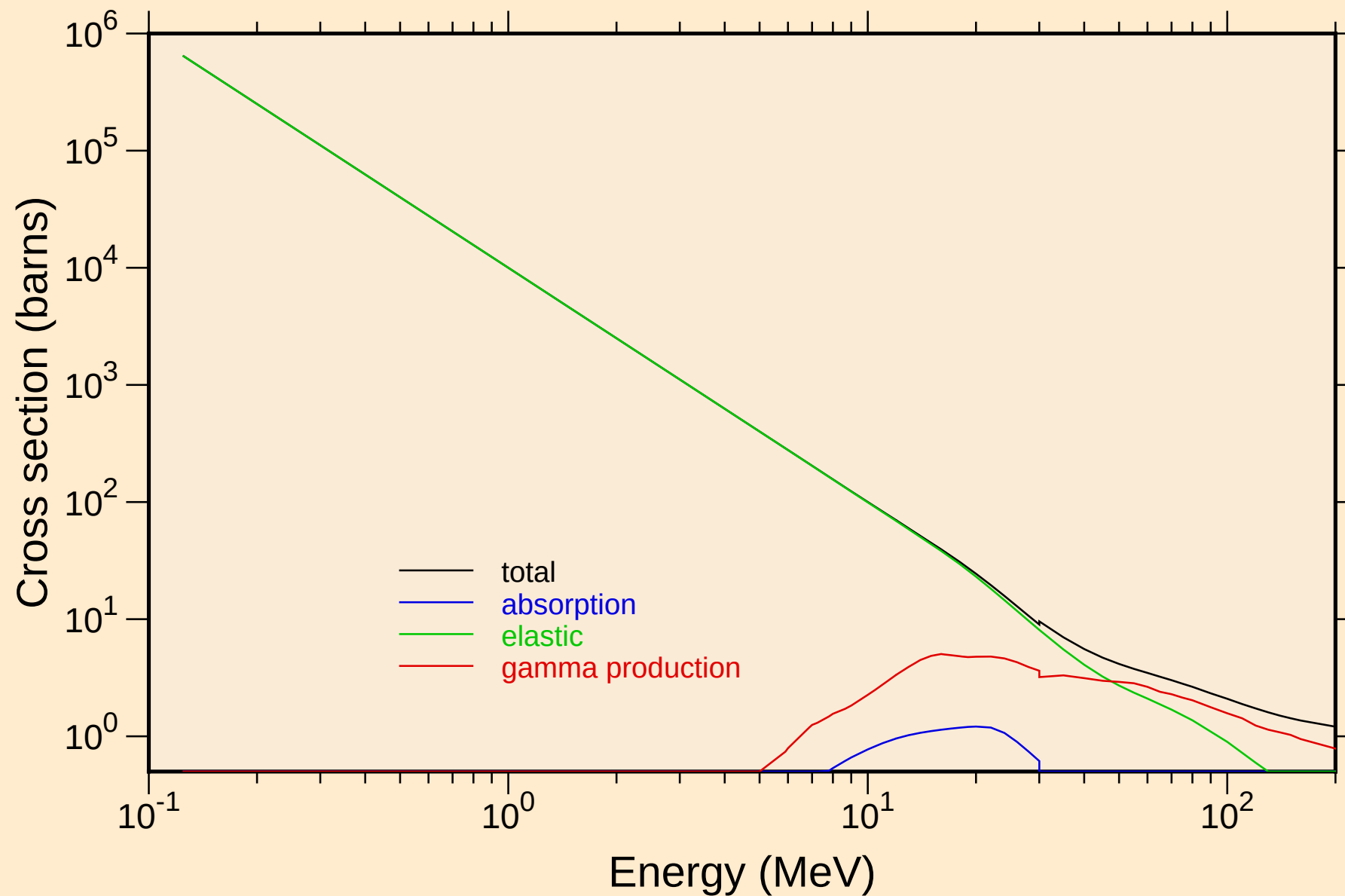


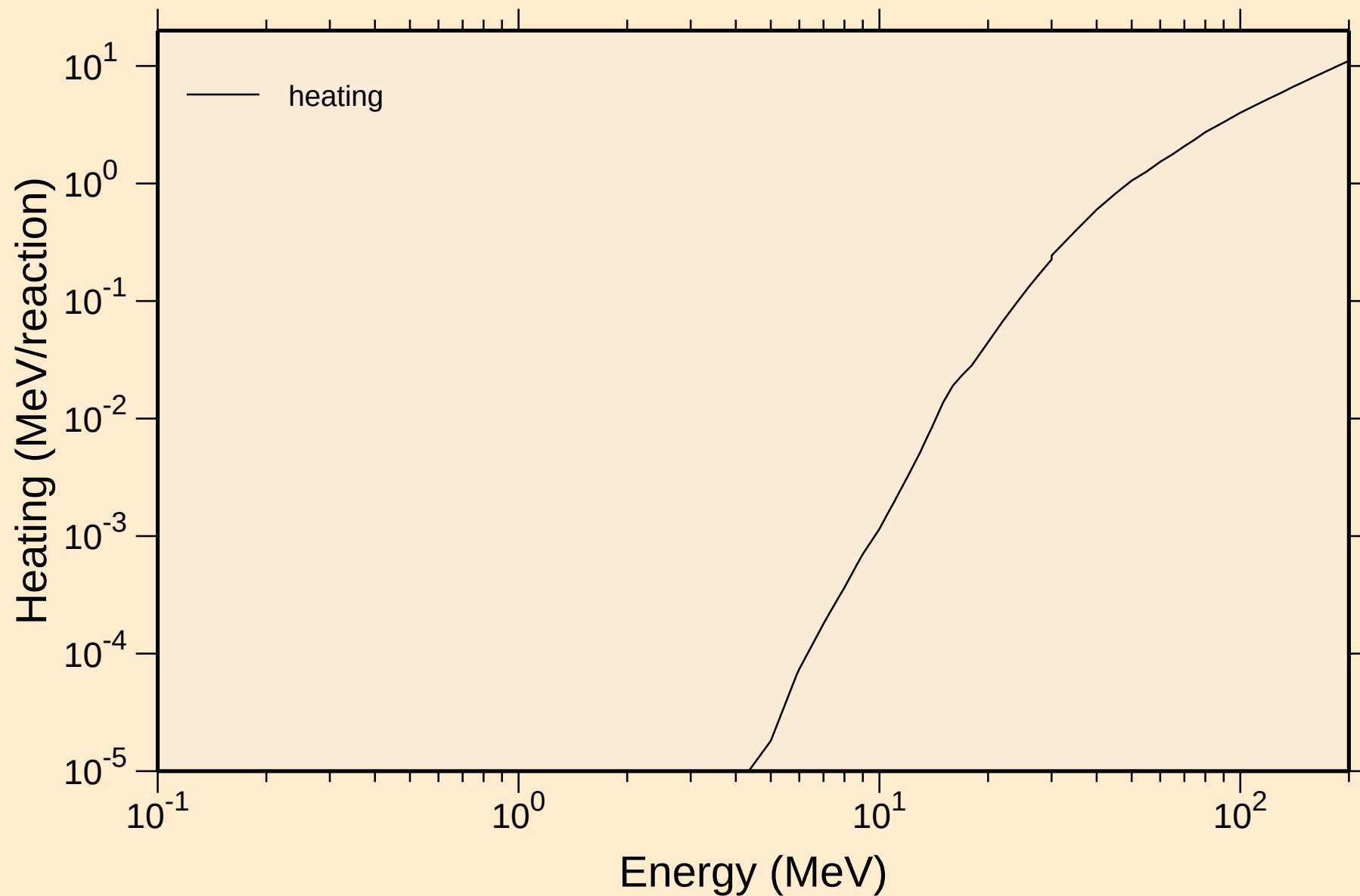
# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

## Principal cross sections



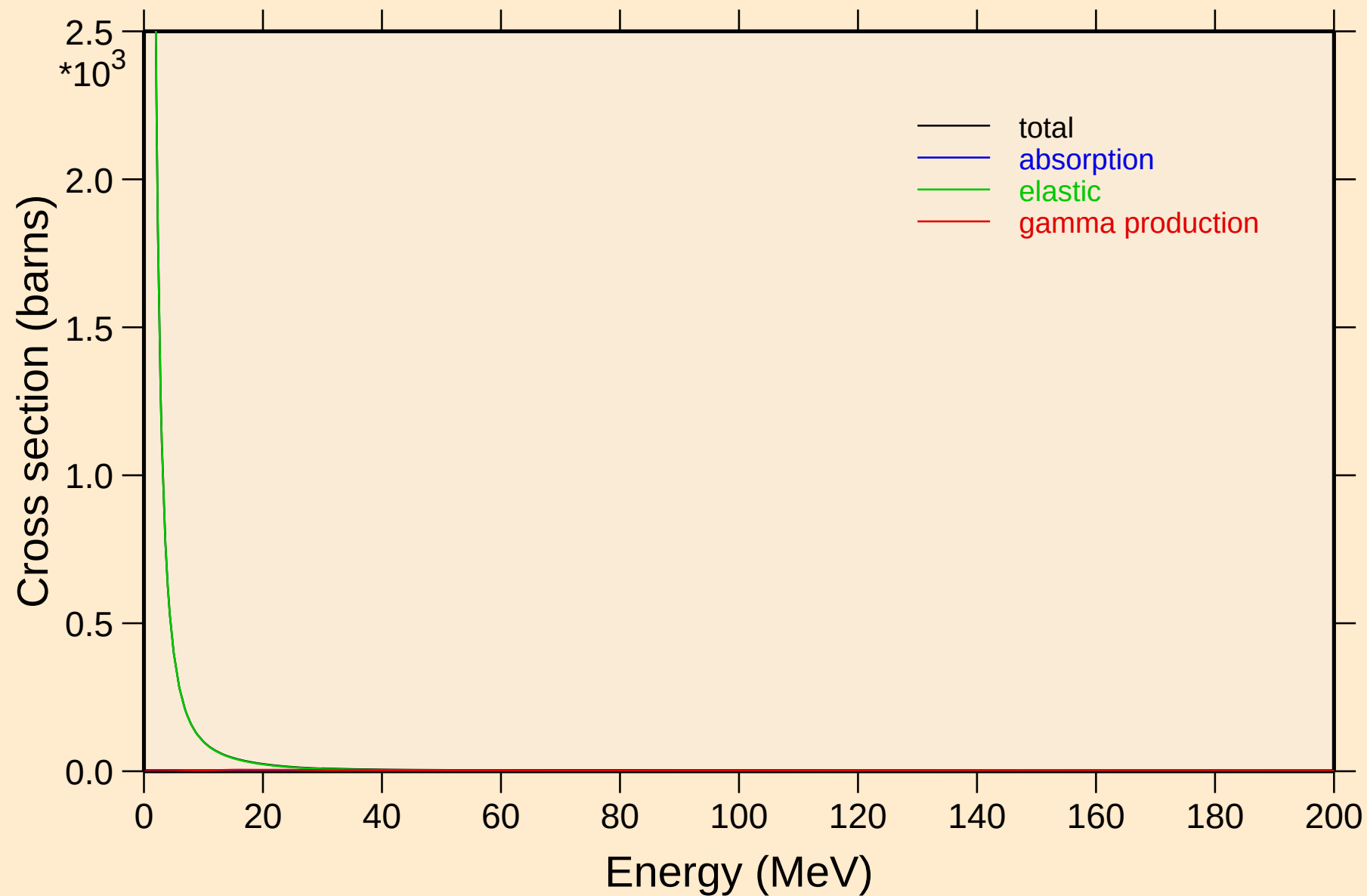
# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

Heating



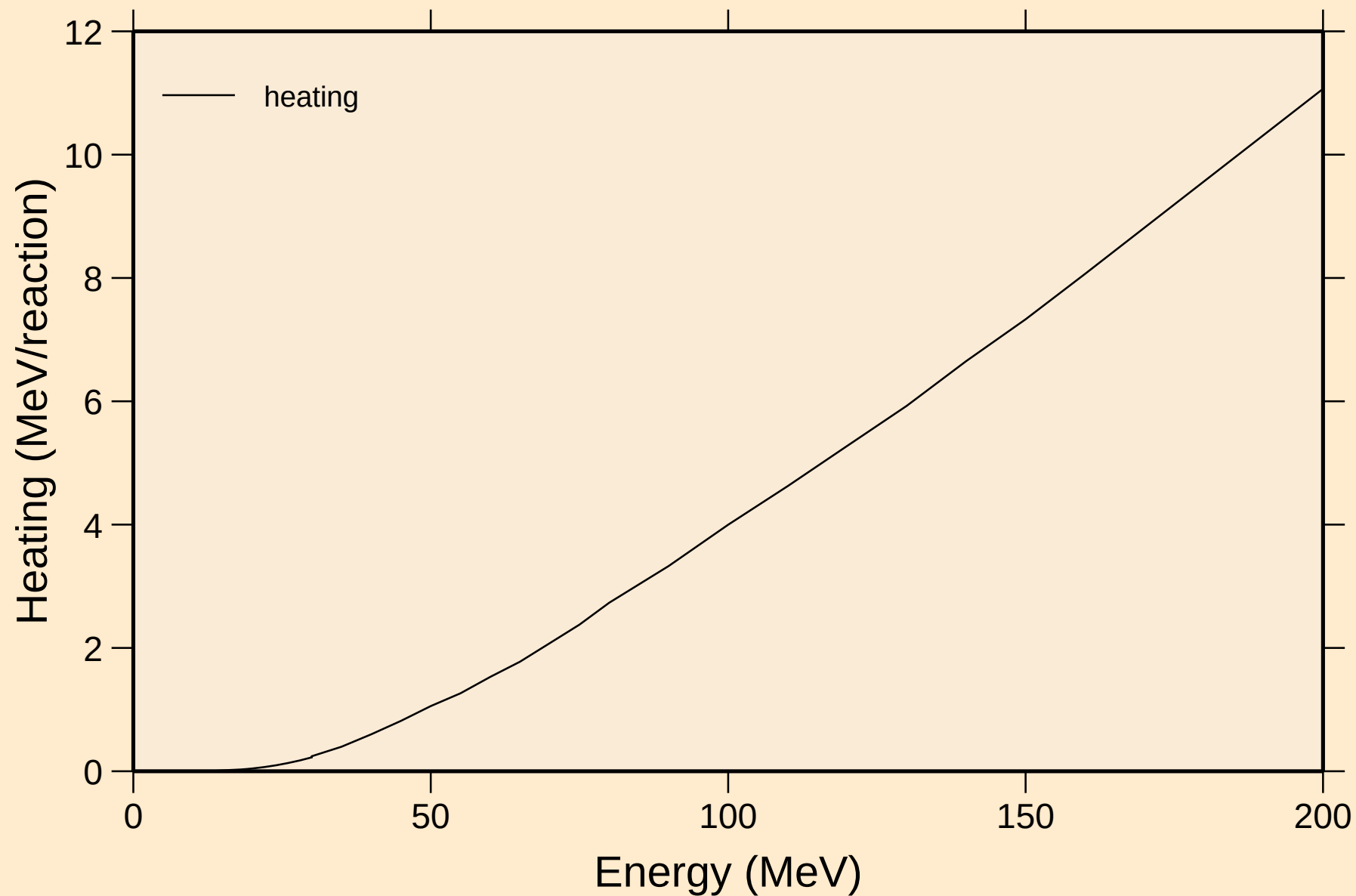
# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

## Principal cross sections



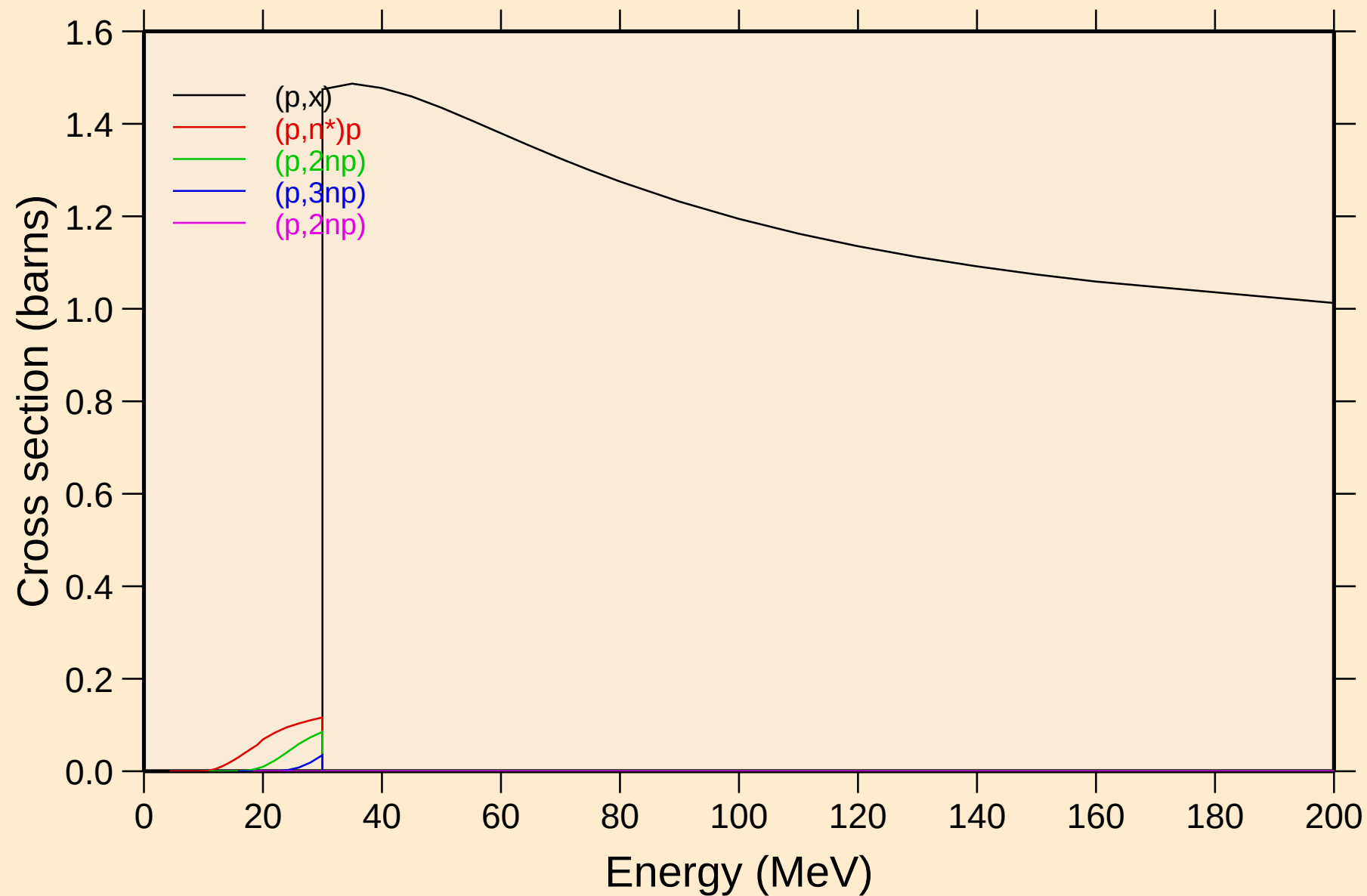
# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

Heating



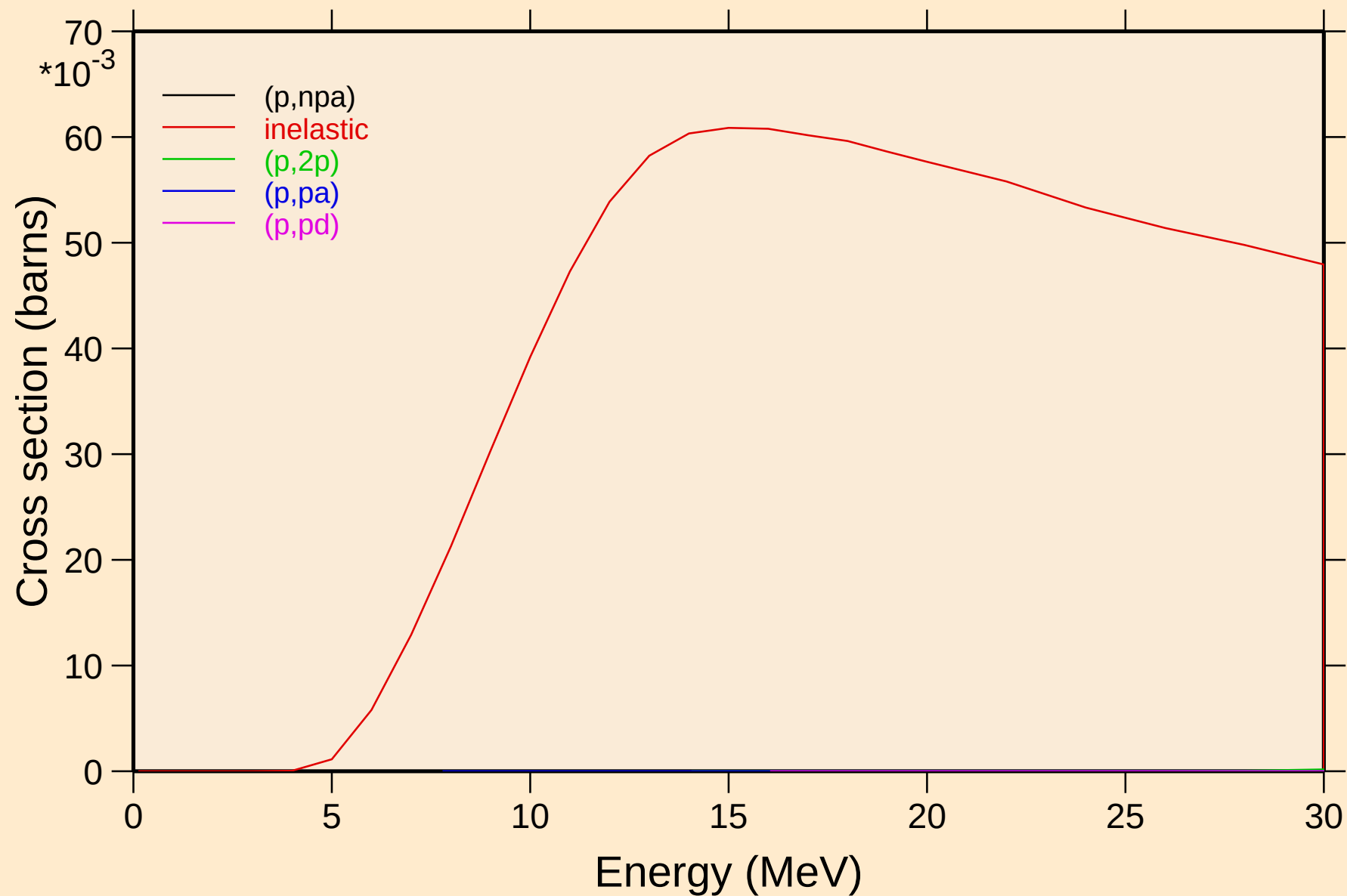
# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

Threshold reactions



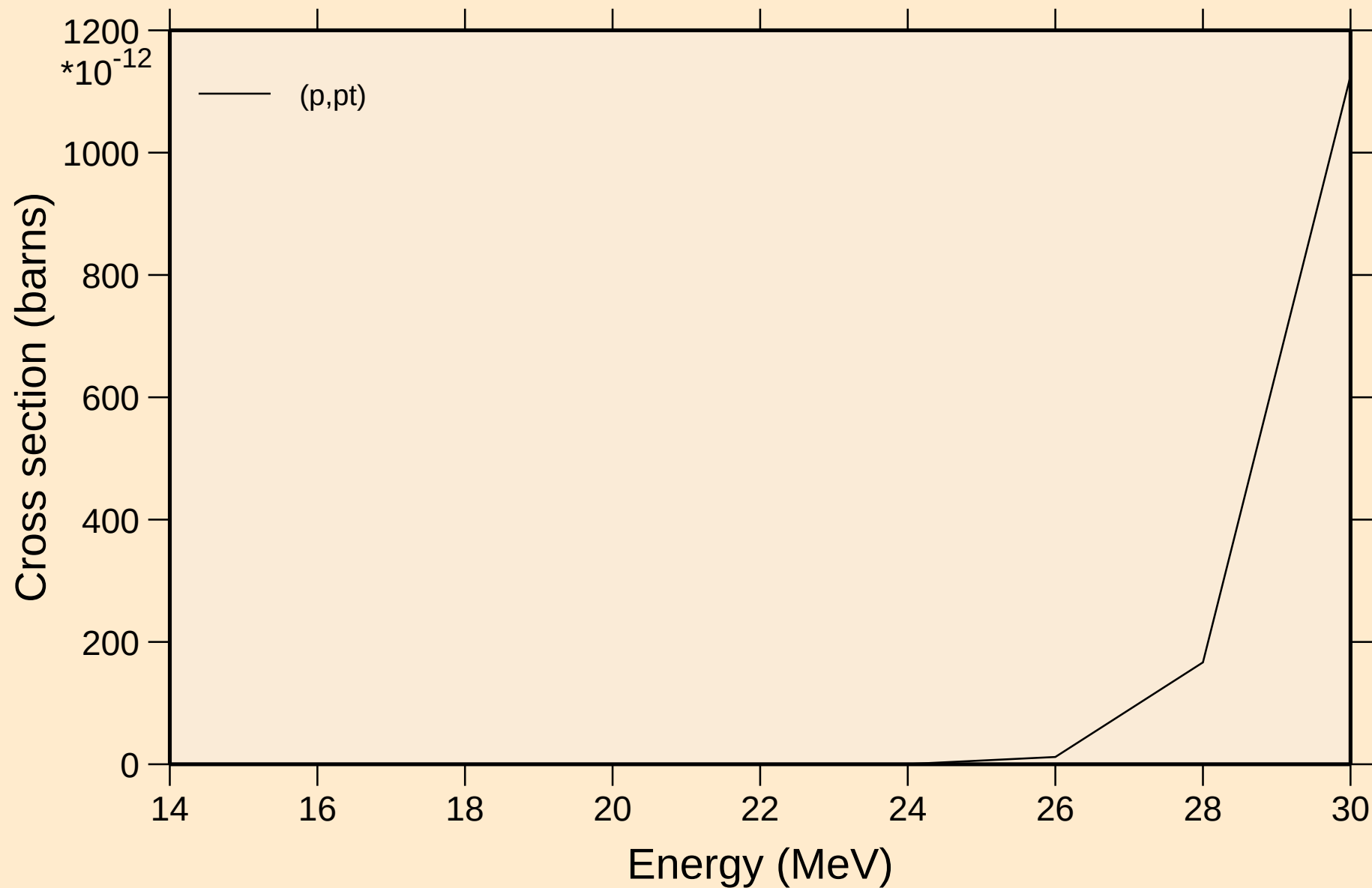
# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

Threshold reactions

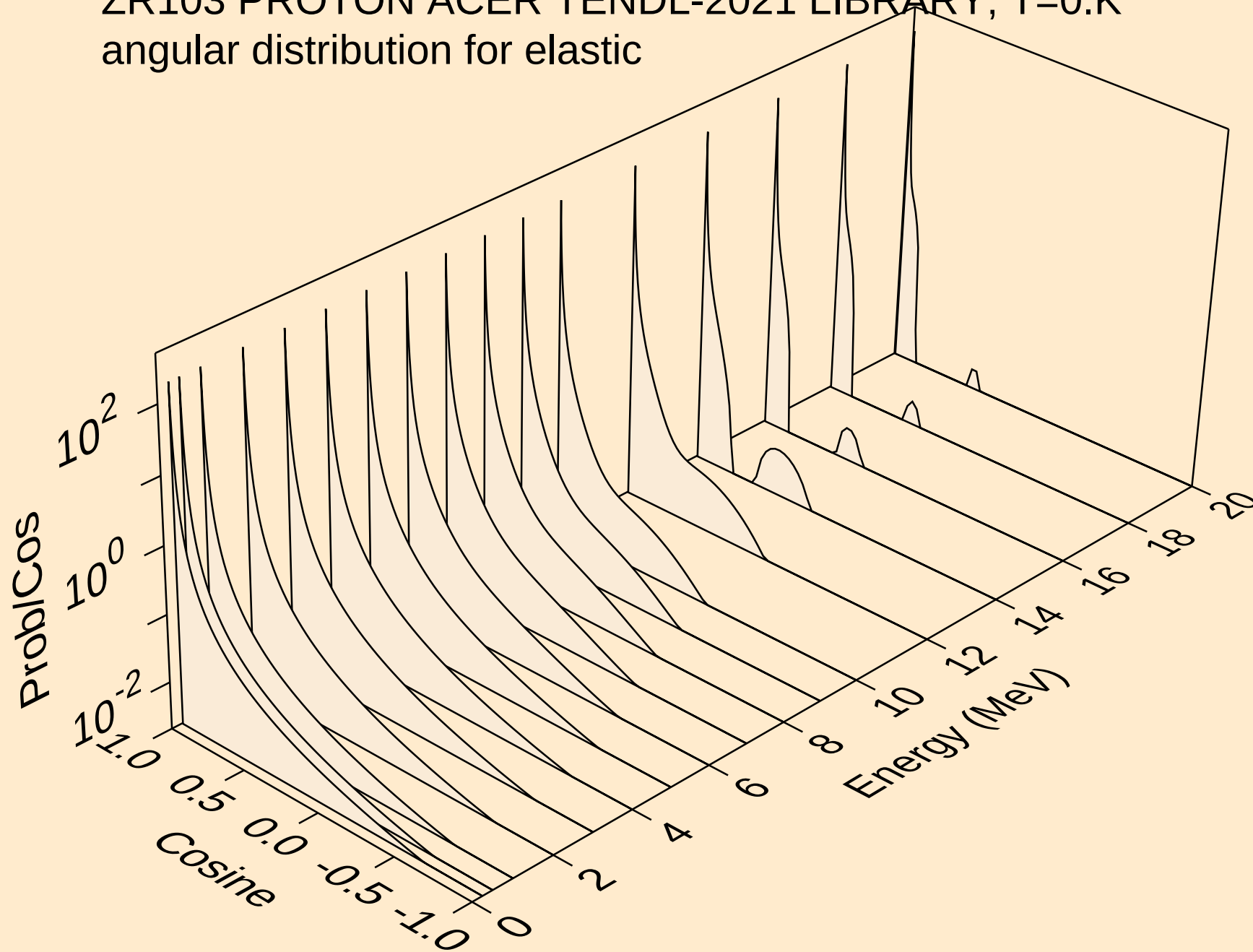


# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

Threshold reactions

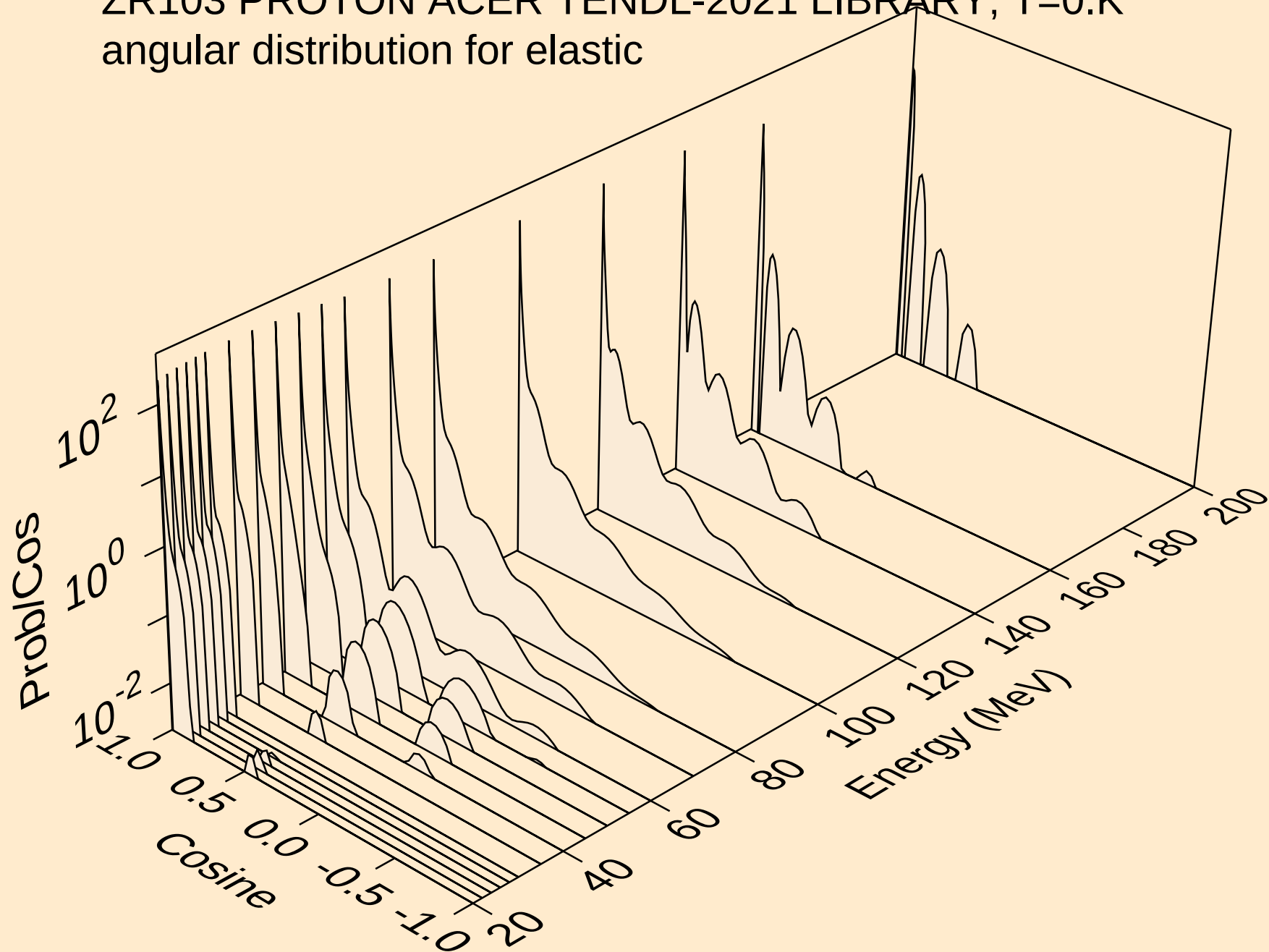


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
angular distribution for elastic

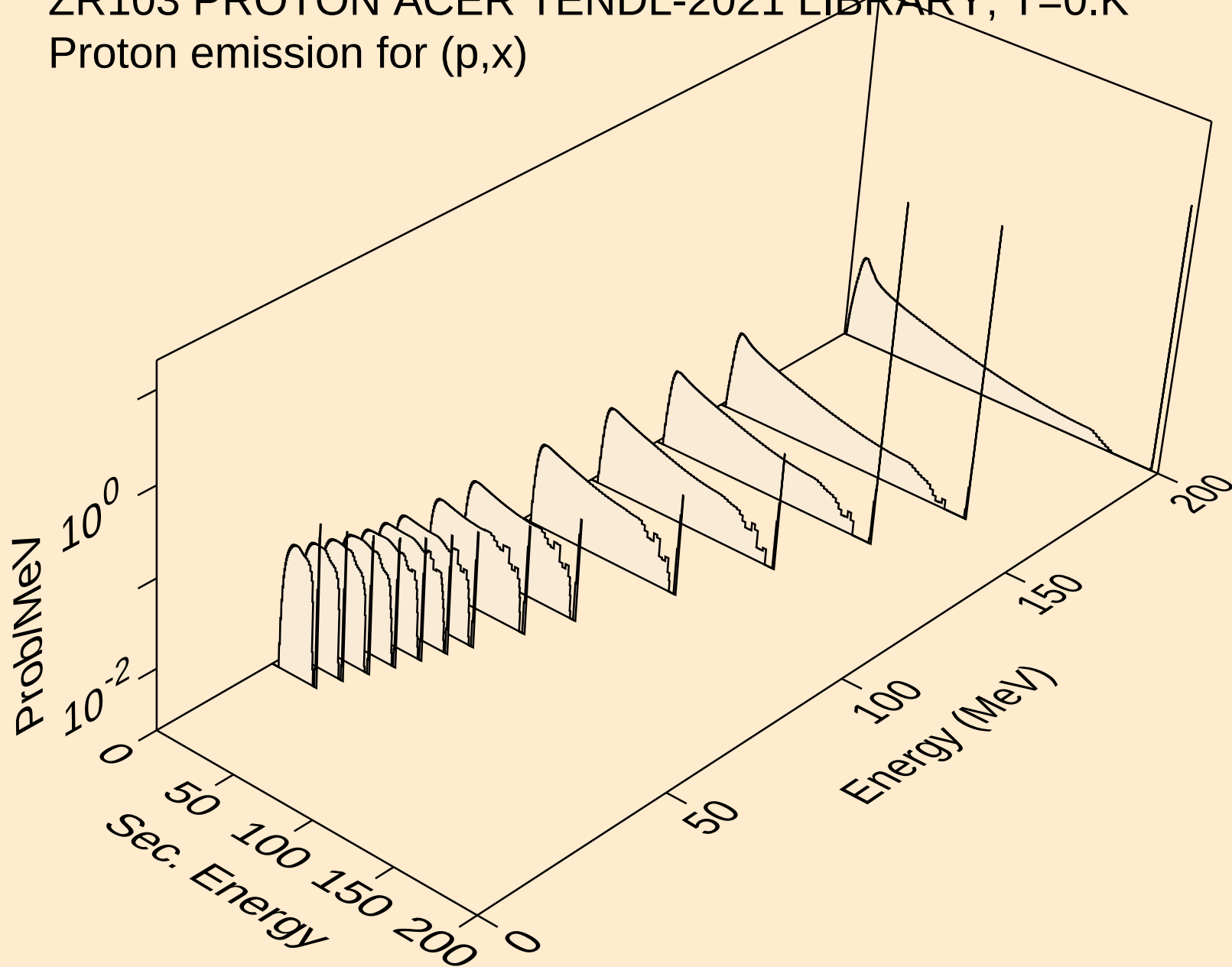




ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
angular distribution for elastic

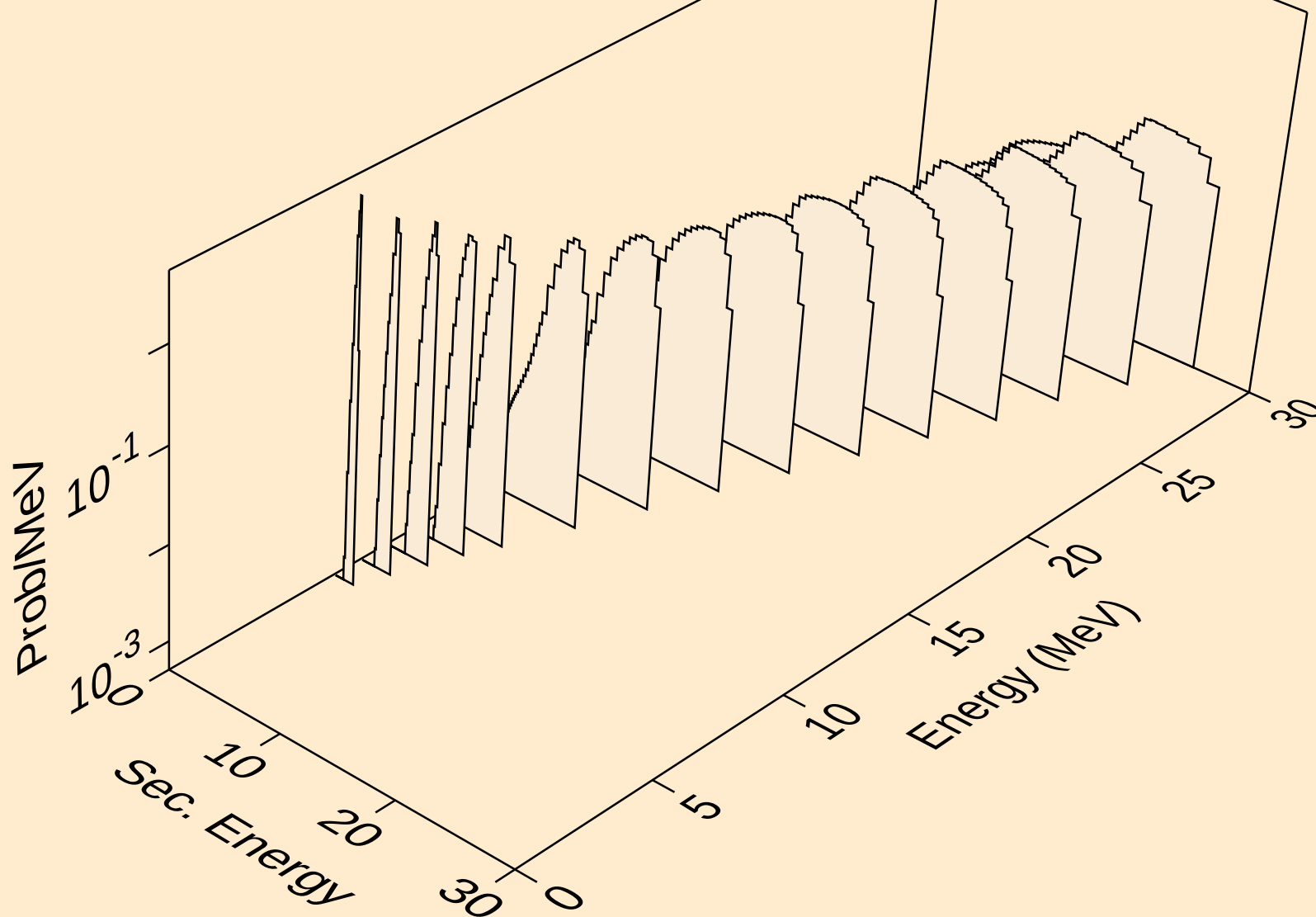


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Proton emission for (p,x)

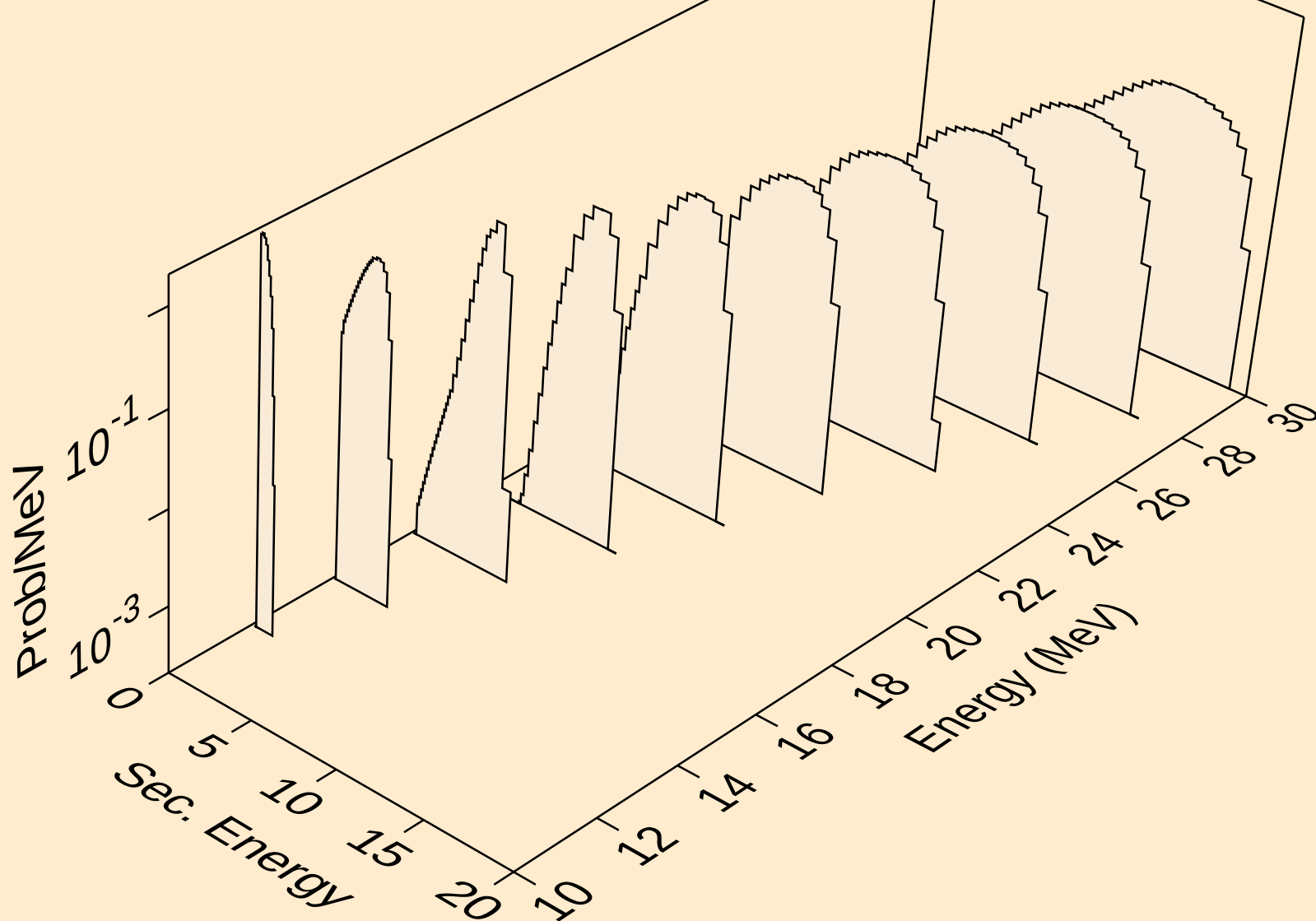


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

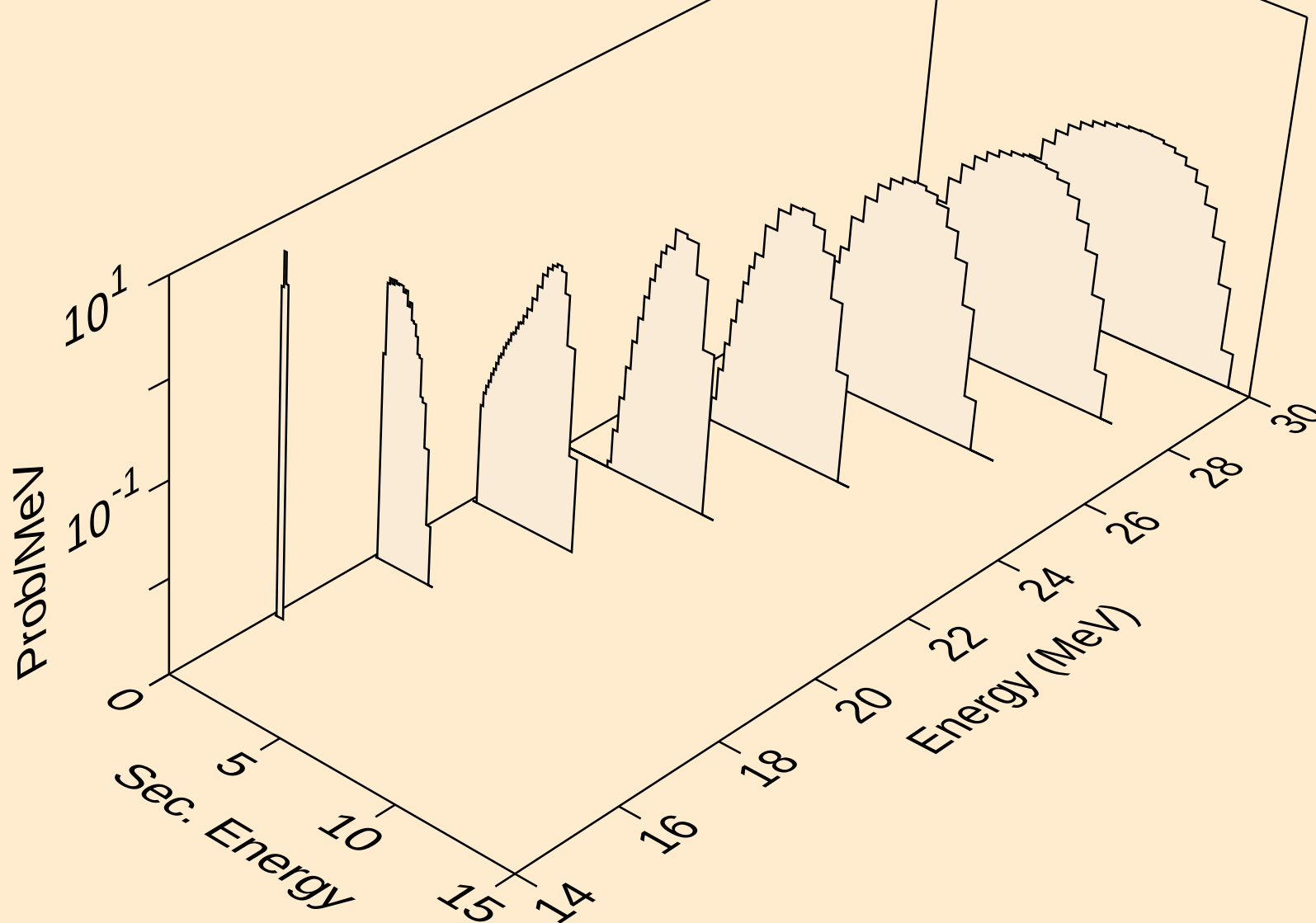
Proton emission for  $(p,n^*)p$



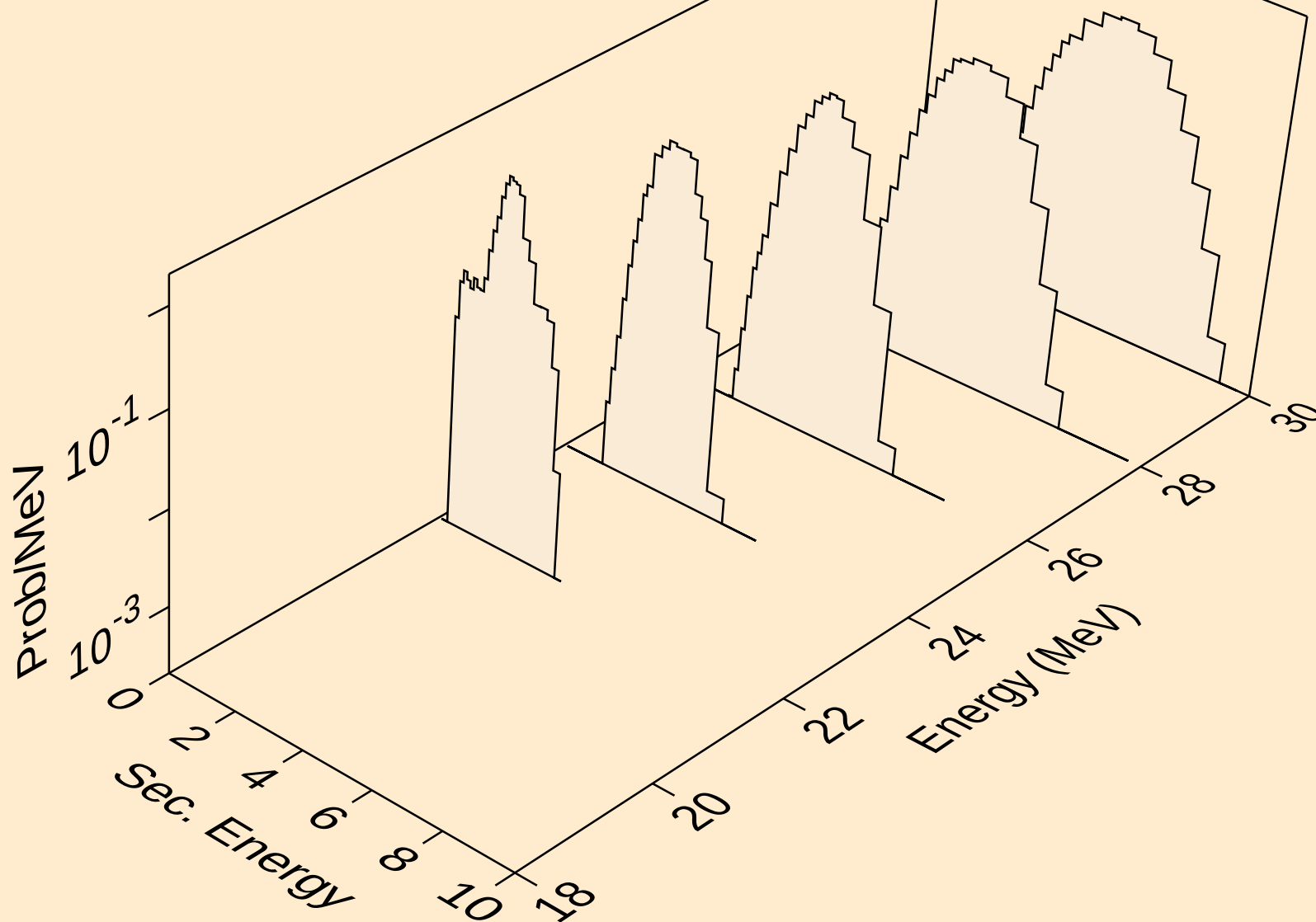
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Proton emission for (p,2np)



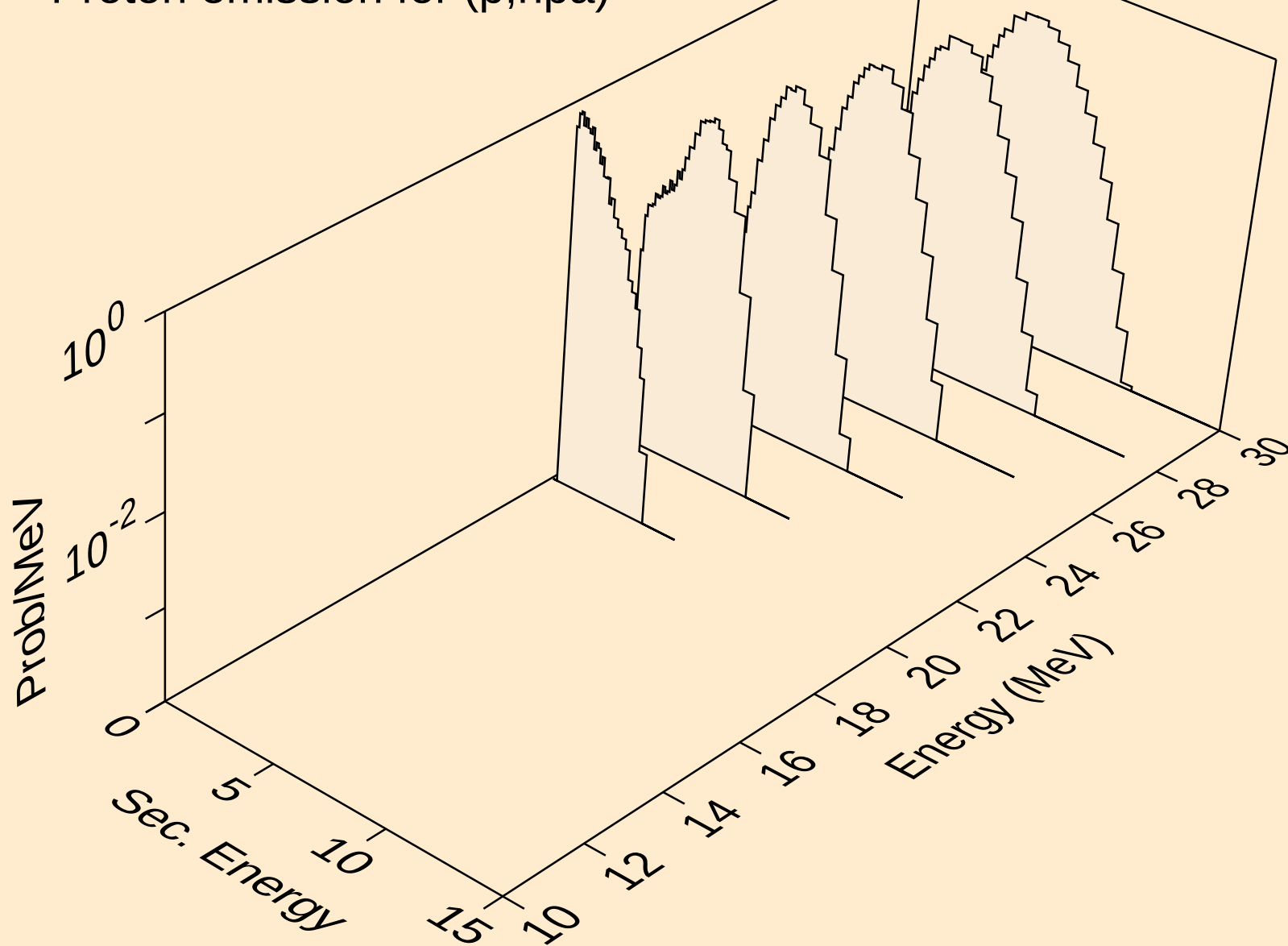
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Proton emission for (p,3np)



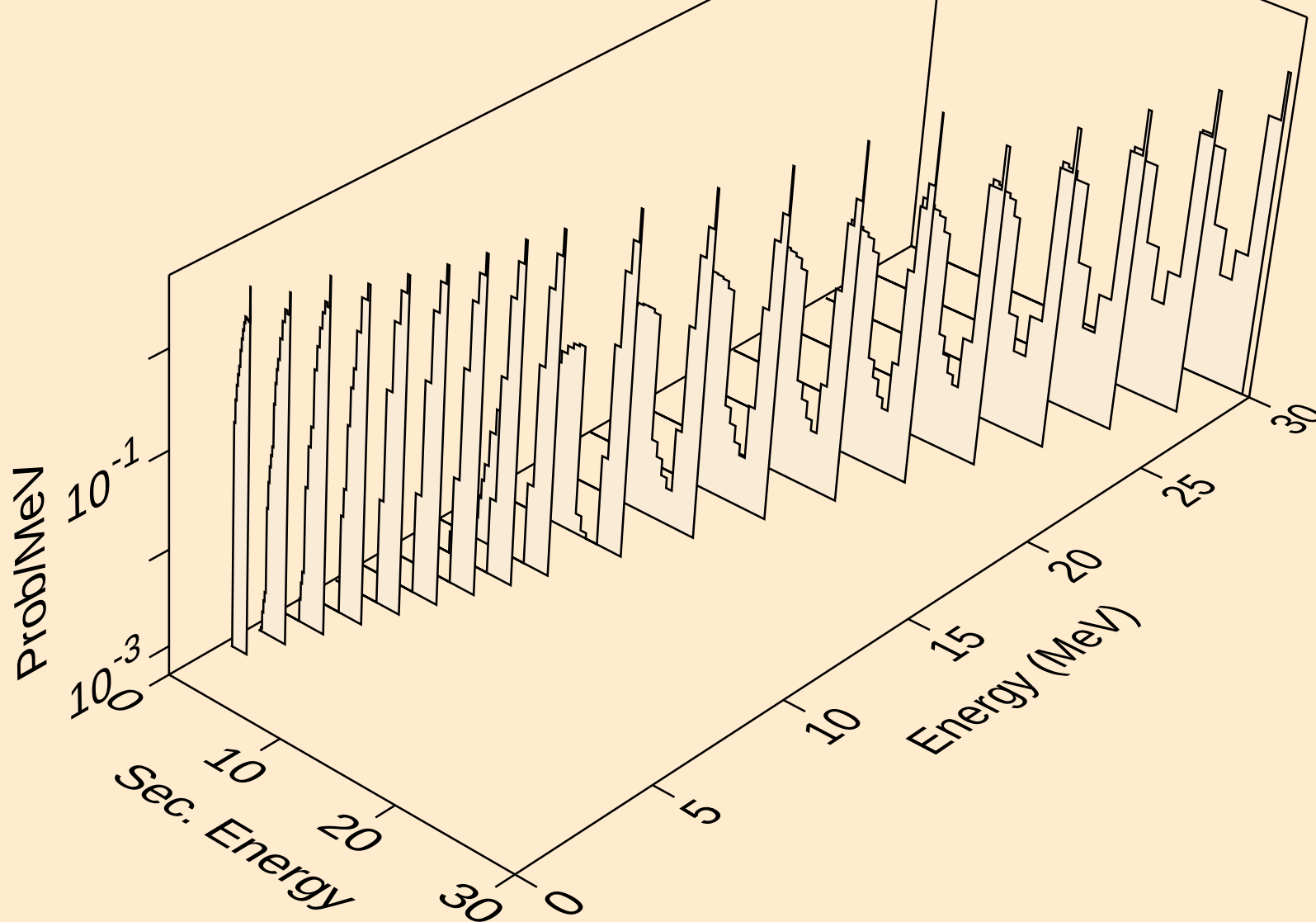
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Proton emission for (p,2np)



ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Proton emission for (p,npa)

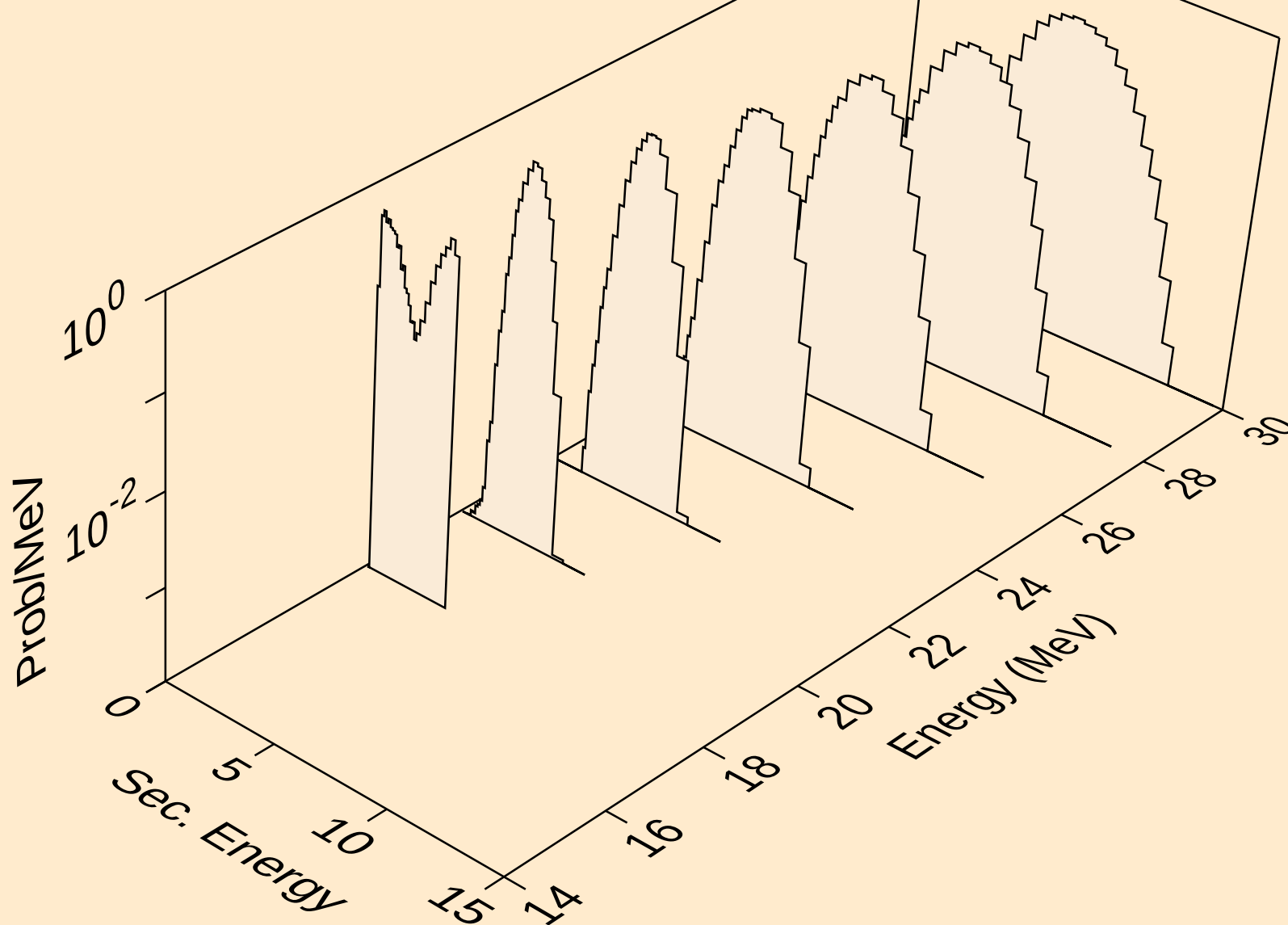


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Proton emission for inelastic



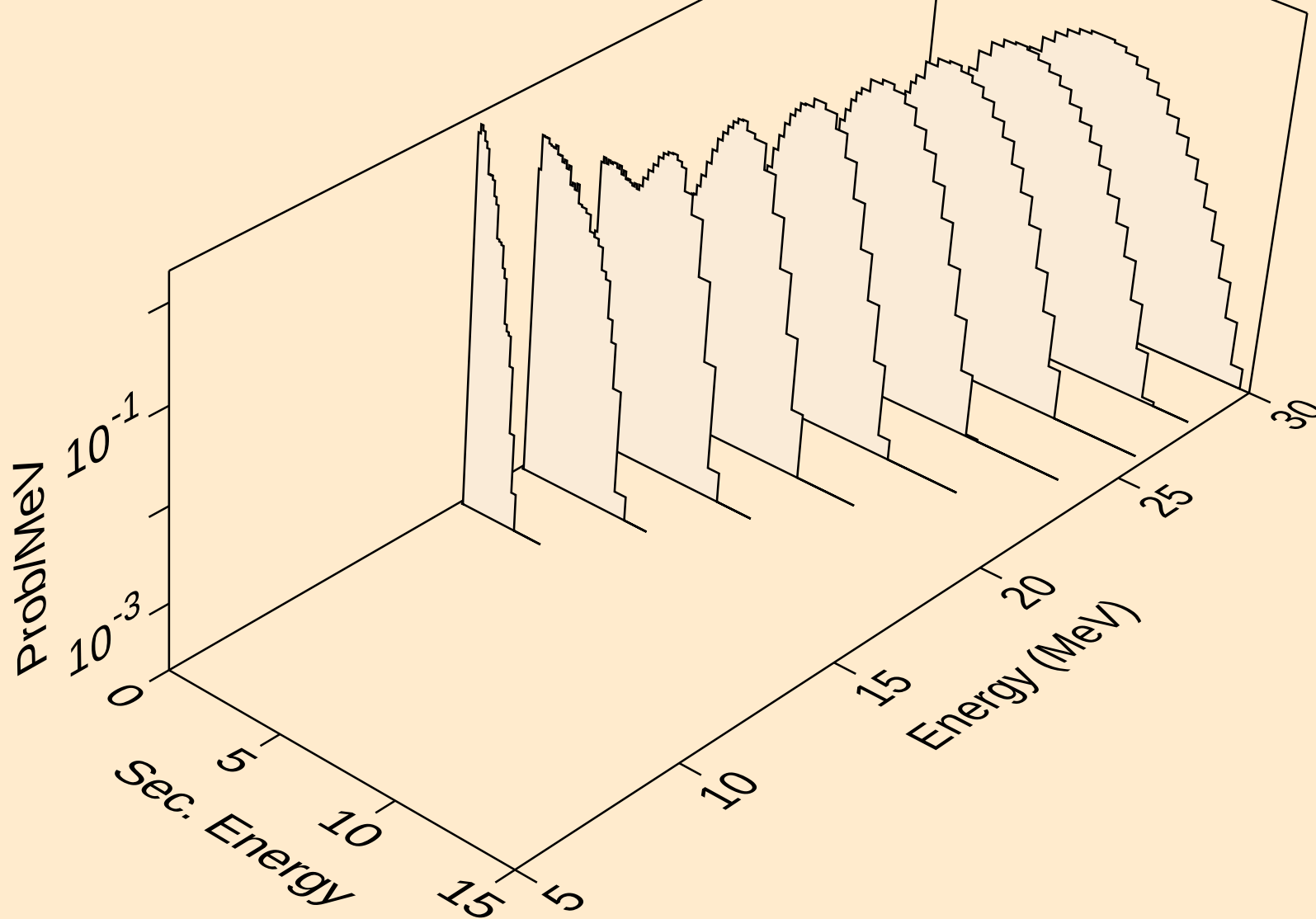


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Proton emission for (p,2p)



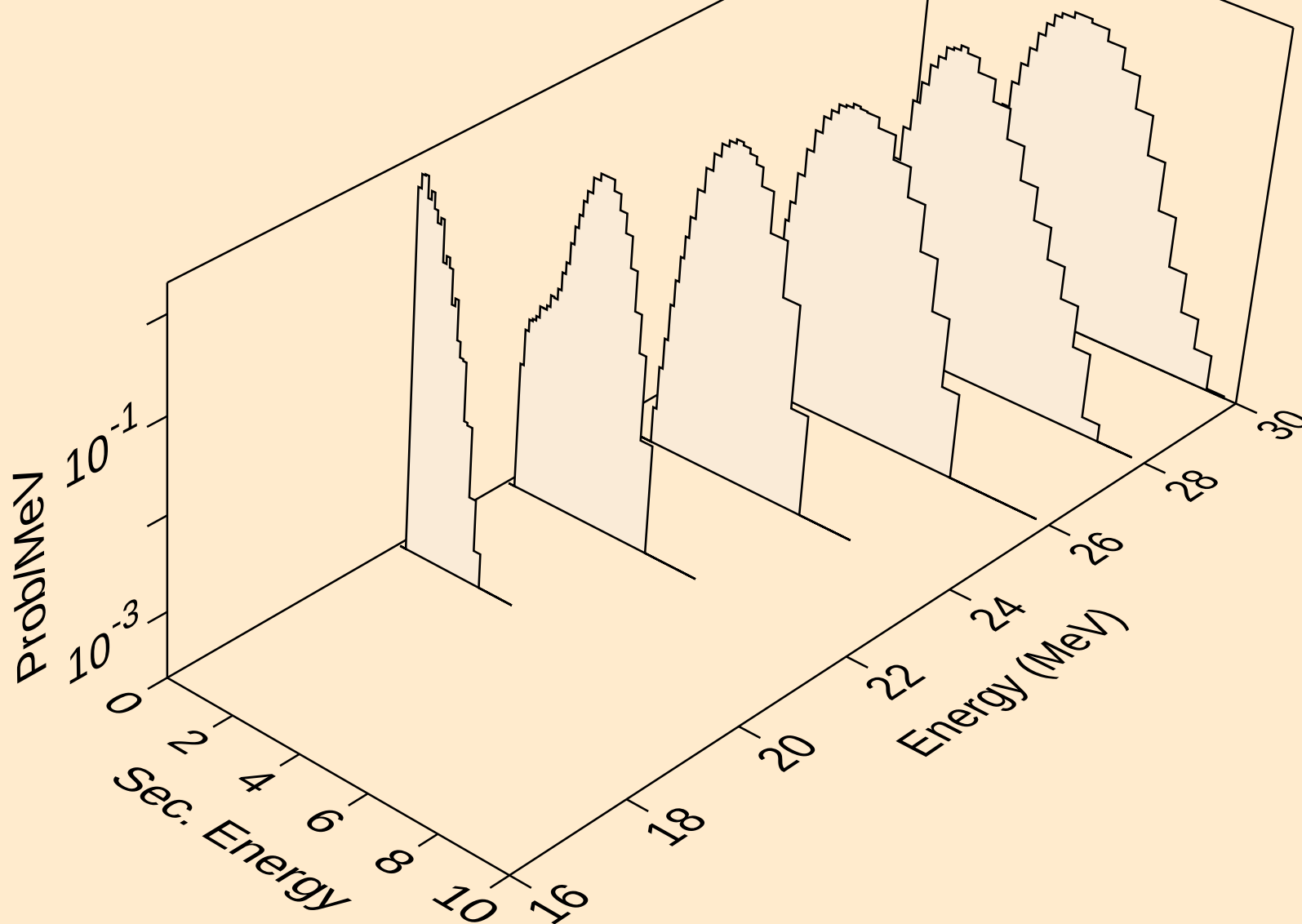
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

Proton emission for (p,pa)



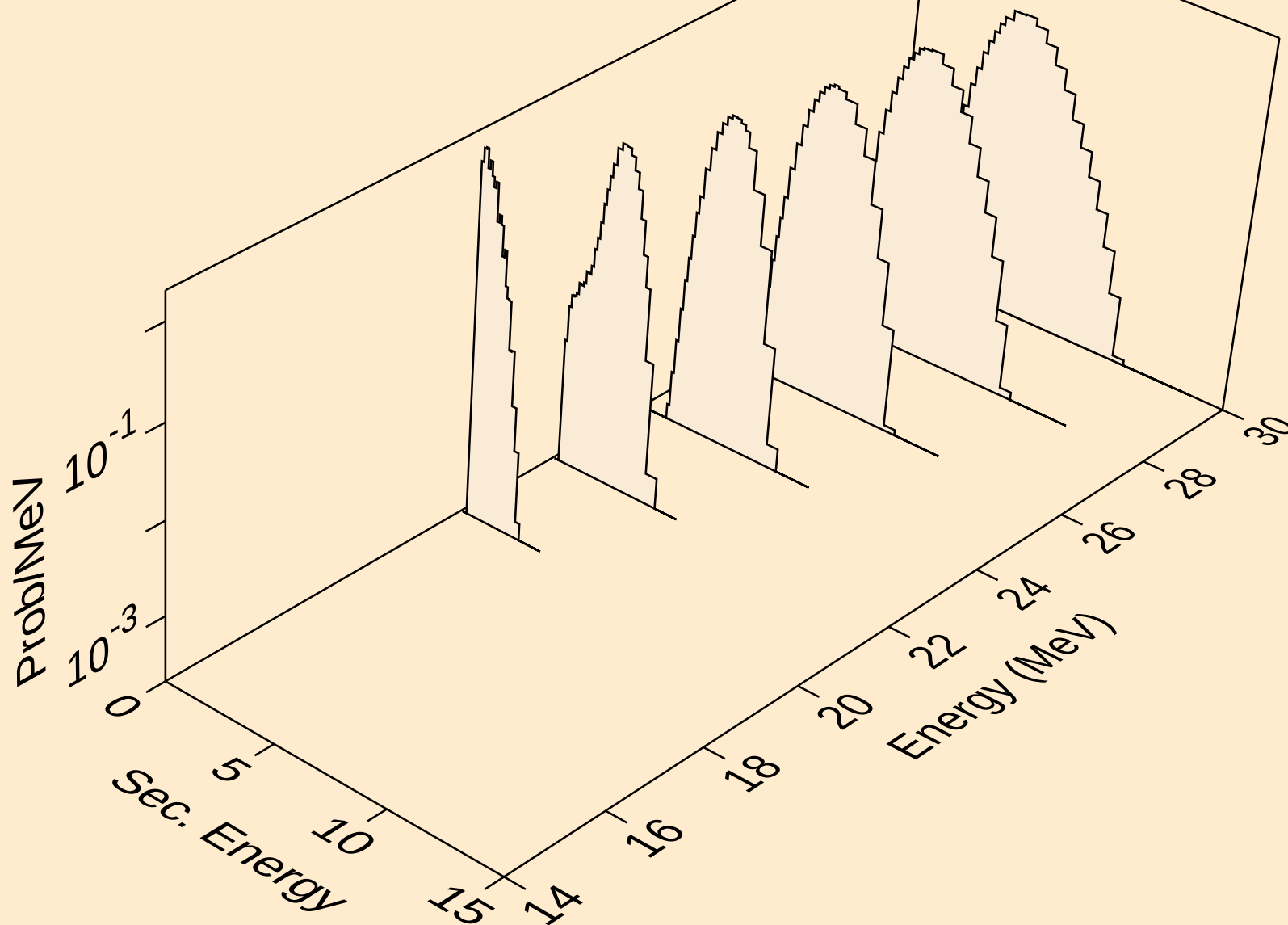
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

Proton emission for (p,pd)

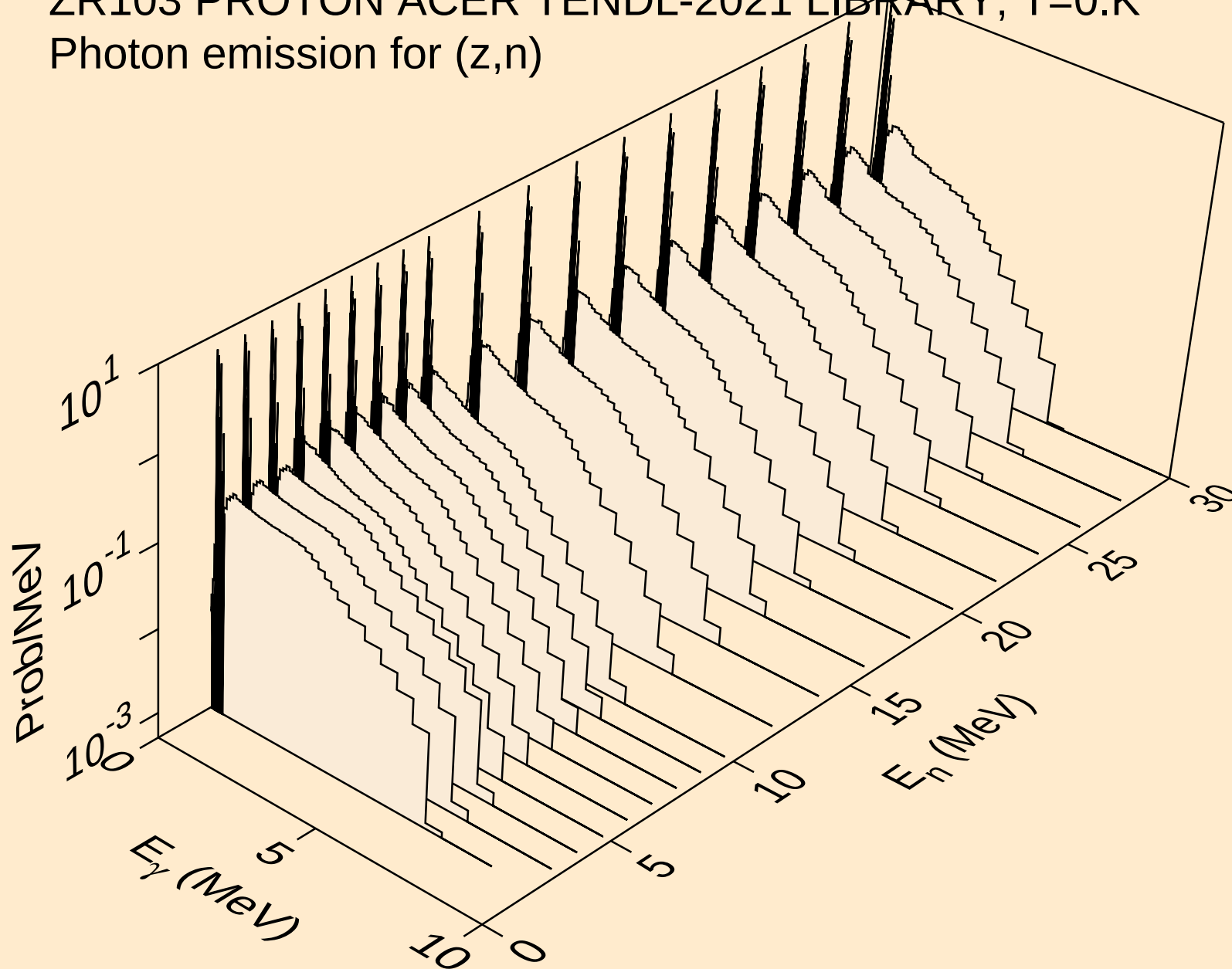


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

Proton emission for (p,pt)

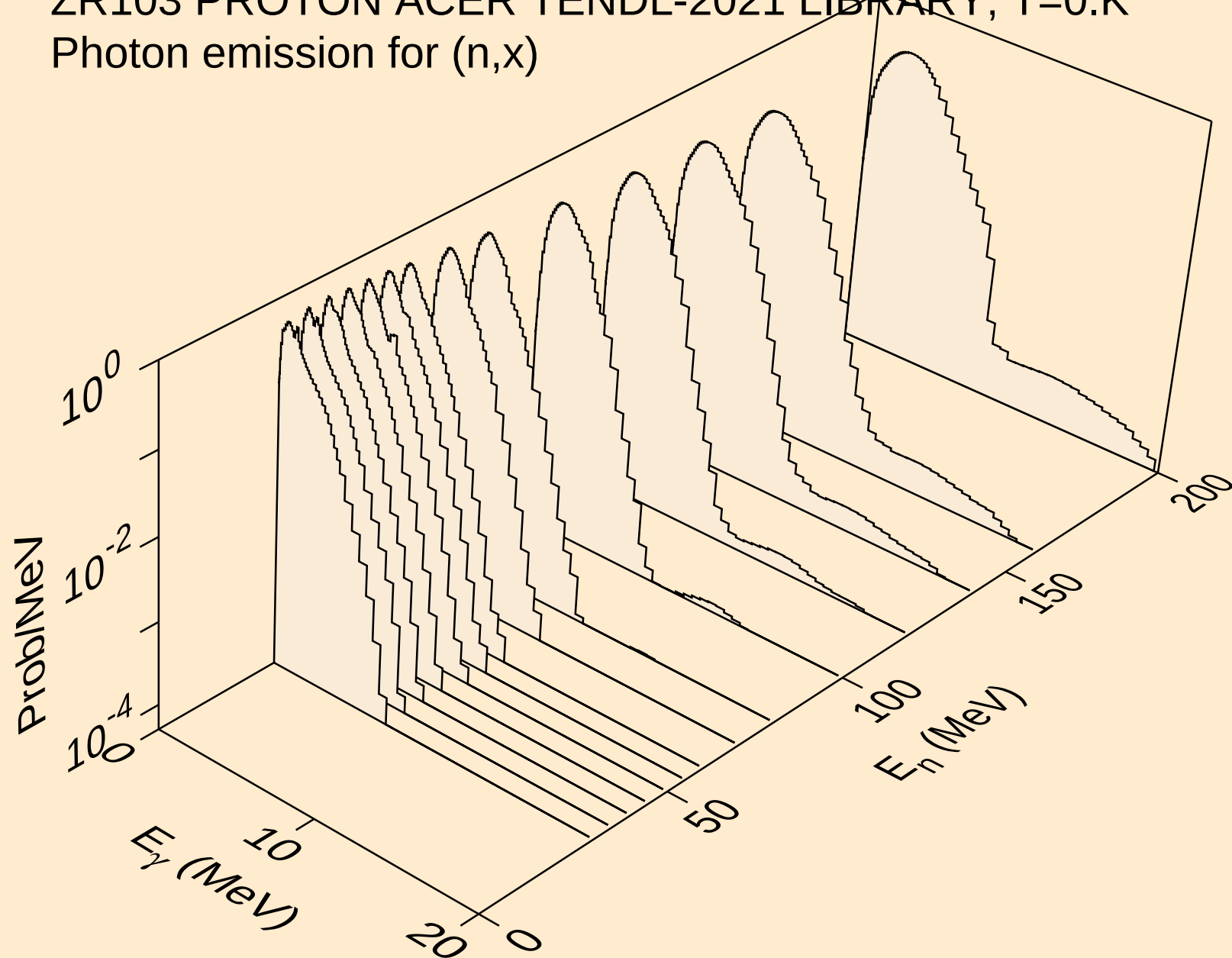


ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (z,n)

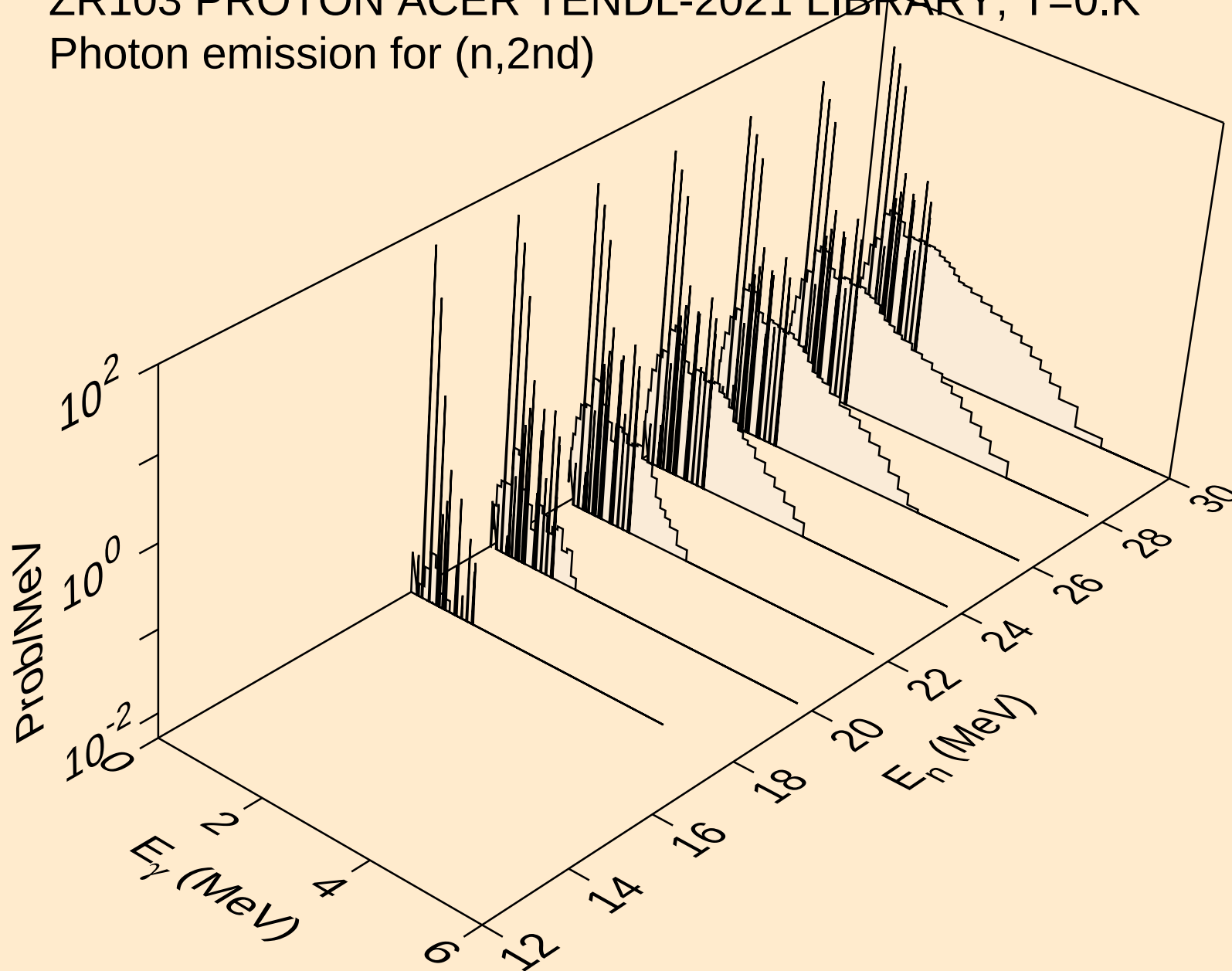


# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

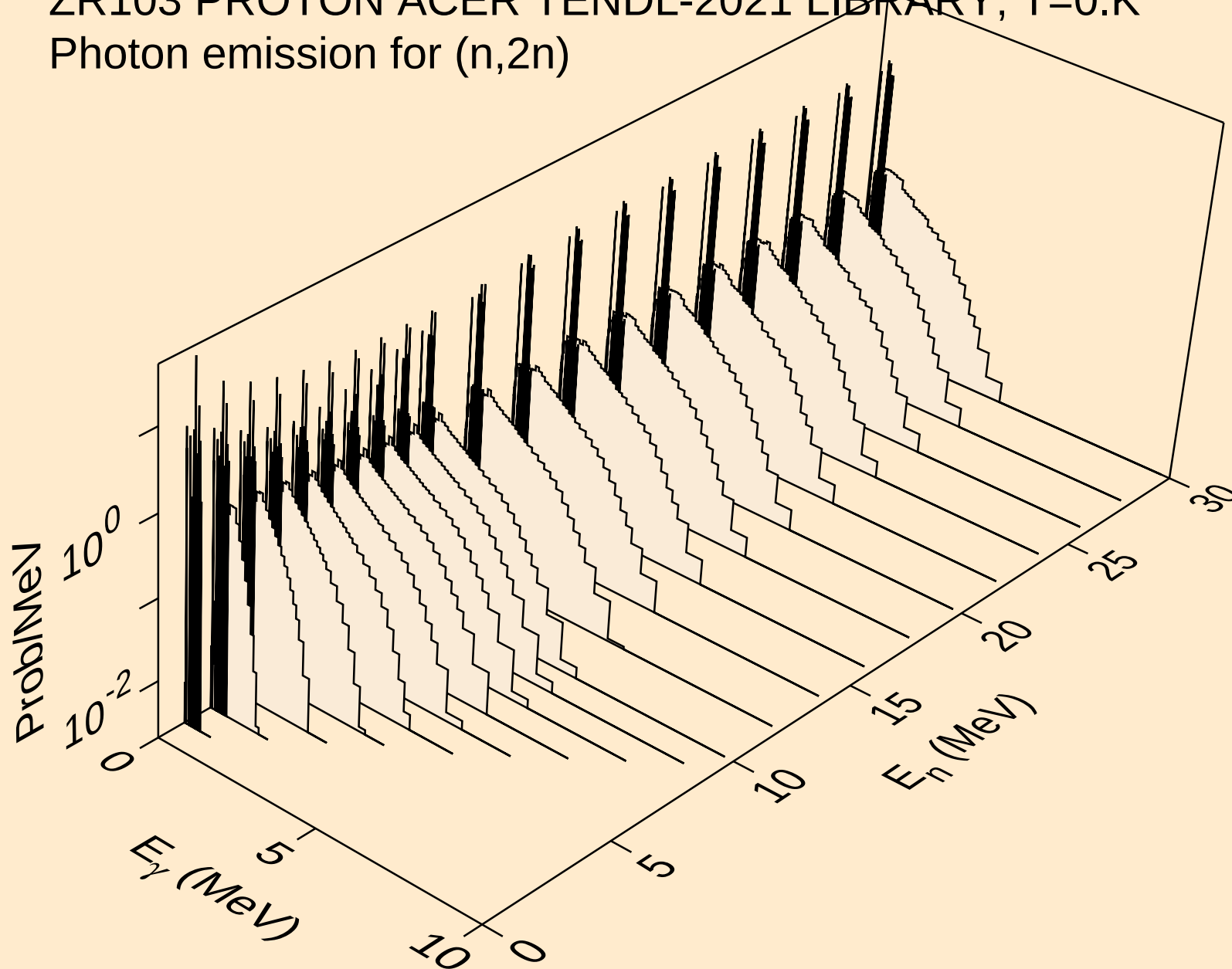
Photon emission for (n,x)



ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (n,2nd)

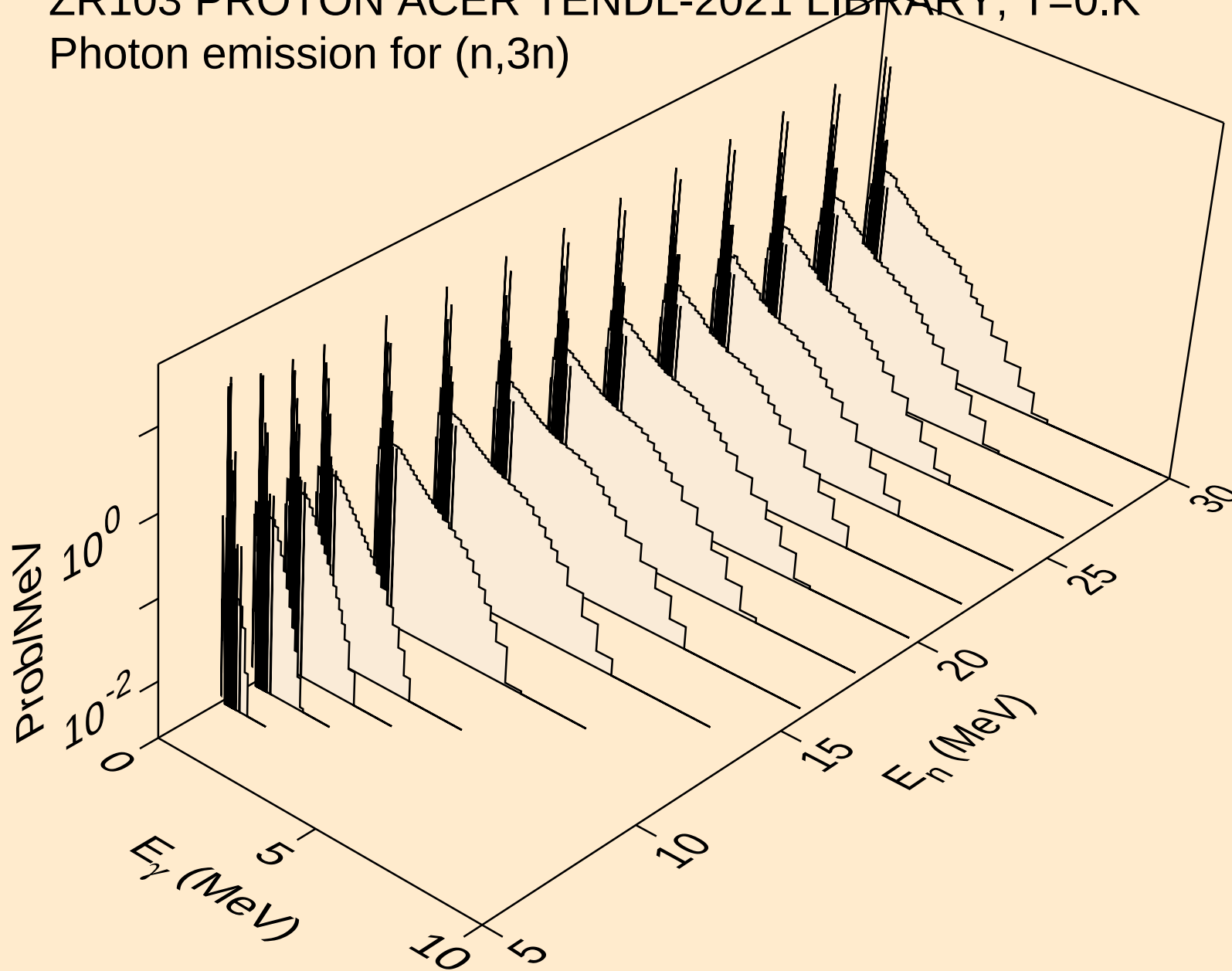


ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (n,2n)

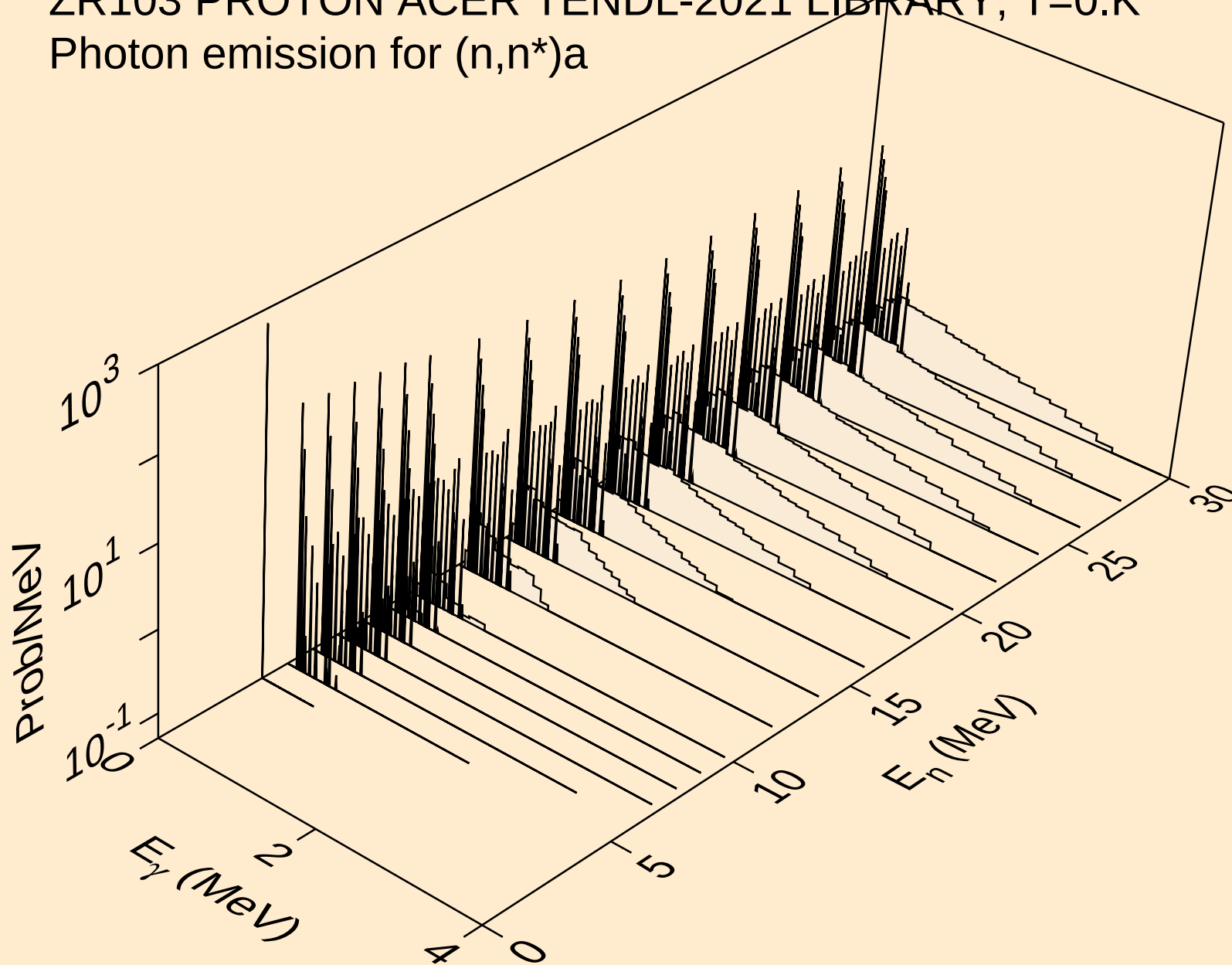




ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (n,3n)

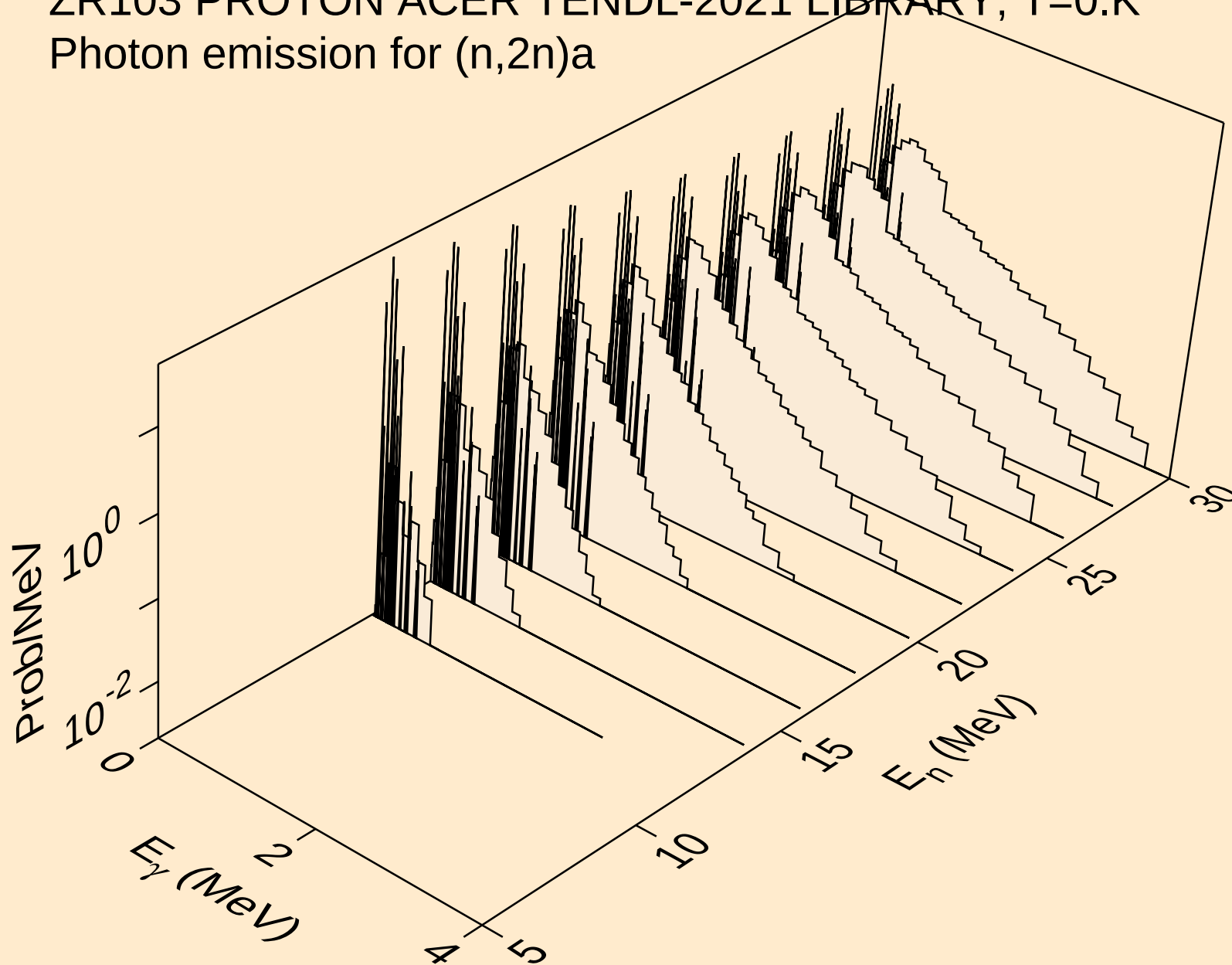


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Photon emission for (n,n\*)a



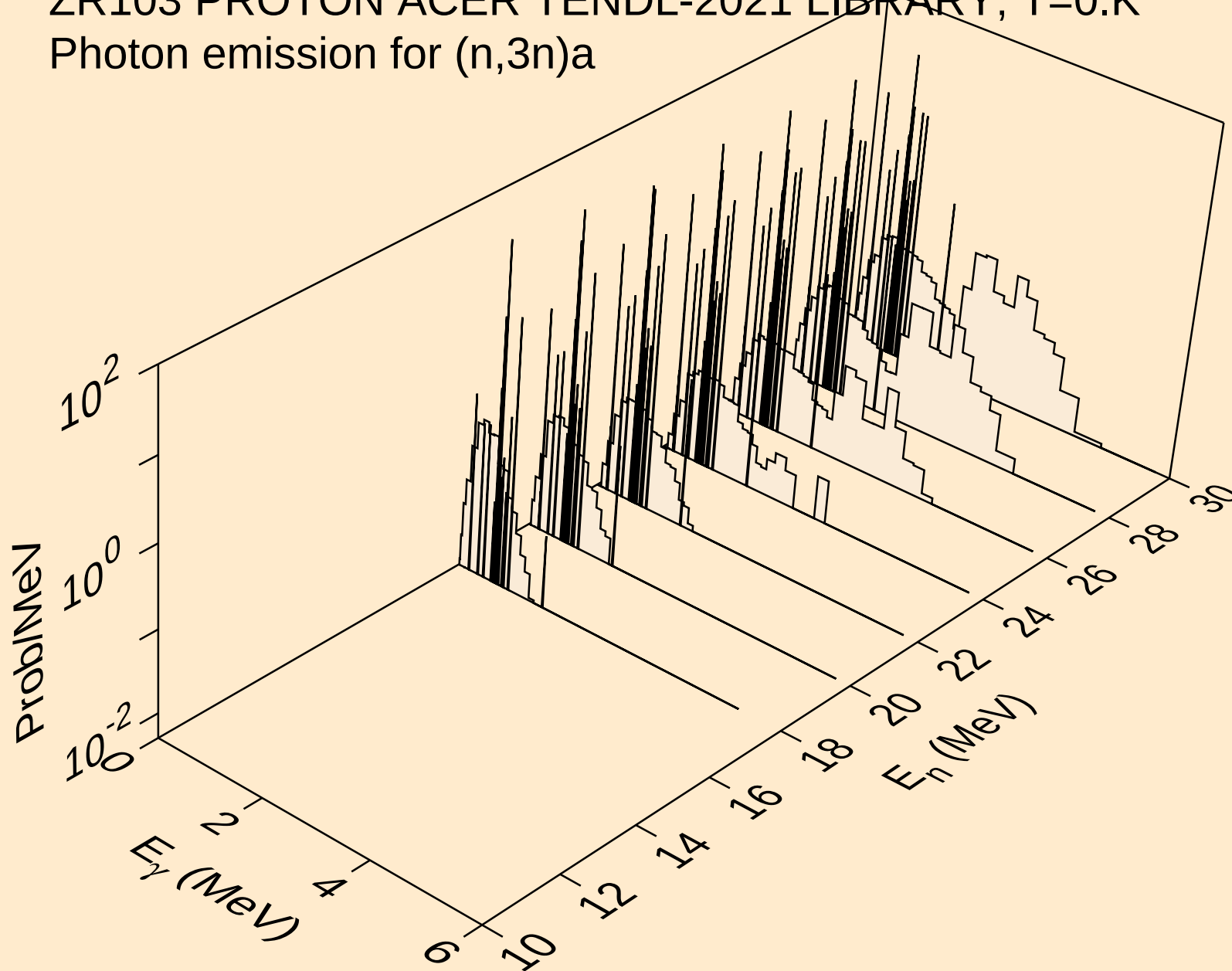
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

Photon emission for (n,2n) $\alpha$

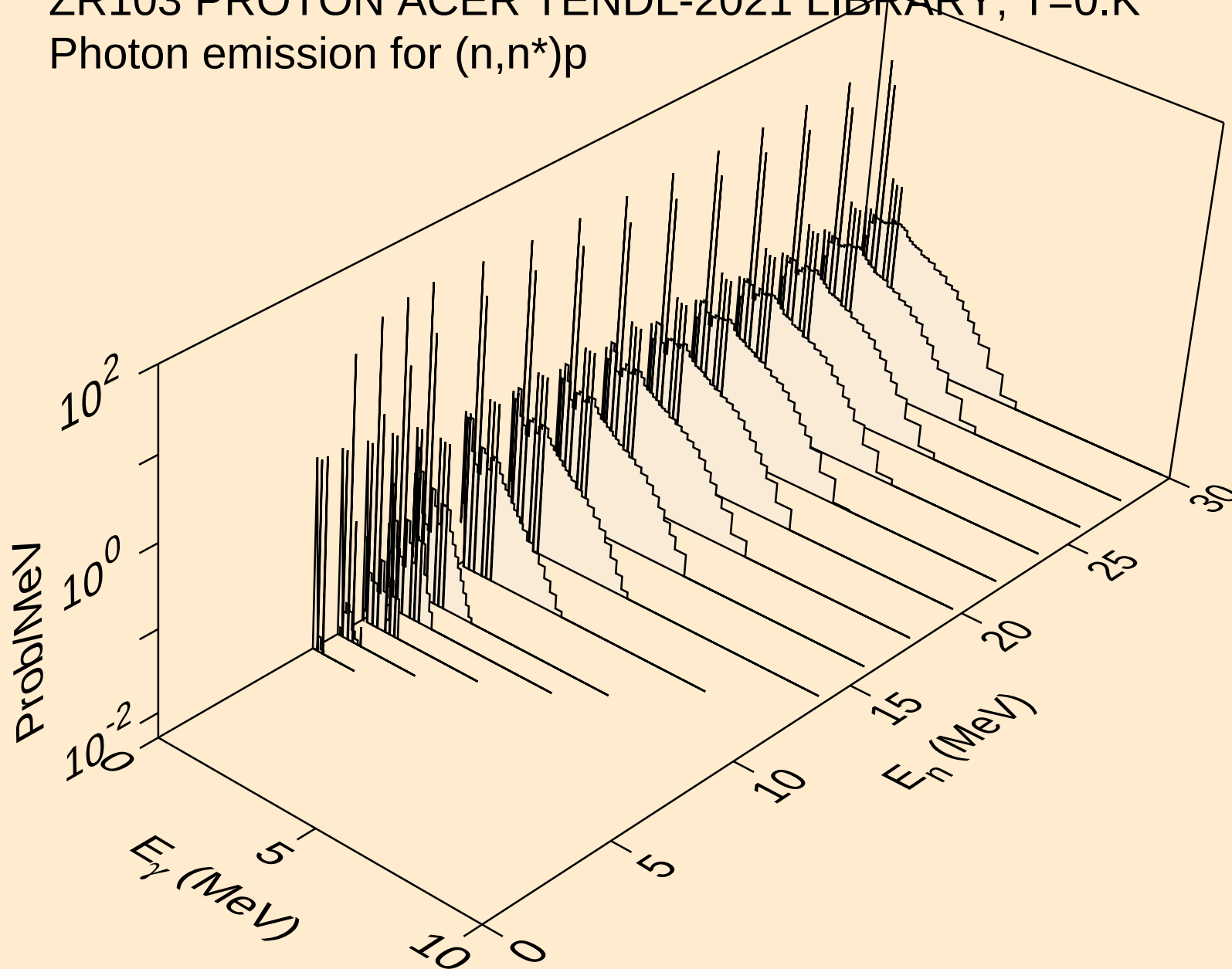


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

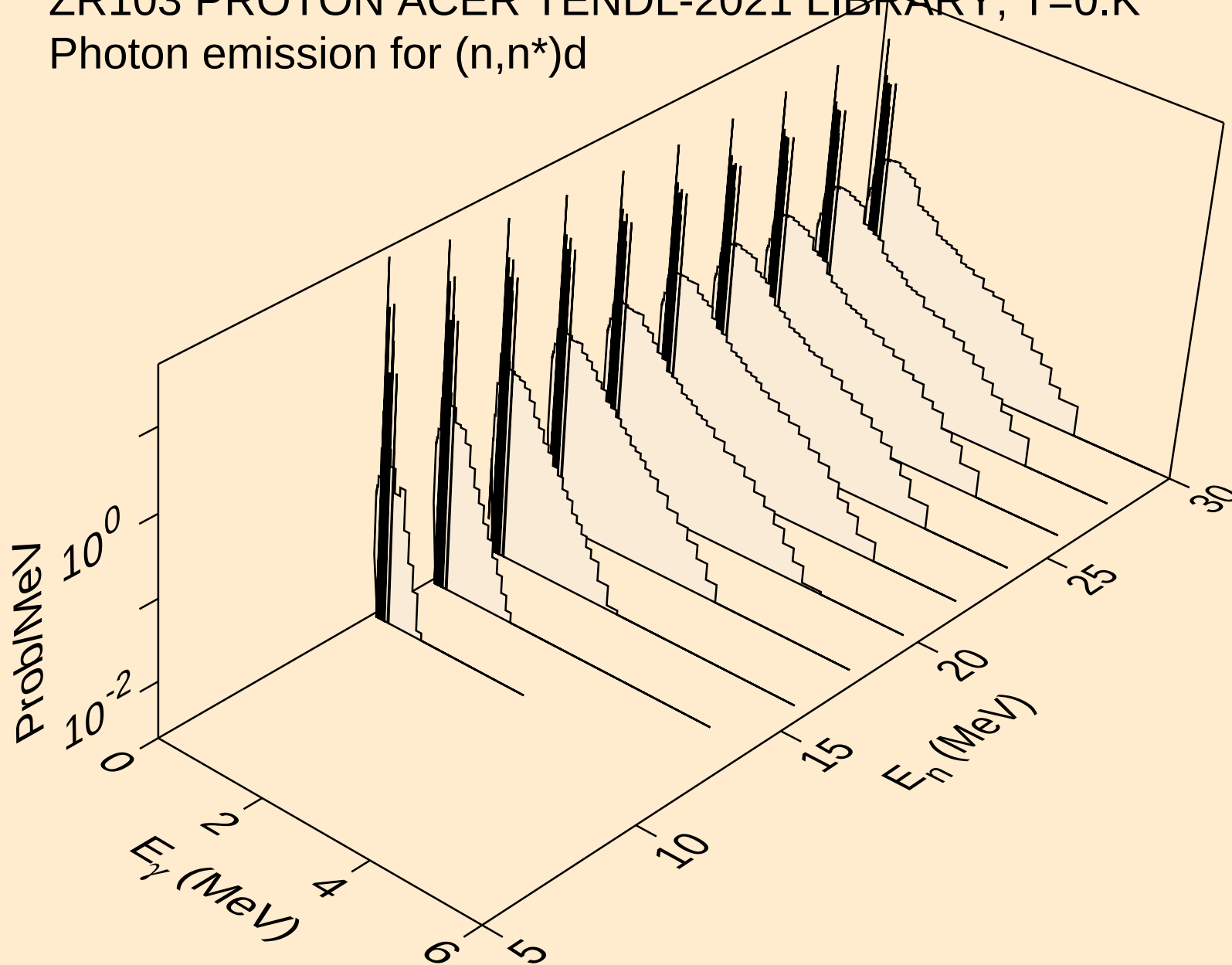
Photon emission for (n,3n) $\alpha$



ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for  $(n,n^*)p$

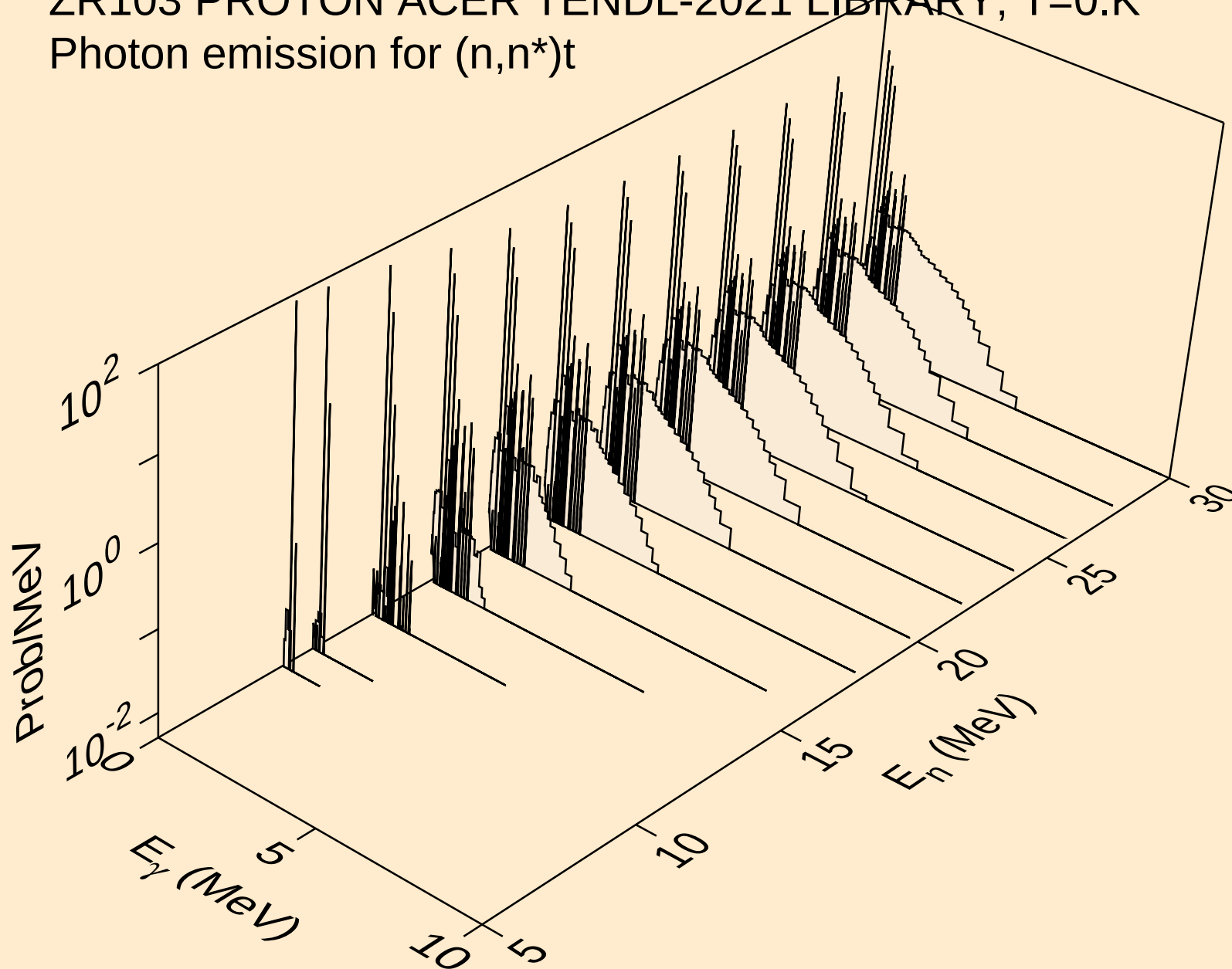


ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for  $(n,n^*)d$

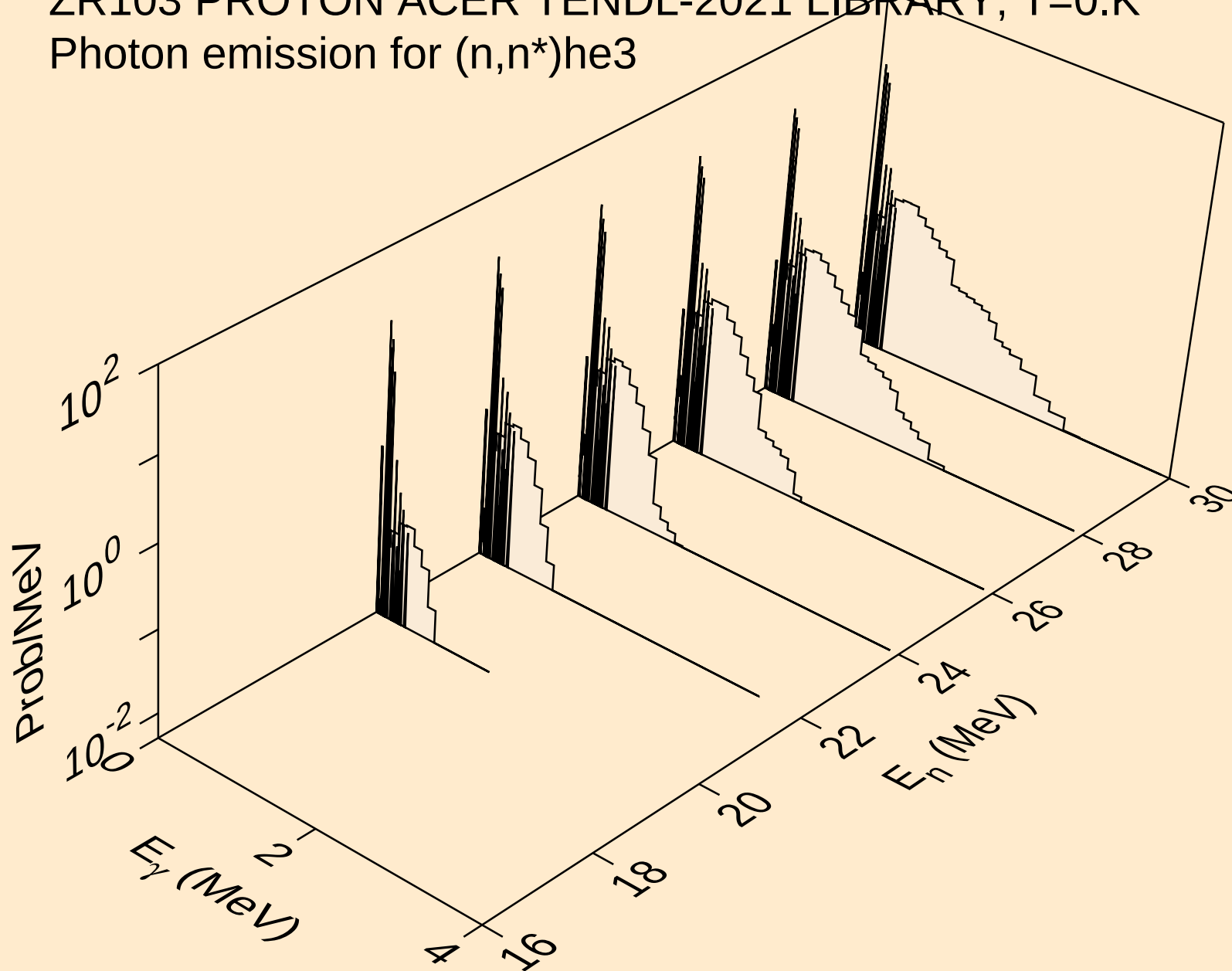


ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$

Photon emission for  $(n,n^*)t$

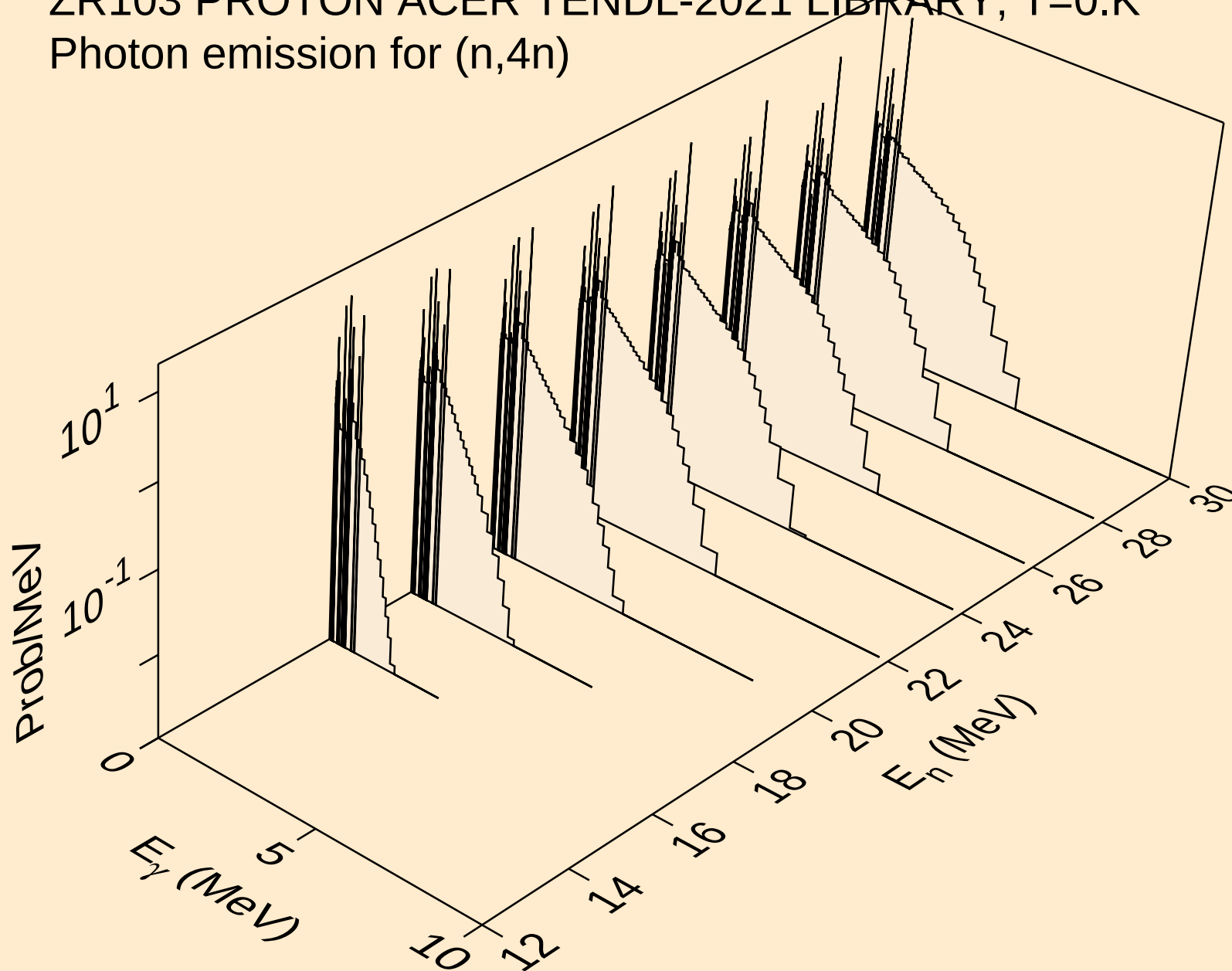


ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for  $(n,n^*)\text{he3}$

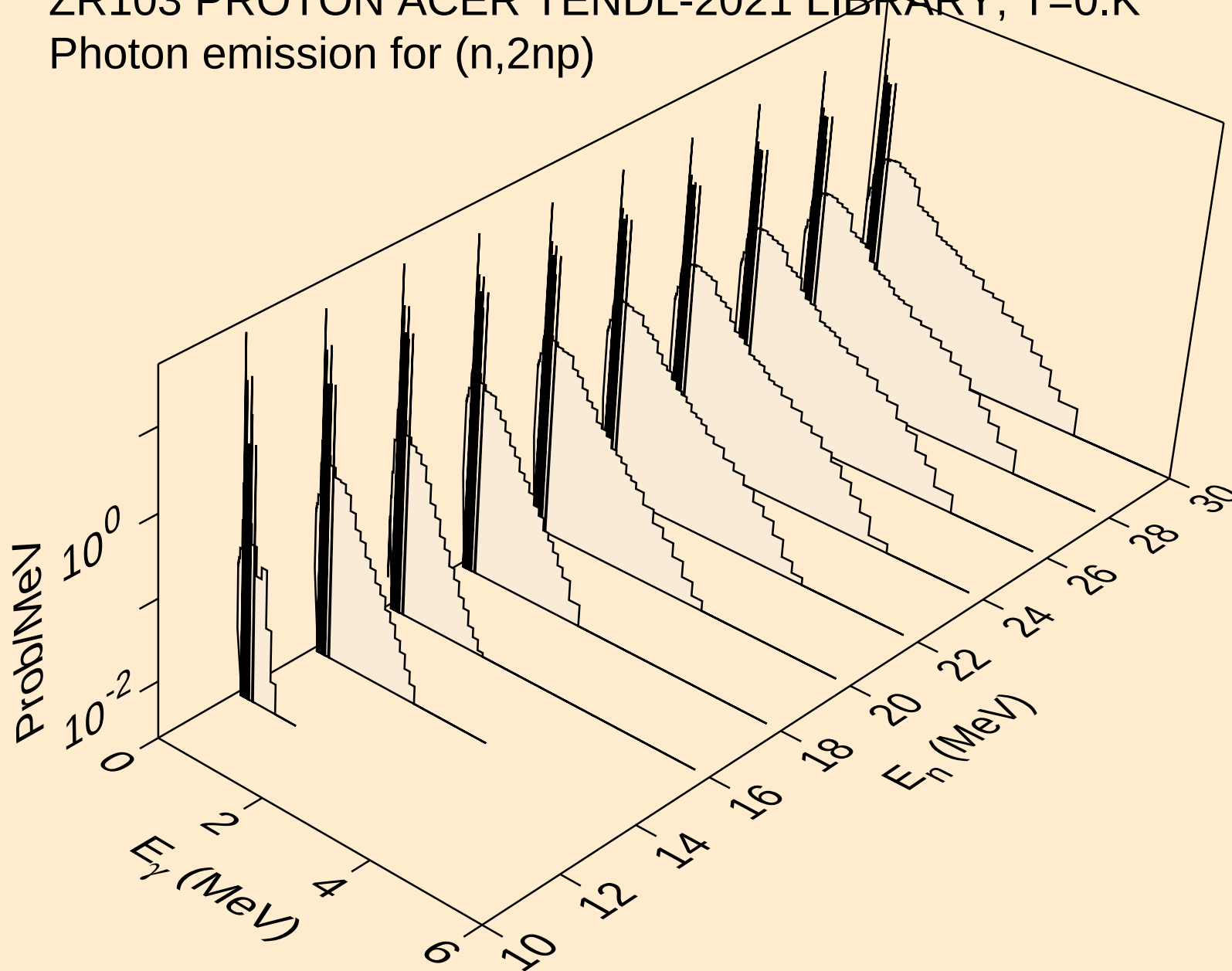




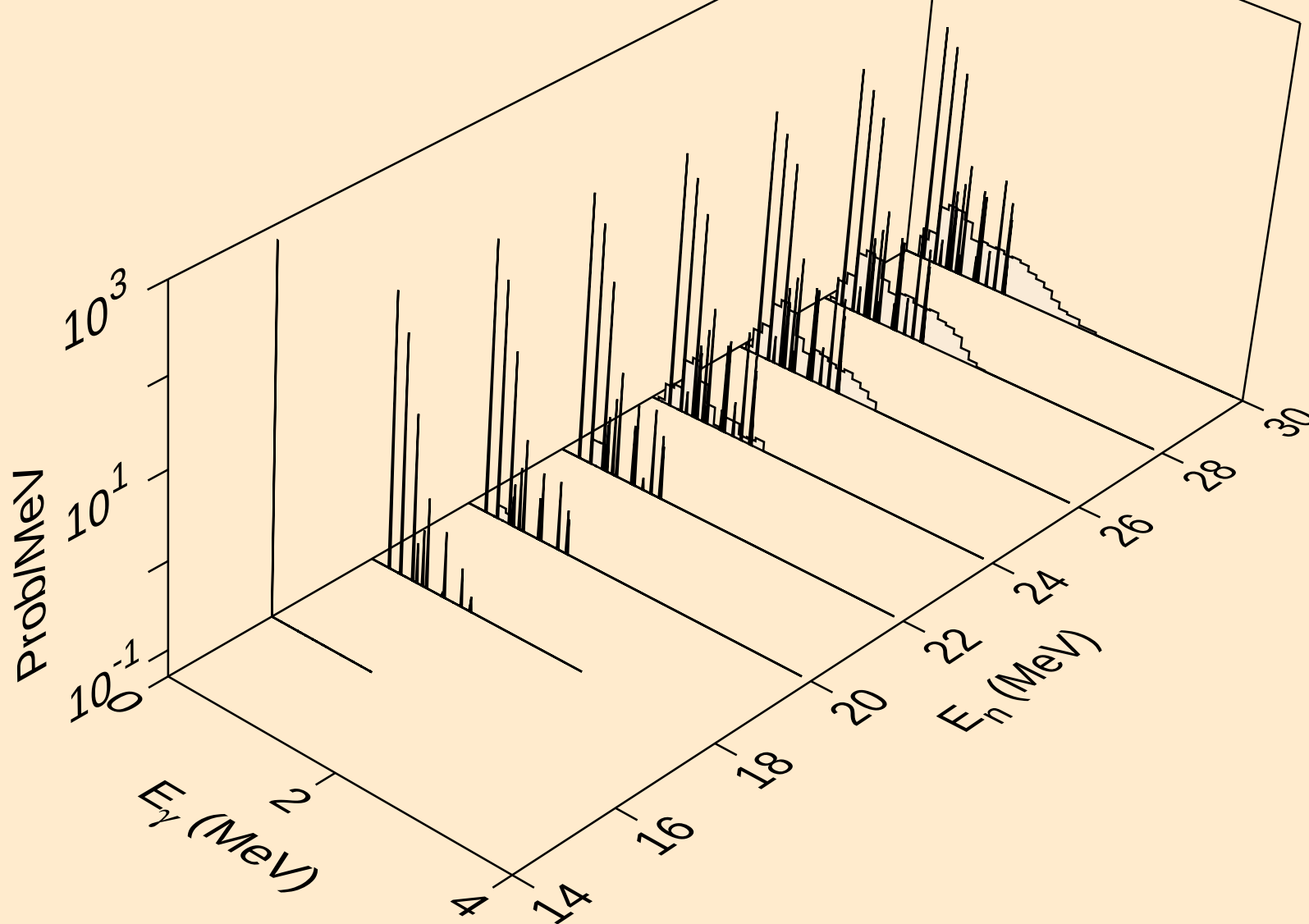
ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (n,4n)



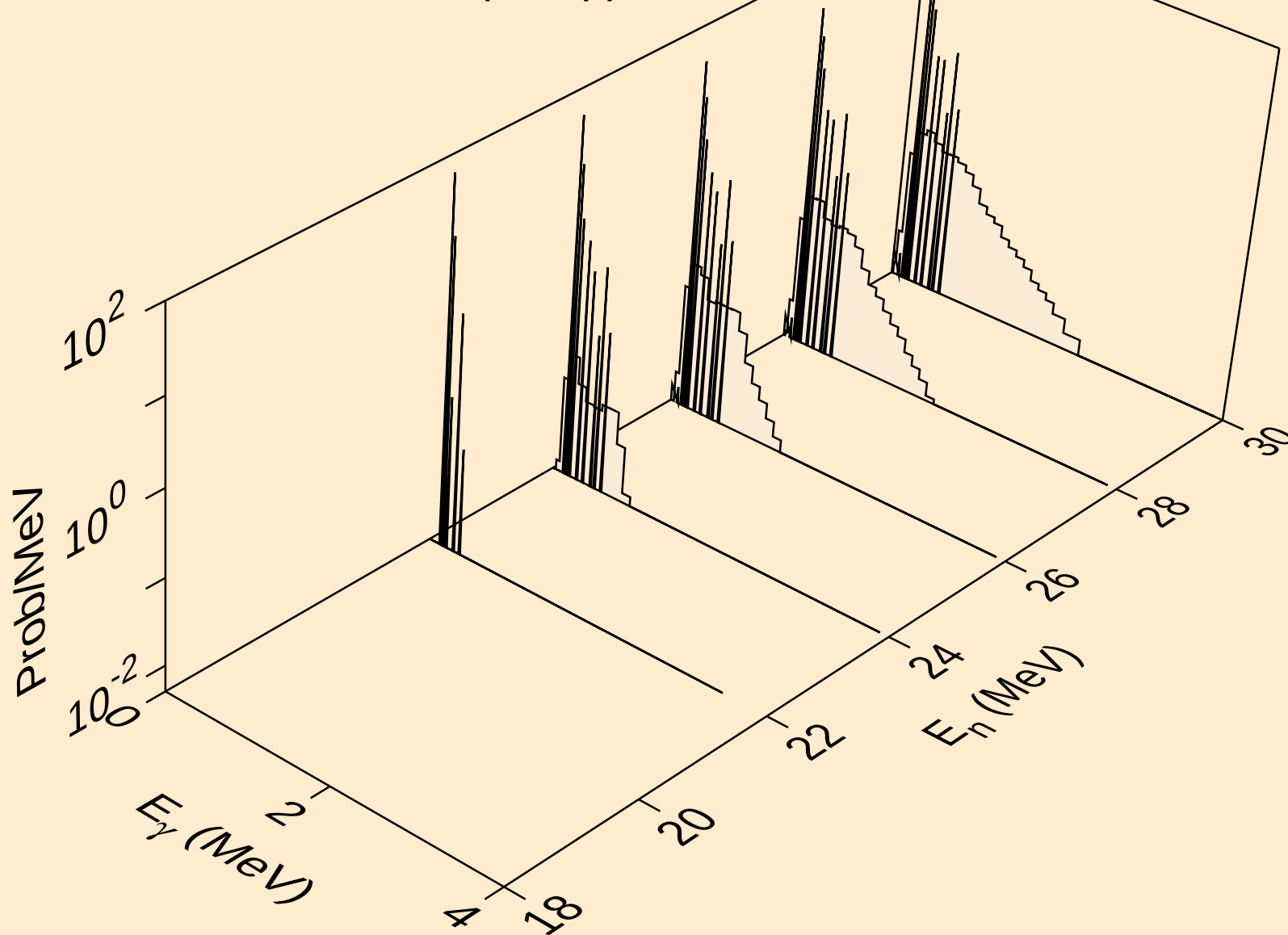
ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (n,2np)



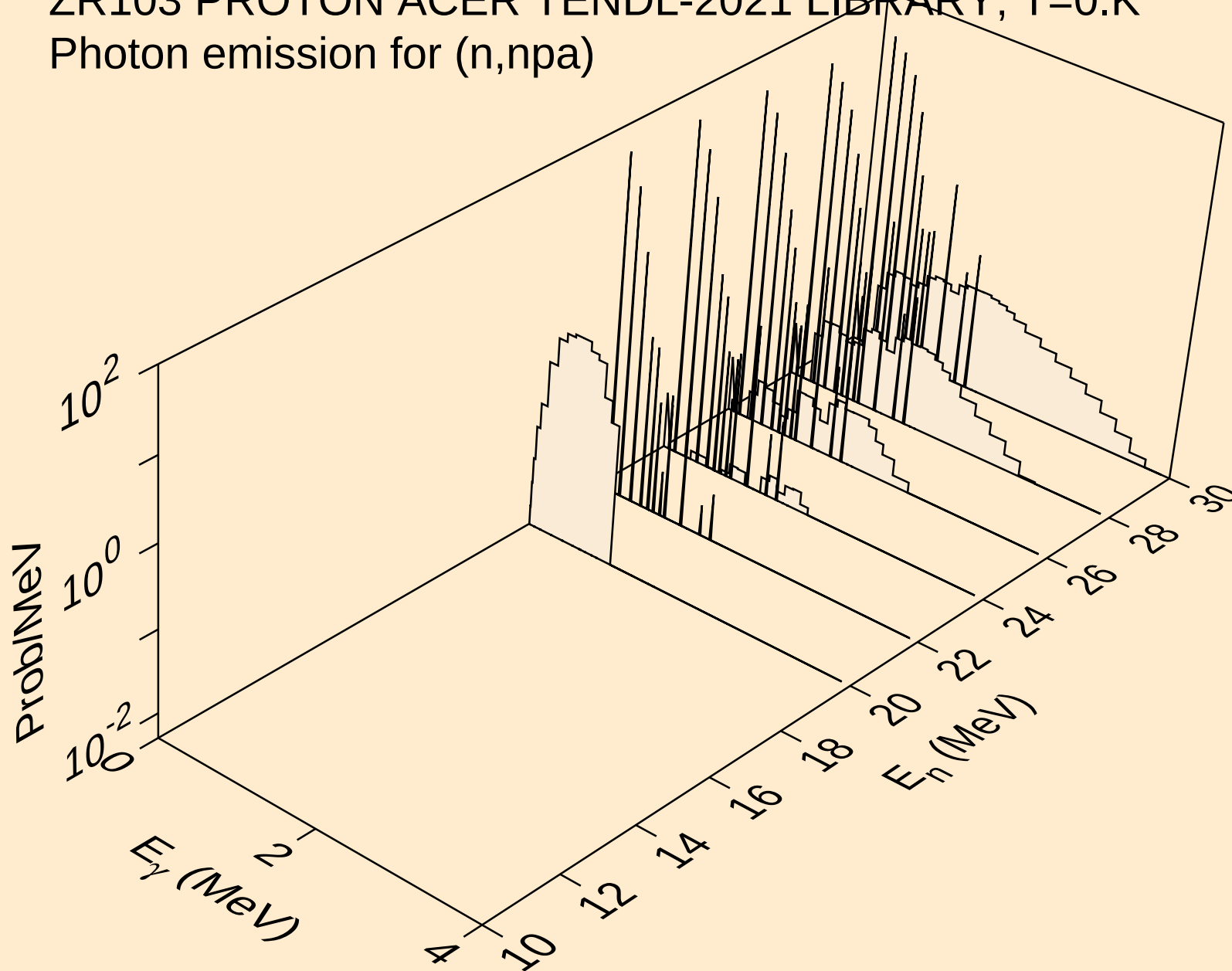
ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (n,3np)



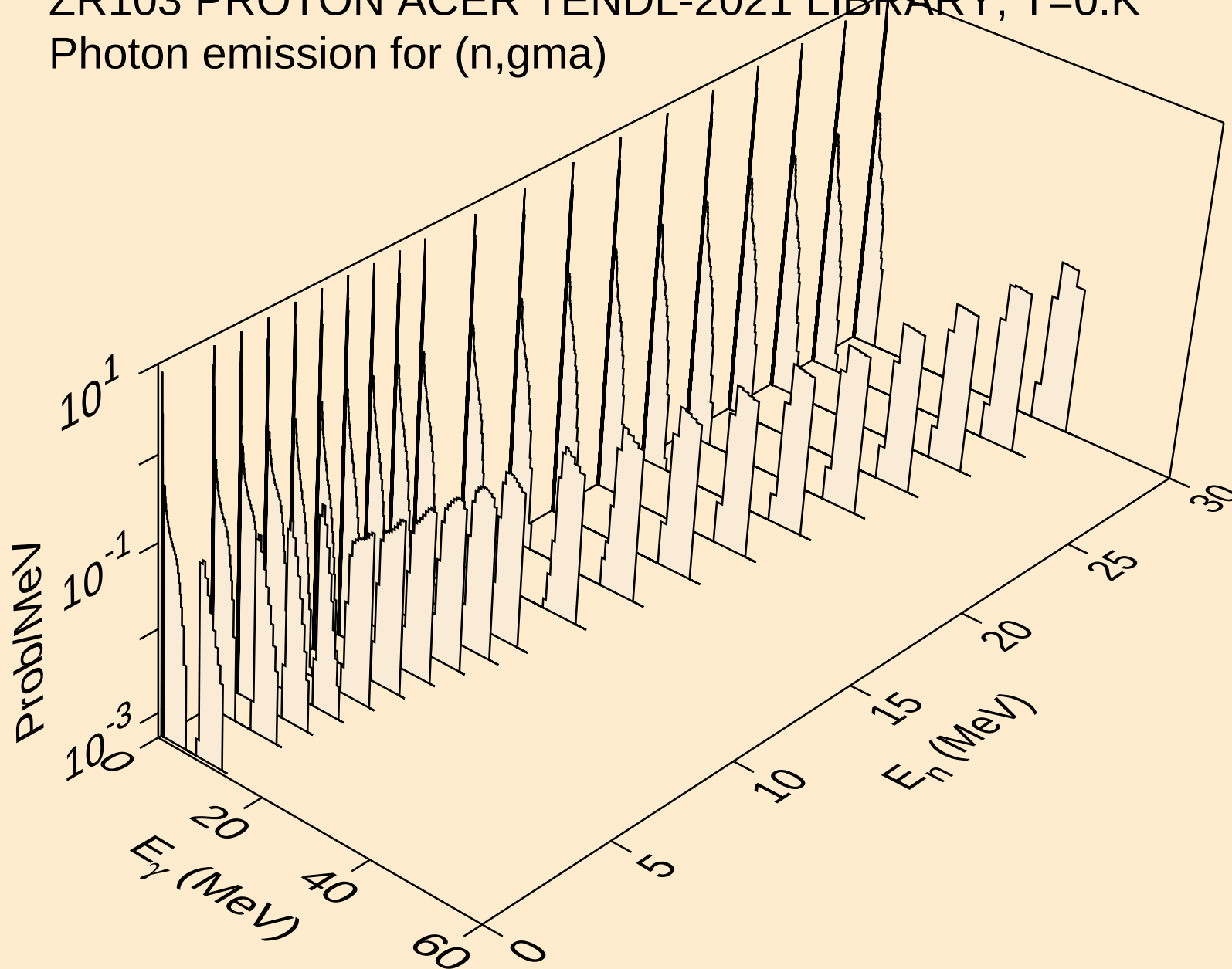
ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (n,2np)



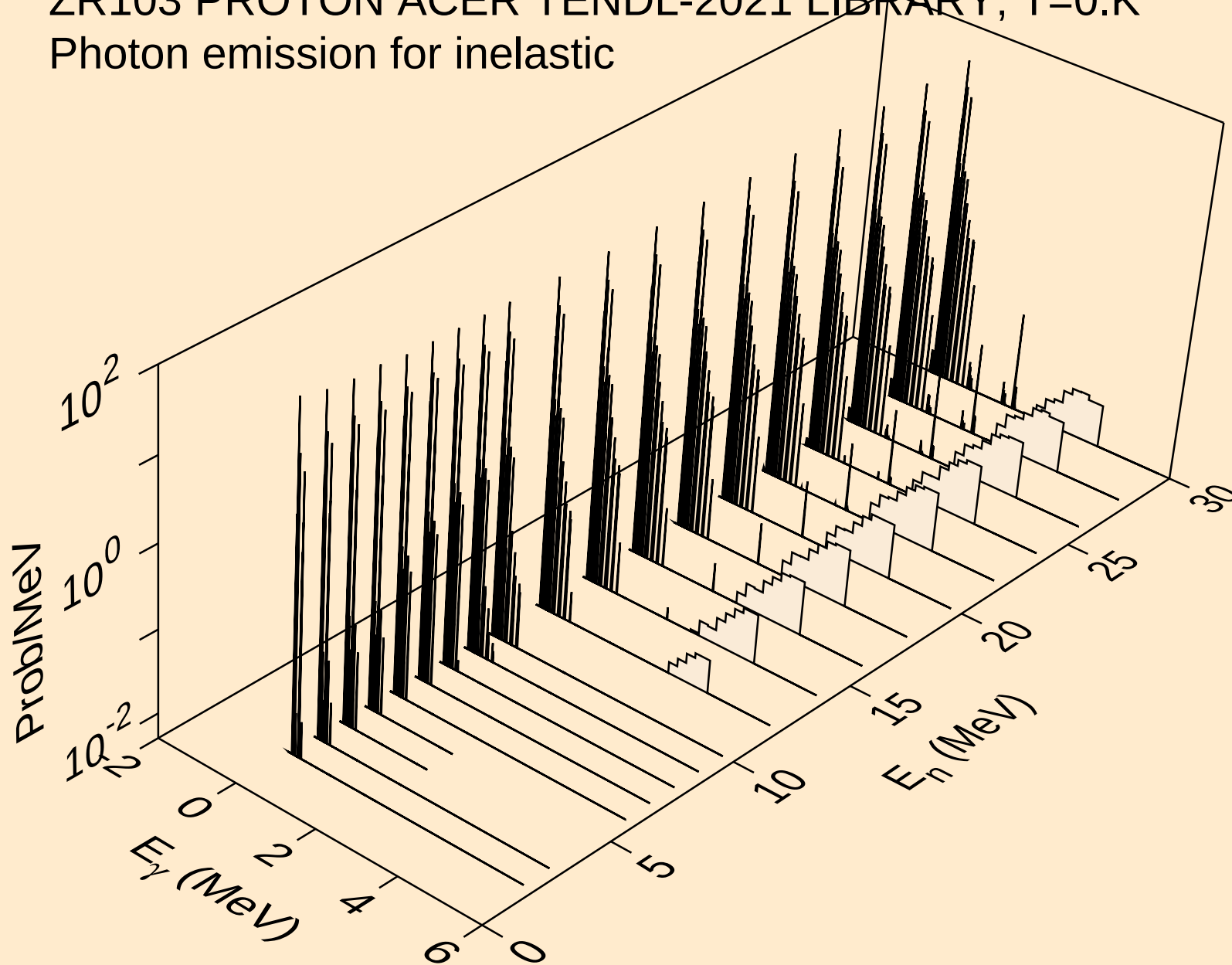
ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (n,npa)



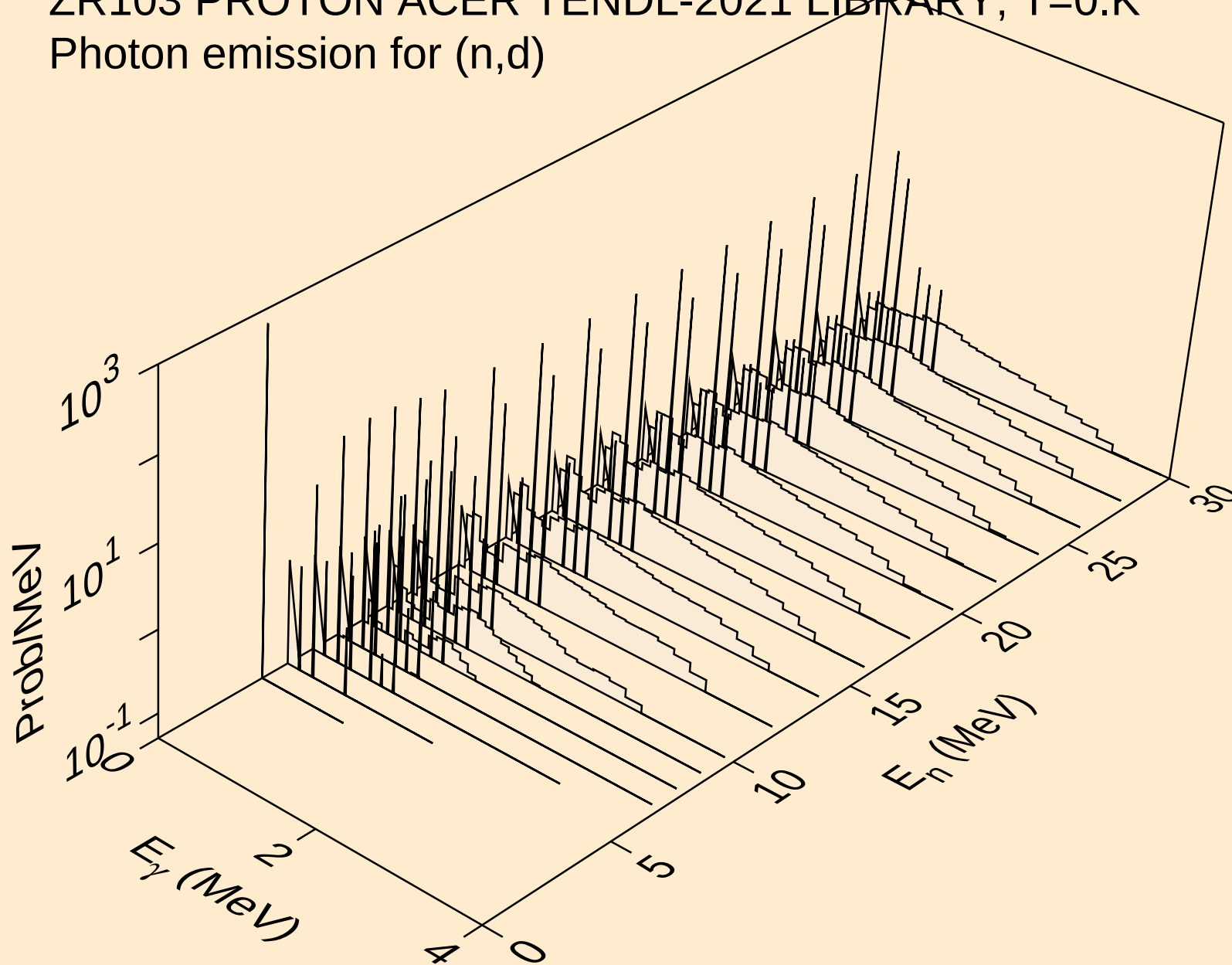
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Photon emission for (n,gma)



ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Photon emission for inelastic

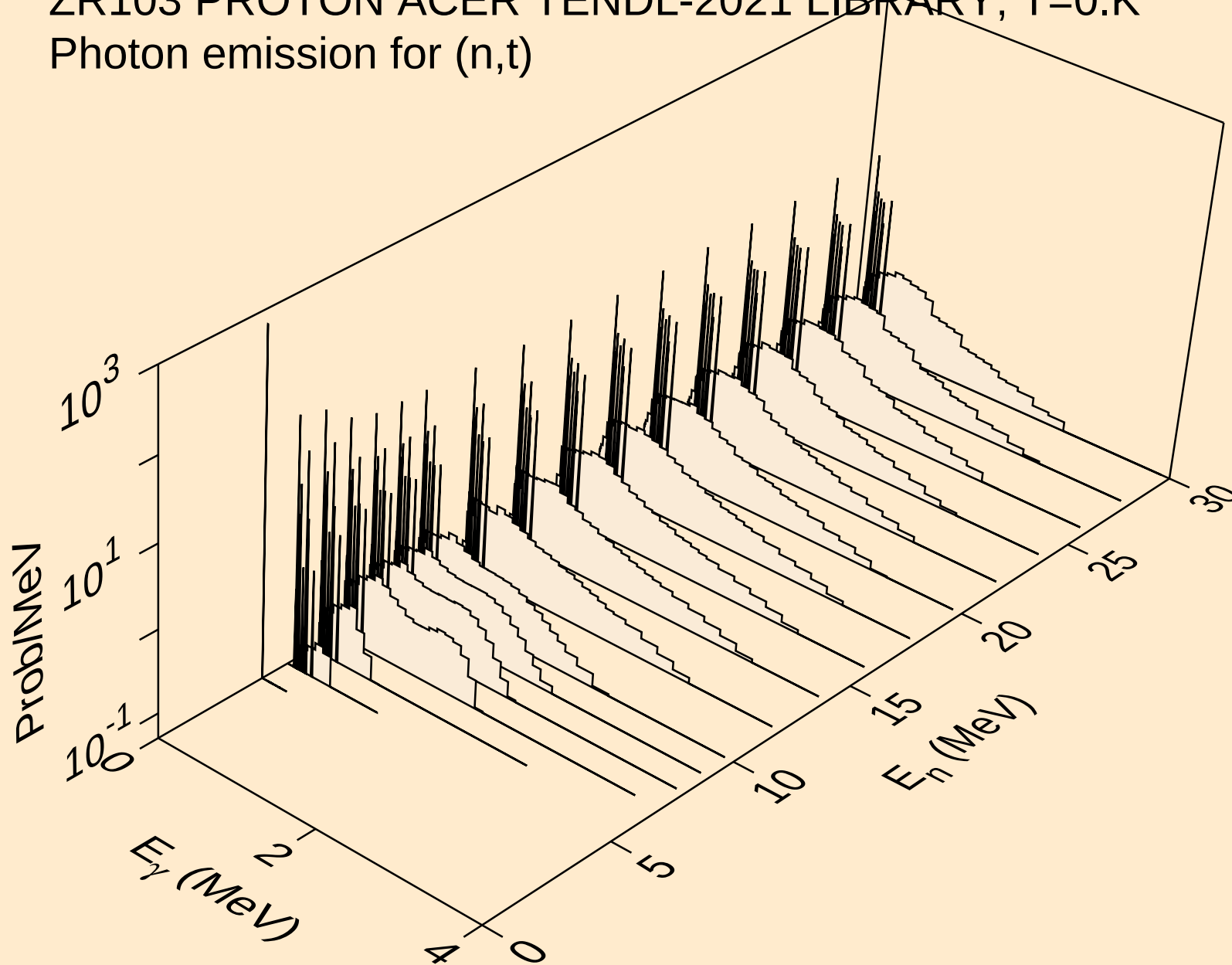


ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (n,d)

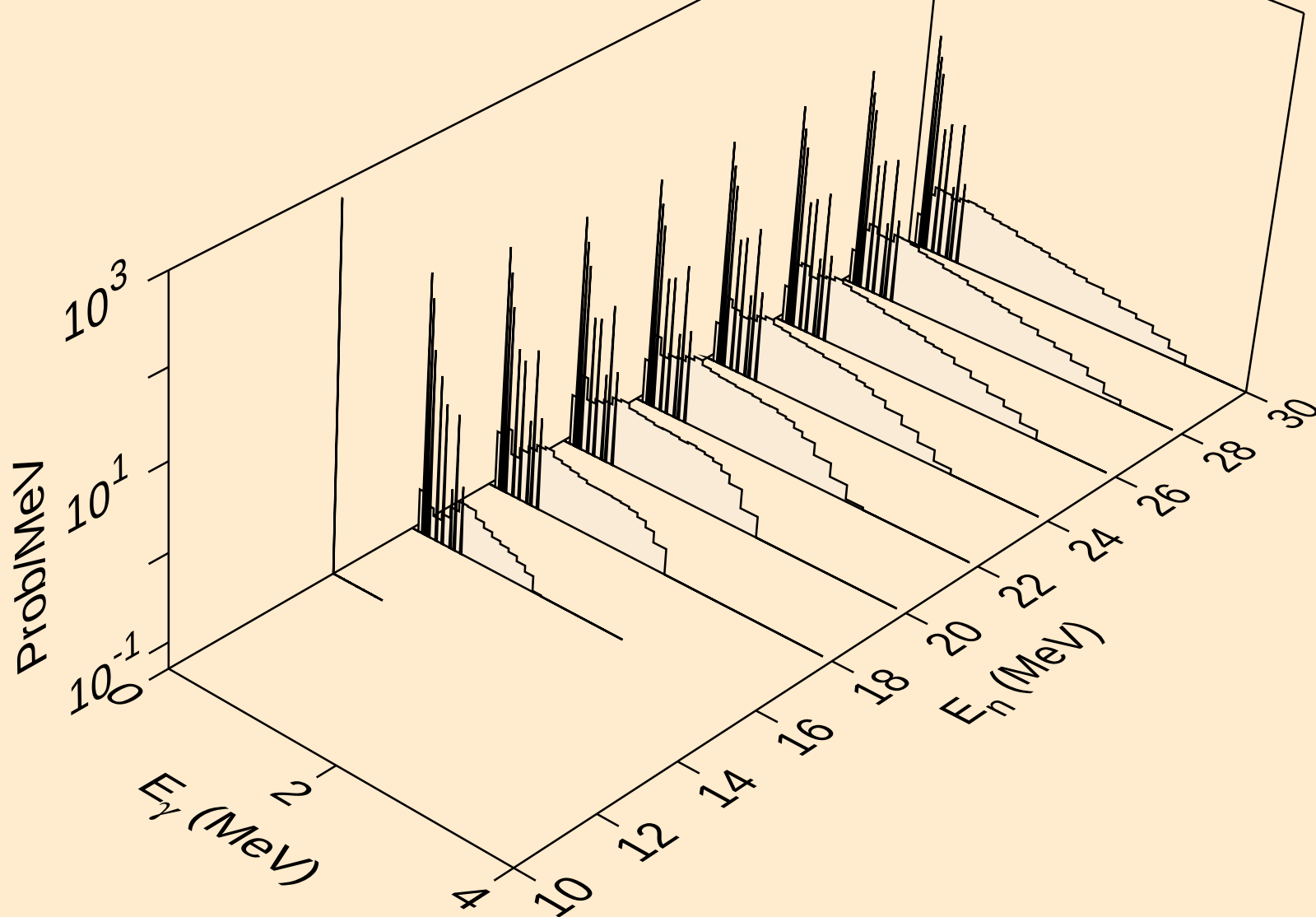




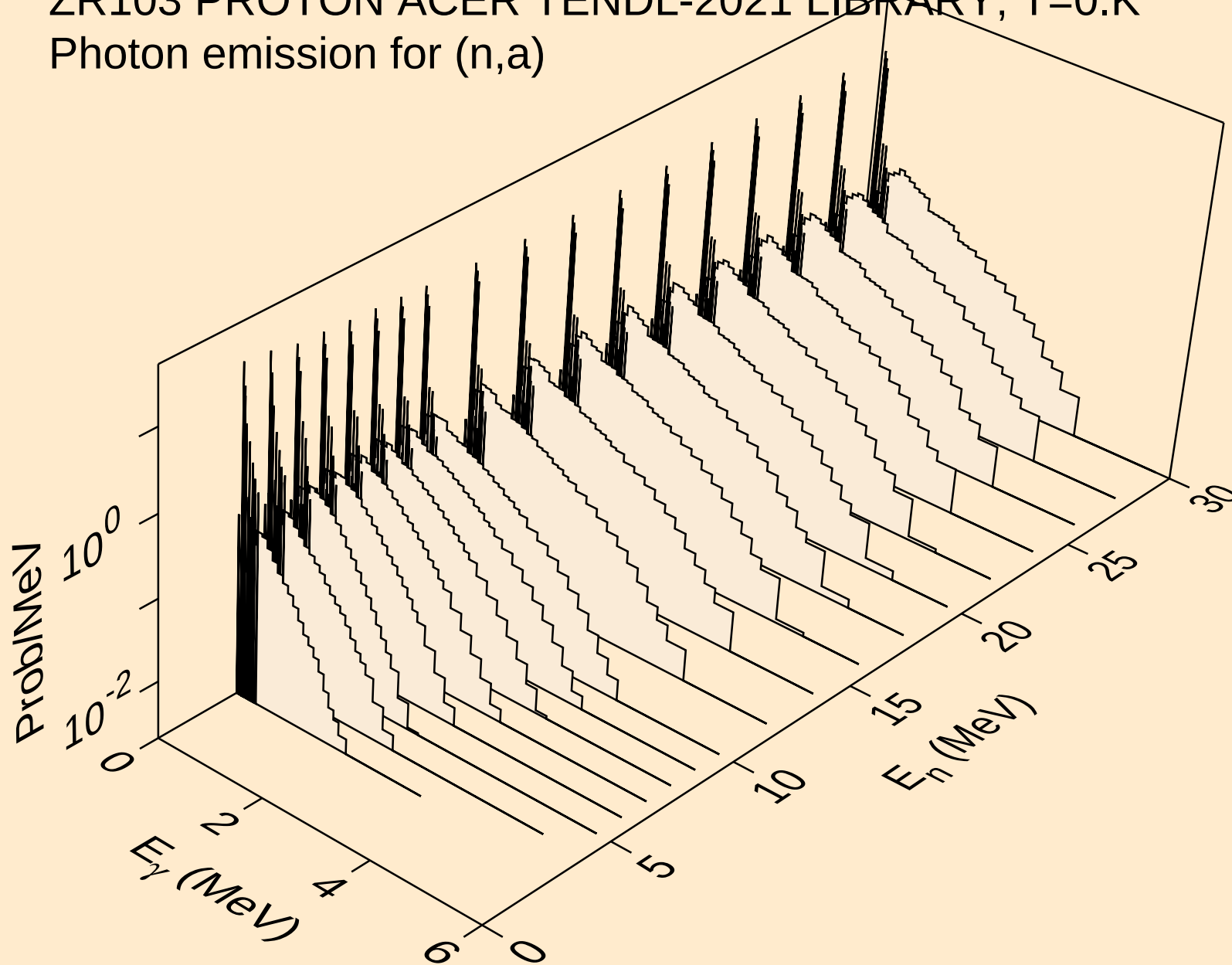
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Photon emission for (n,t)



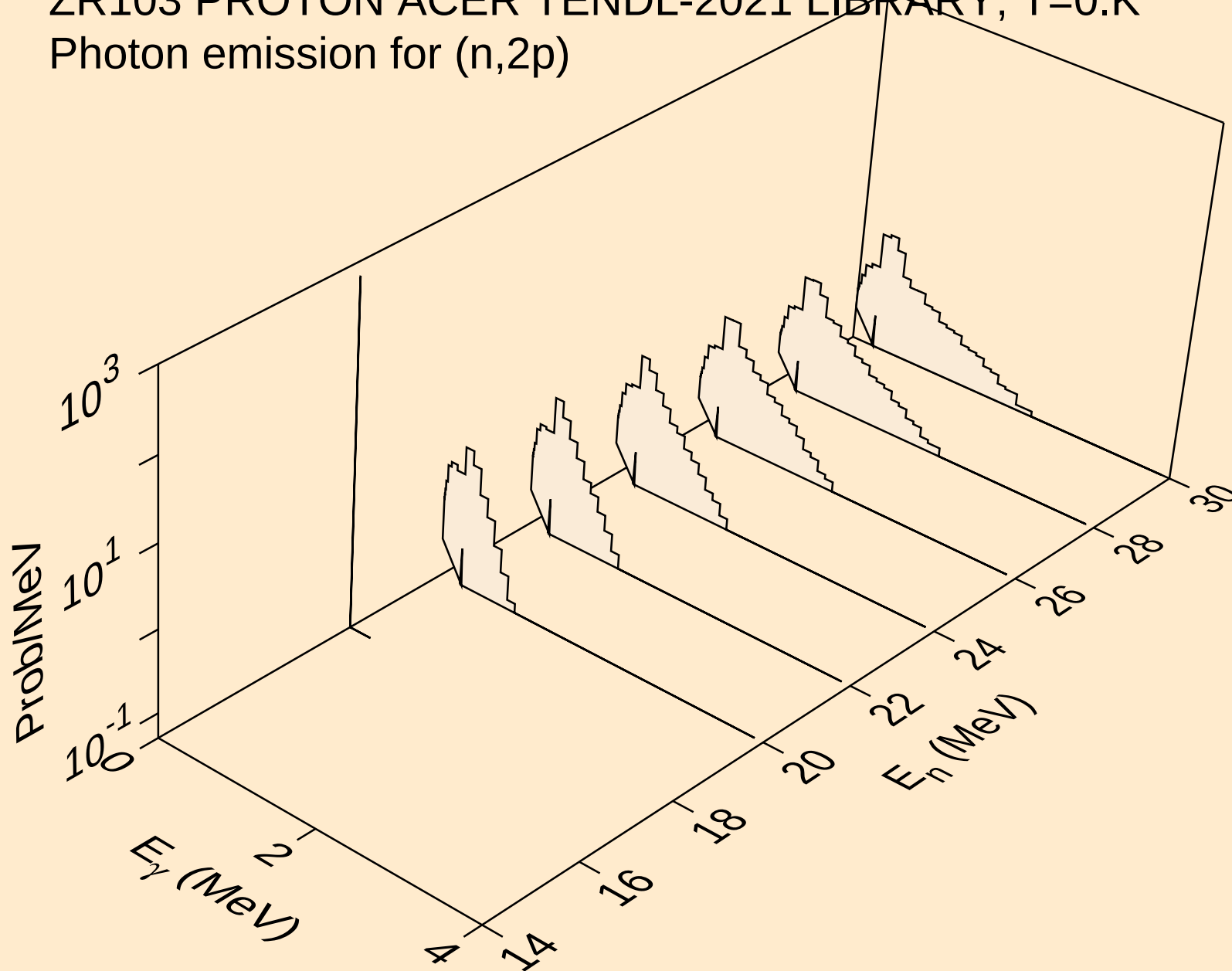
ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
Photon emission for (n,he3)



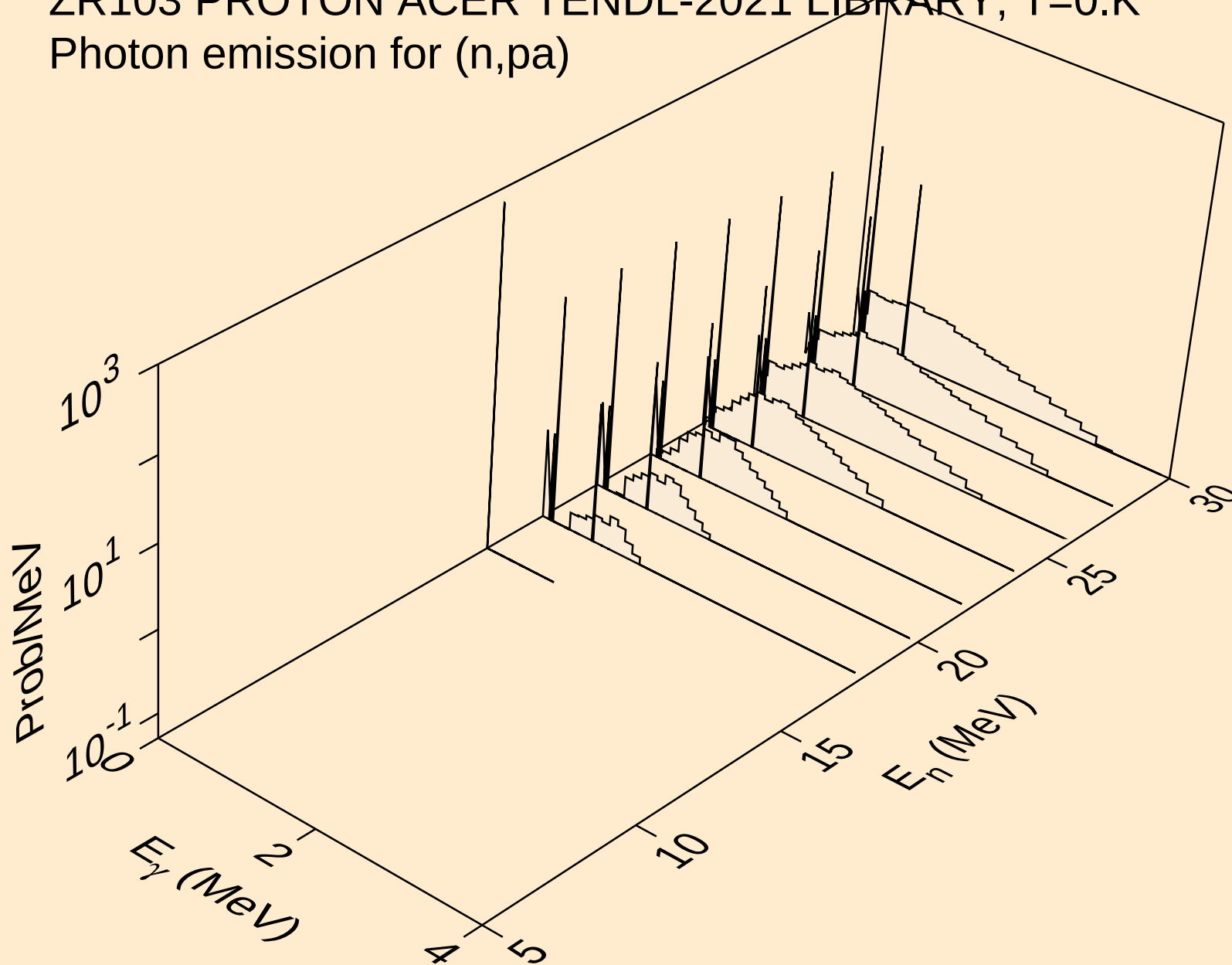
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Photon emission for (n,a)



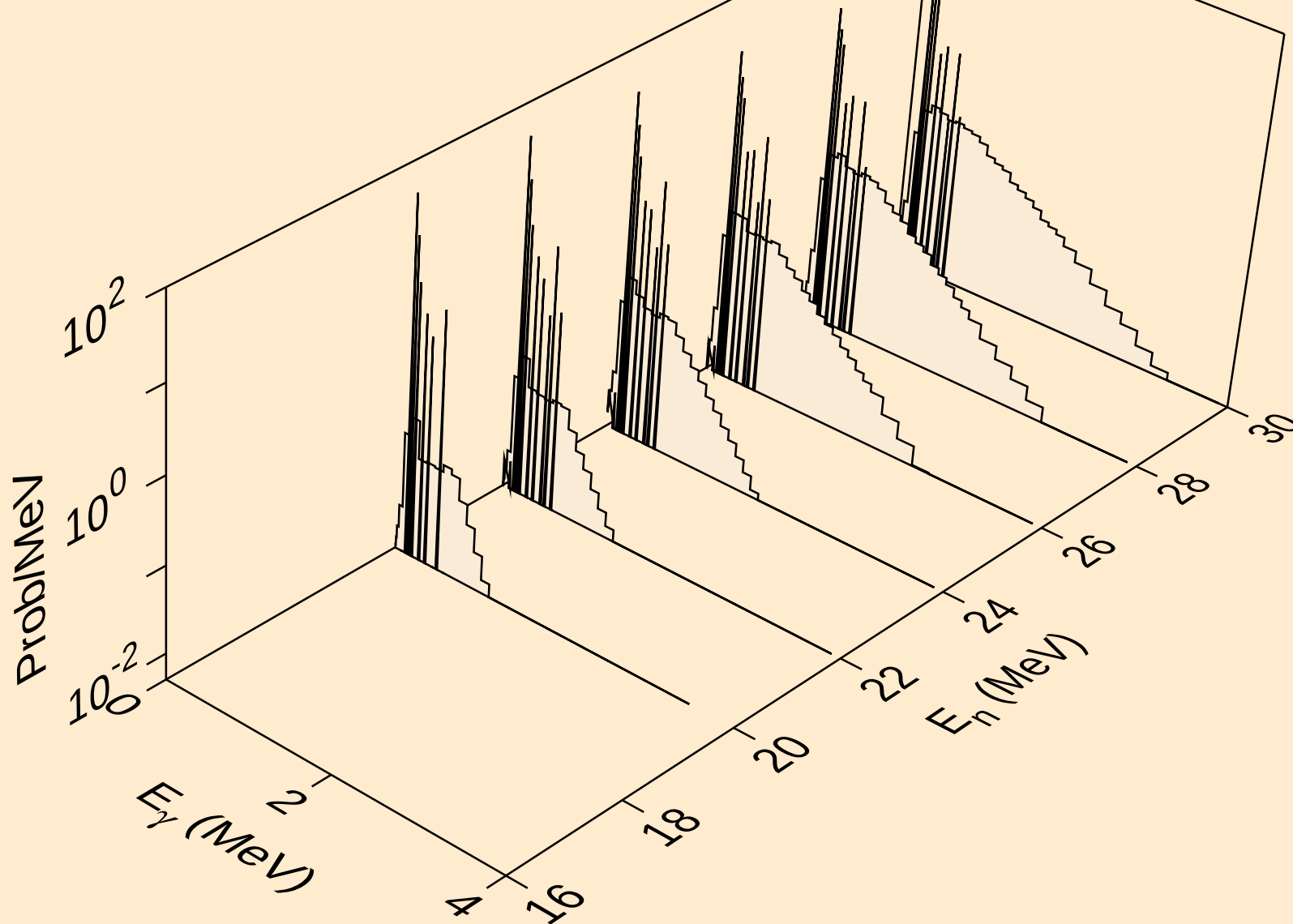
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Photon emission for (n,2p)



ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Photon emission for (n,p $\alpha$ )

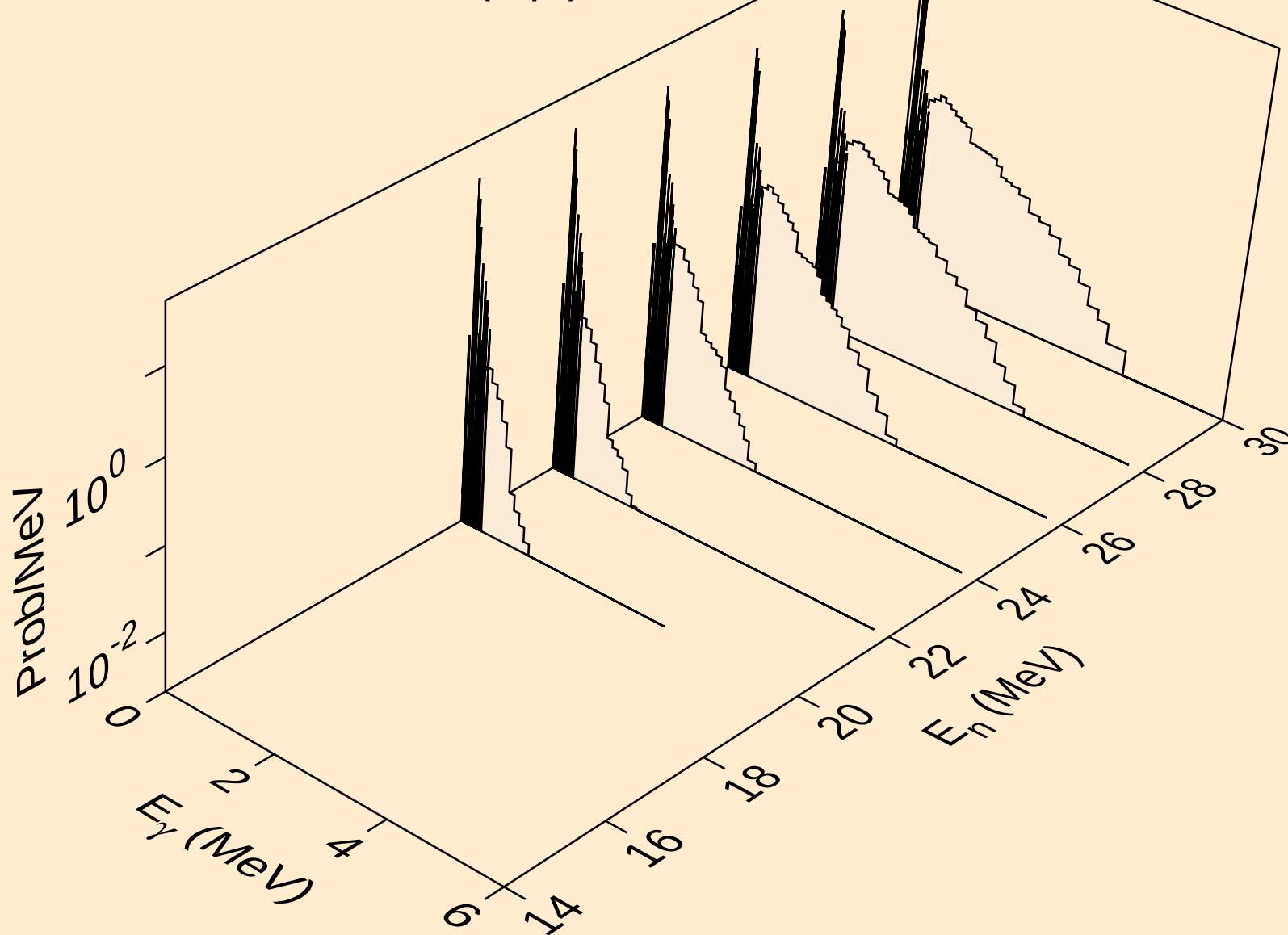


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
Photon emission for (n,pd)



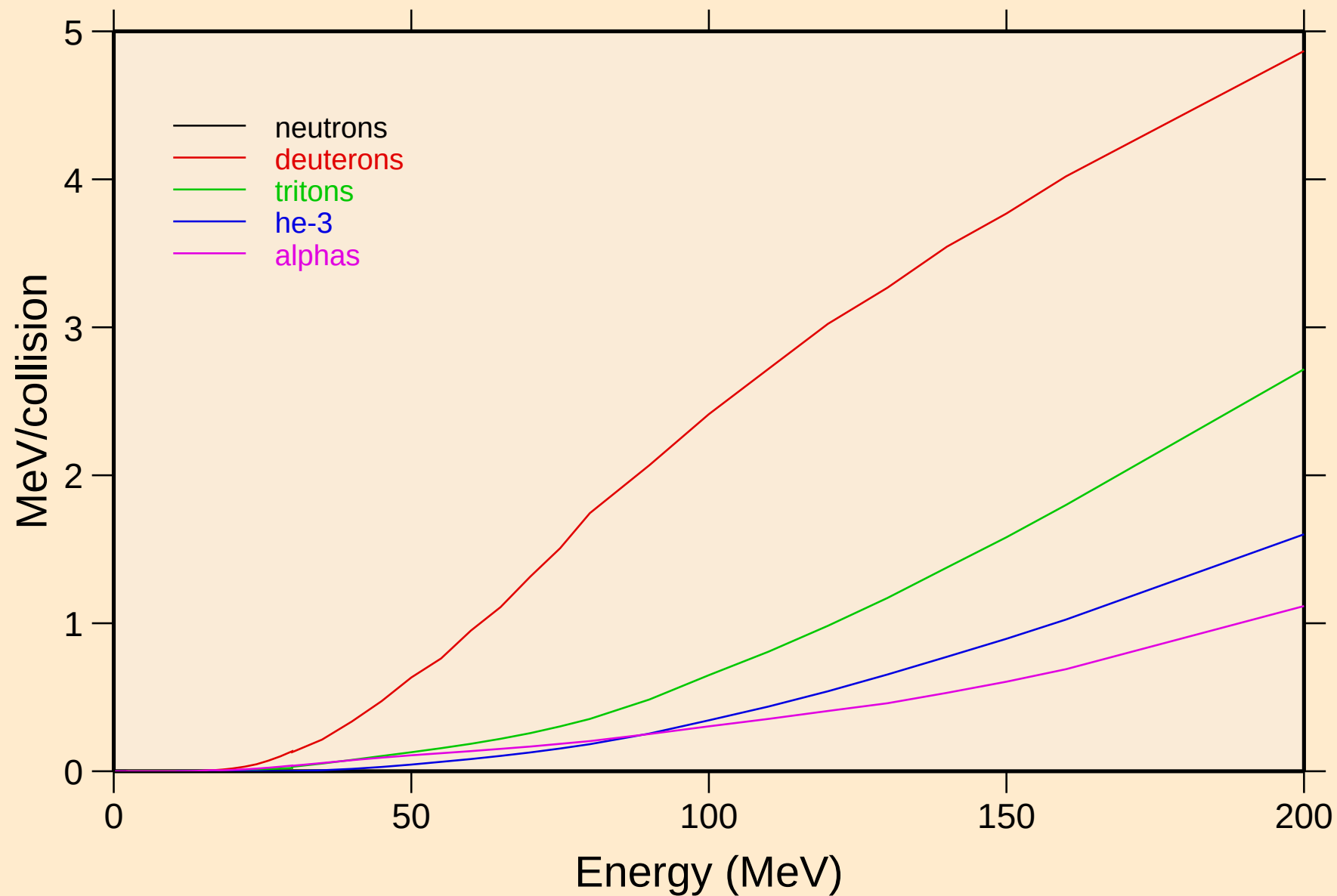
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

Photon emission for (n,pt)



# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

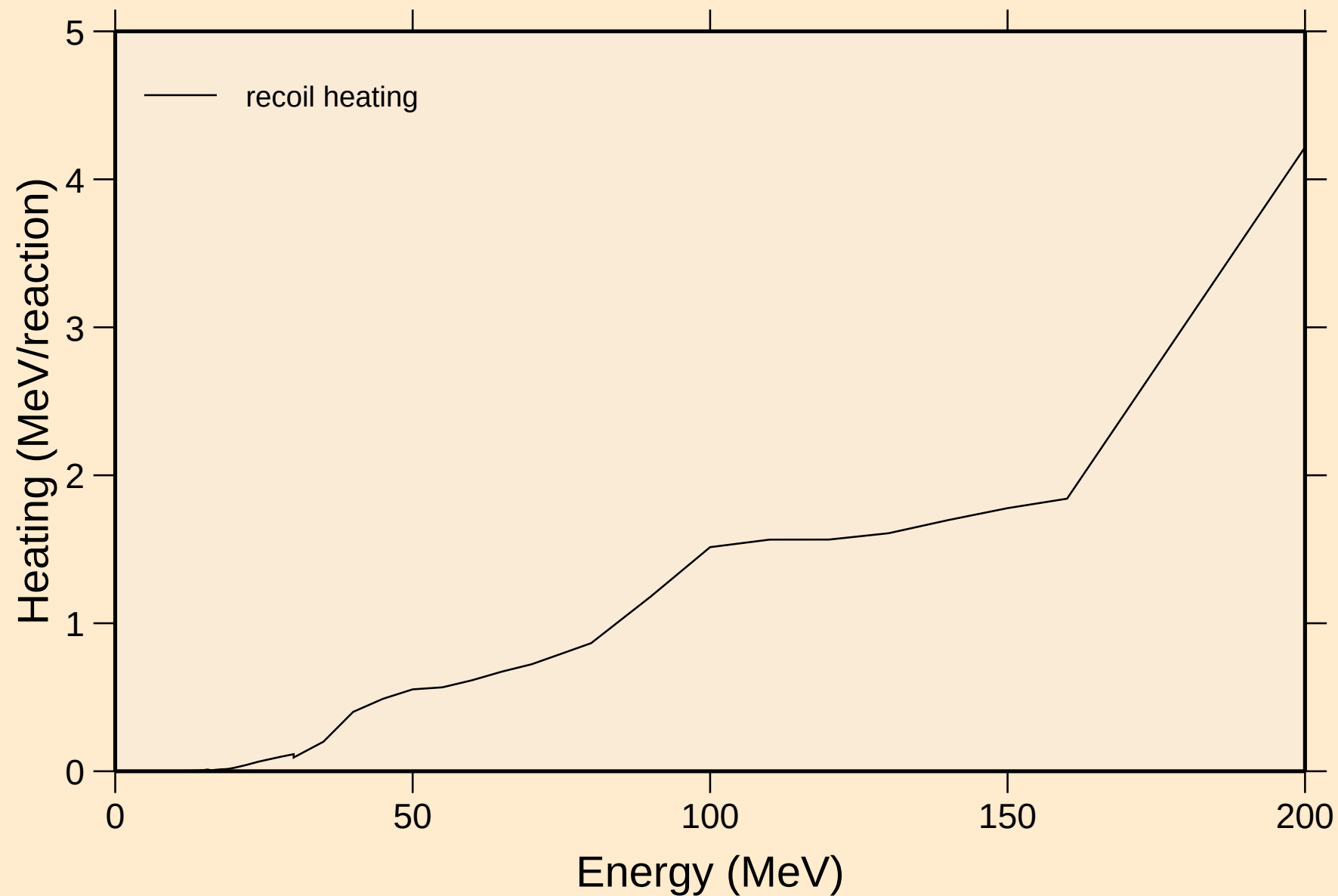
## Particle heating contributions





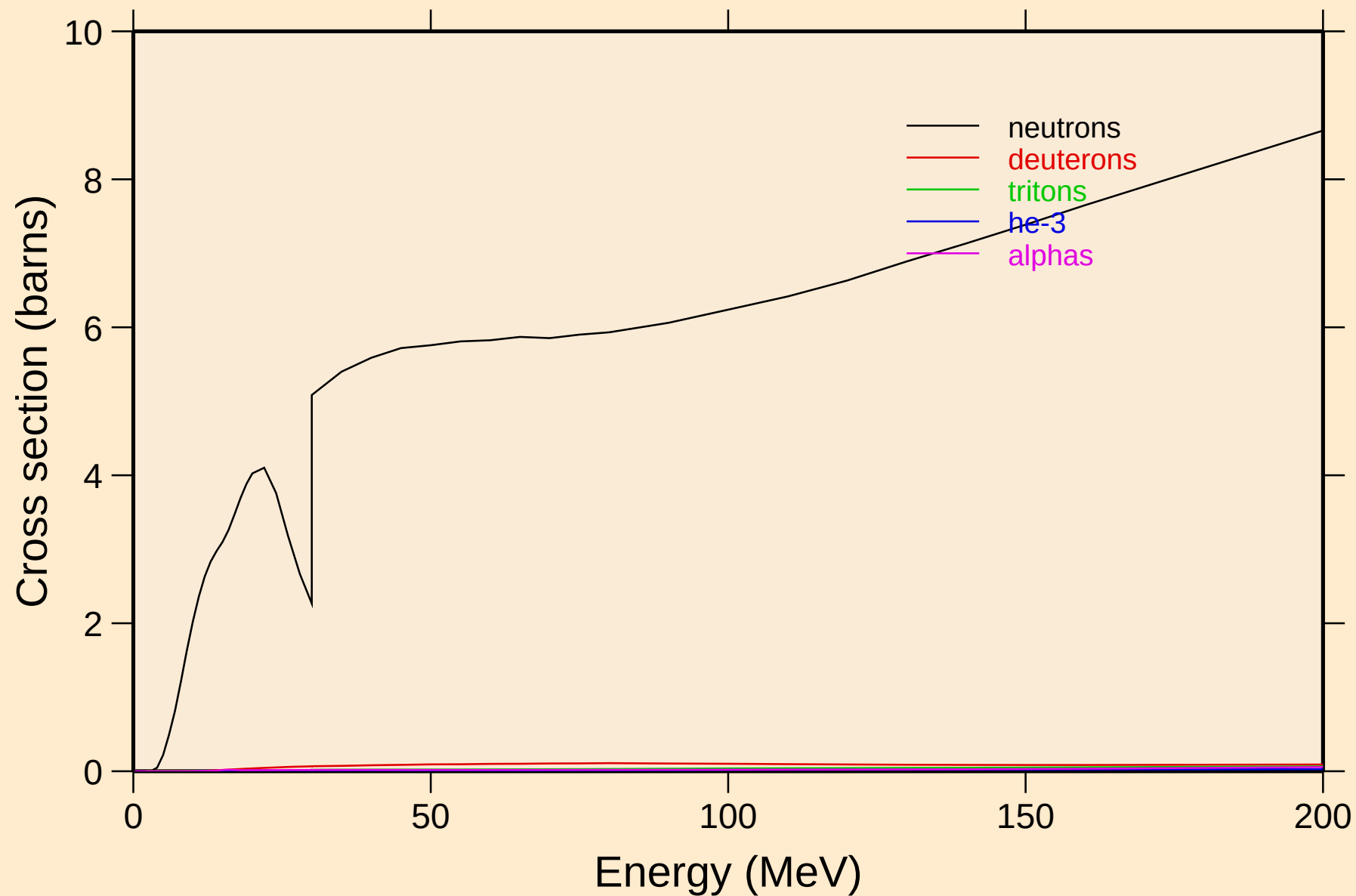
# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

## Recoil Heating

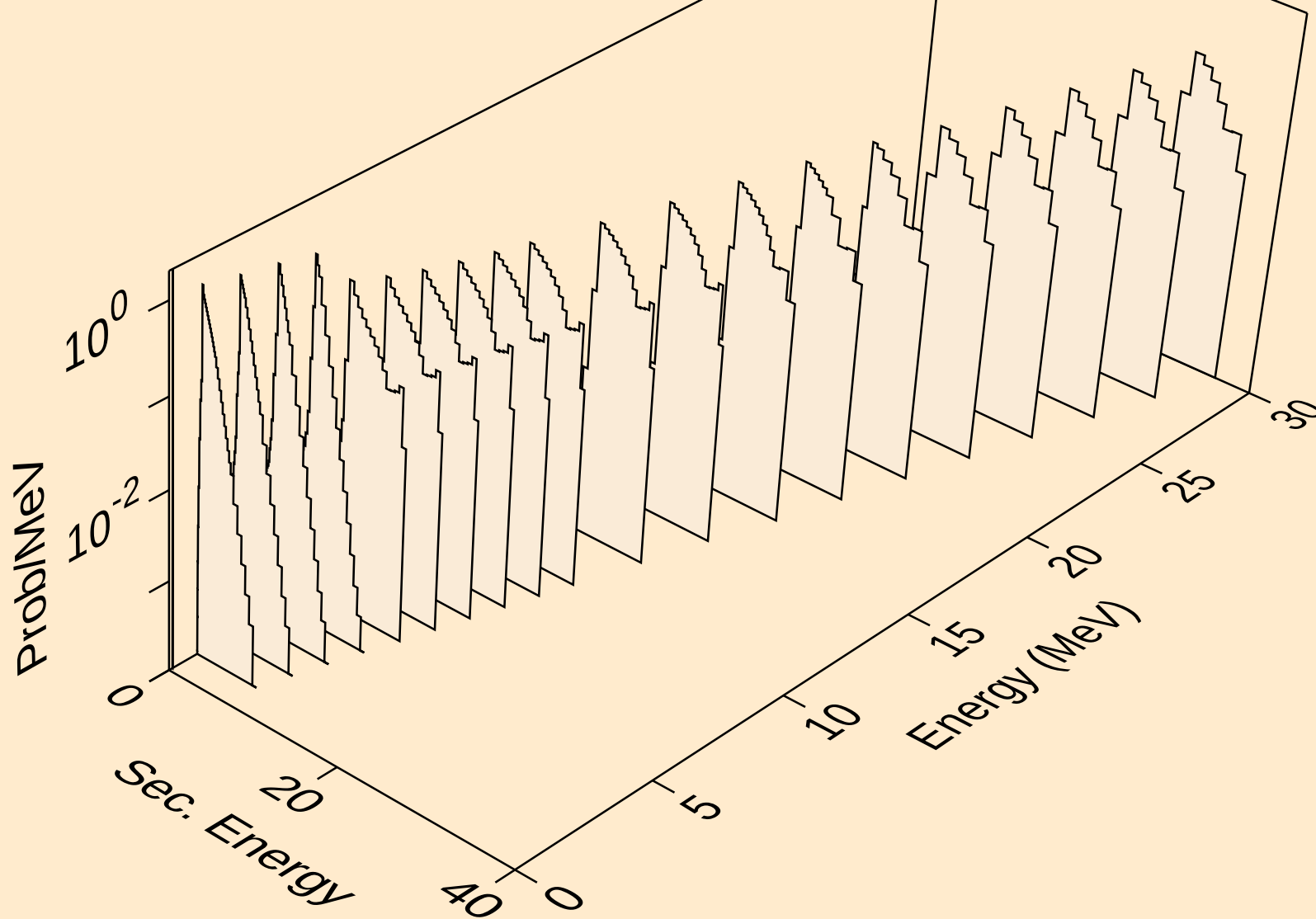


# ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K

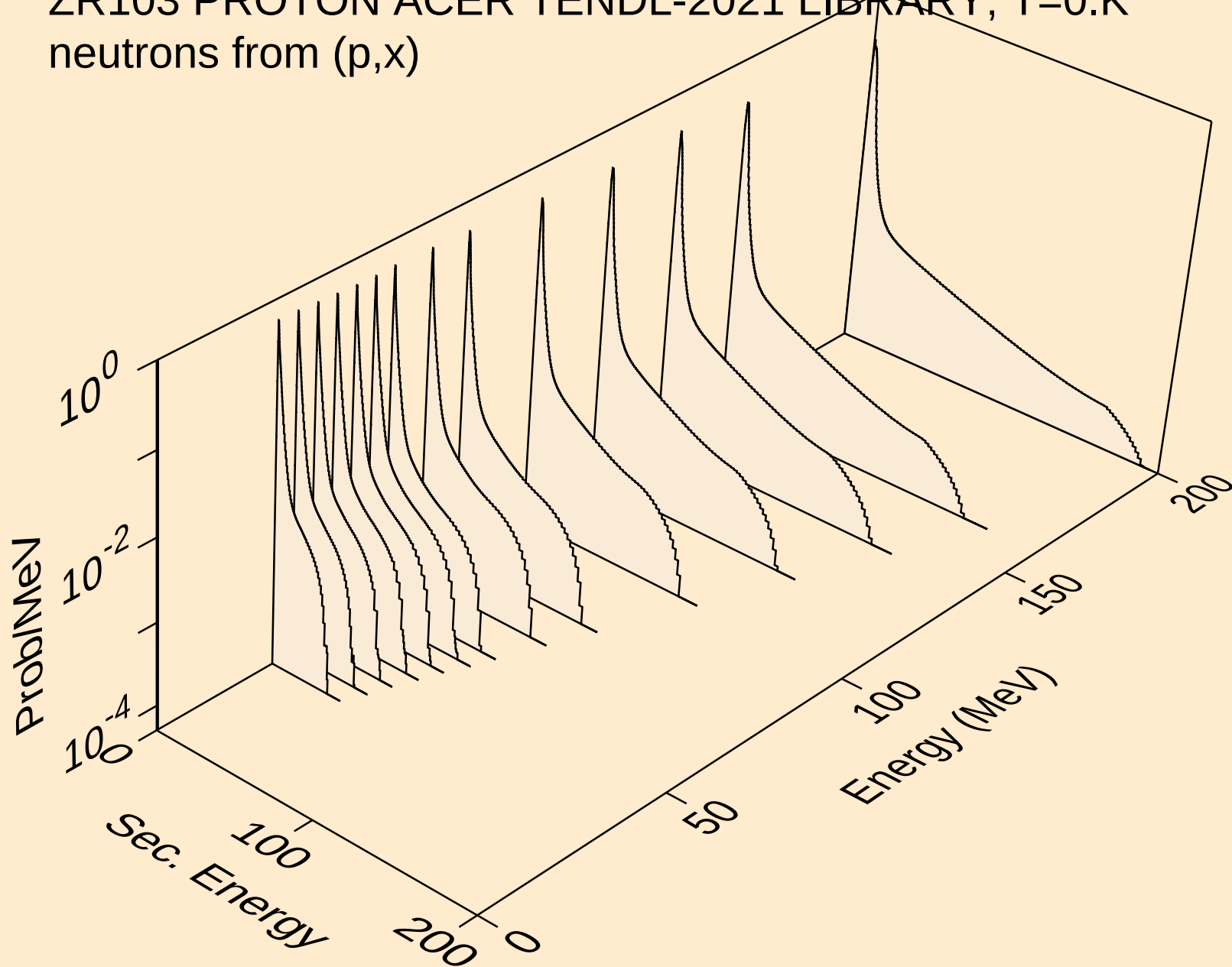
## Particle production cross sections



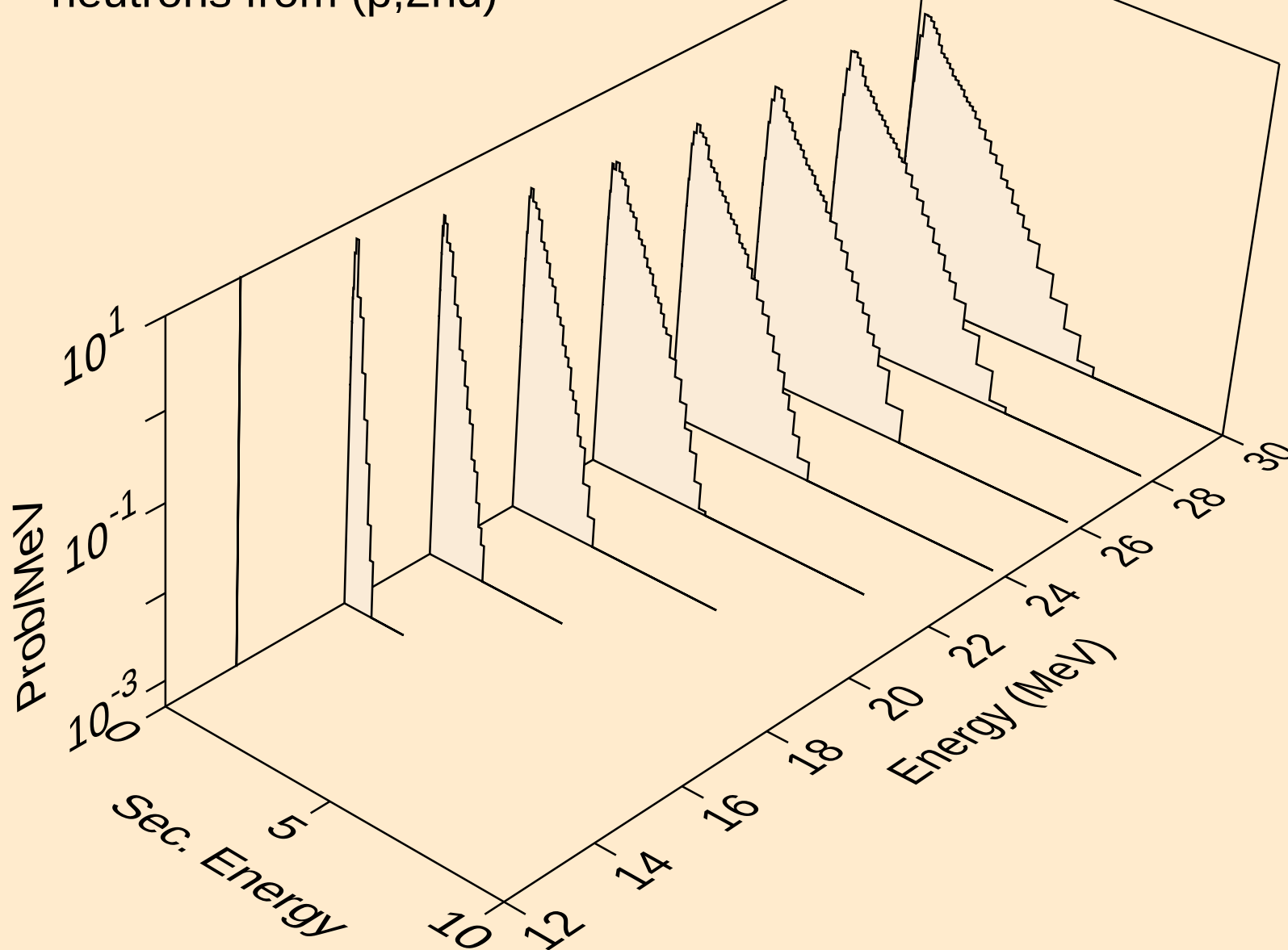
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,n)



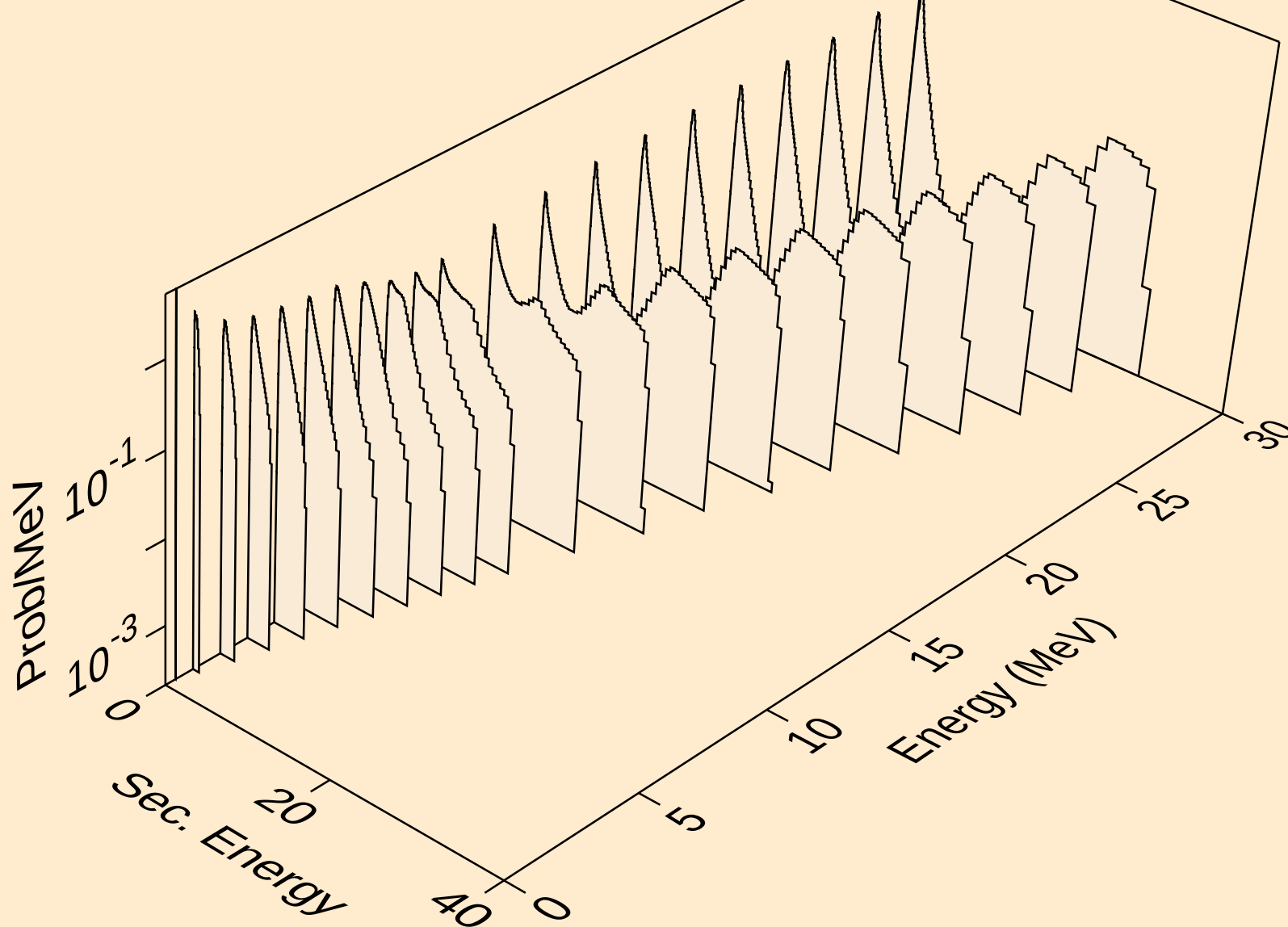
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,x)



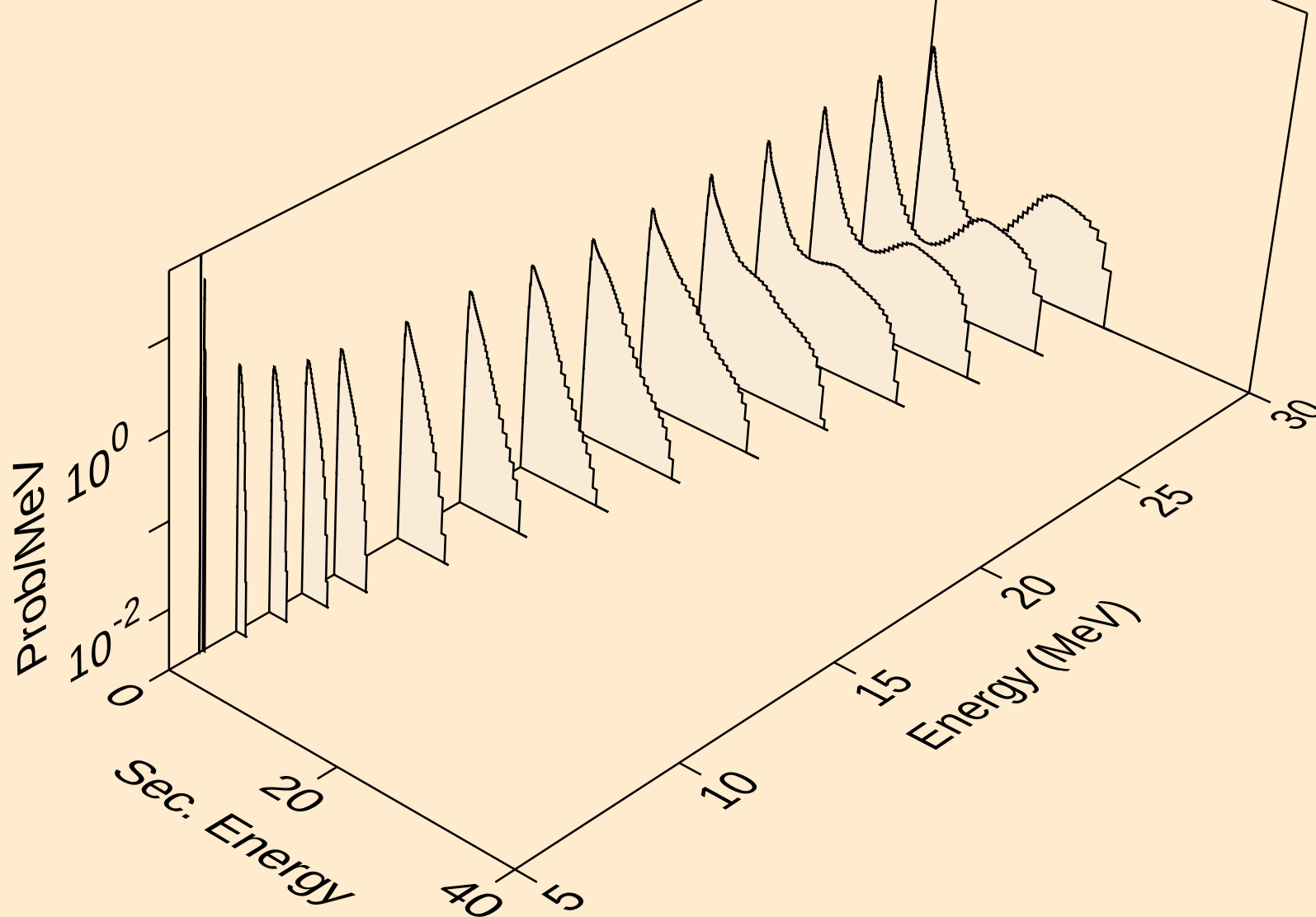
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,2nd)



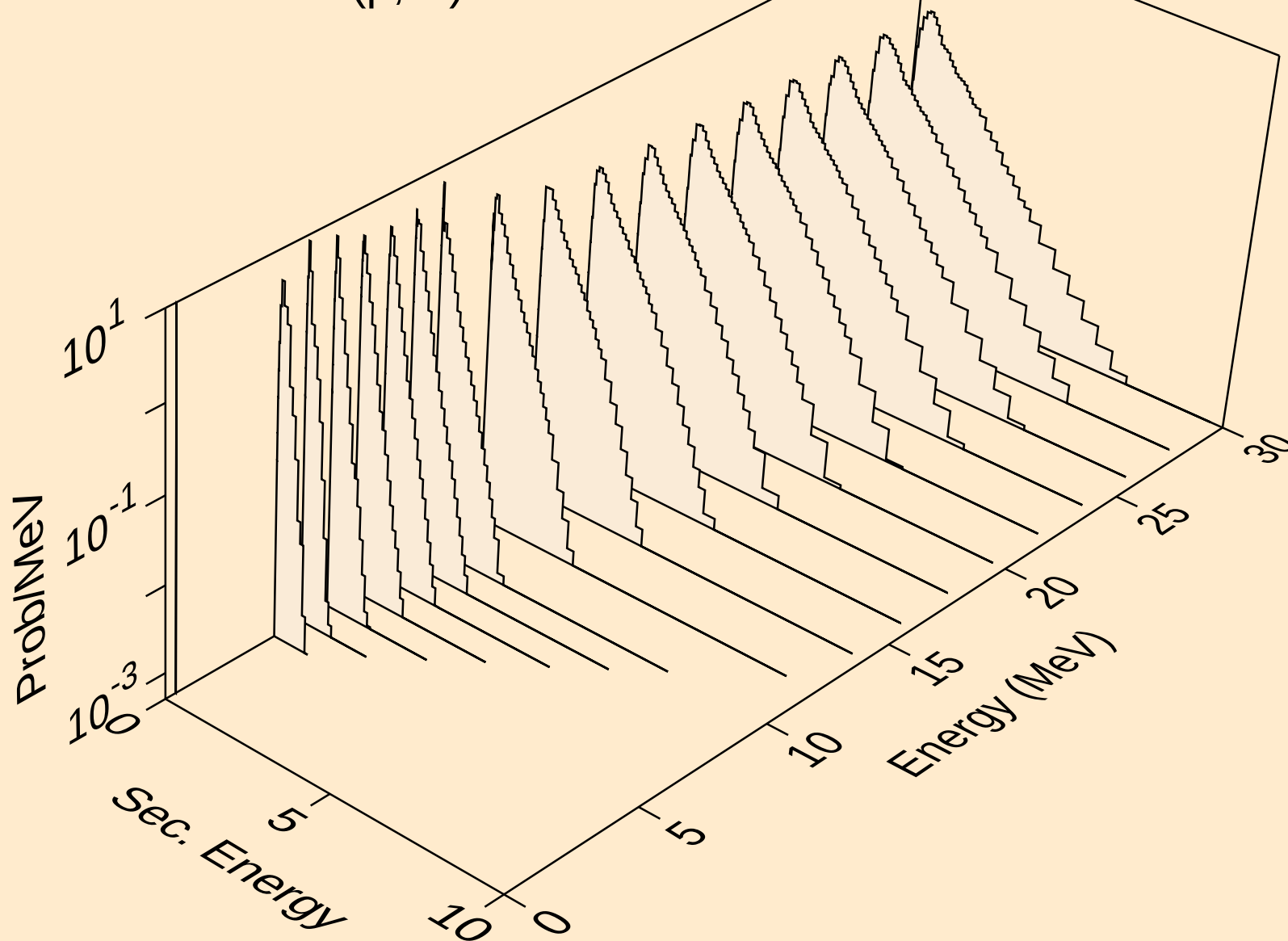
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,2n)



ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,3n)

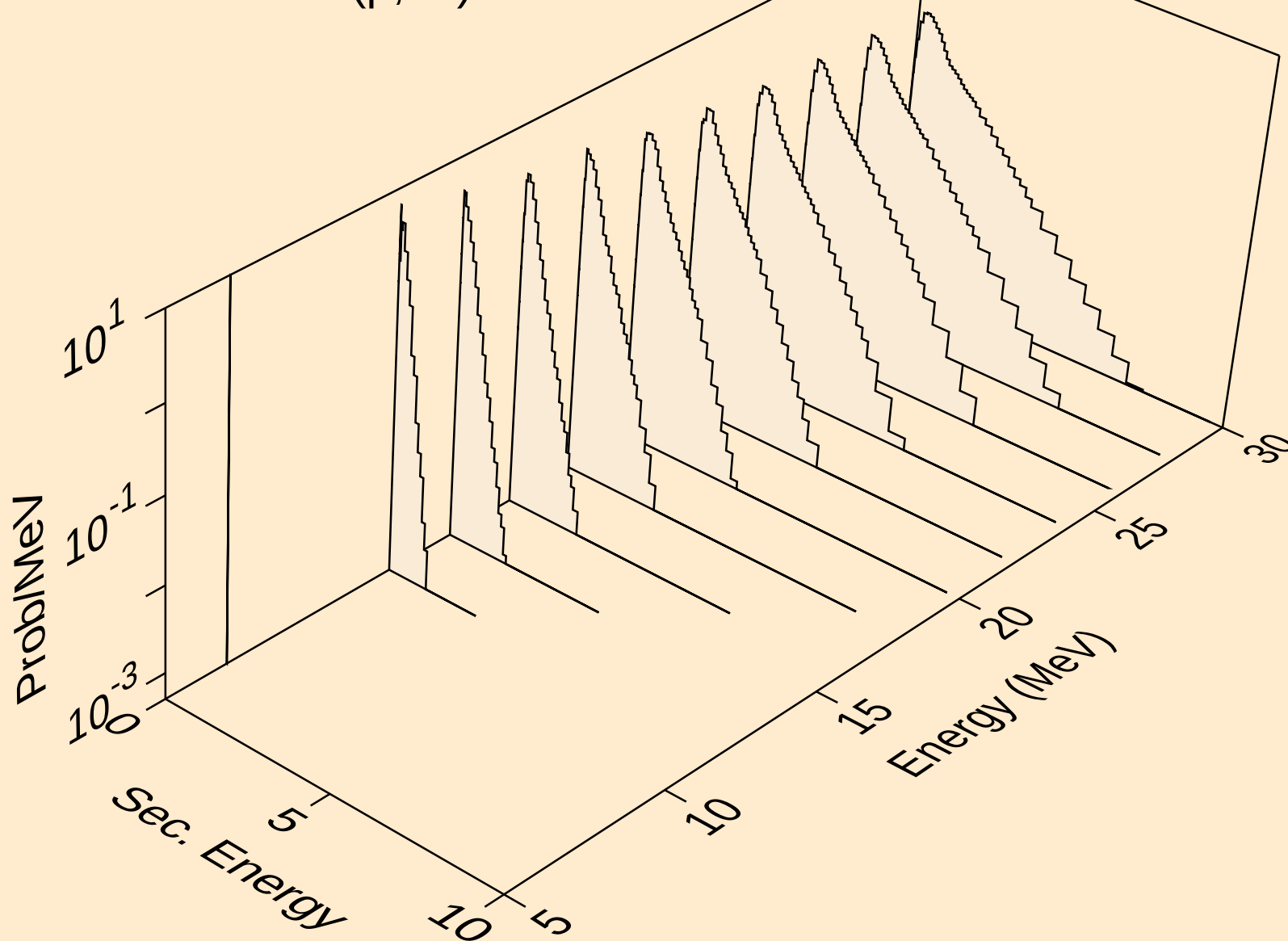


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,n\*)a

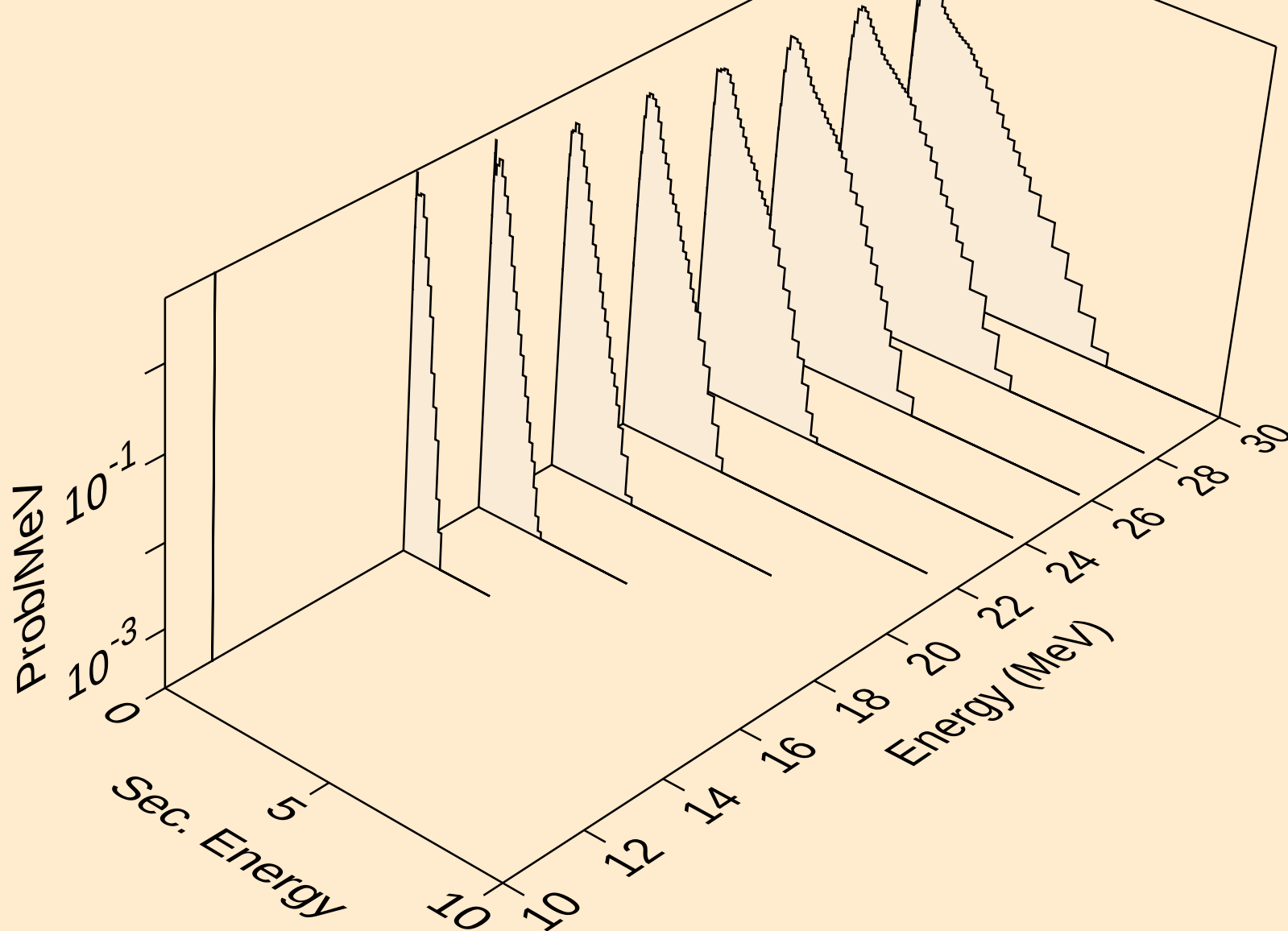




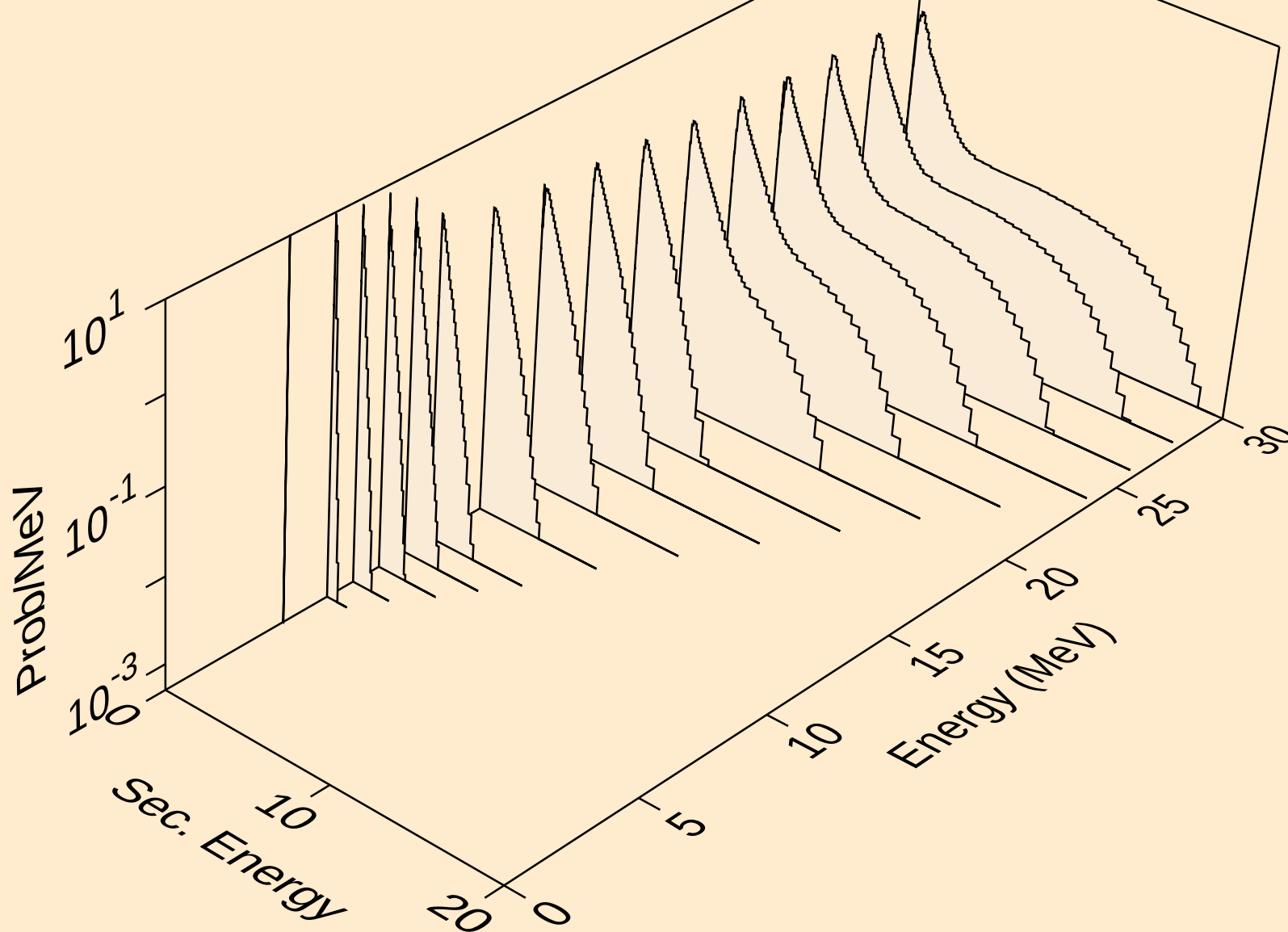
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,2n)a



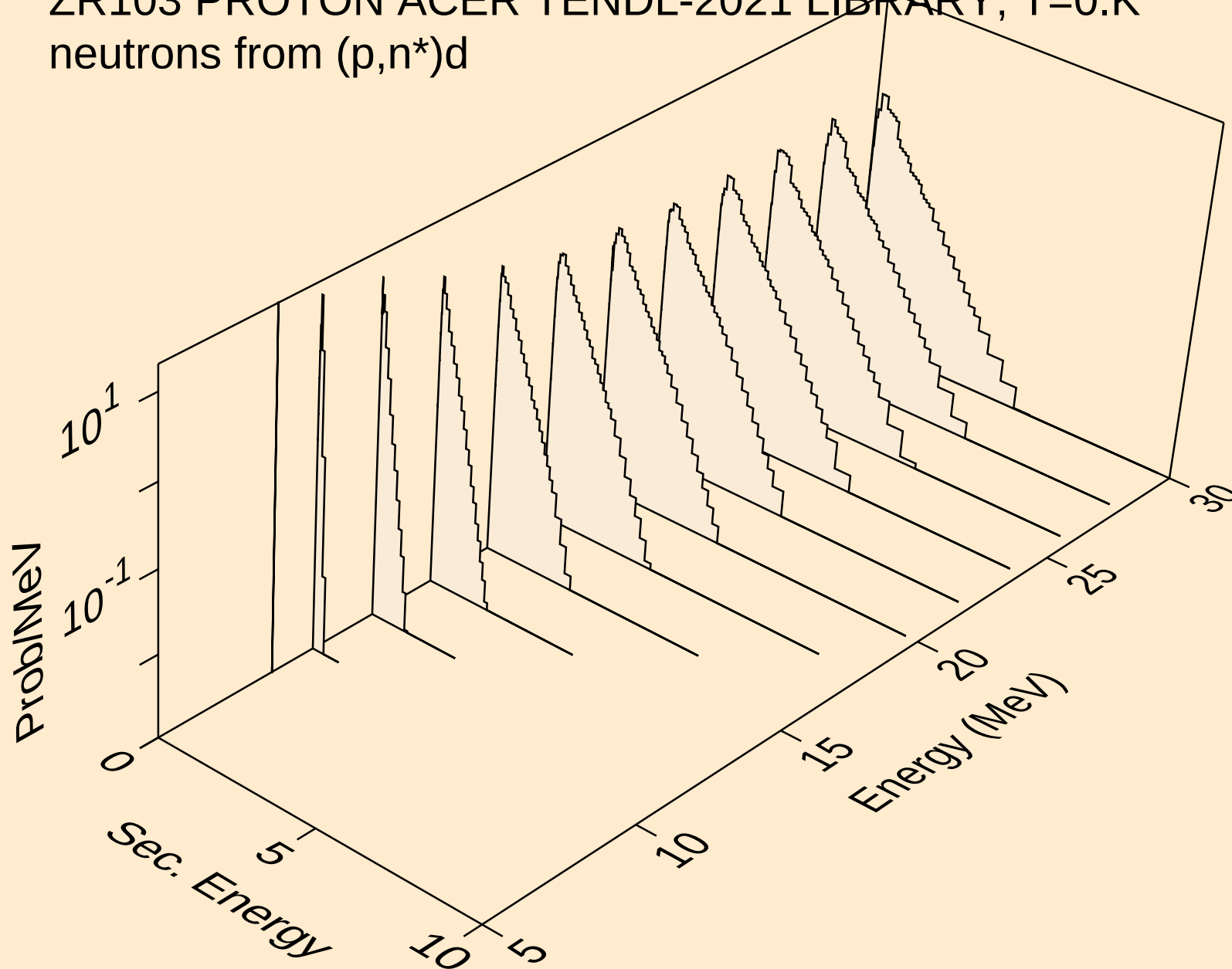
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,3n)a



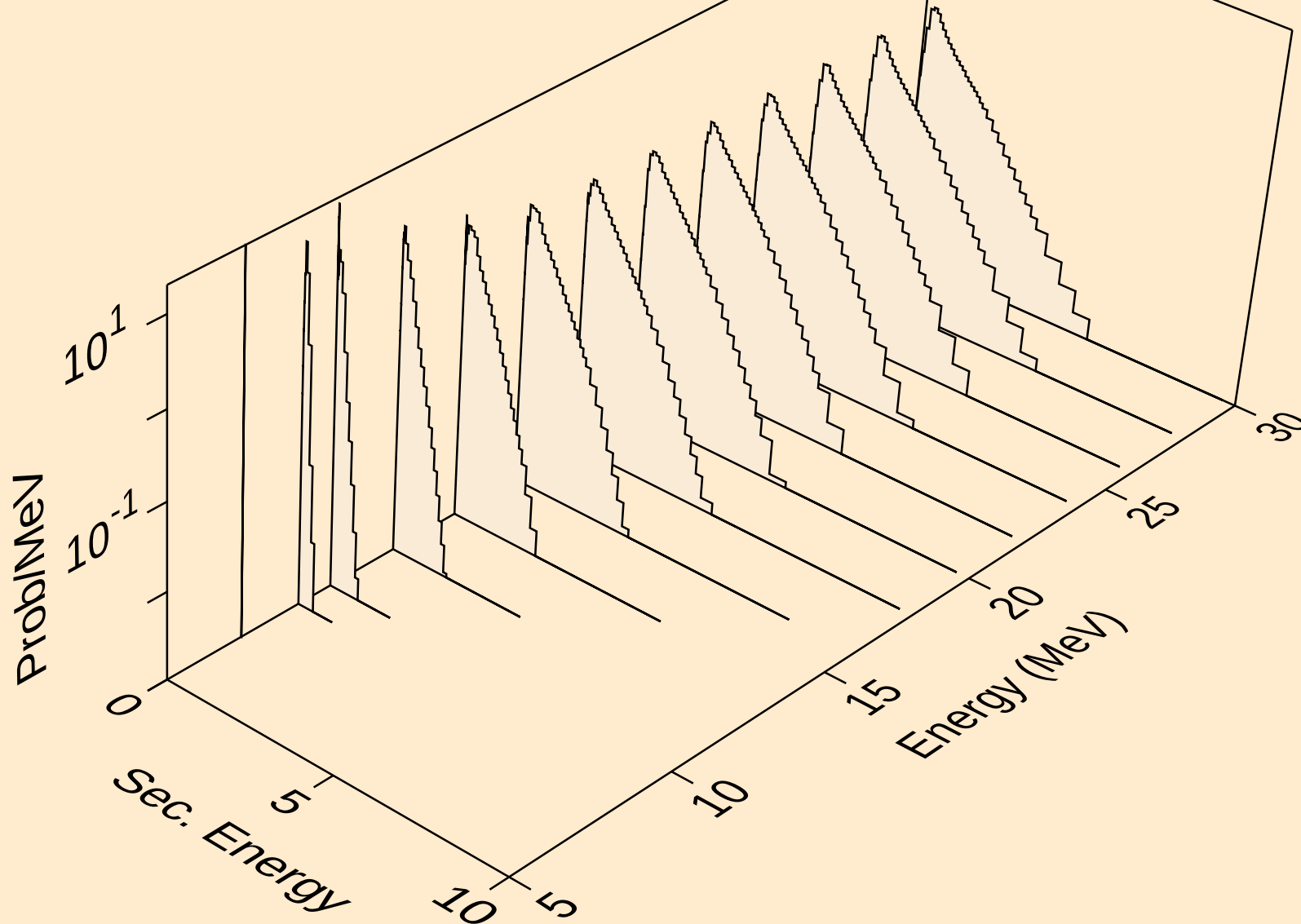
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,n\*)p



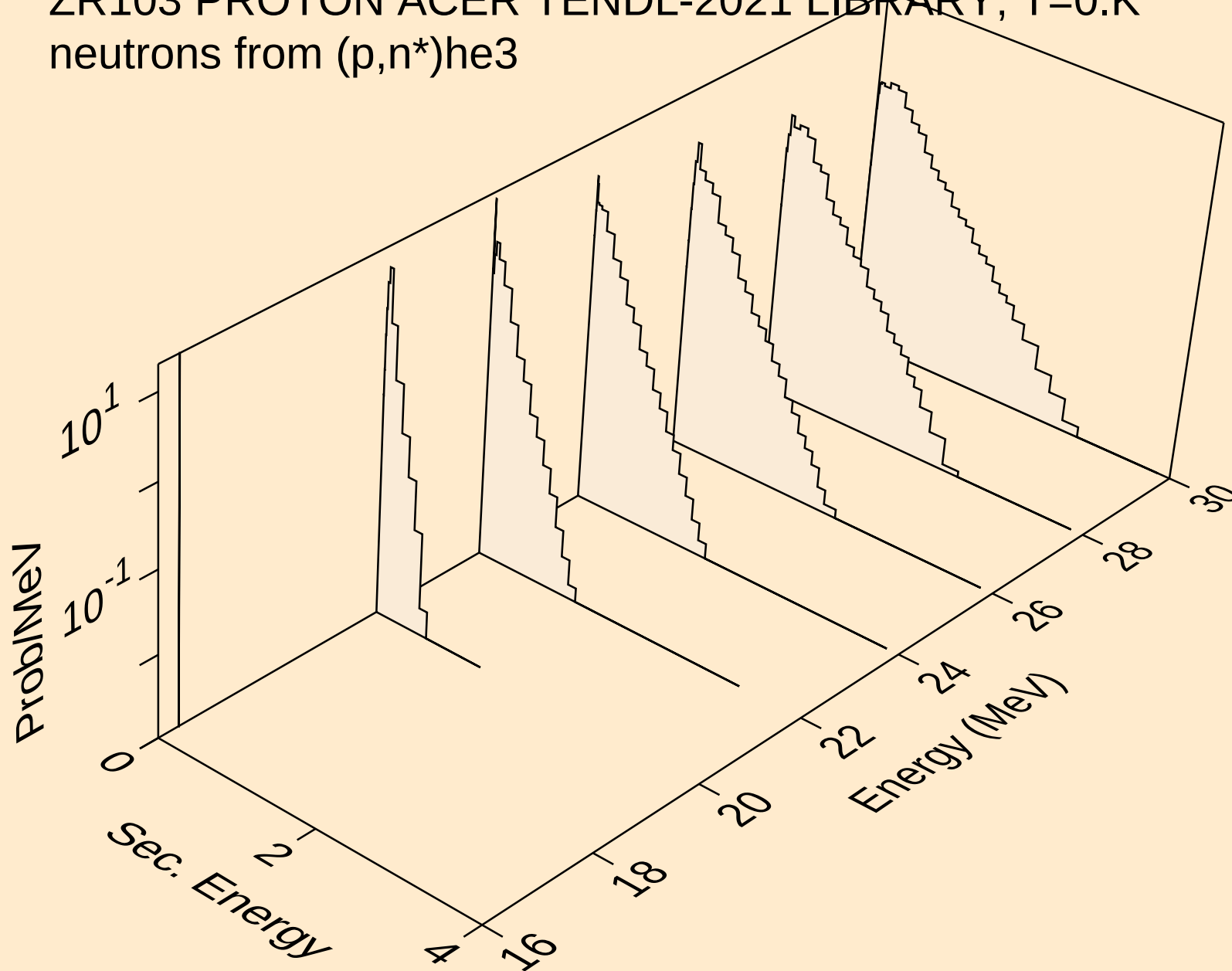
ZR103 PROTON ACER TENDL-2021 LIBRARY;  $T=0.K$   
neutrons from  $(p,n^*)d$



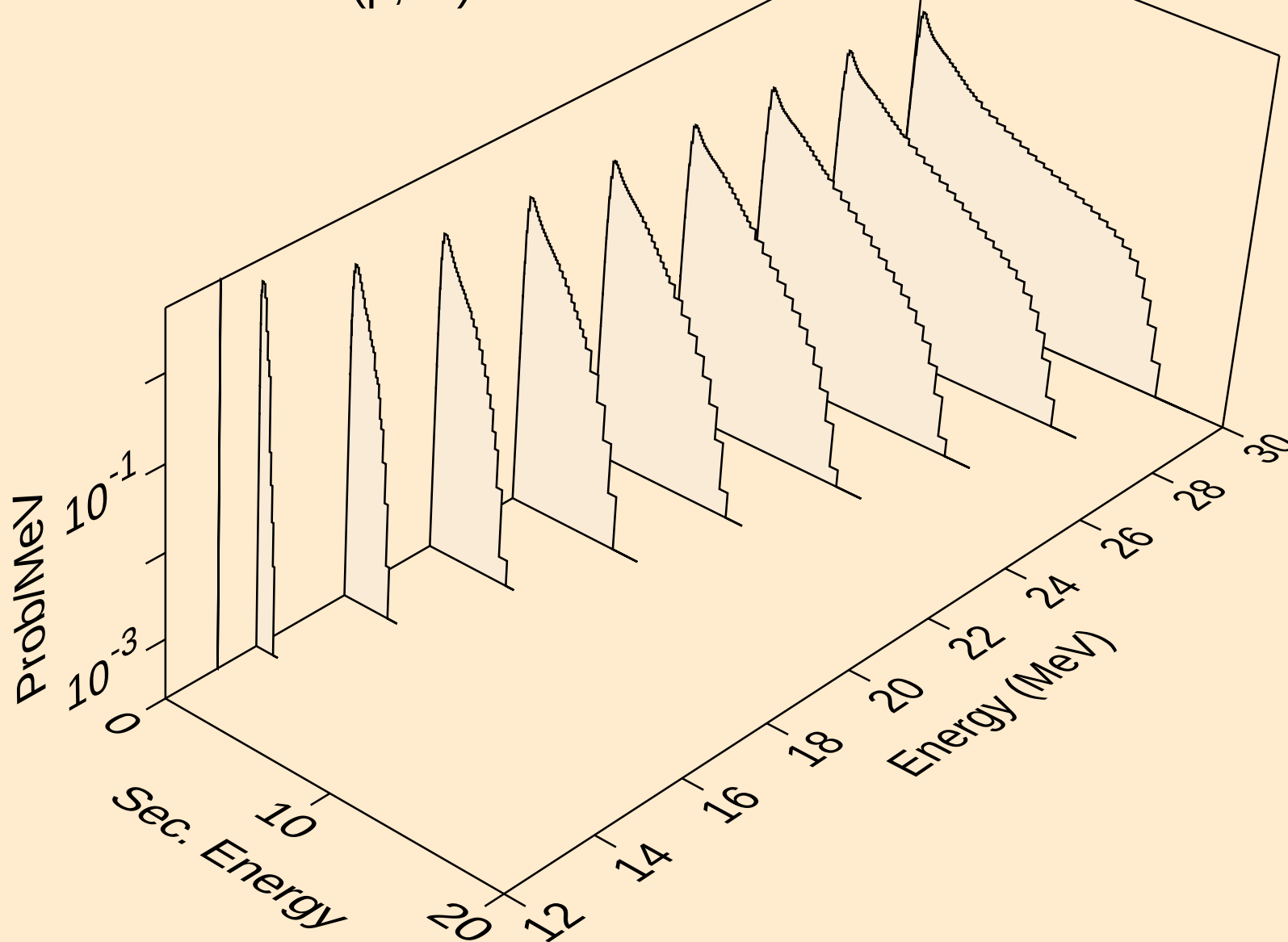
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,n\*)t



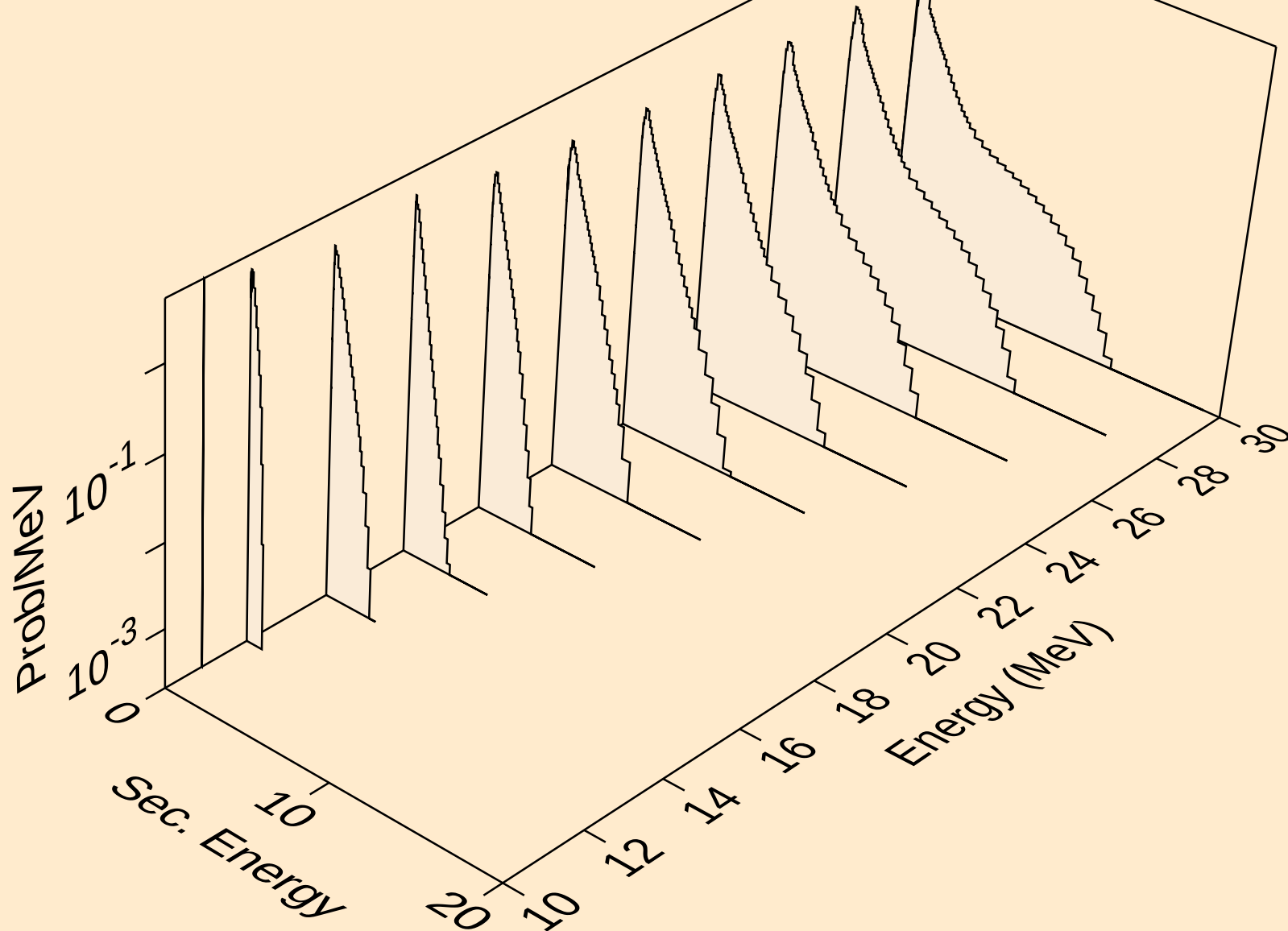
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,n\*)he3



ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,4n)

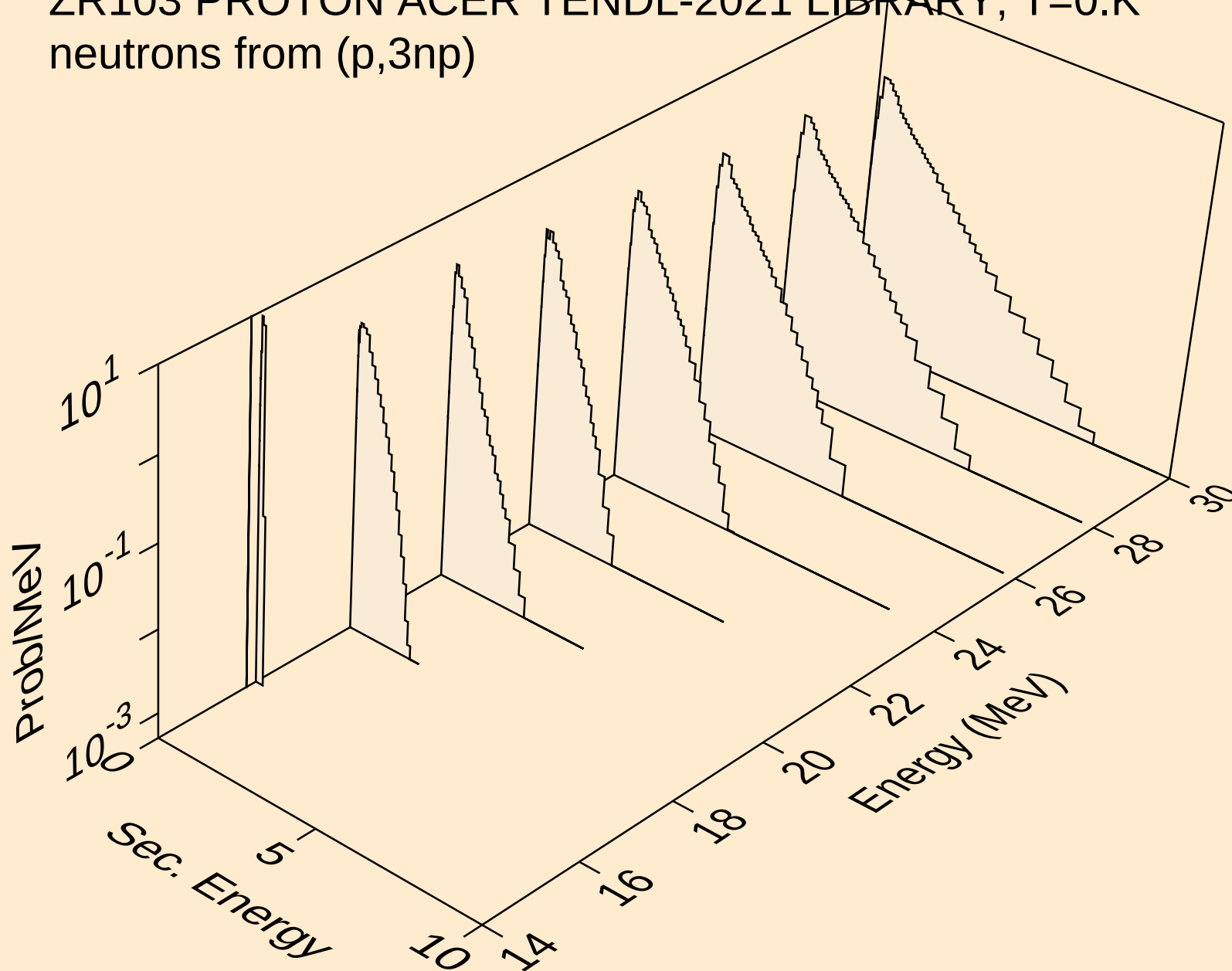


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,2np)

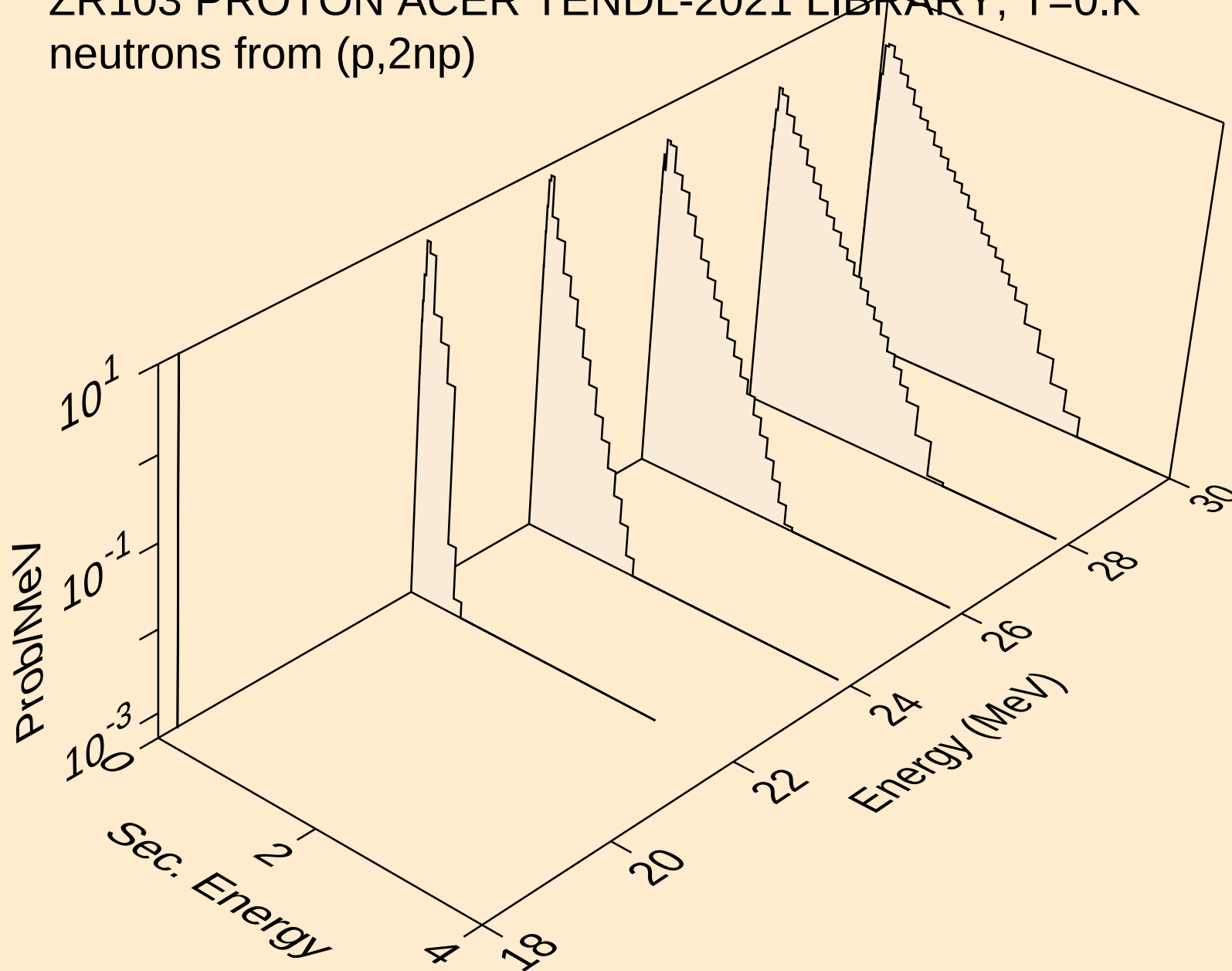




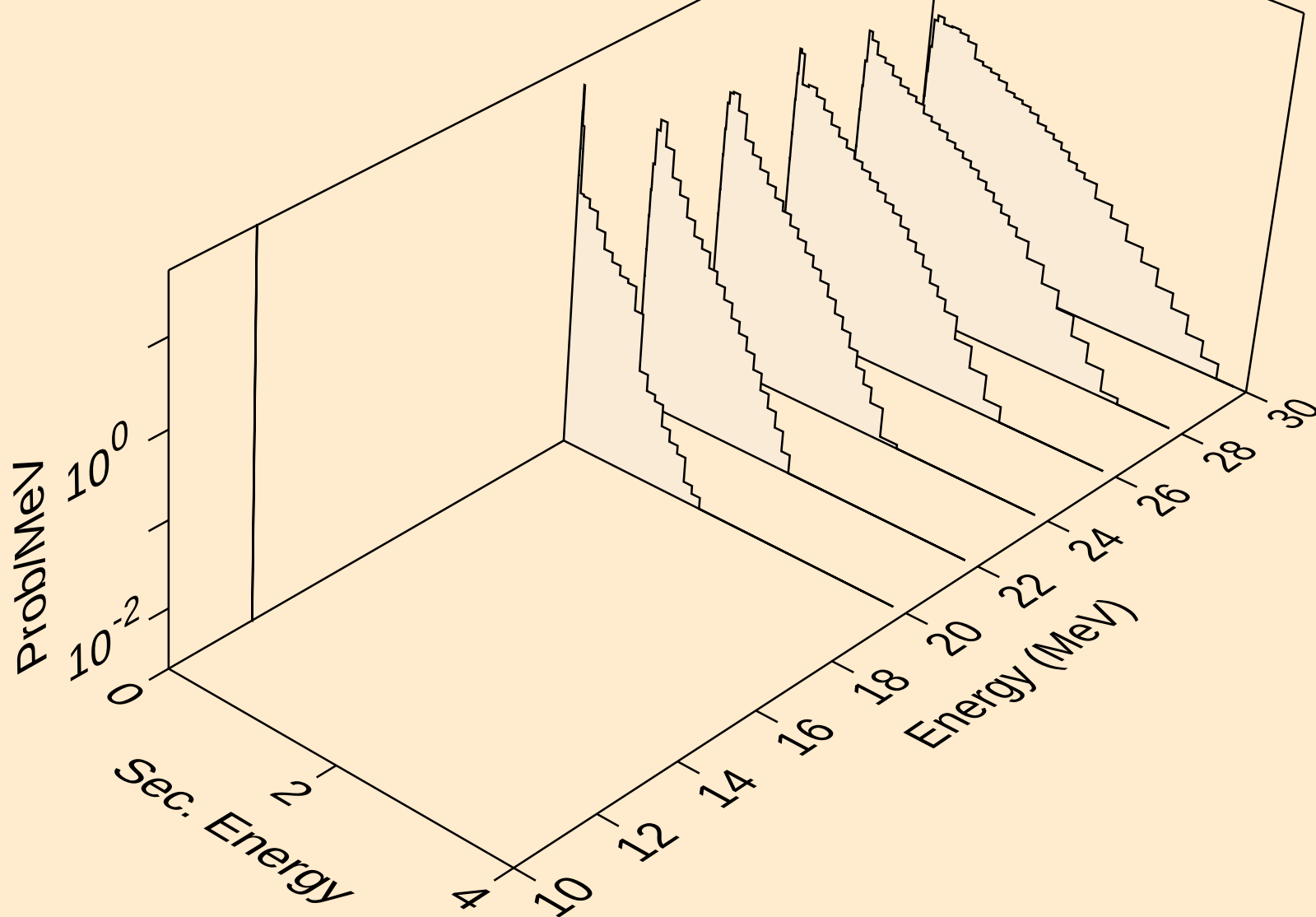
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,3np)



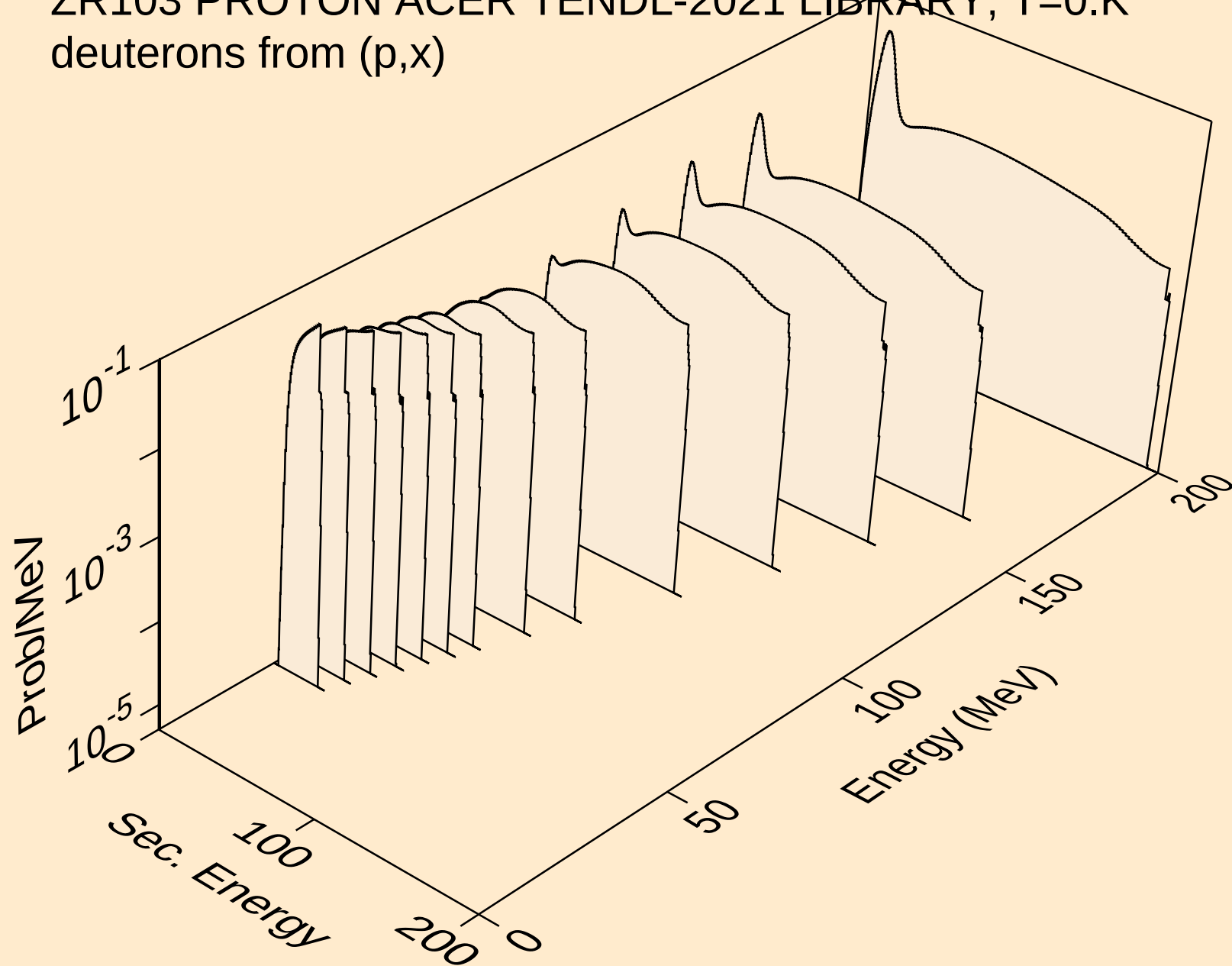
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,2np)



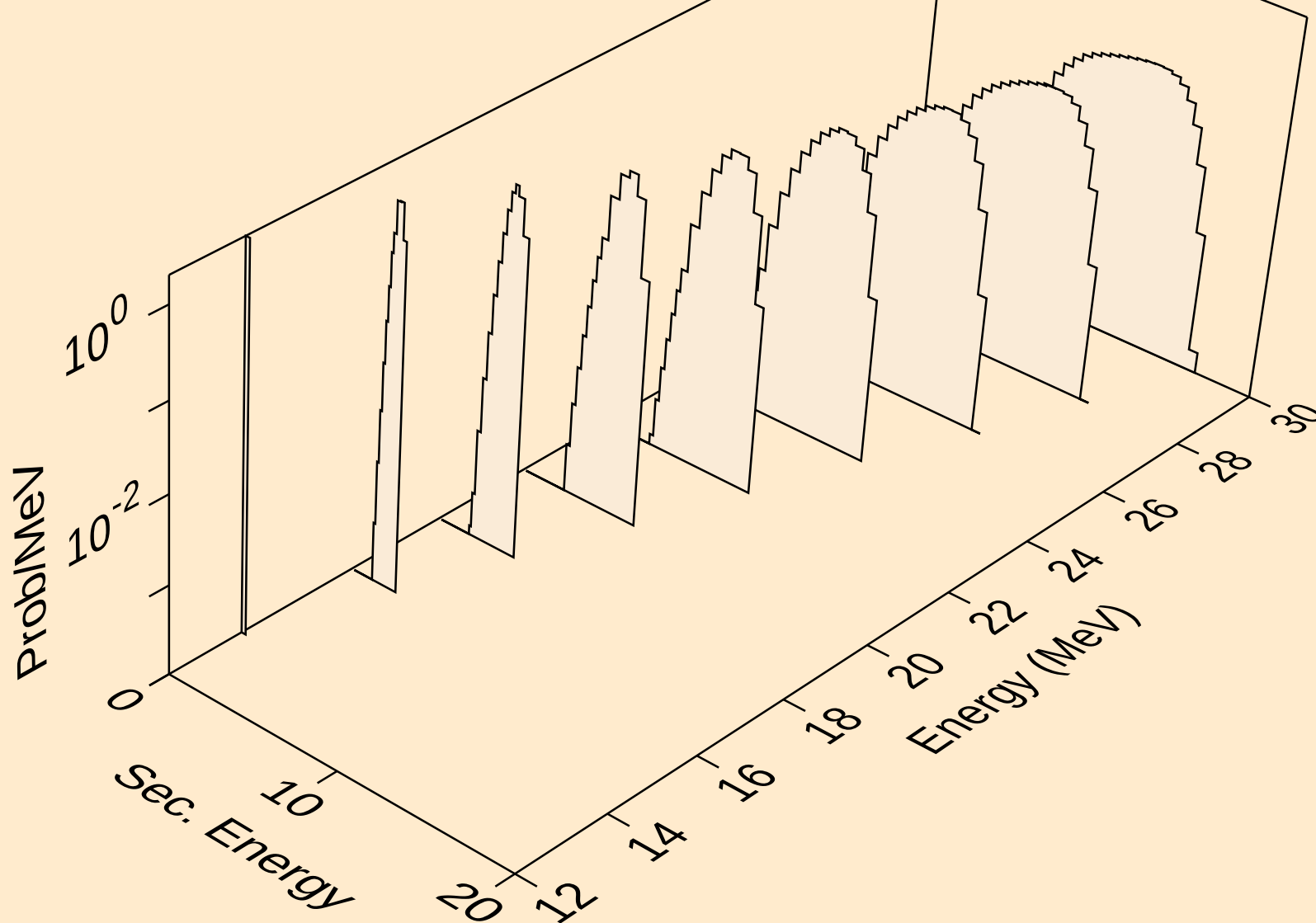
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
neutrons from (p,npa)



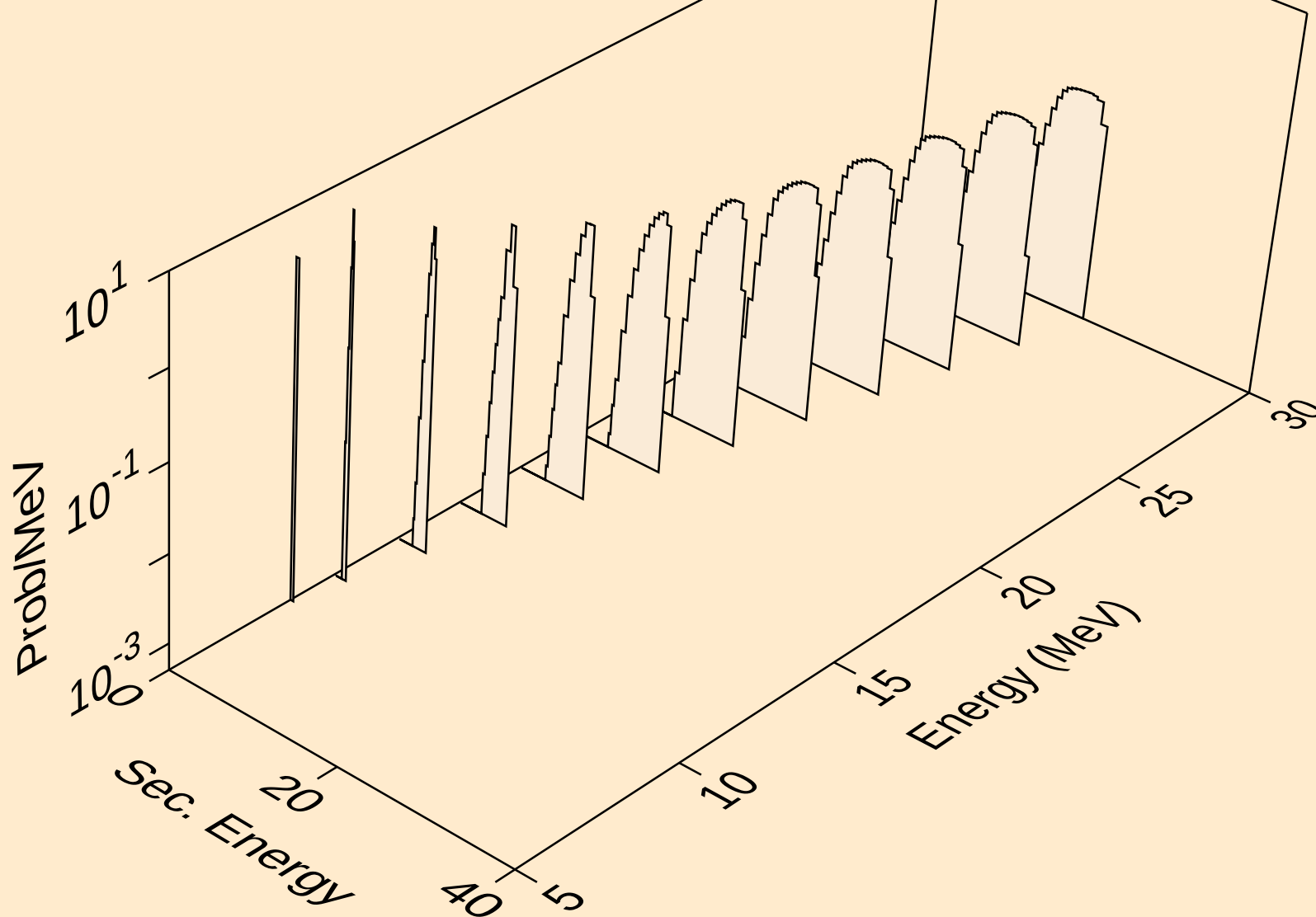
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
deuterons from (p,x)



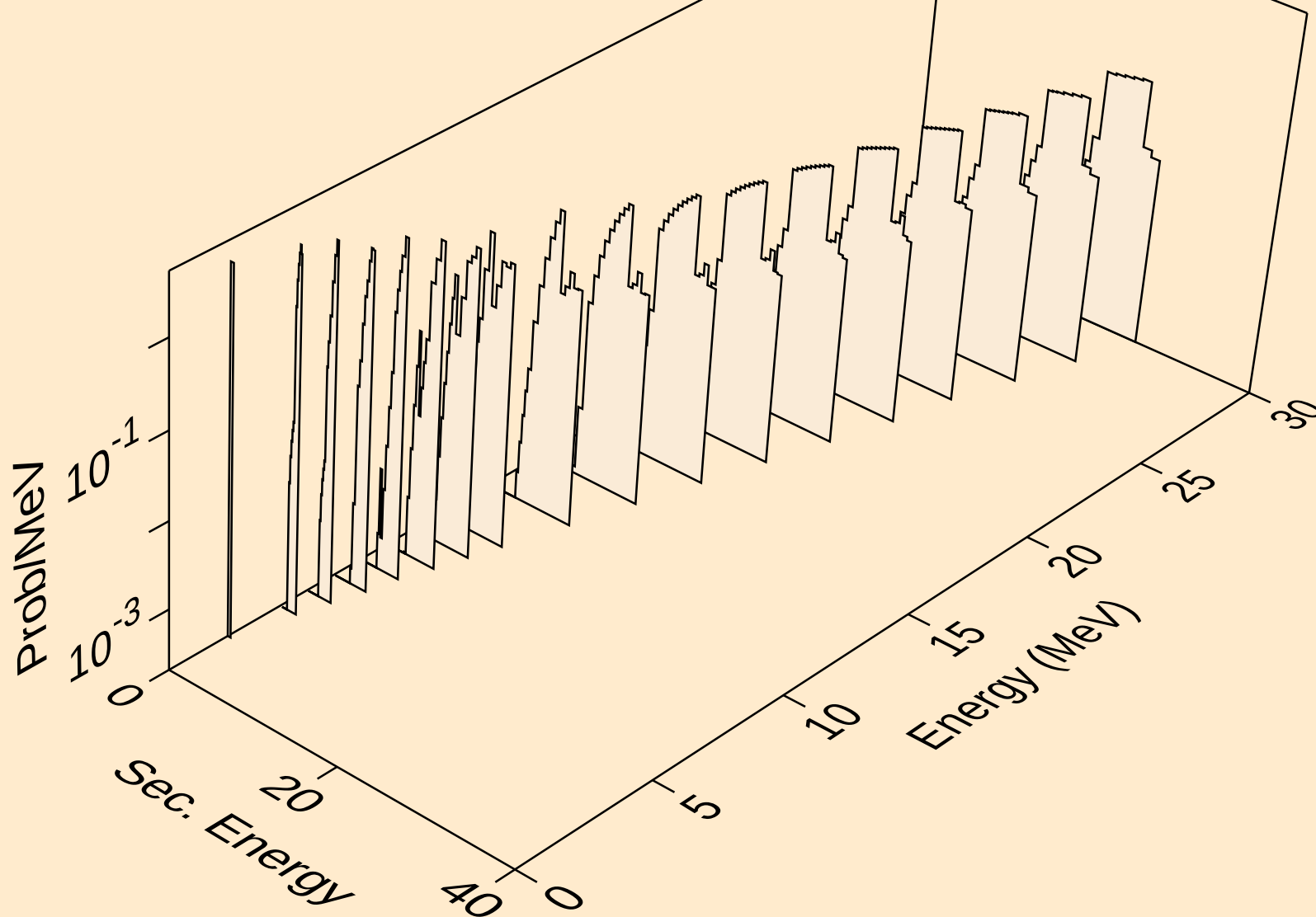
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
deuterons from (p,2nd)



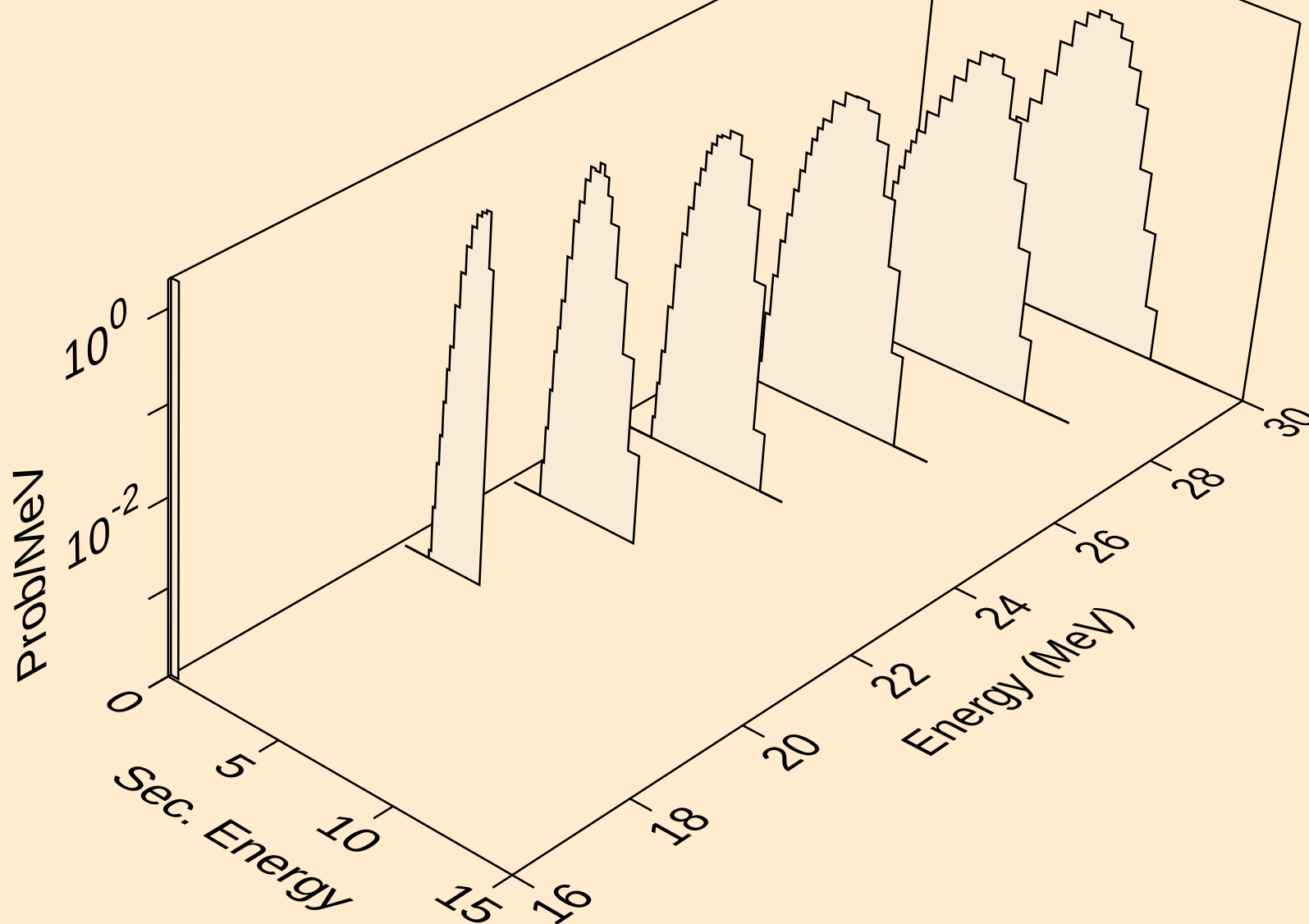
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
deuterons from (p,n\*)d



ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
deuterons from (p,d)

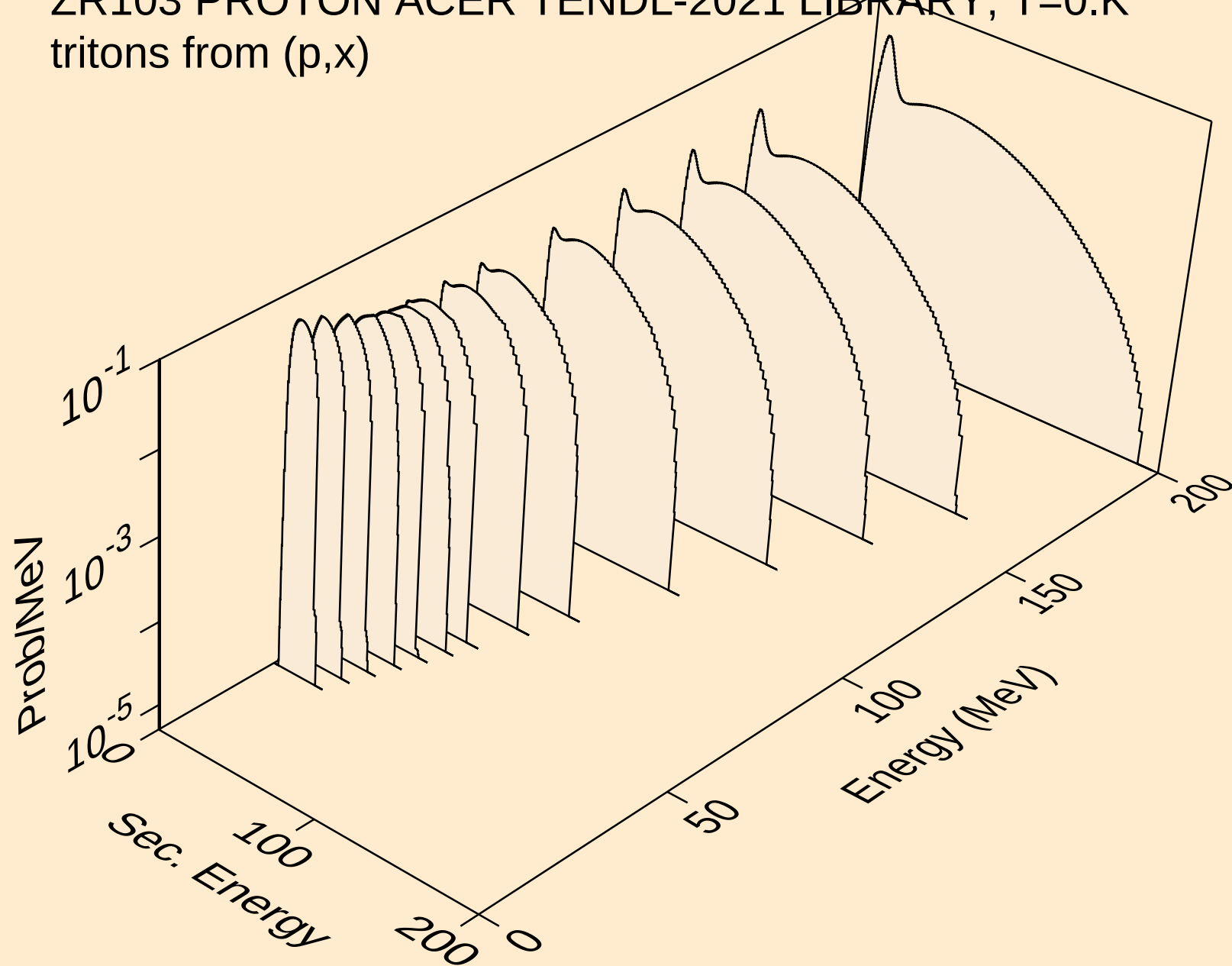


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
deuterons from (p,pd)

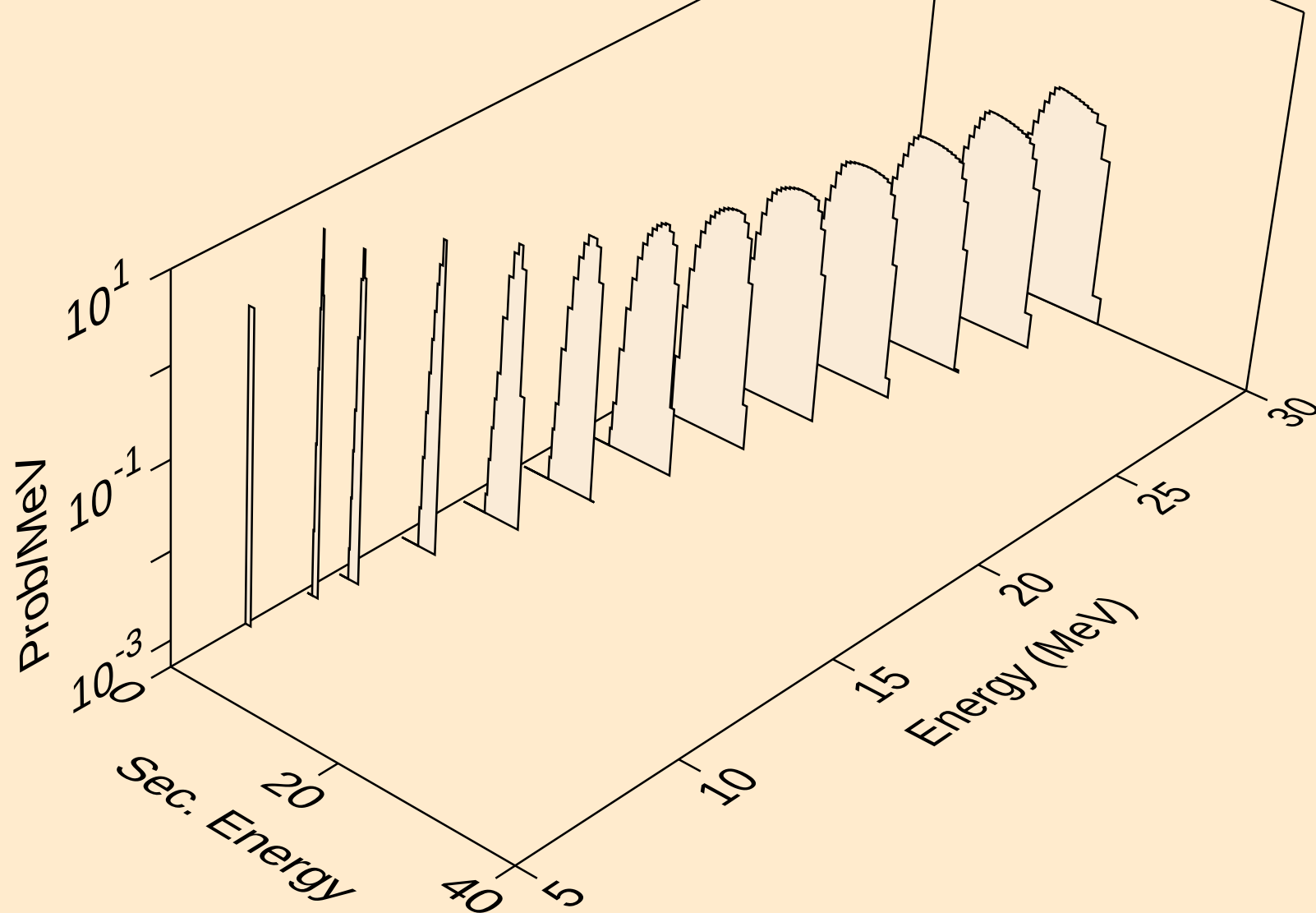




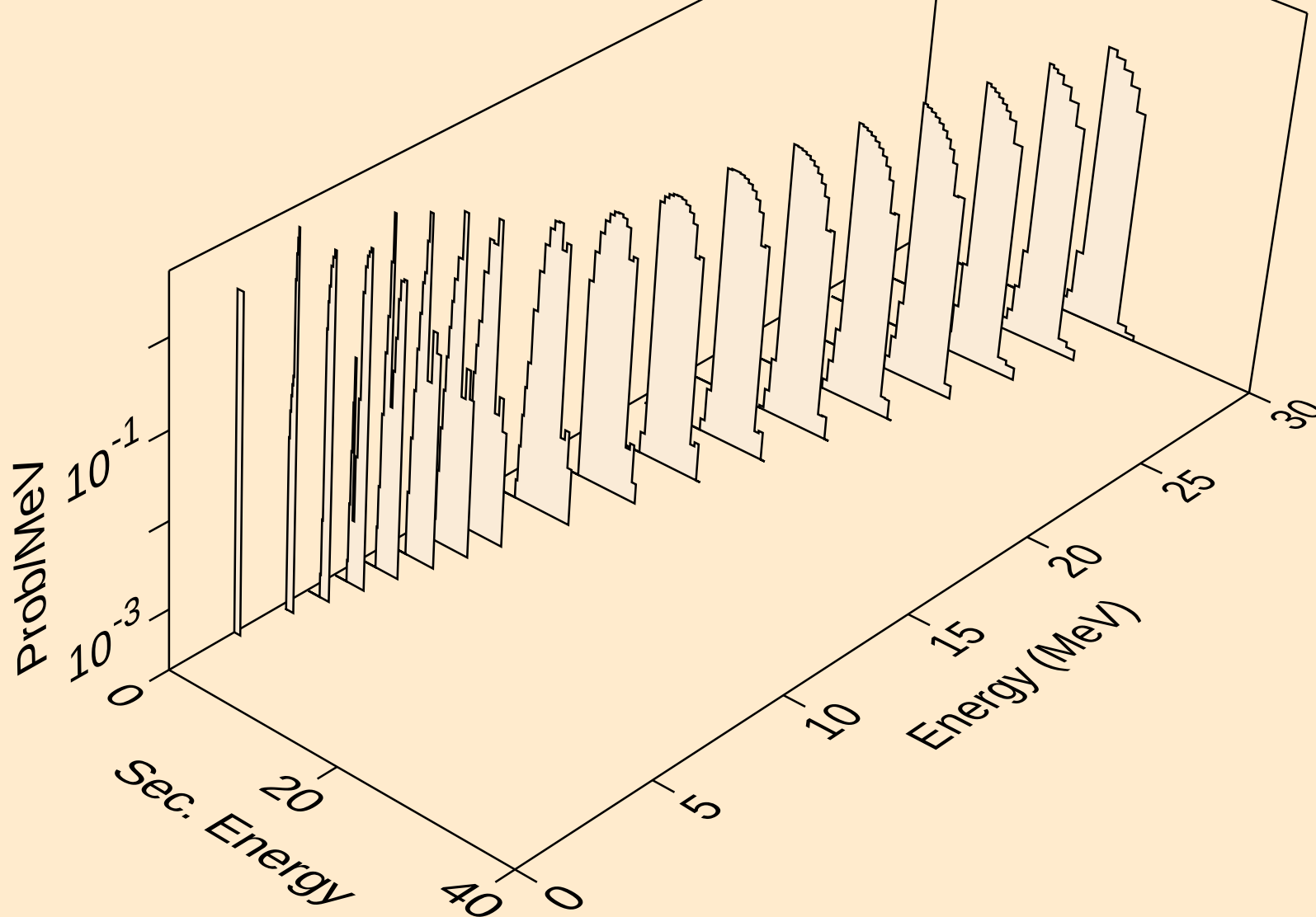
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
tritons from (p,x)



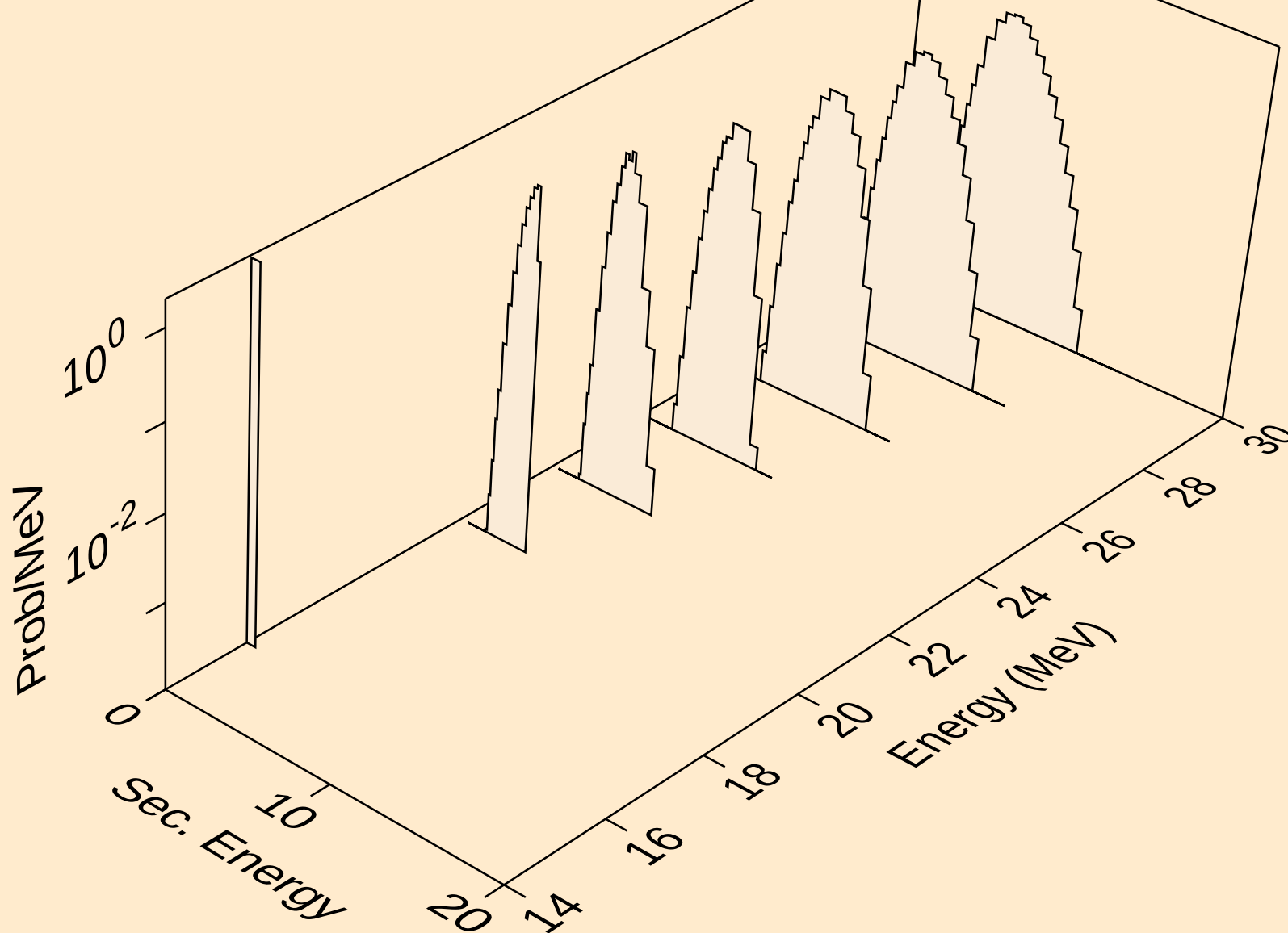
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
tritons from (p,n\*)t



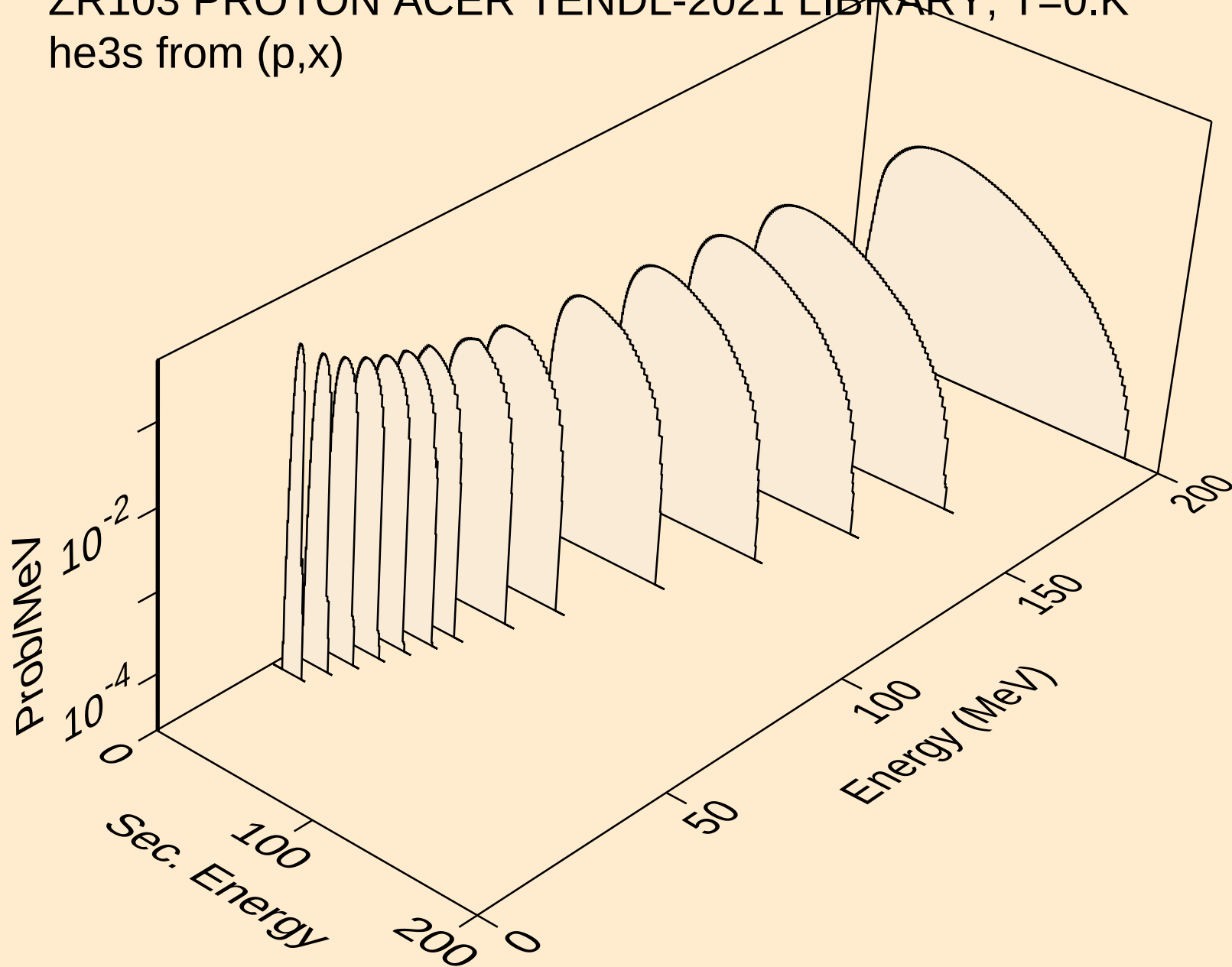
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
tritons from (p,t)



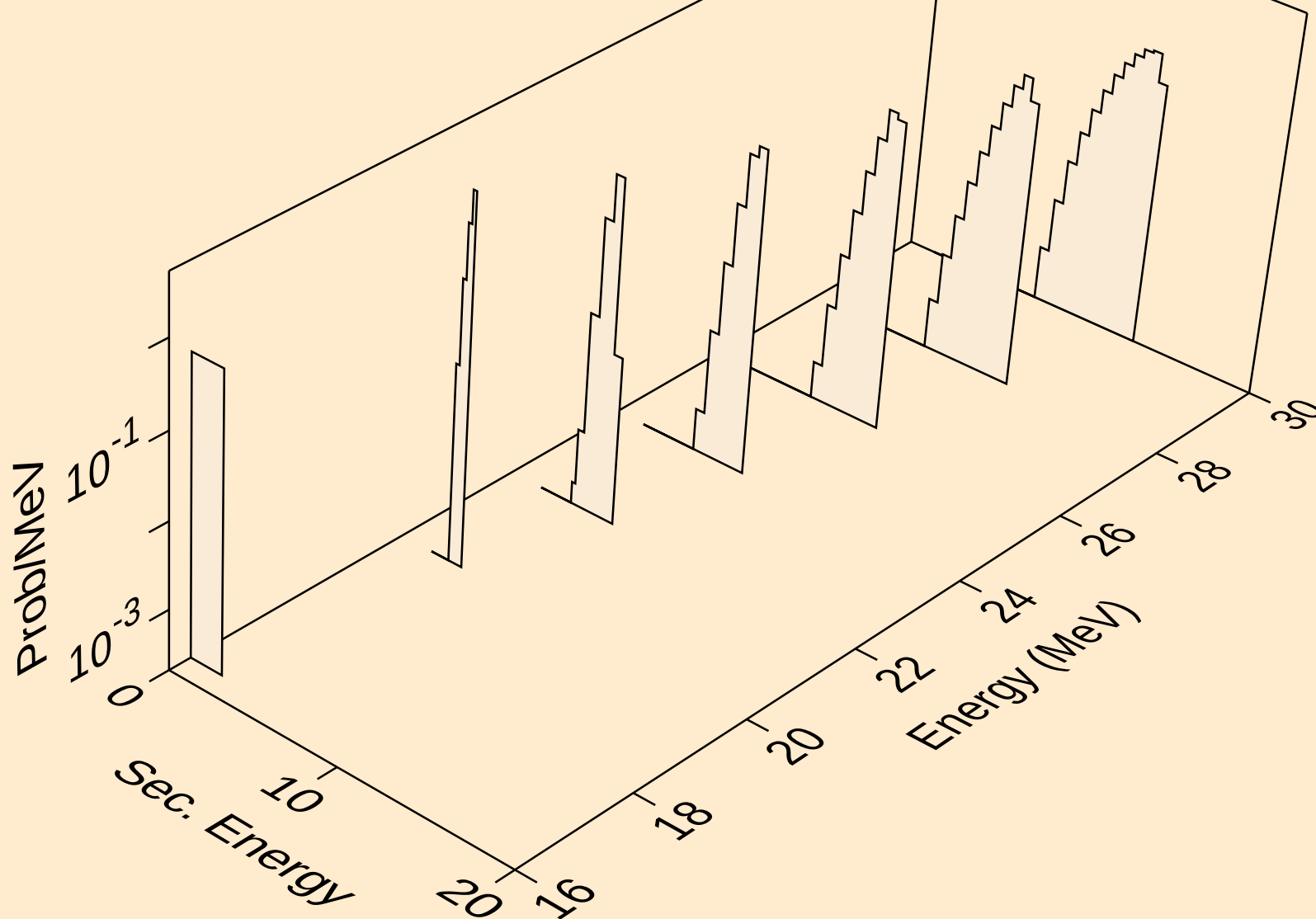
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
tritons from (p,pt)



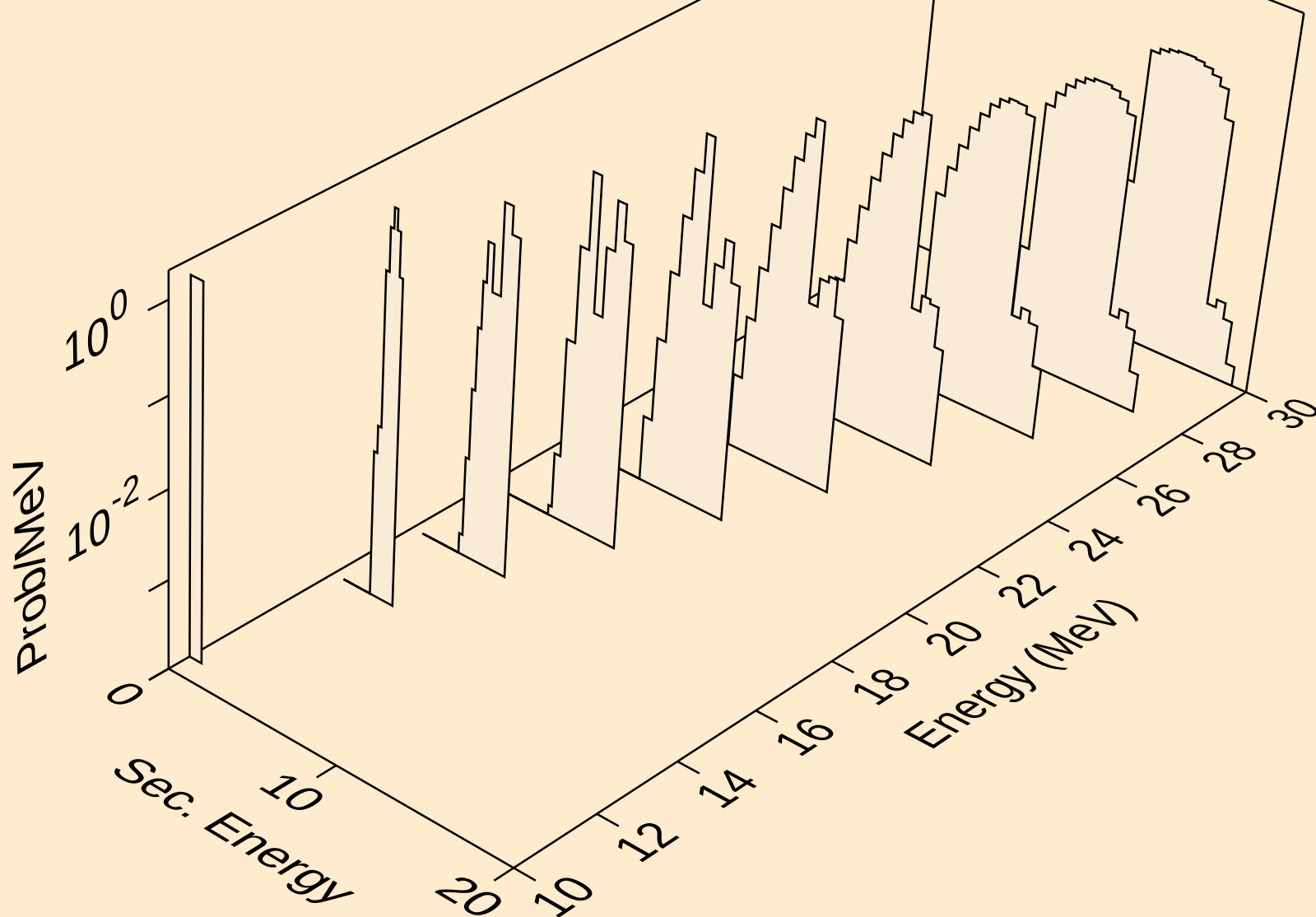
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
he3s from (p,x)



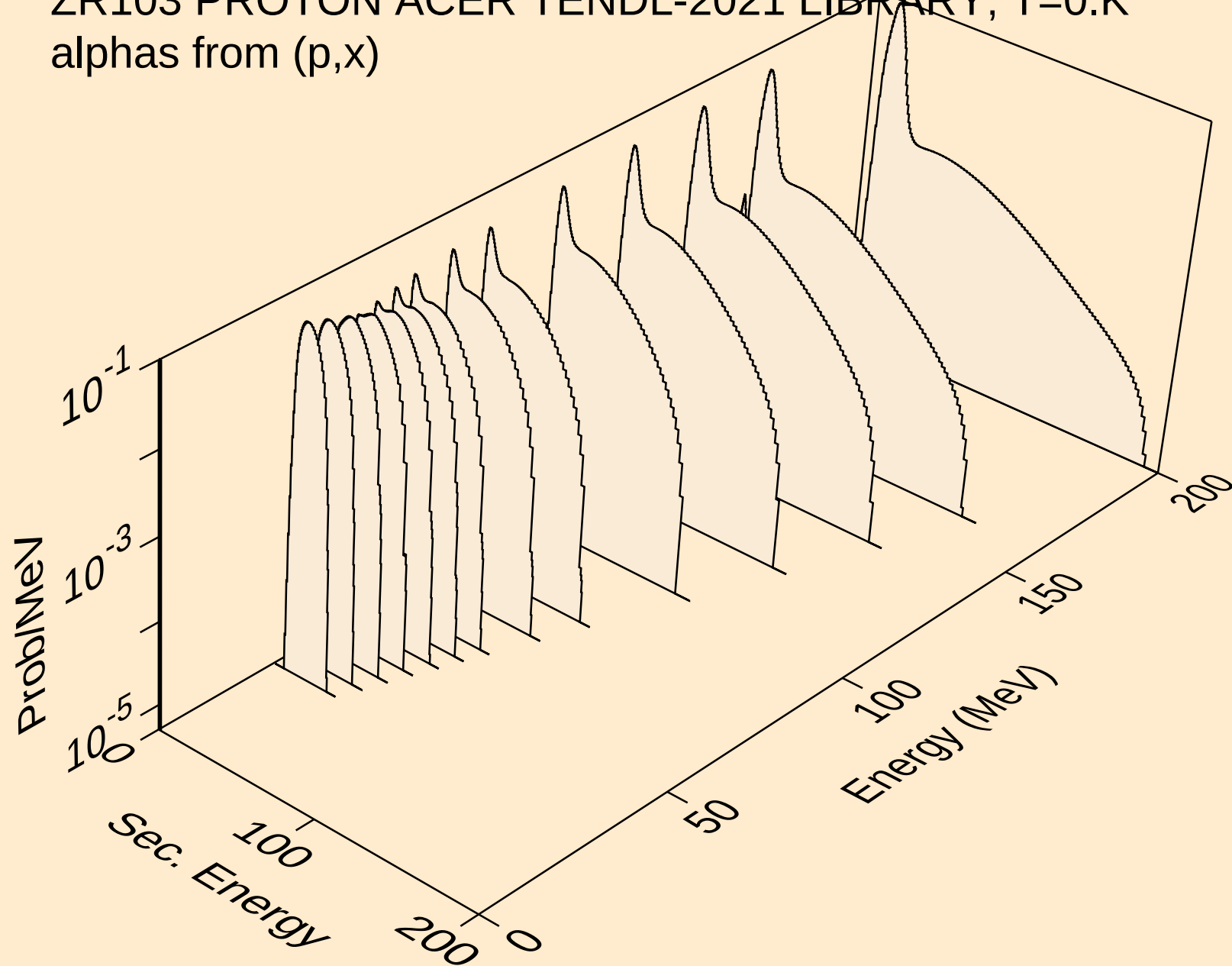
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
he3s from (p,n\*)he3



ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
he3s from (p,he3)

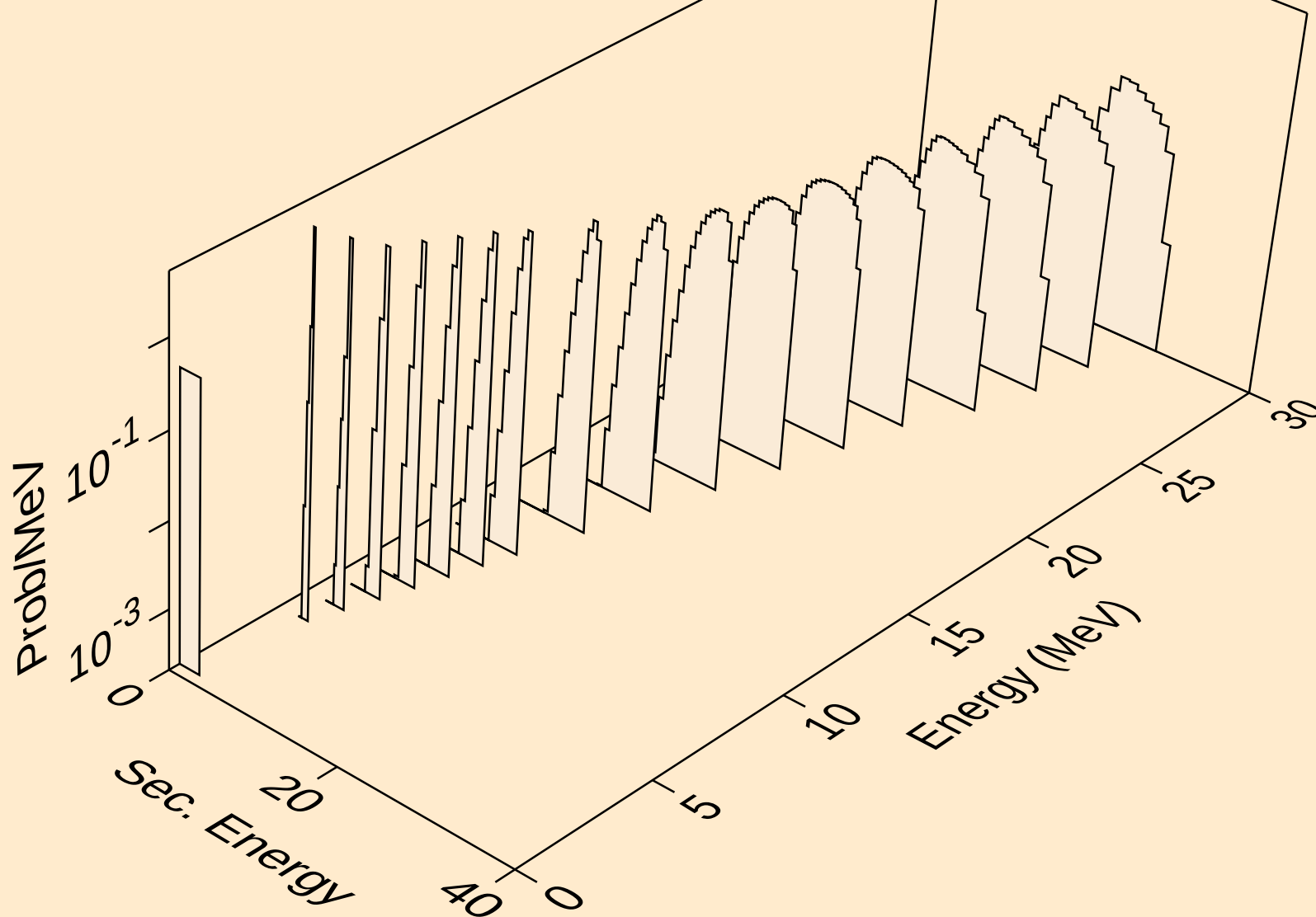


ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
alphas from (p,x)

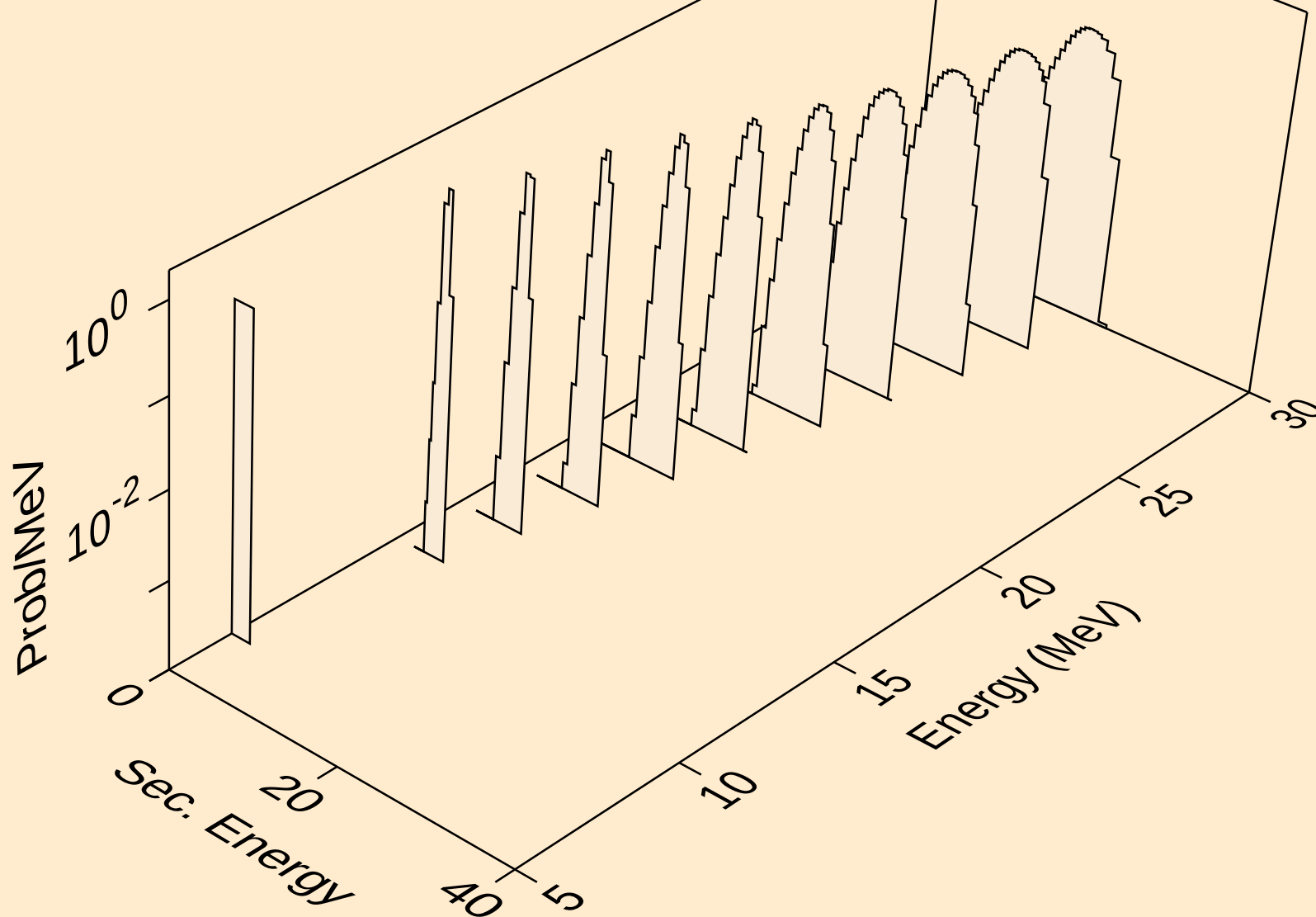




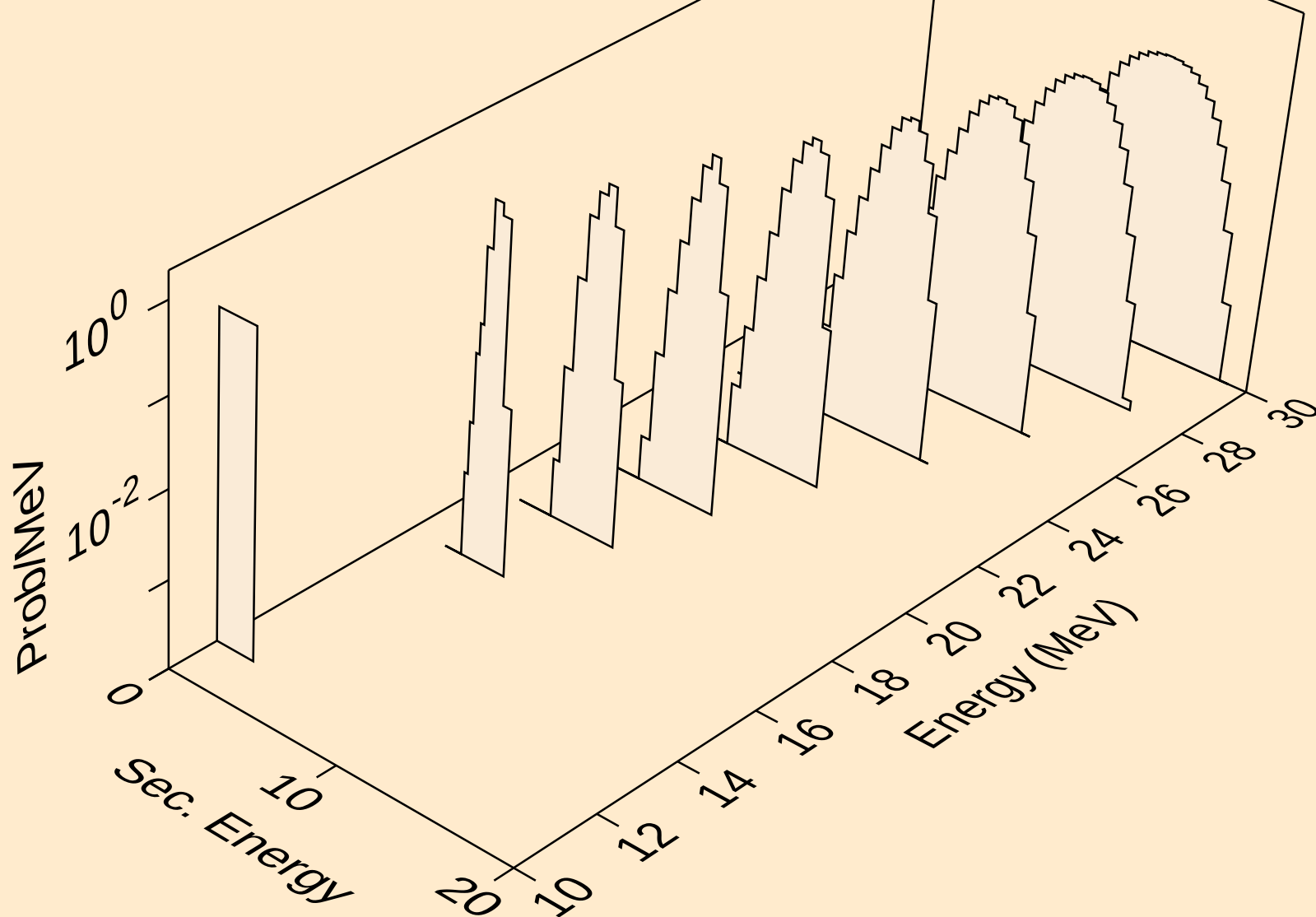
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
alphas from (p,n\*)a



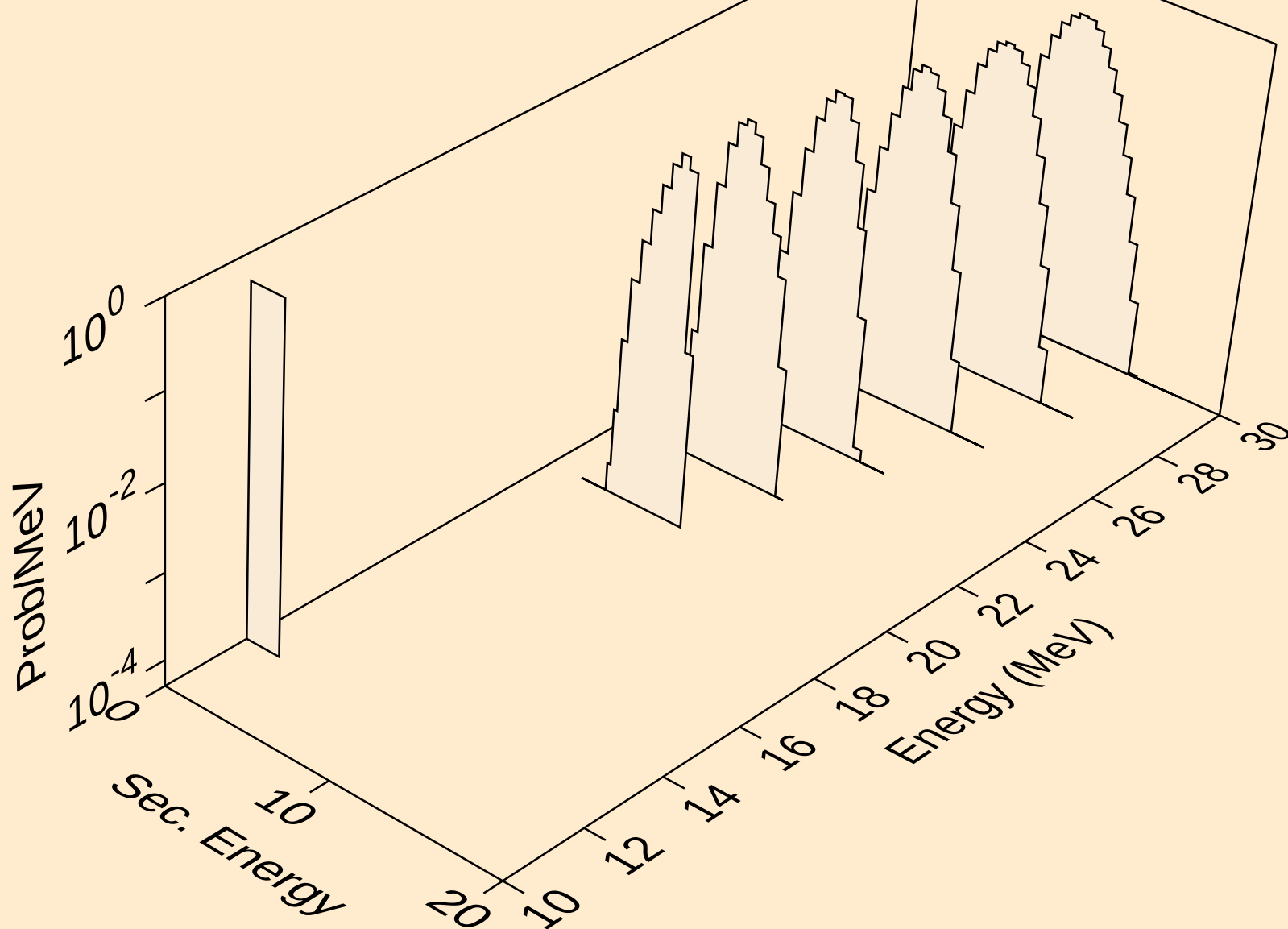
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
alphas from (p,2n)a



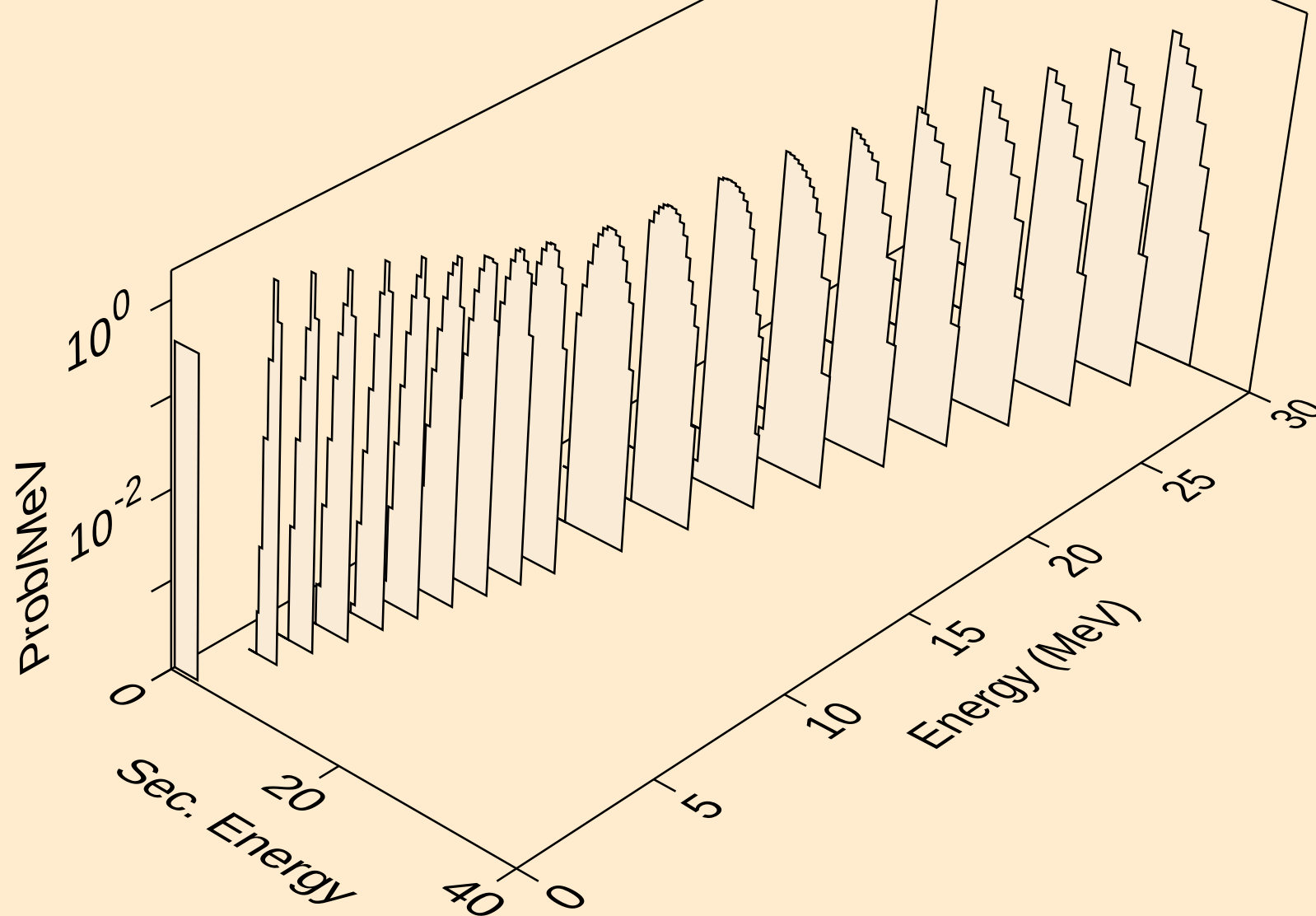
ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
alphas from (p,3n)a



ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
alphas from (p,npa)



ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
alphas from (p,a)



ZR103 PROTON ACER TENDL-2021 LIBRARY; T=0.K  
alphas from (p,pa)

