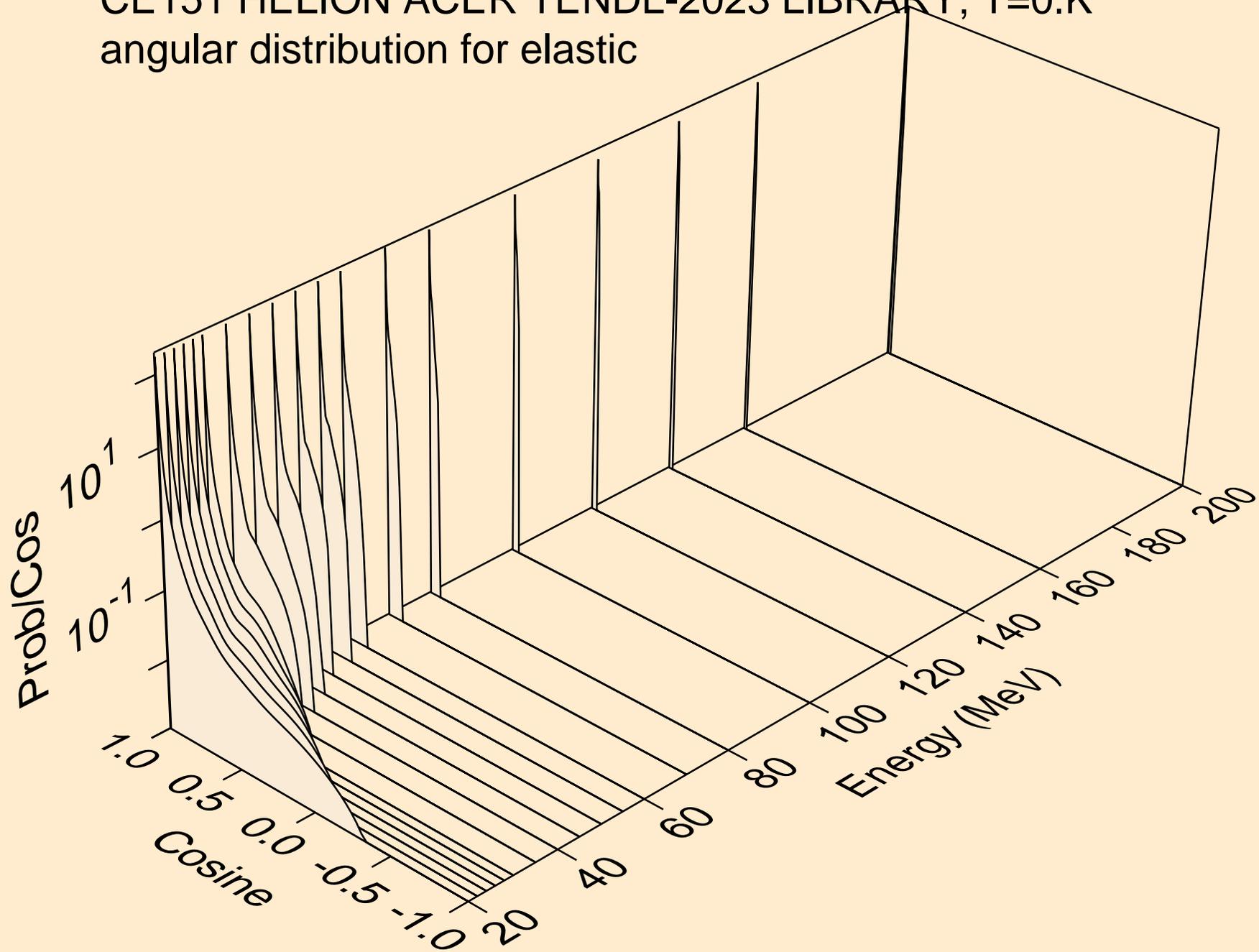Threshold reactions

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

inelastic
(s,d)
(s,t)
(s,a)
(s,2p)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Threshold reactions

Cross section (barns)
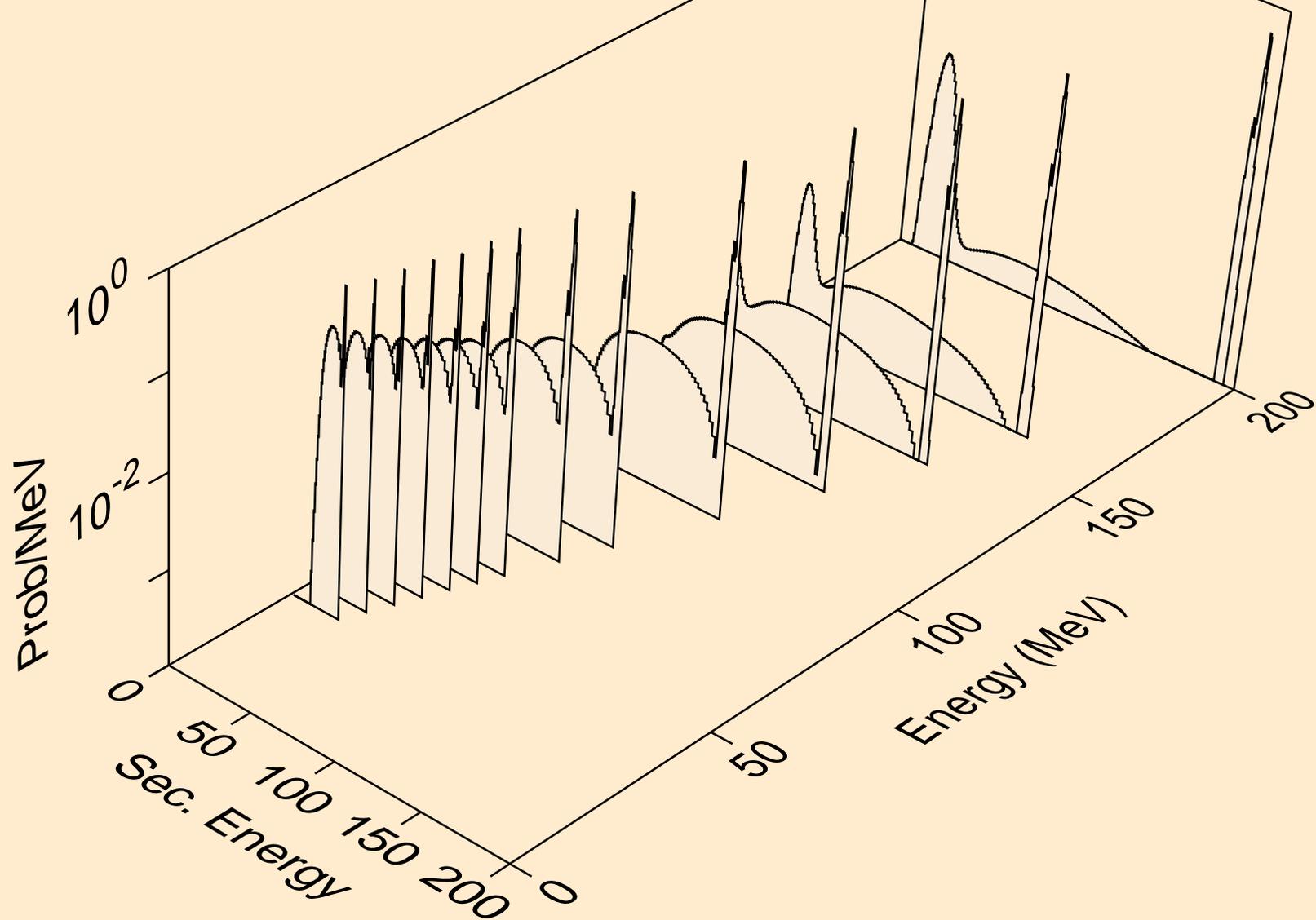
Energy (MeV)

(s,pd)
(s,pt)

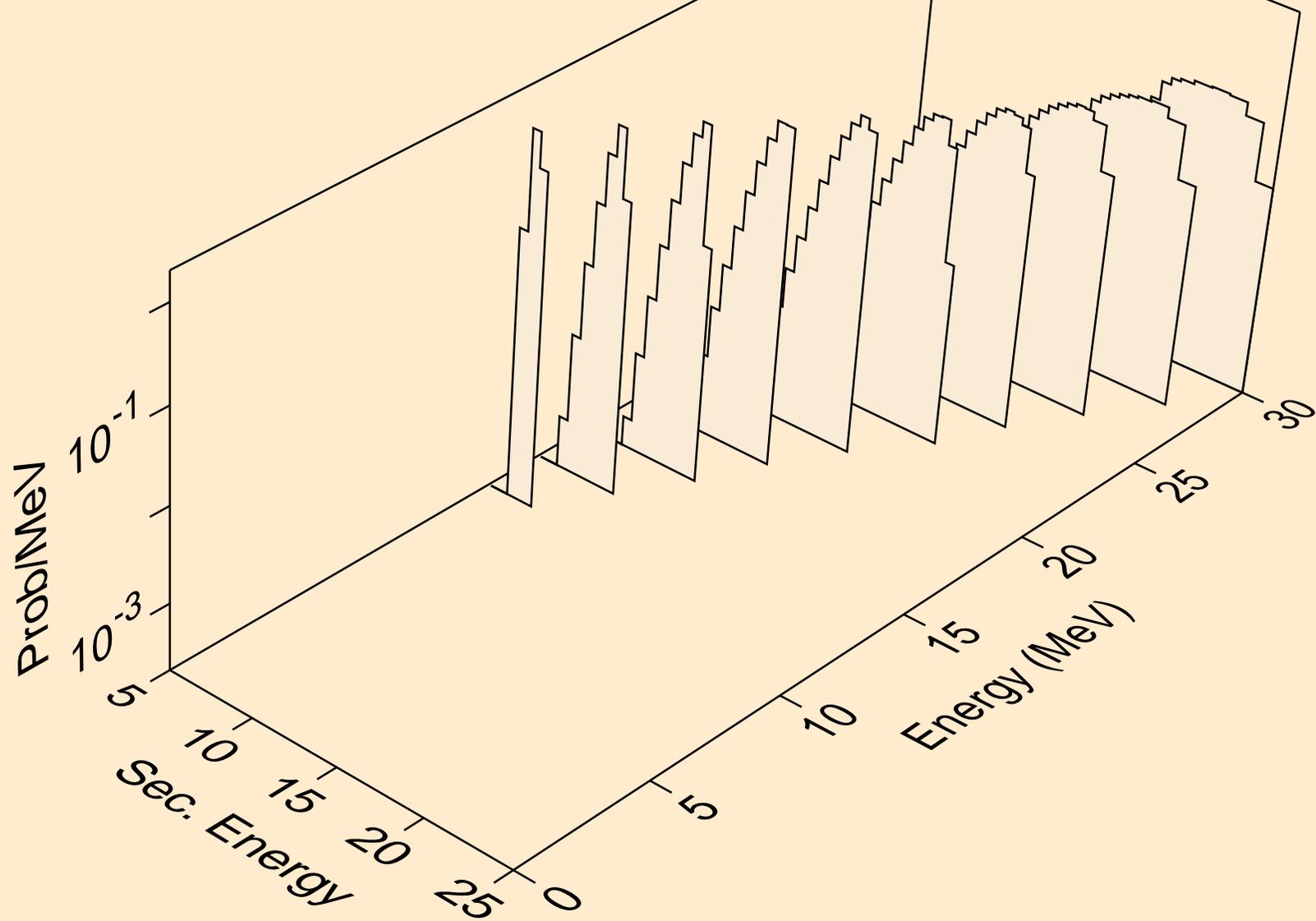CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
angular distribution for elastic

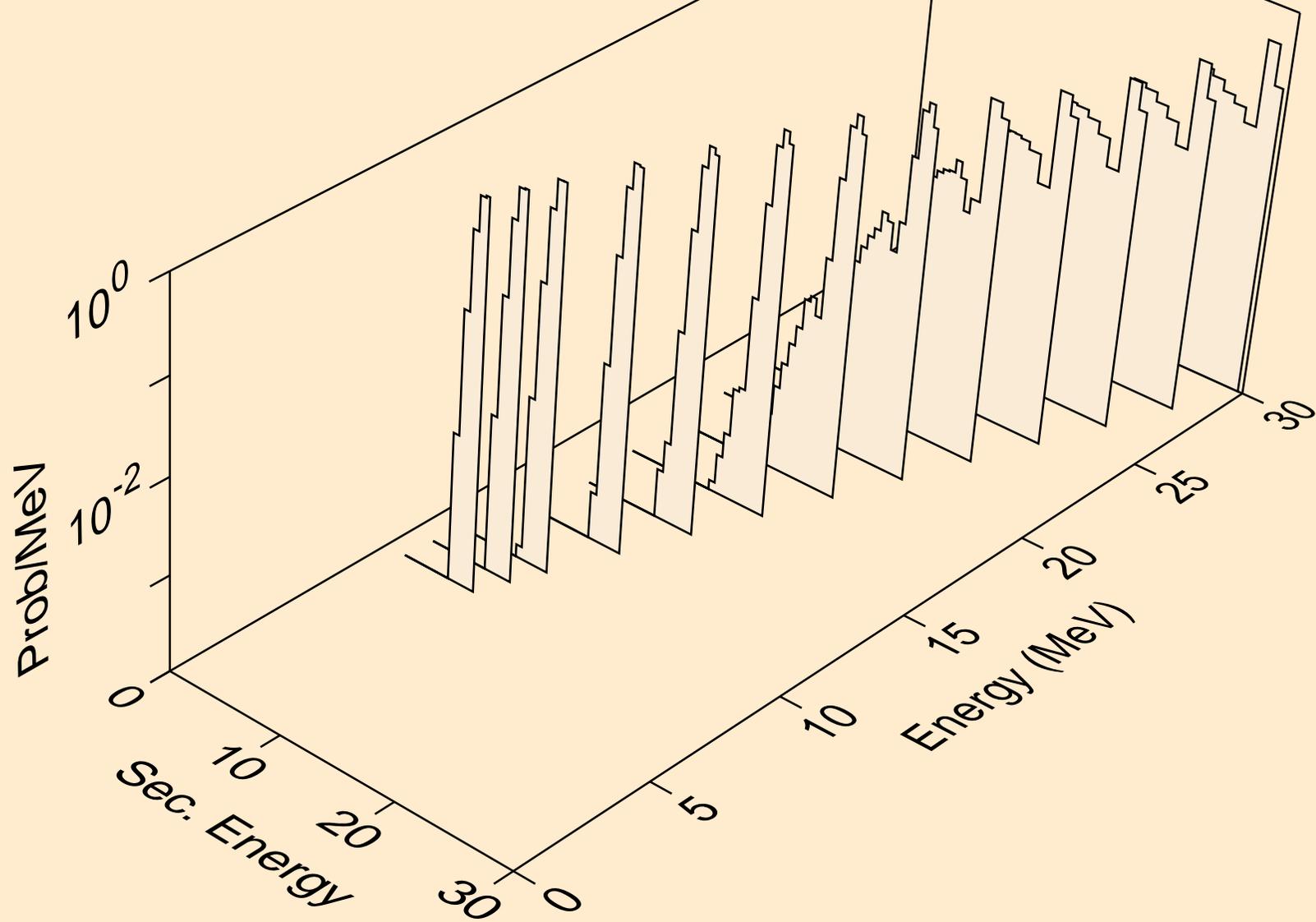CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
angular distribution for elastic

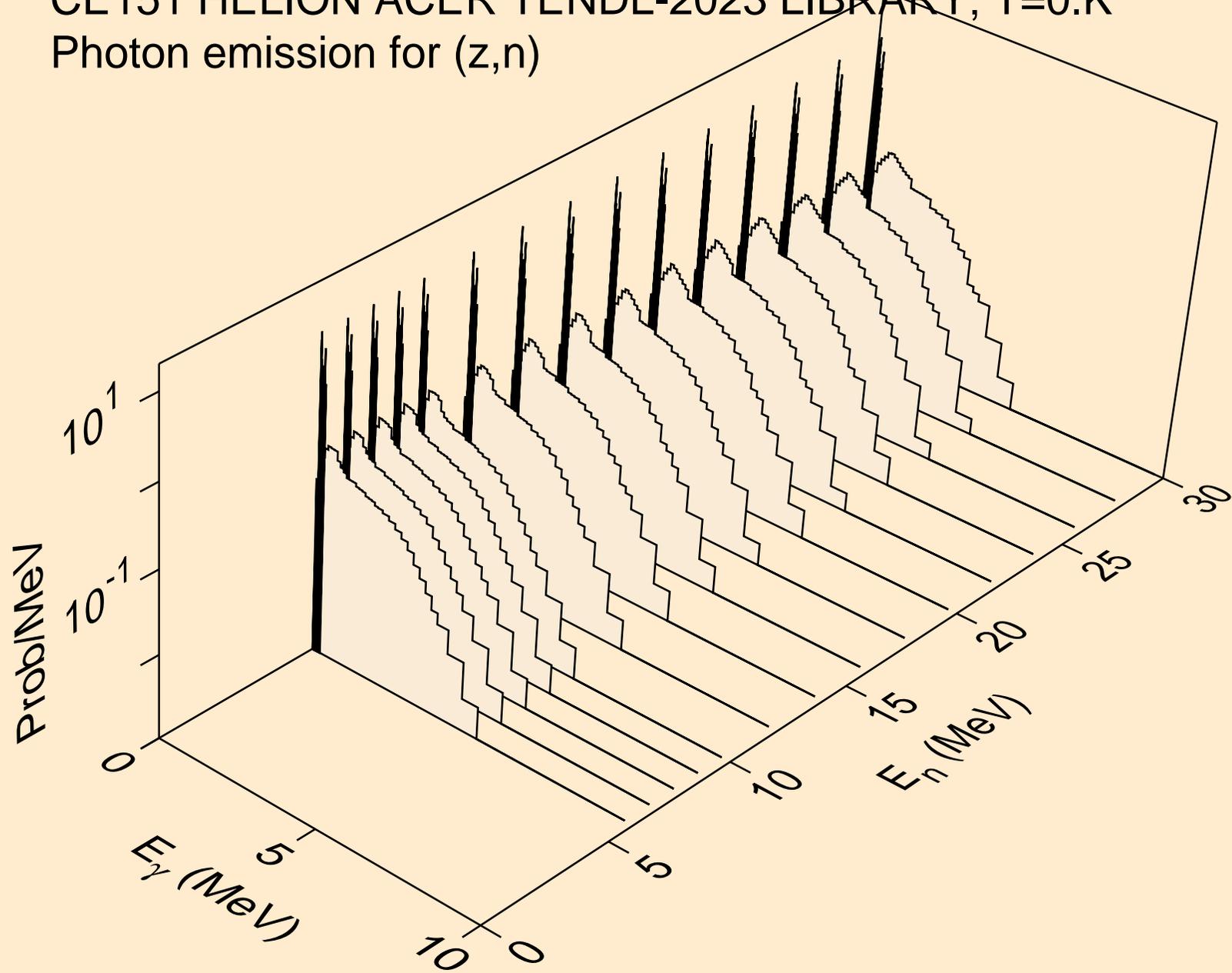CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
He-3 emission for (s,x)

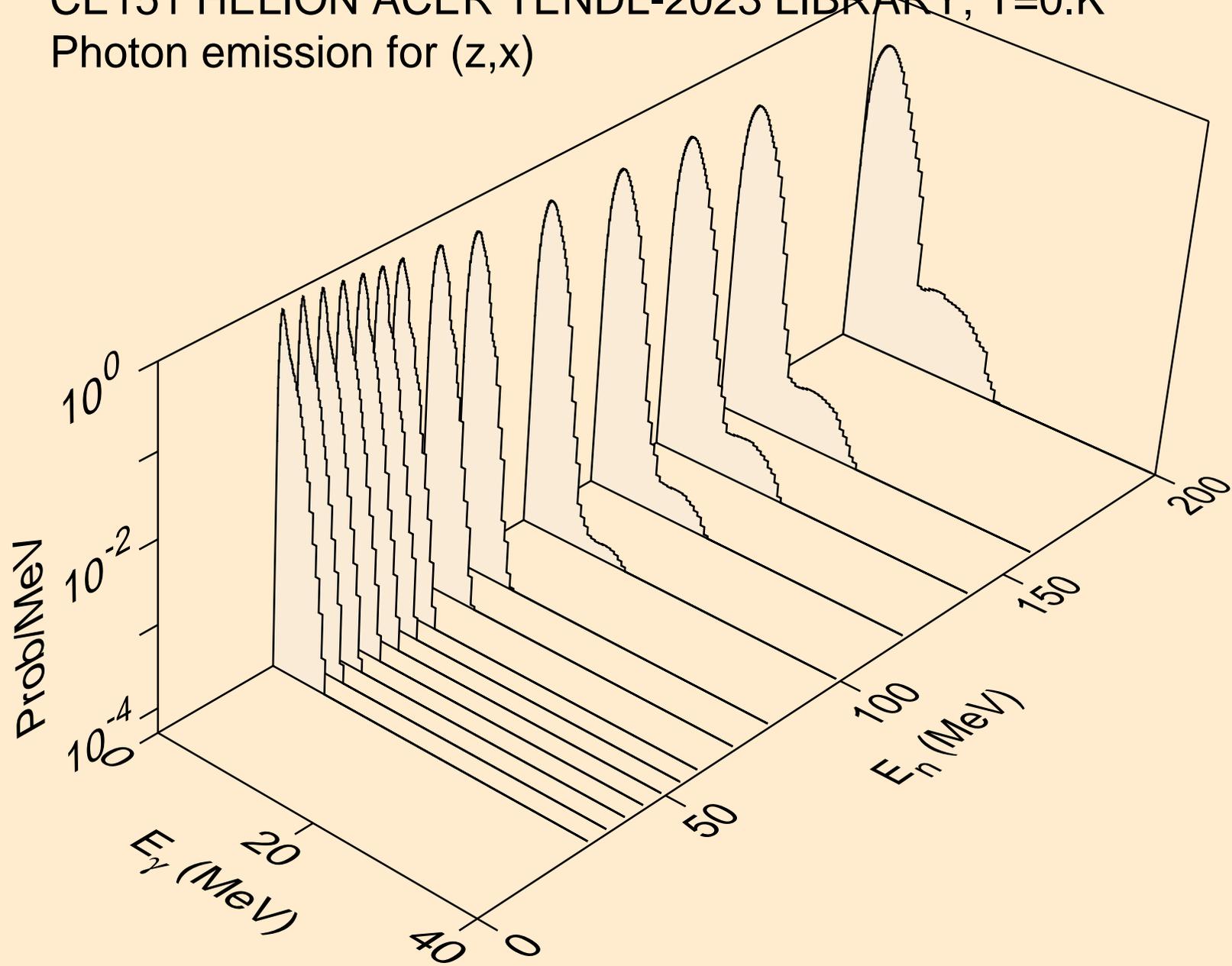CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
He-3 emission for (s,n*)he3

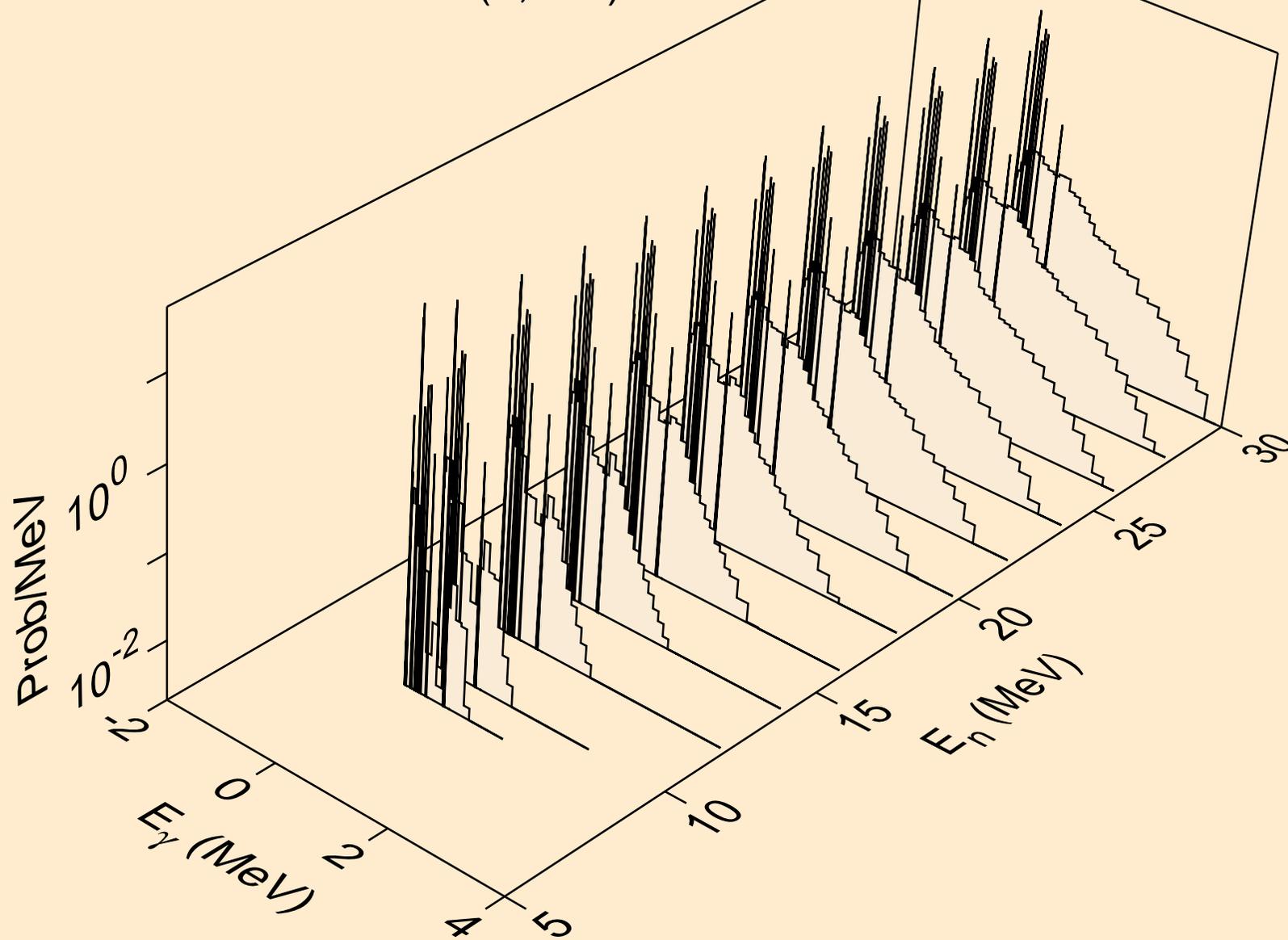CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
He-3 emission for inelastic

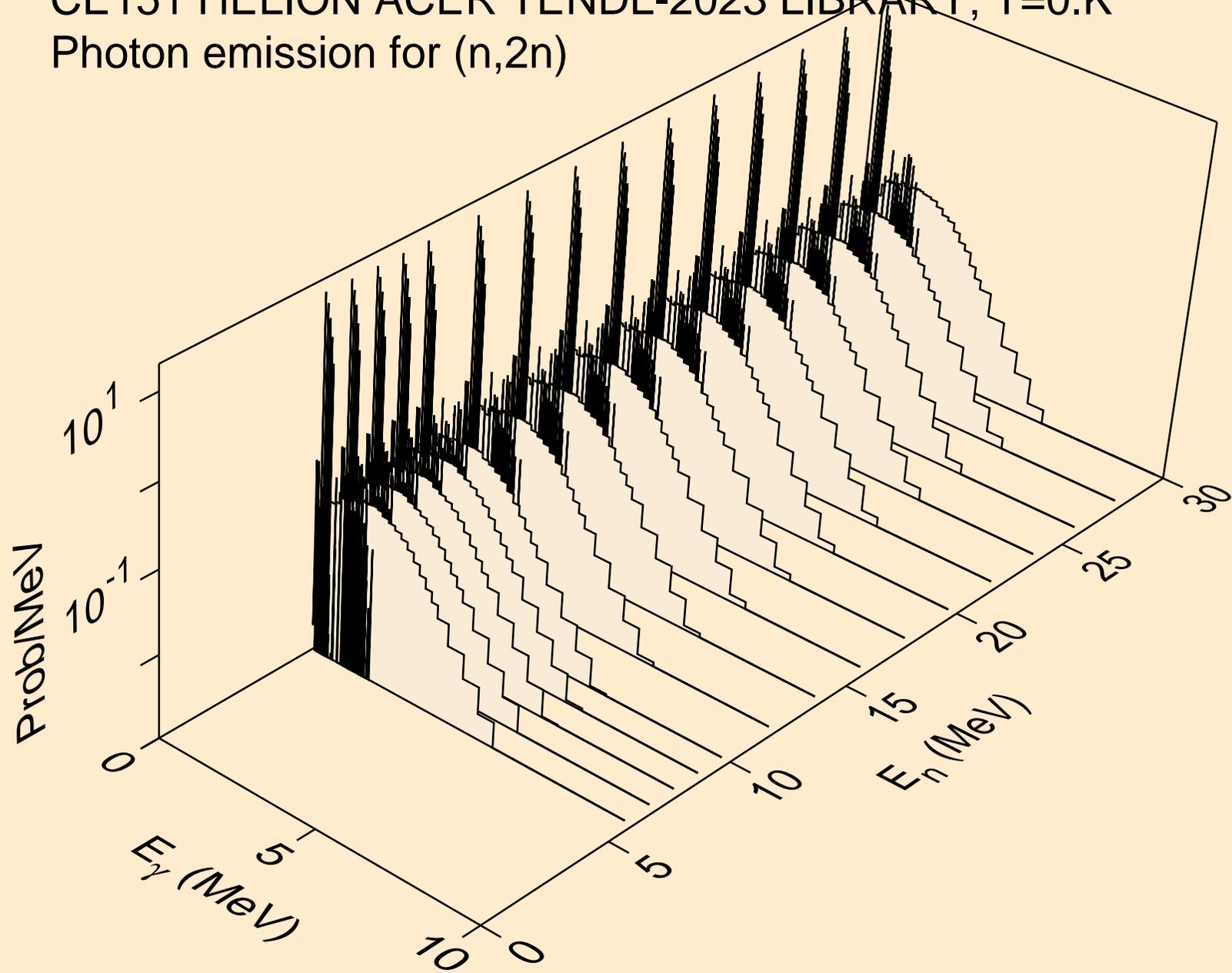CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (z,n)

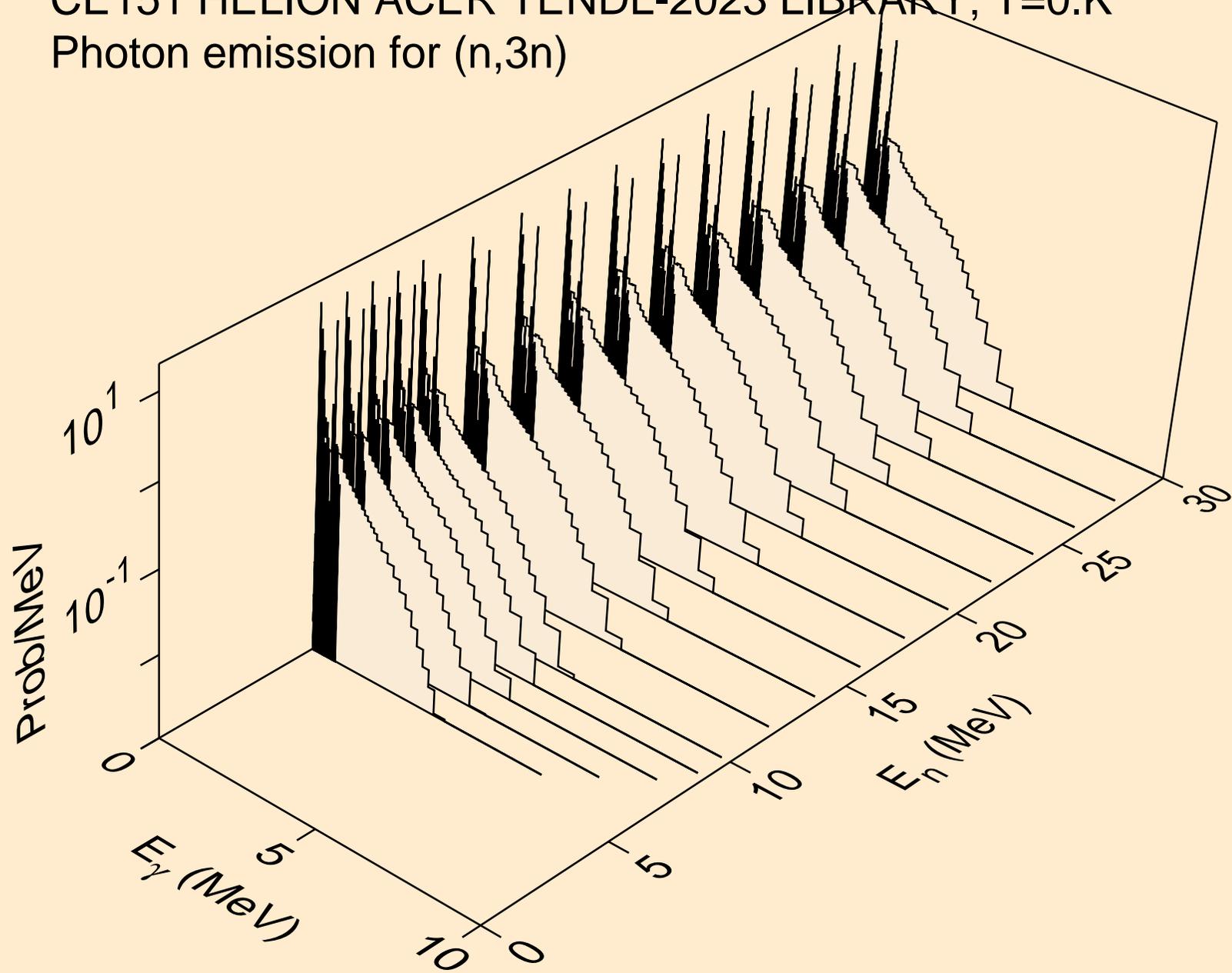CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (z,x)

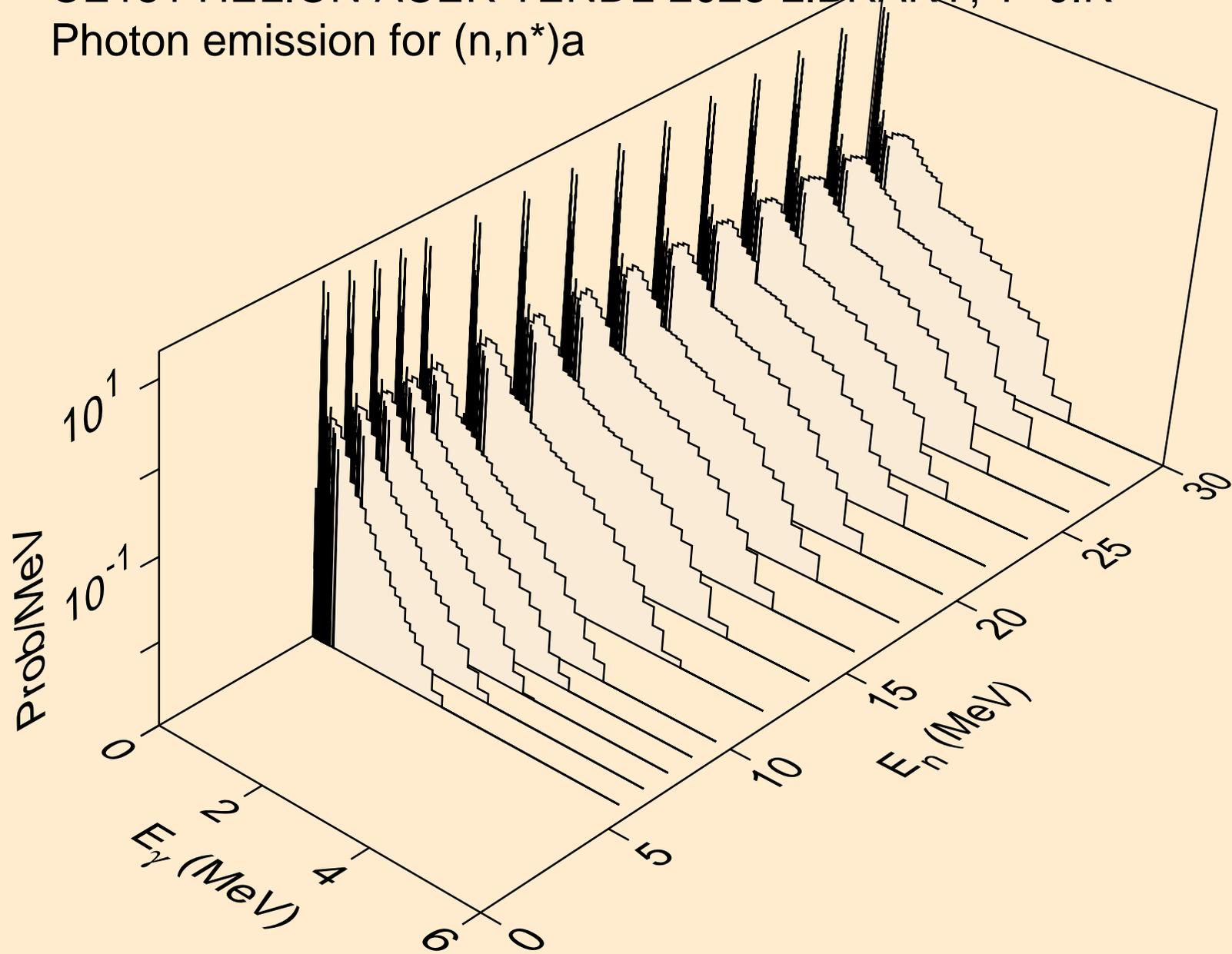CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2nd)

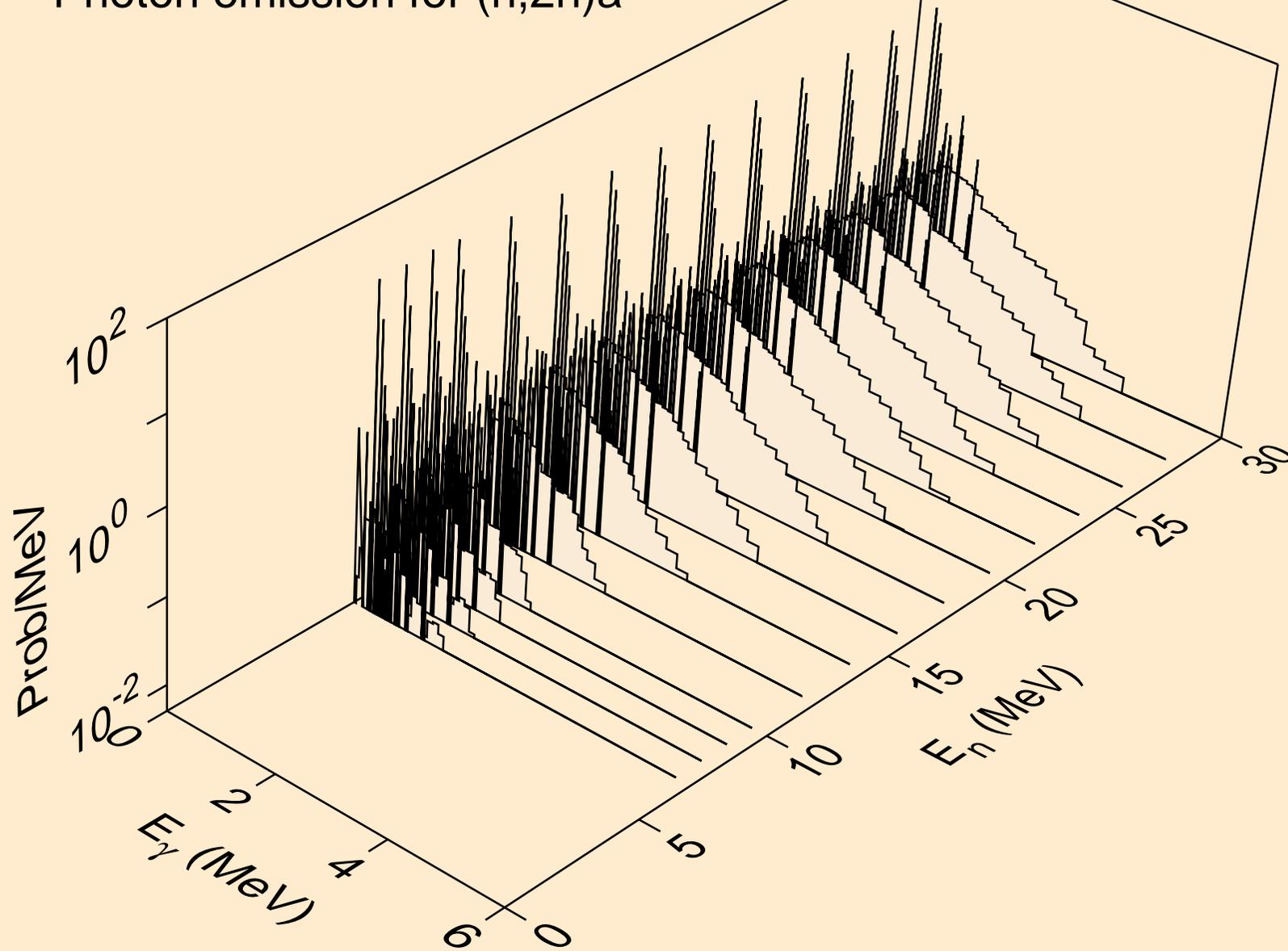CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2n)

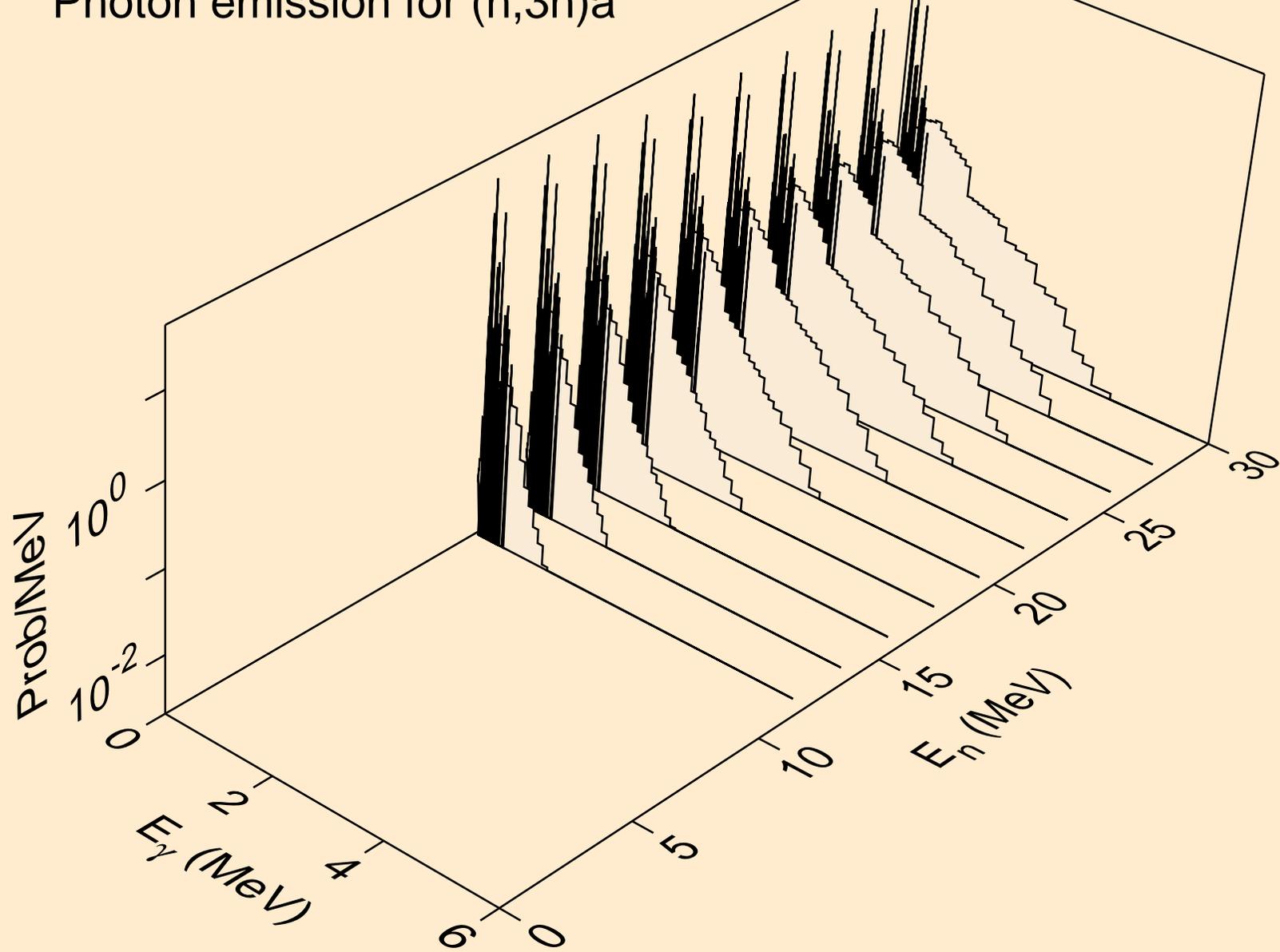CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,3n)

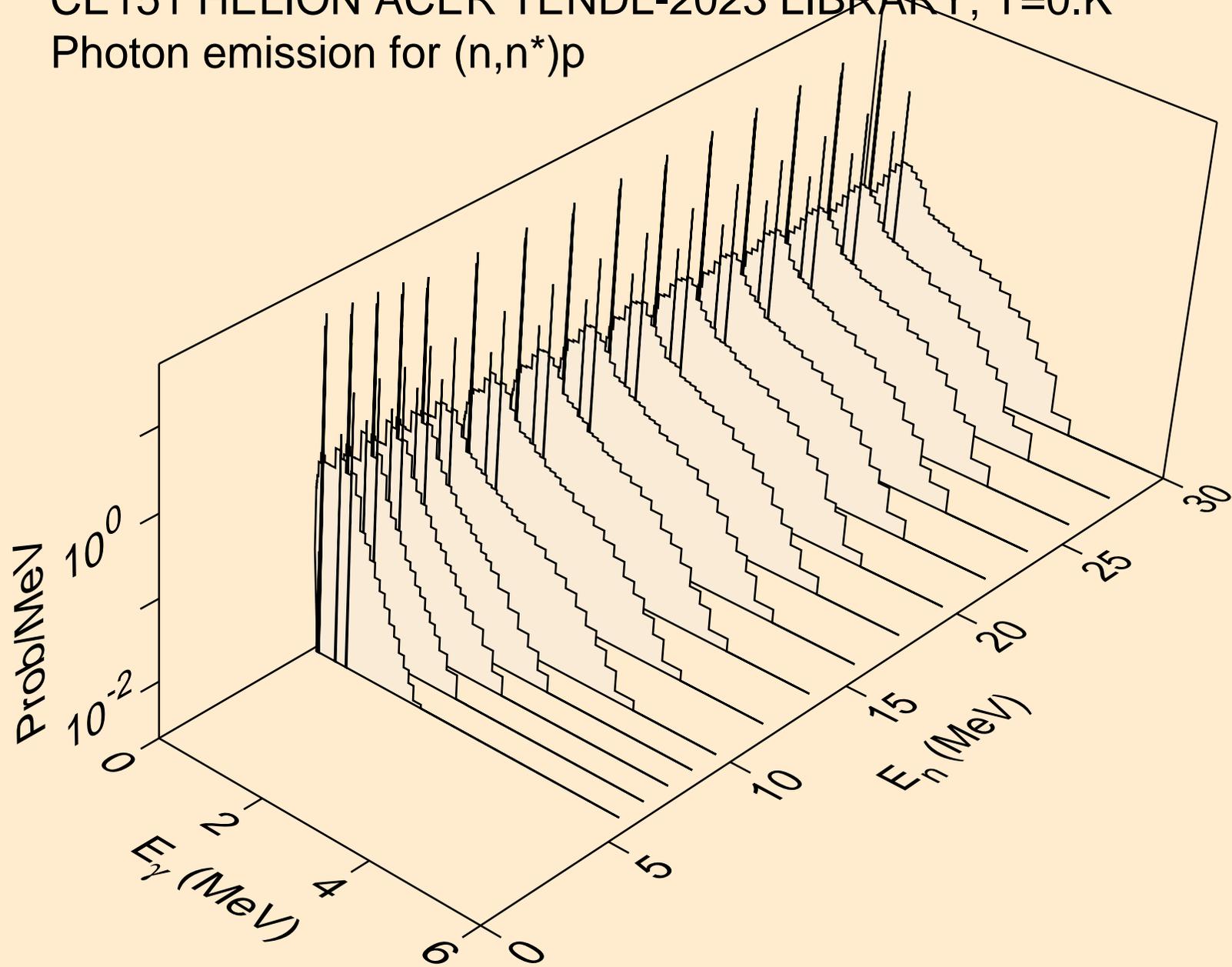CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)a

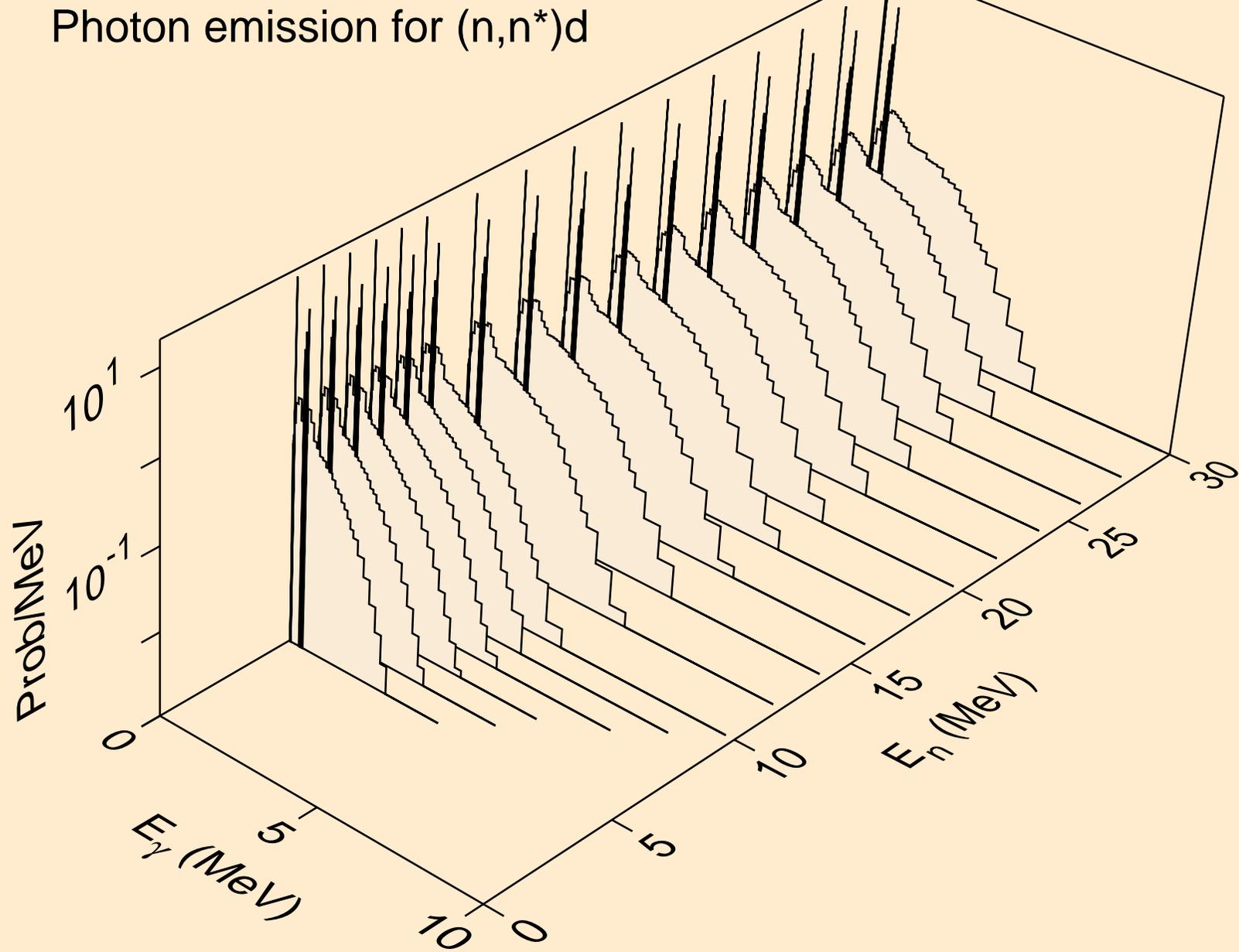CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2n)a

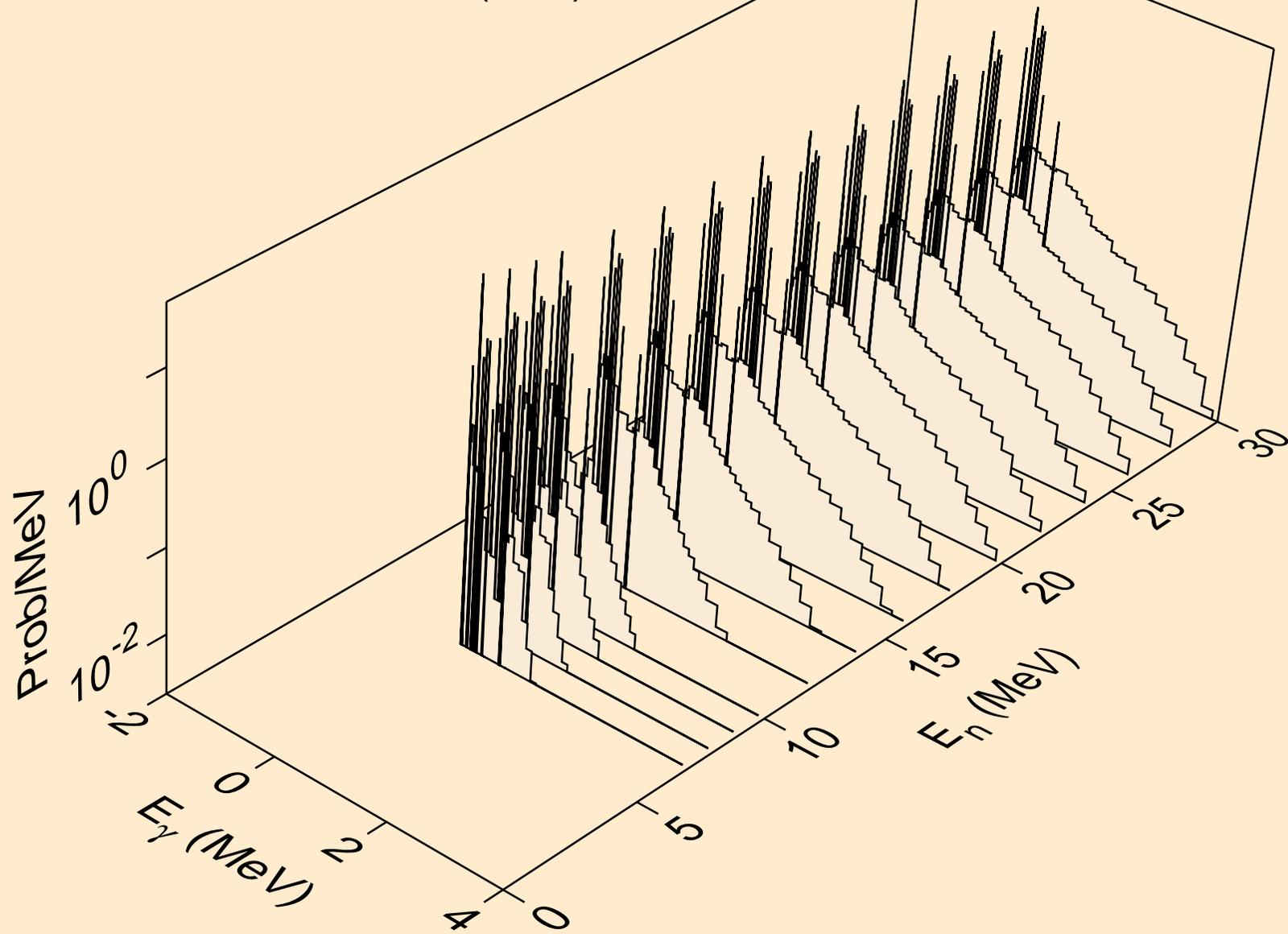CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,3n)a

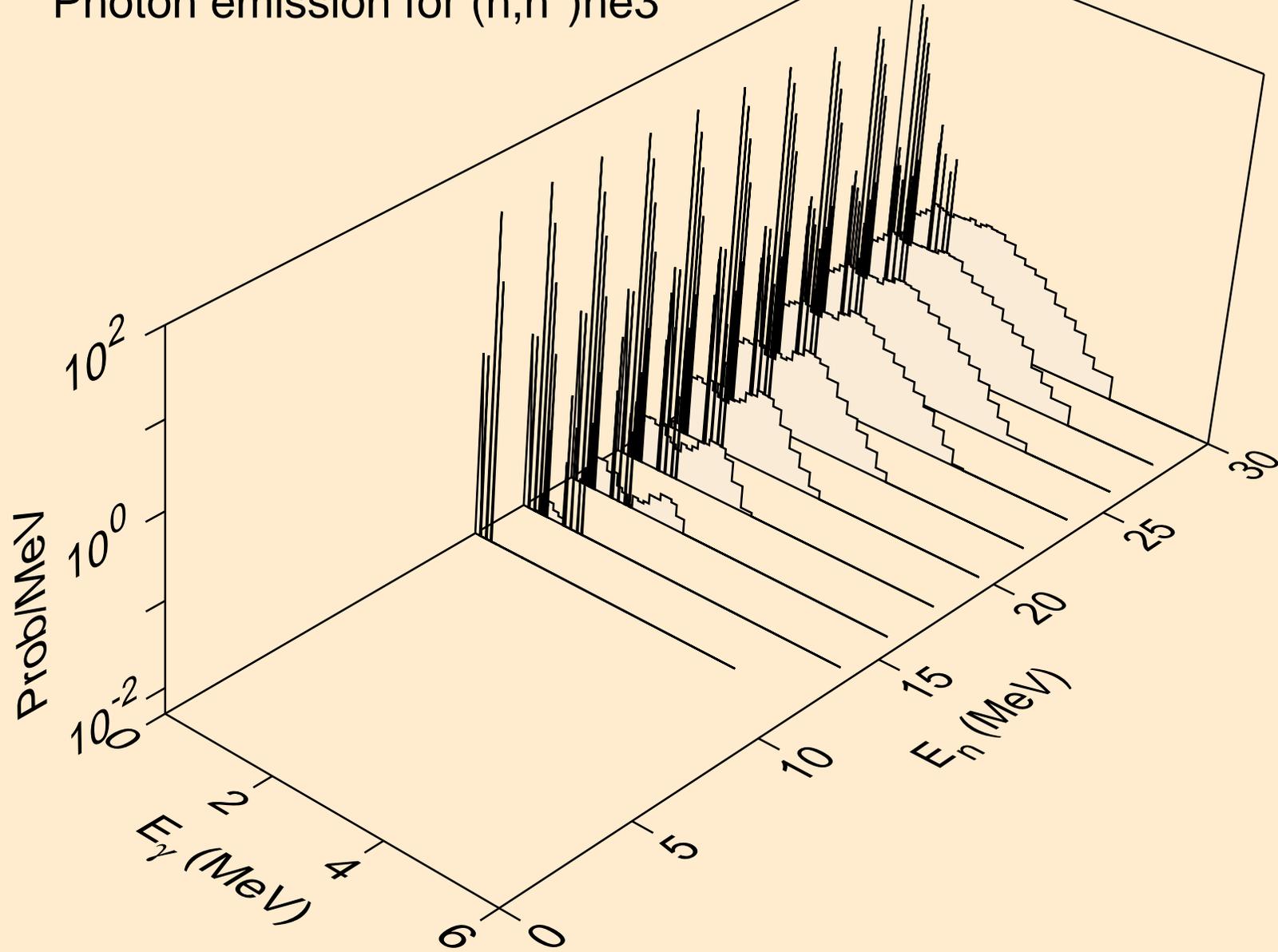CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)p

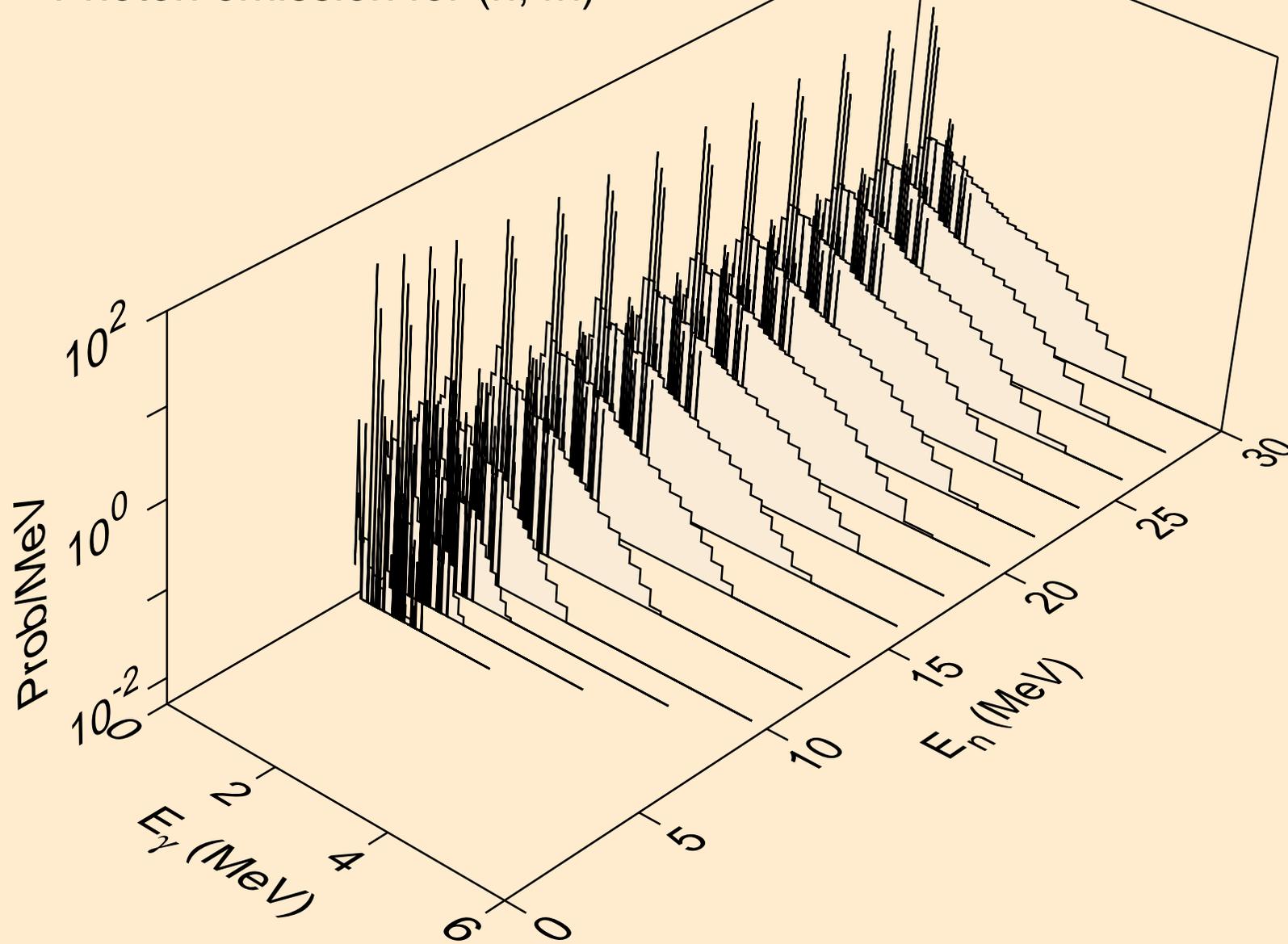CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)d

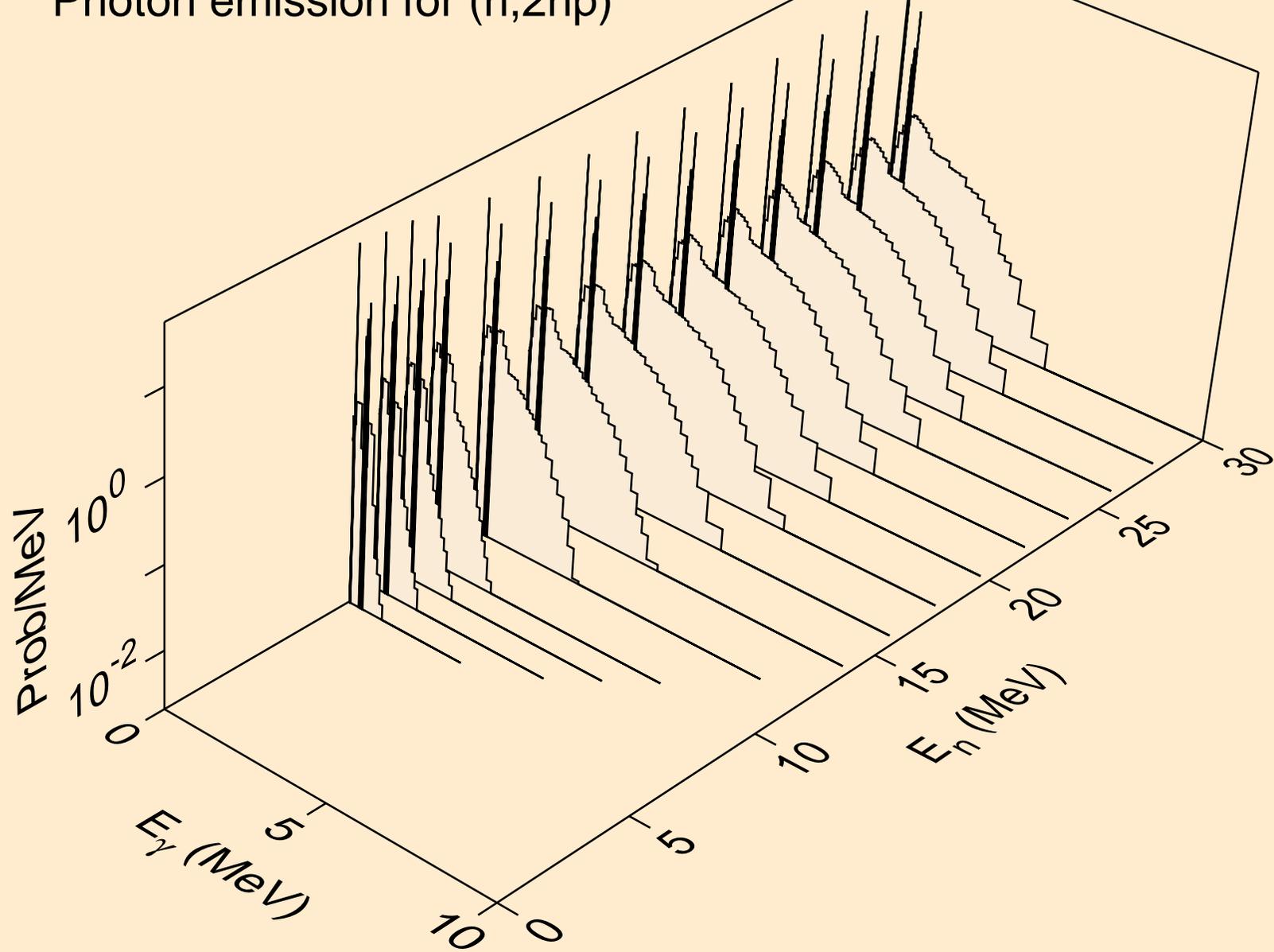CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)t

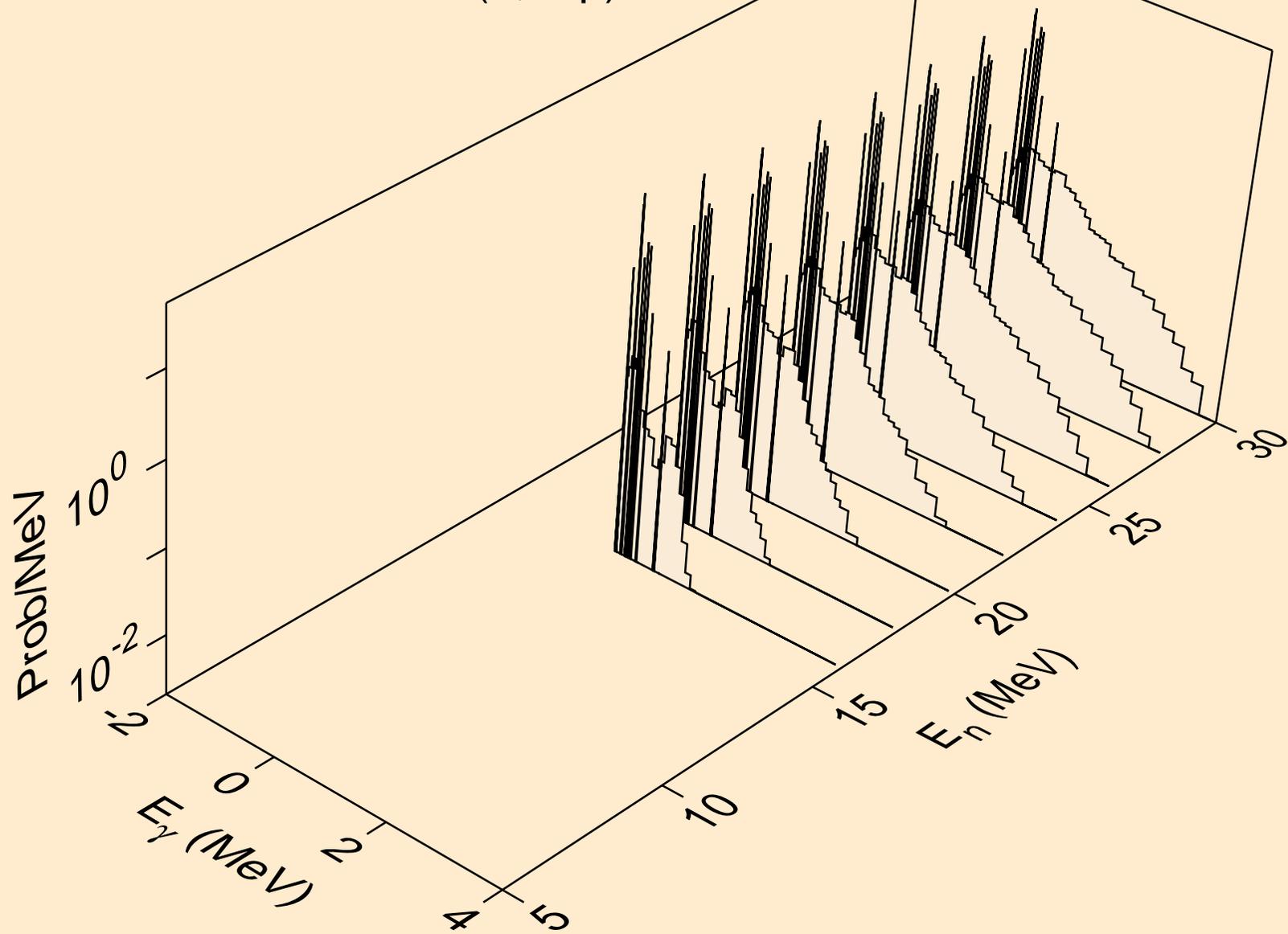CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,n*)he3

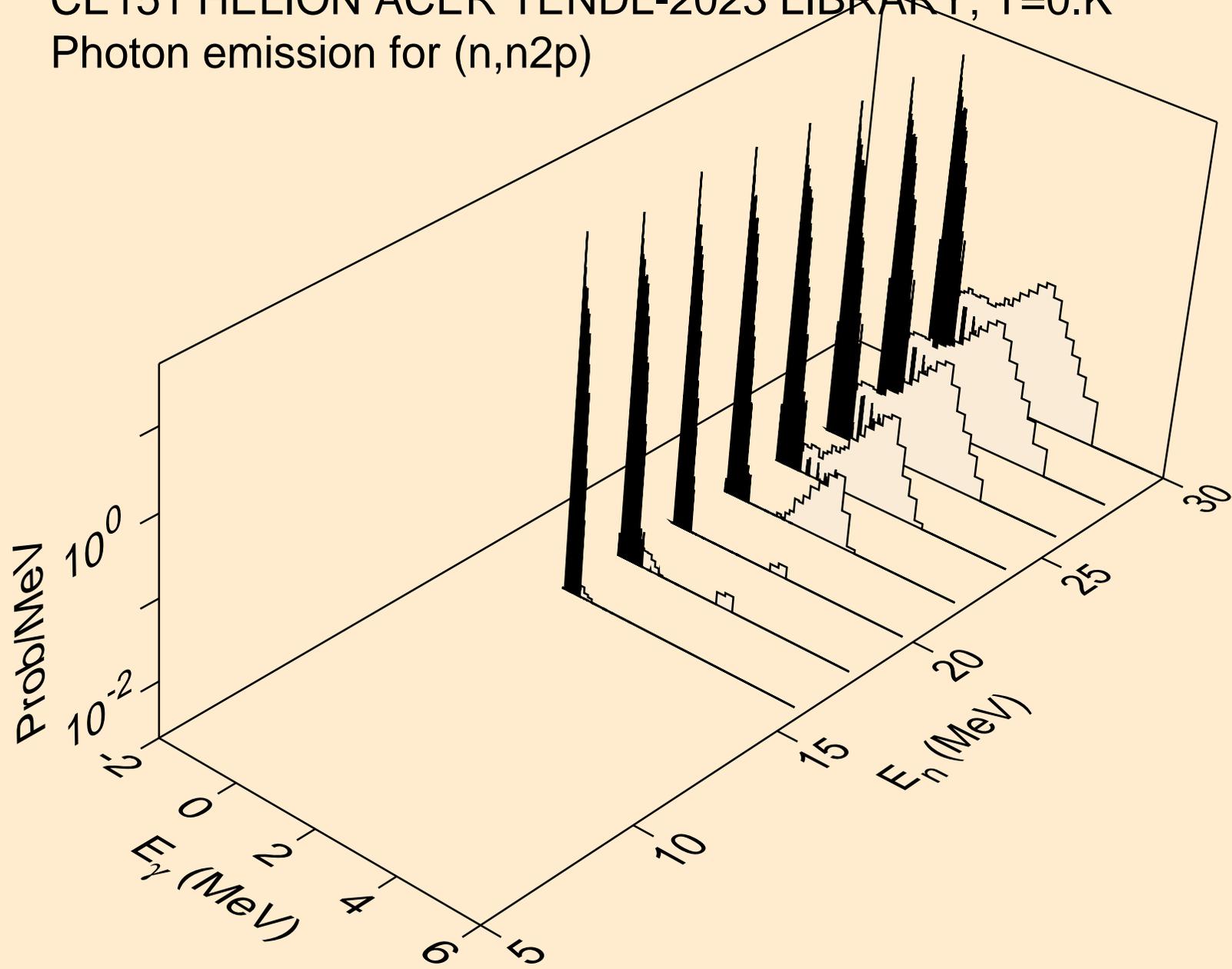CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,4n)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
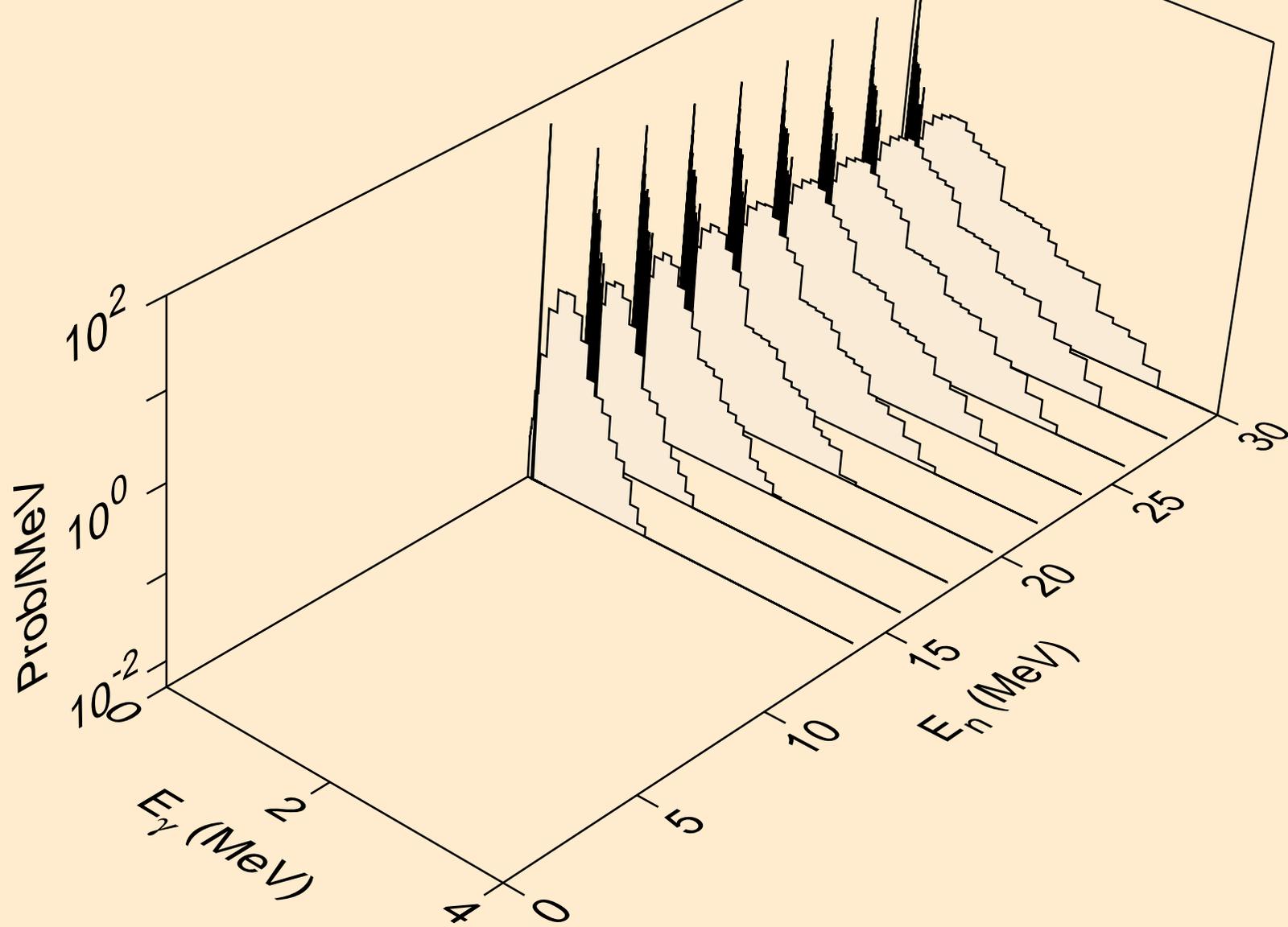Photon emission for (n,2np)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
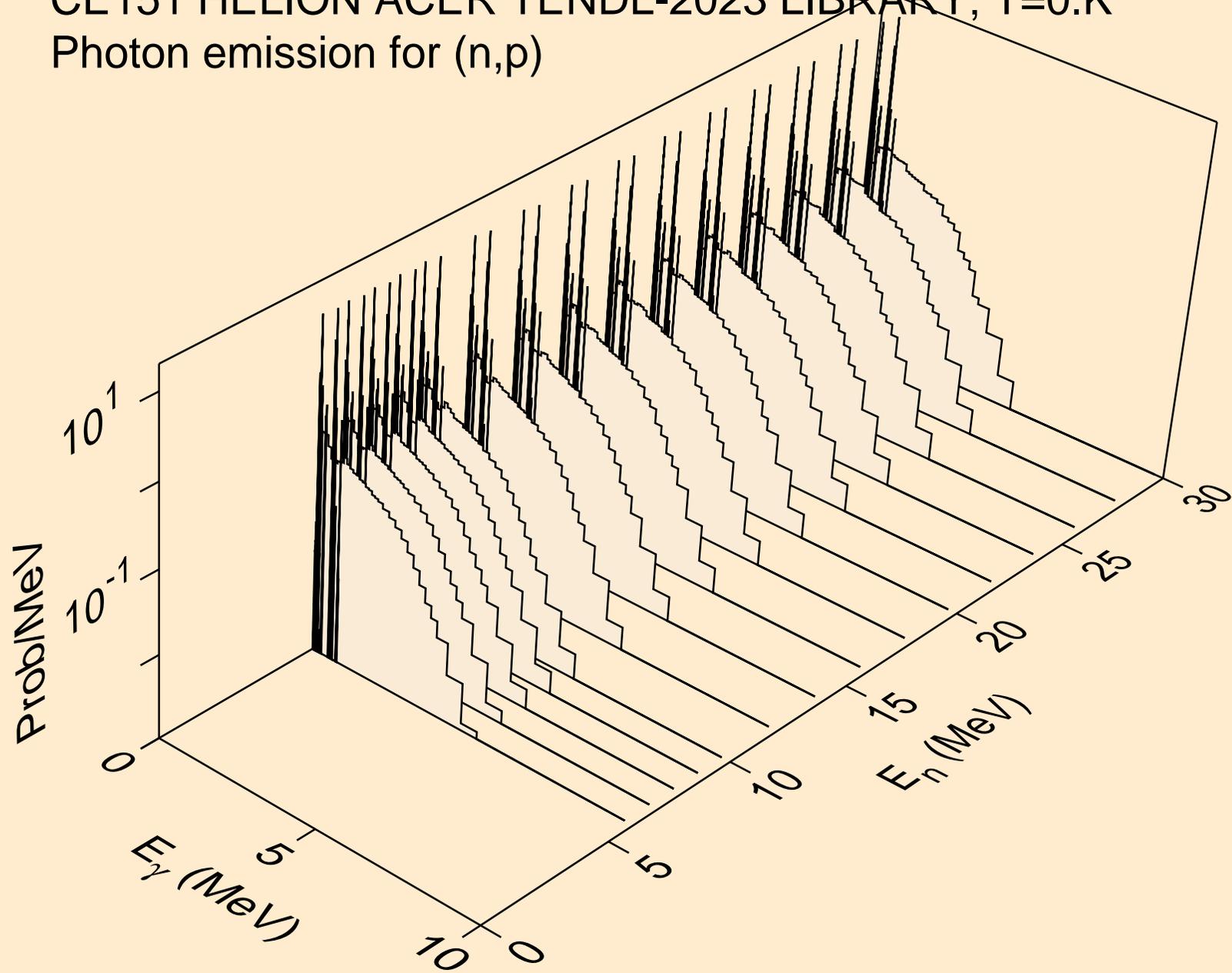Photon emission for (n,3np)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
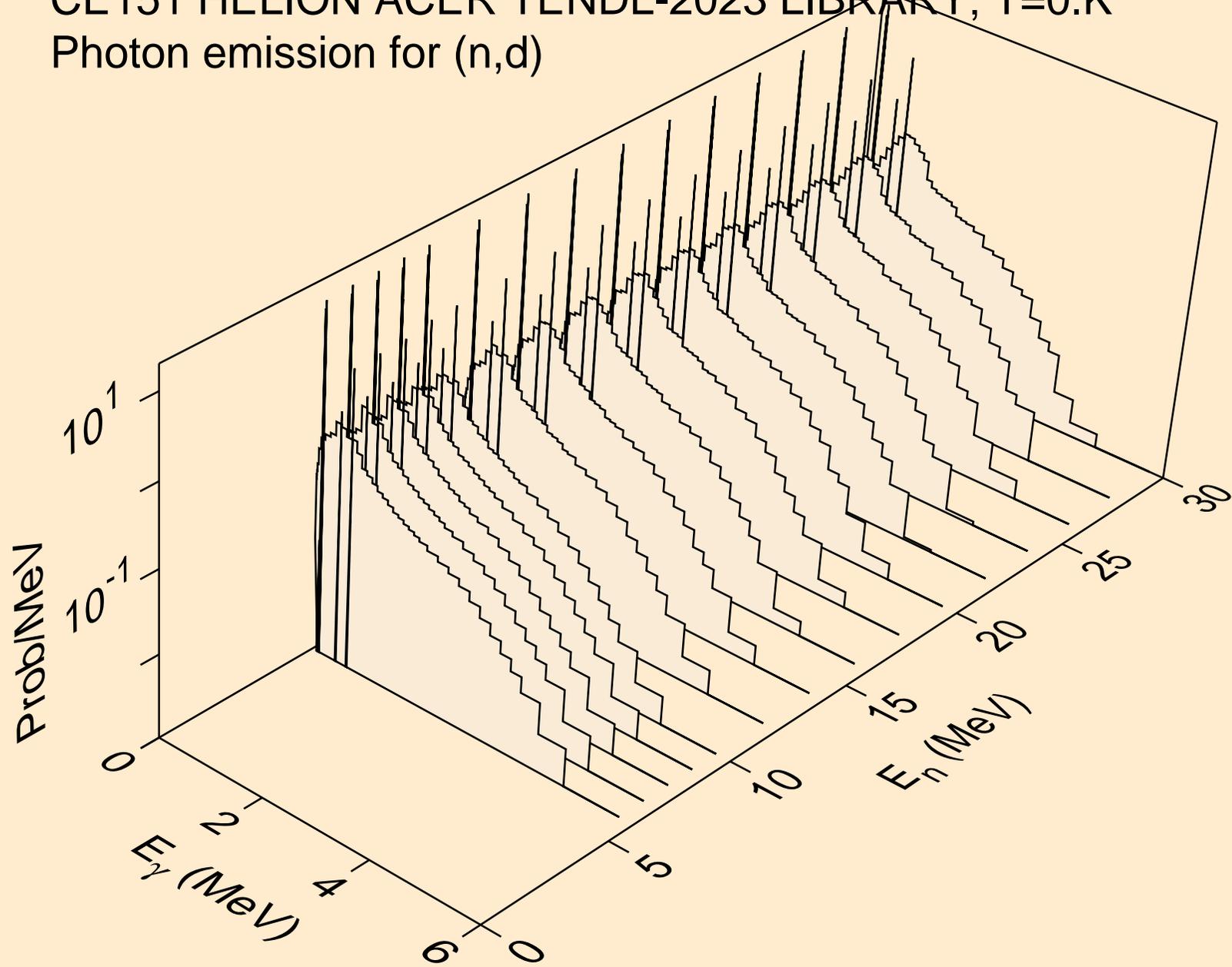Photon emission for (n,n2p)

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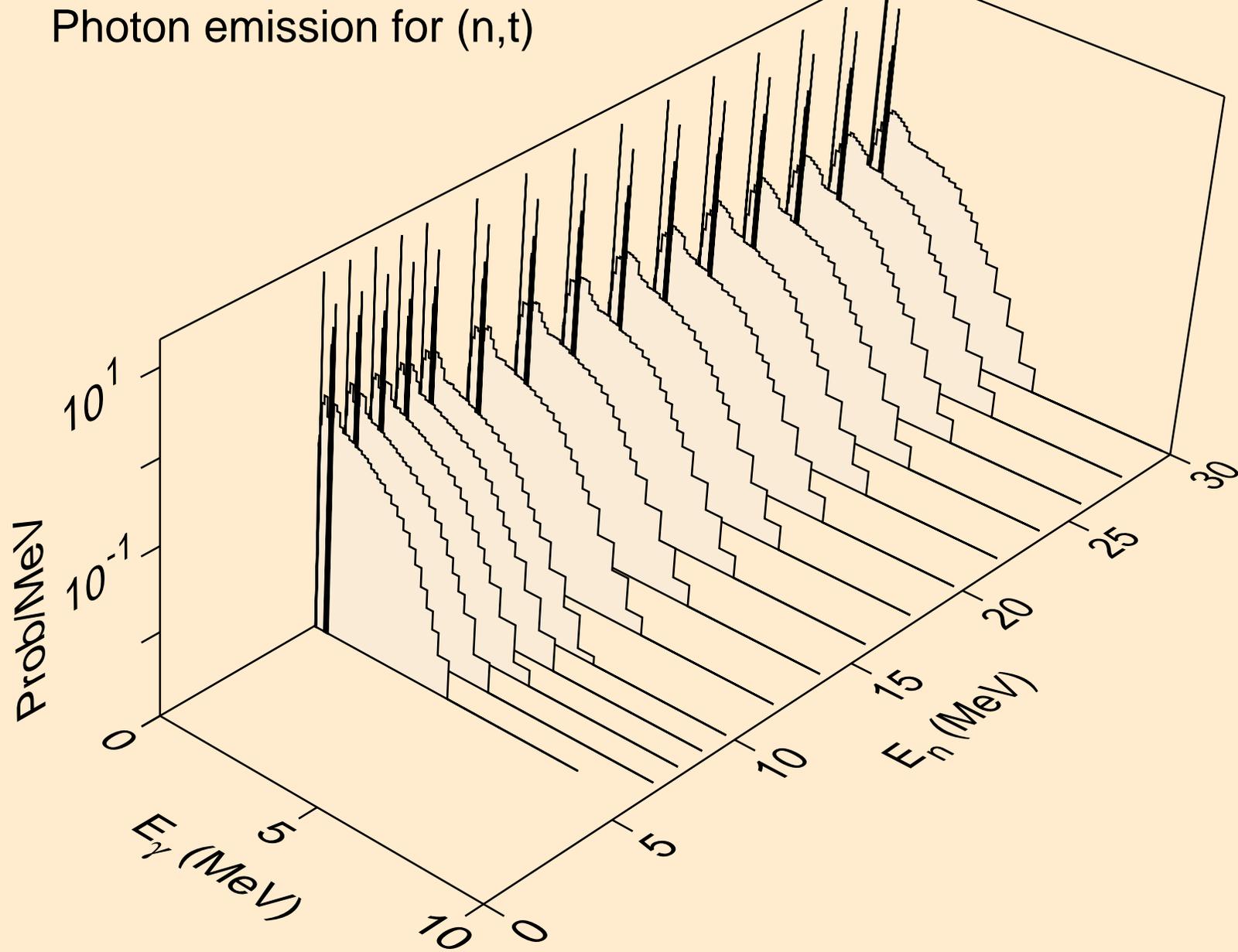Photon emission for (n,npa)

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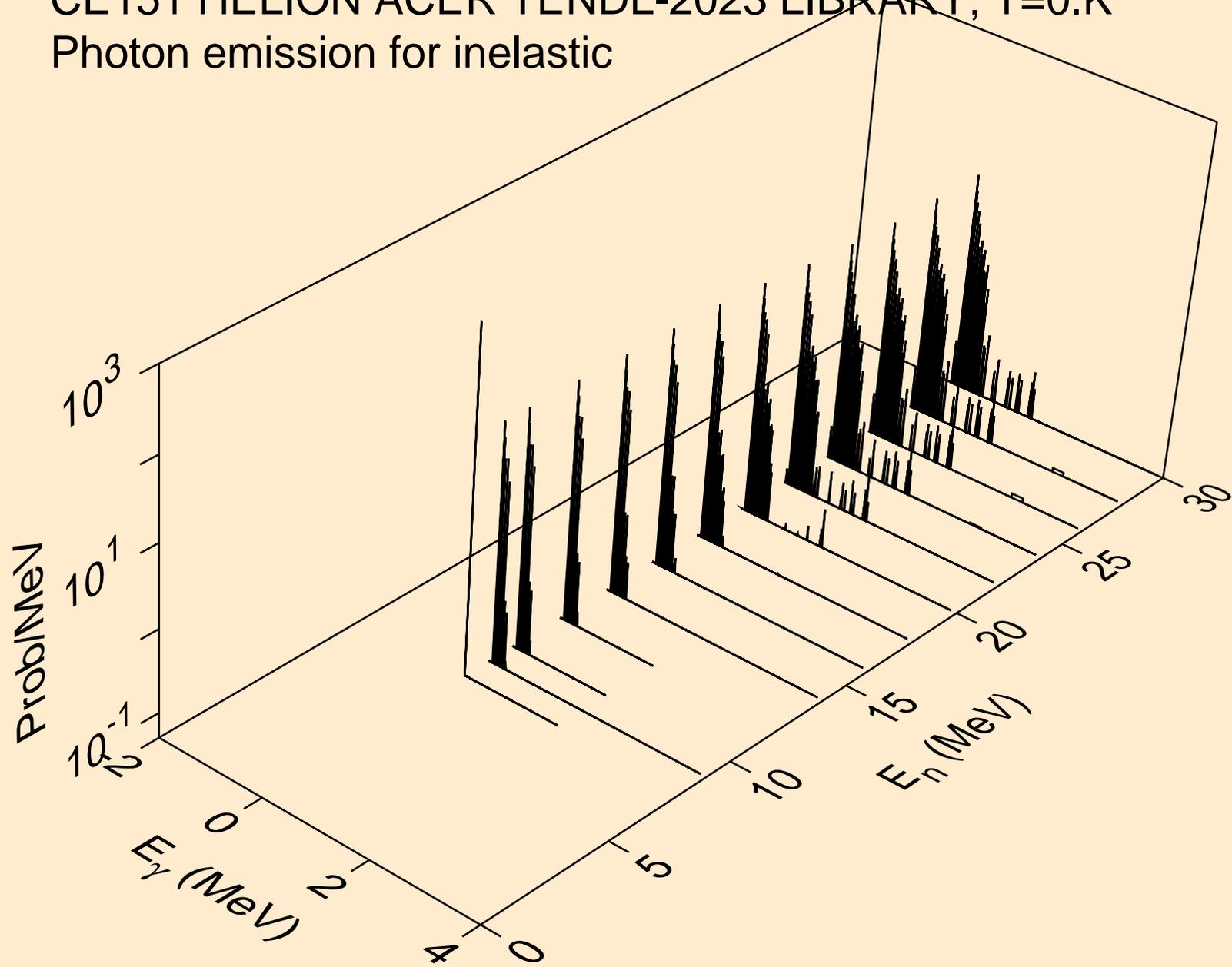Photon emission for (n,p)

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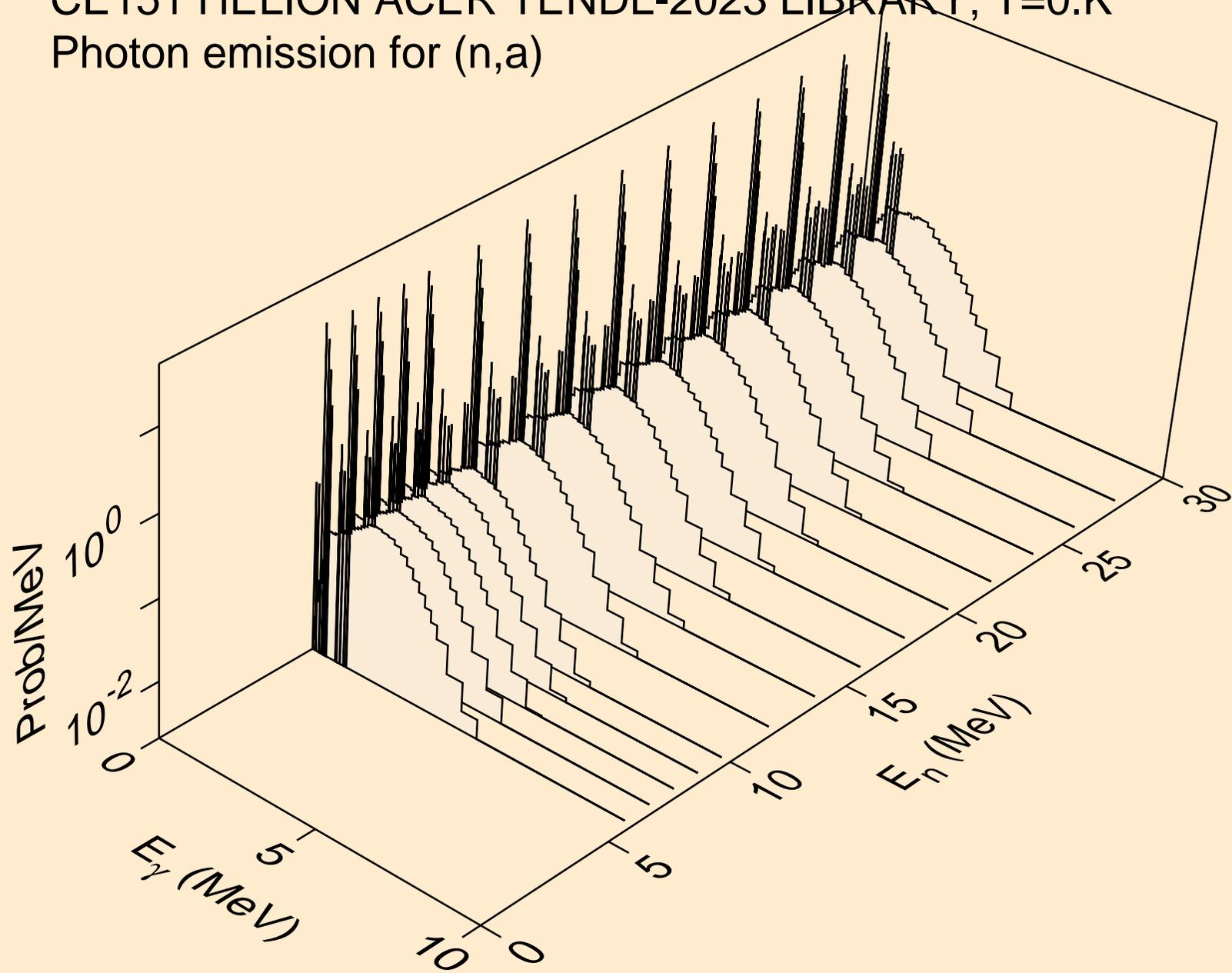Photon emission for (n,d)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
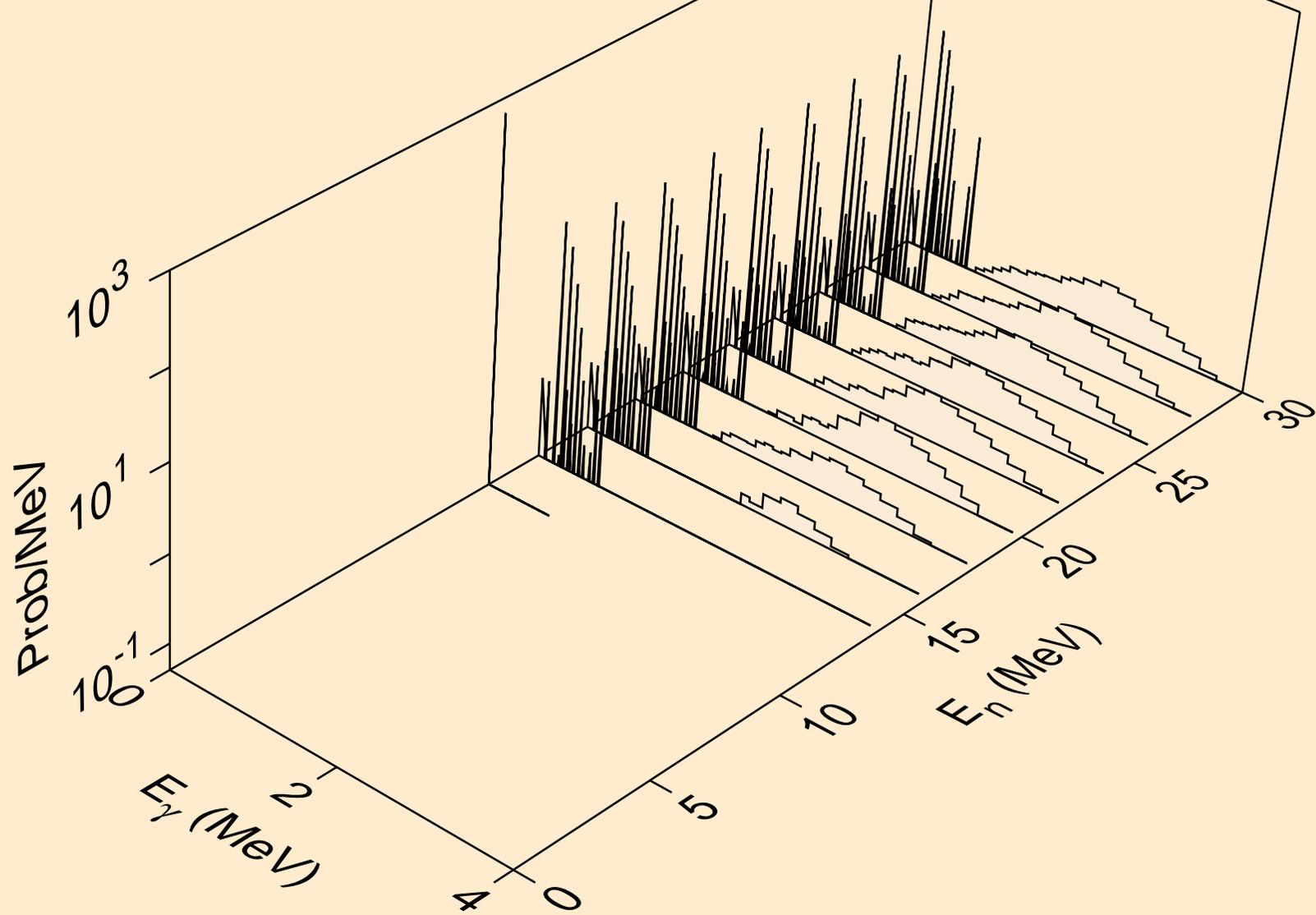Photon emission for (n,t)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
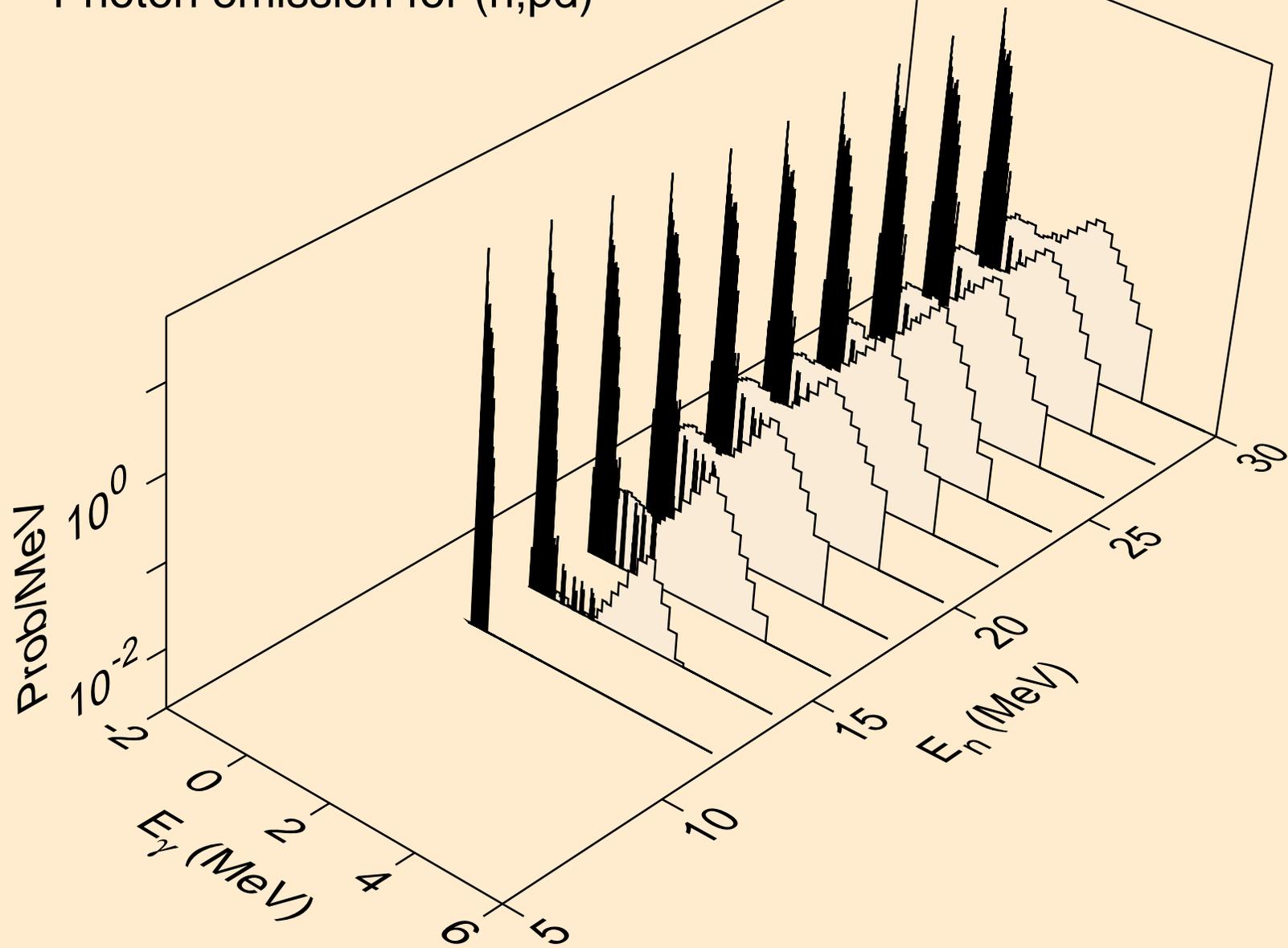Photon emission for inelastic

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
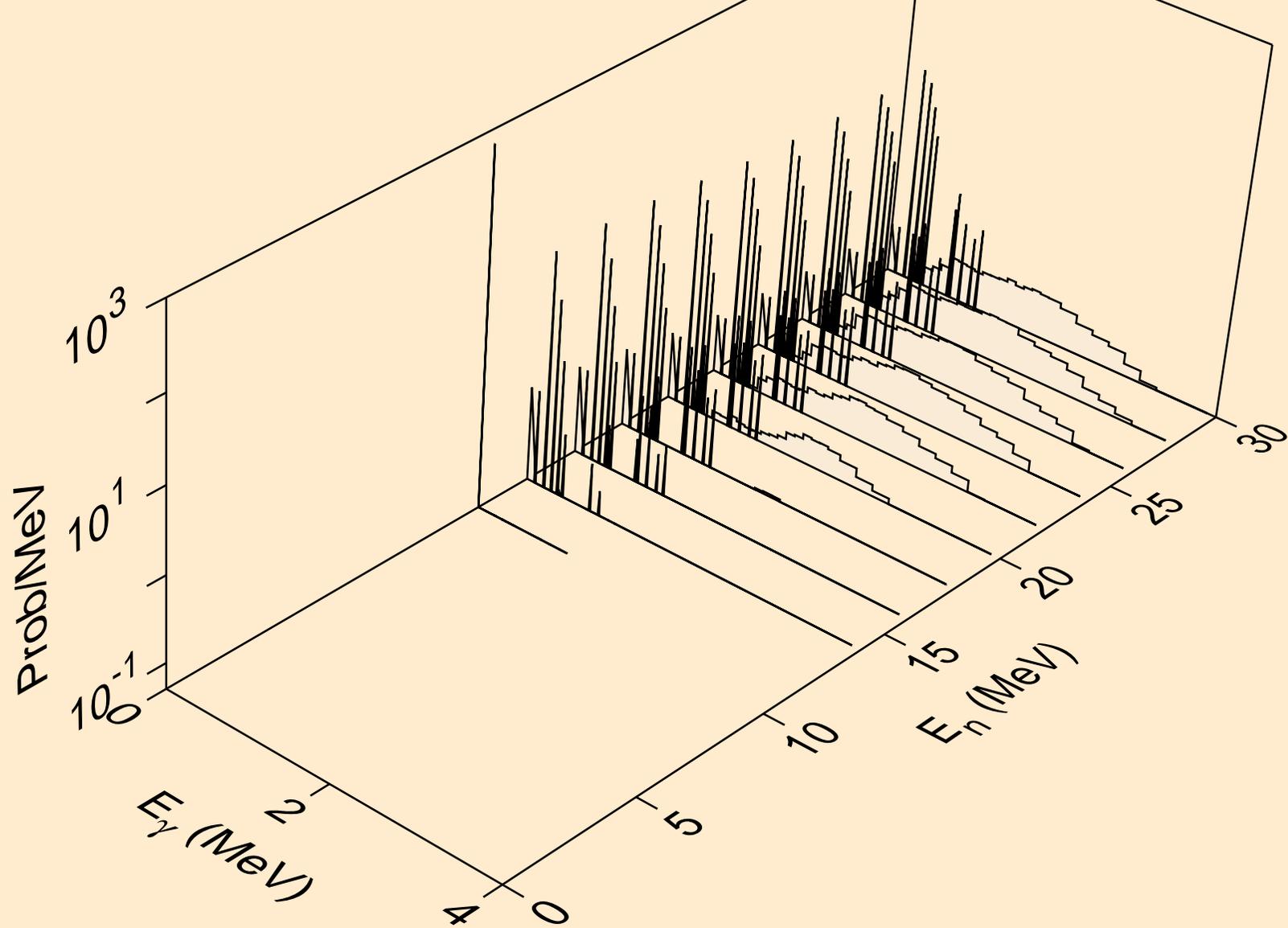Photon emission for (n,a)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,2p)

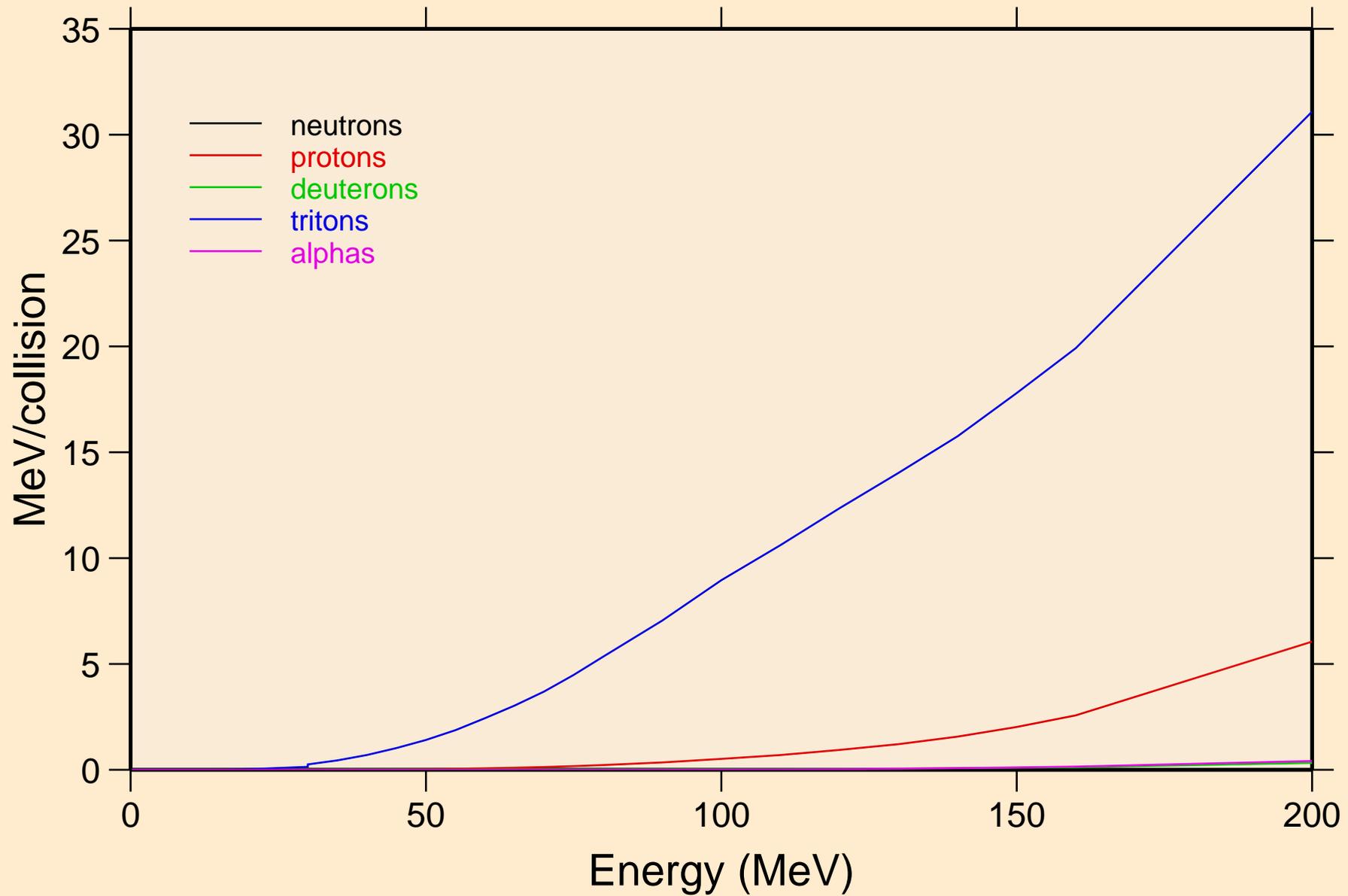CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,pd)

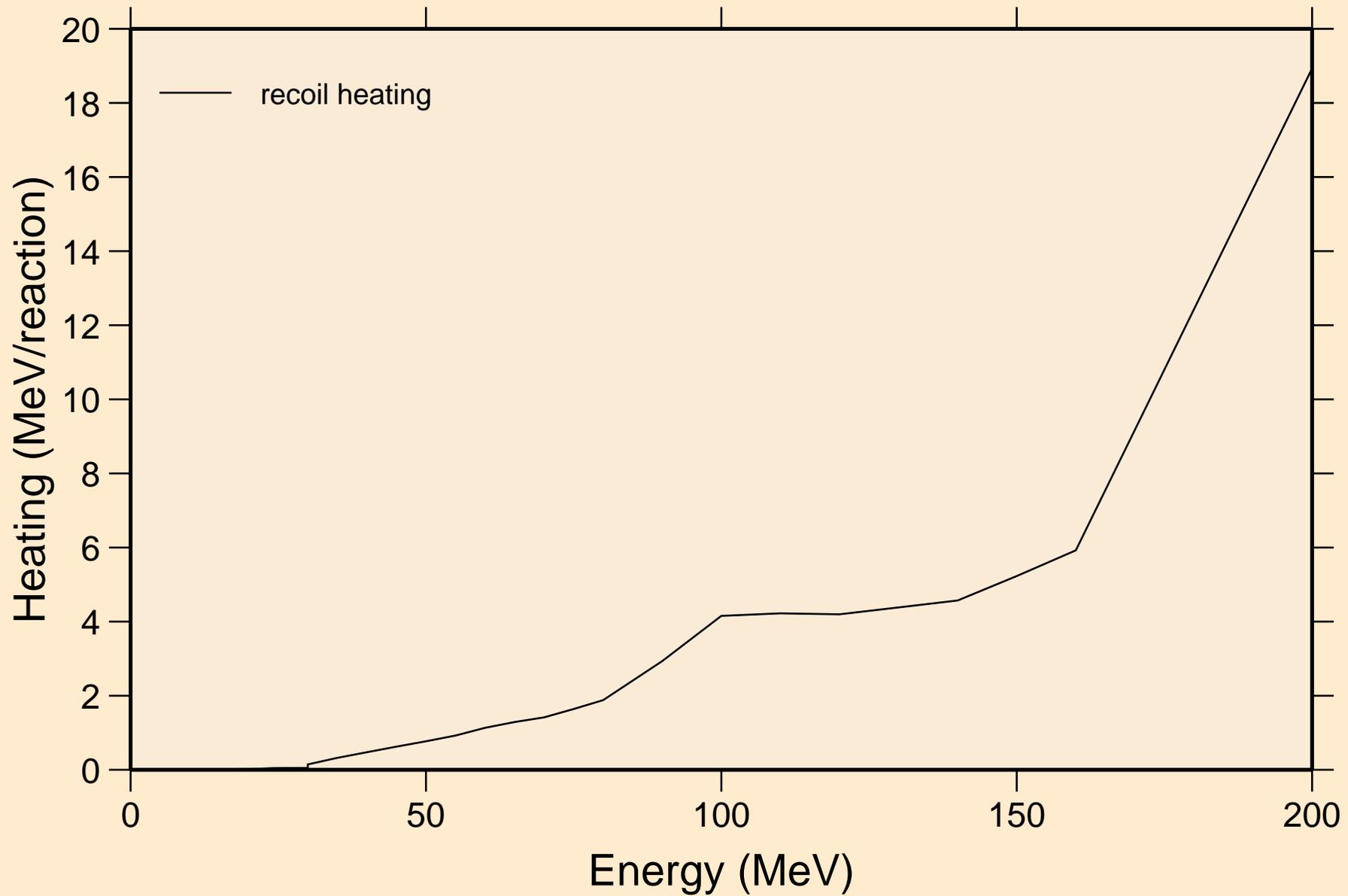CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Photon emission for (n,pt)
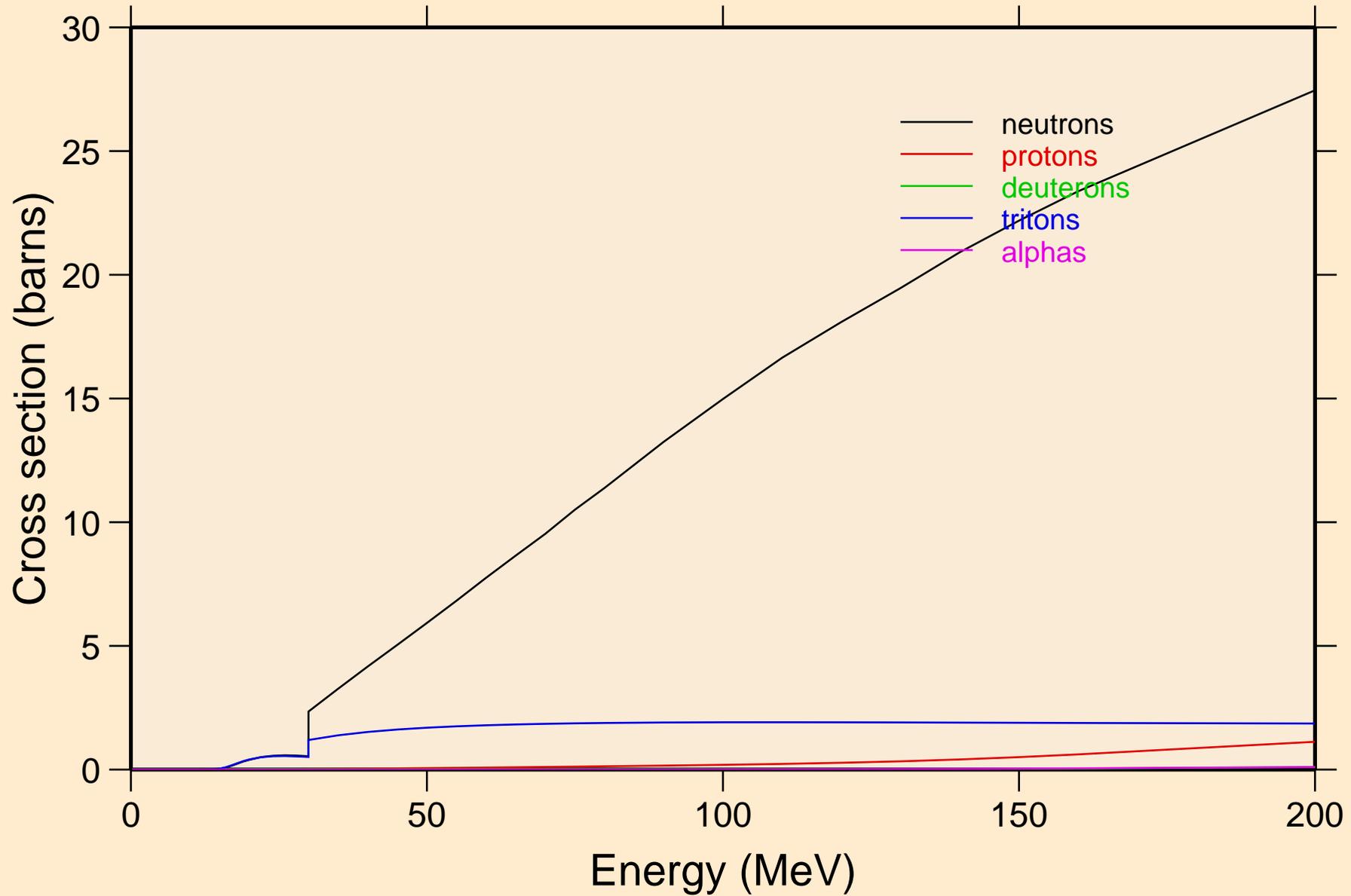
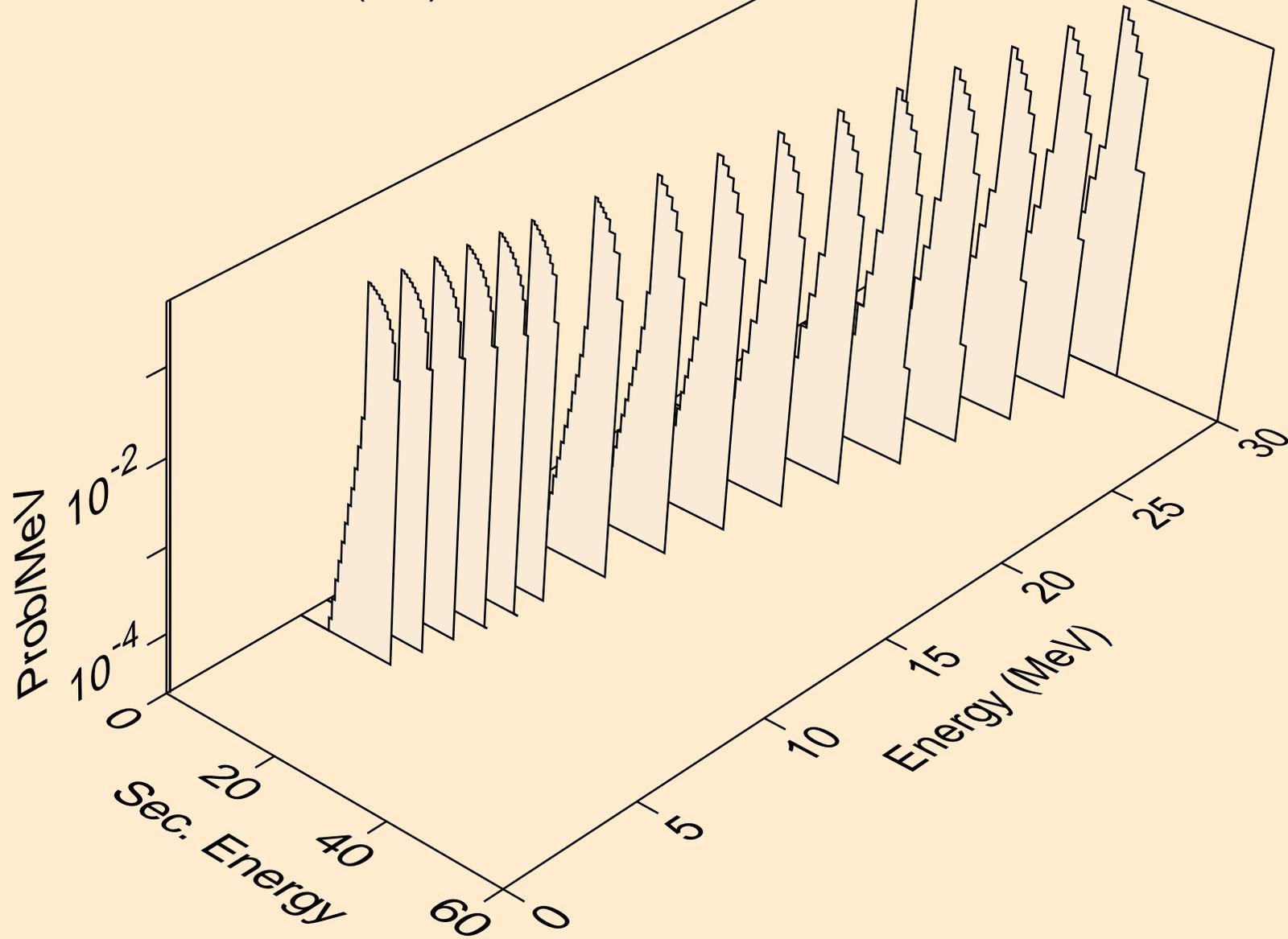CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Particle heating contributions

- neutrons
- protons
- deuterons
- tritons
- alphas

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Recoil Heating

recoil heating

Heating (MeV/reaction)

Energy (MeV)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
Particle production cross sections

neutrons
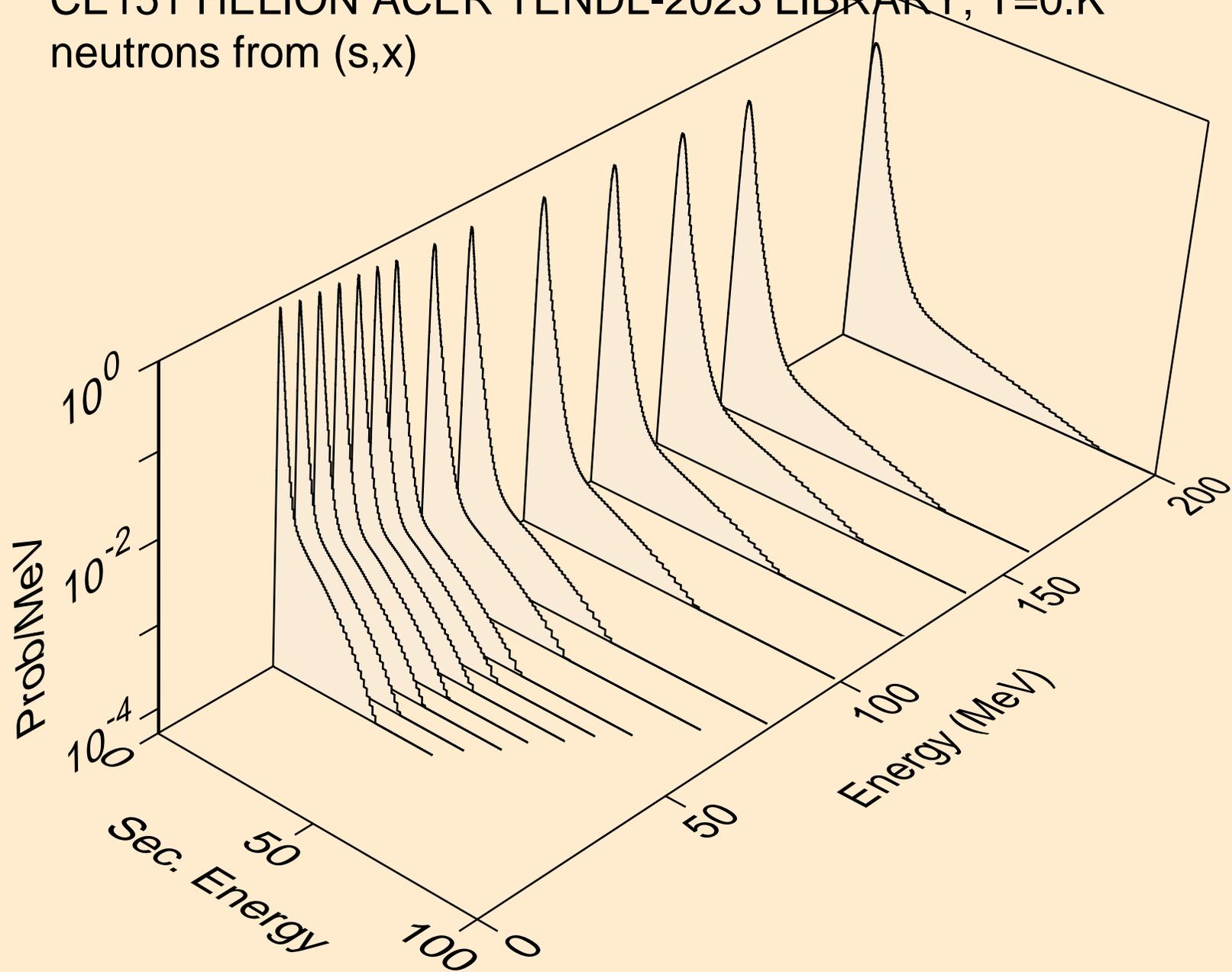protons
deuterons
tritons
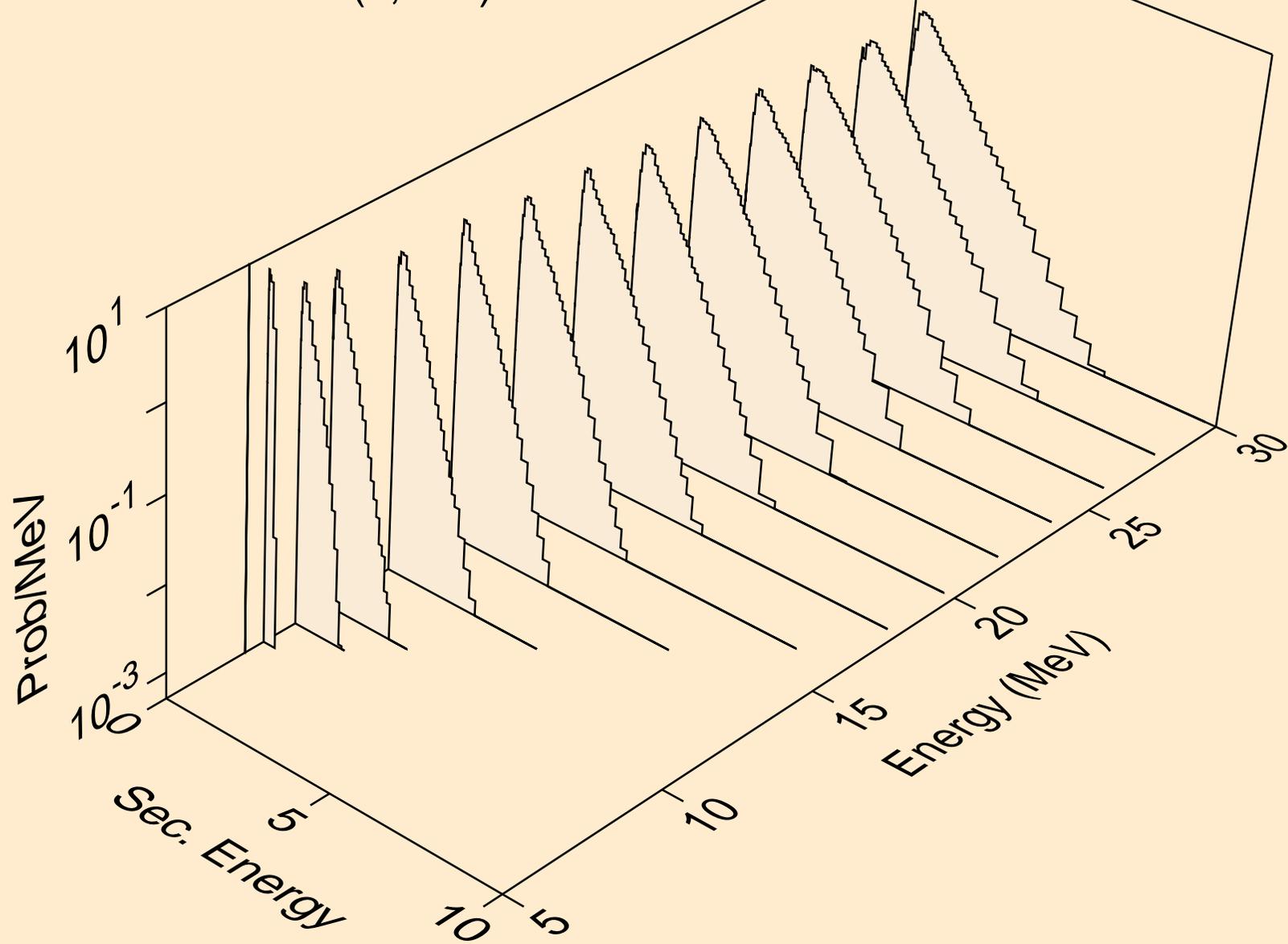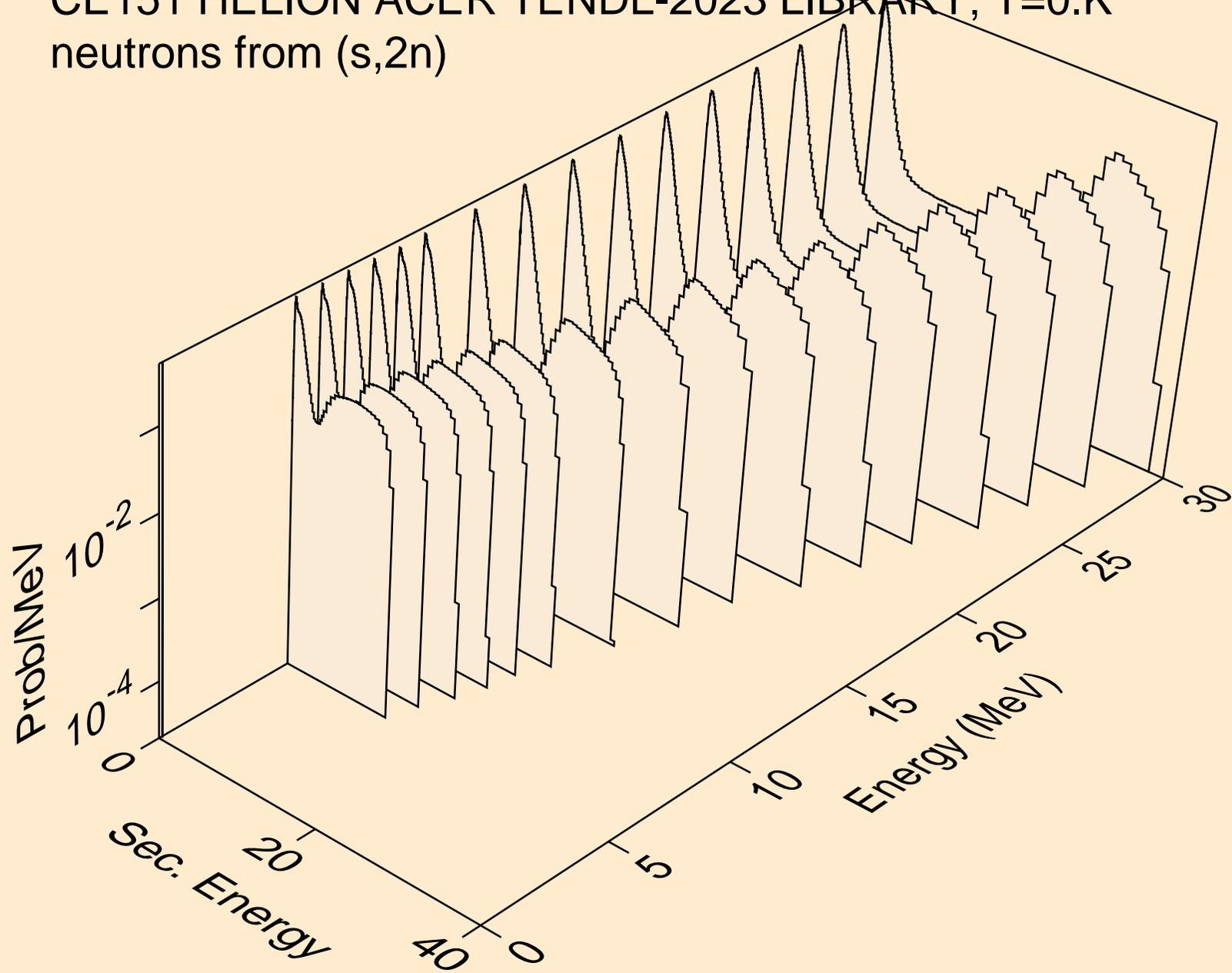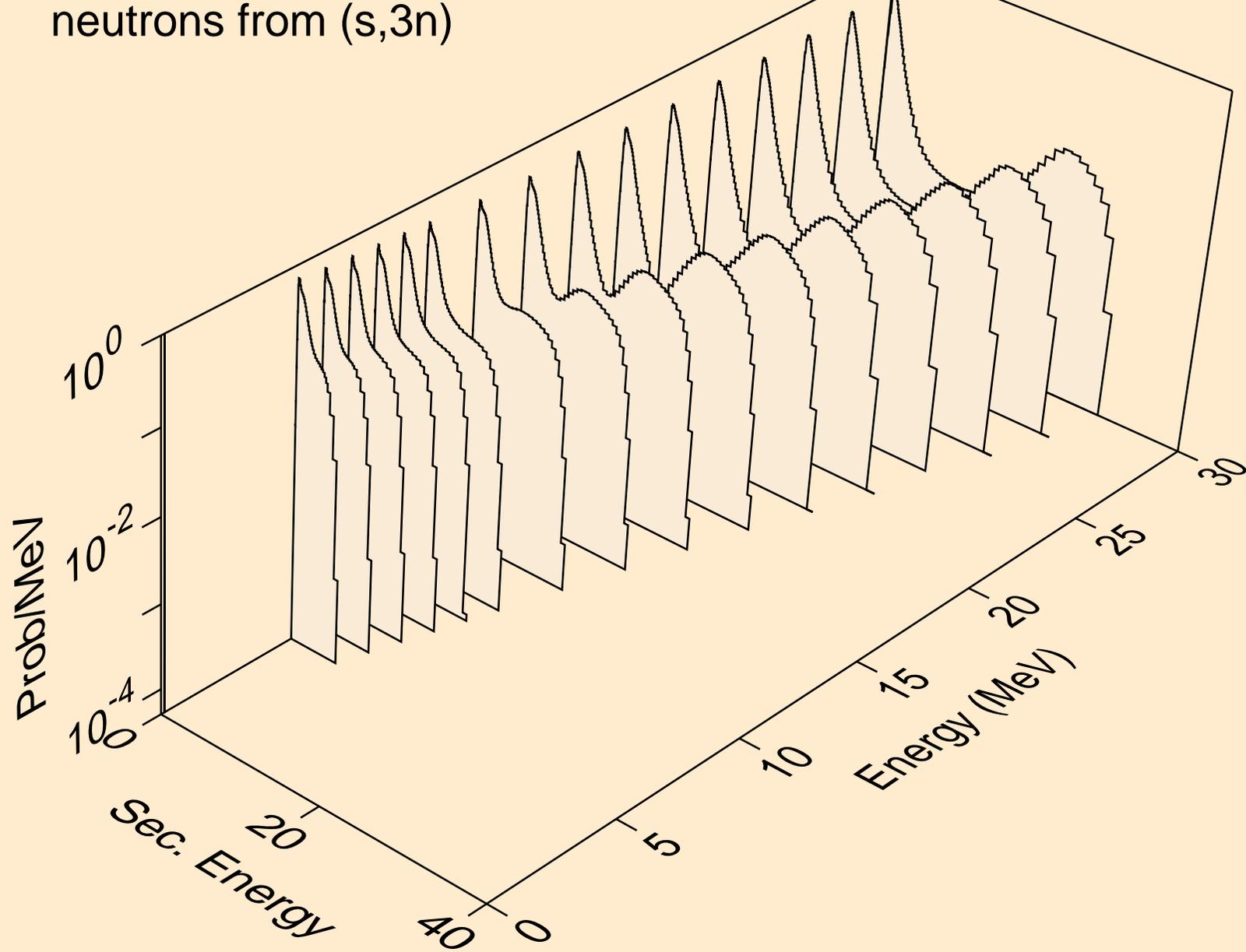alphas

Cross section (barns)

Energy (MeV)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,n)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,x)

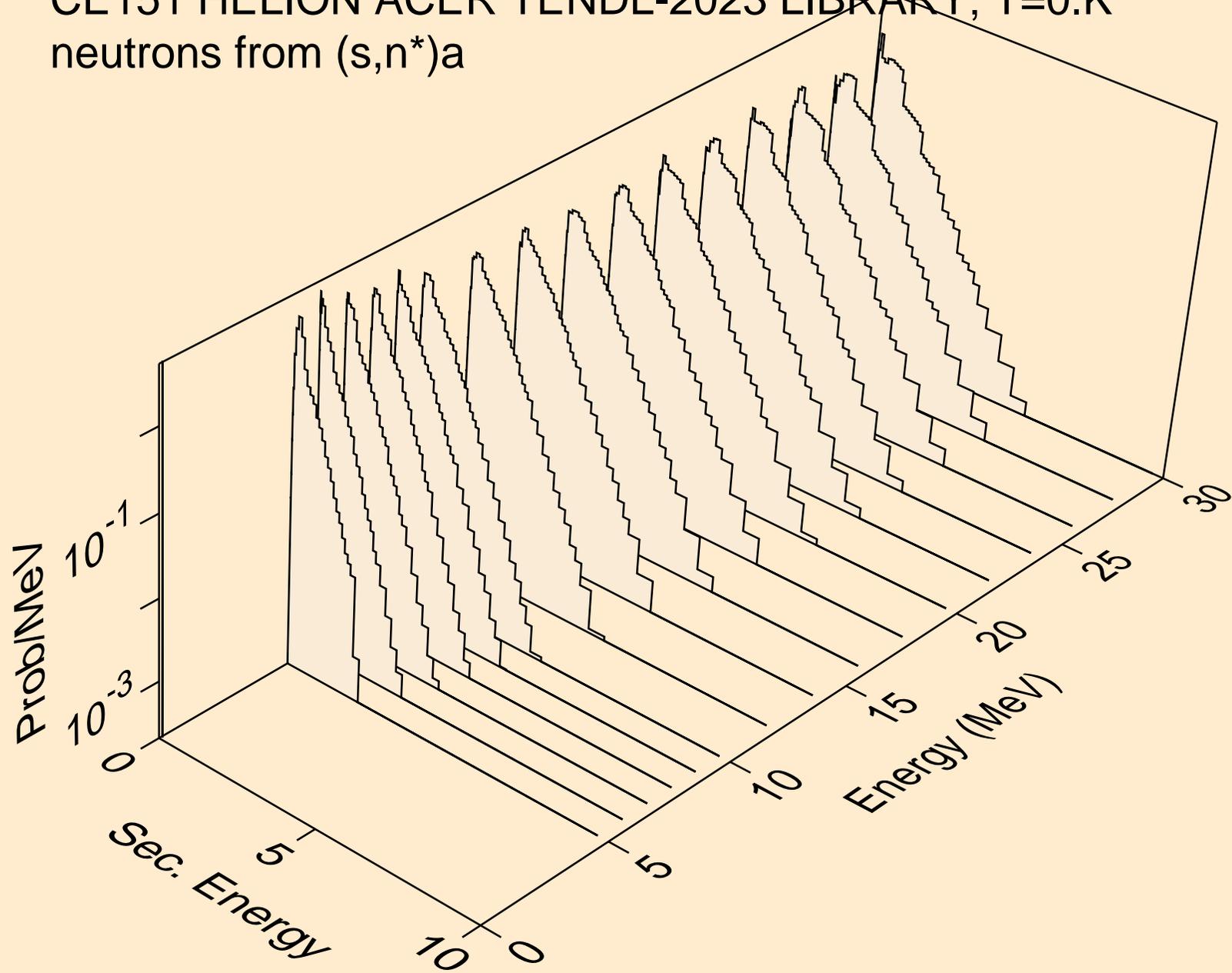CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,2nd)

Prob/MeV

10^1

10^{-1}

10^{-3}

Sec. Energy

5

10

5

10

15

20

25

30

Energy (MeV)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
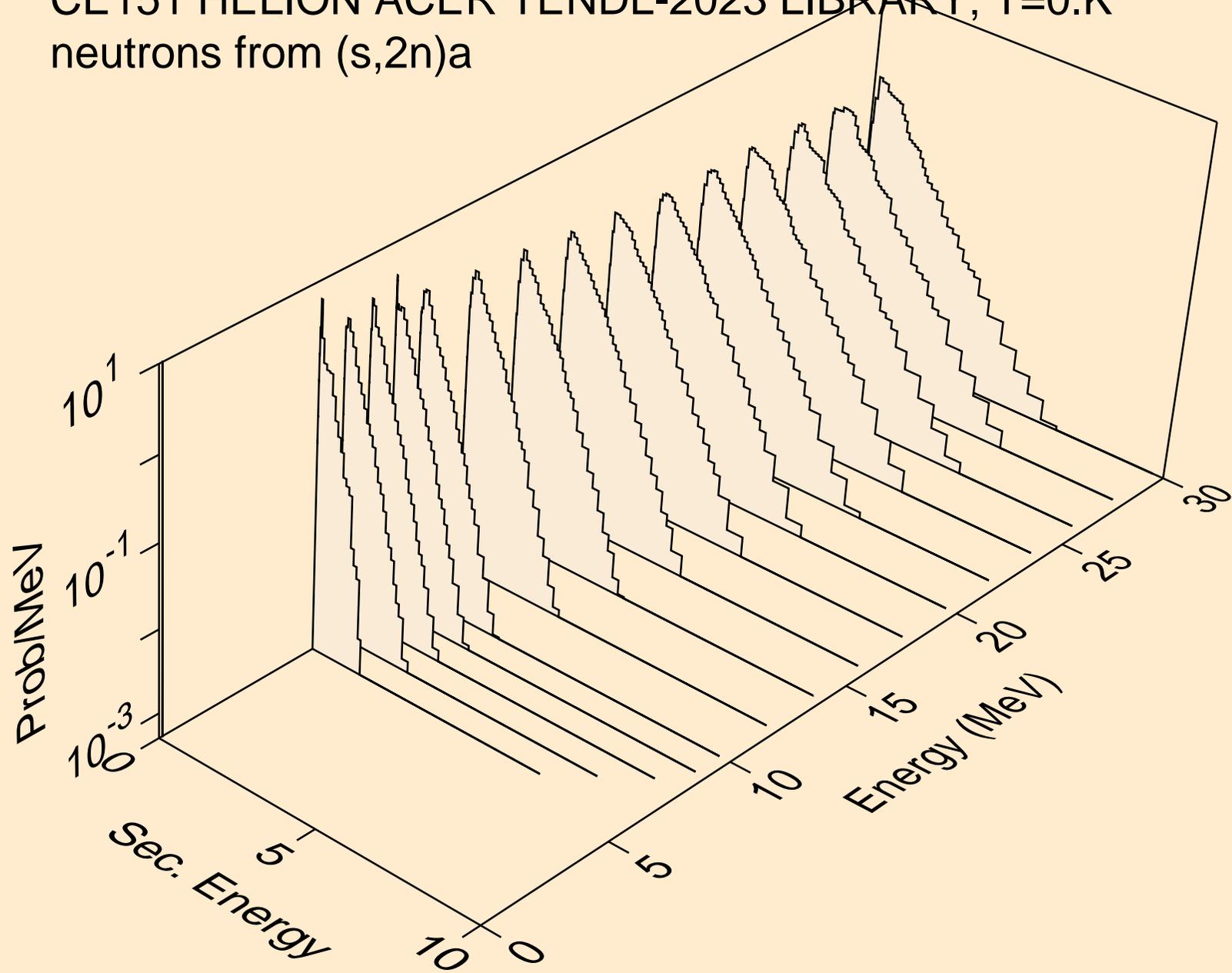neutrons from (s,2n)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
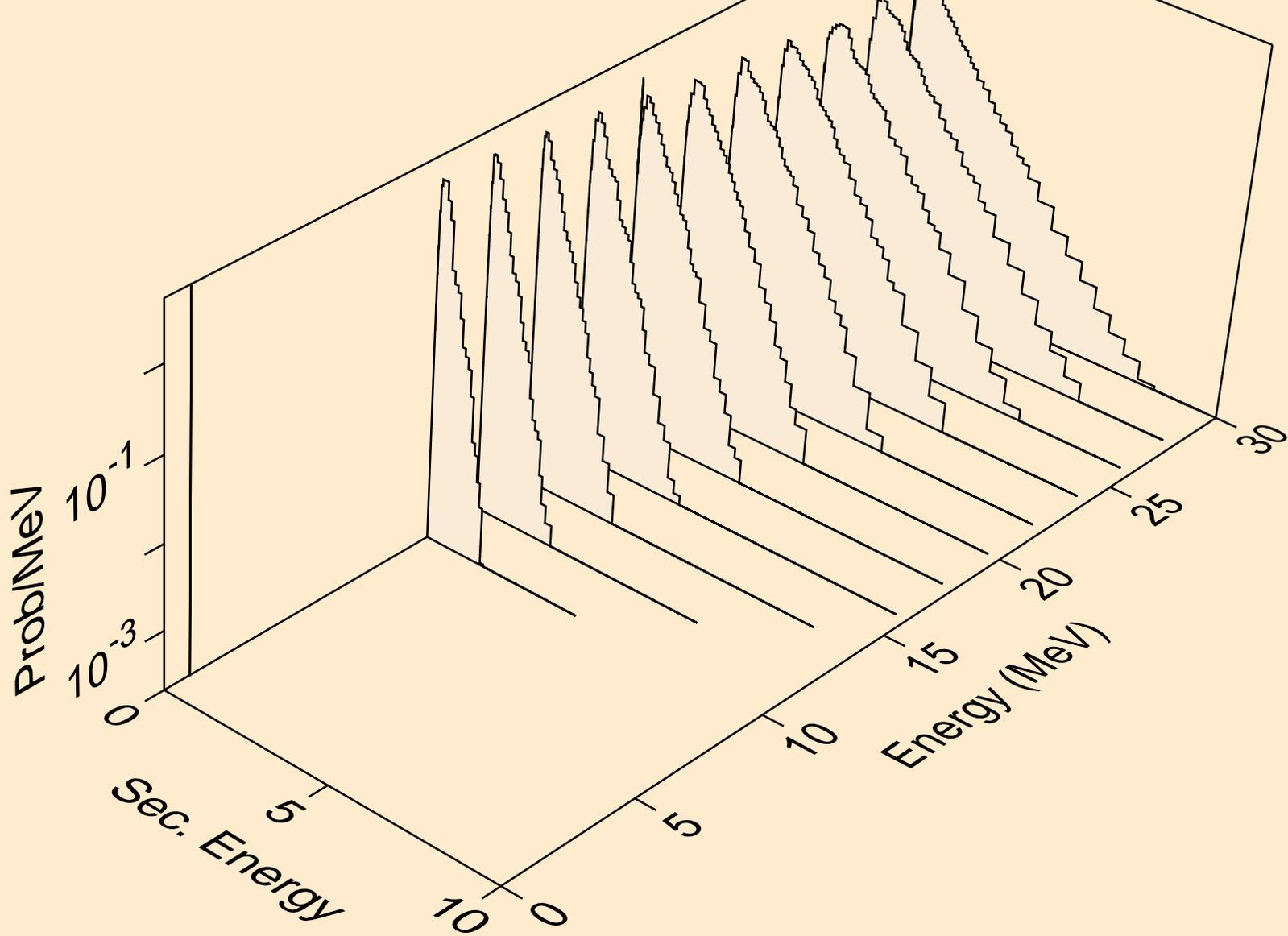neutrons from (s,3n)

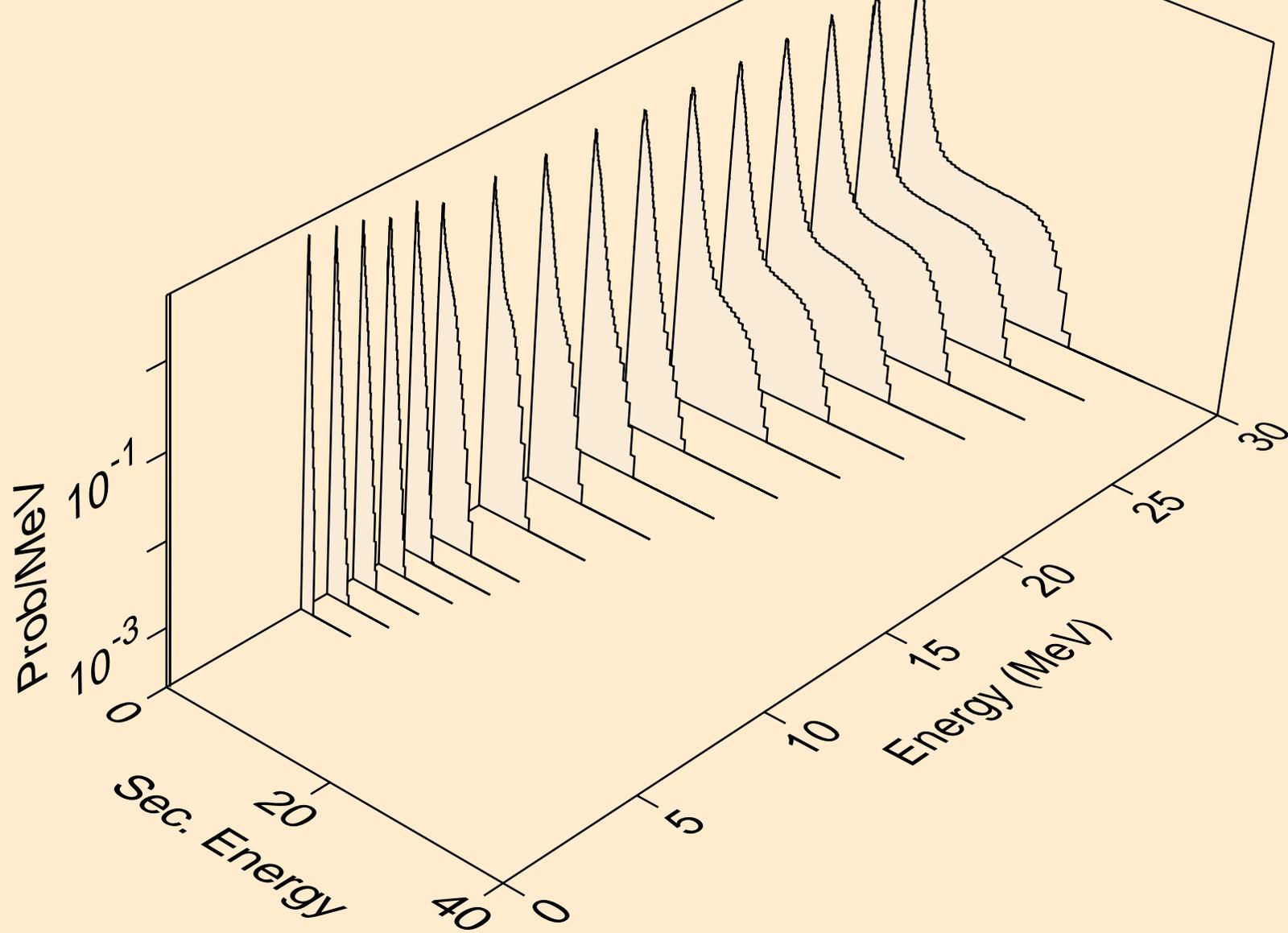CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,n*)a

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
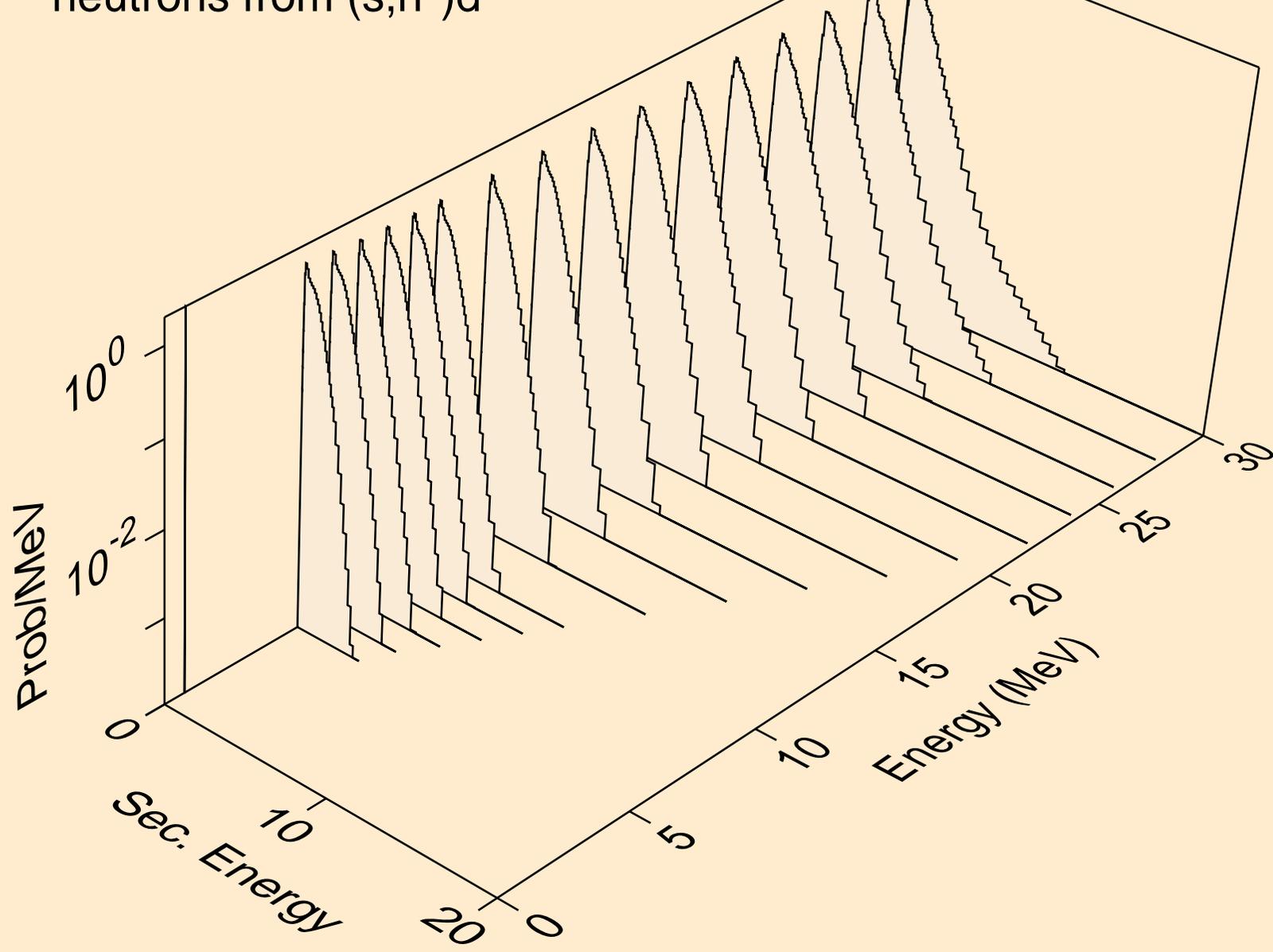neutrons from (s,2n)a

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
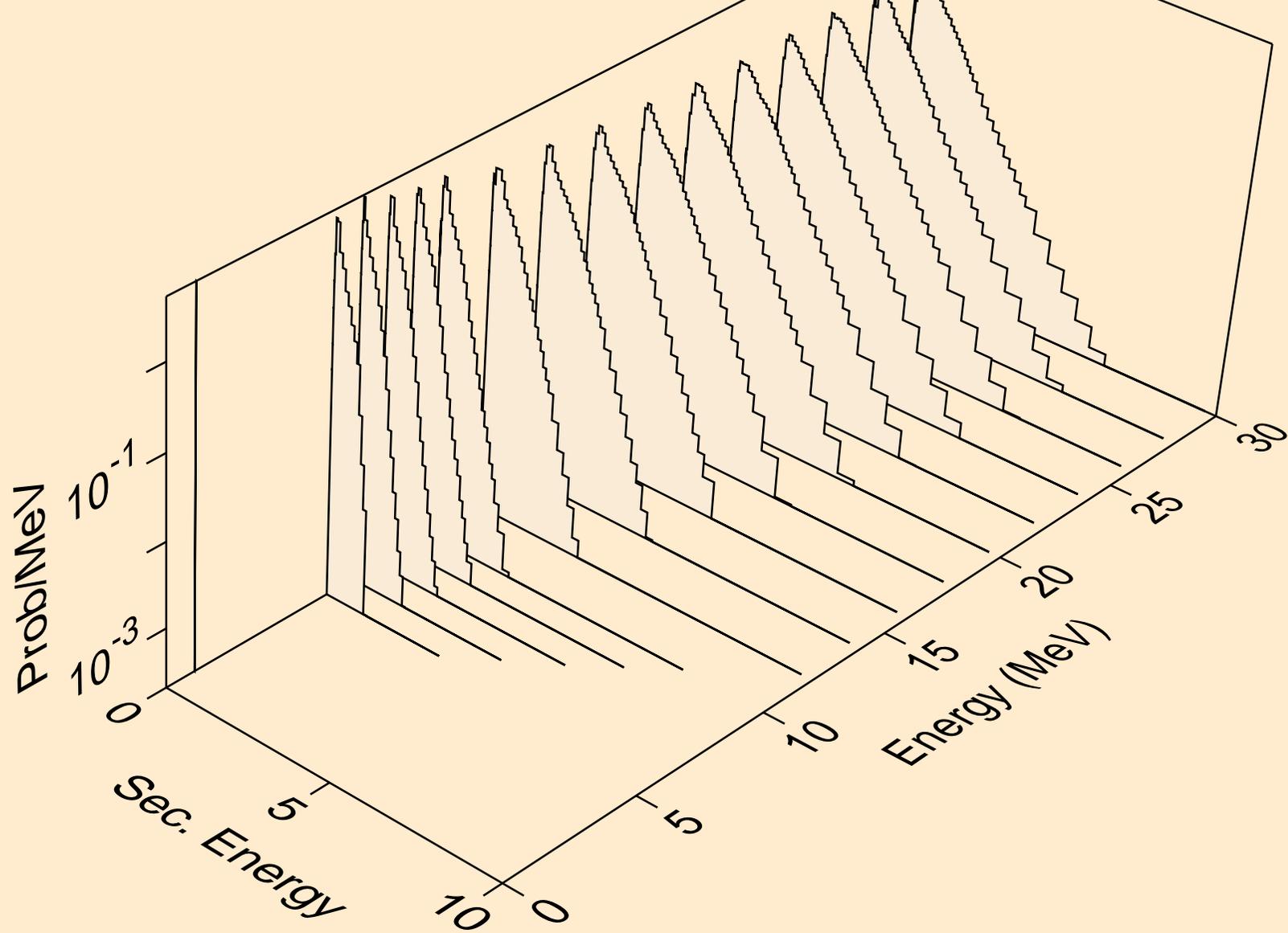neutrons from (s,3n)a

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
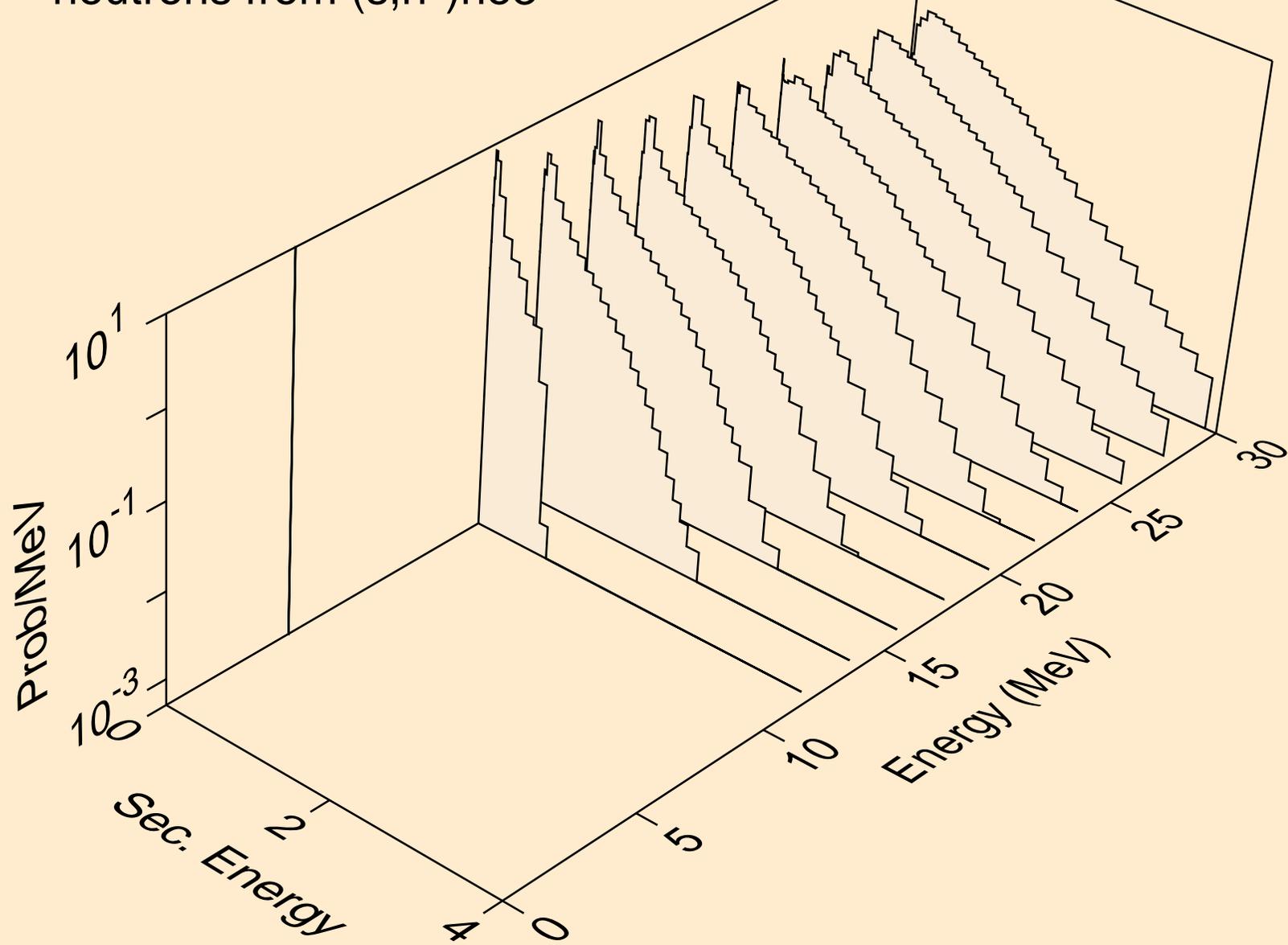neutrons from (s,n*)p

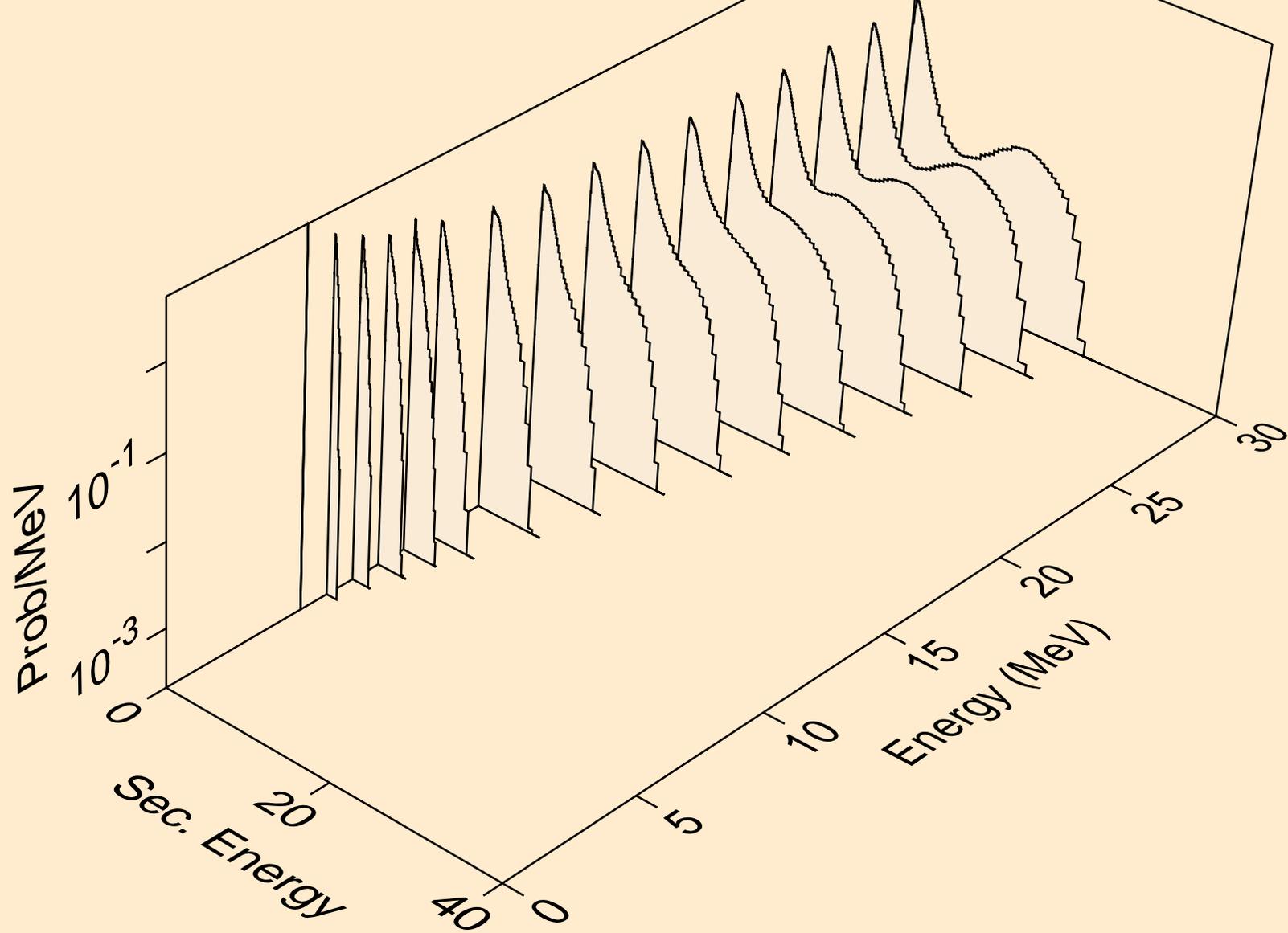CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,n*)d

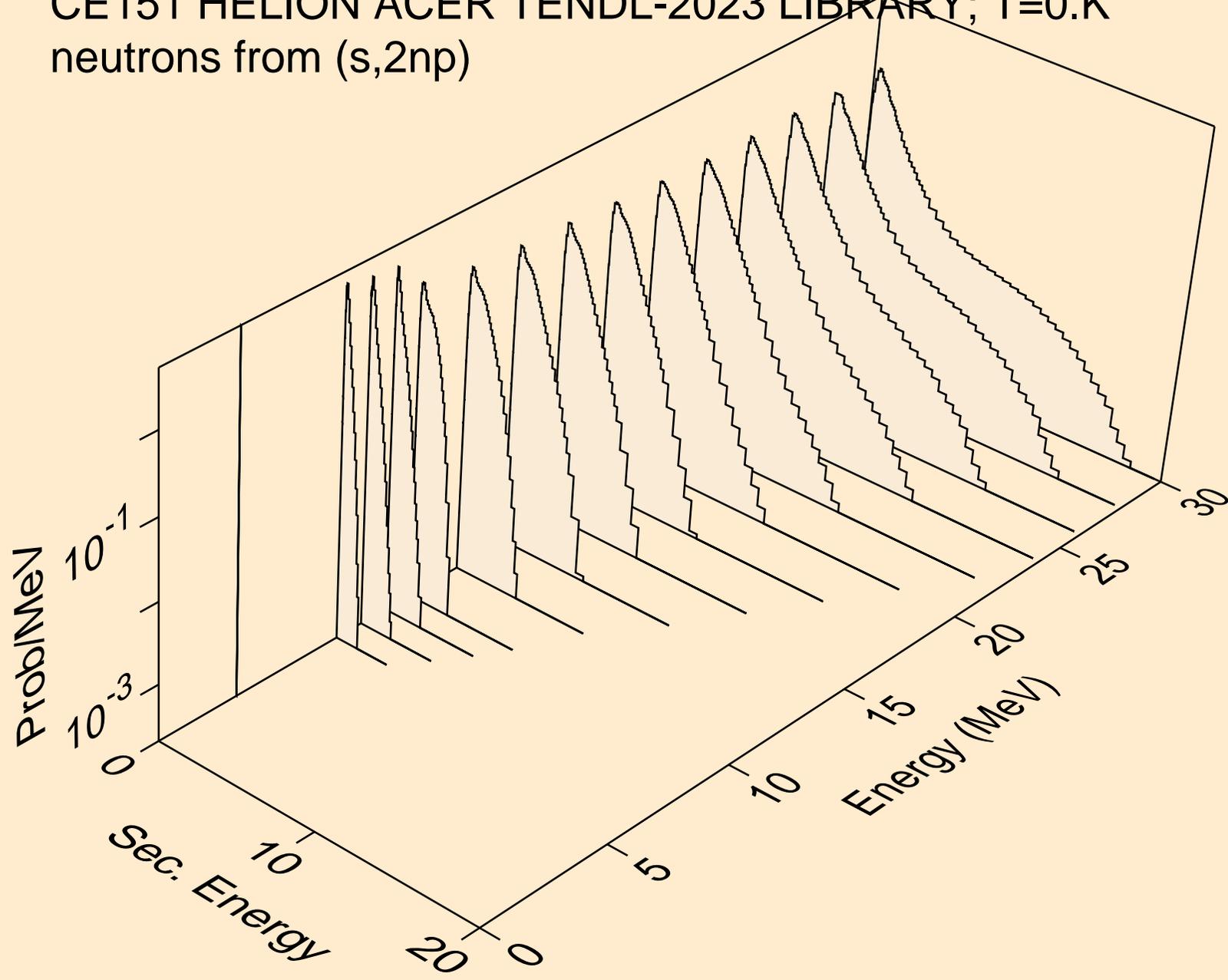CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,n*)t

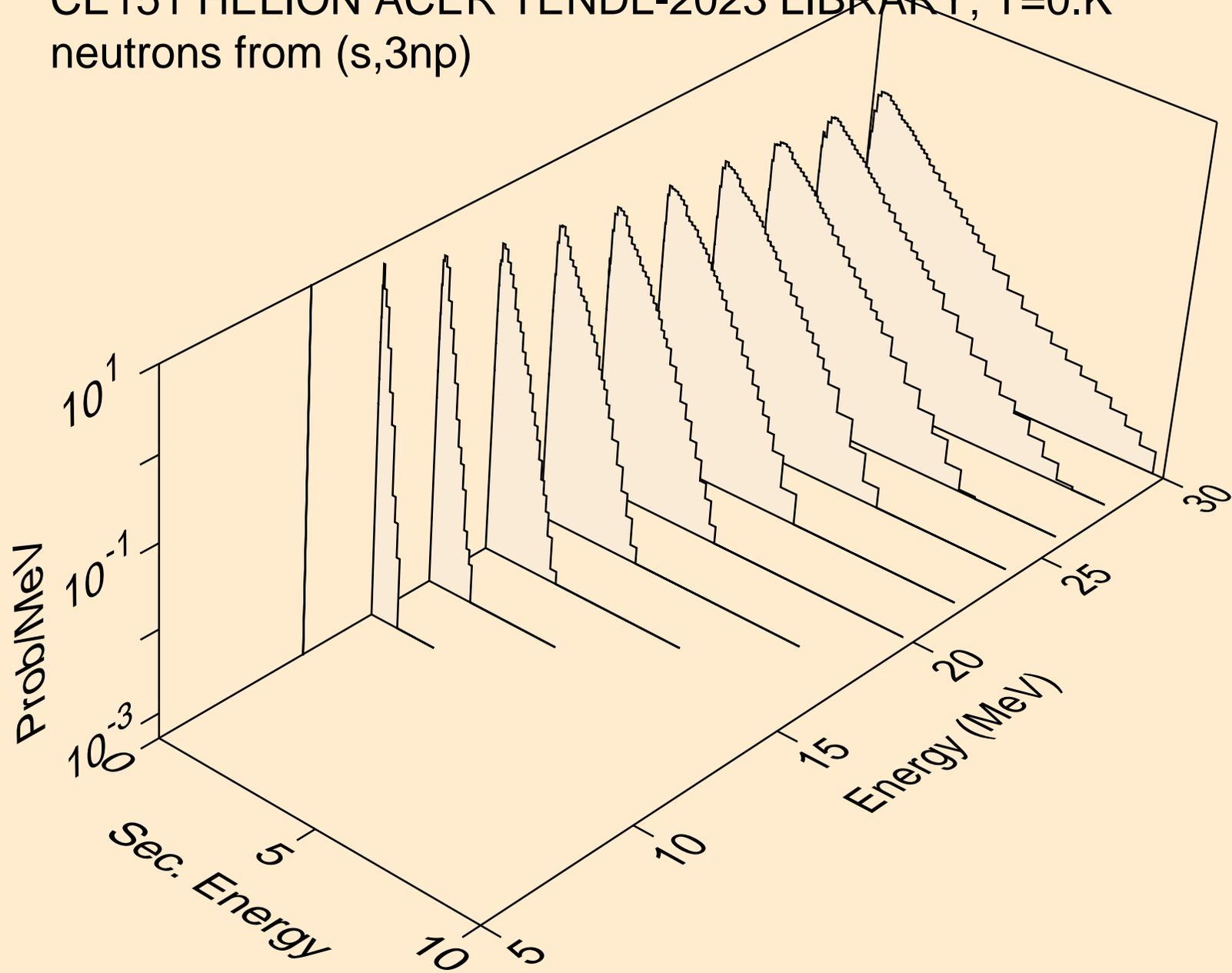CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,n*)he3

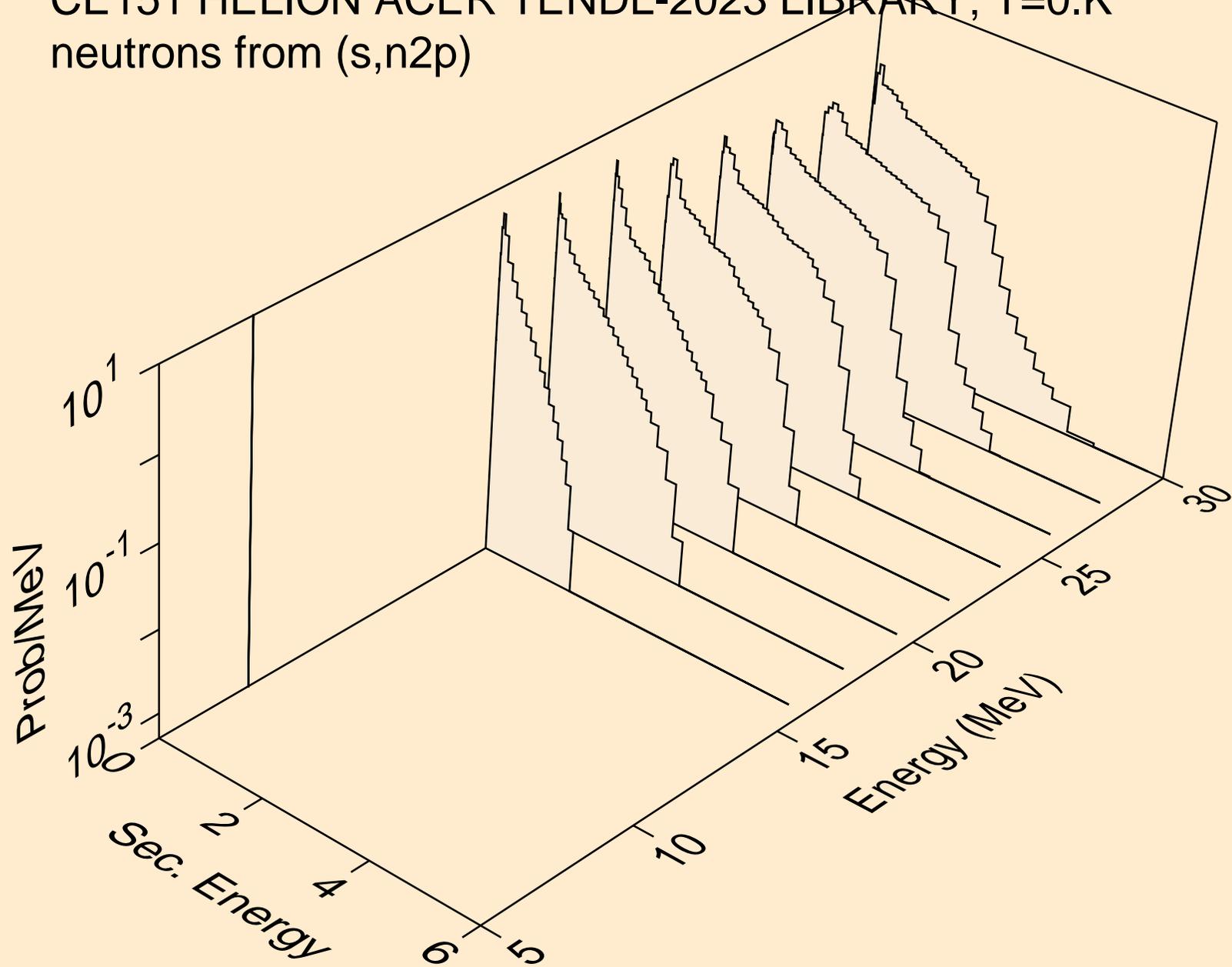CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,4n)

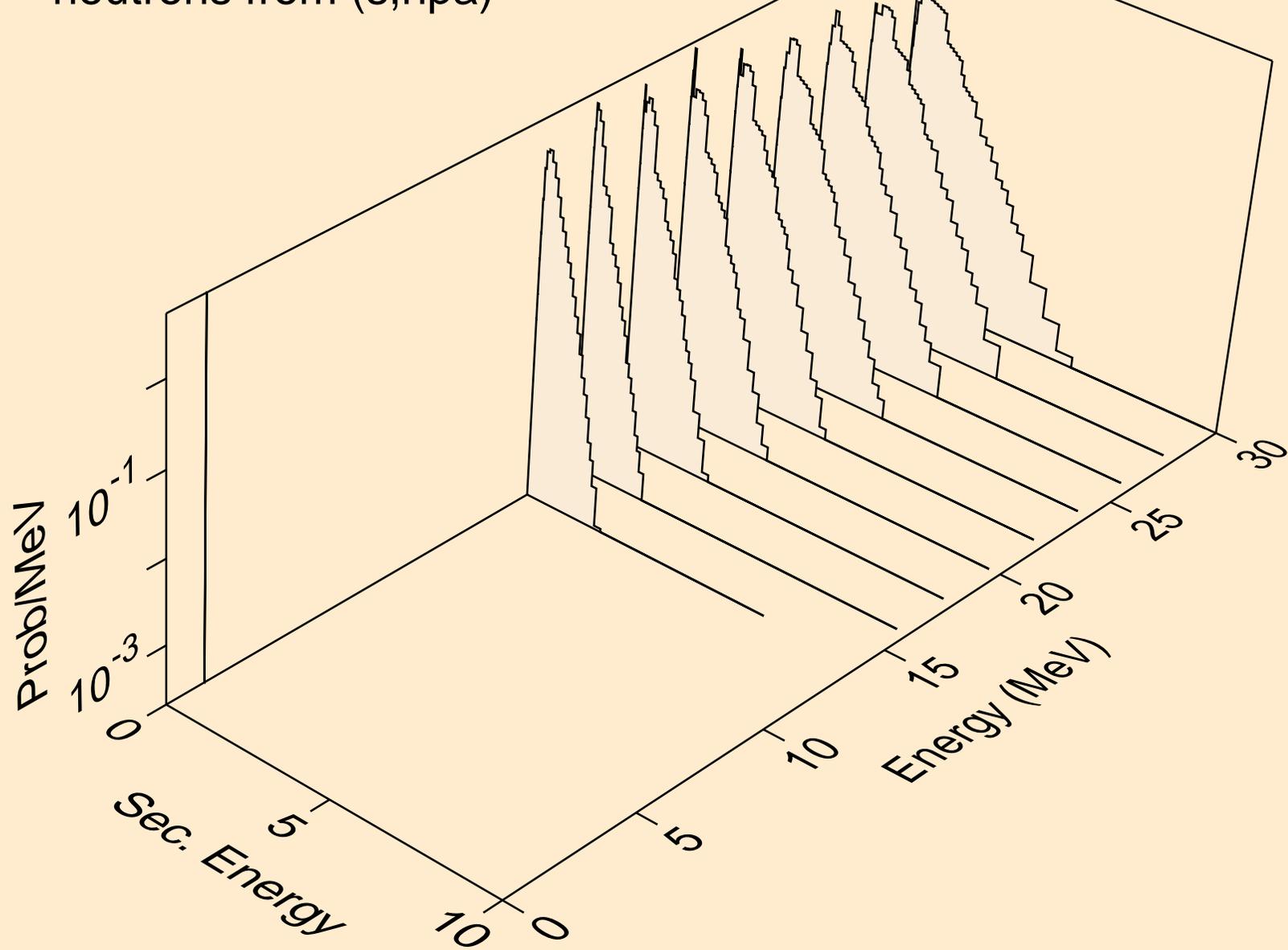CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,2np)

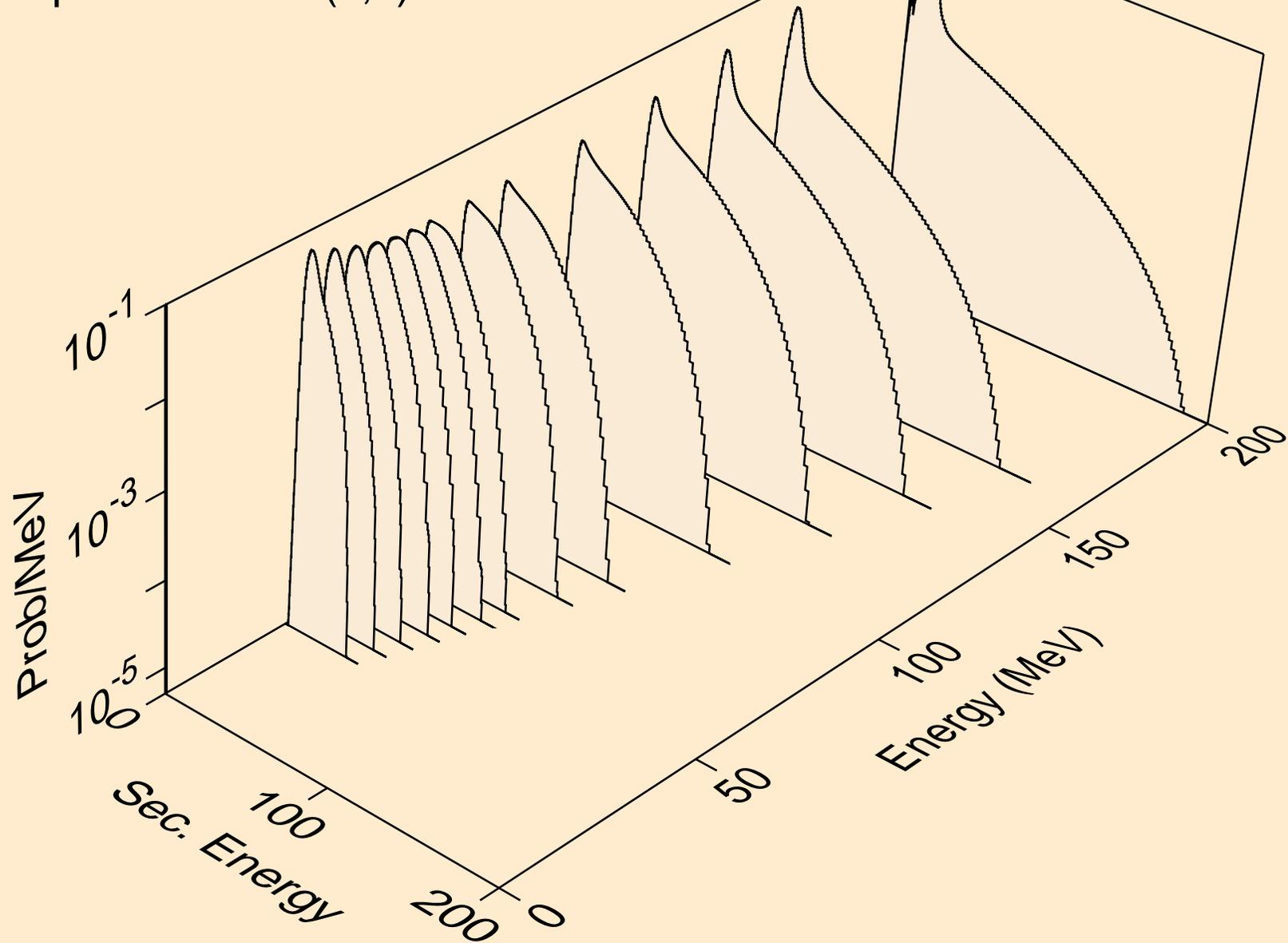CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,3np)

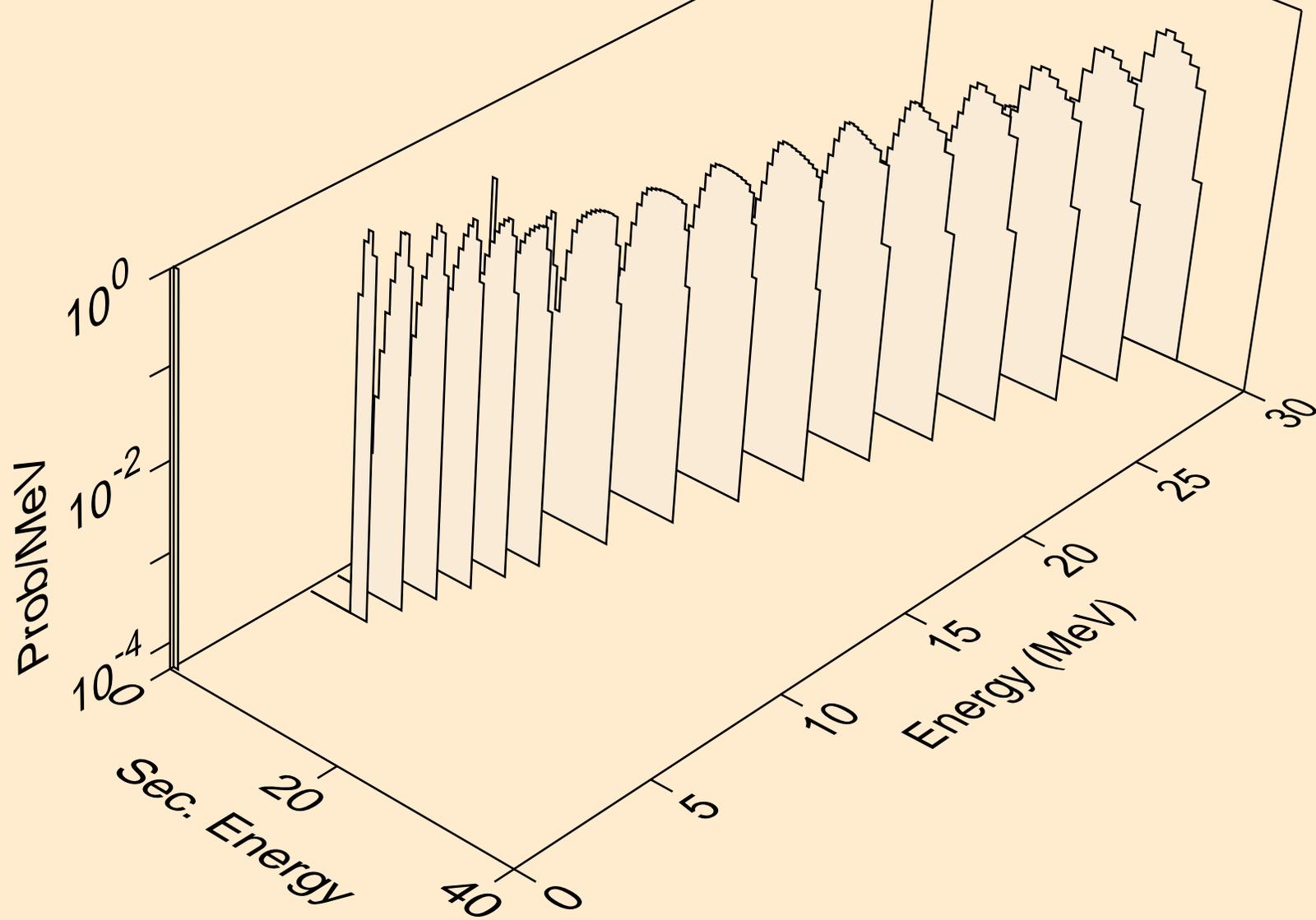CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,n2p)

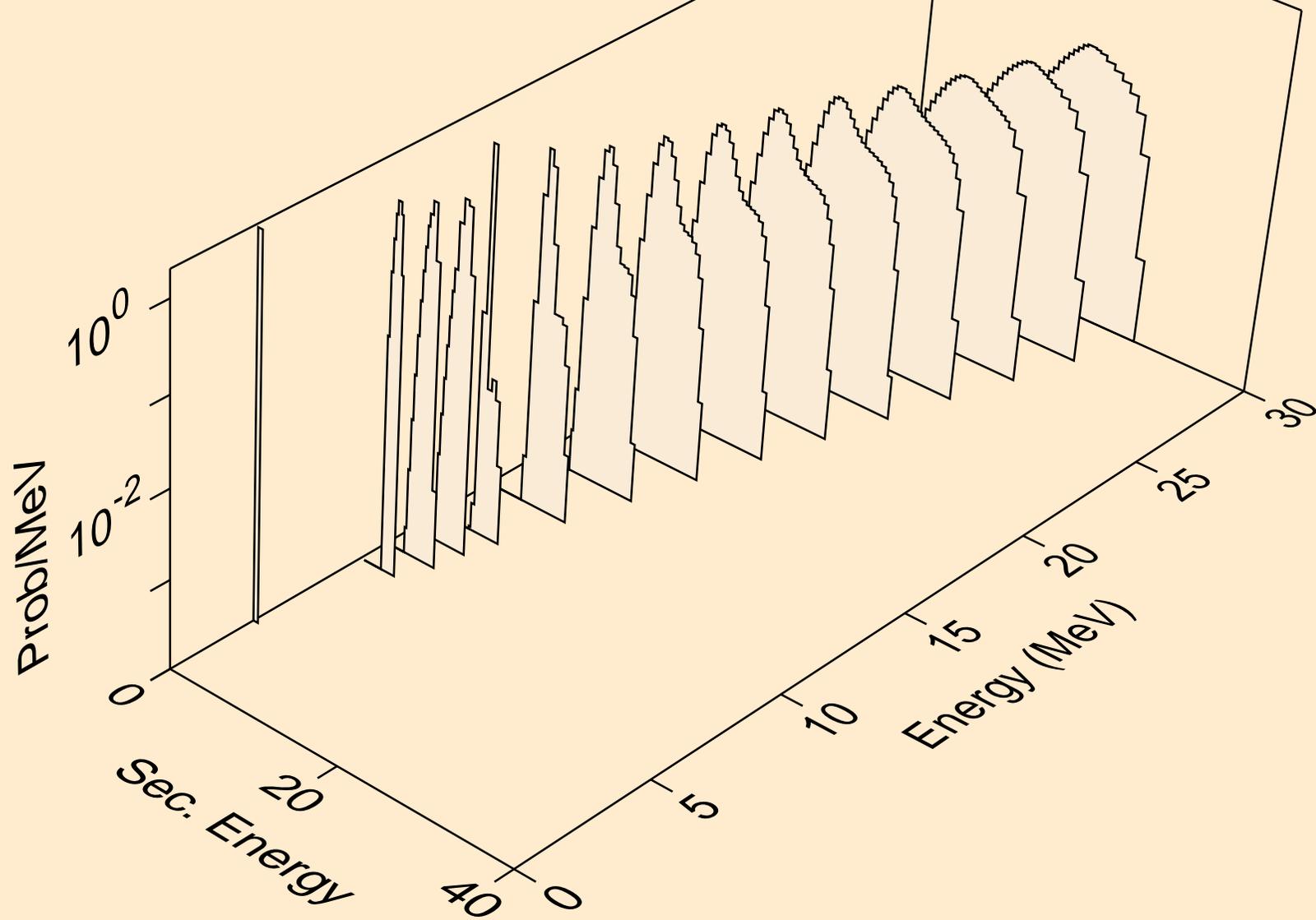CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
neutrons from (s,npa)

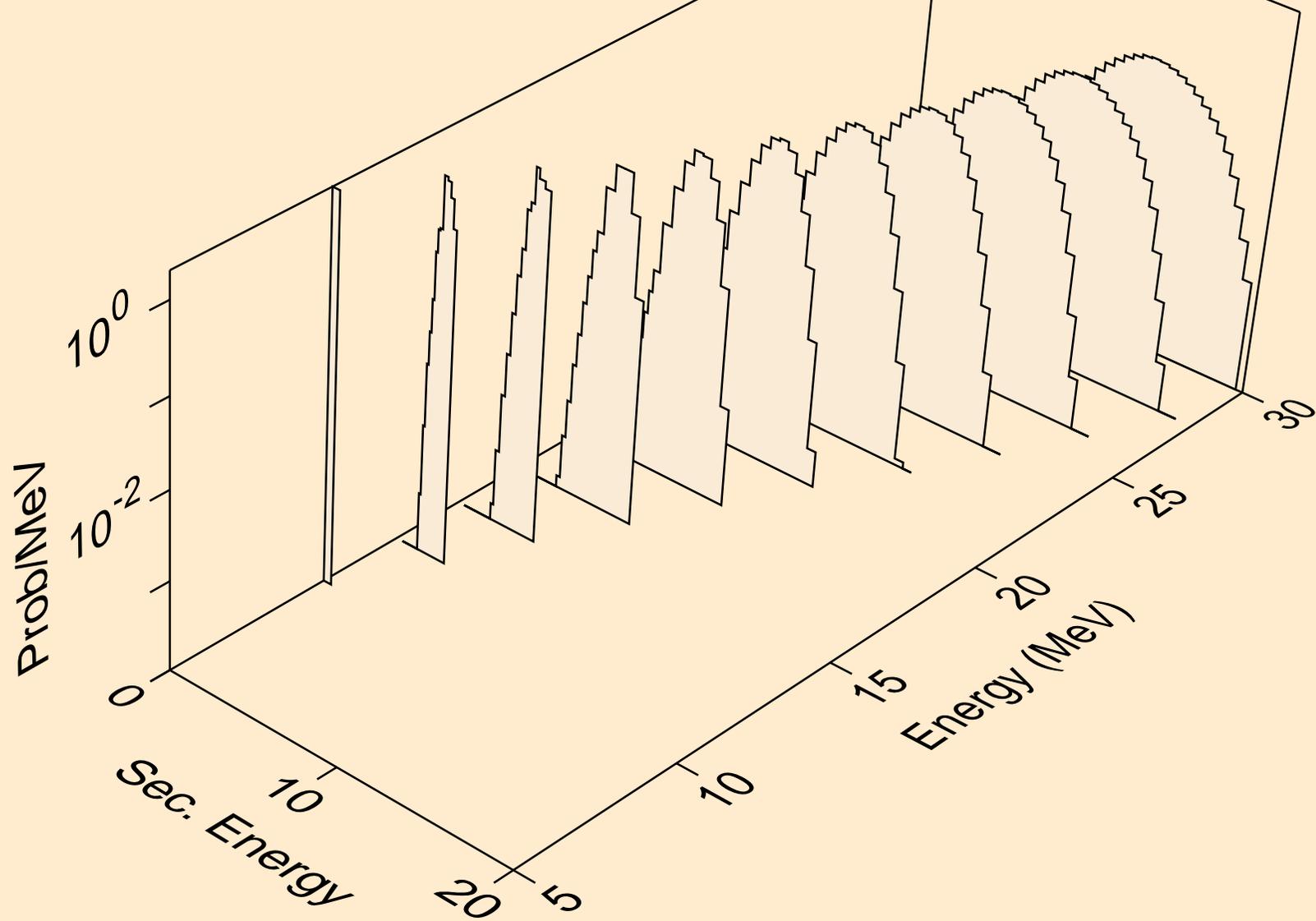CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
protons from (s,x)

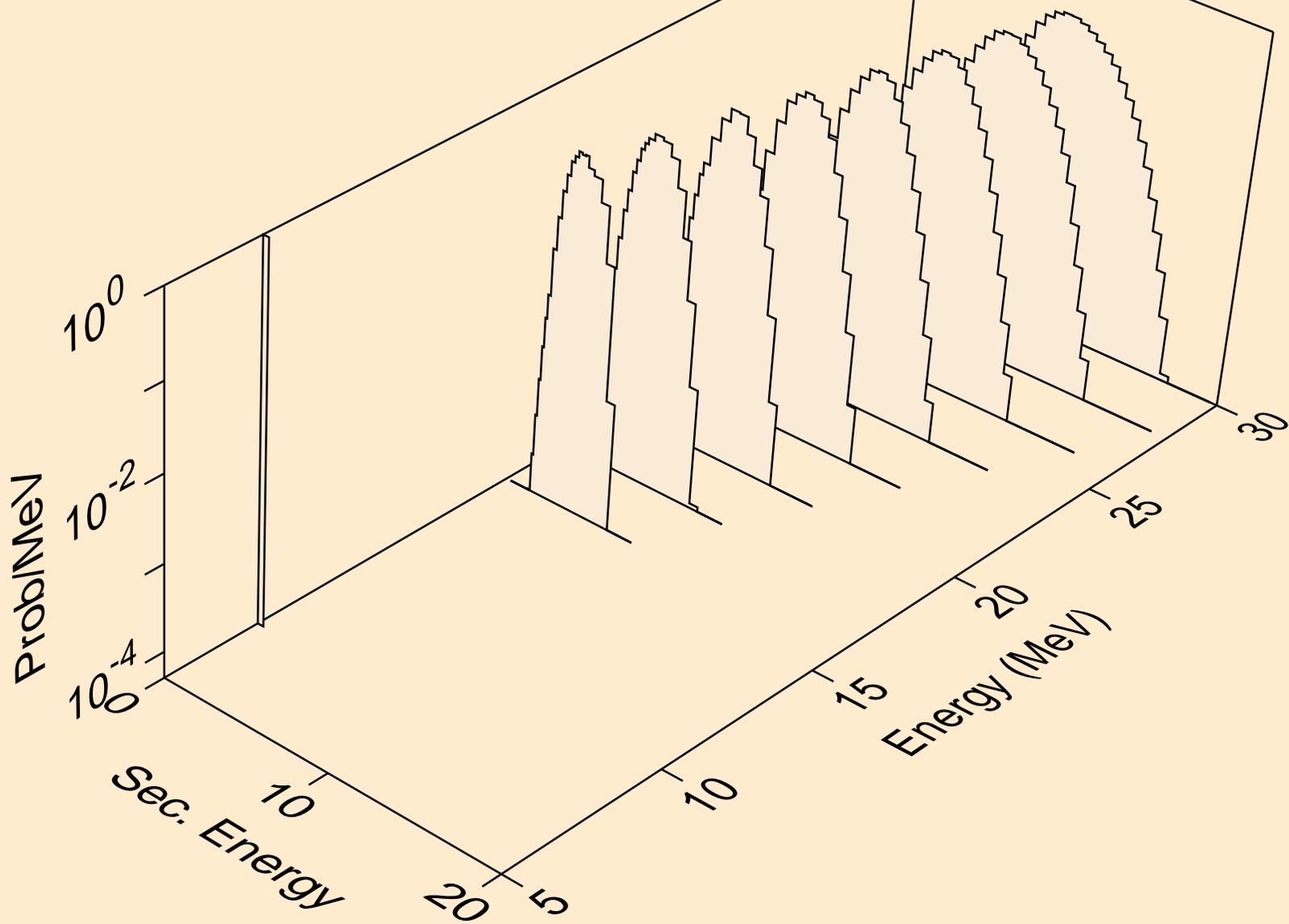CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
protons from (s,n*)p

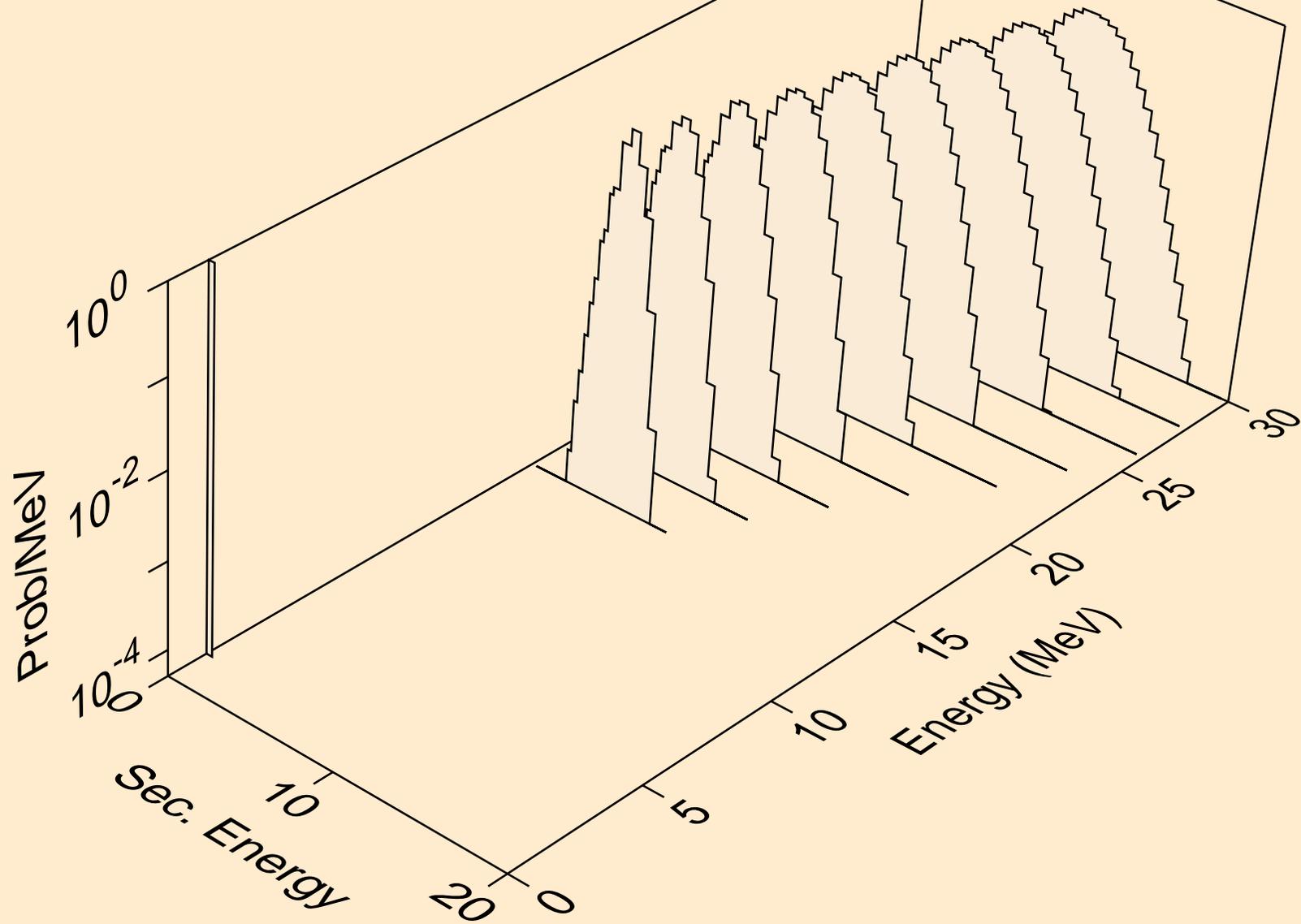CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
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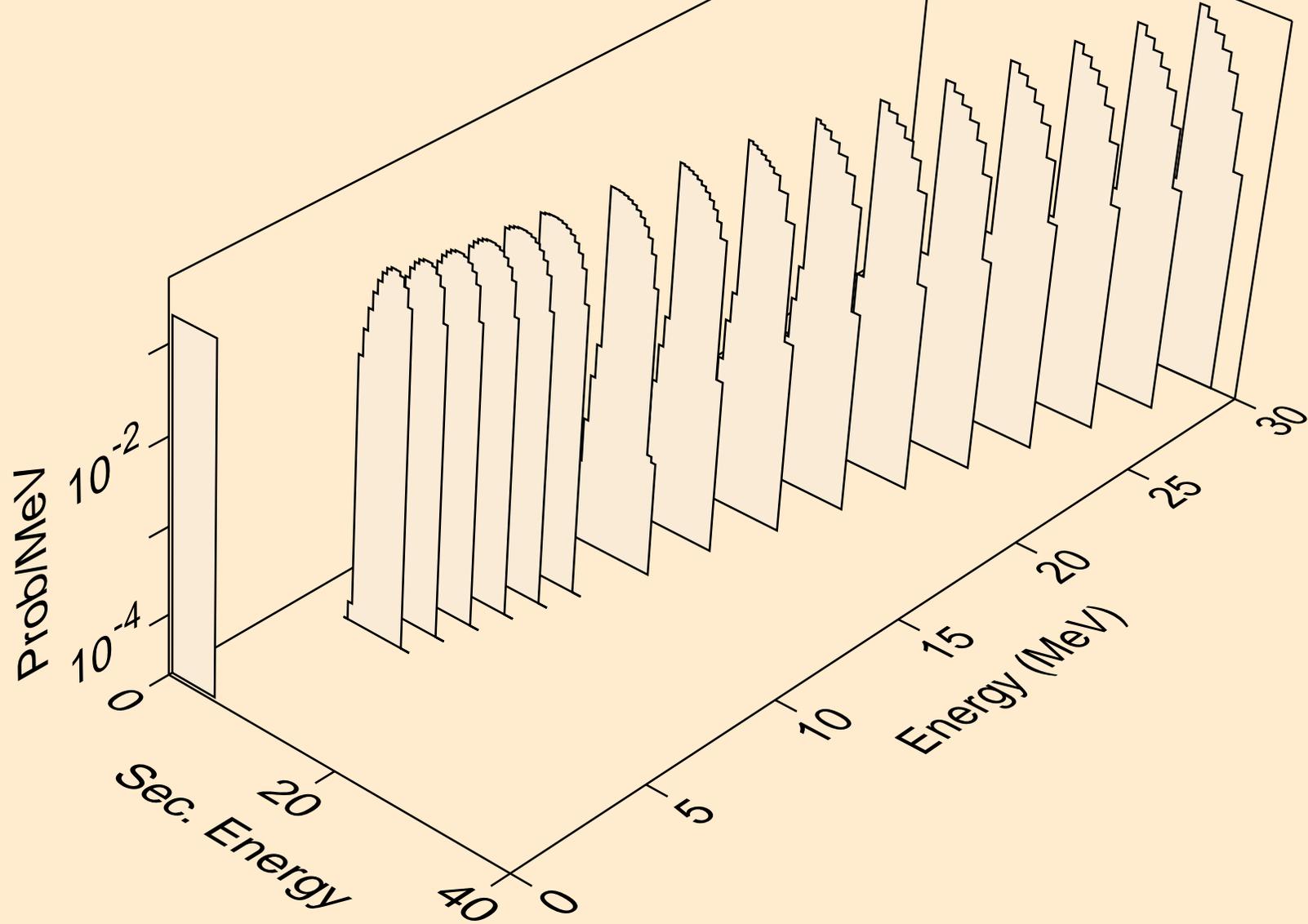CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
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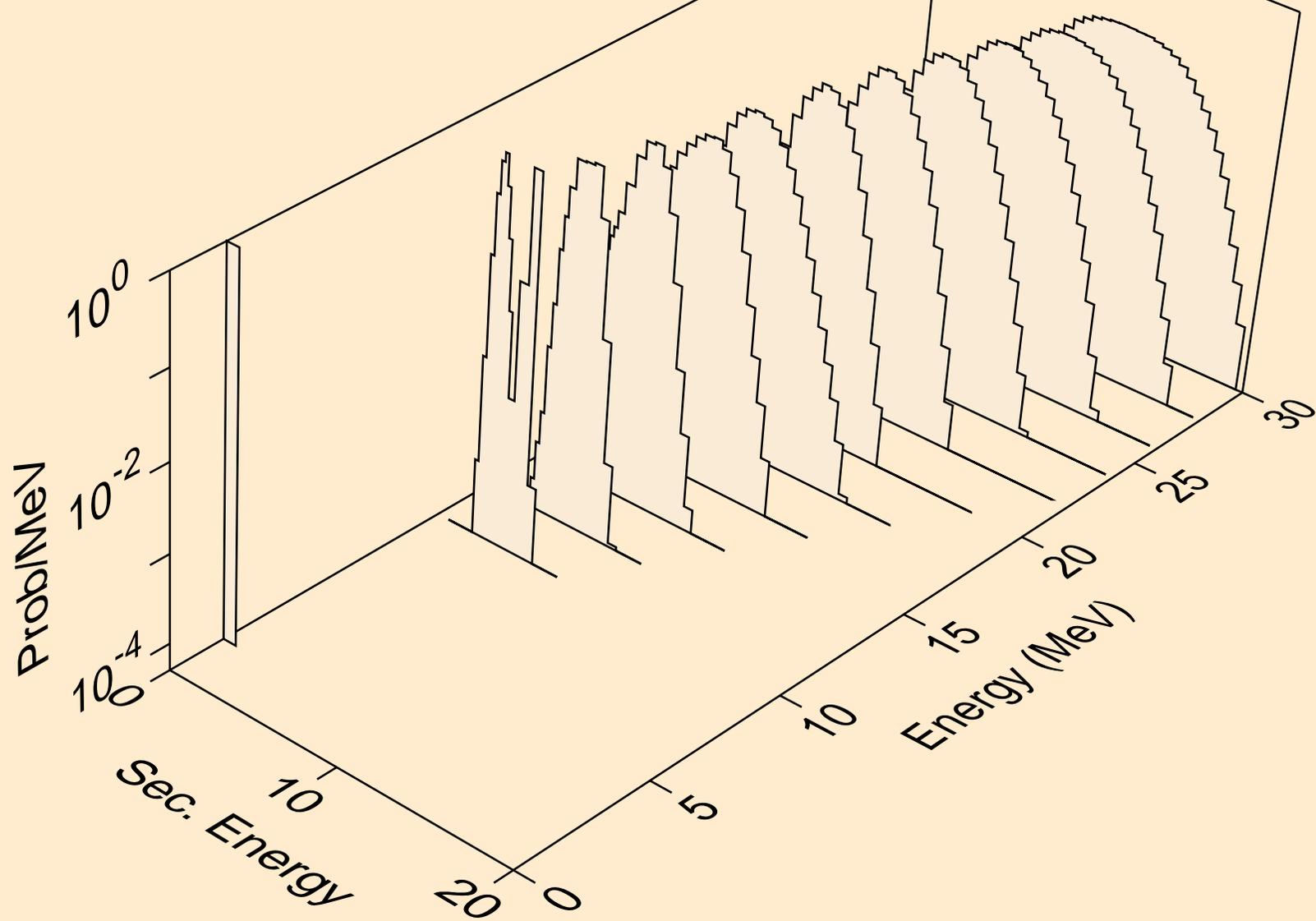CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
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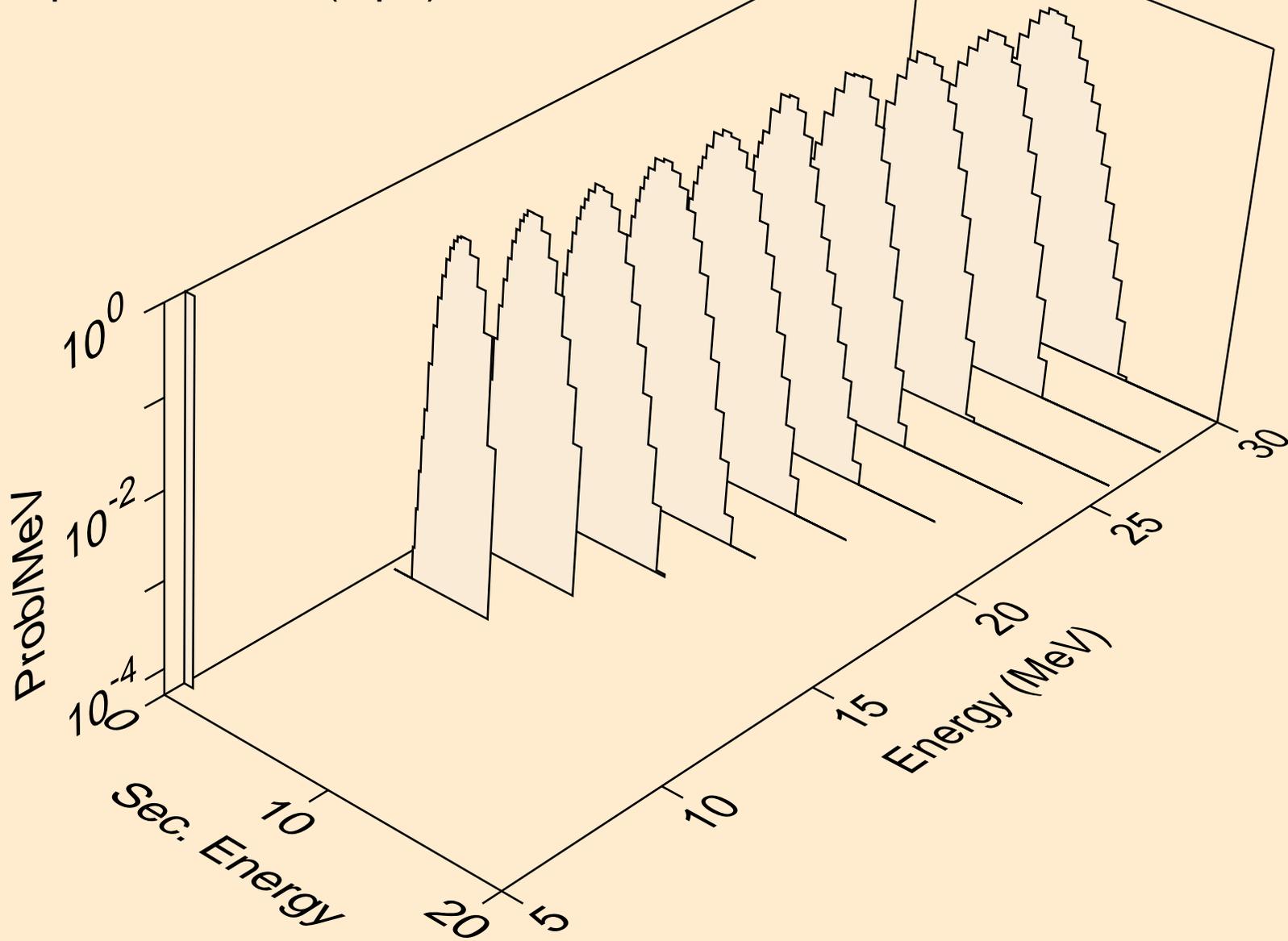CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
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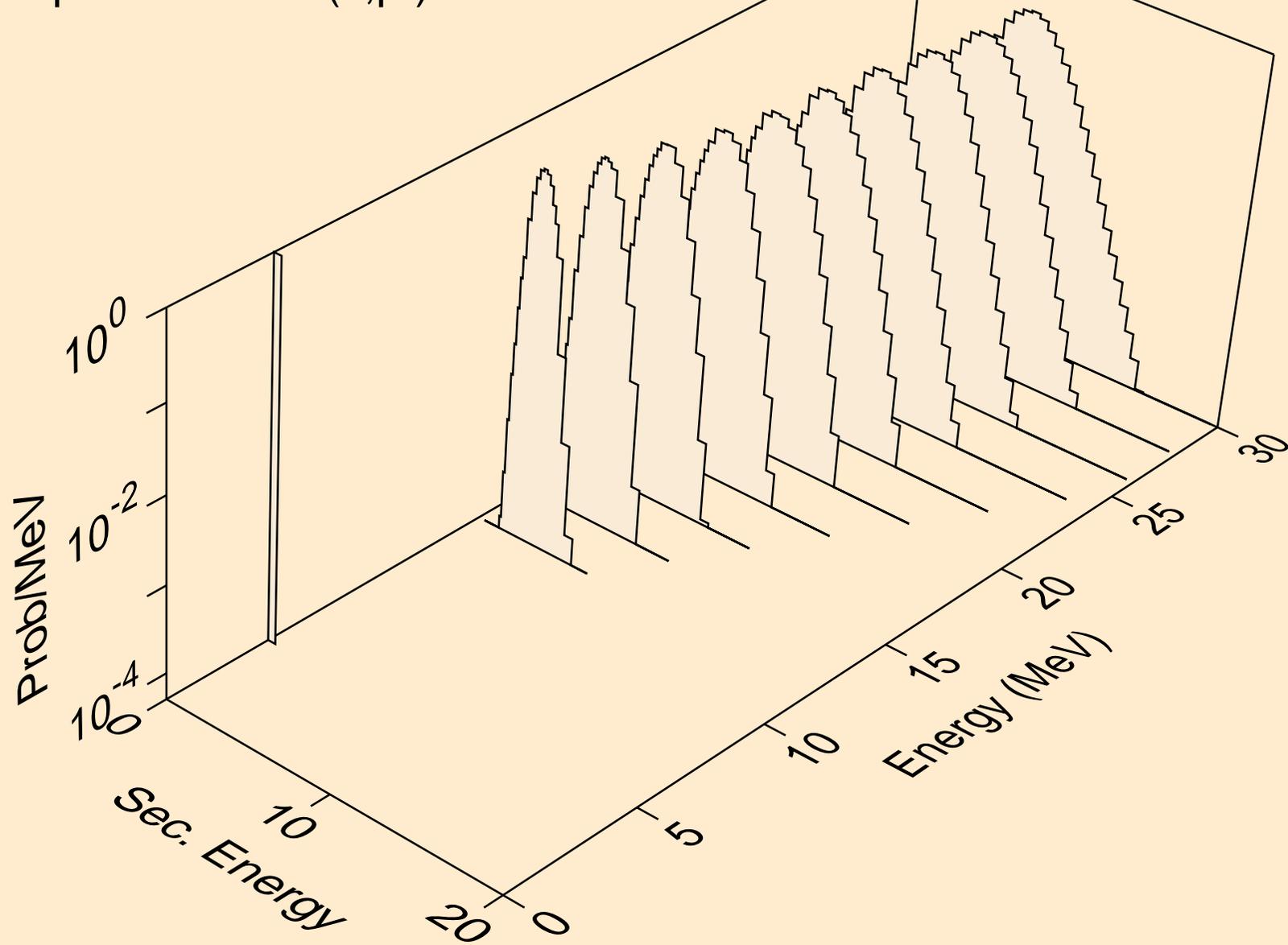CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
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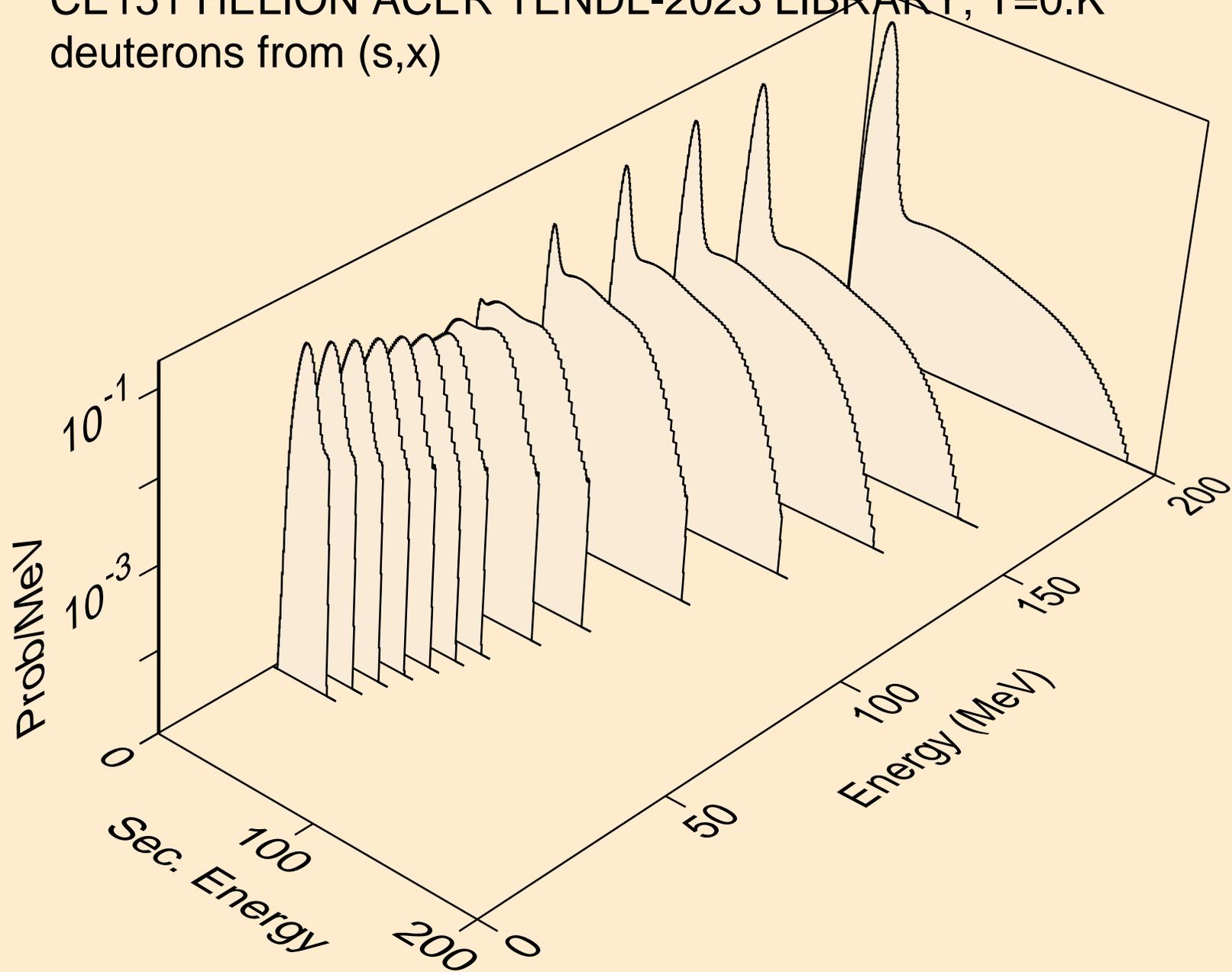protons from (s,2p)

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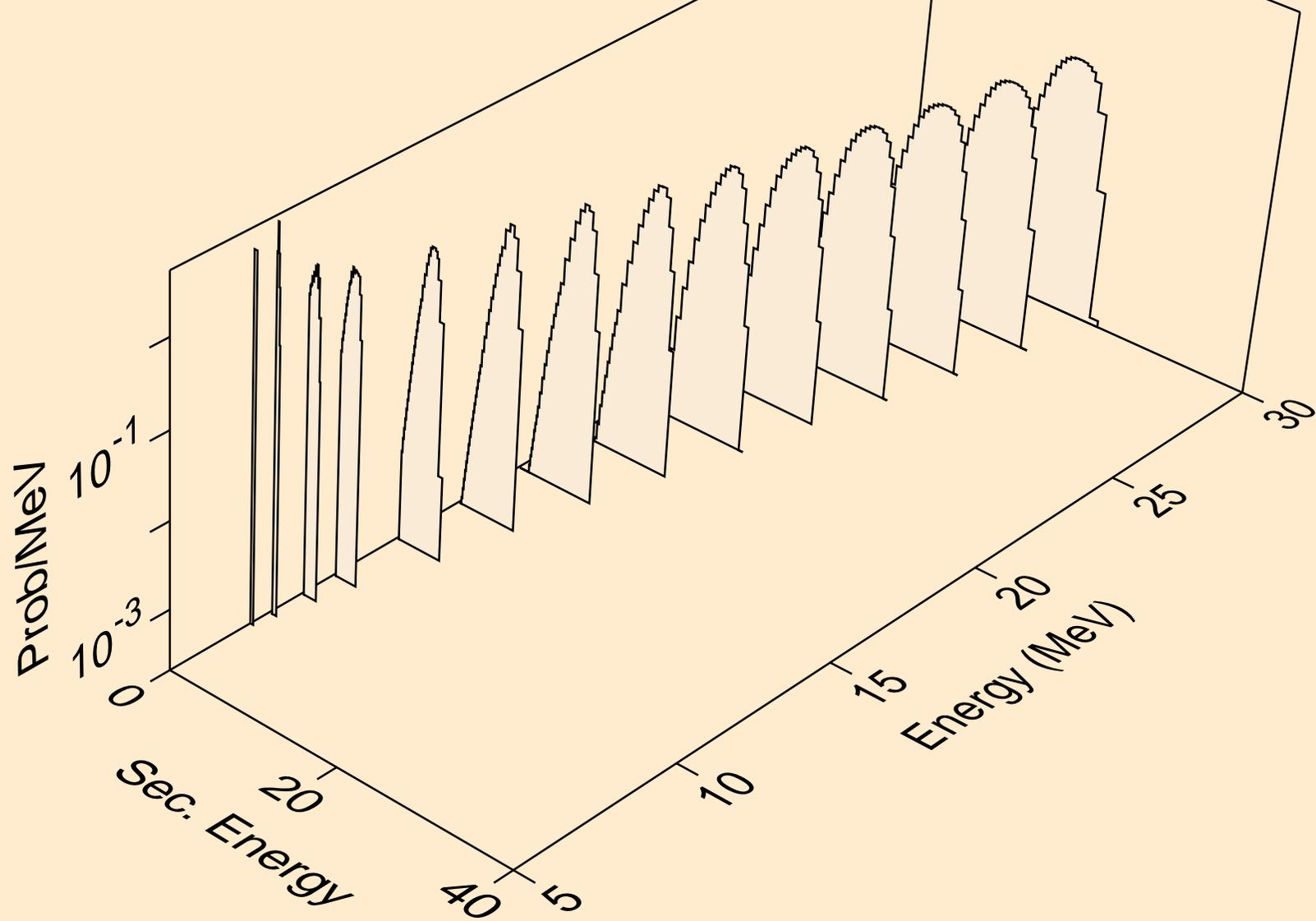protons from (s,pd)

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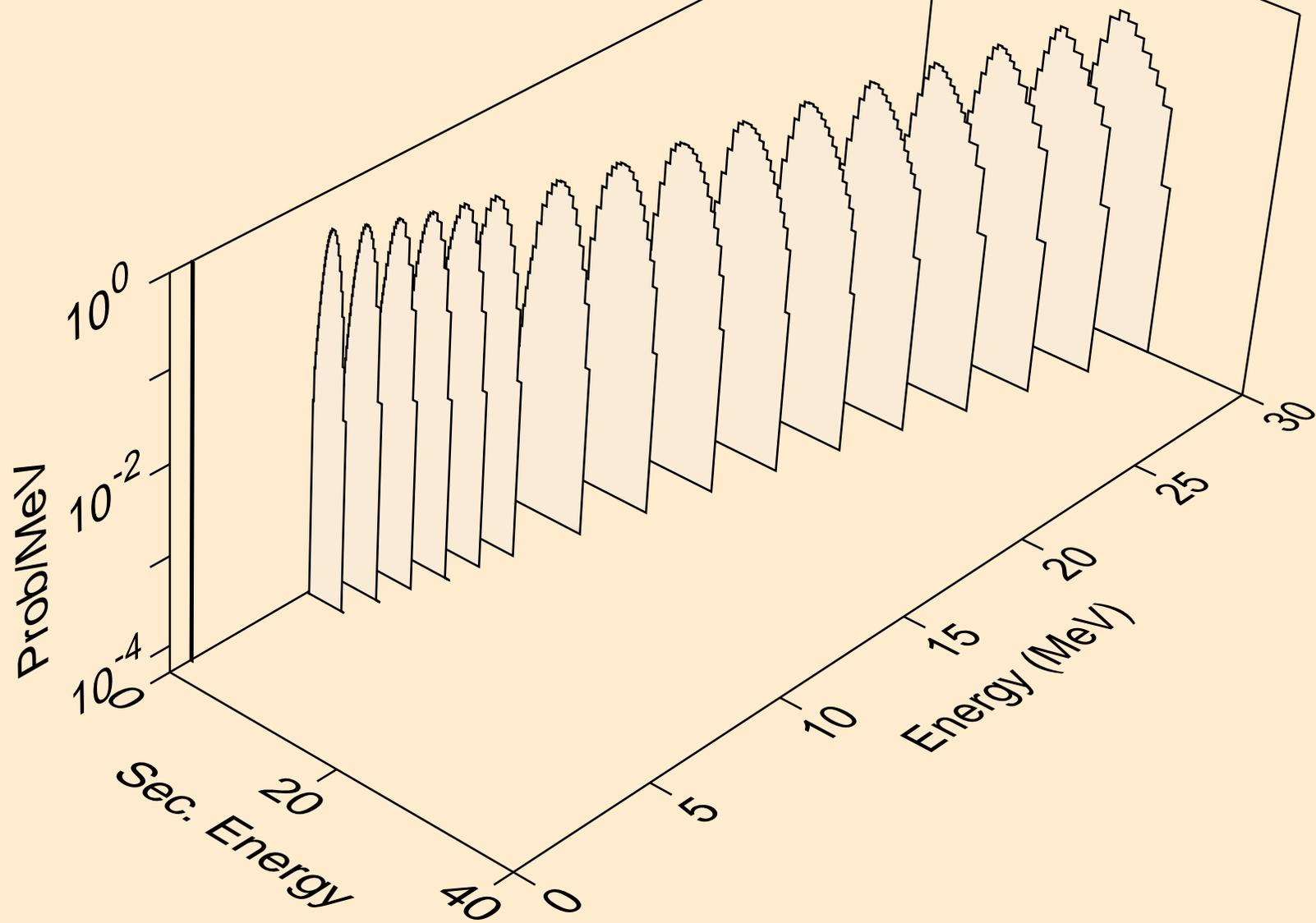protons from (s,pt)

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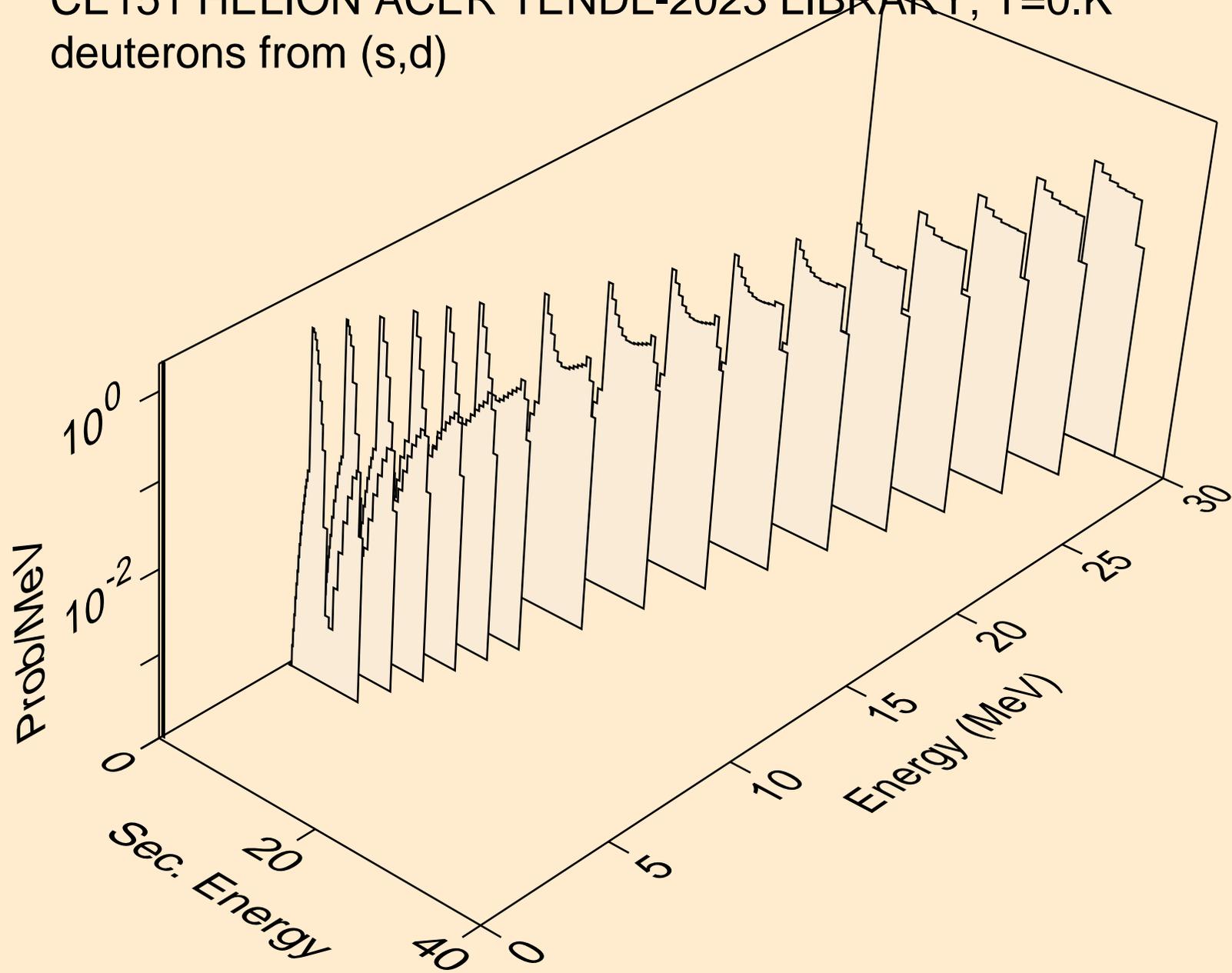deuterons from (s,x)

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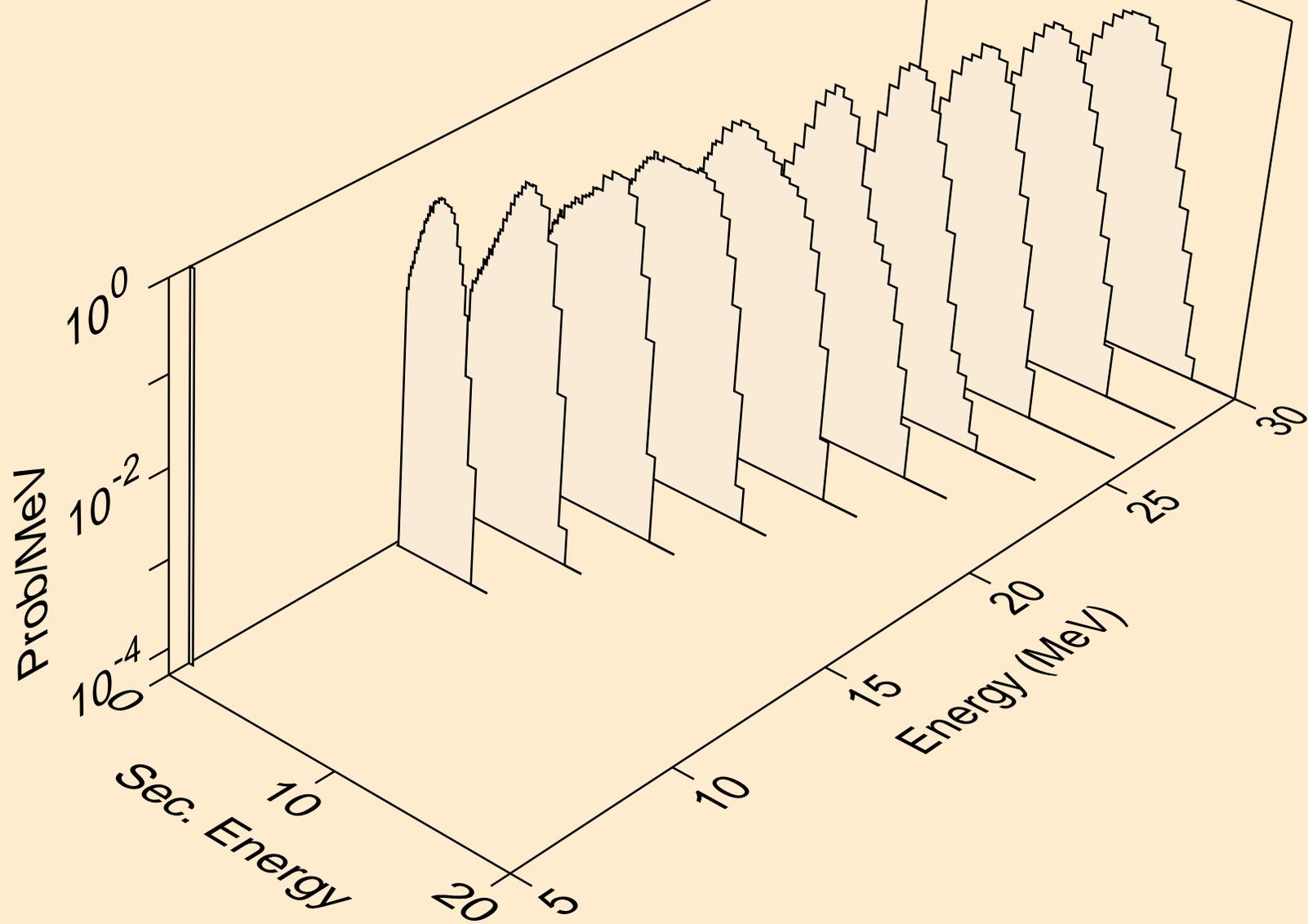deuterons from (s,2nd)

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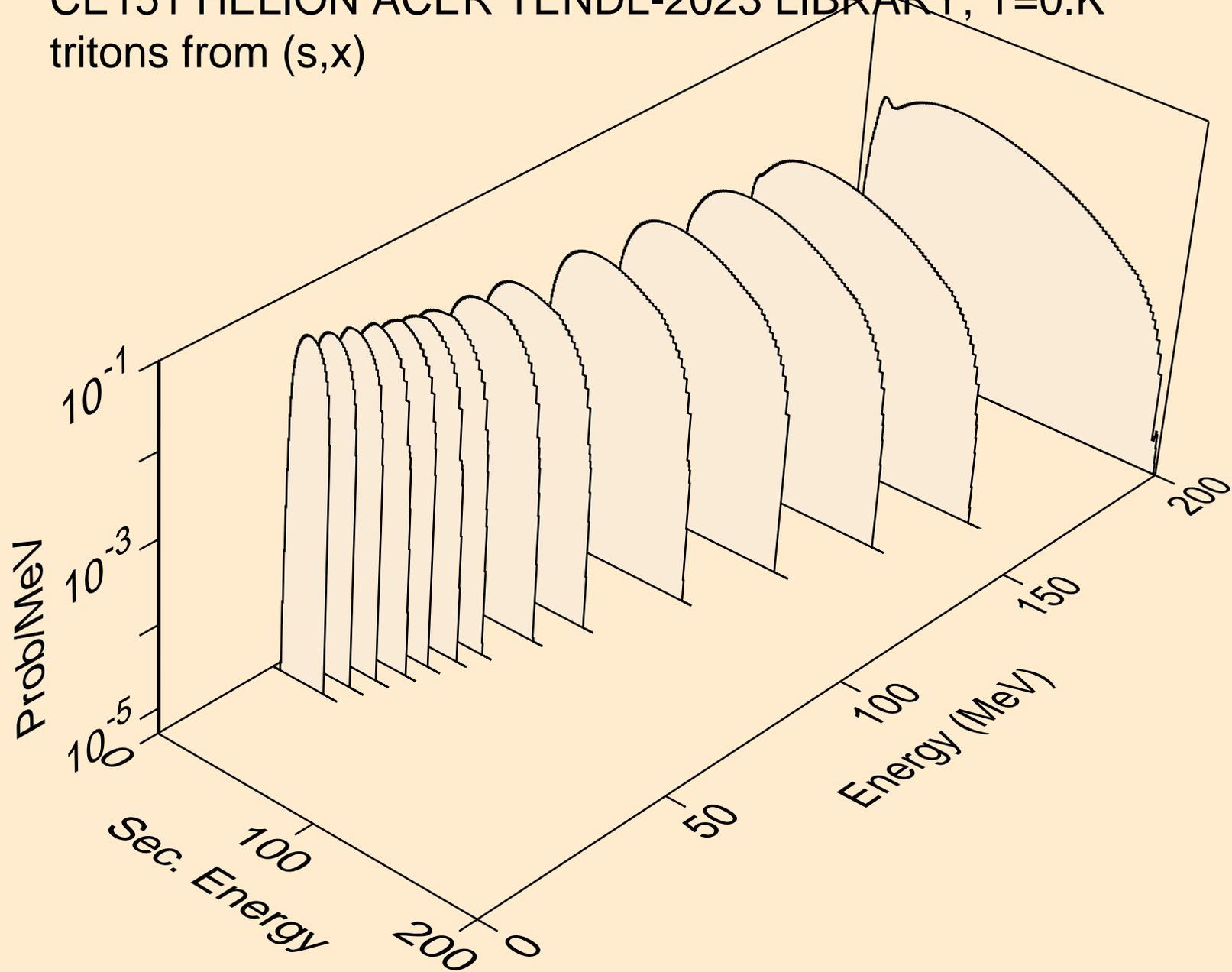deuterons from (s,n*)d

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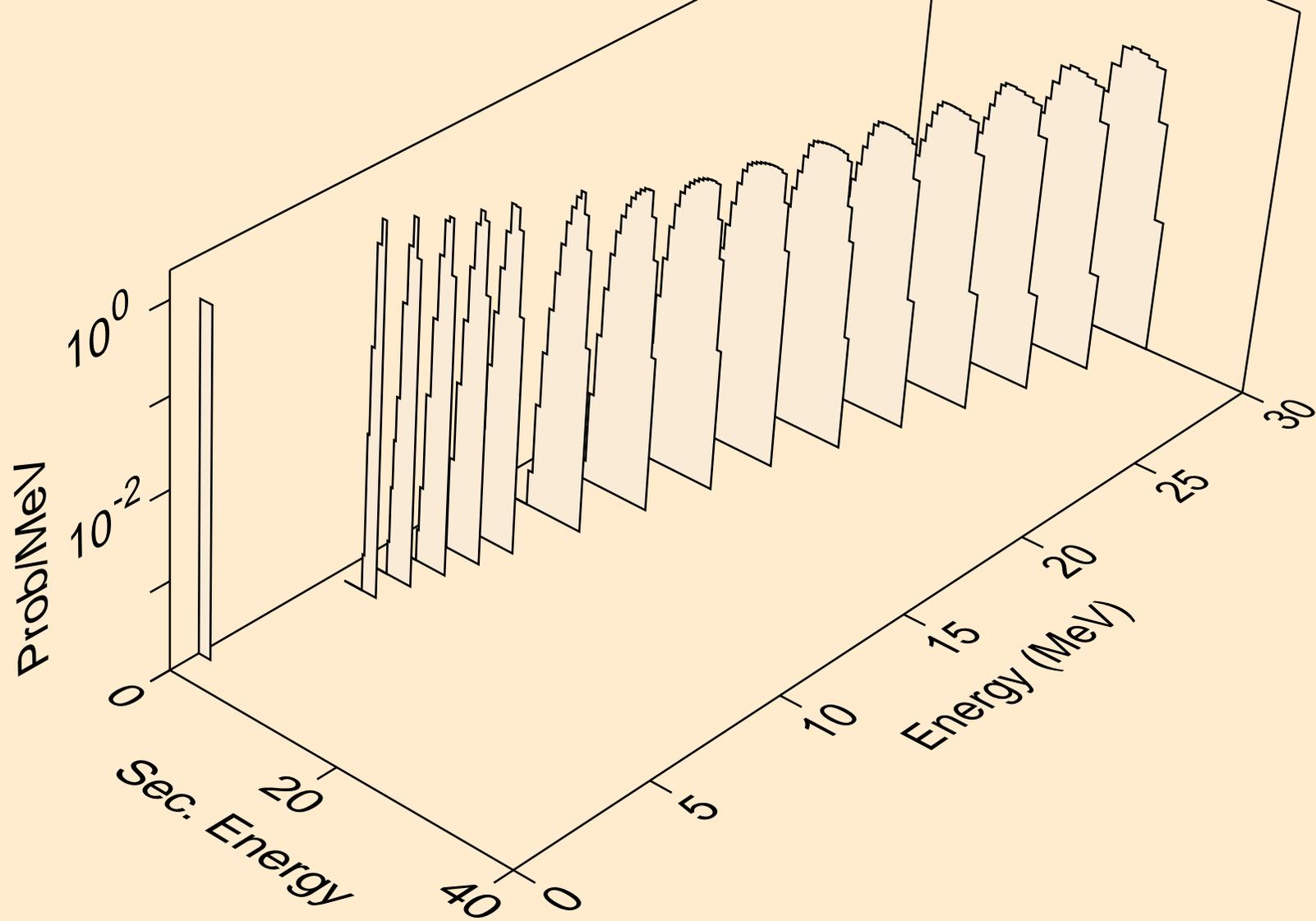deuterons from (s,d)

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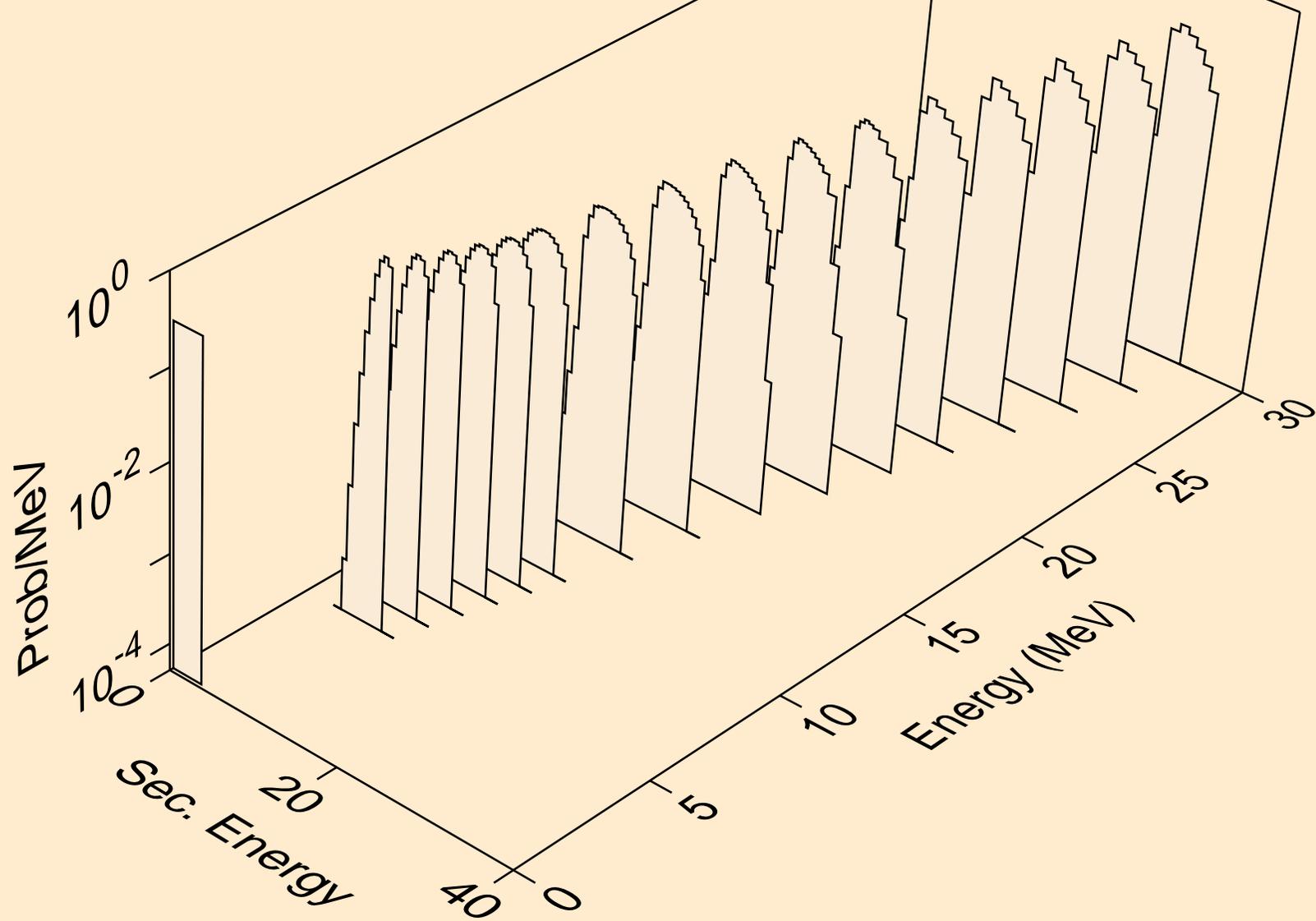deuterons from (s,pd)

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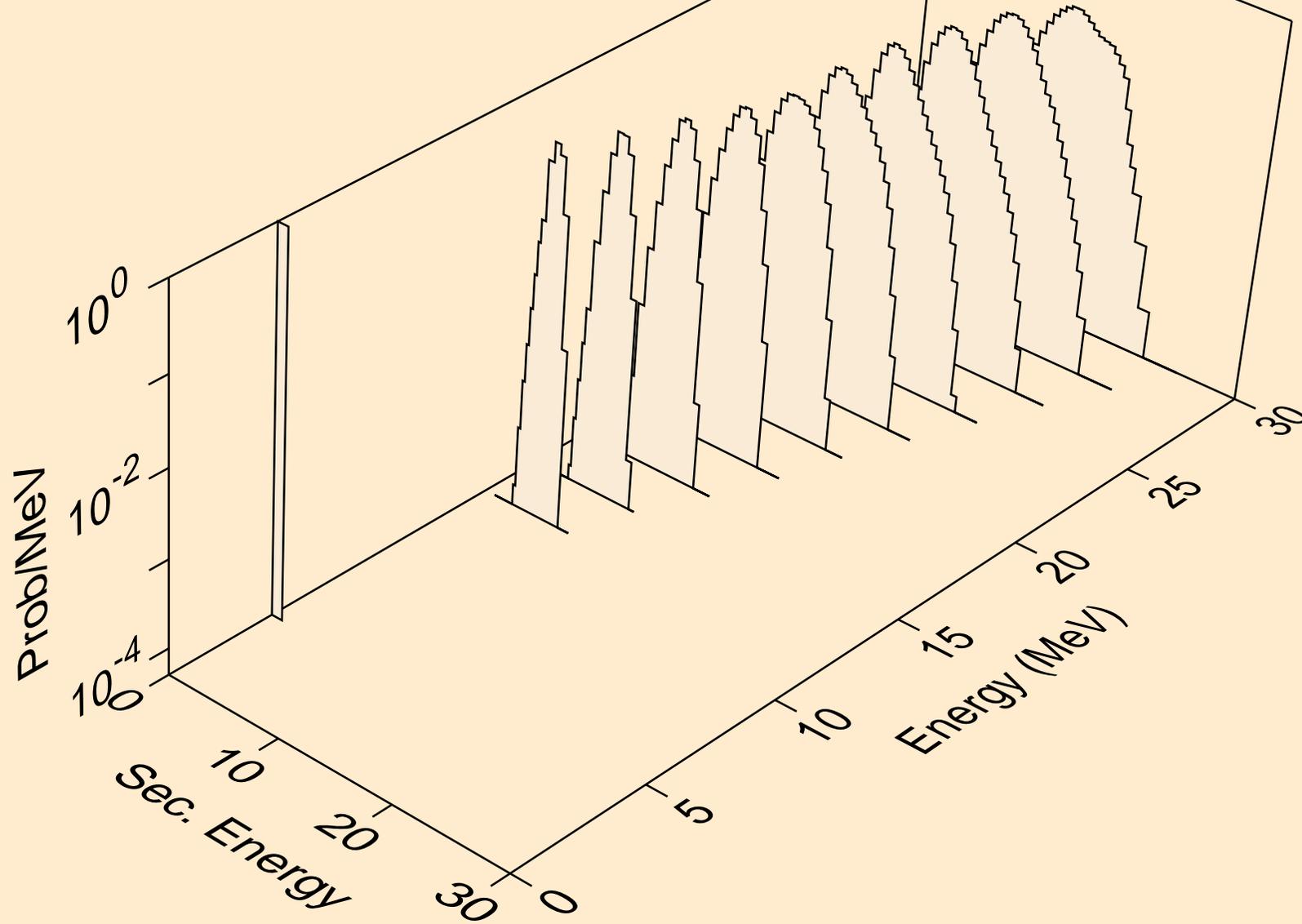tritons from (s,x)

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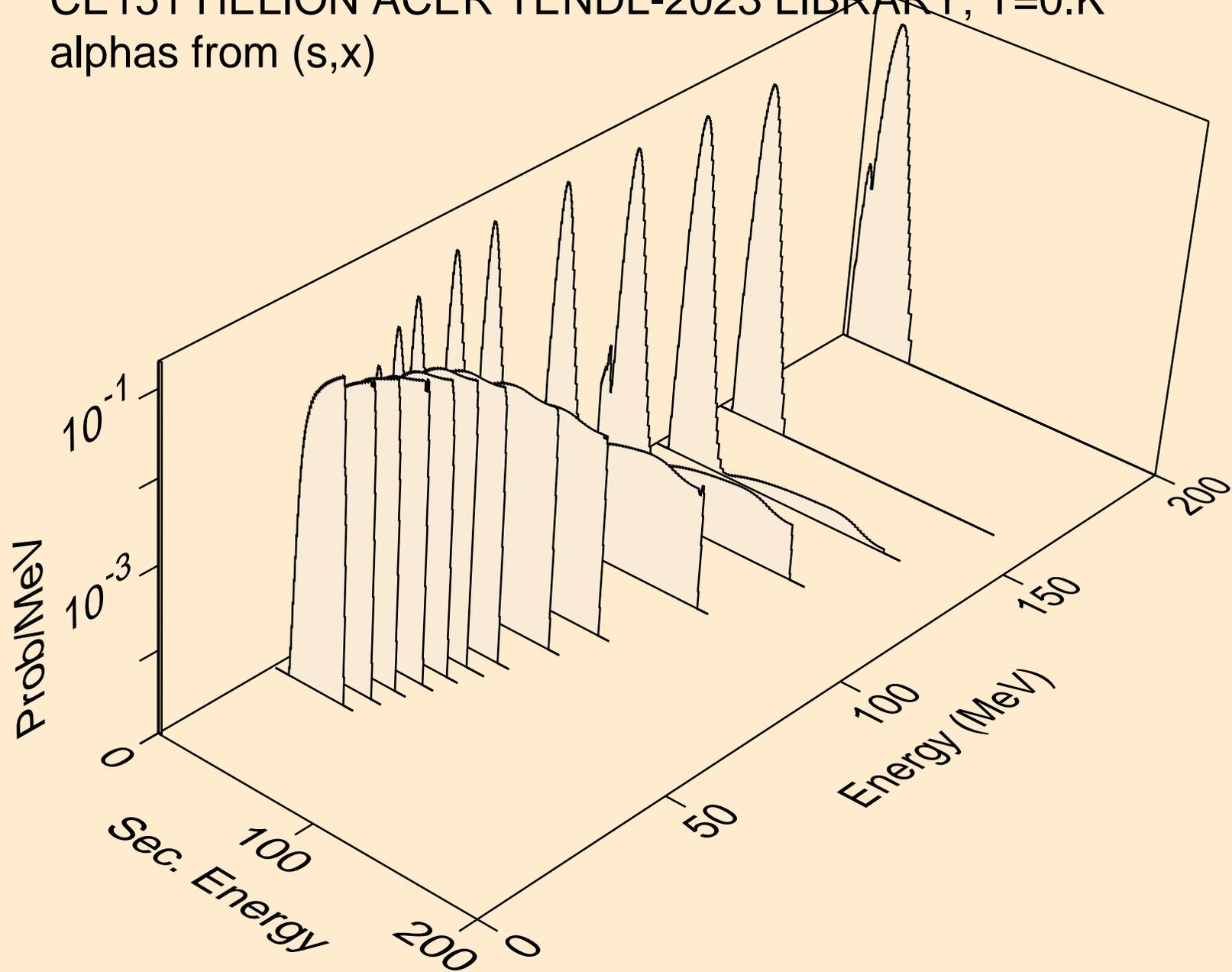tritons from (s,n*)t

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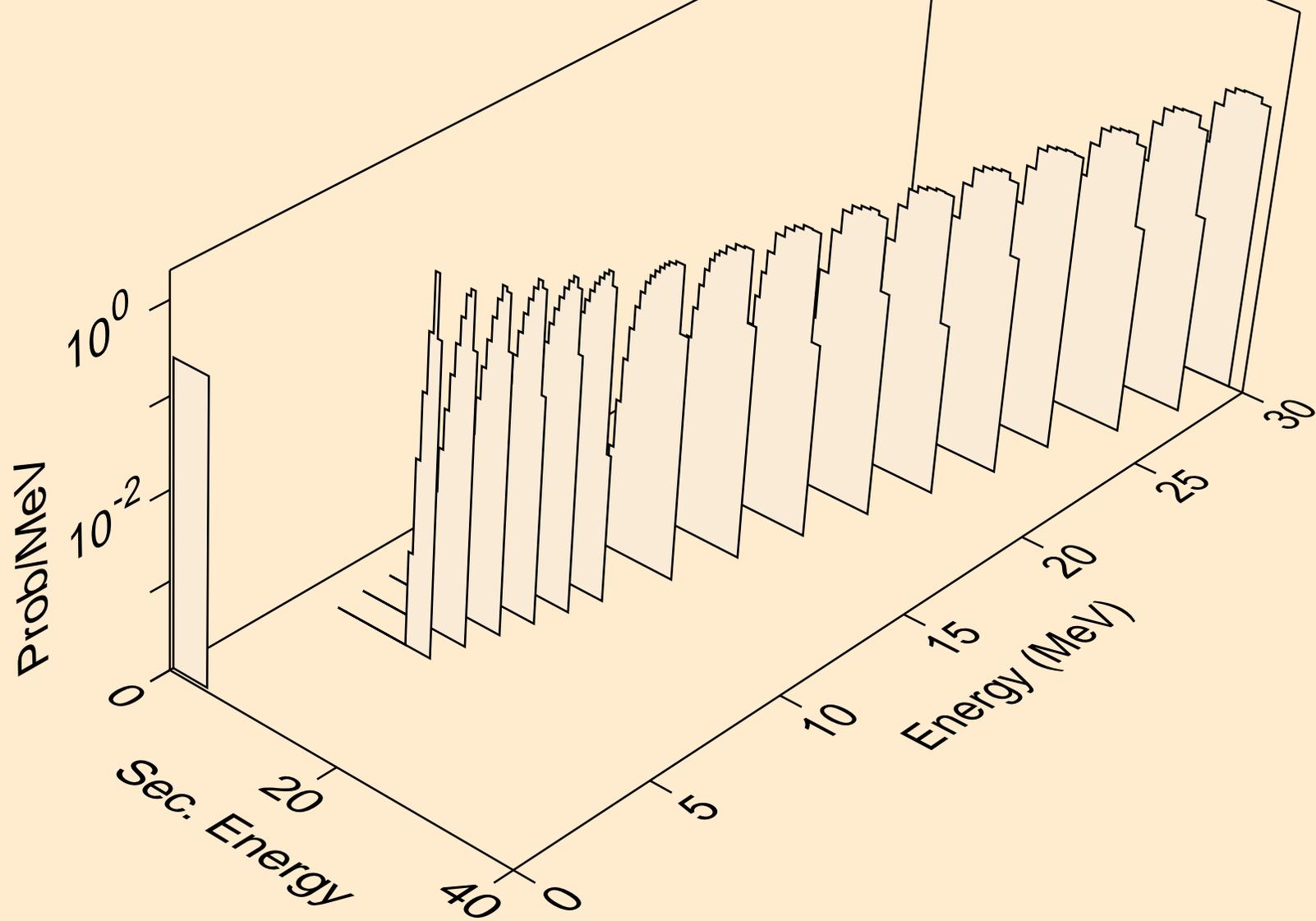tritons from (s,t)

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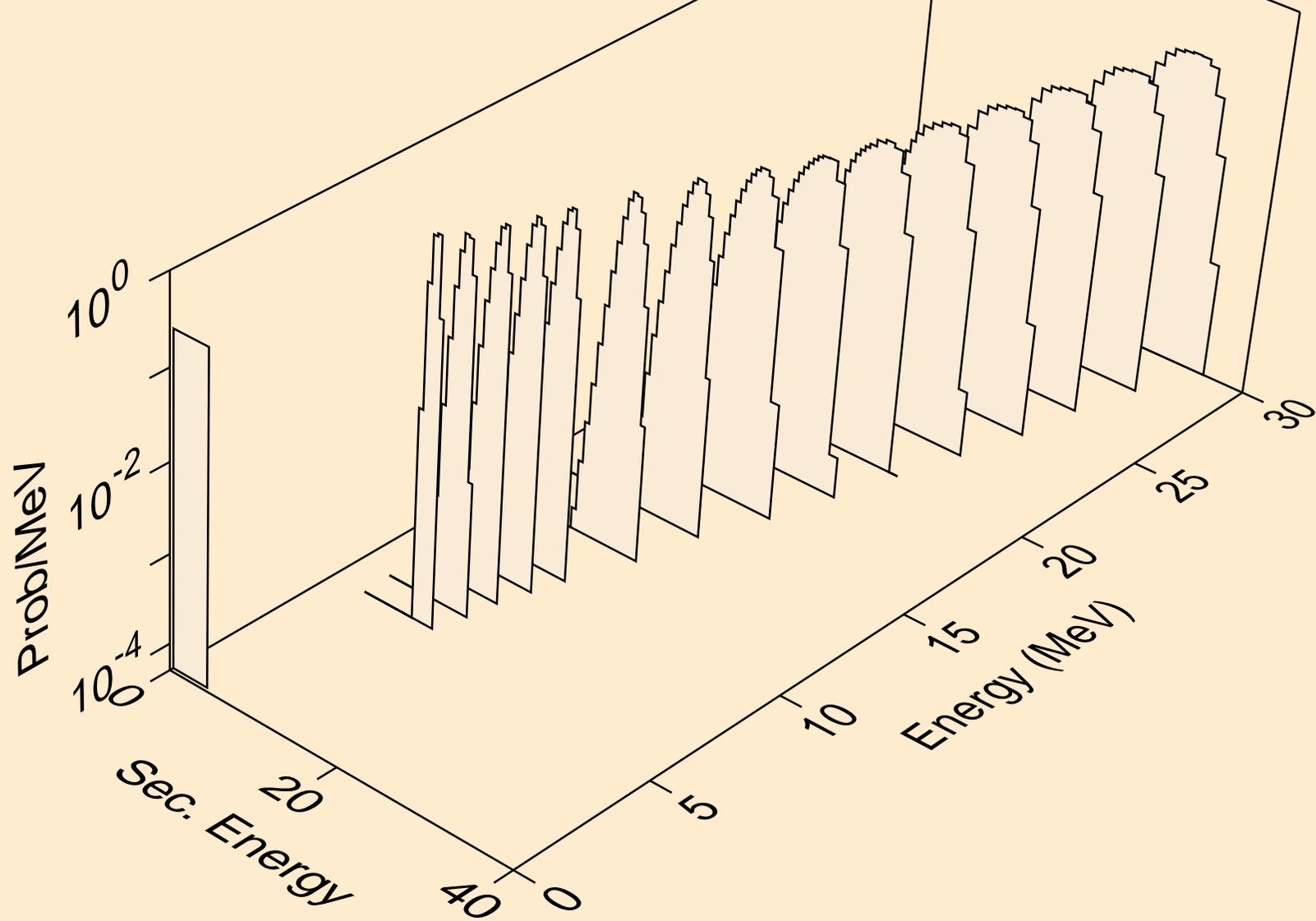tritons from (s,pt)

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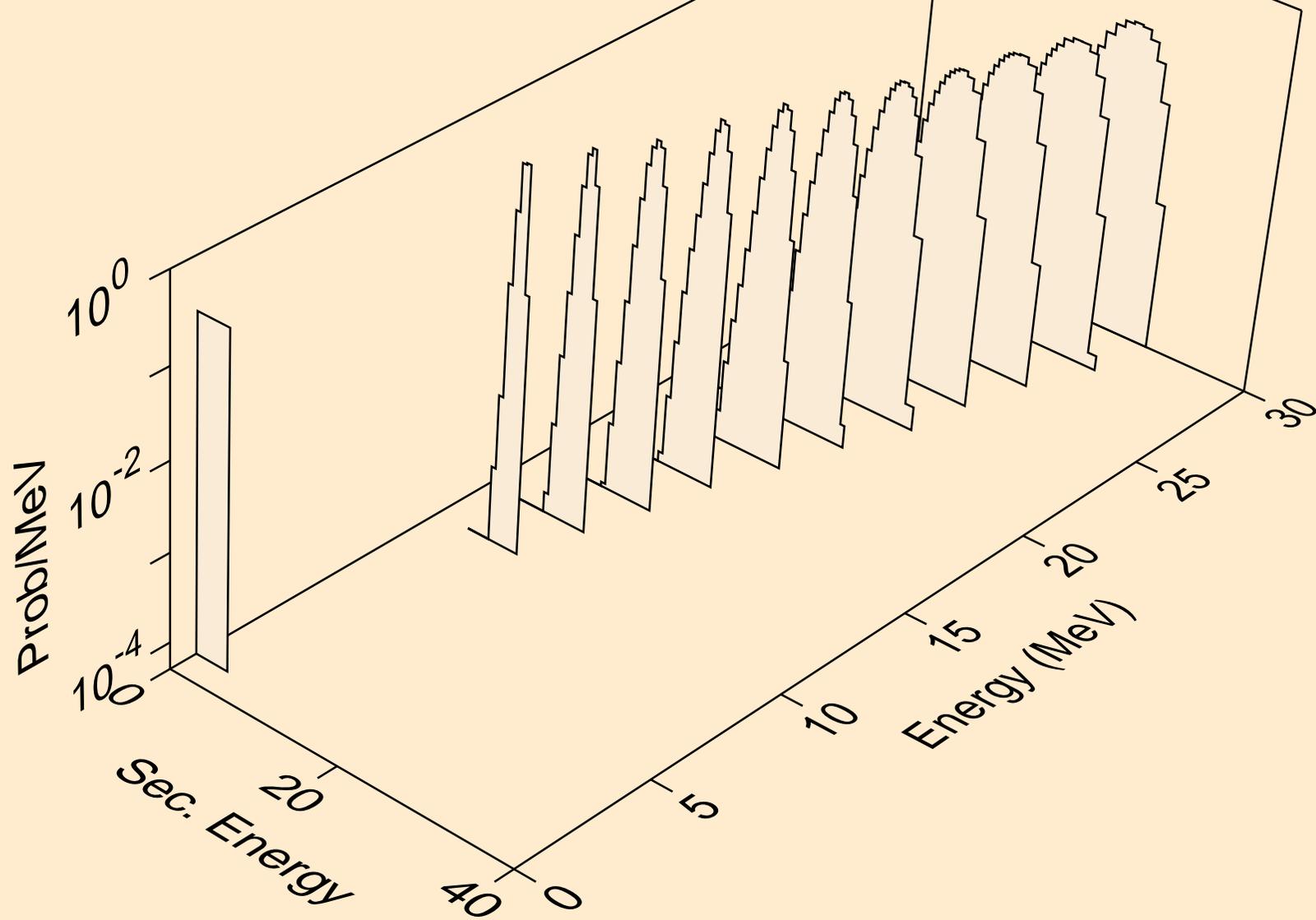alphas from (s,x)

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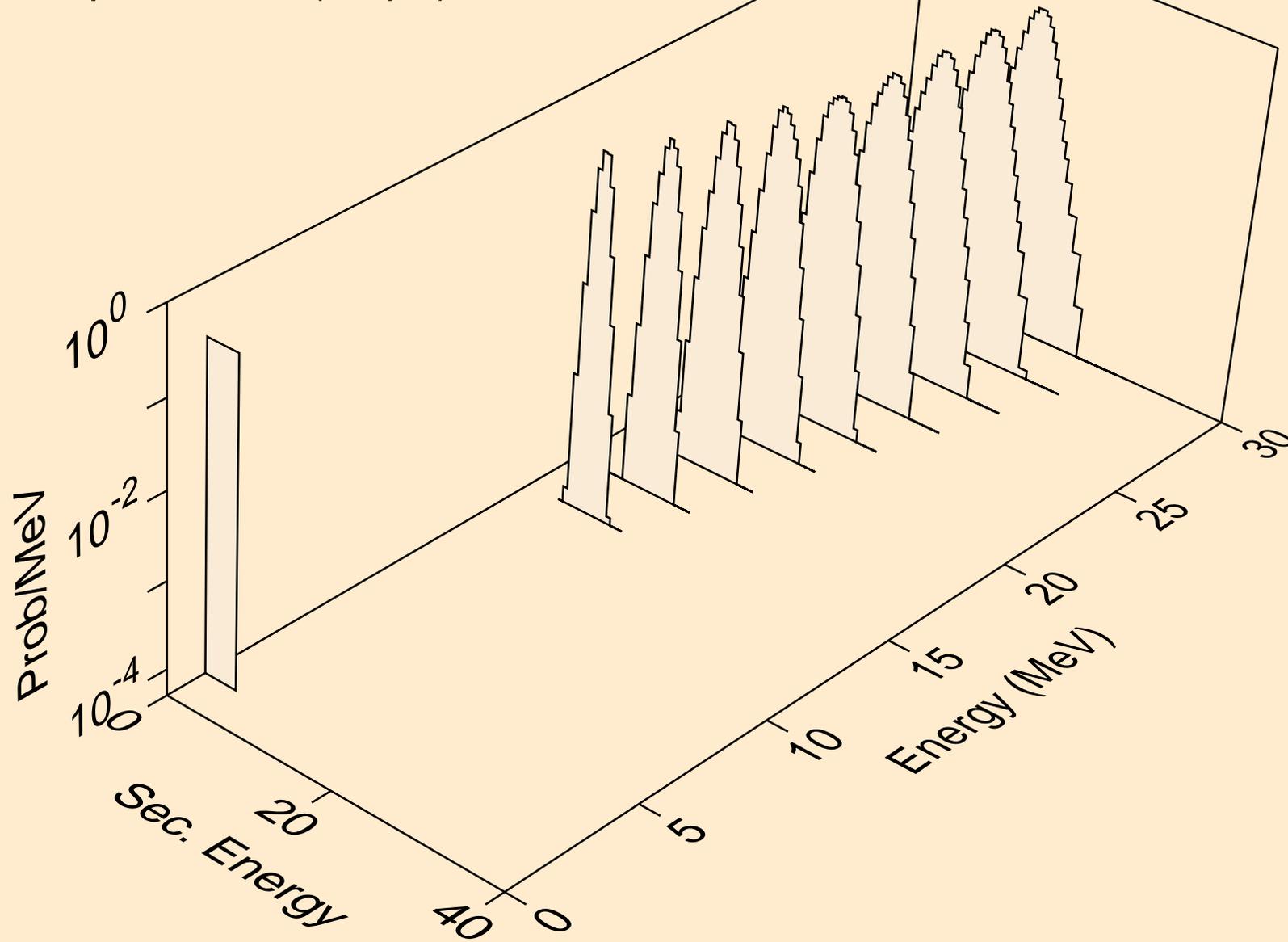alphas from (s,n*)a

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alphas from (s,2n)a

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
alphas from (s,3n)a

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
alphas from (s,npa)

CE151 HELION ACER TENDL-2023 LIBRARY; T=0.K
alphas from (s,a)