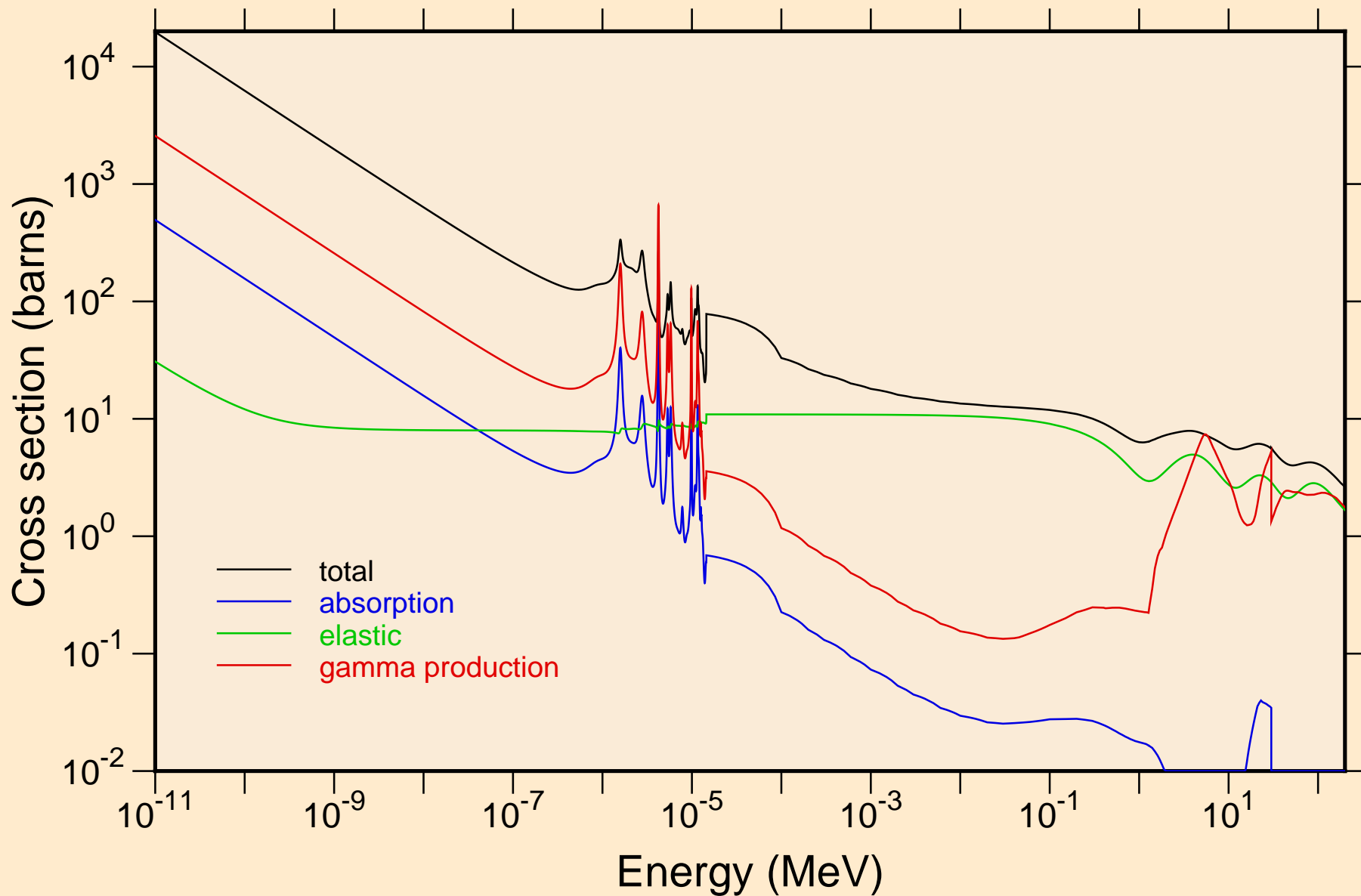
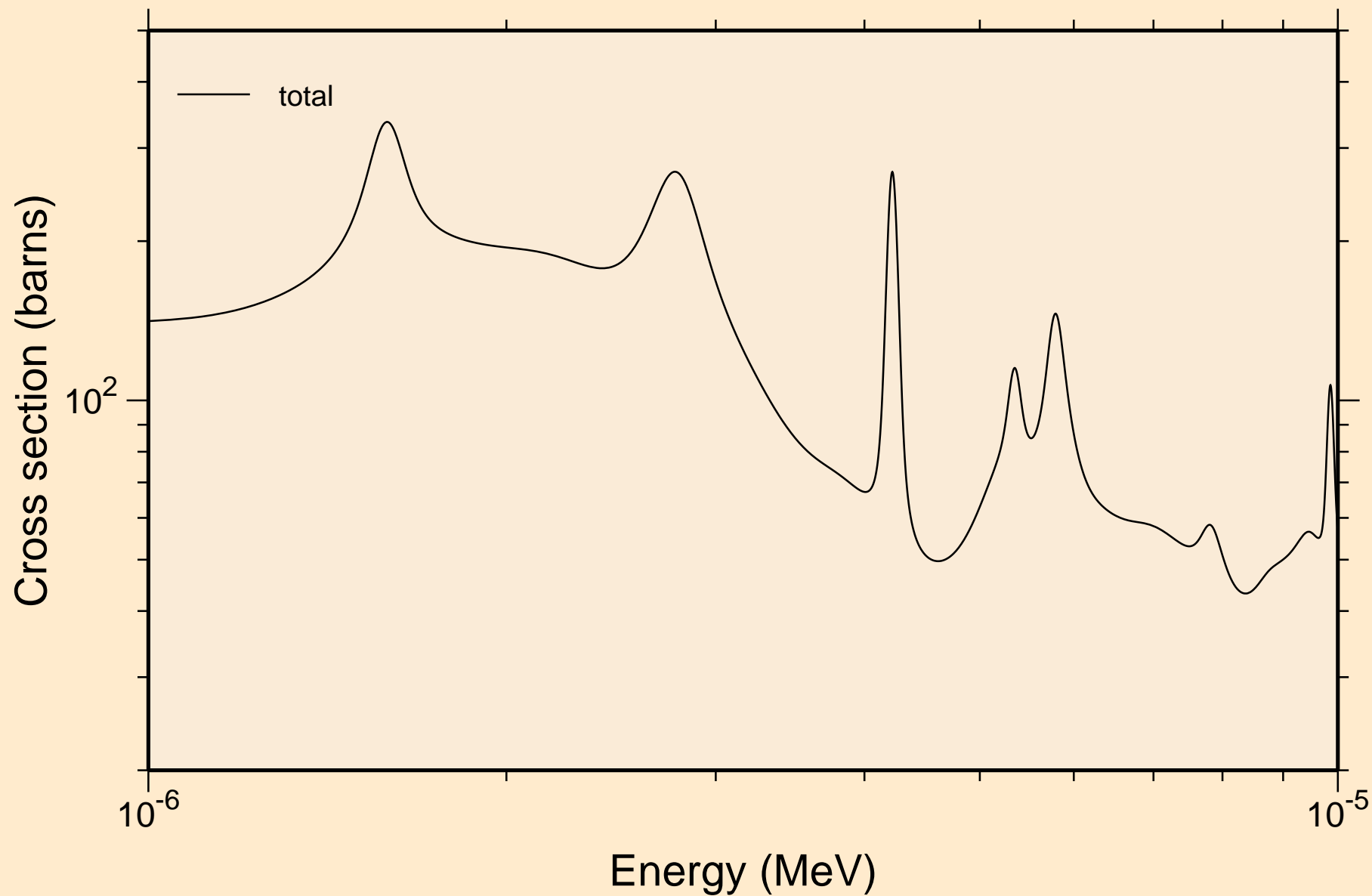


# U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K

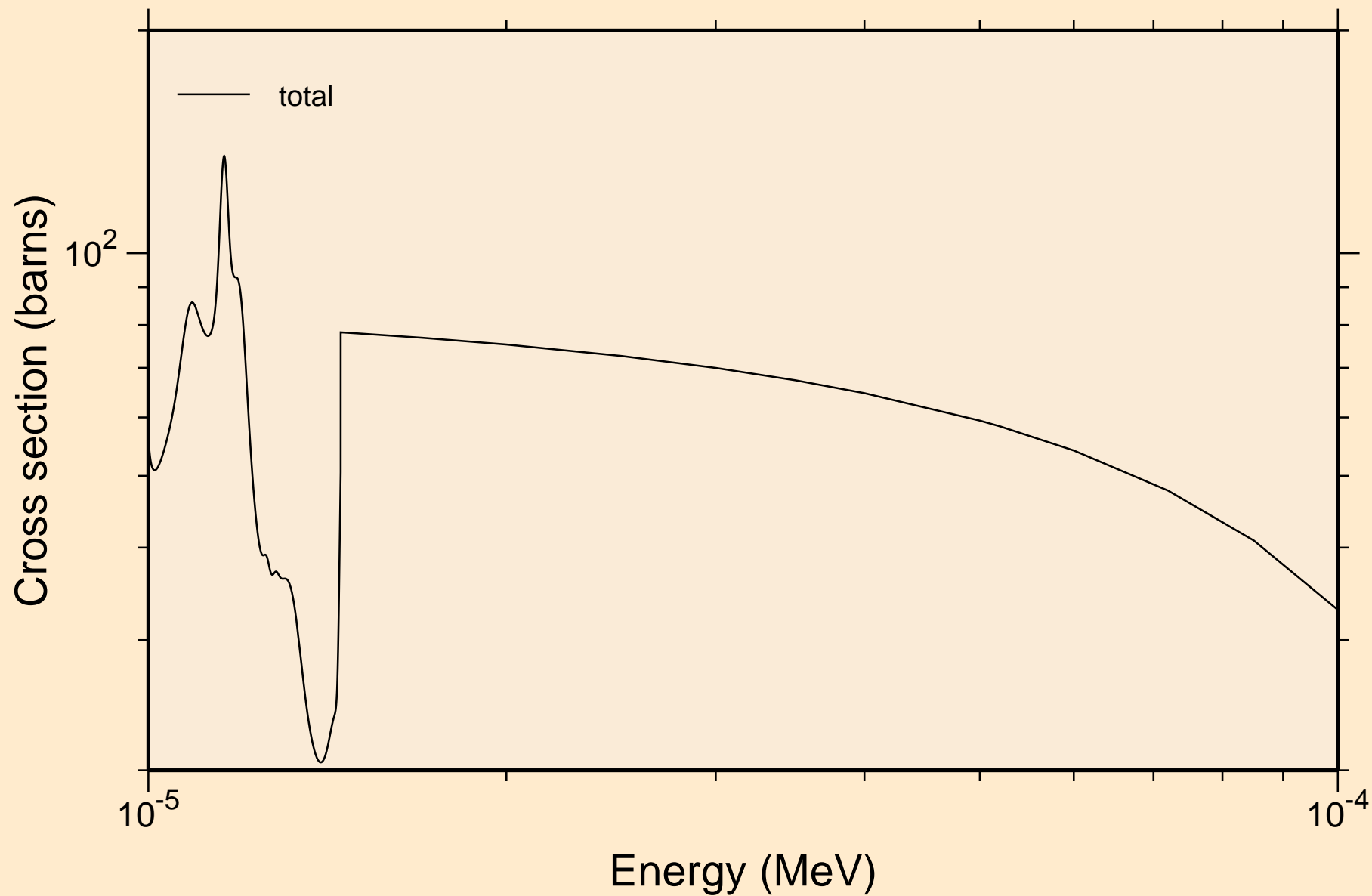
## Principal cross sections



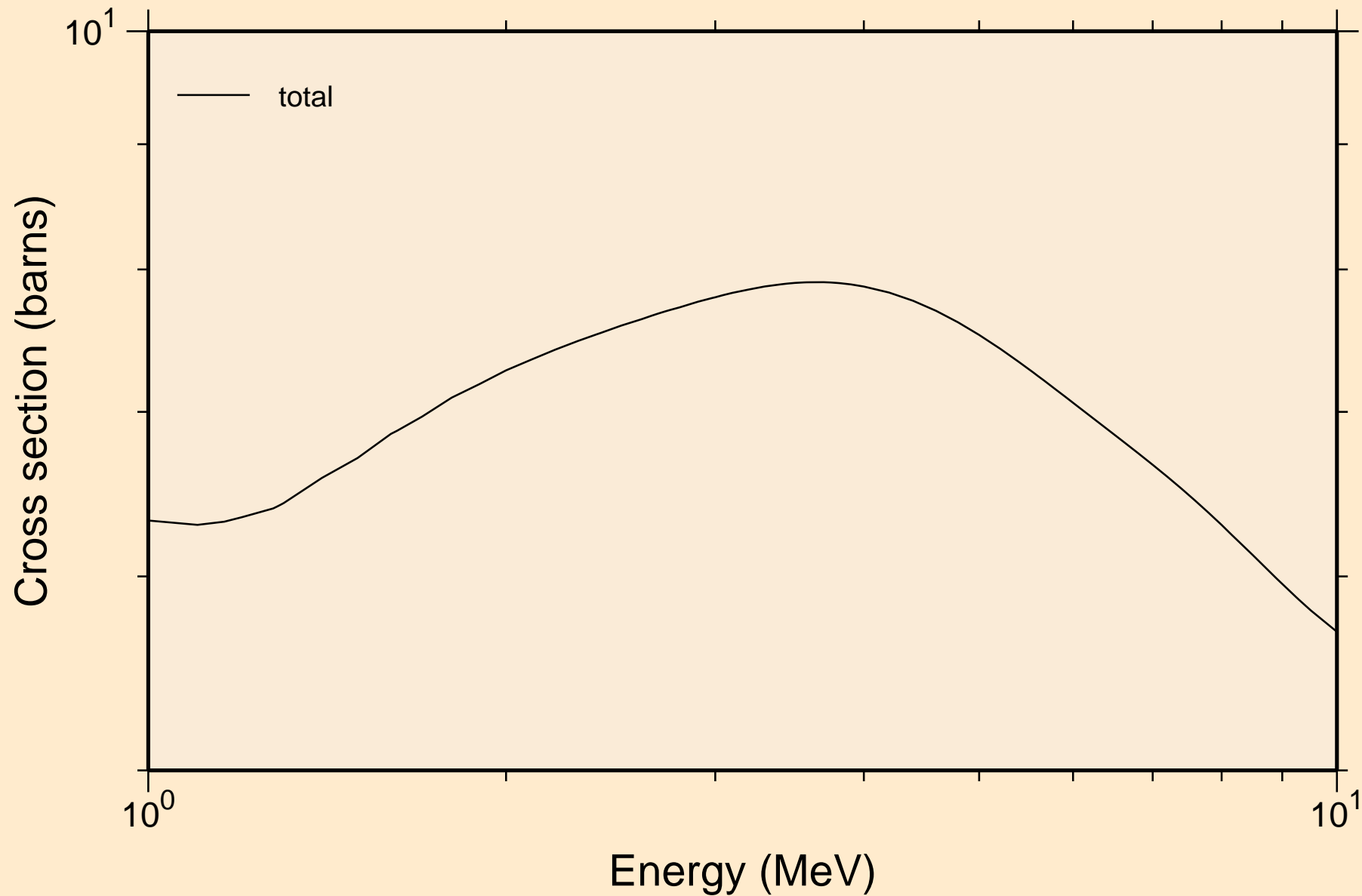
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resonance total cross section



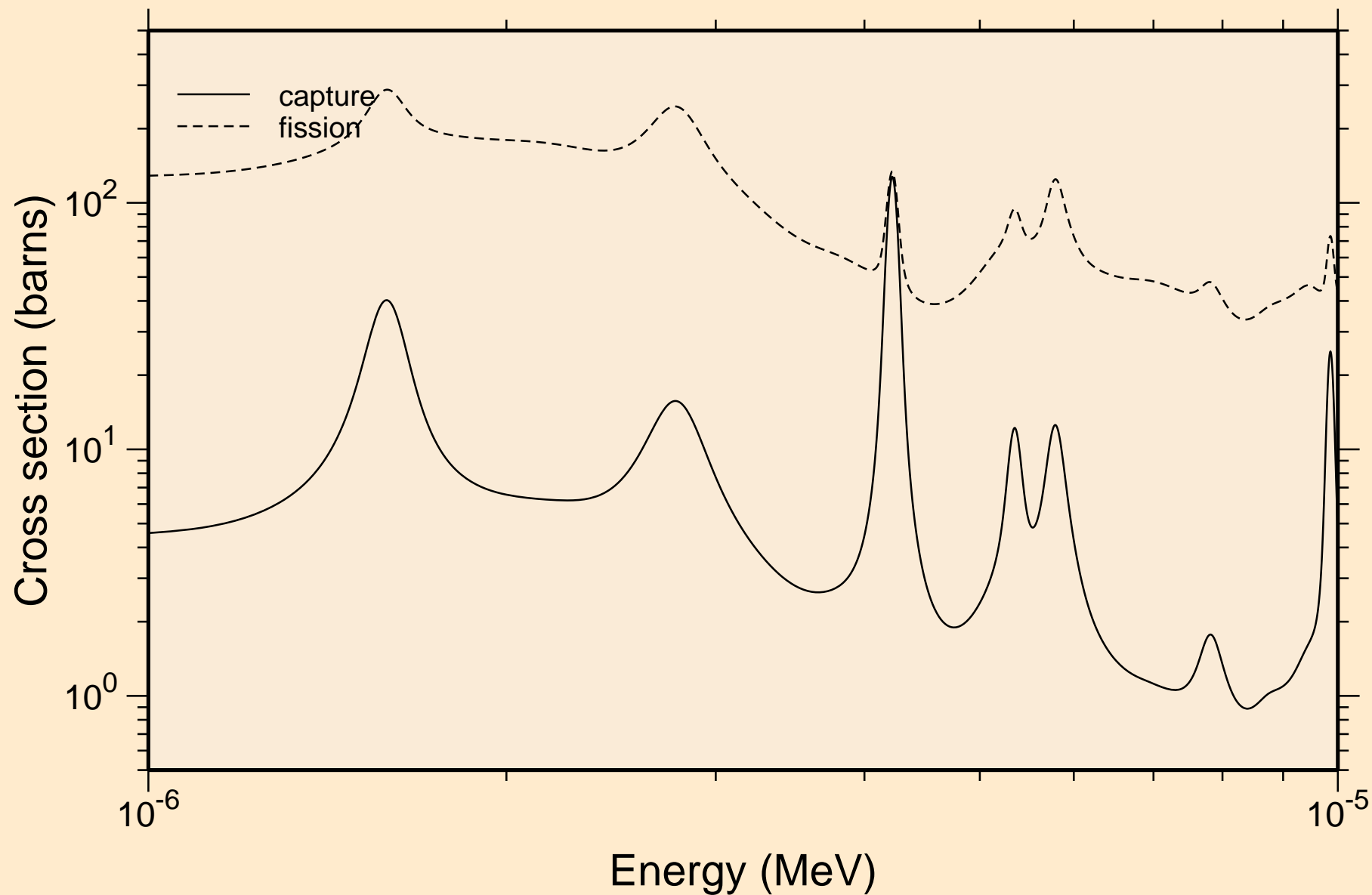
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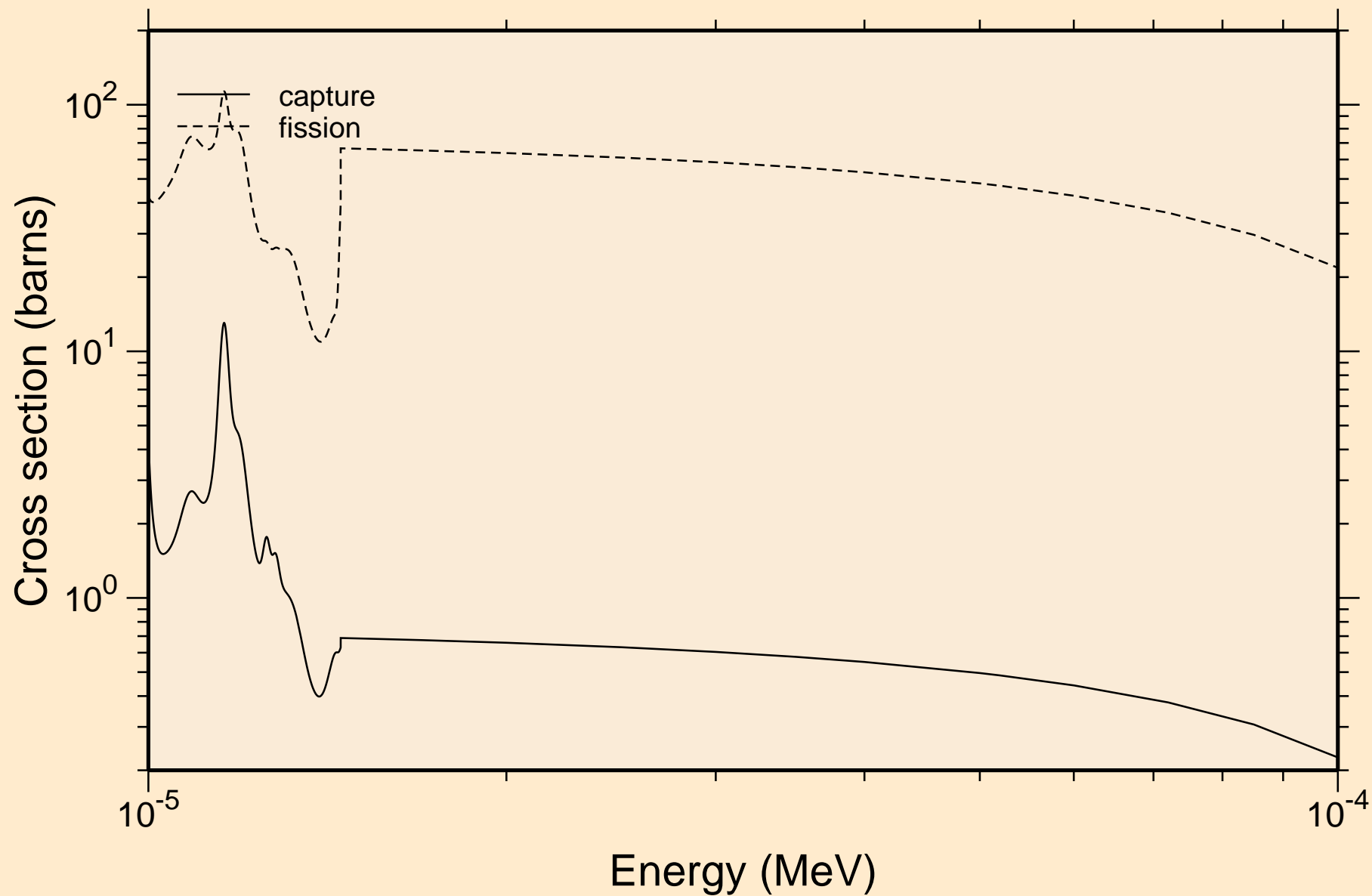
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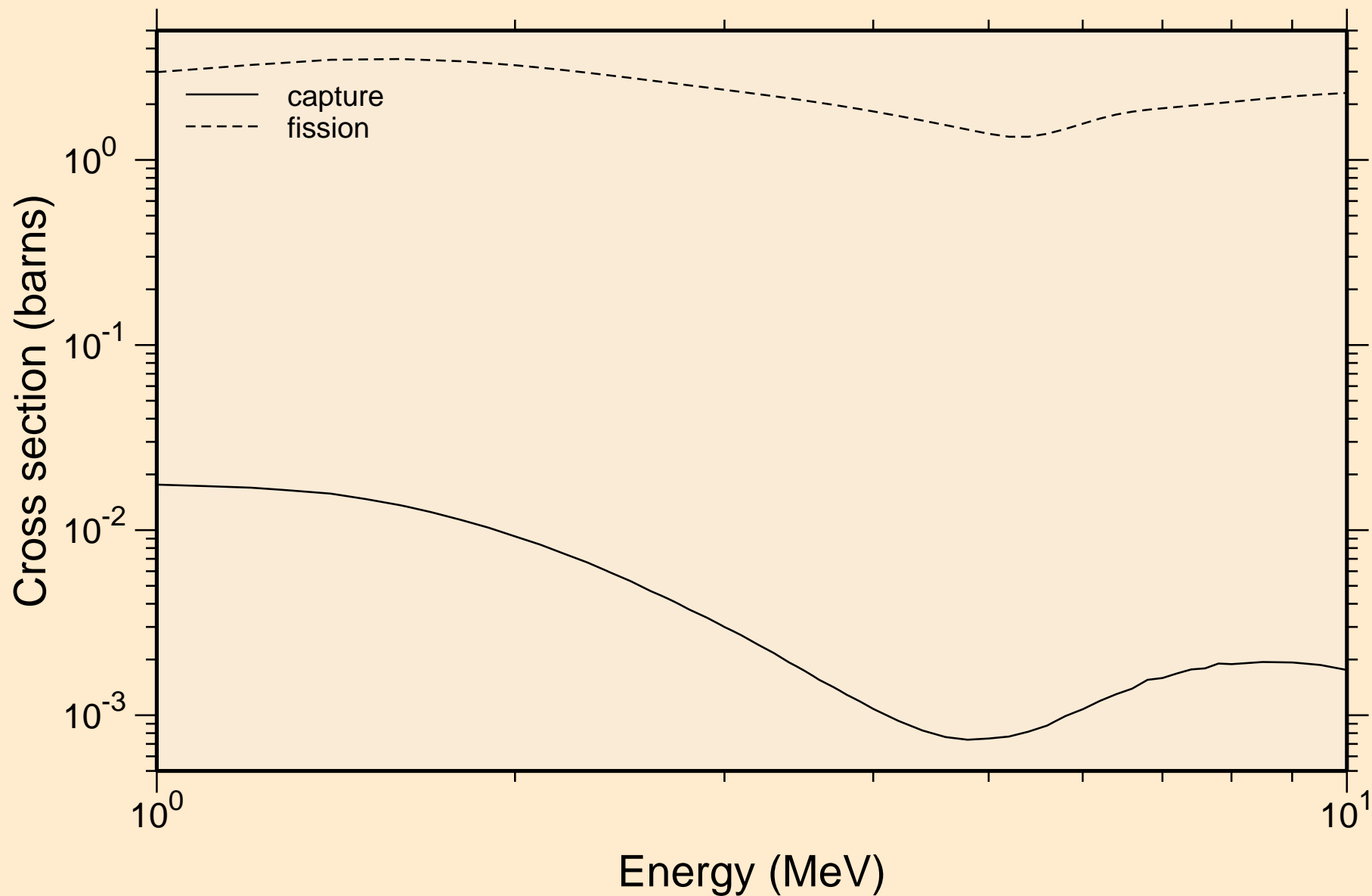
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
resonance absorption cross sections



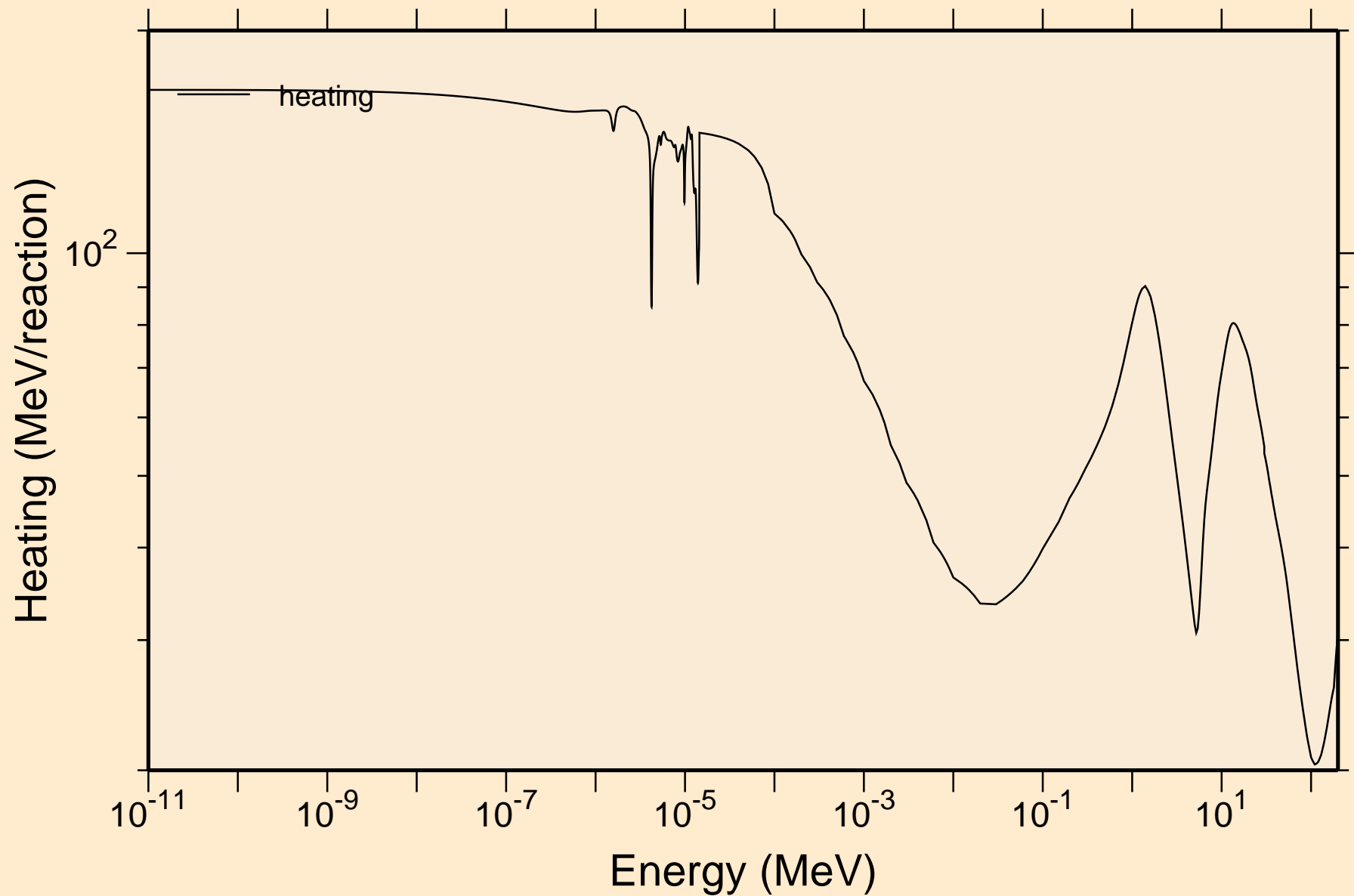
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resonance absorption cross sections



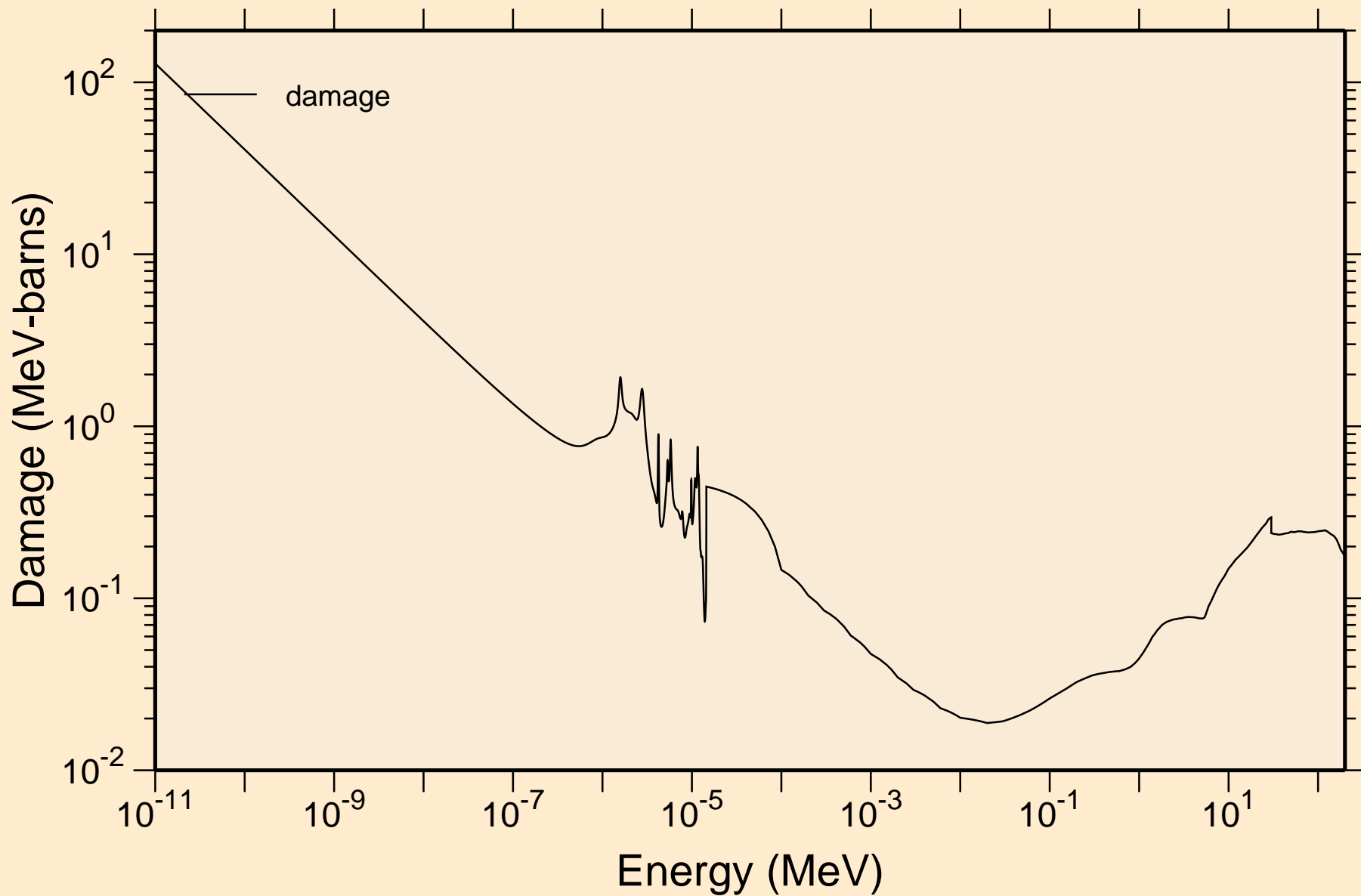
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resonance absorption cross sections



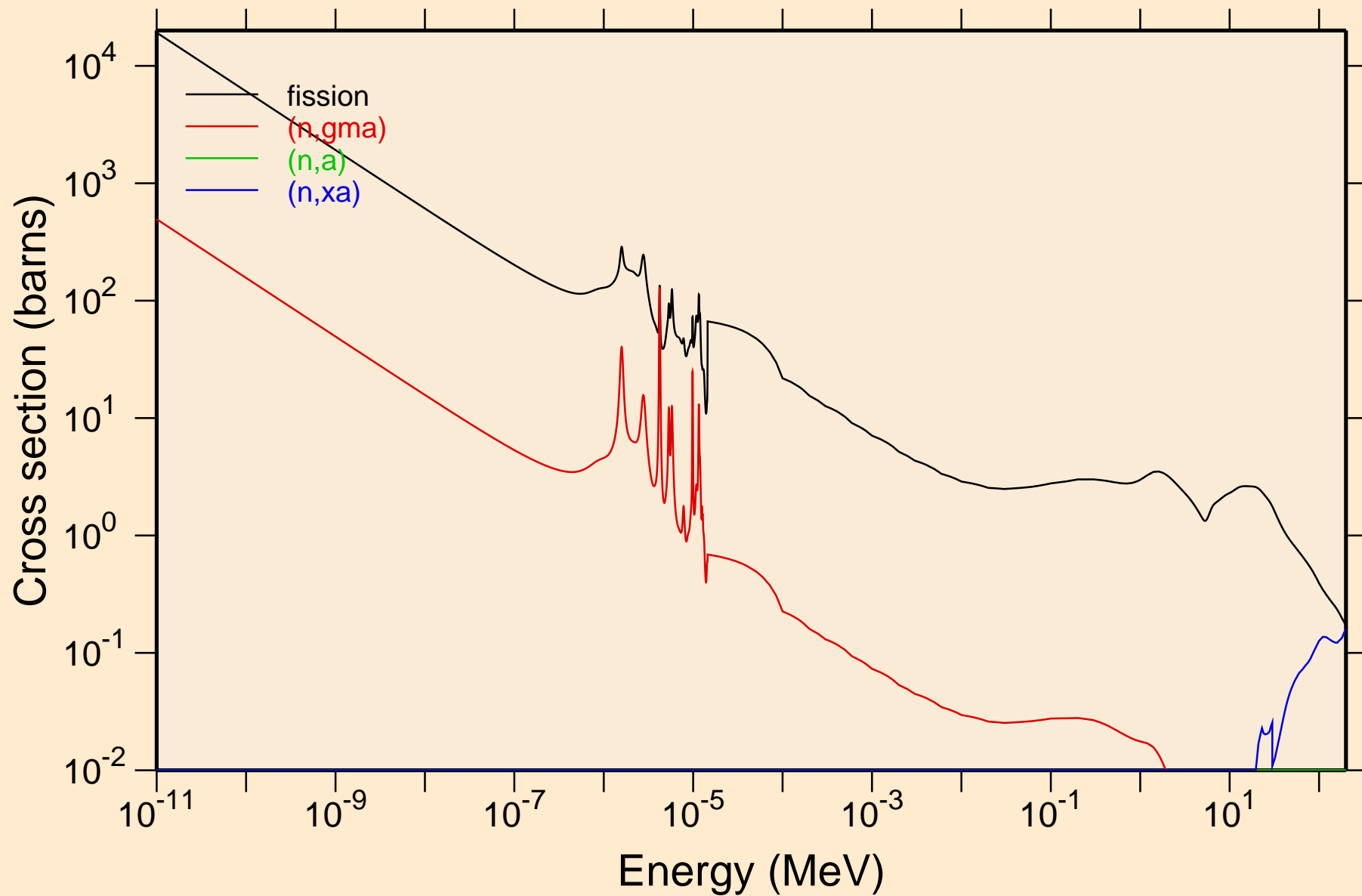
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Heating



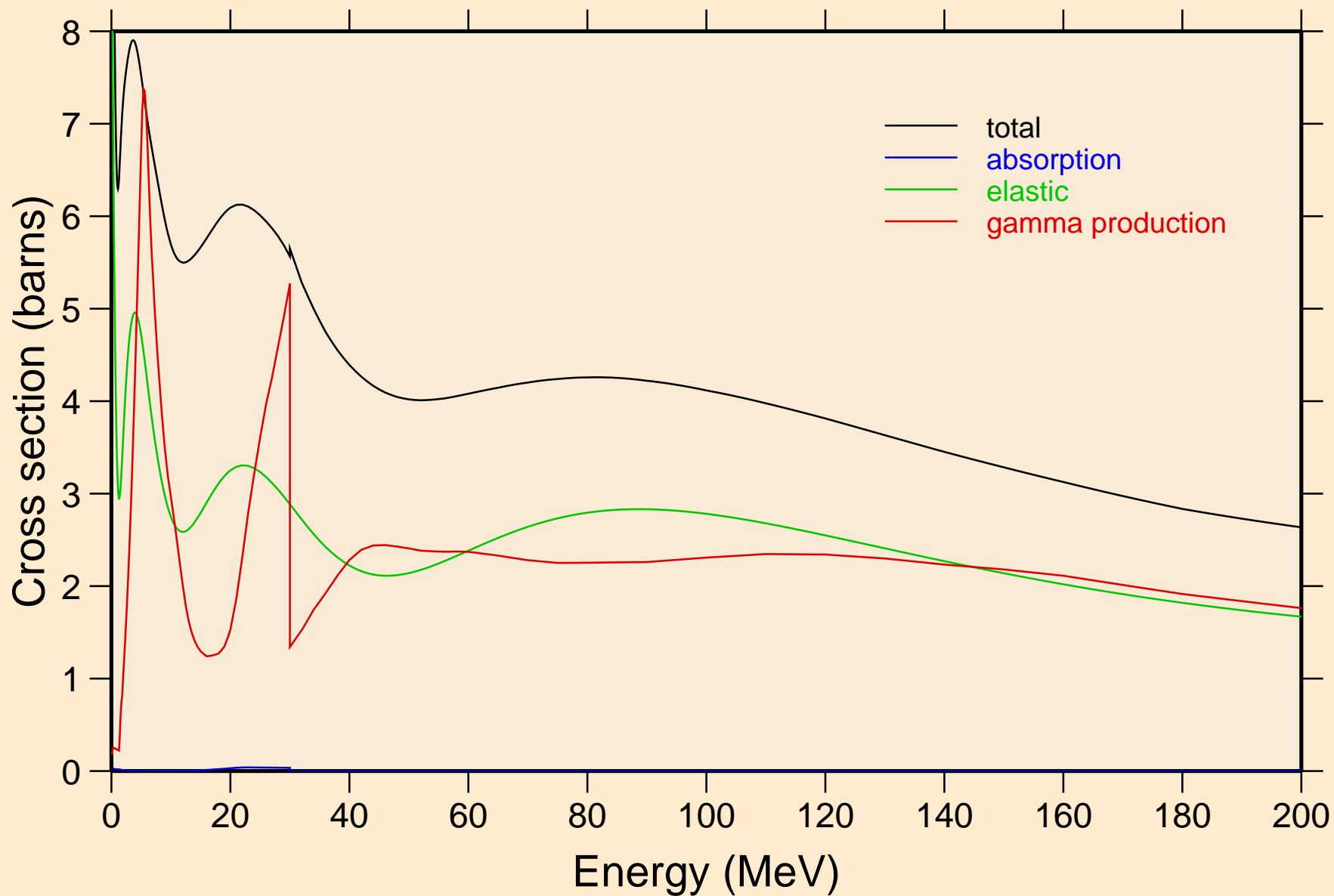
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Damage



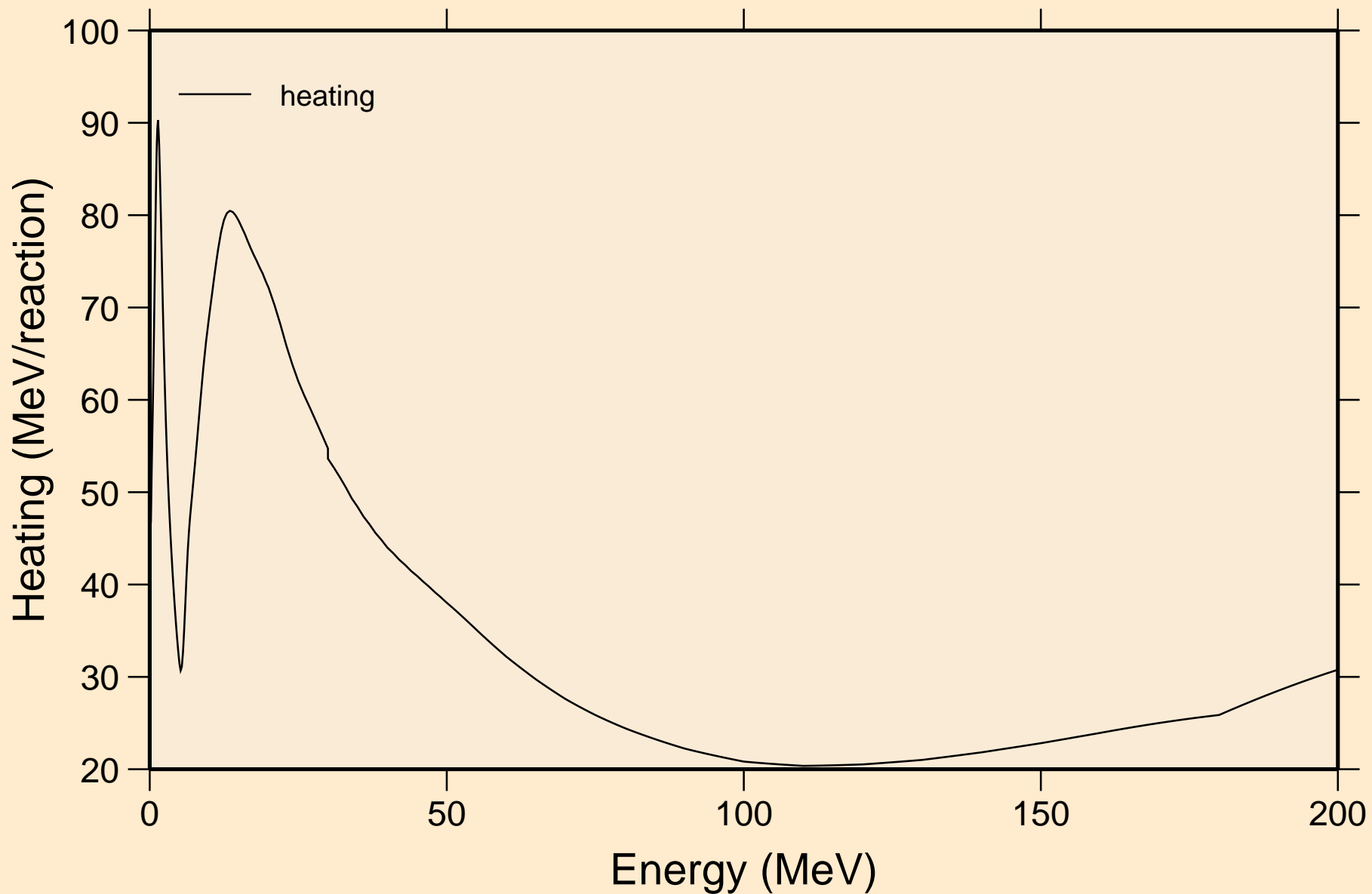
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Non-threshold reactions



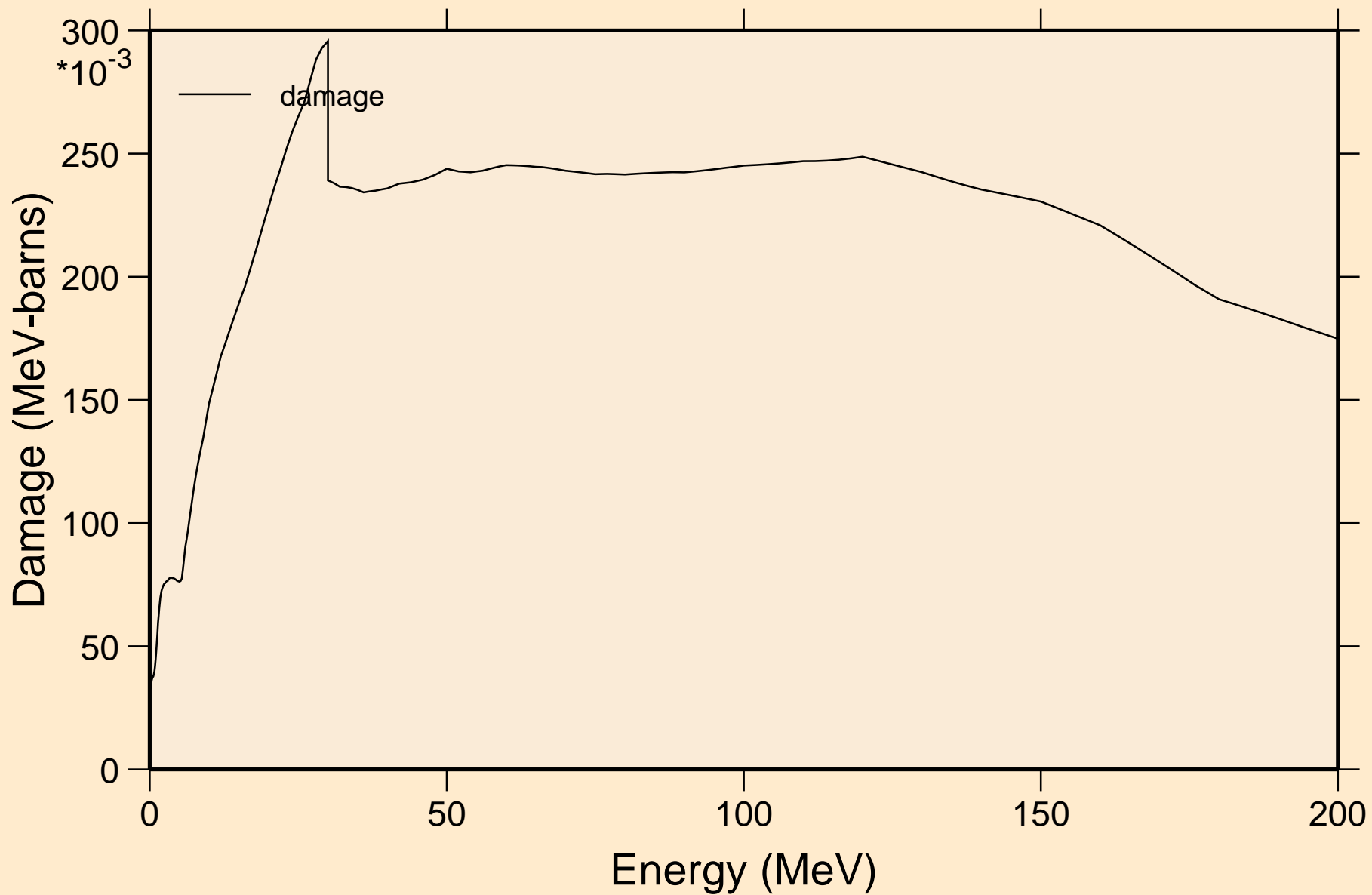
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Principal cross sections



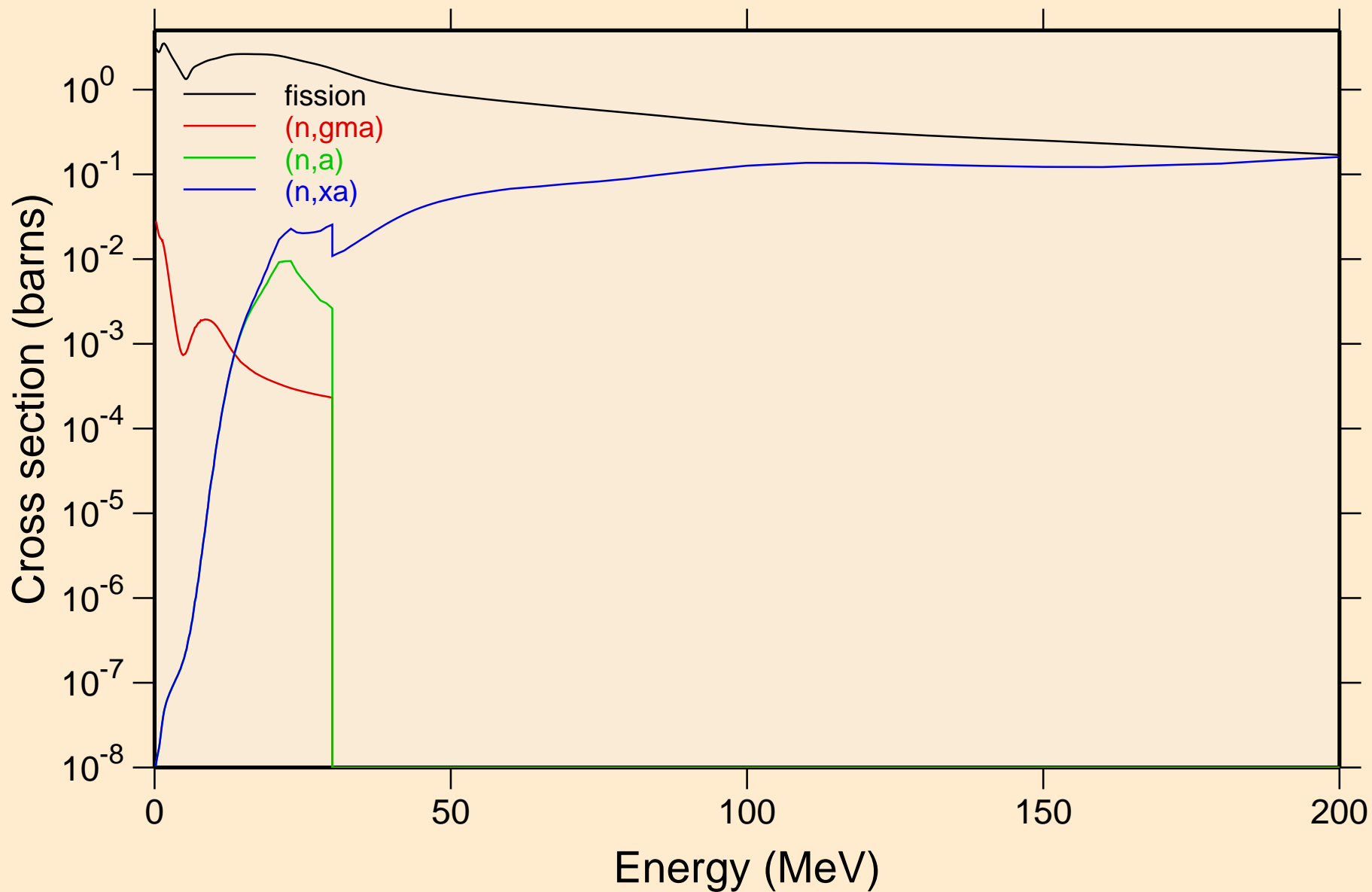
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Heating



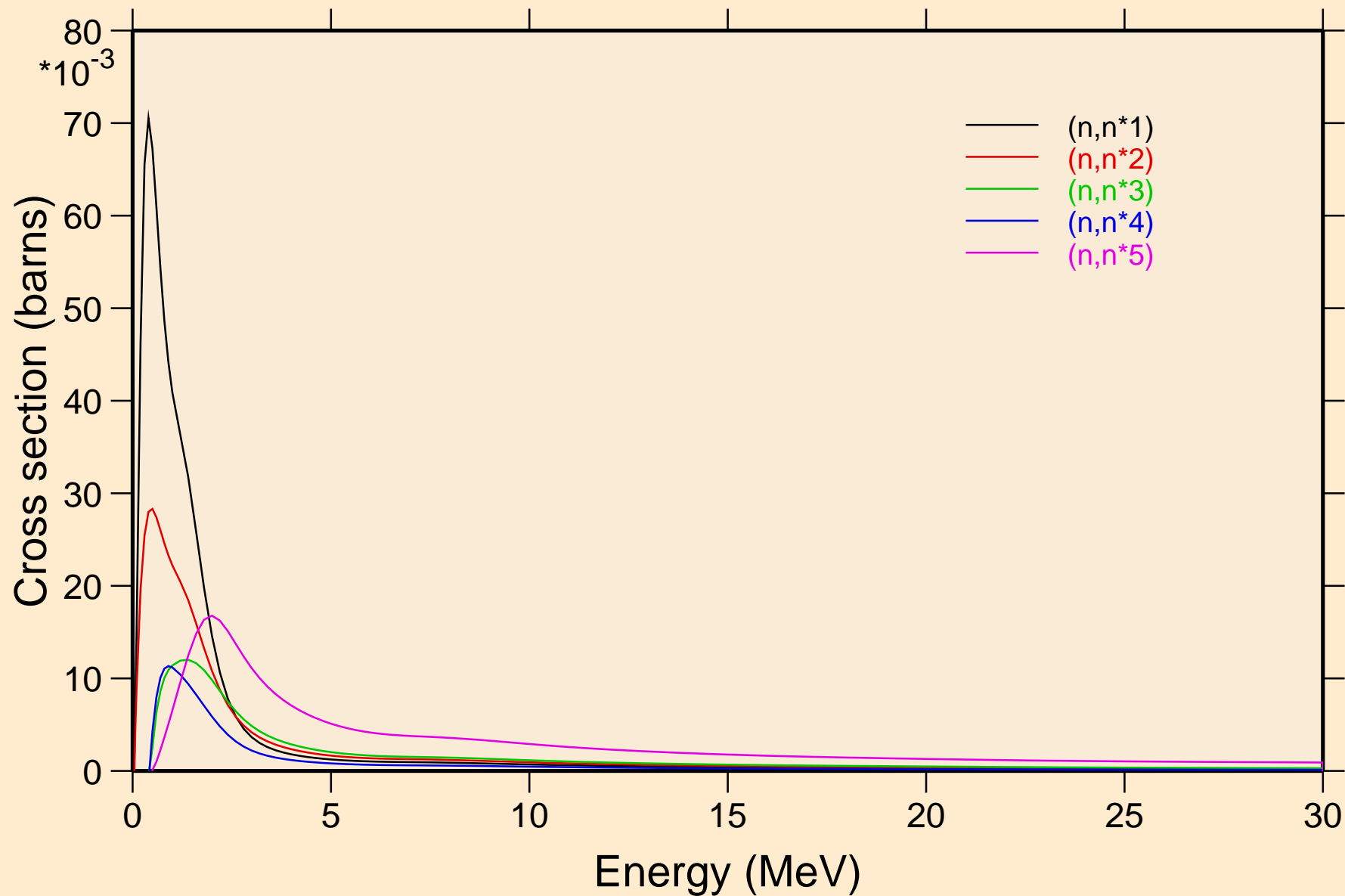
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Damage



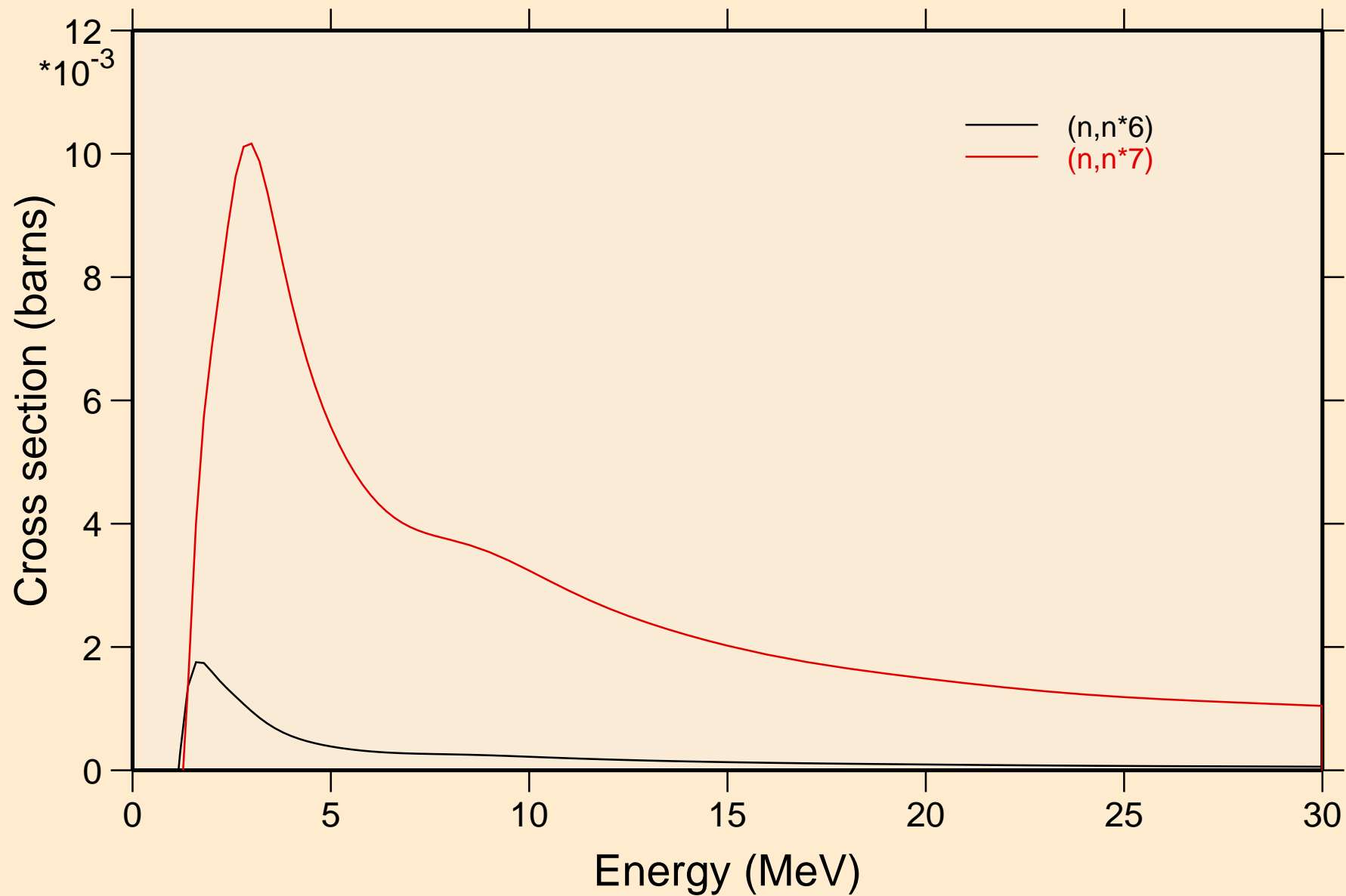
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Non-threshold reactions



U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Inelastic levels

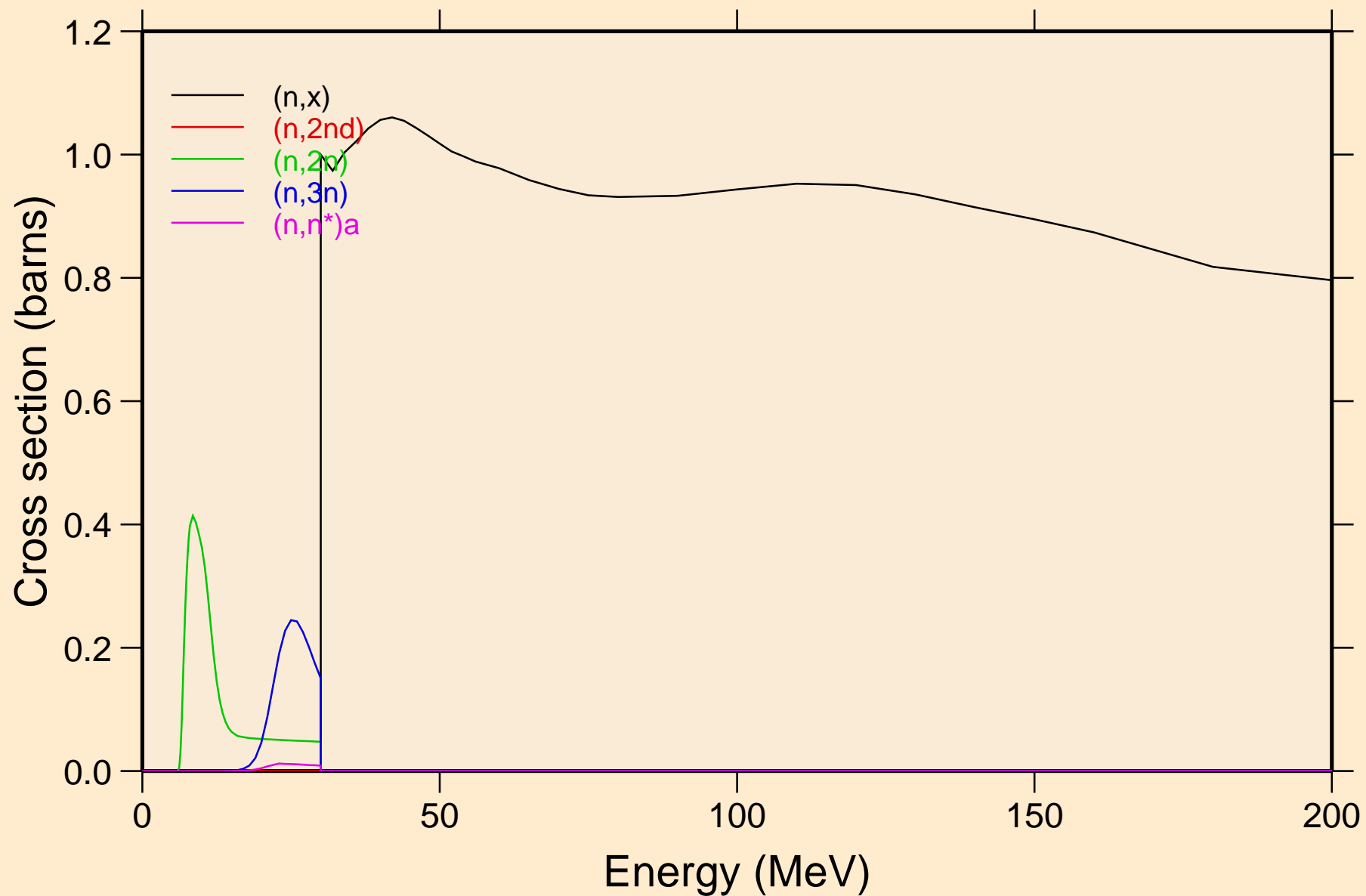


U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Inelastic levels

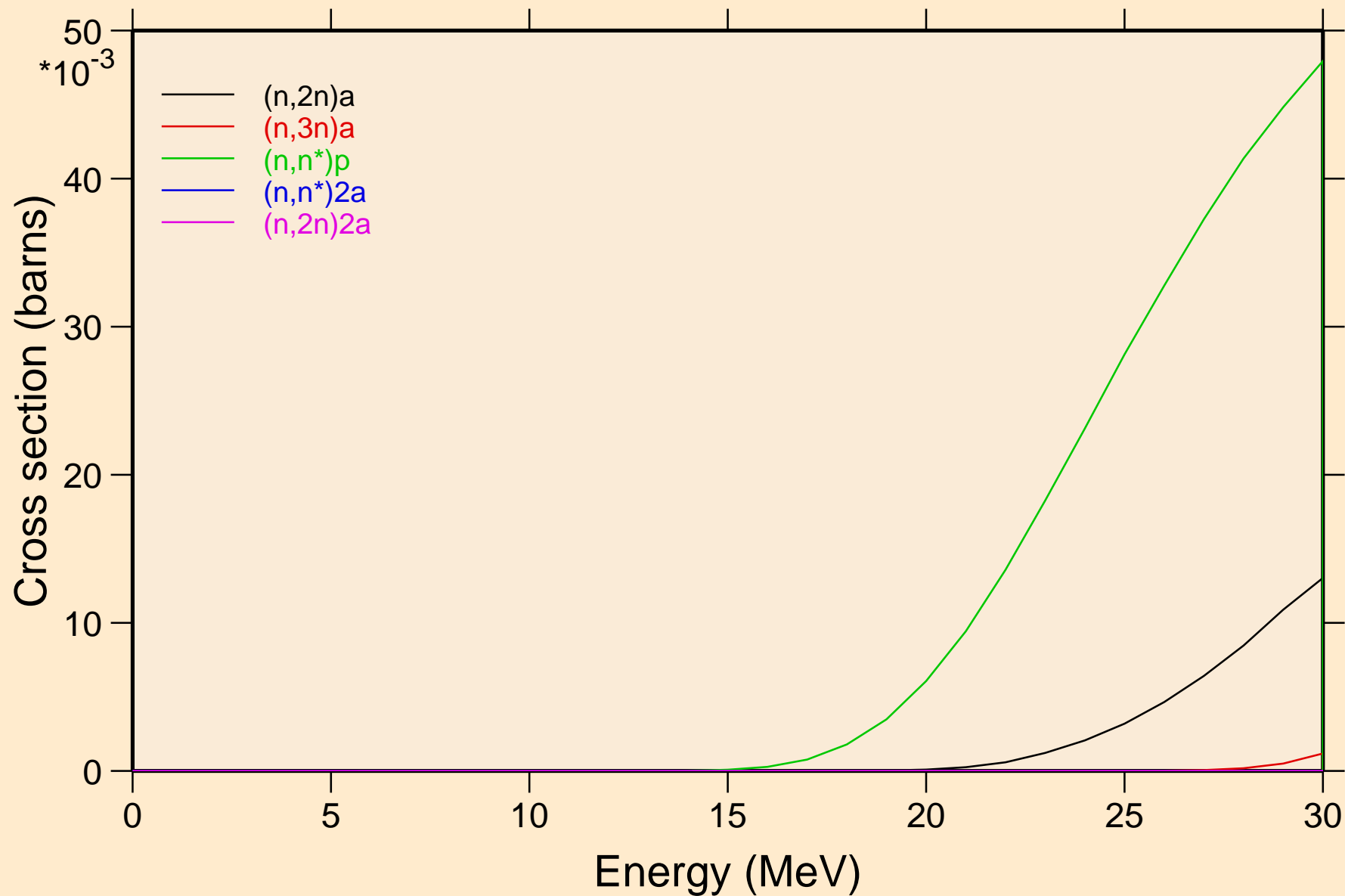


# U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K

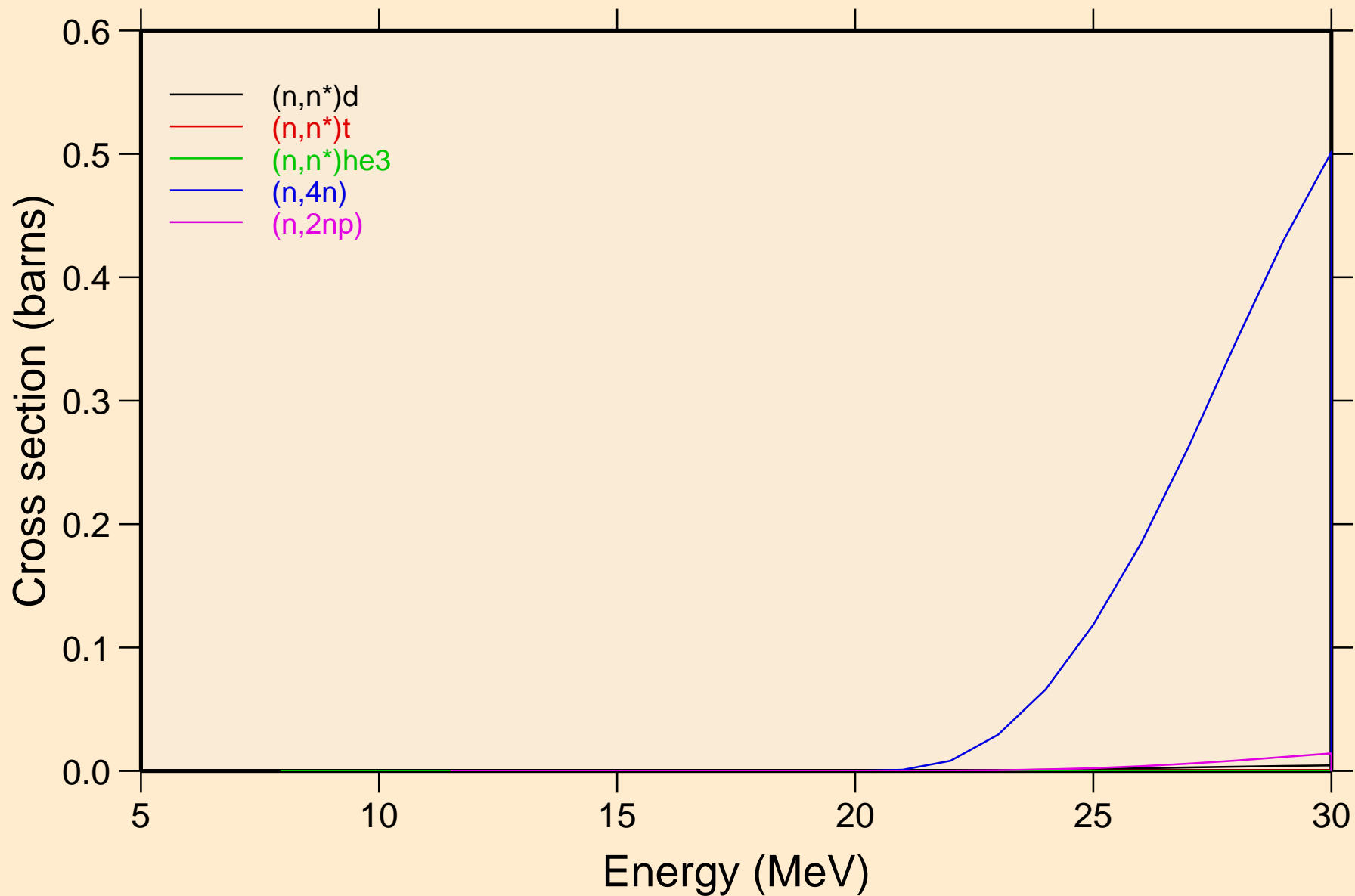
## Threshold reactions



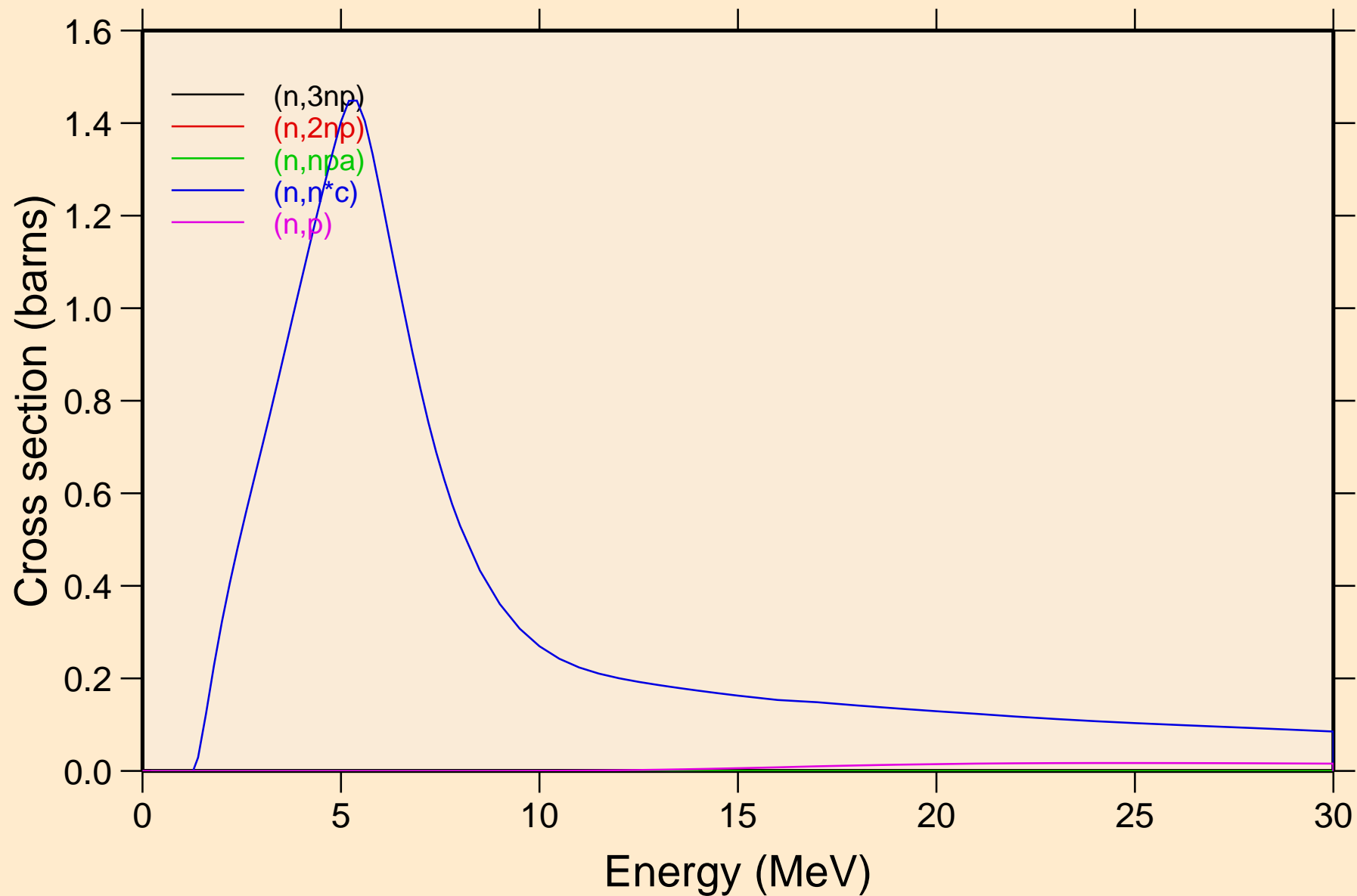
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Threshold reactions



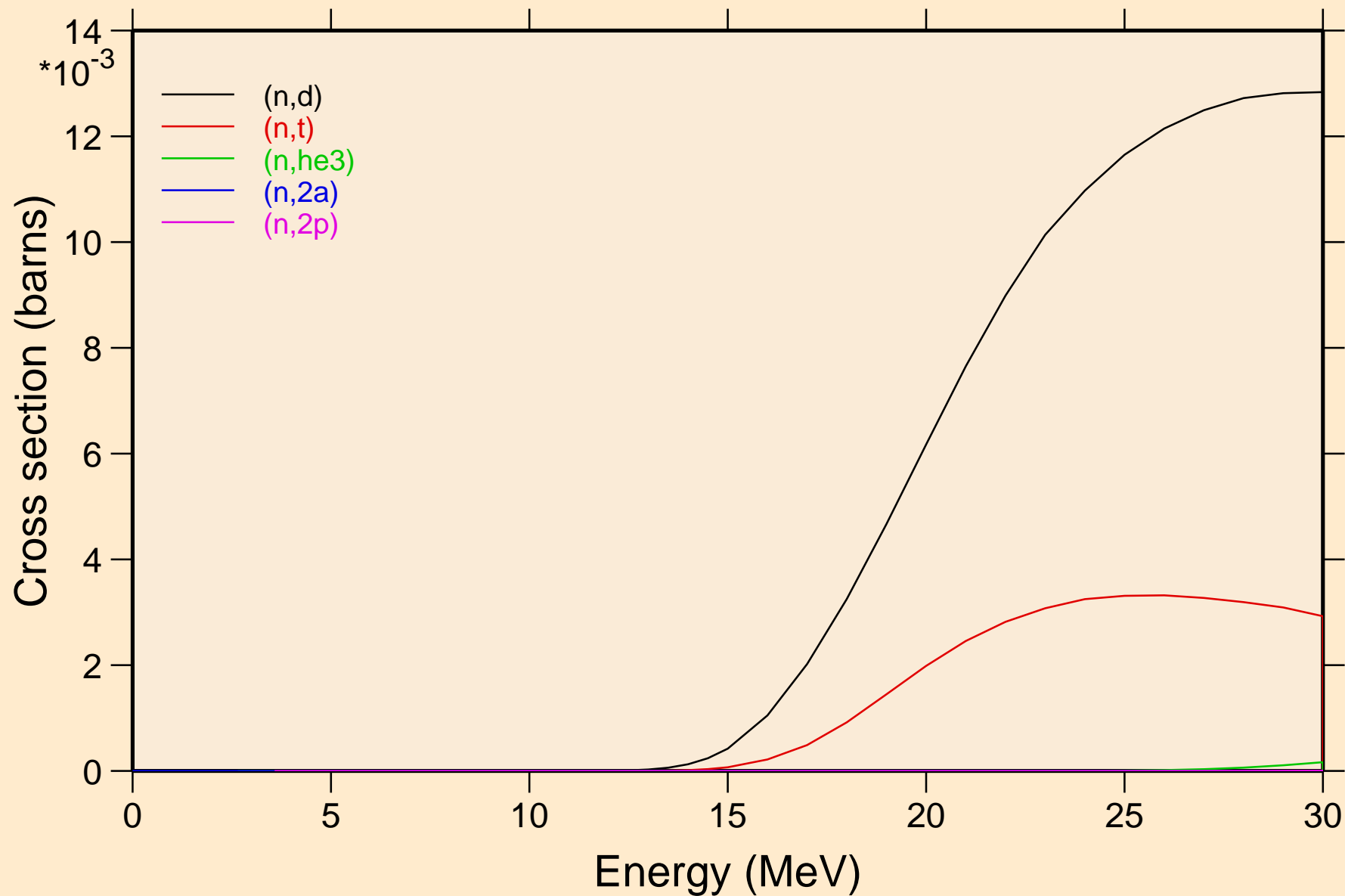
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Threshold reactions



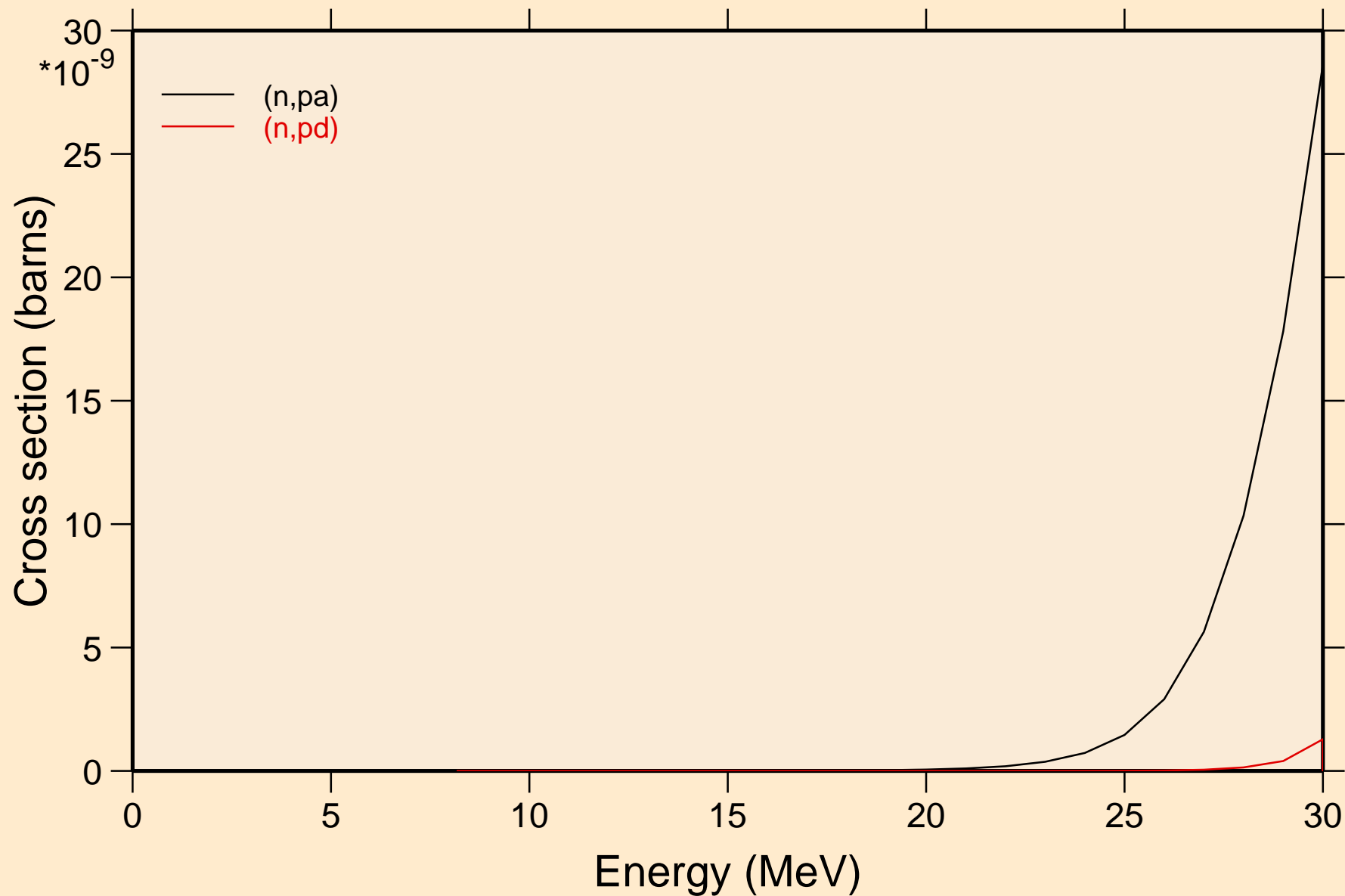
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Threshold reactions



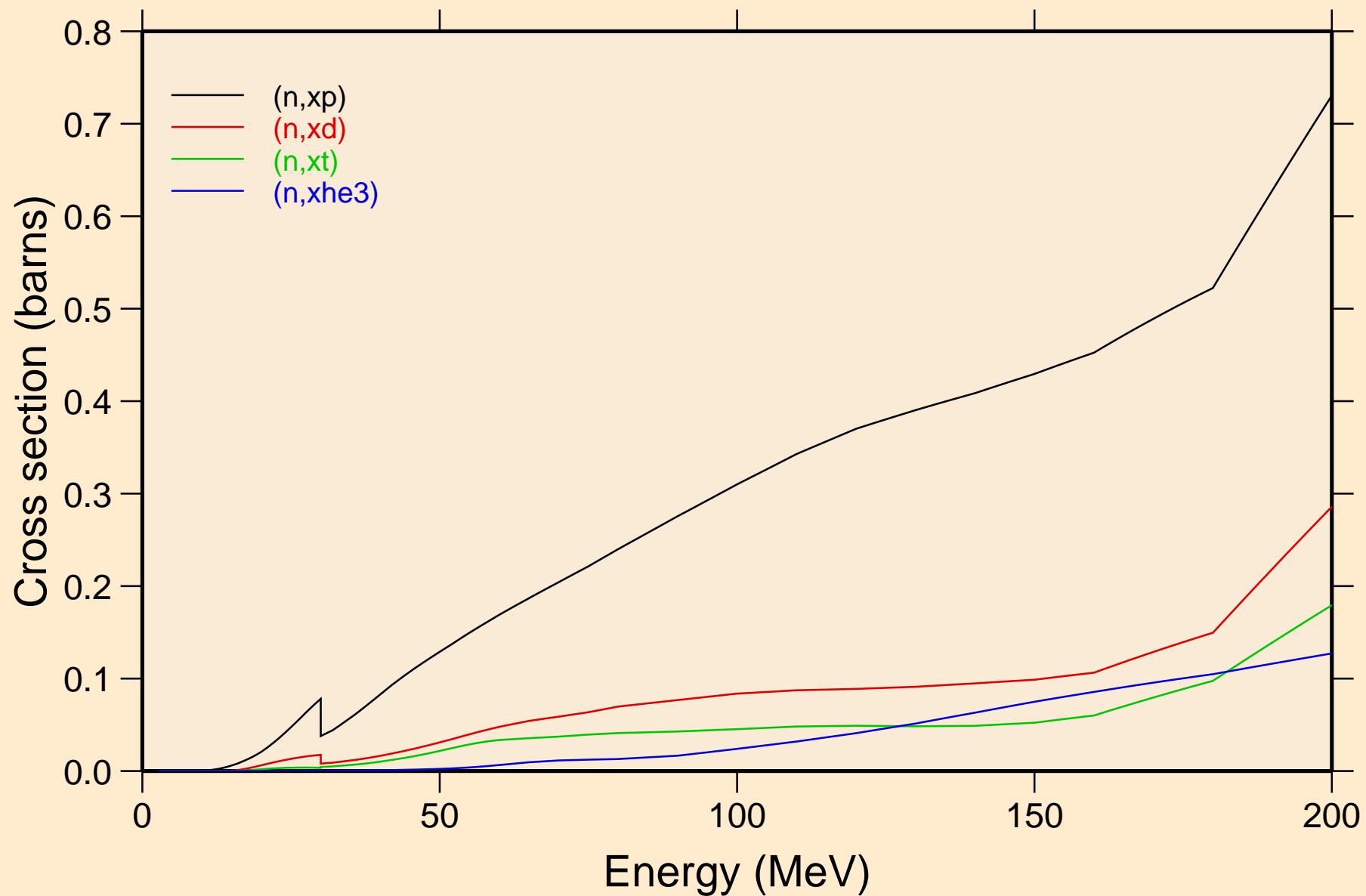
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Threshold reactions



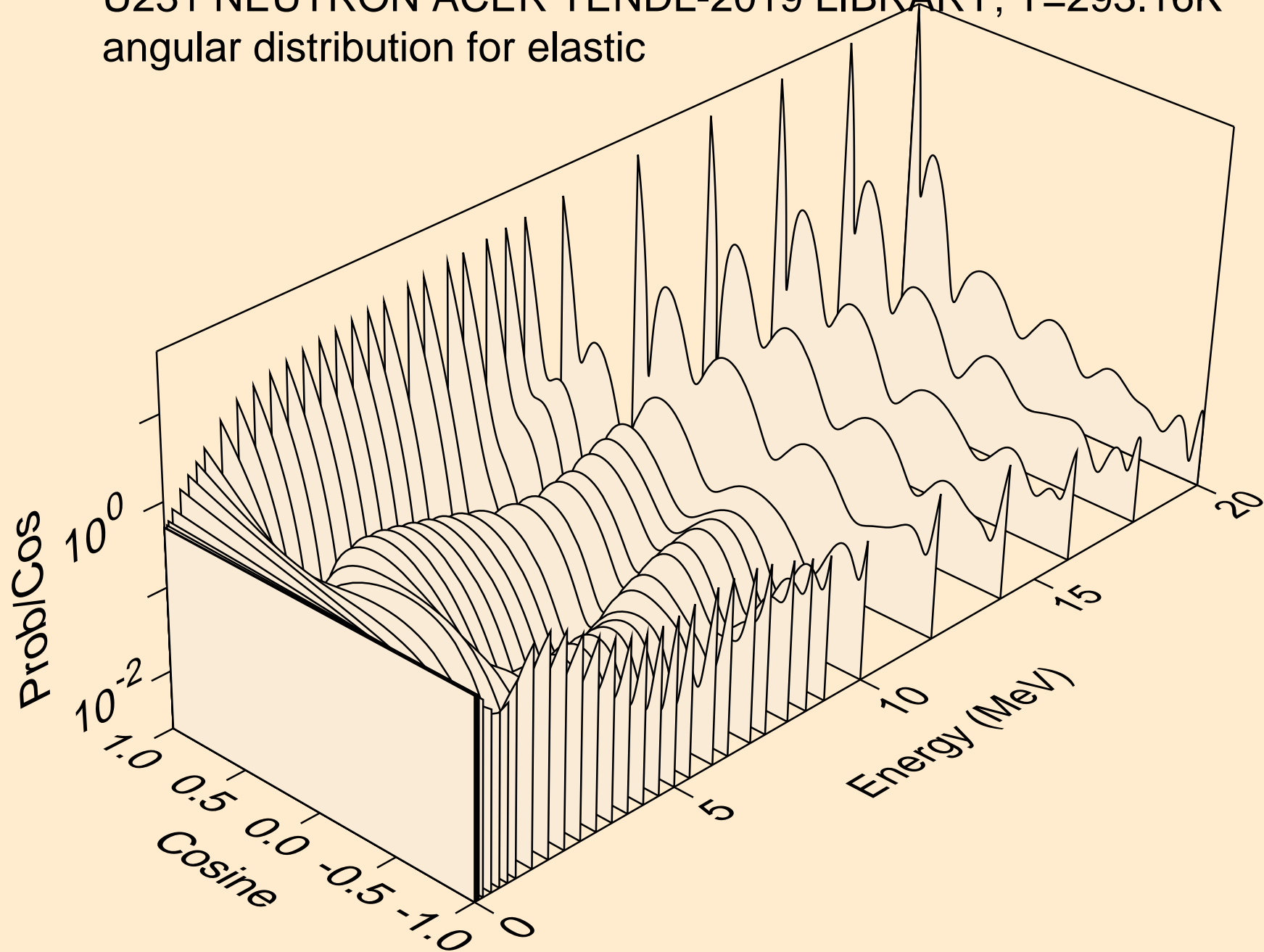
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Threshold reactions



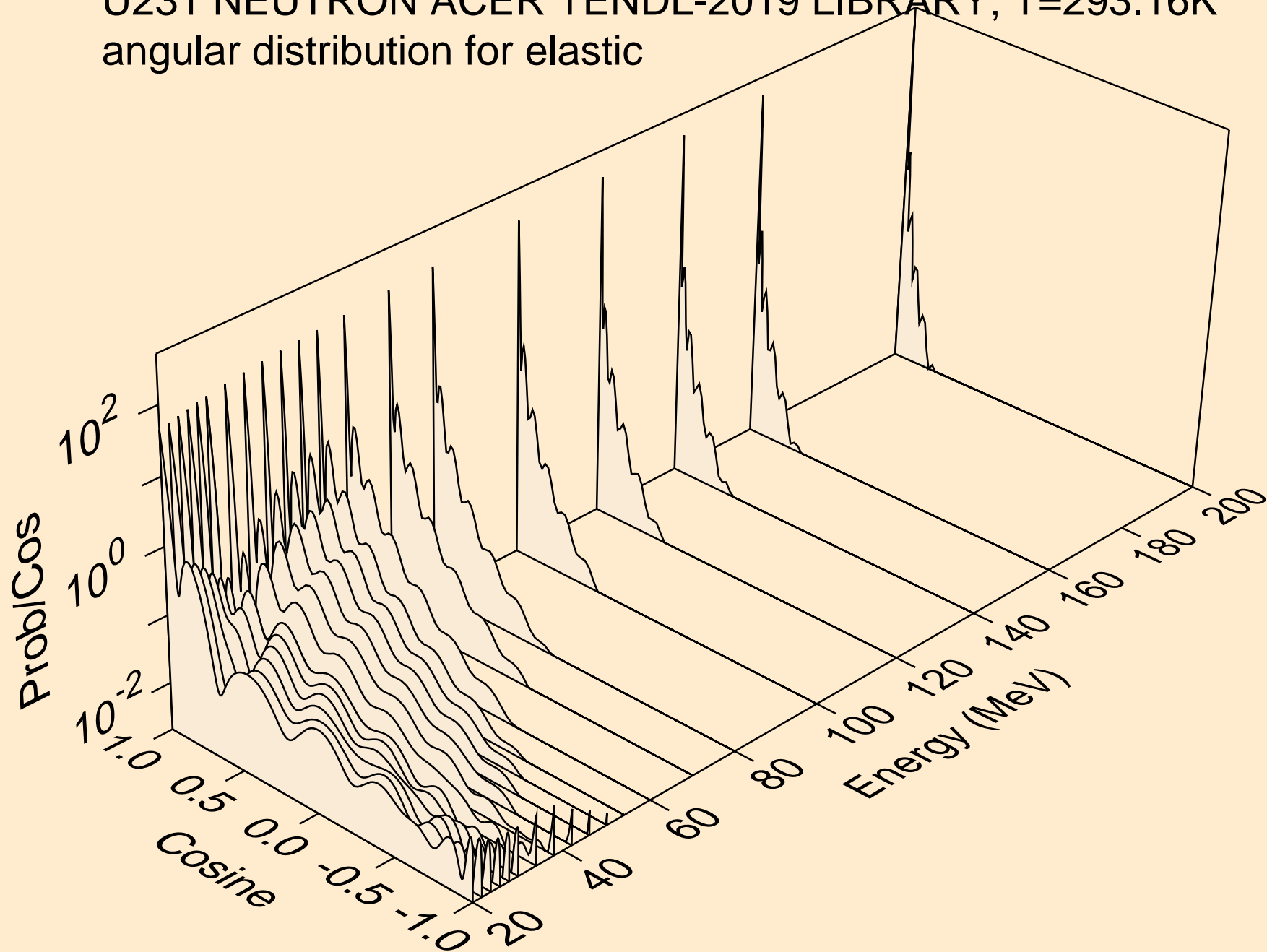
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Threshold reactions



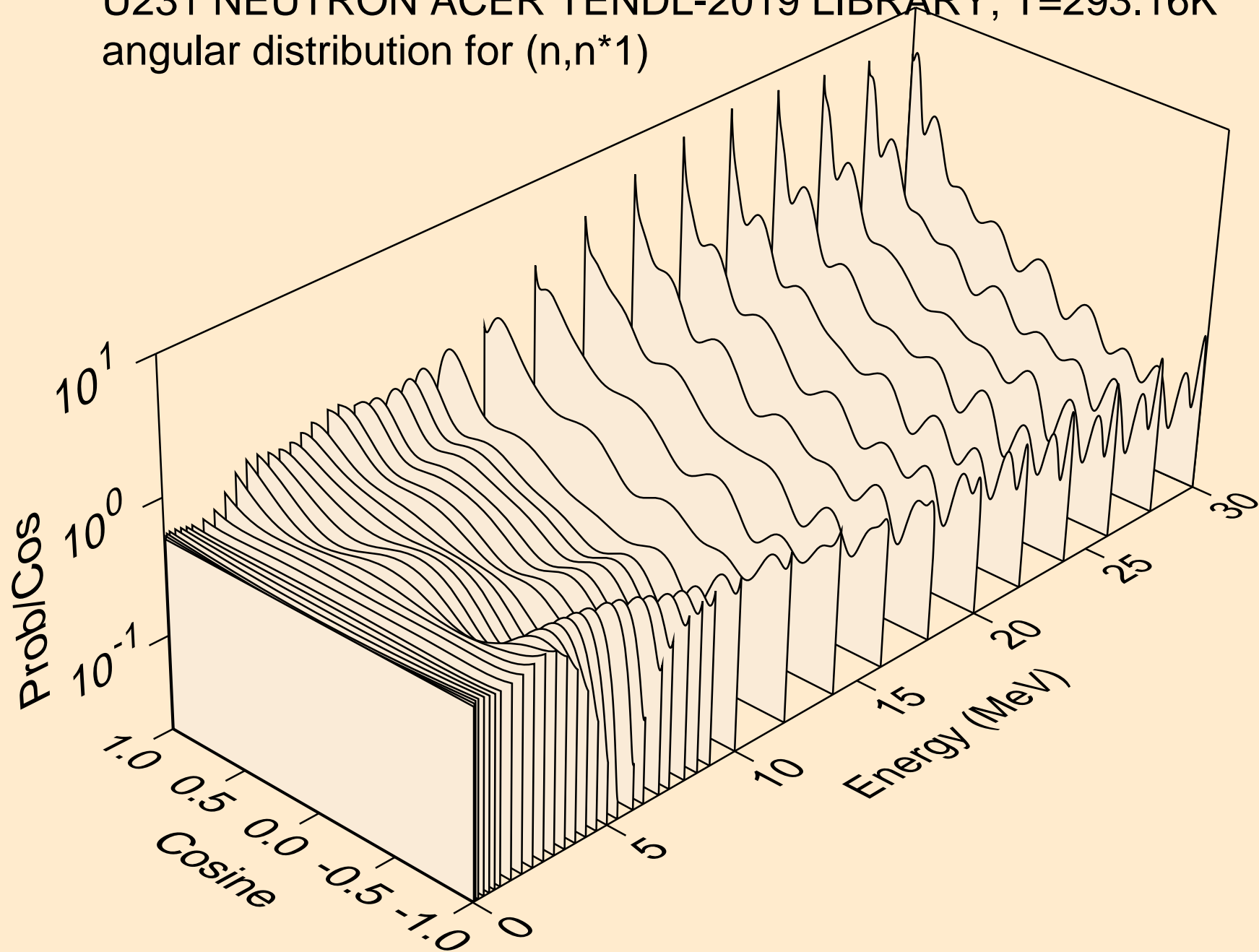
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angular distribution for elastic



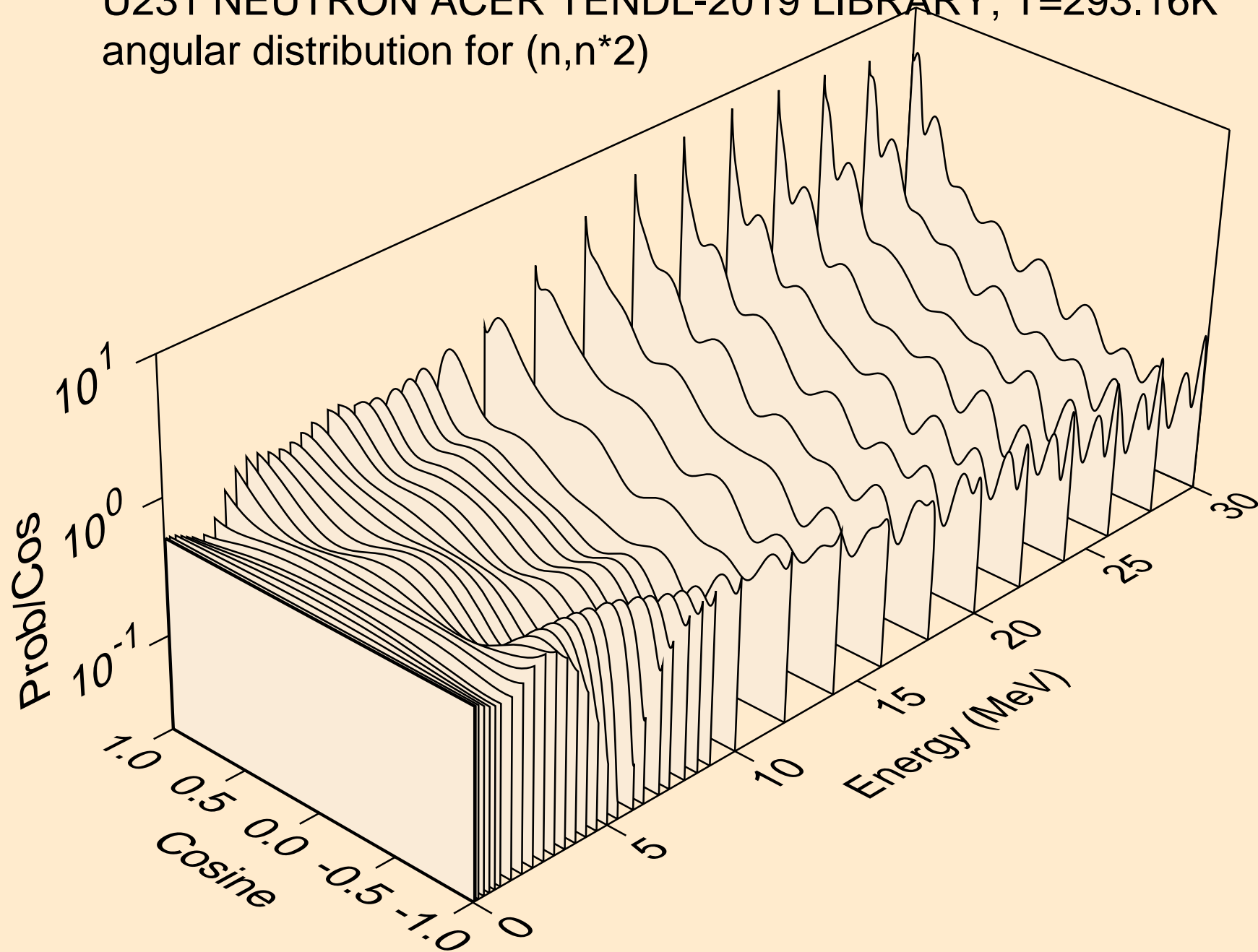
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angular distribution for elastic



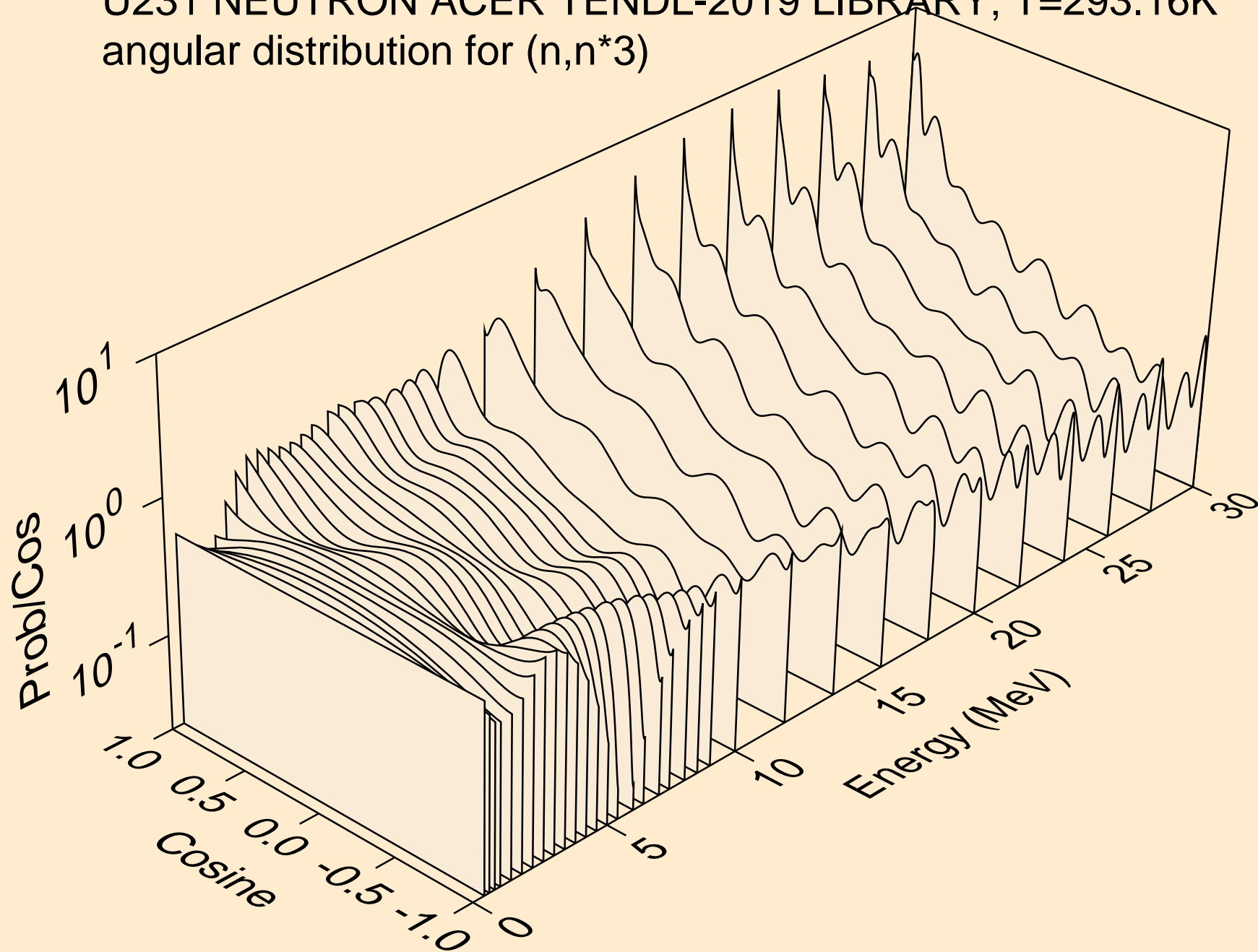
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angular distribution for (n,n\*1)



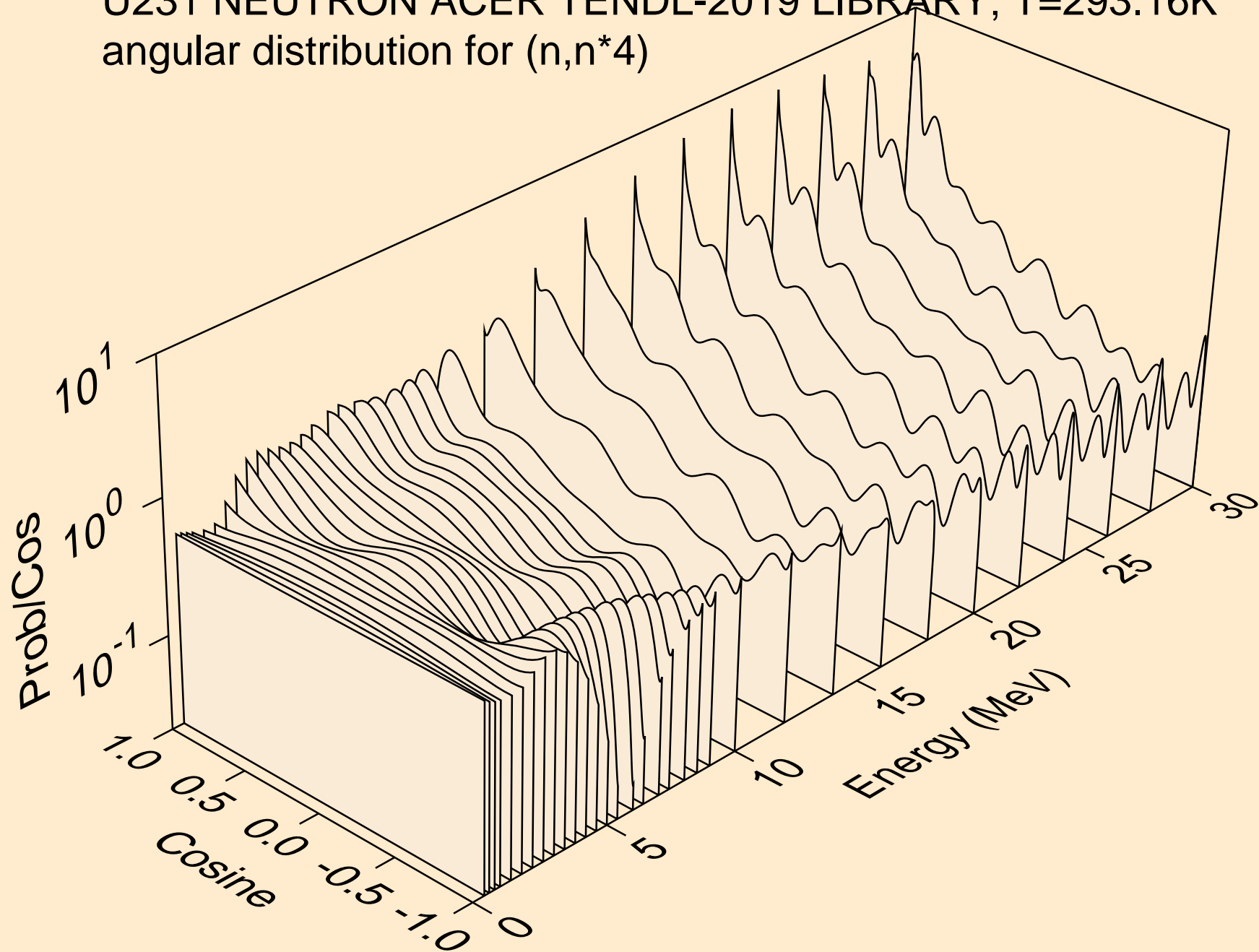
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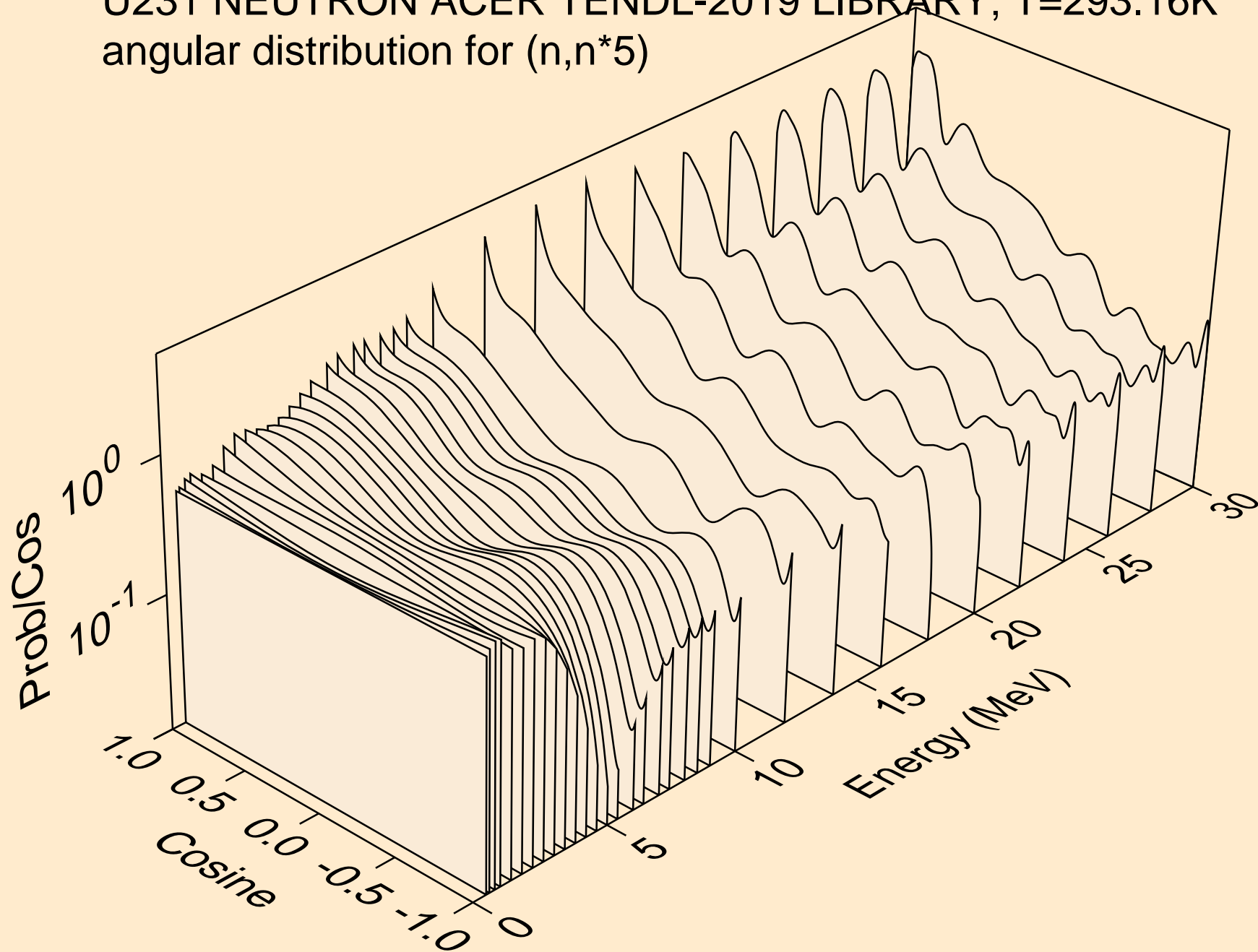
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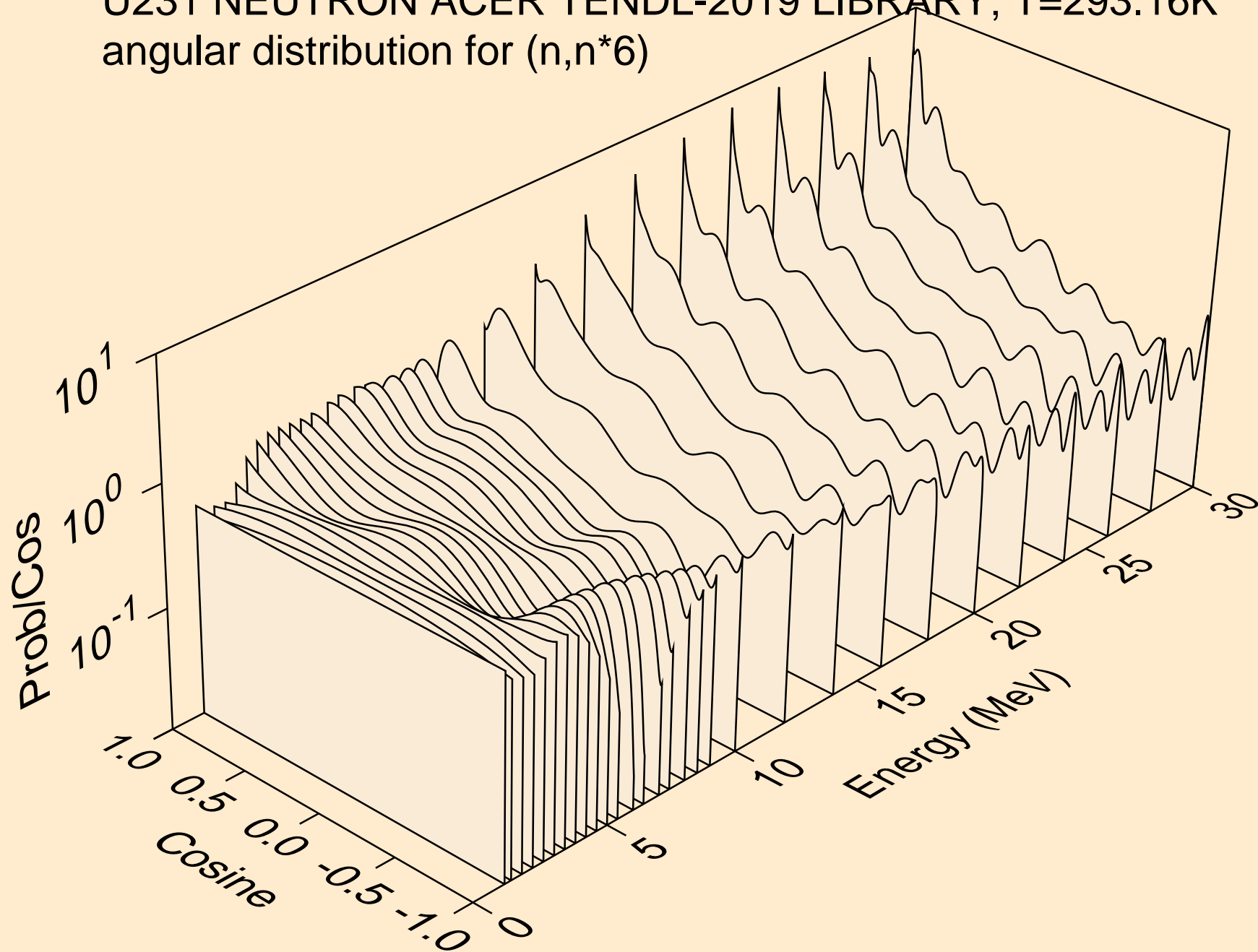
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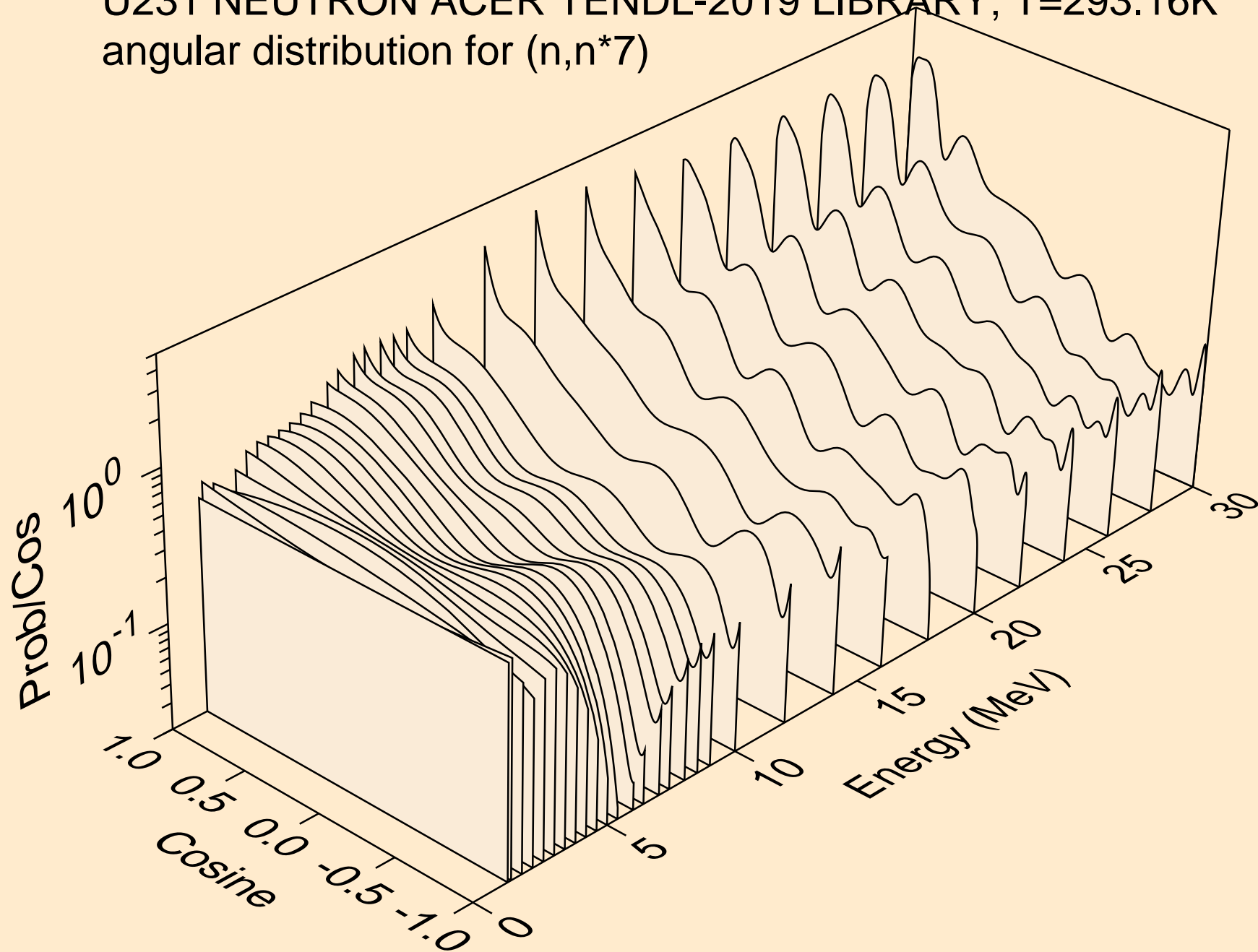
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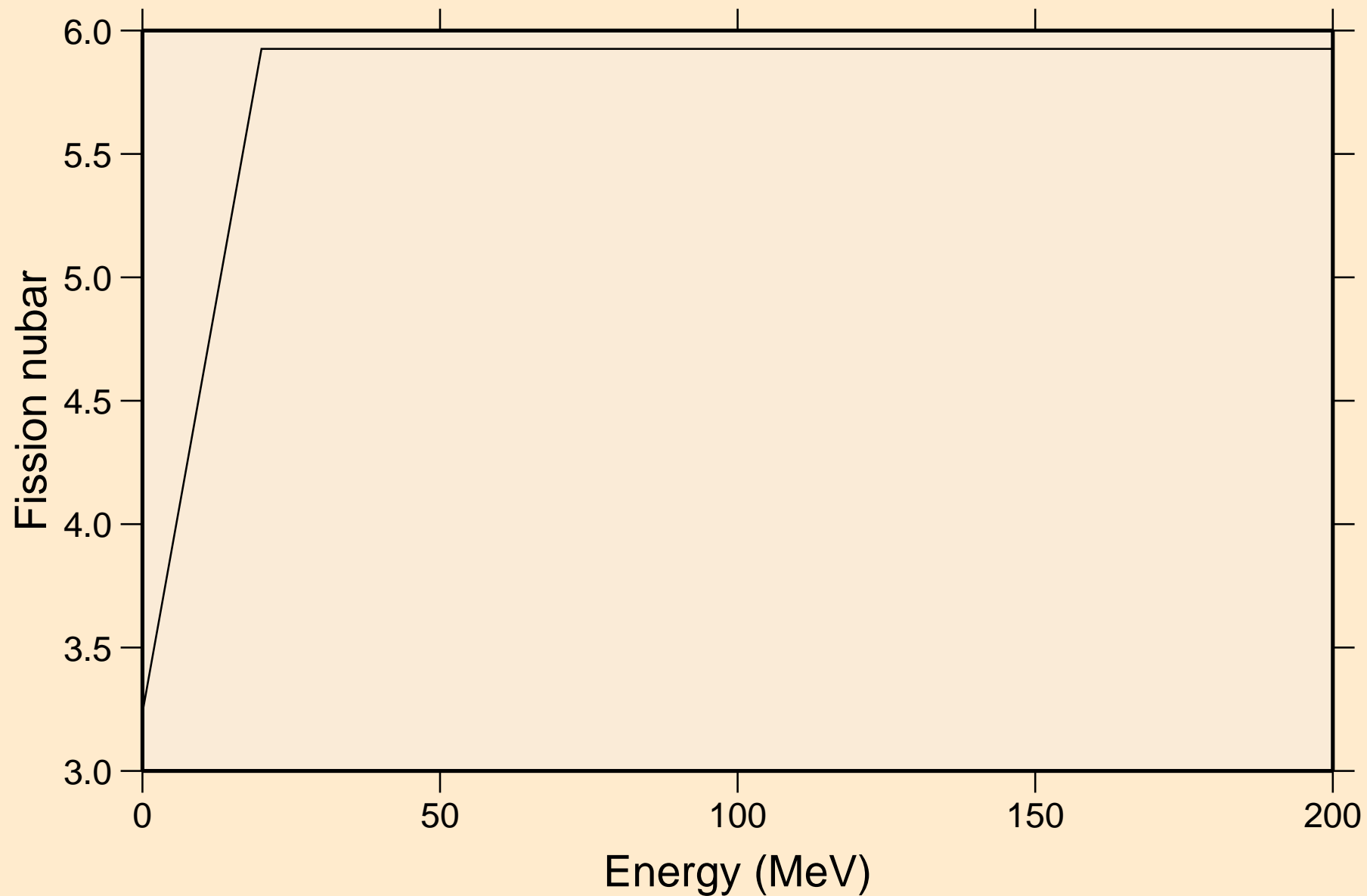
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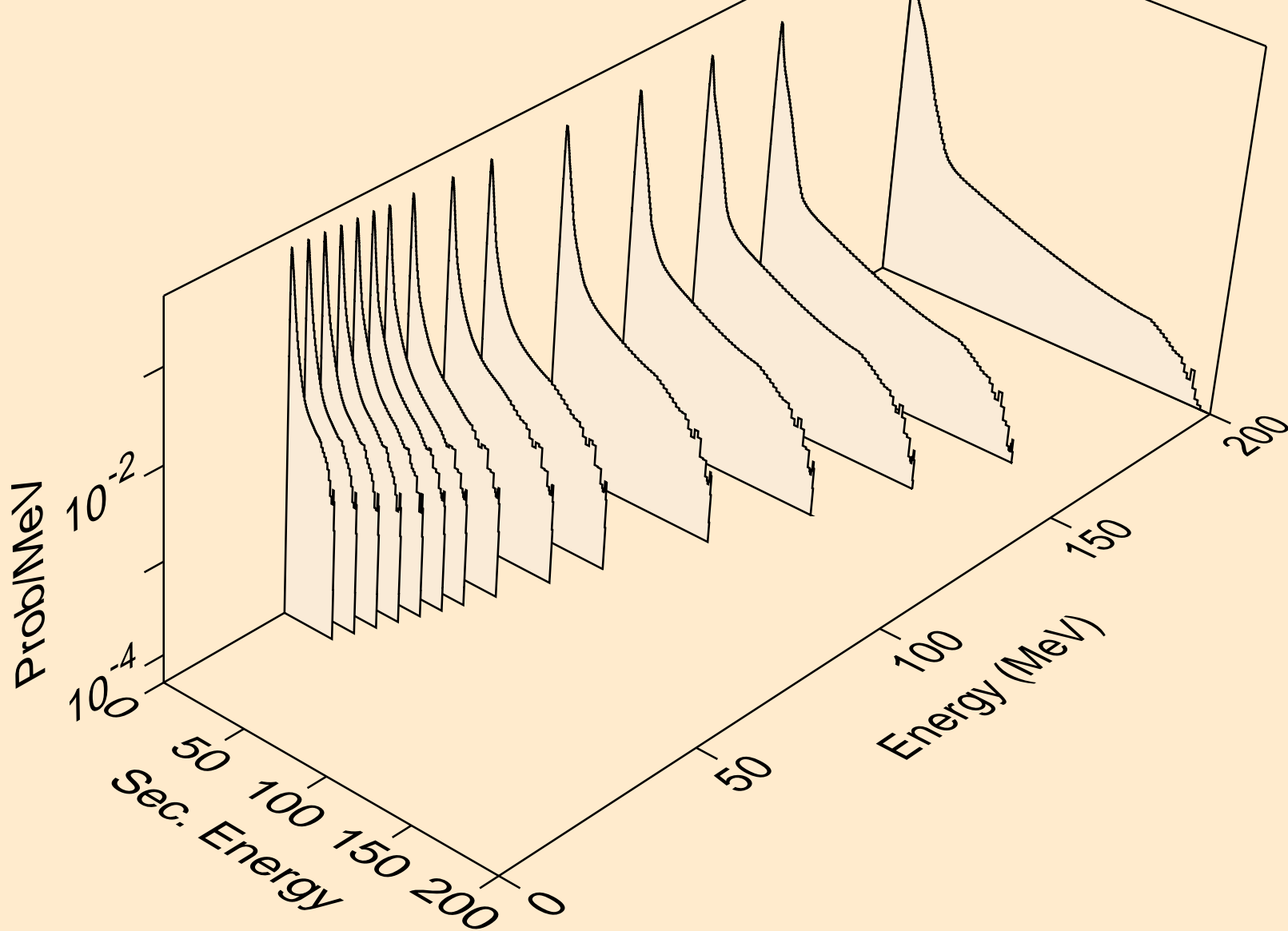
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angular distribution for (n,n\*7)



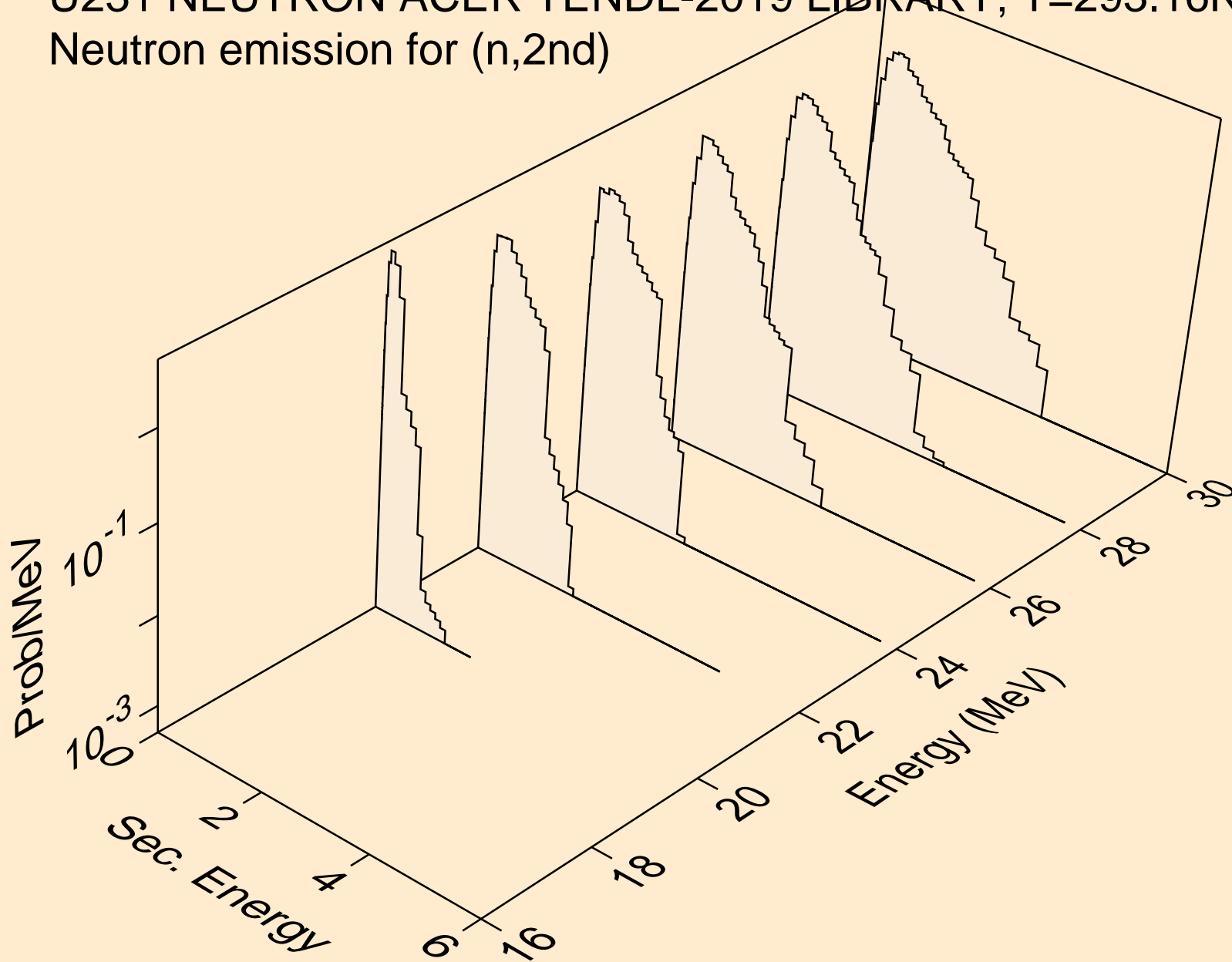
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Total fission nubar



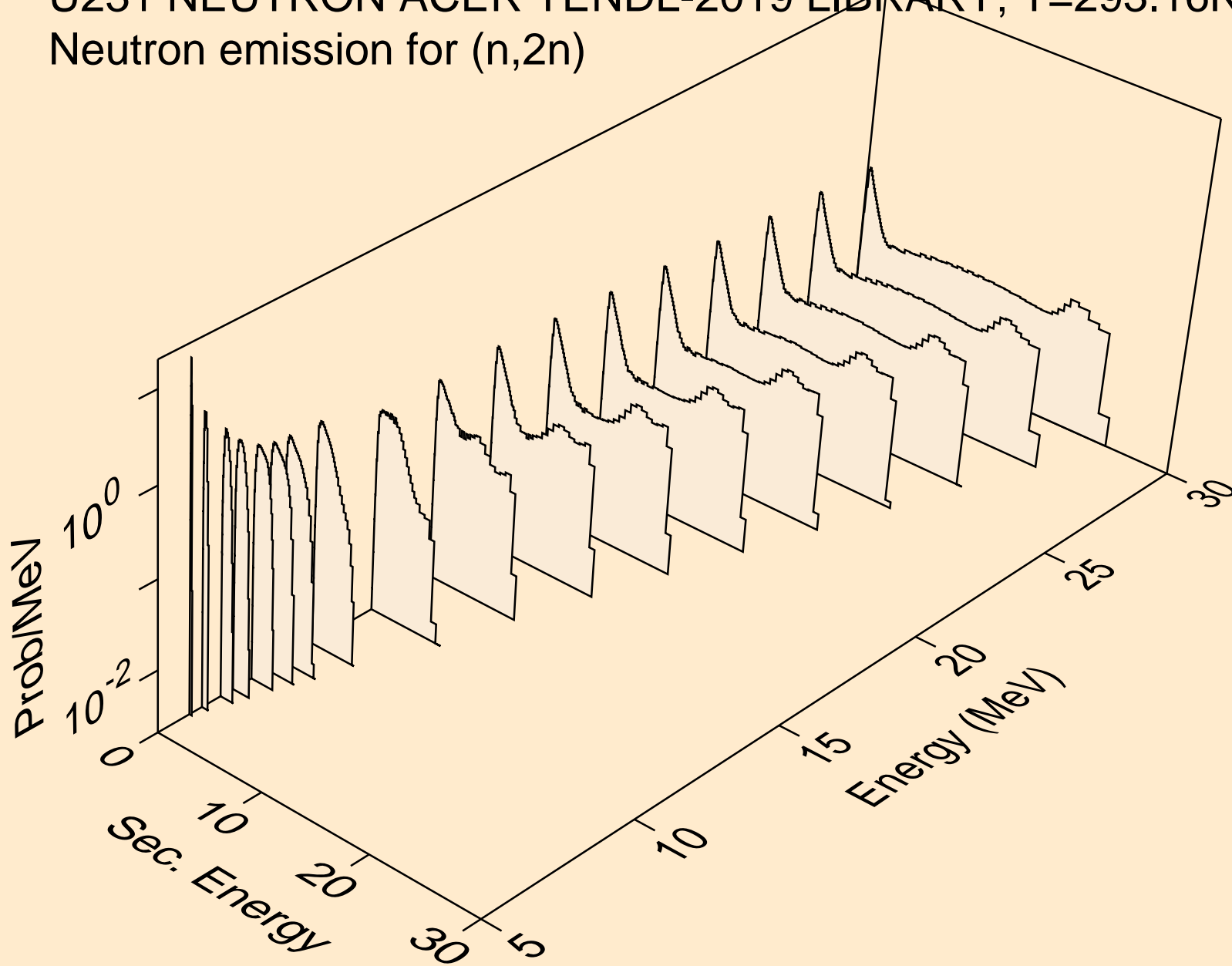
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Neutron emission for (n,x)



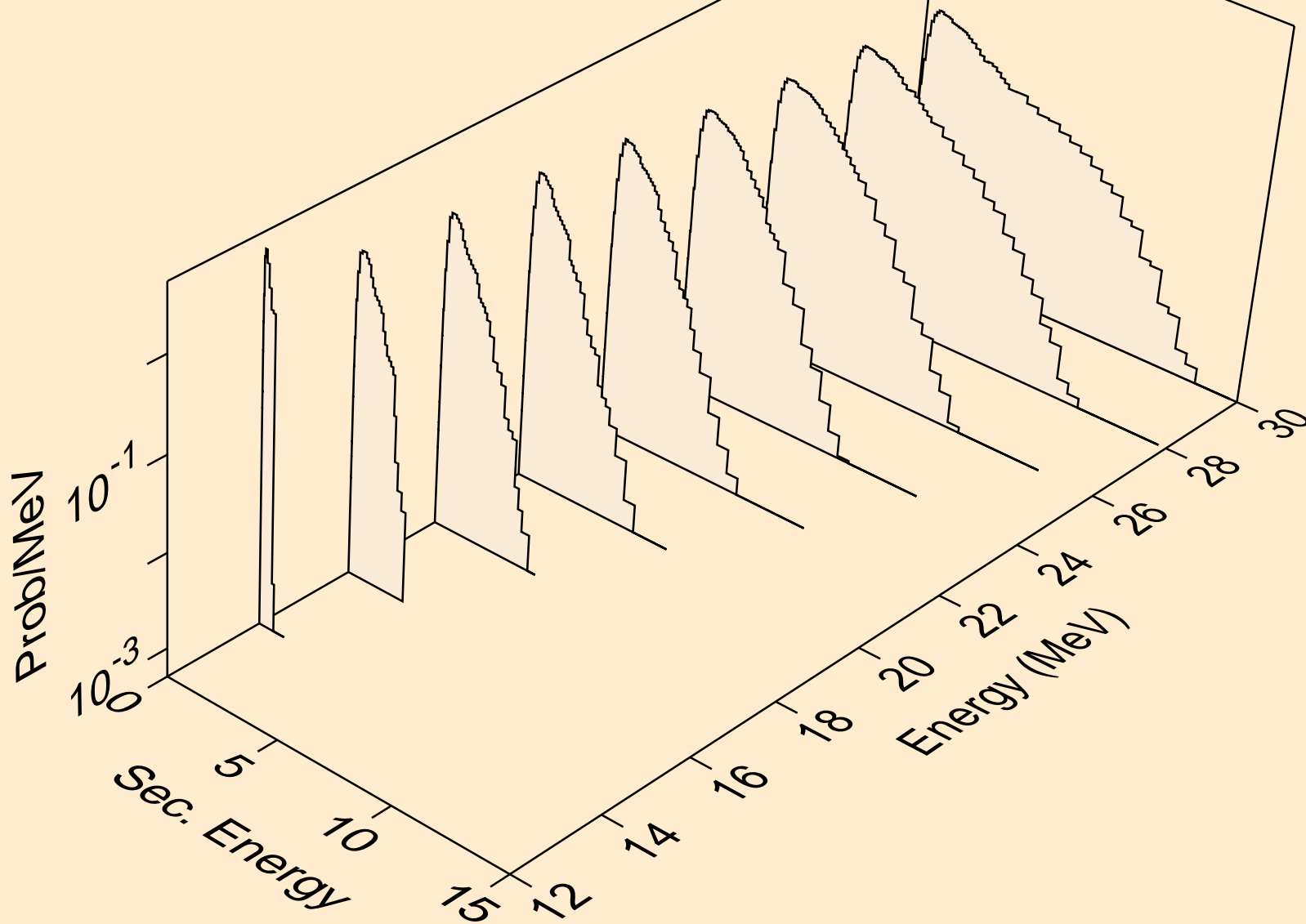
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Neutron emission for (n,2nd)



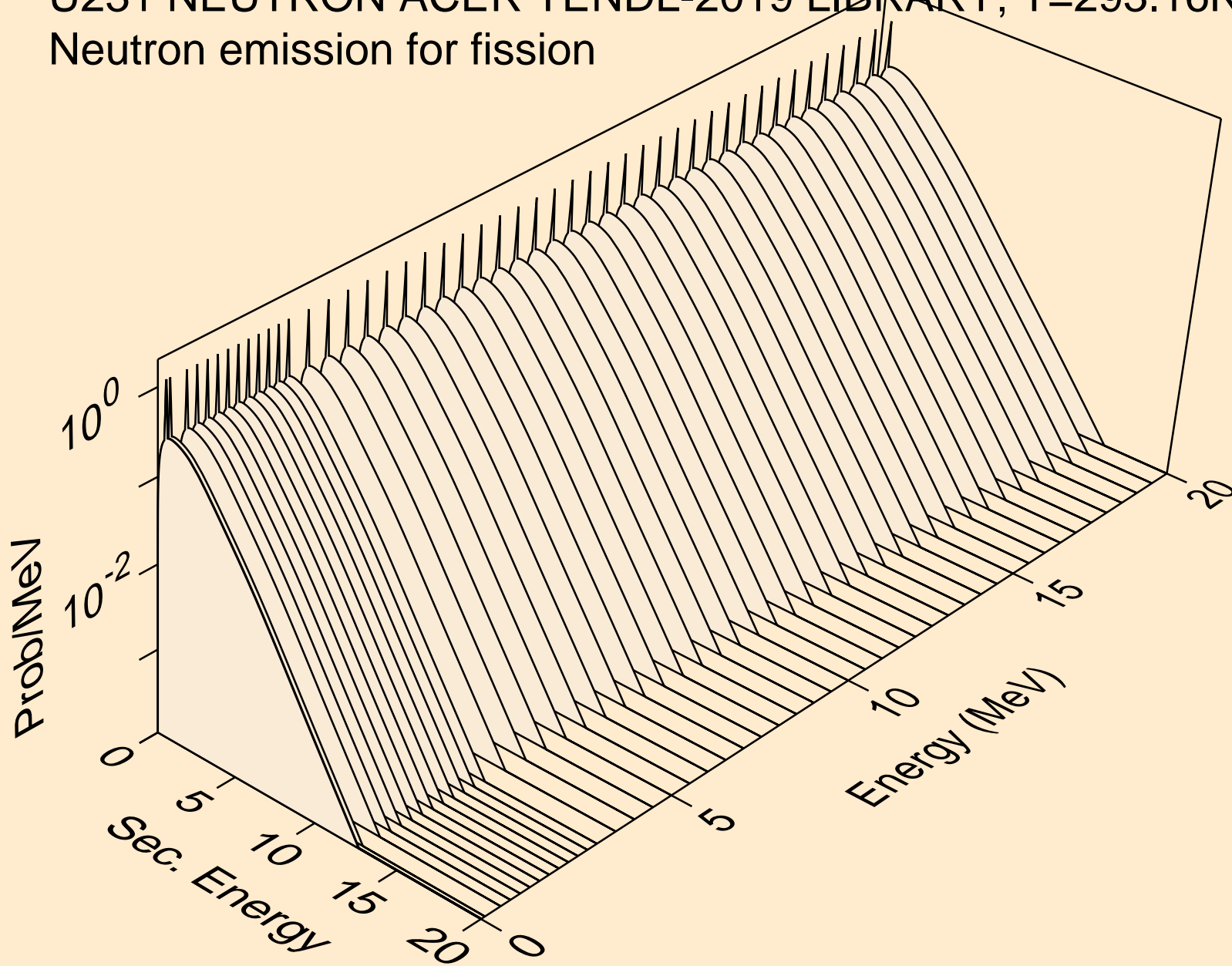
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Neutron emission for (n,2n)



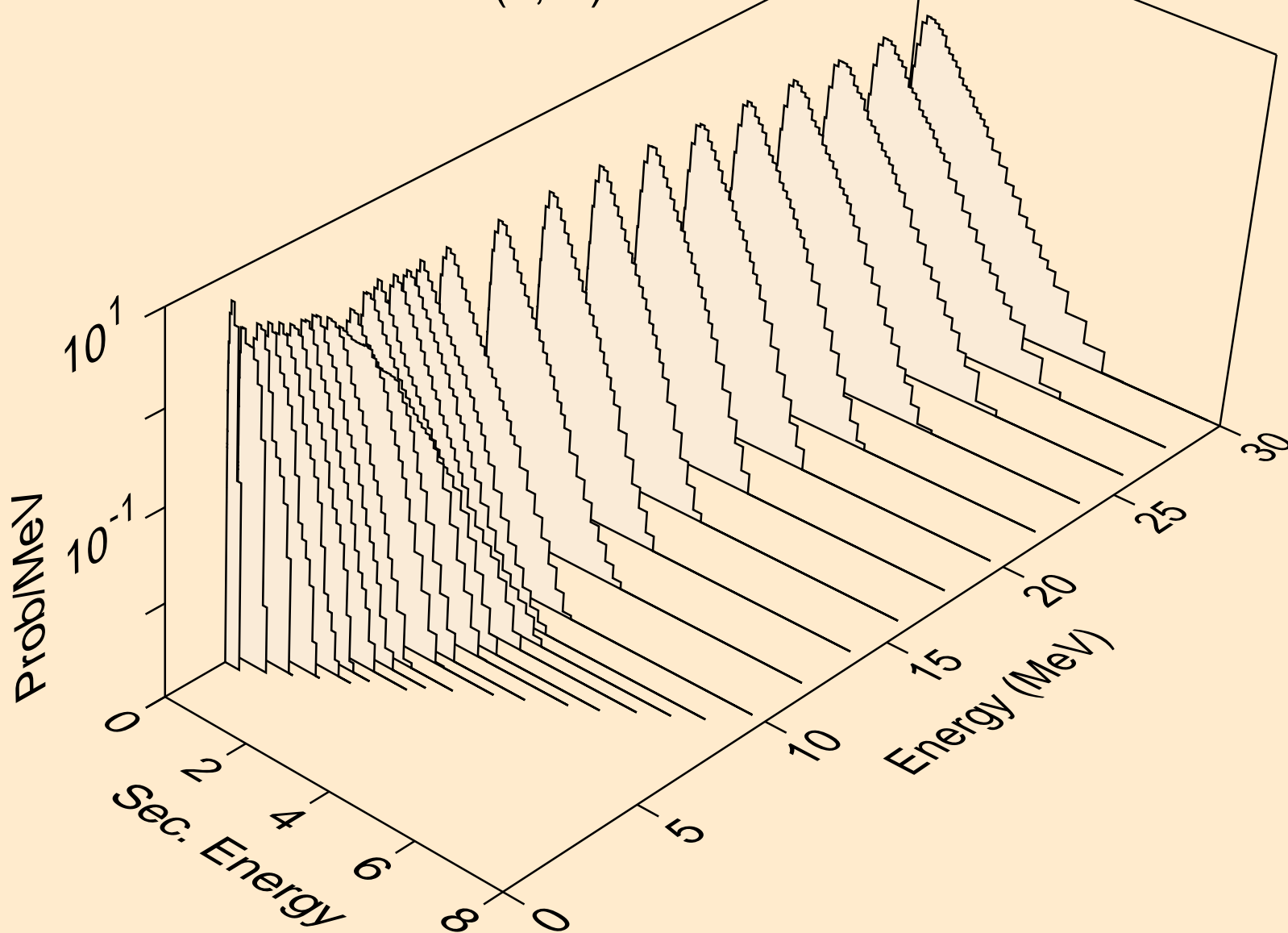
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Neutron emission for (n,3n)



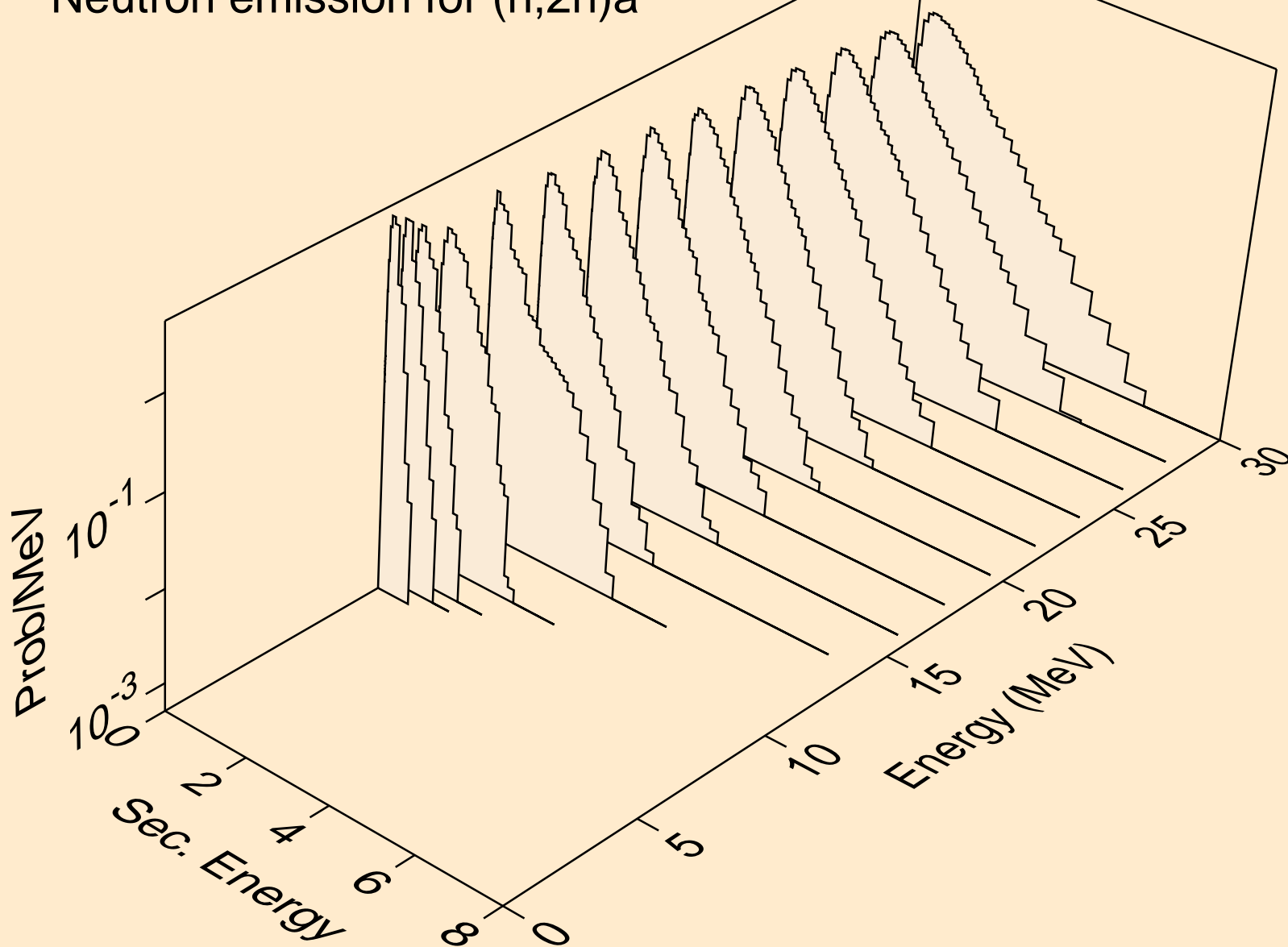
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Neutron emission for fission



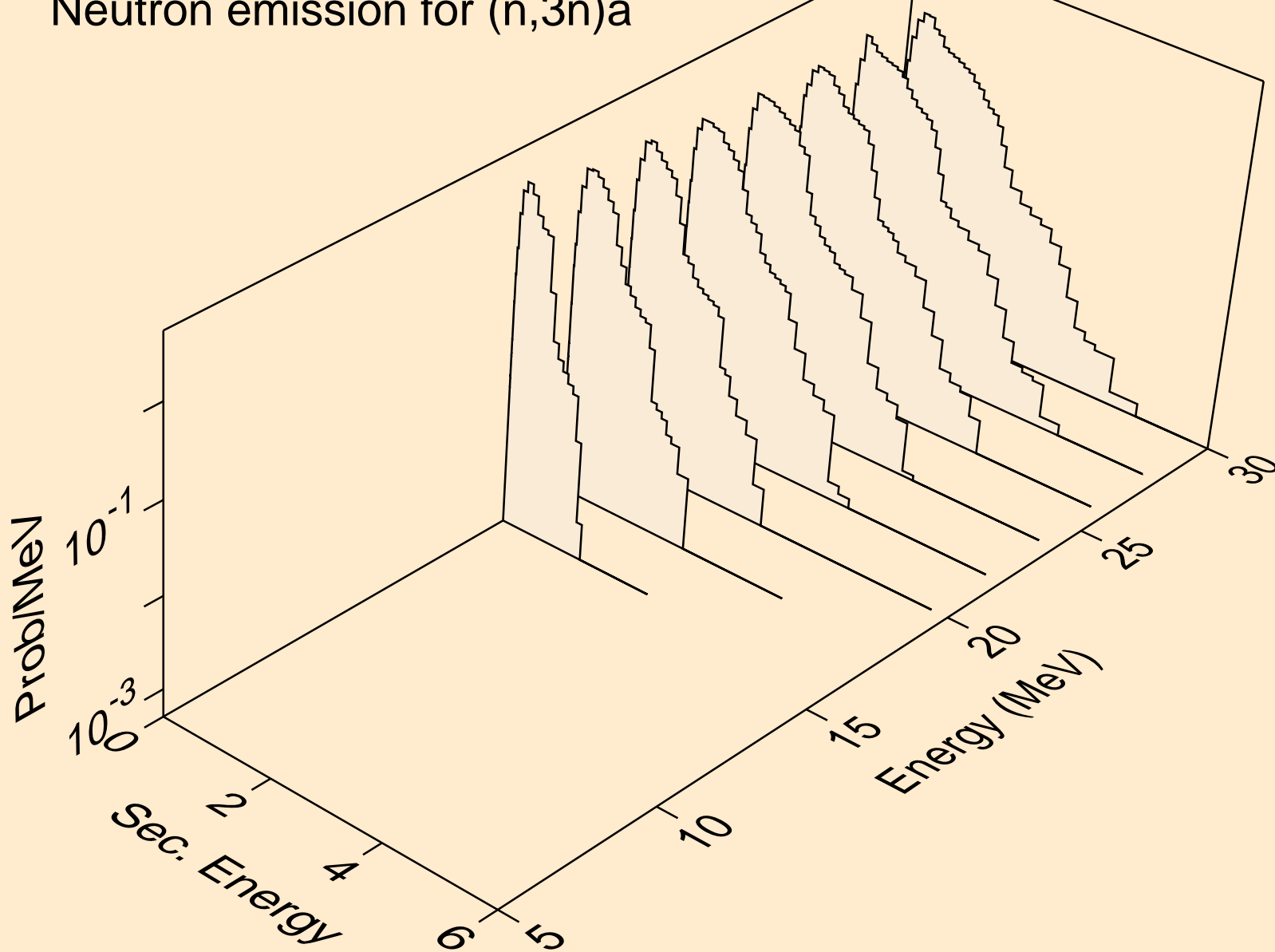
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Neutron emission for (n,n\*)a



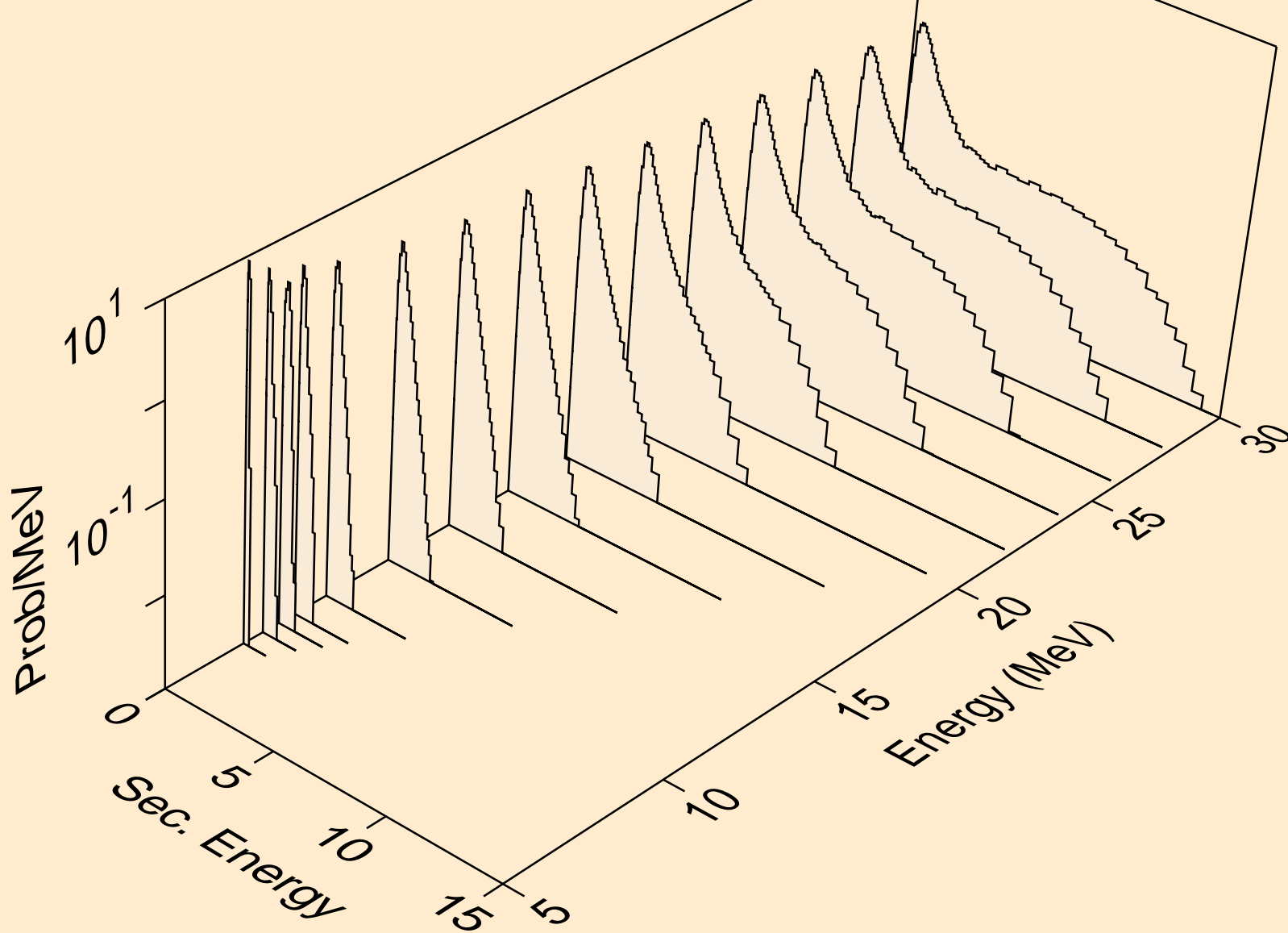
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Neutron emission for (n,2n)a



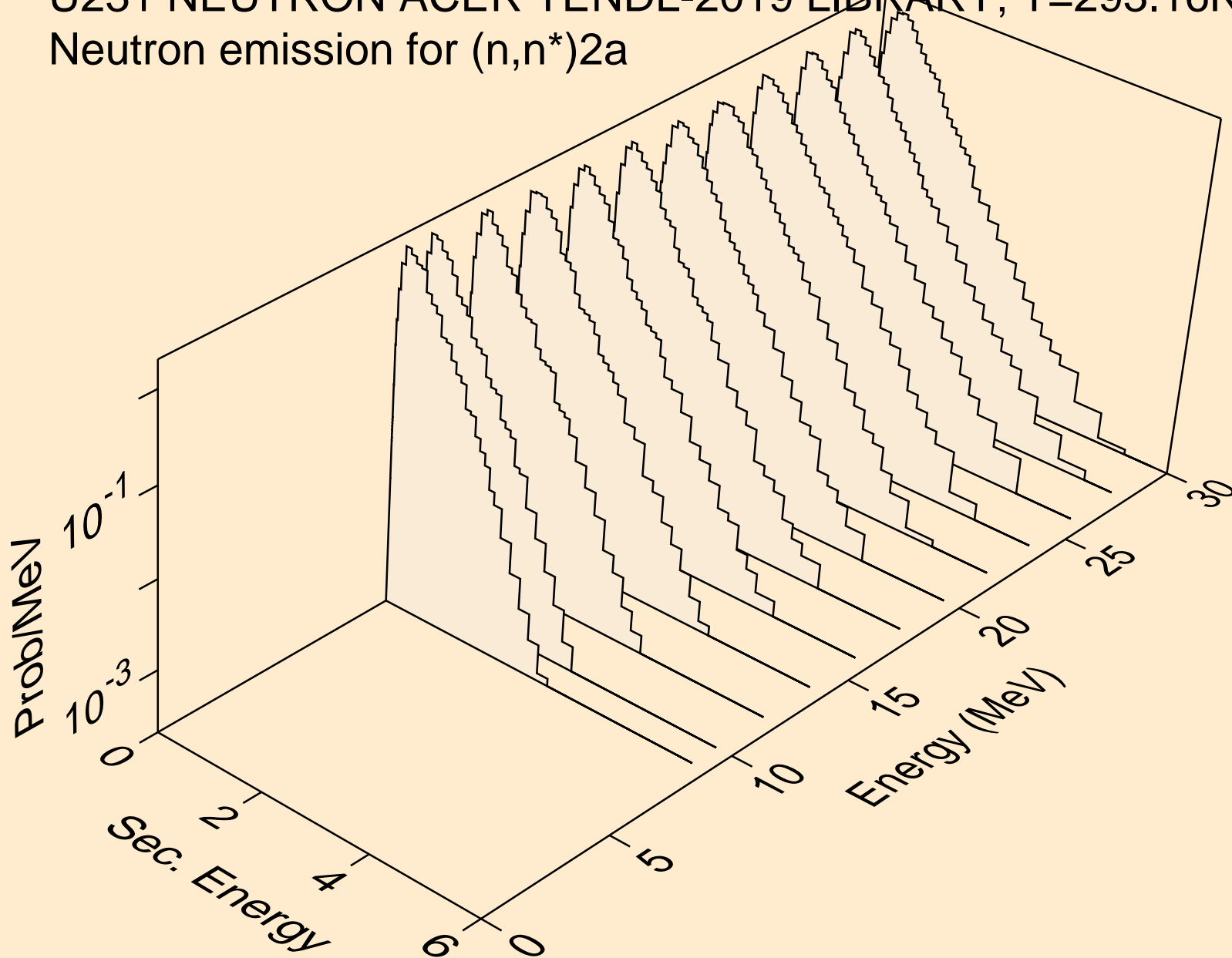
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Neutron emission for (n,3n)a



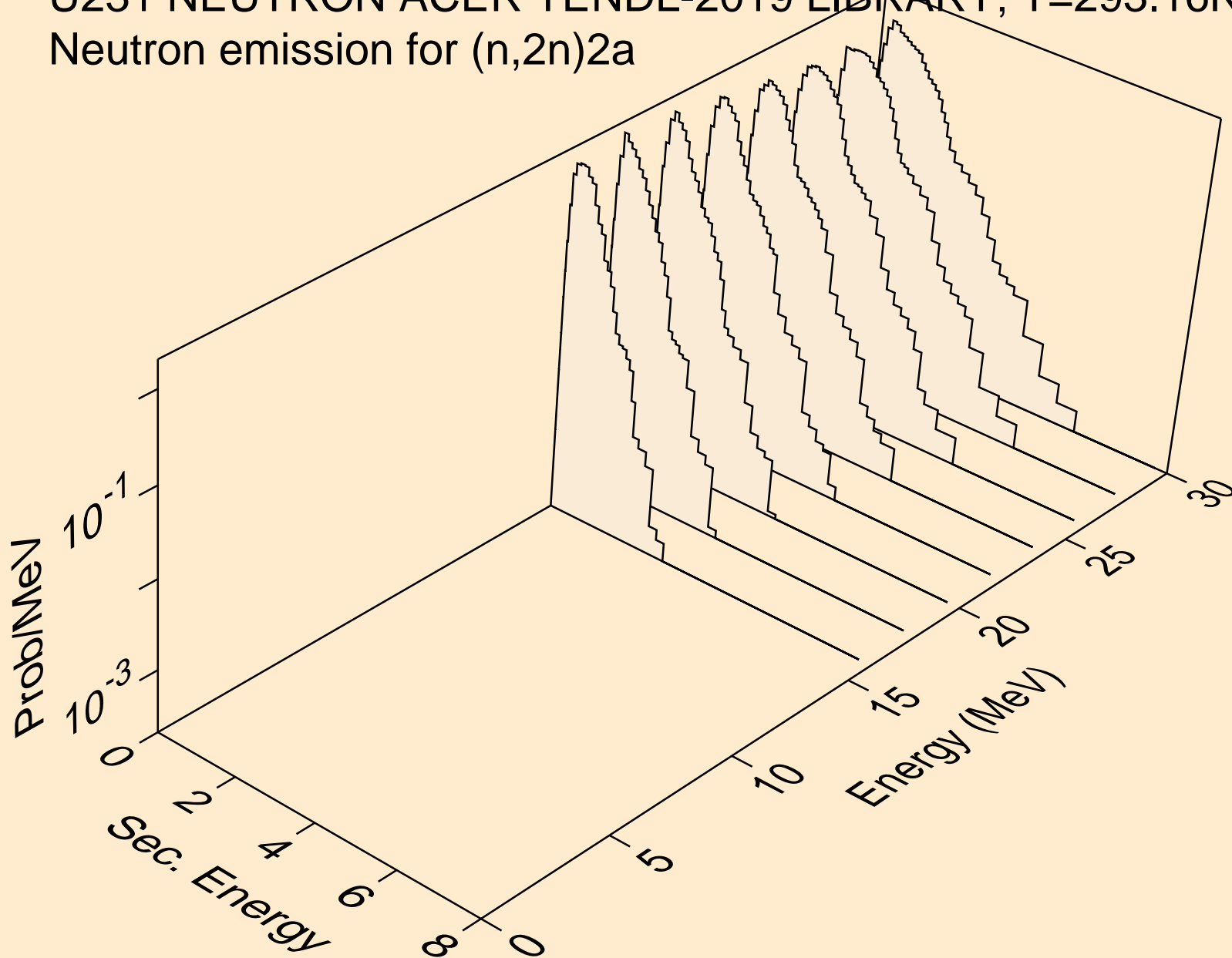
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Neutron emission for (n,n\*)p



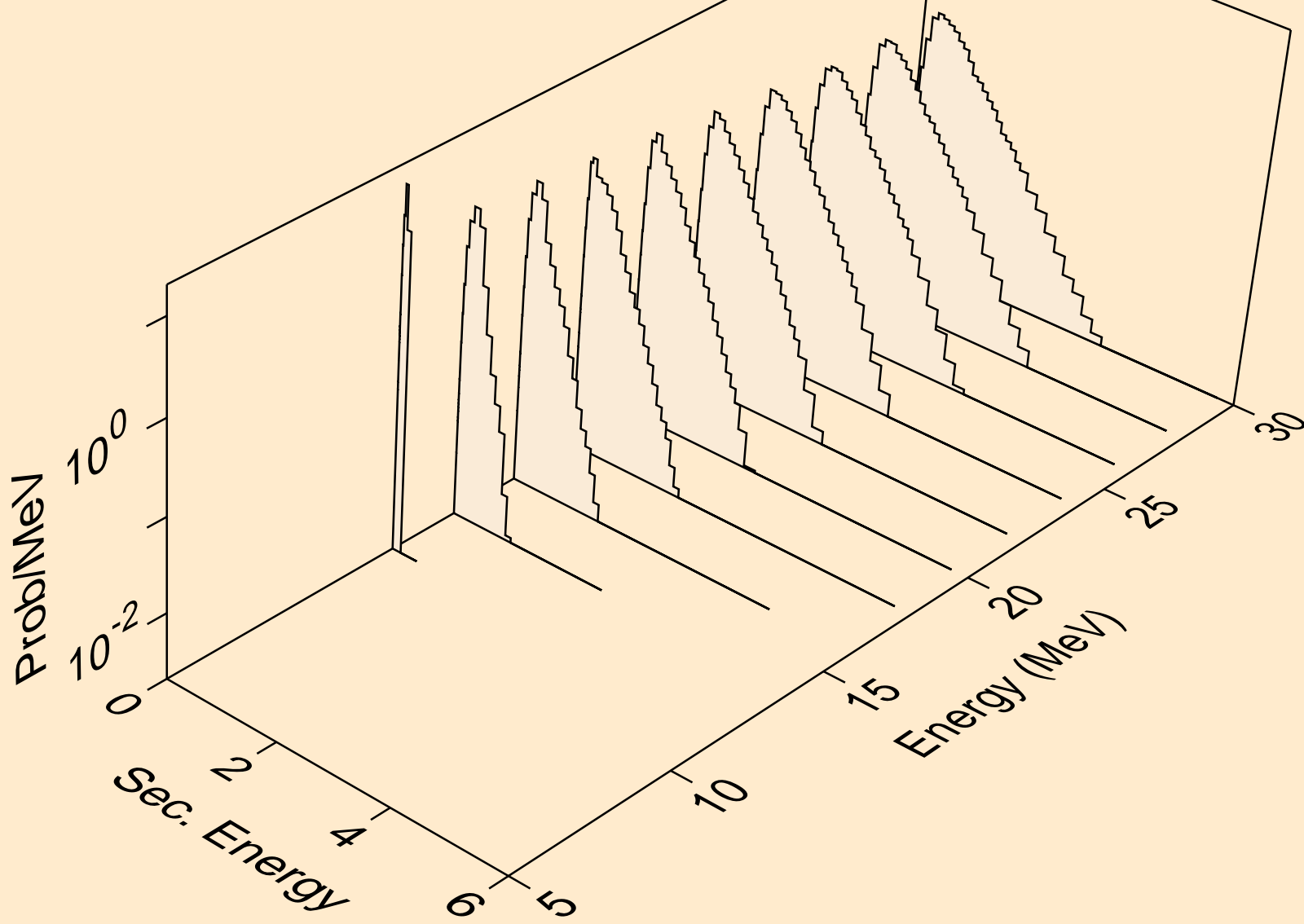
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Neutron emission for (n,n\*)2a



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Neutron emission for (n,2n)2a



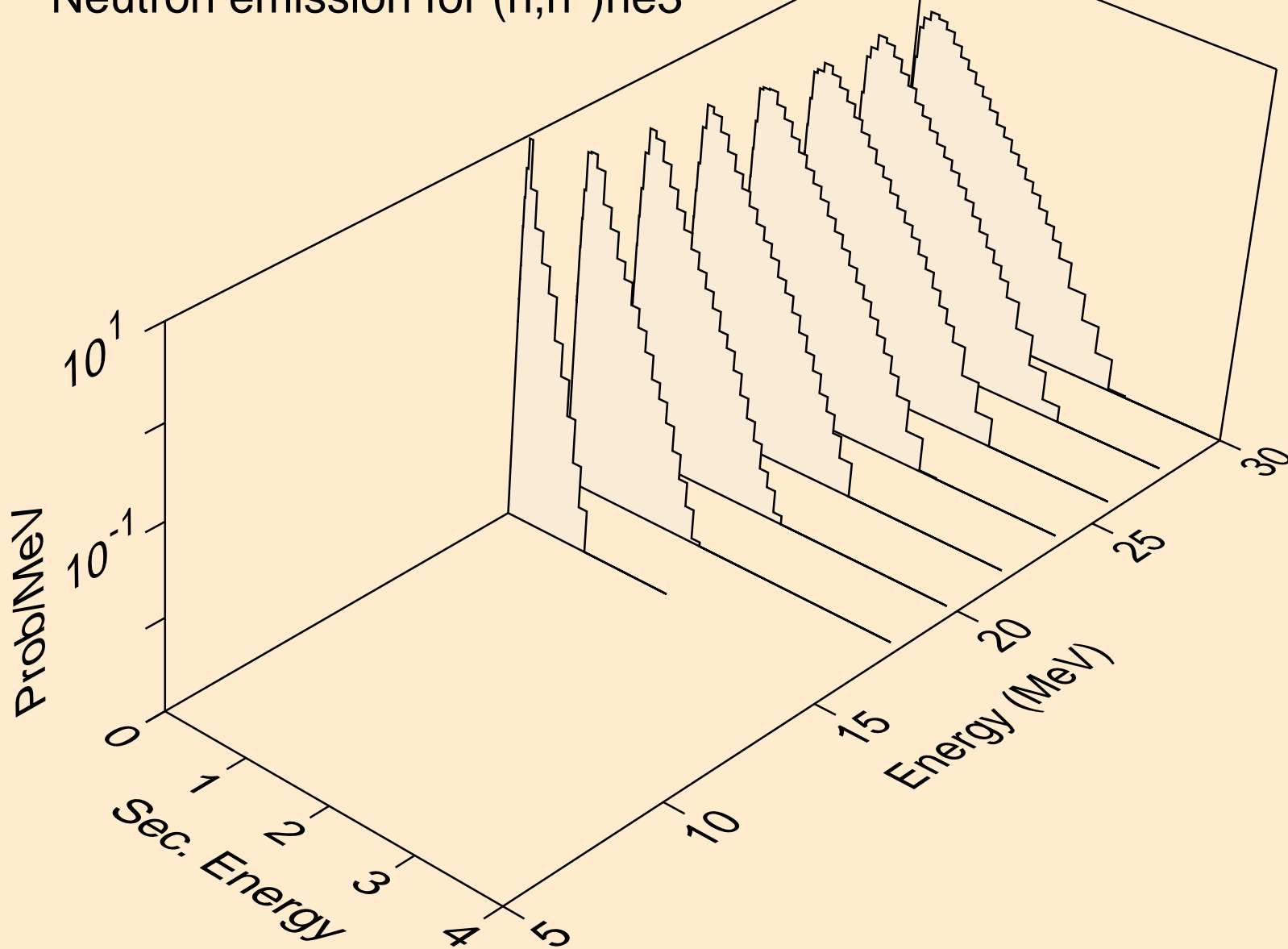
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Neutron emission for (n,n\*)d



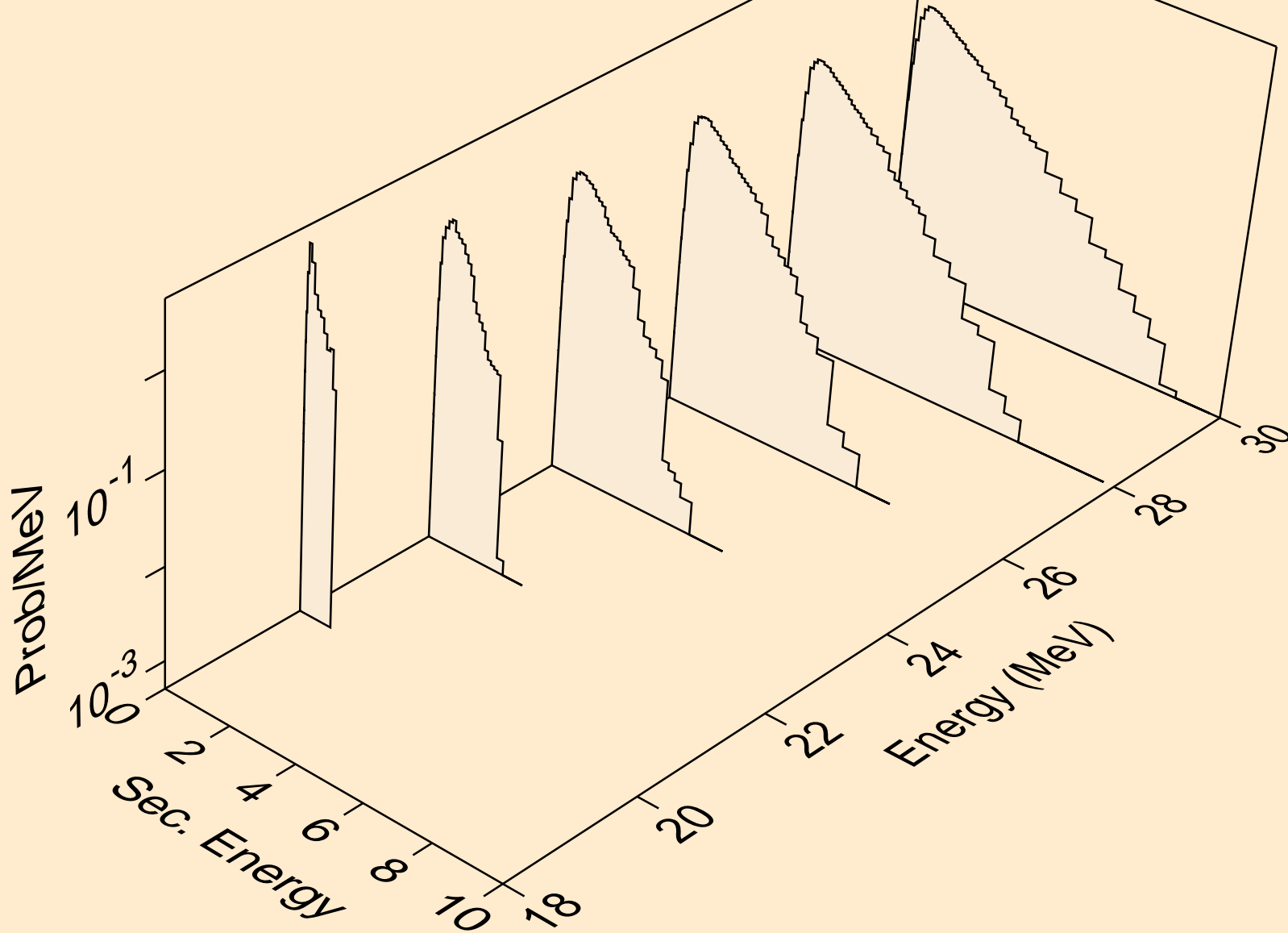
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Neutron emission for (n,n\*)t



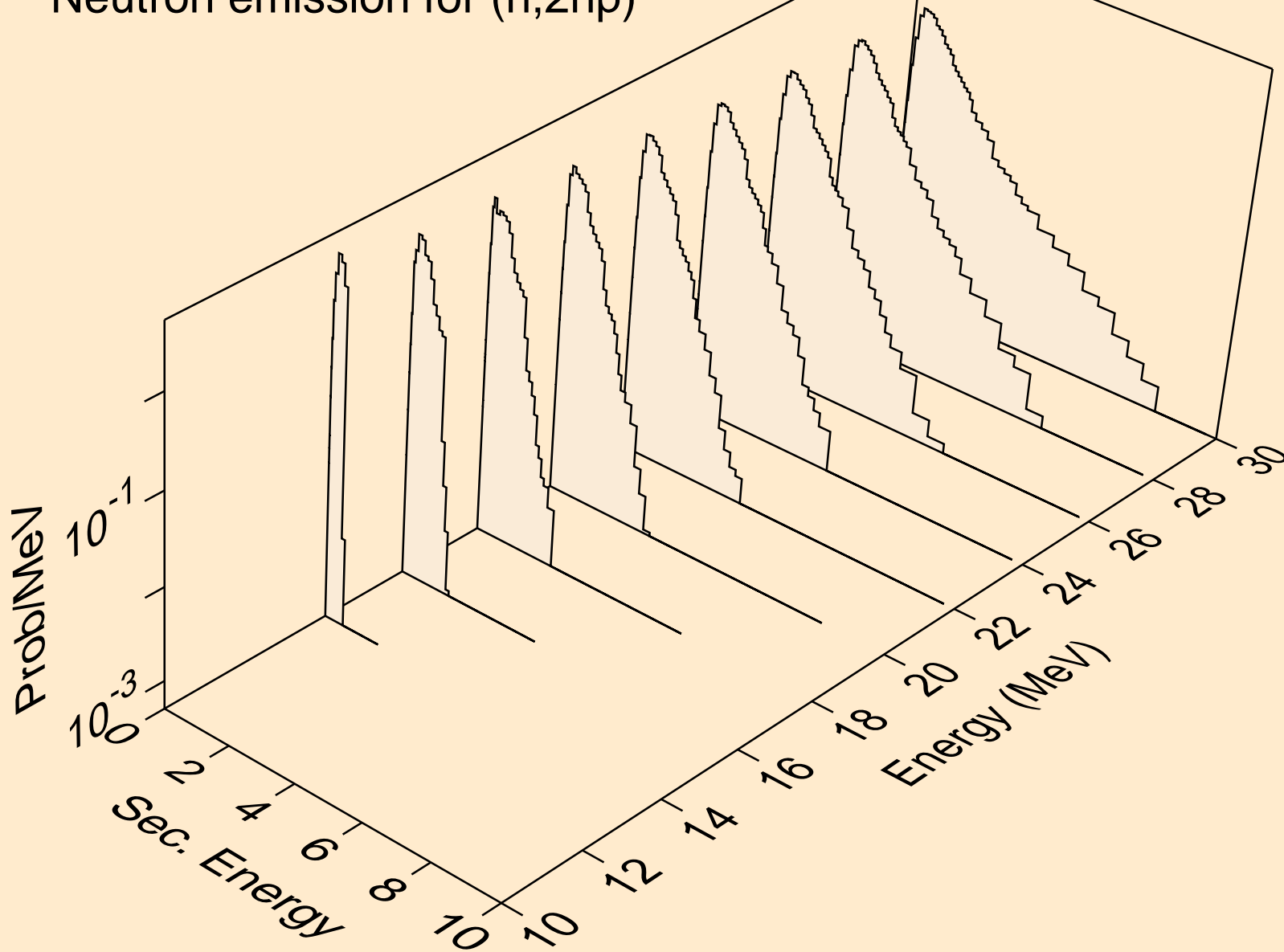
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Neutron emission for (n,n\*)he3



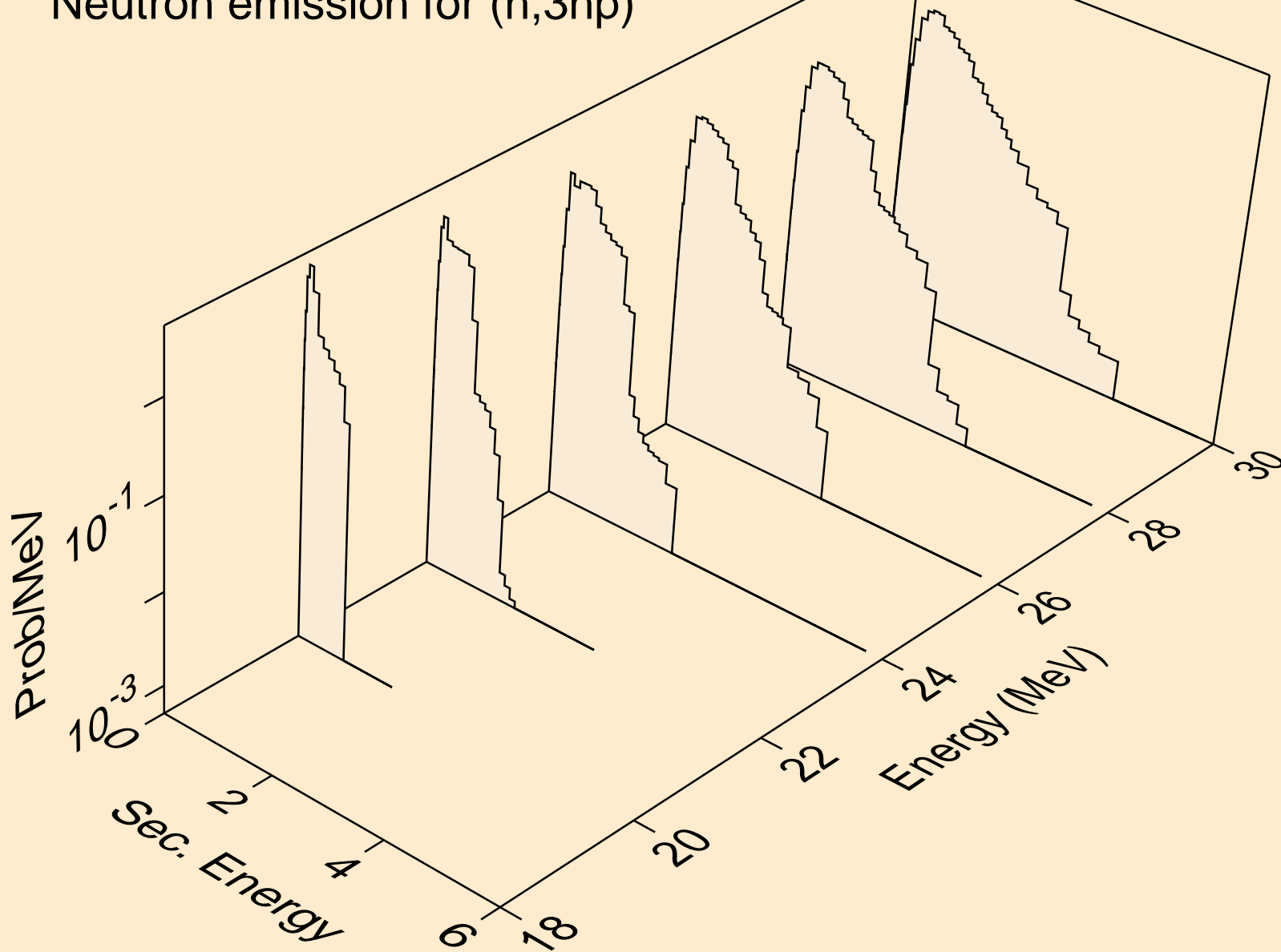
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Neutron emission for (n,4n)



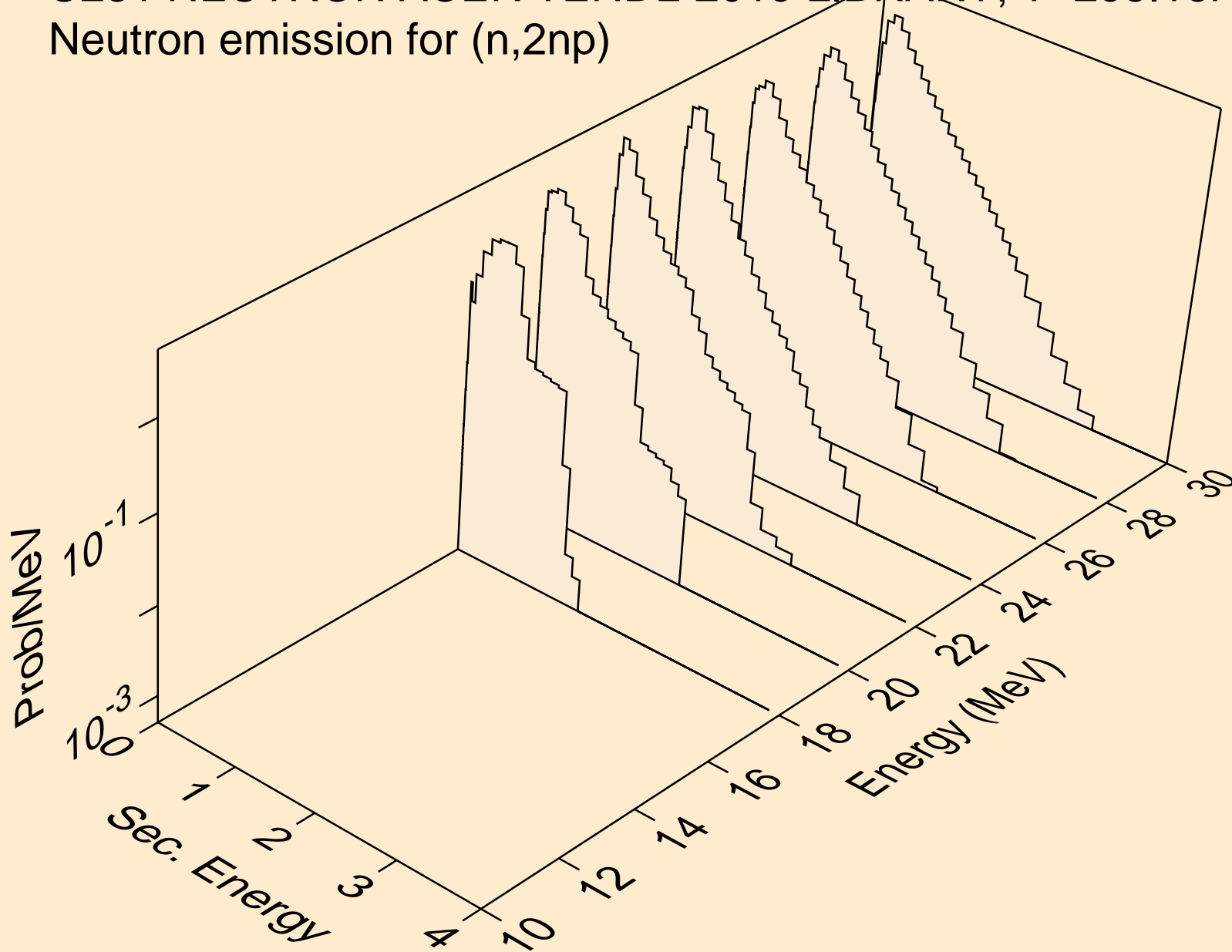
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Neutron emission for (n,2np)



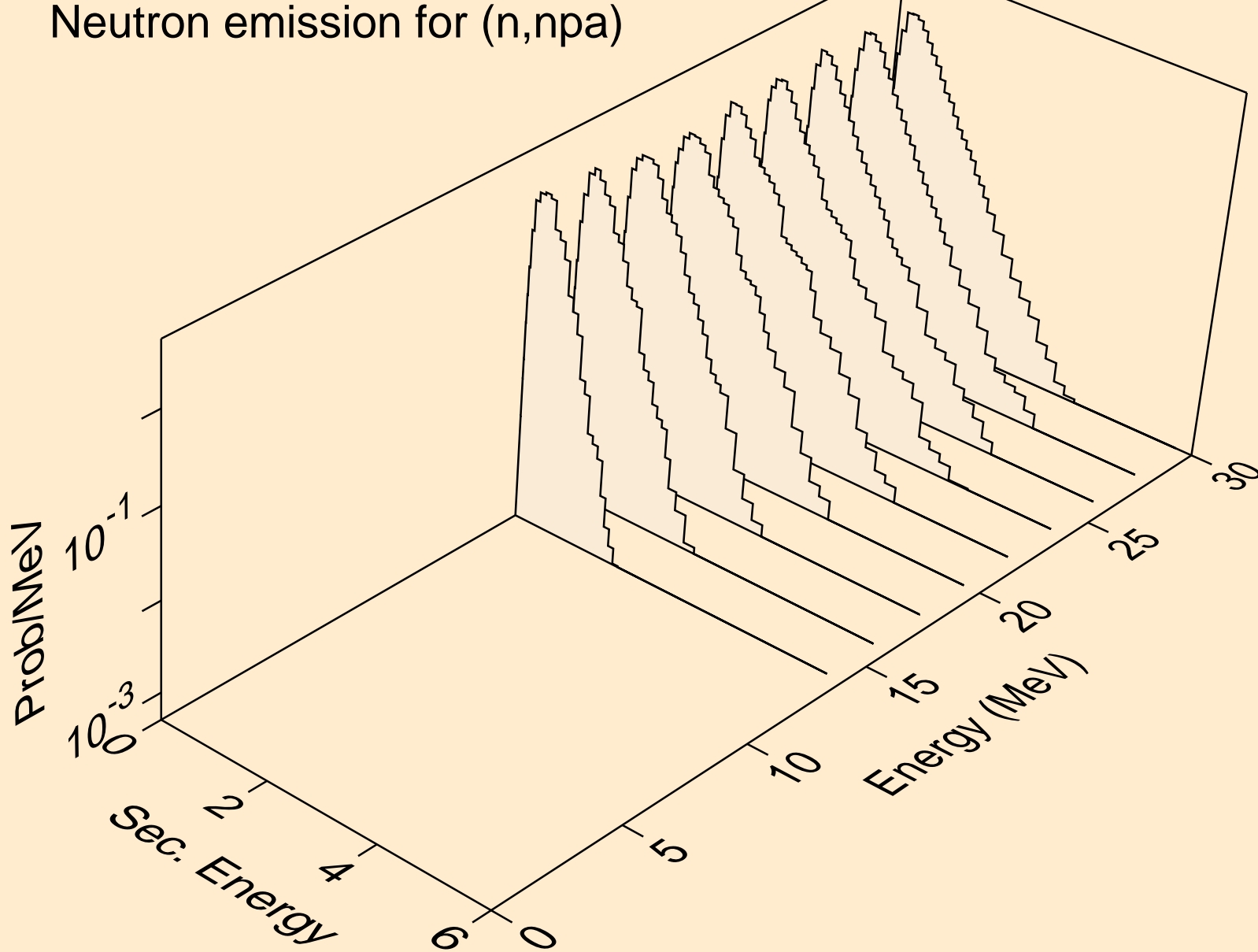
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Neutron emission for (n,3np)



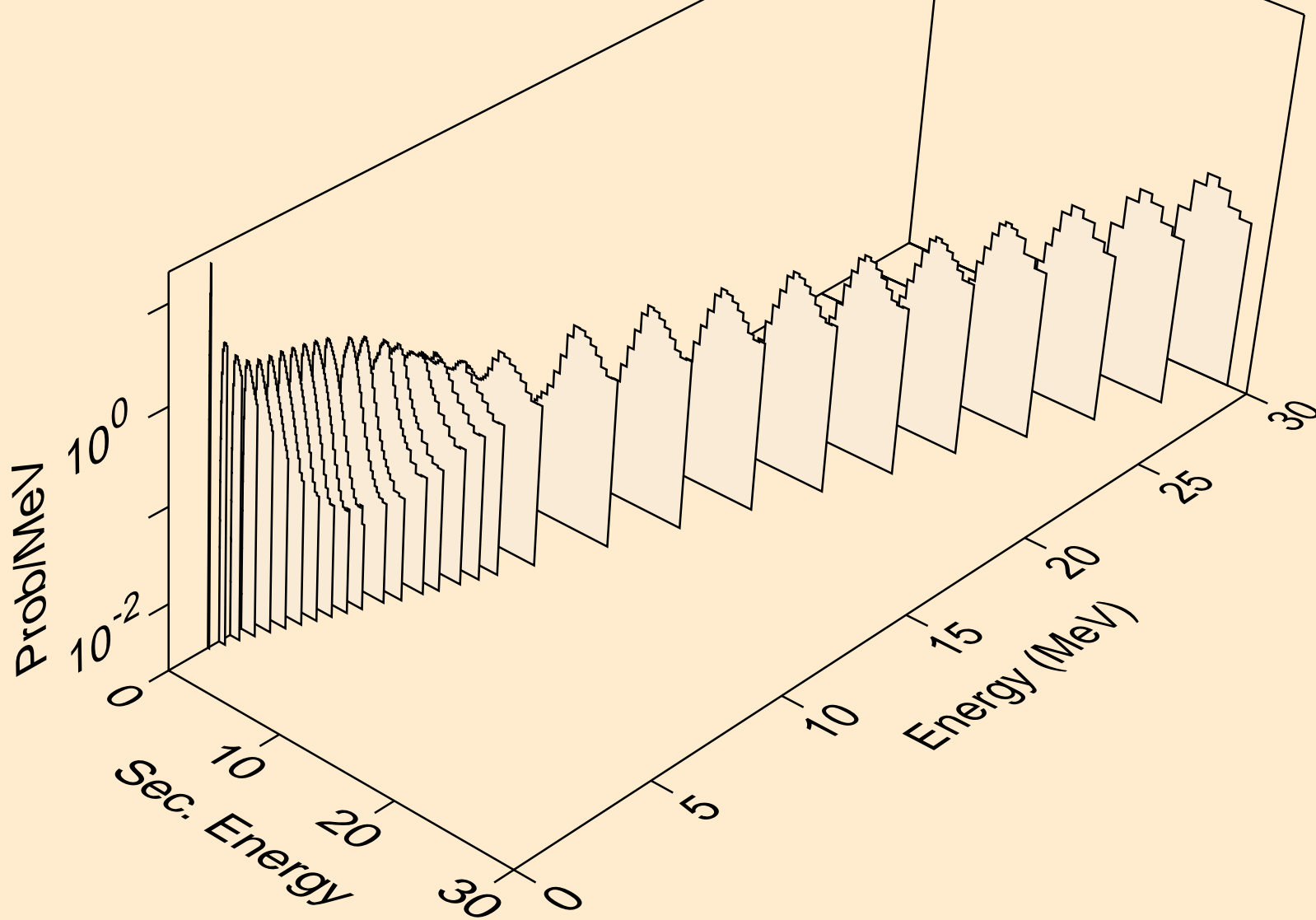
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Neutron emission for (n,2np)



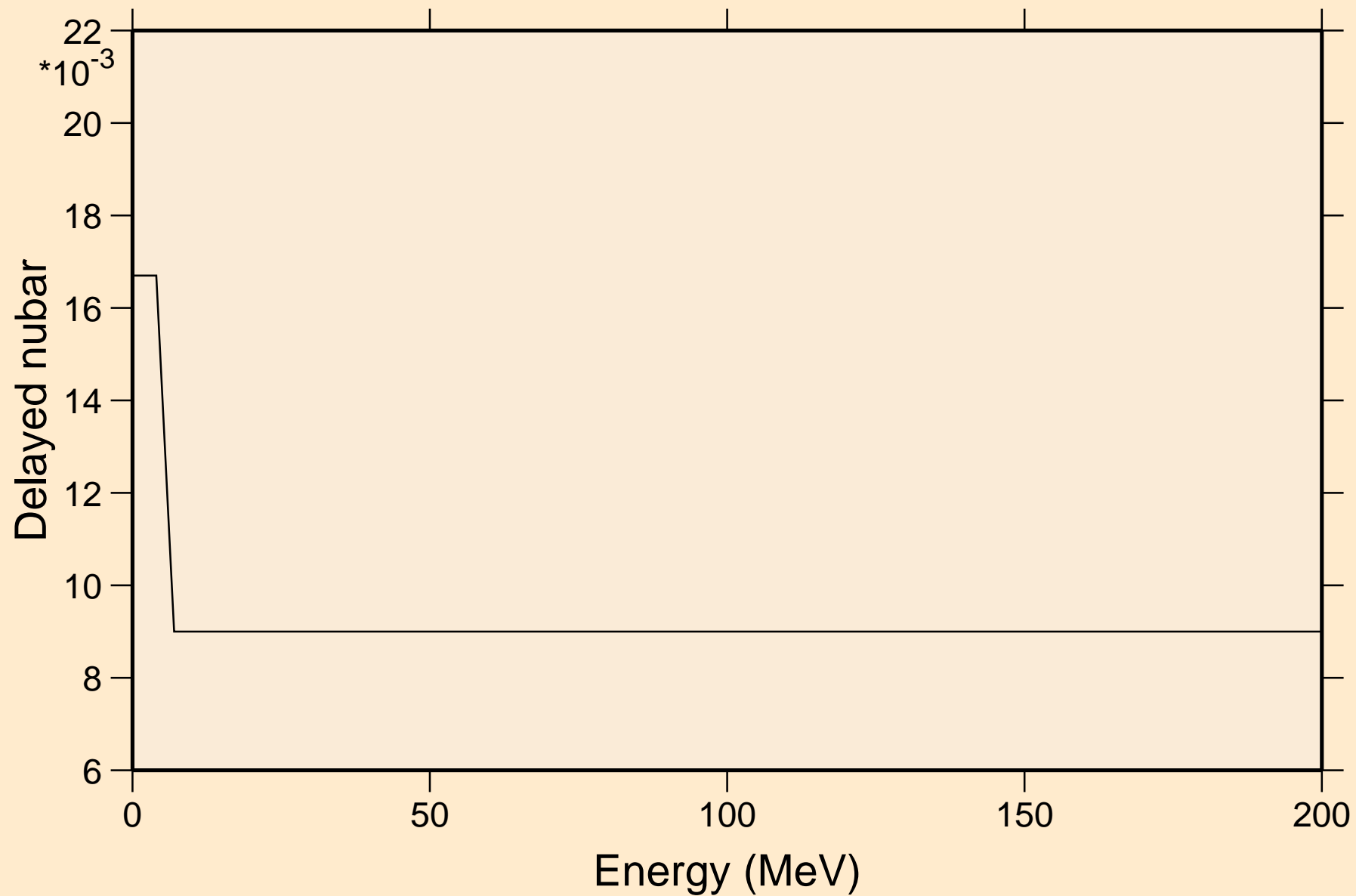
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Neutron emission for (n,npa)



U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Neutron emission for (n,n\*c)

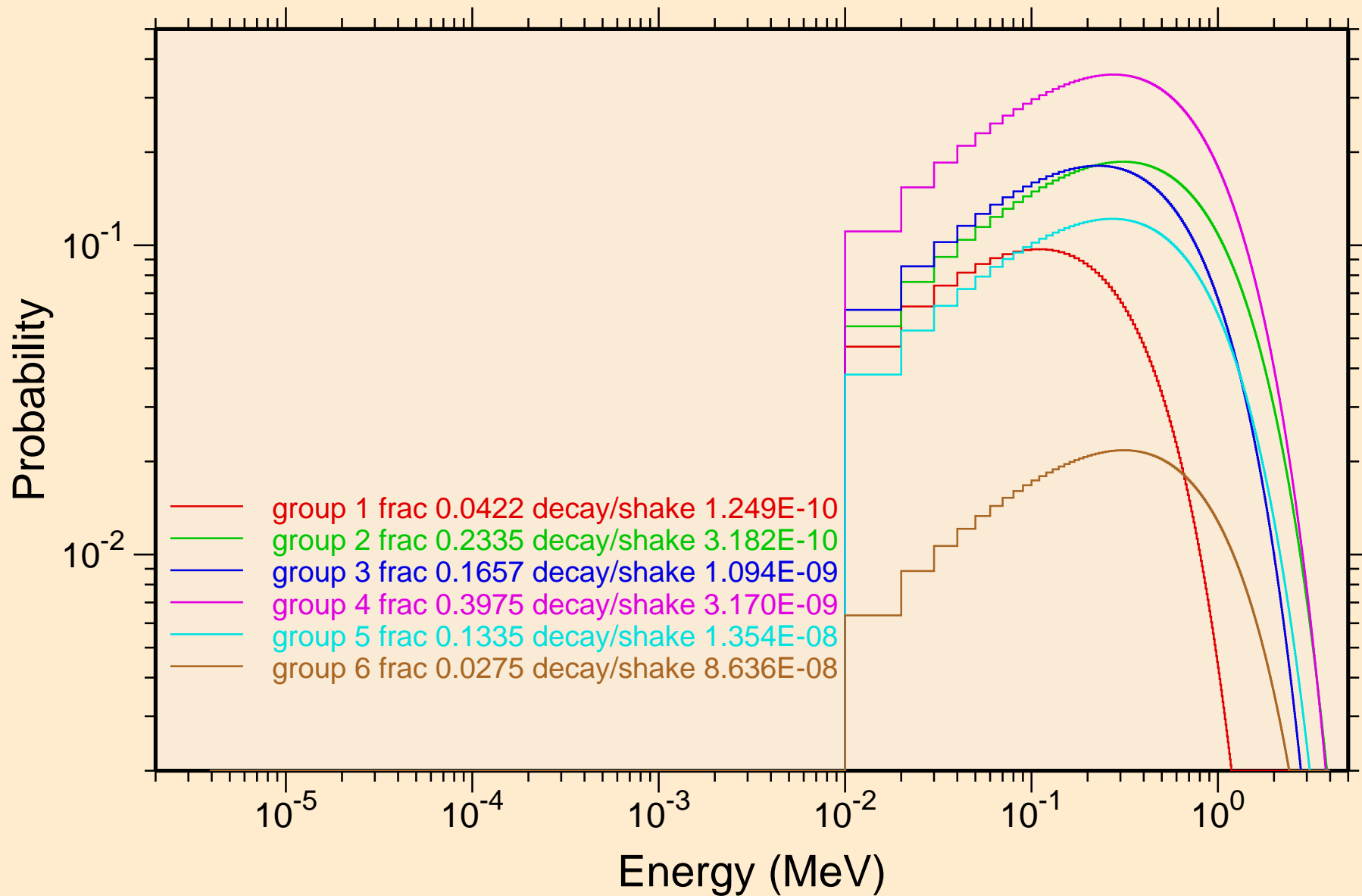


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Delayed nubar

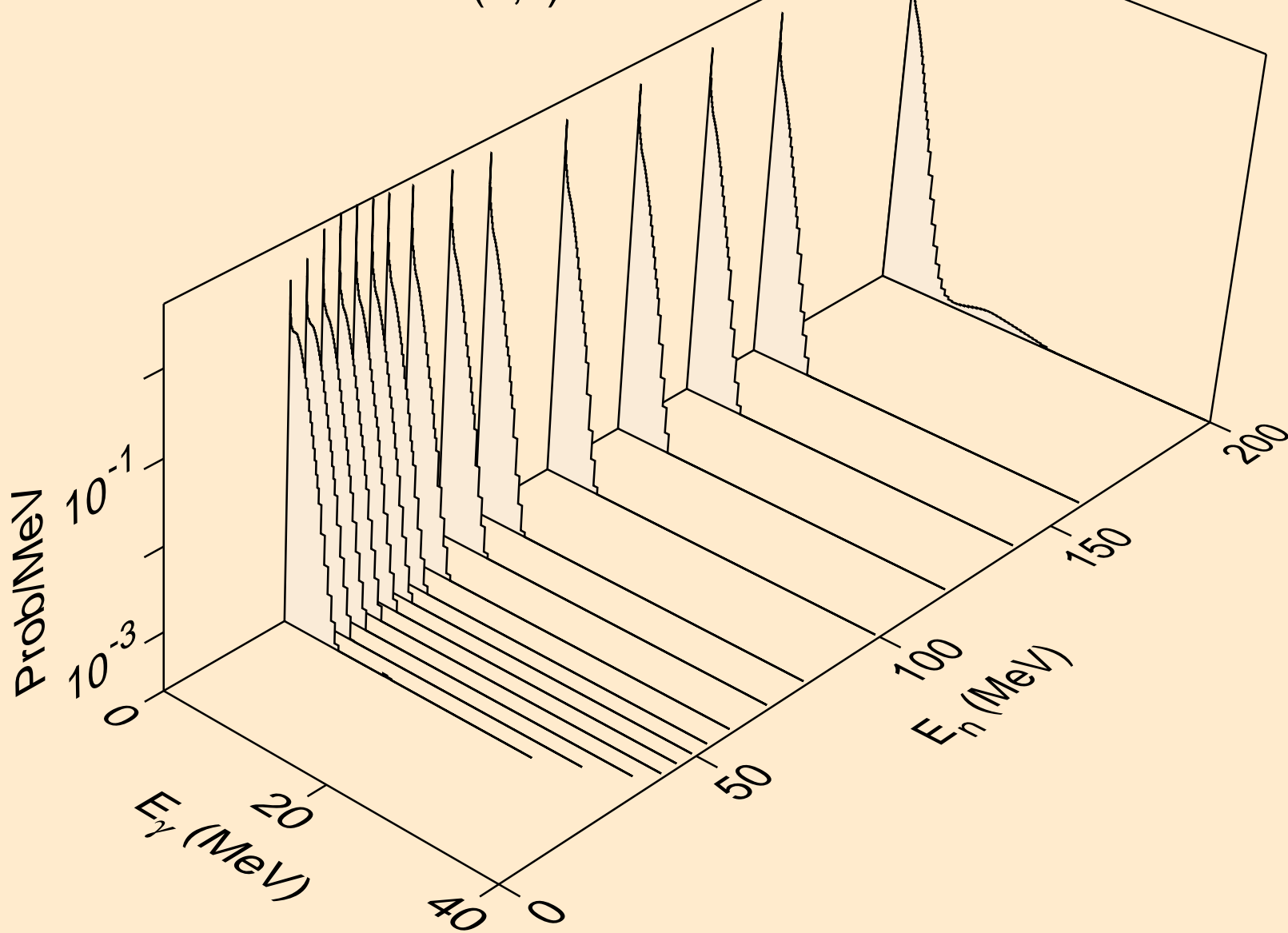


# U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K

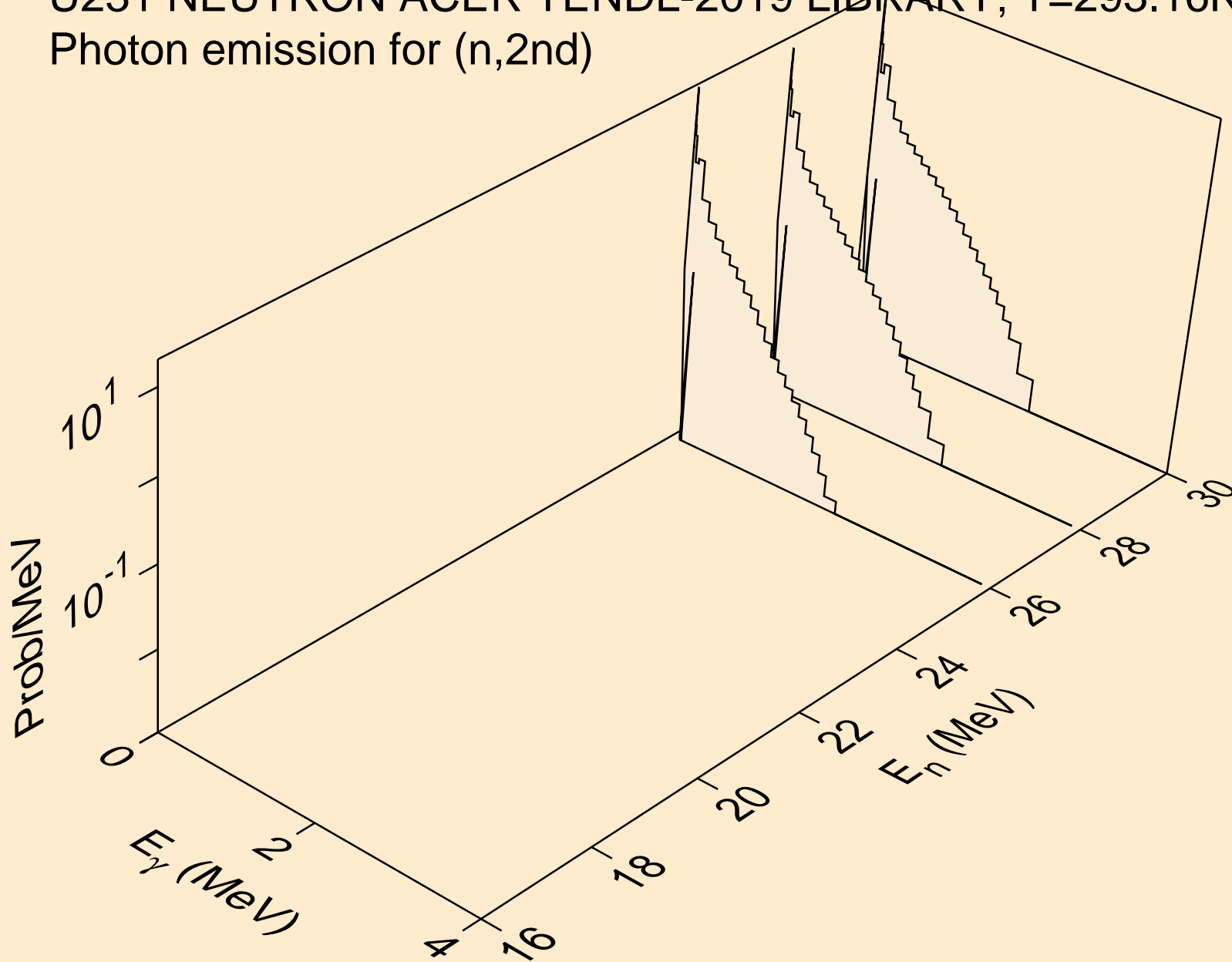
## Delayed neutron spectra



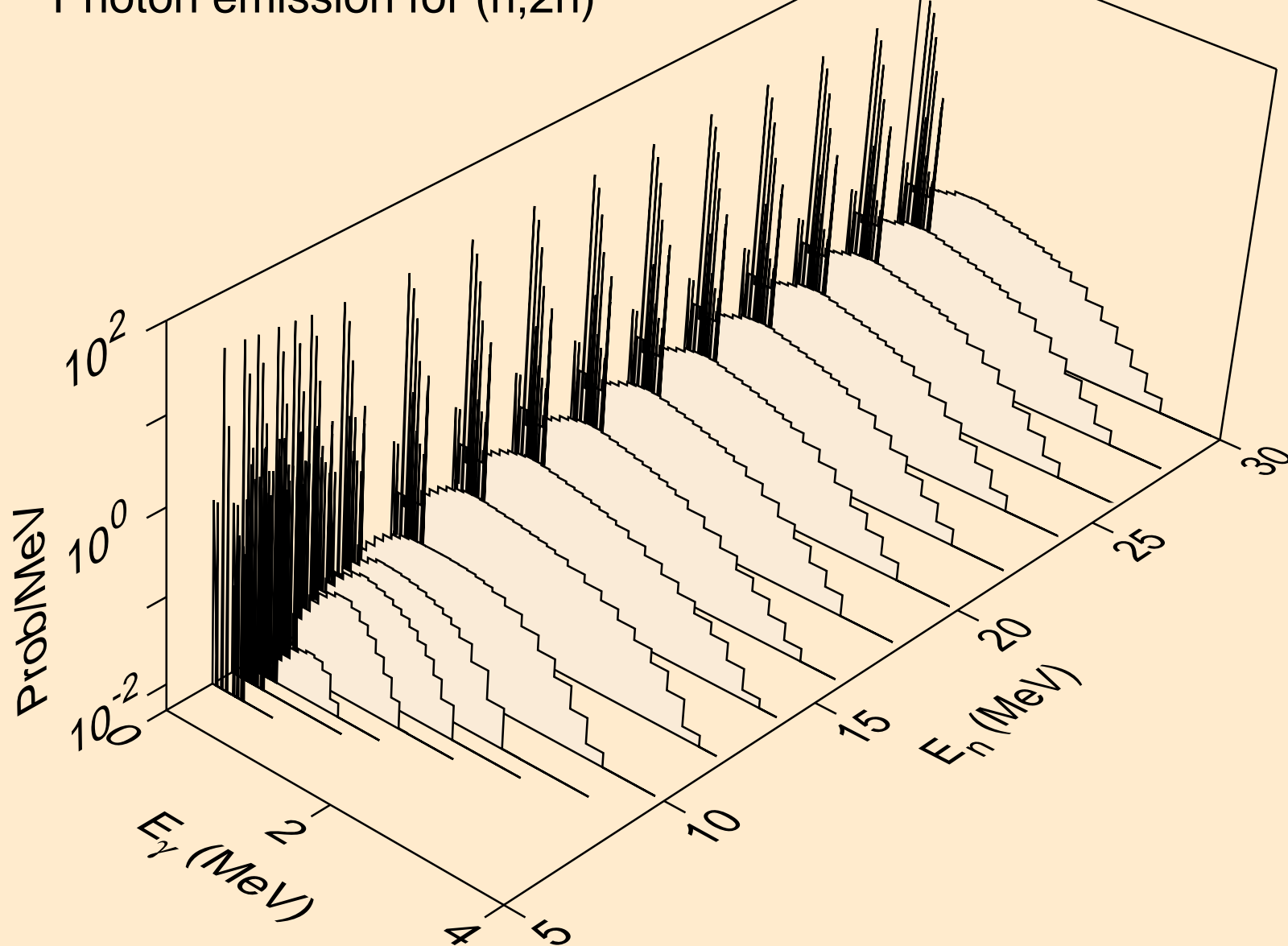
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Photon emission for (n,x)



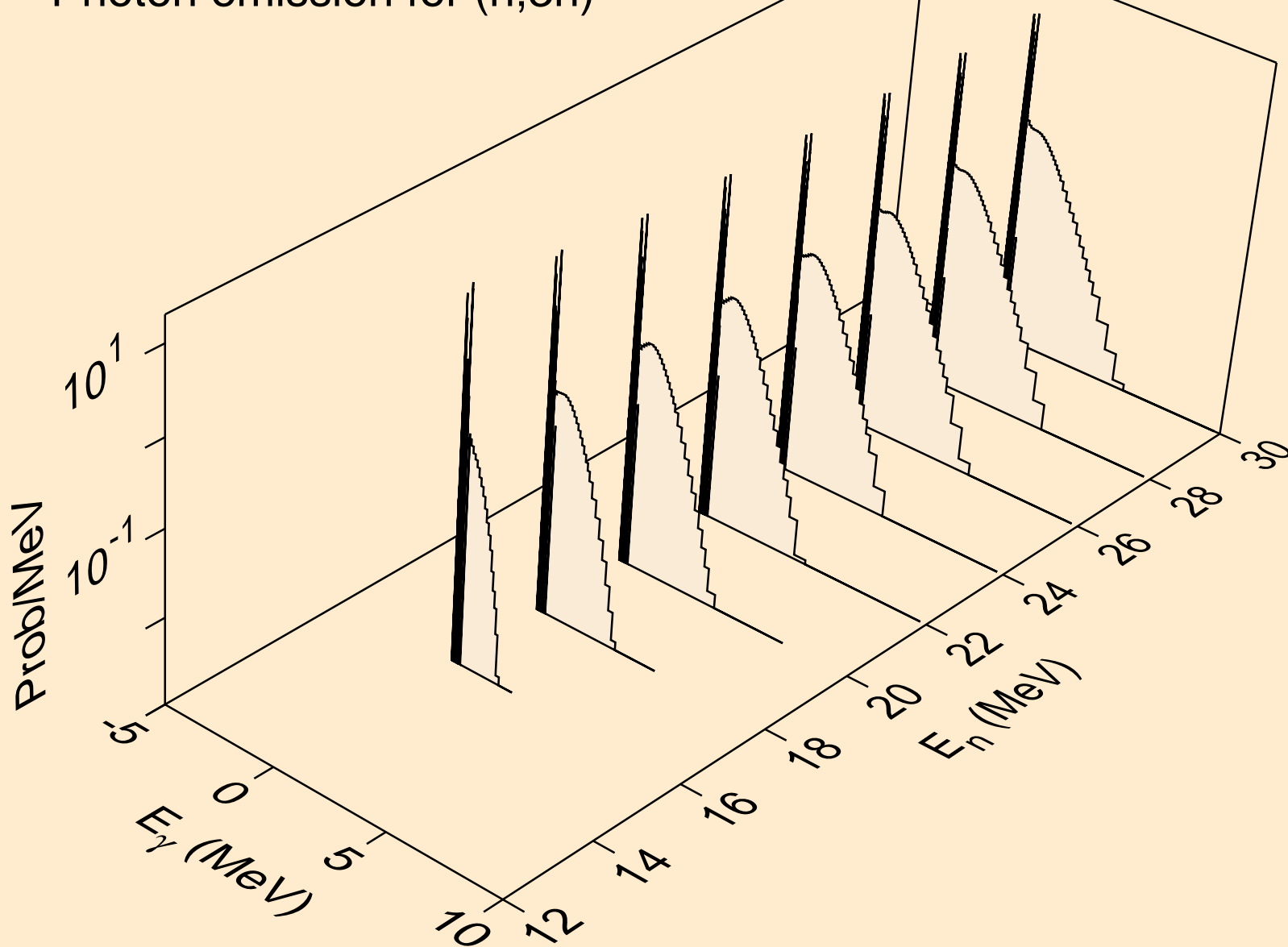
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Photon emission for (n,2nd)



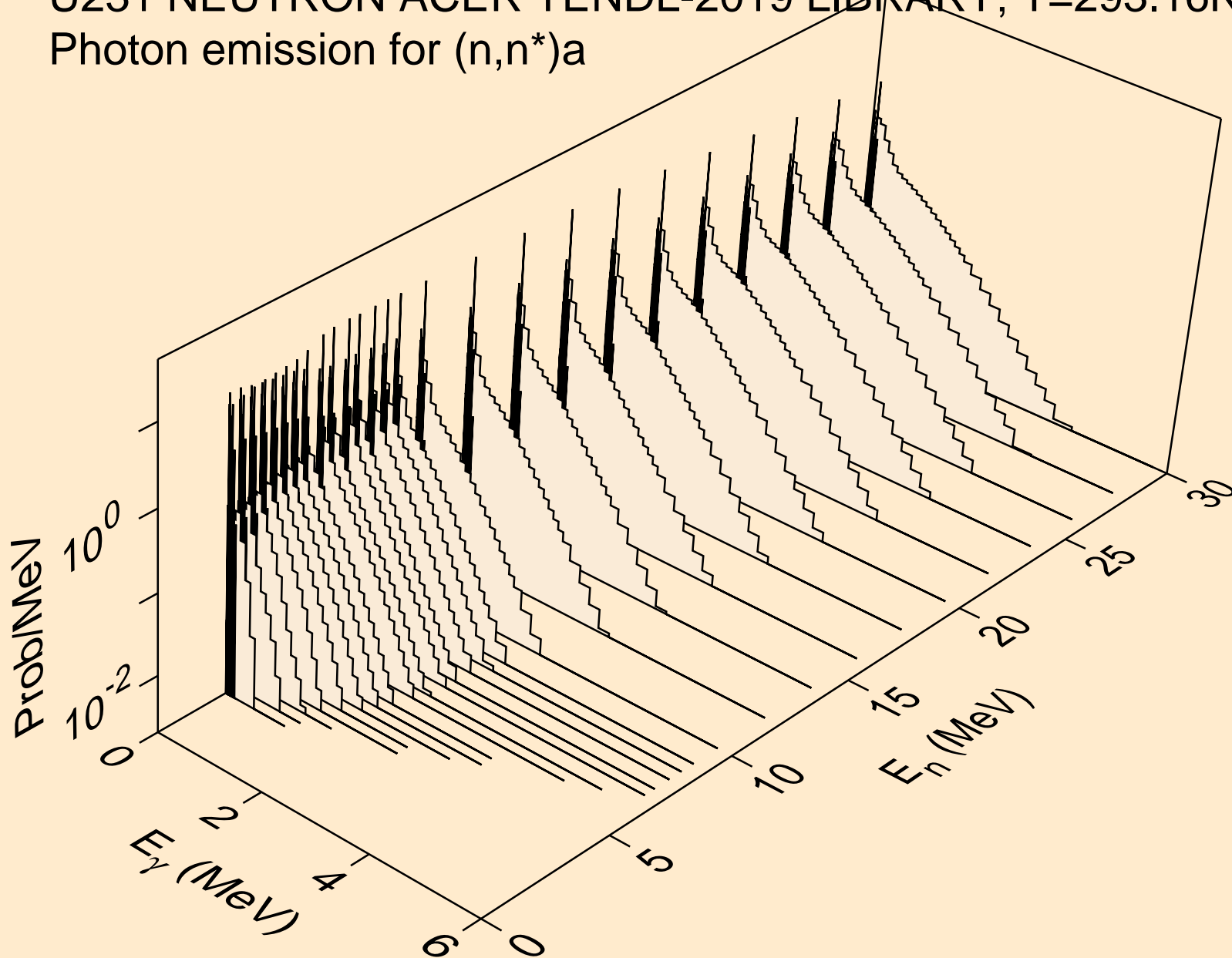
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Photon emission for (n,2n)



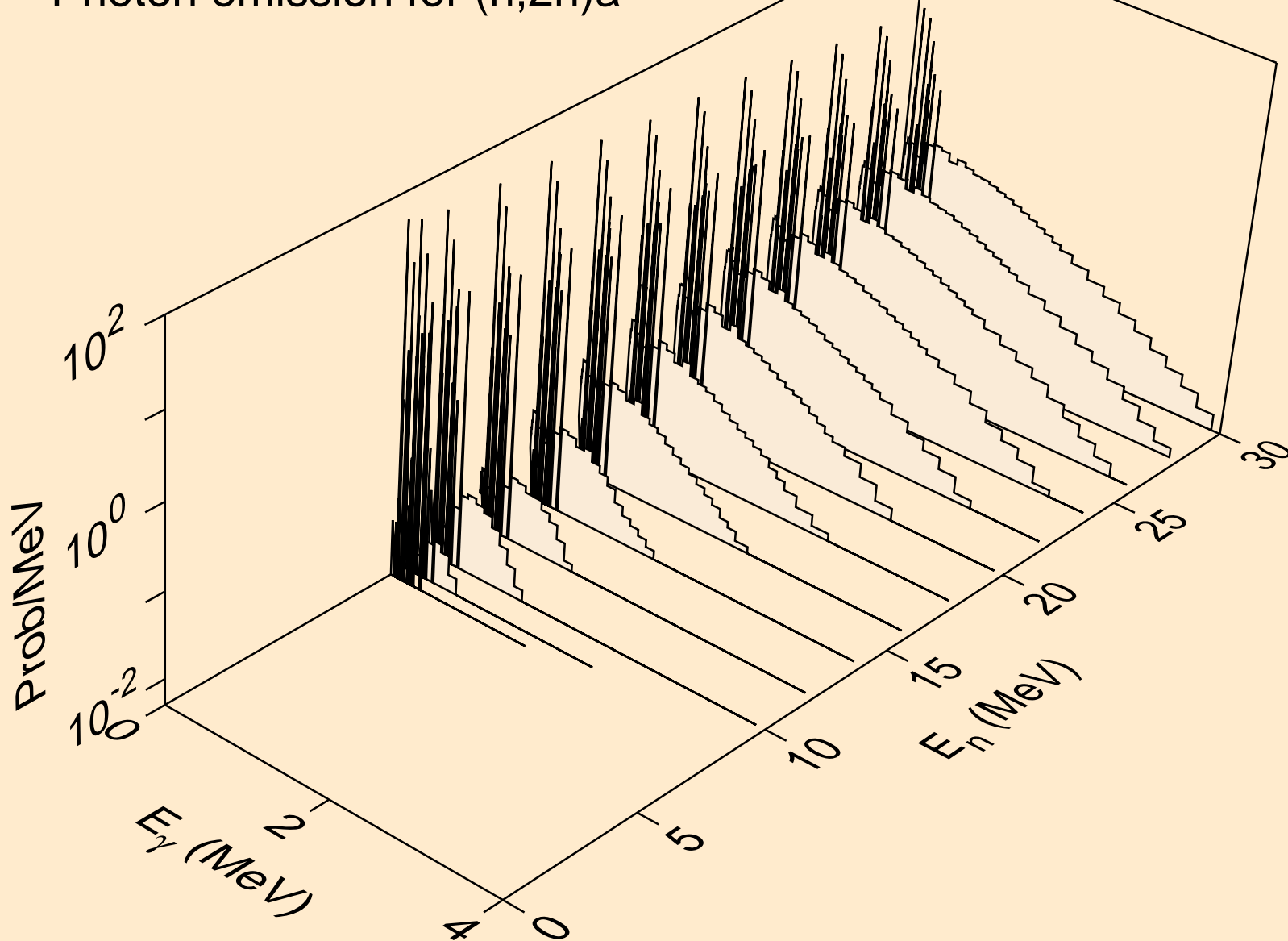
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Photon emission for (n,3n)



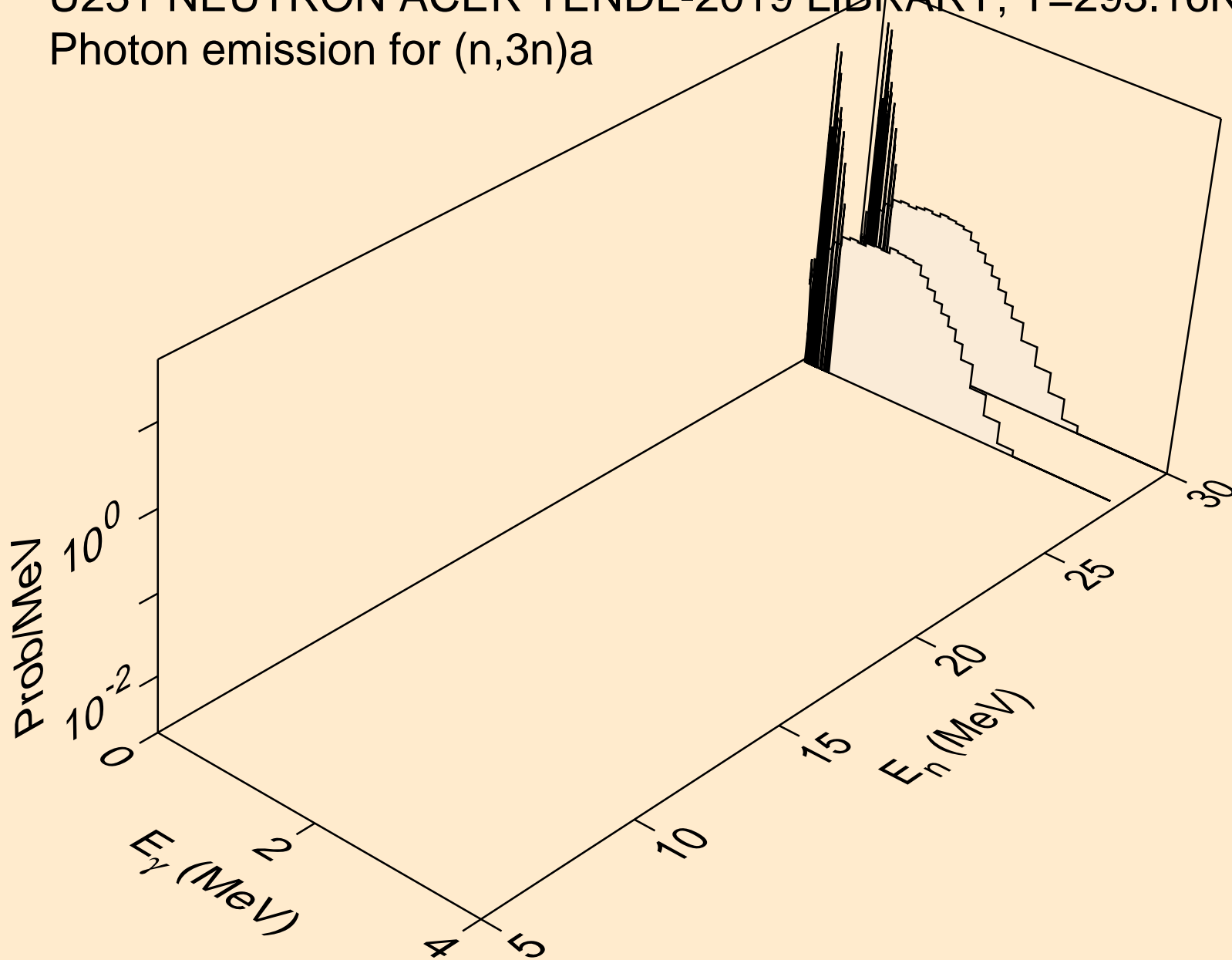
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Photon emission for (n,n\*)a



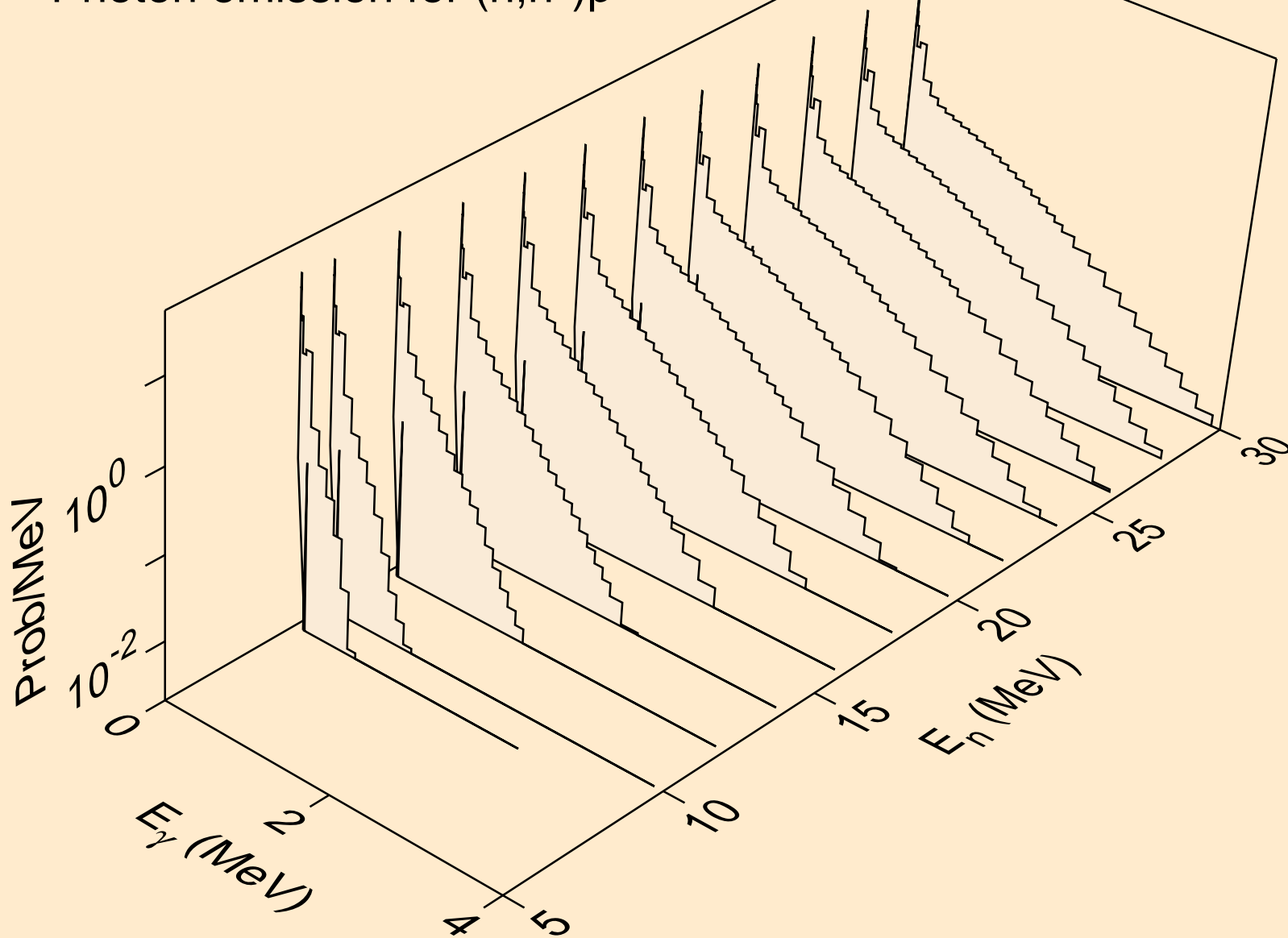
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Photon emission for (n,2n)a



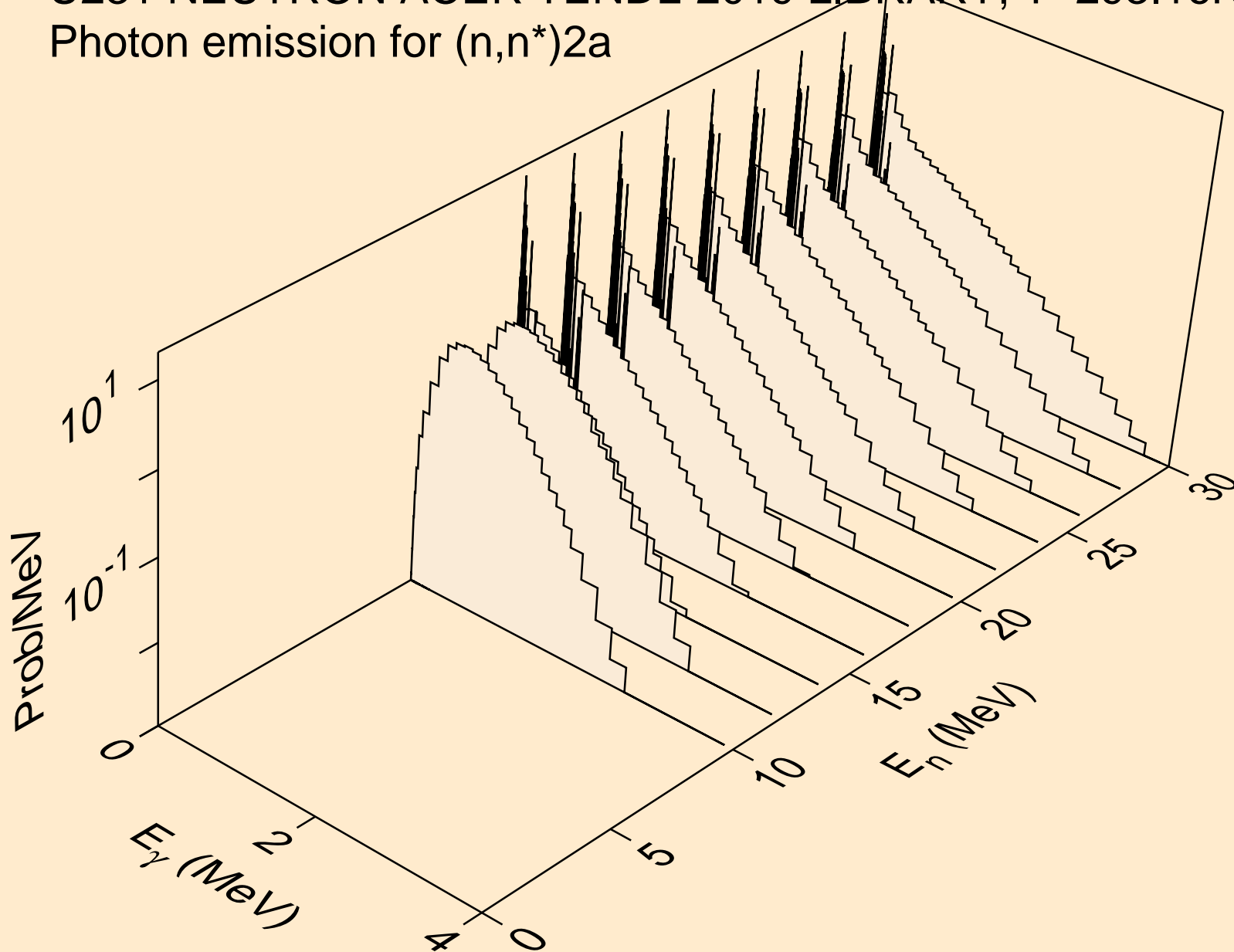
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Photon emission for (n,3n)a



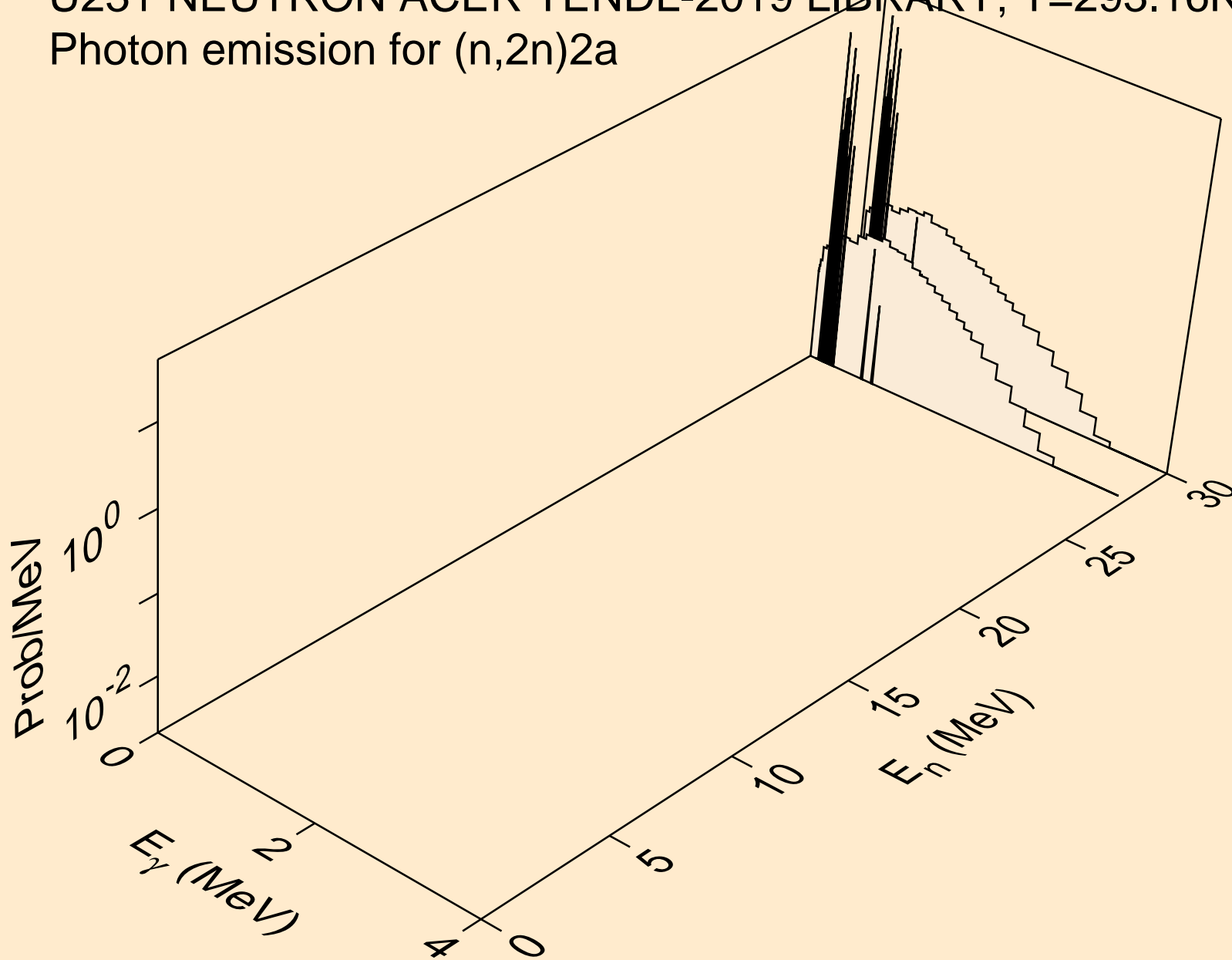
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Photon emission for (n,n\*)p



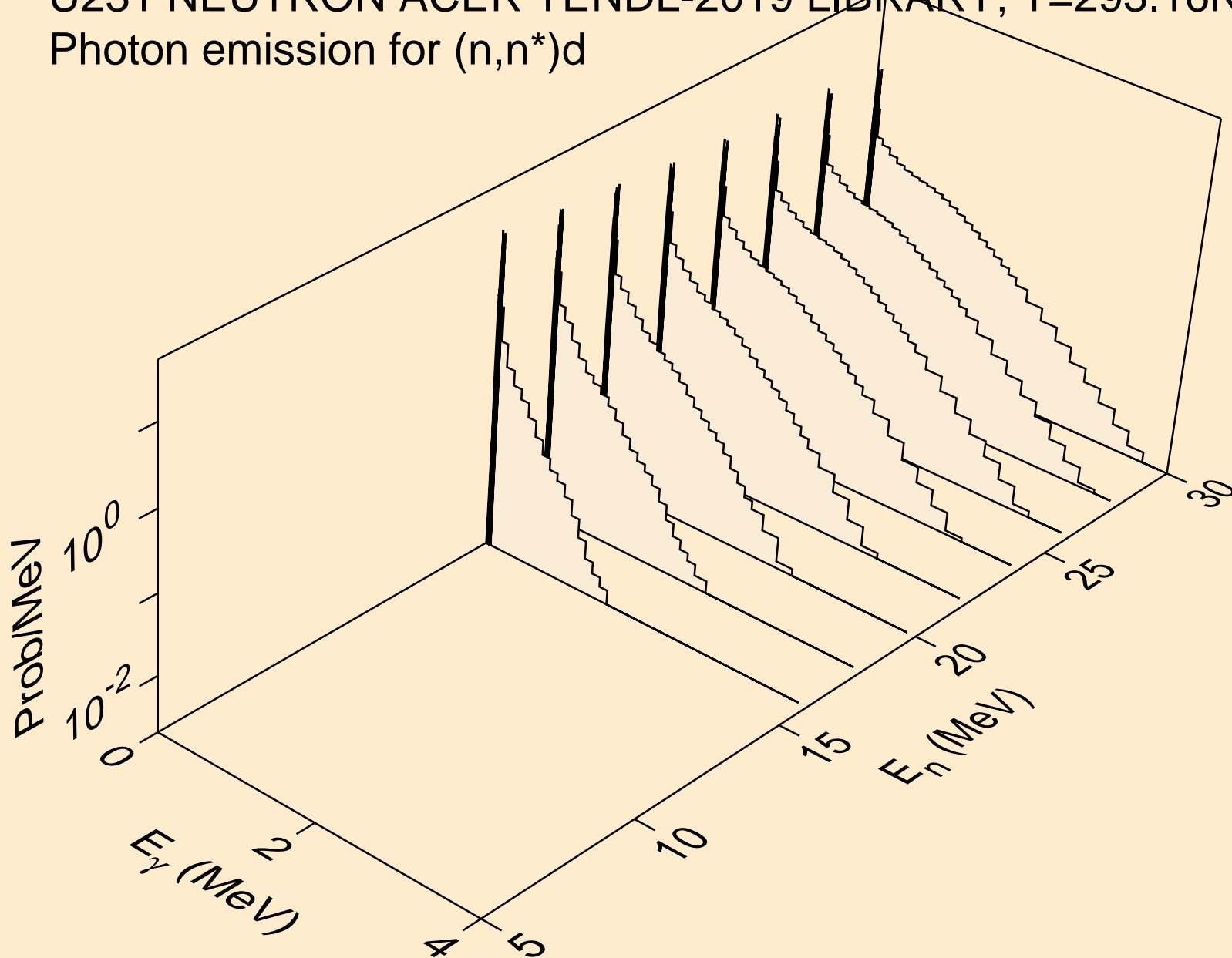
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Photon emission for (n,n\*)2a



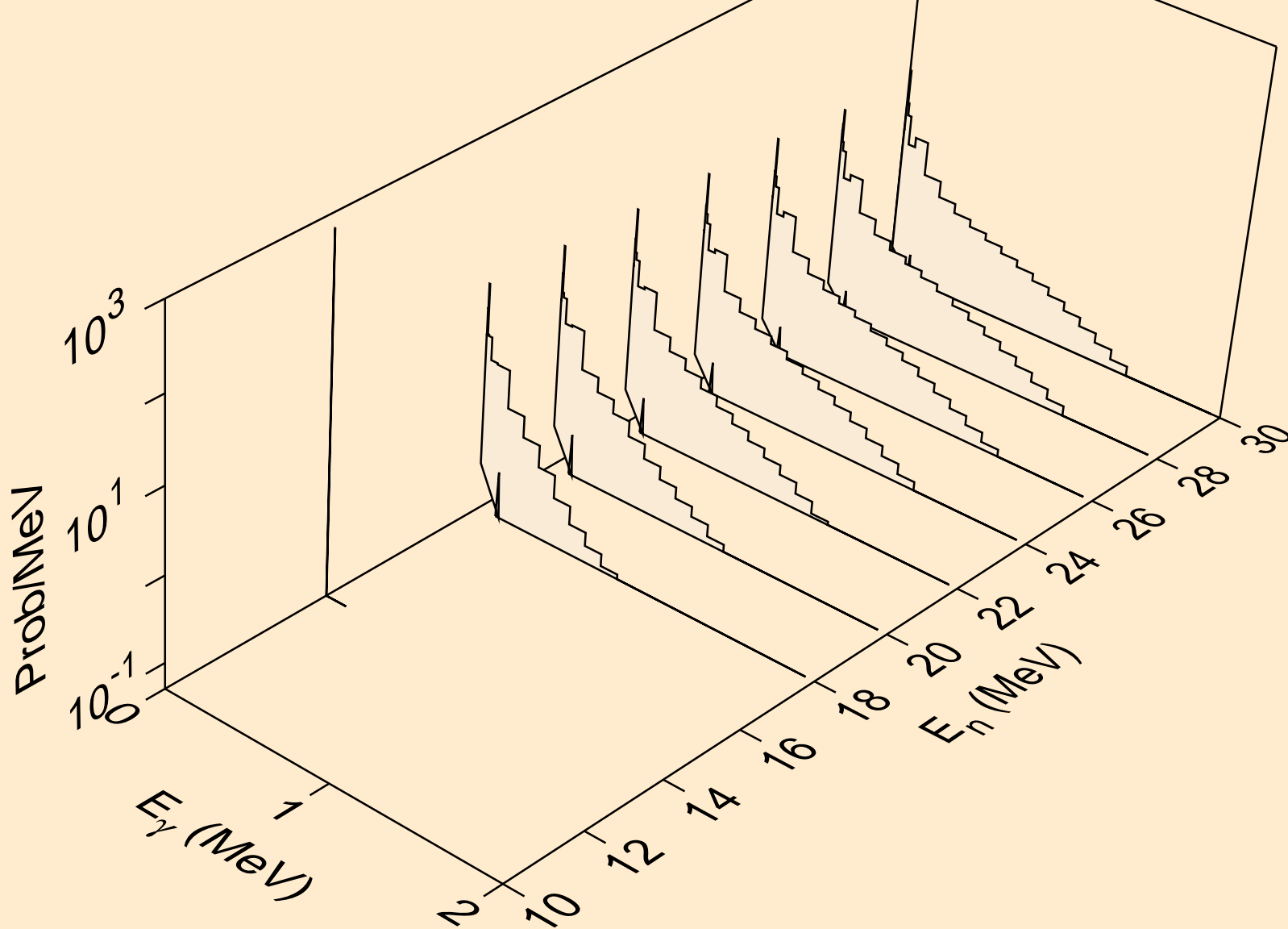
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Photon emission for (n,2n)2a



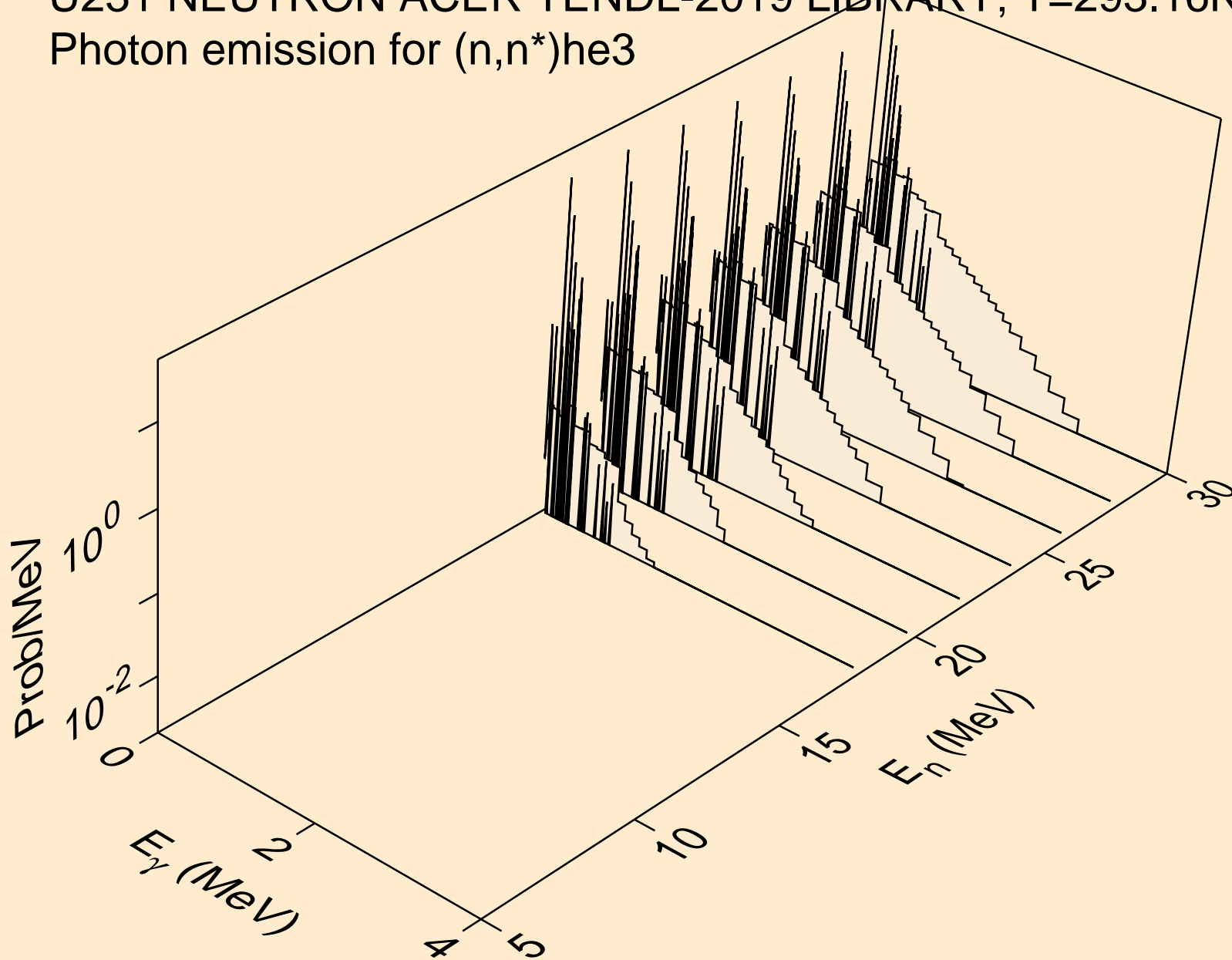
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Photon emission for (n,n\*)d



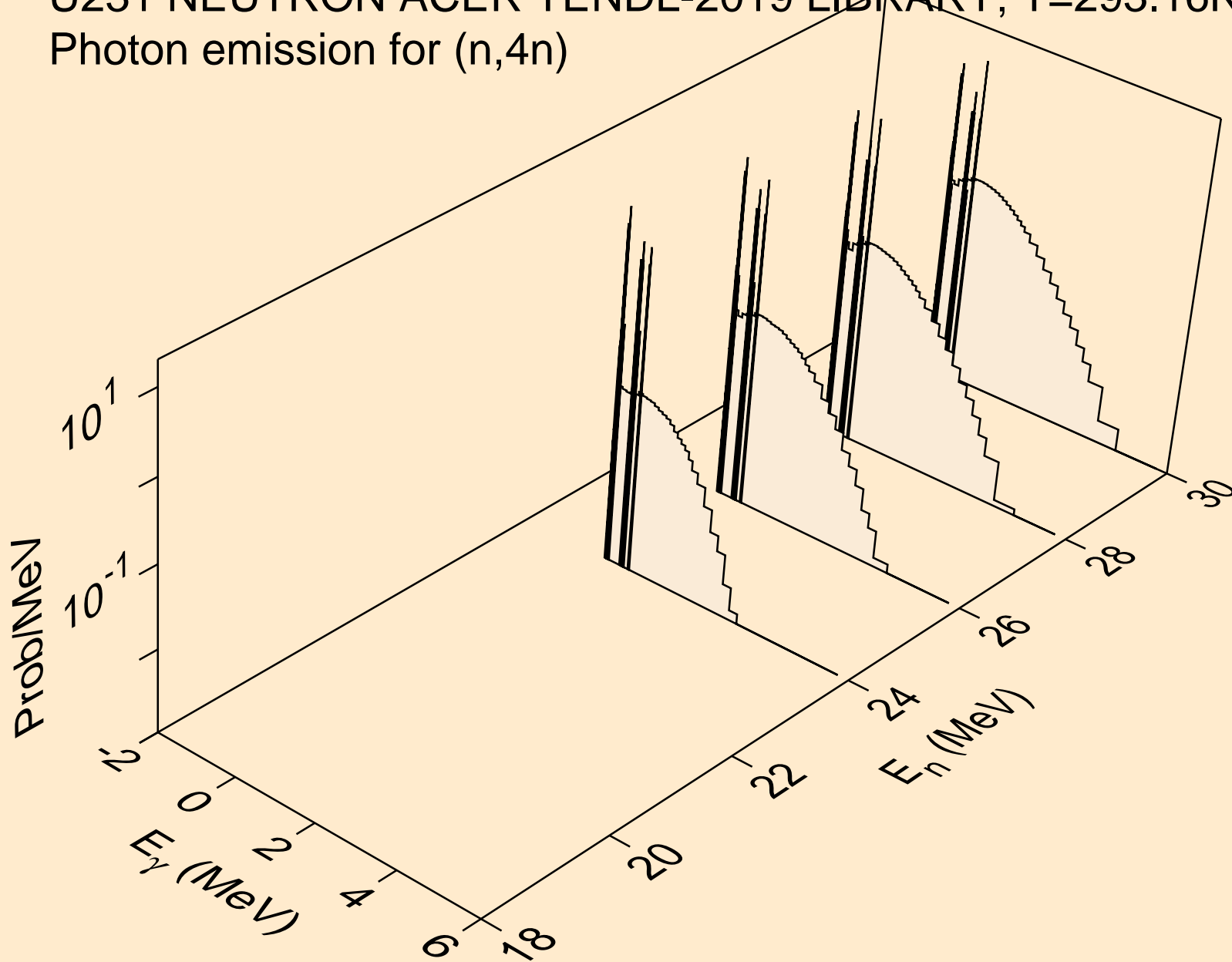
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,n\*)t



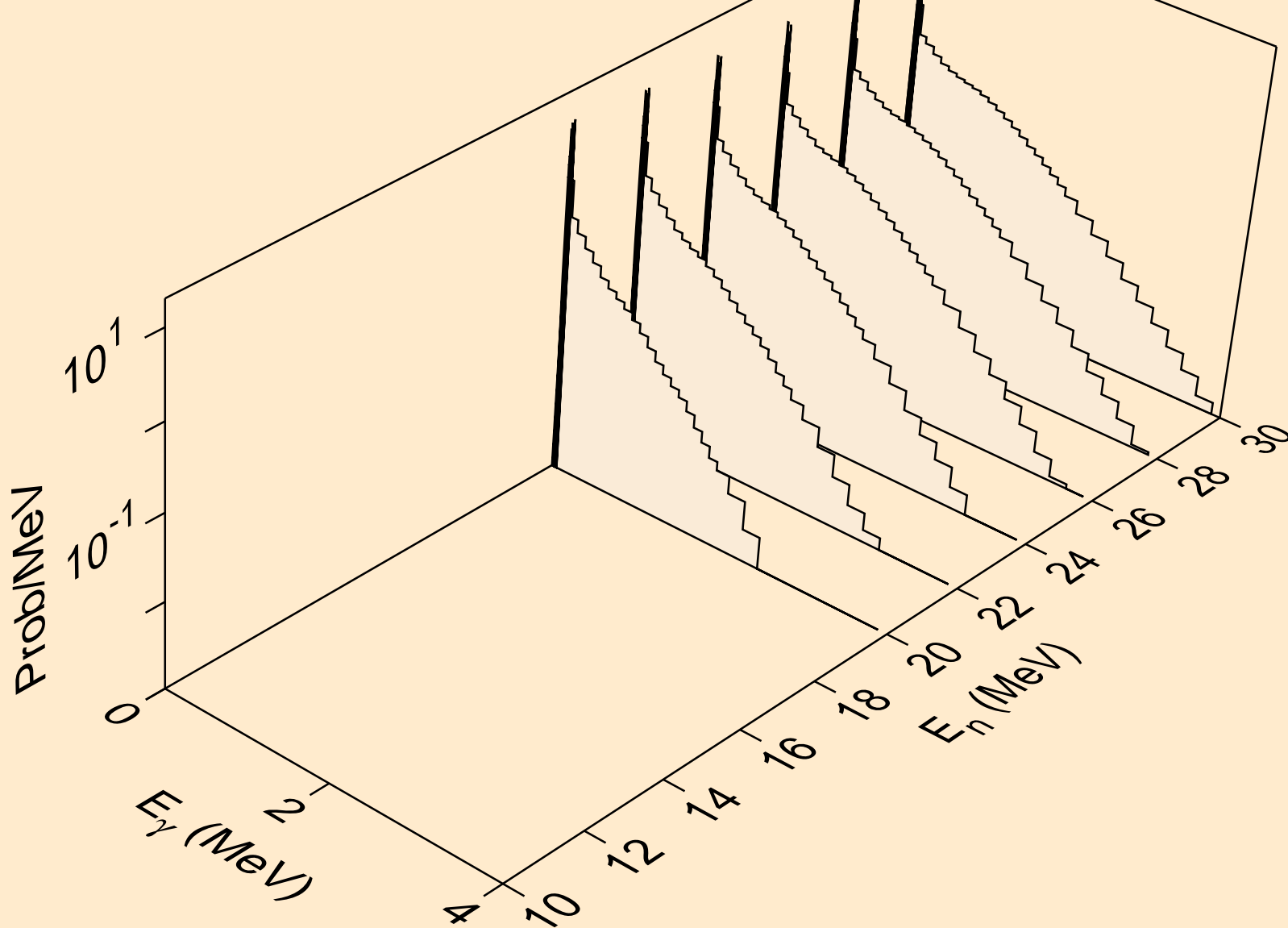
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,n\*)he3



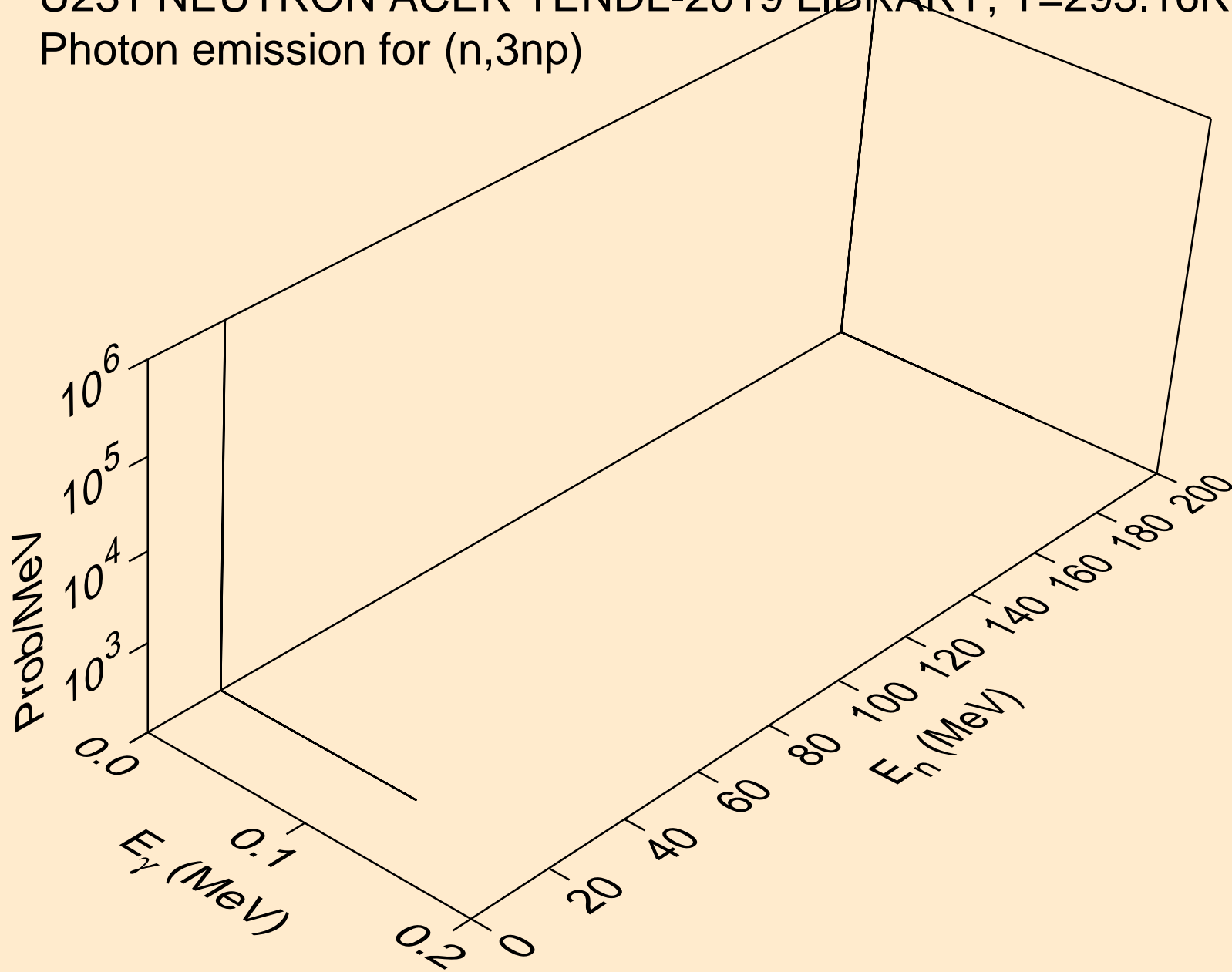
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,4n)



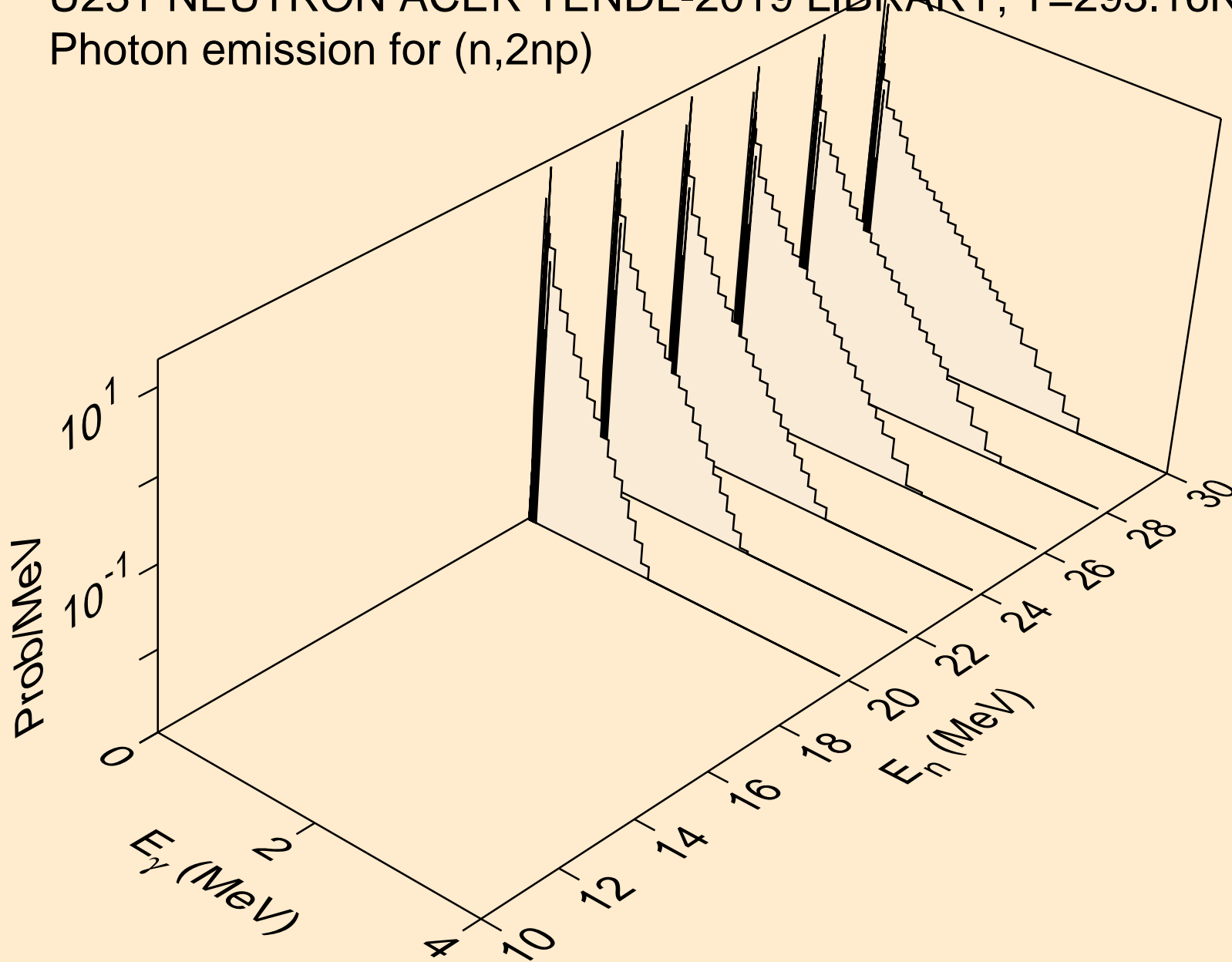
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,2np)



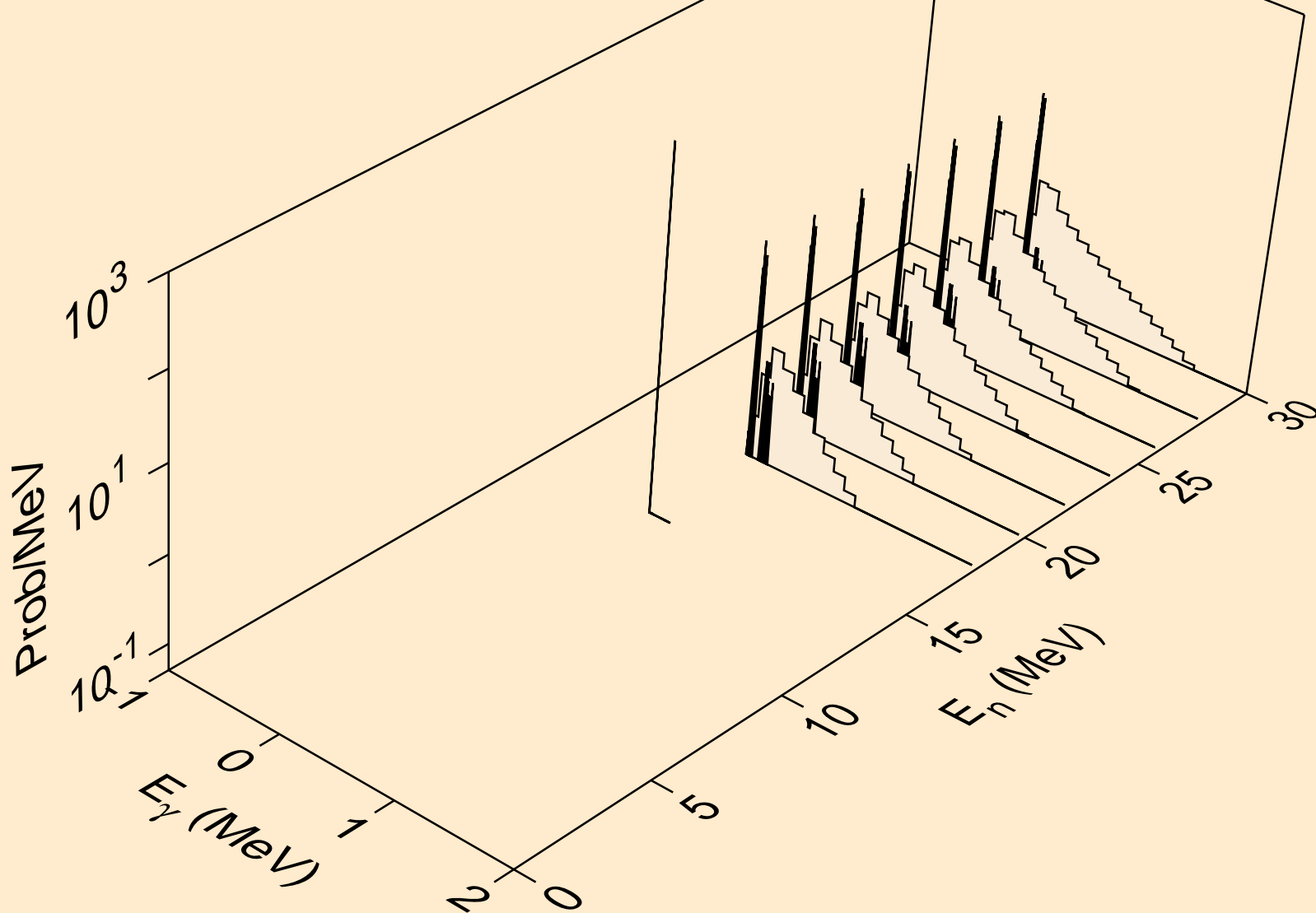
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,3np)



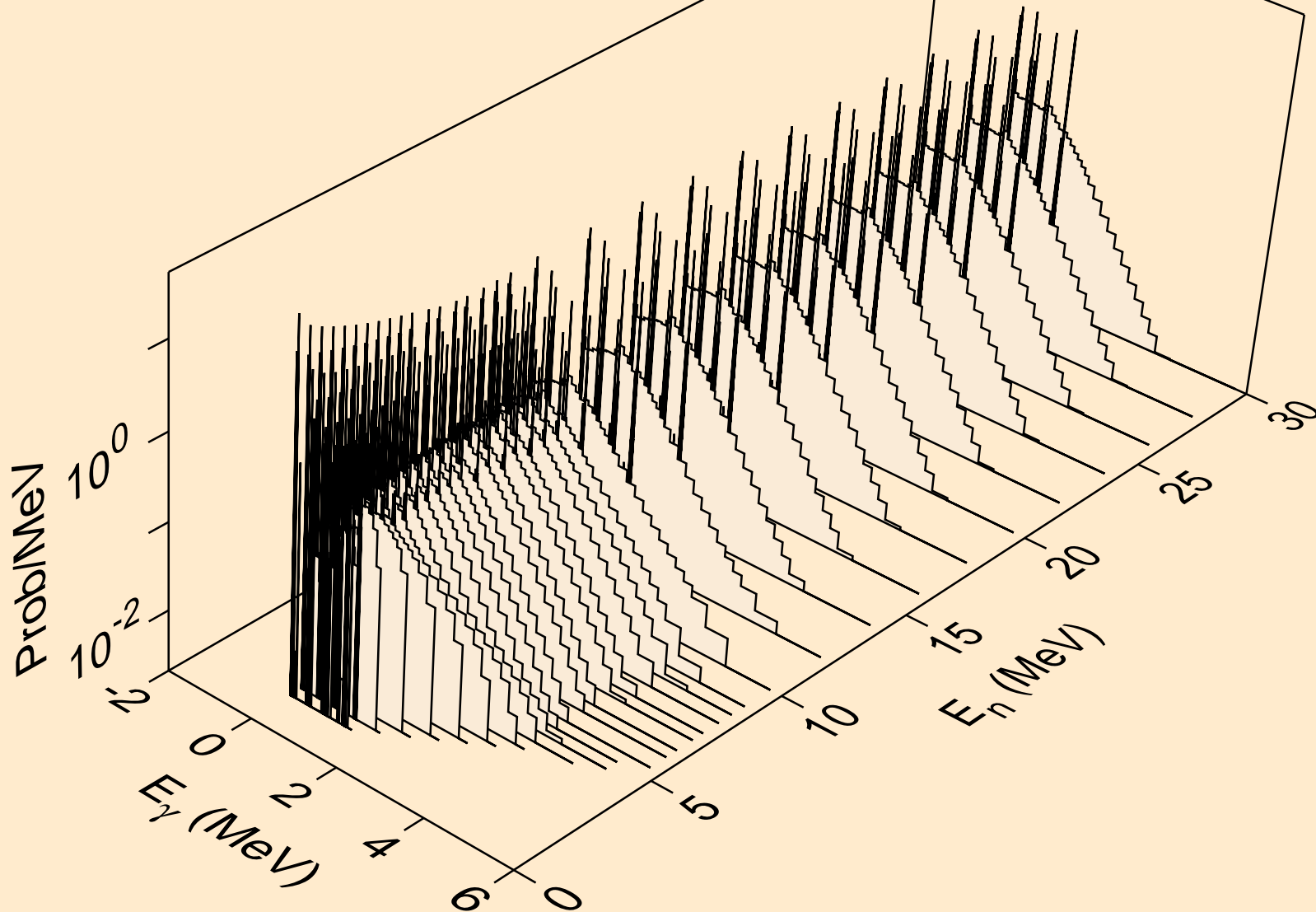
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Photon emission for (n,2np)



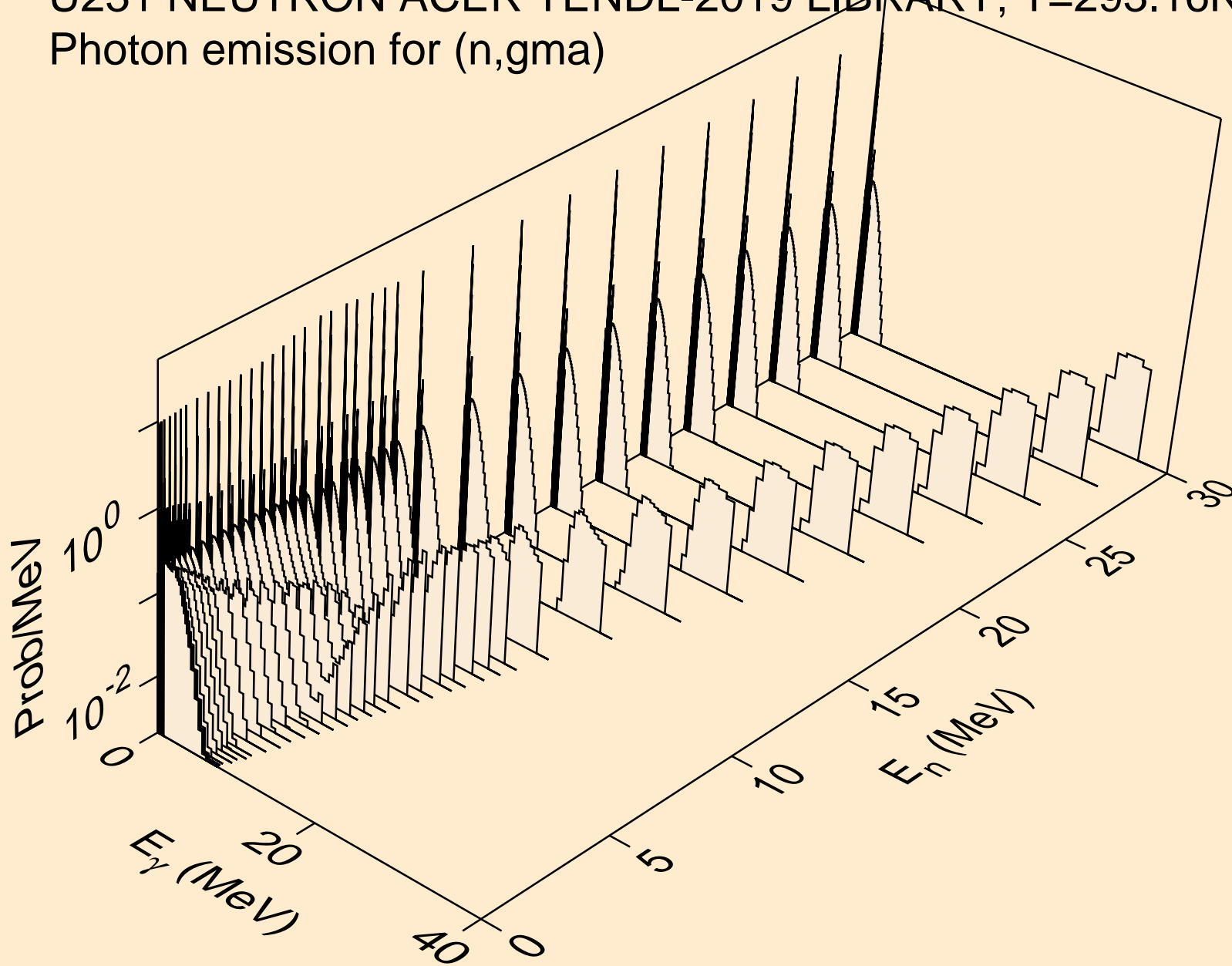
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,npa)



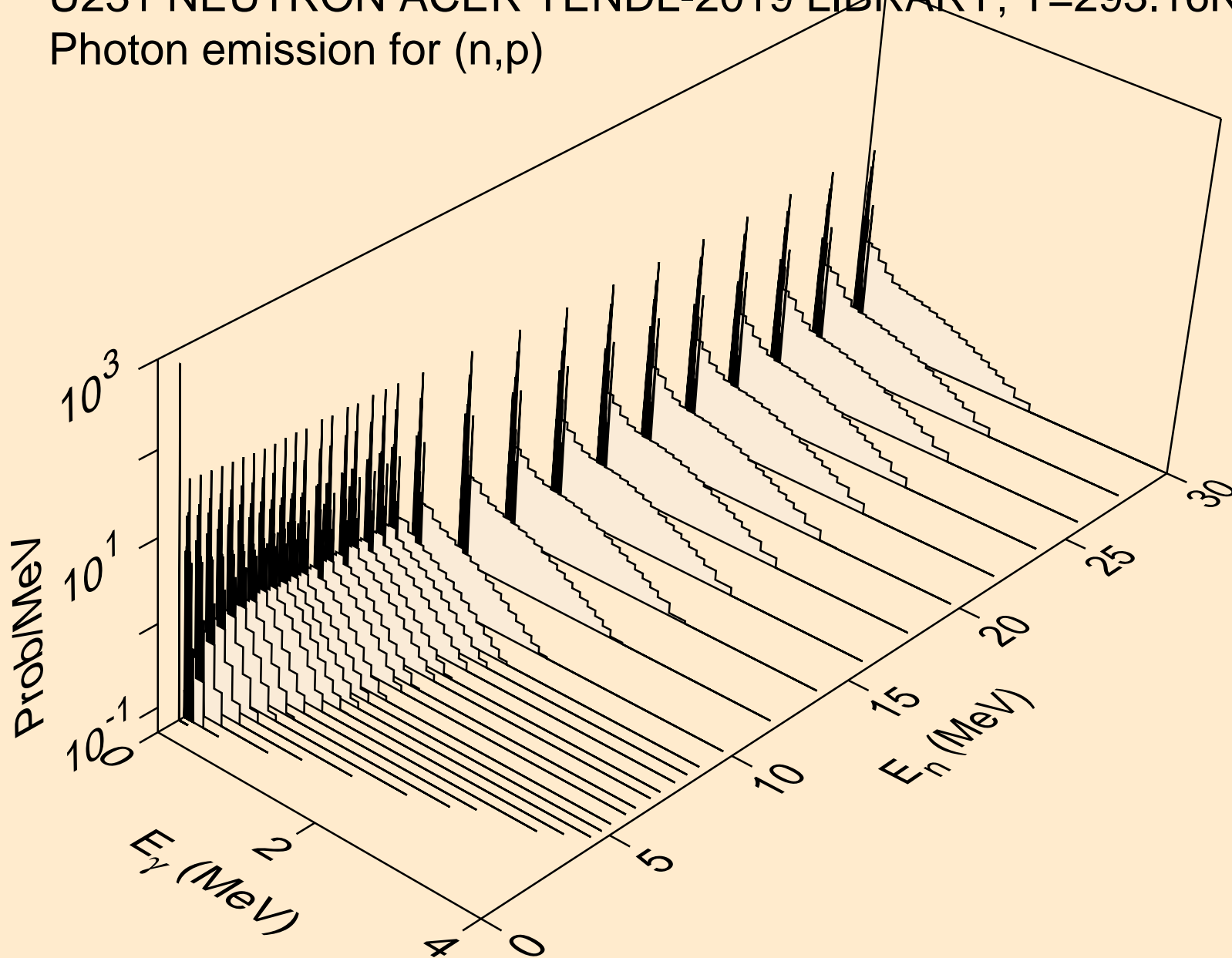
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Photon emission for (n,n\*c)



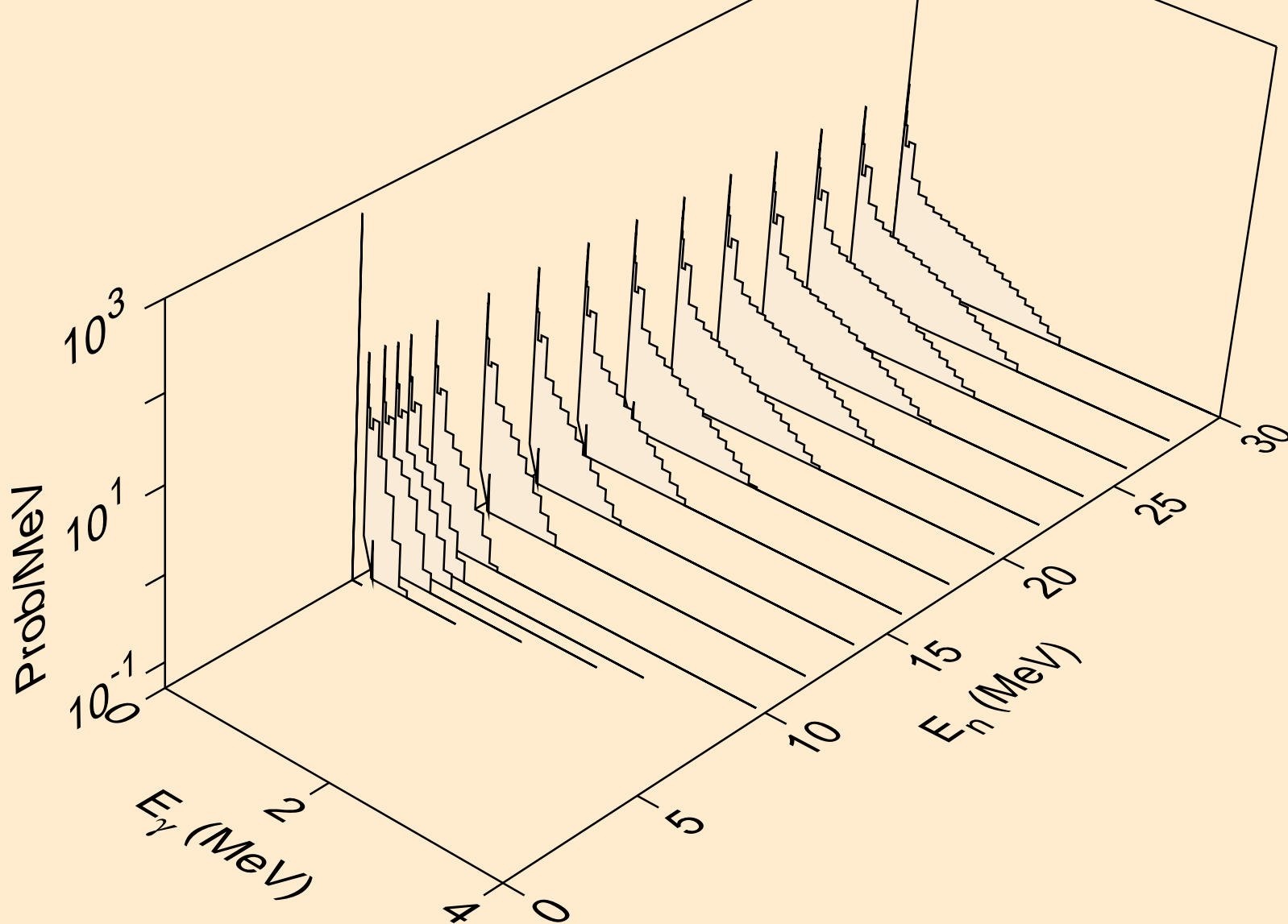
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Photon emission for (n,gma)



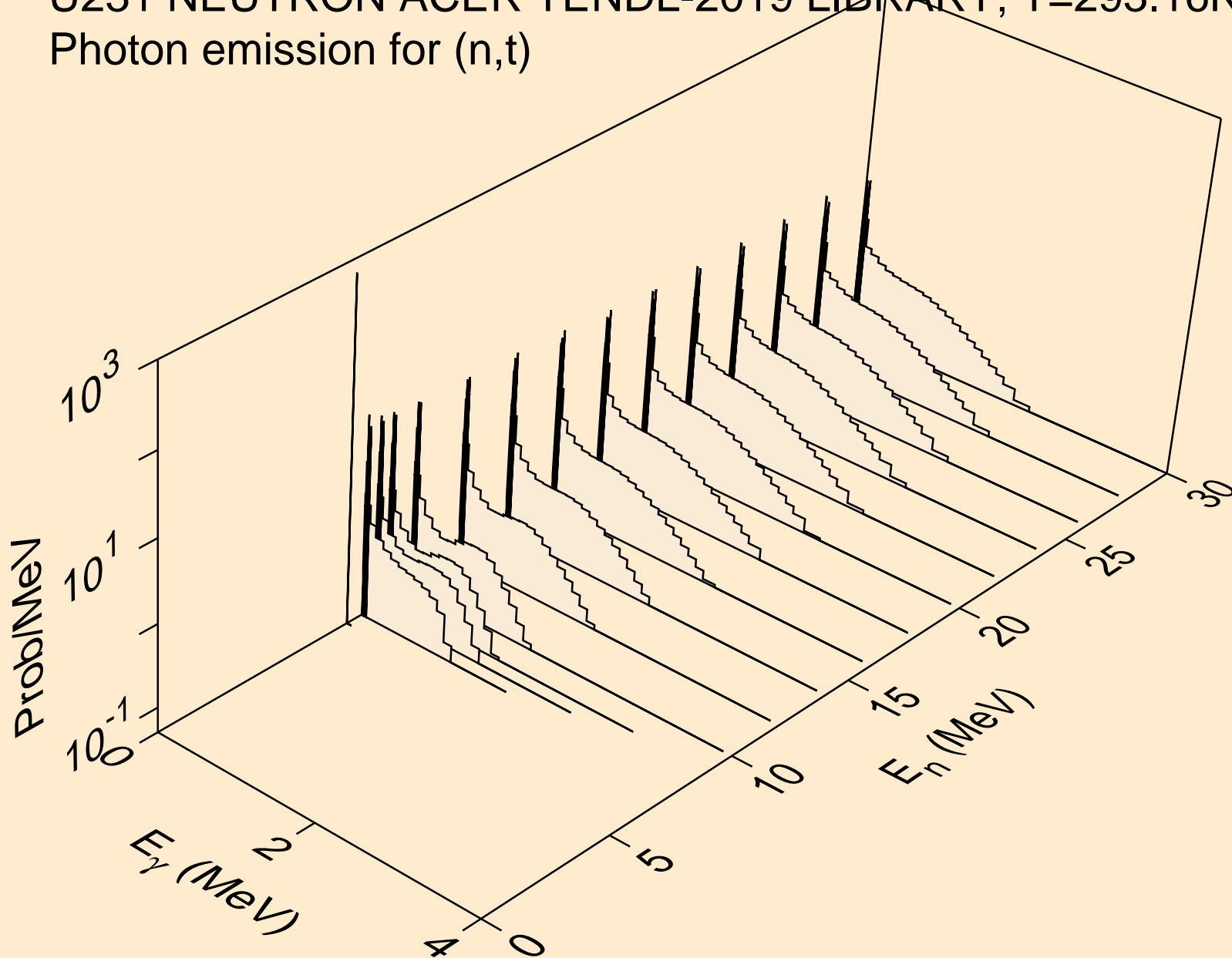
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,p)



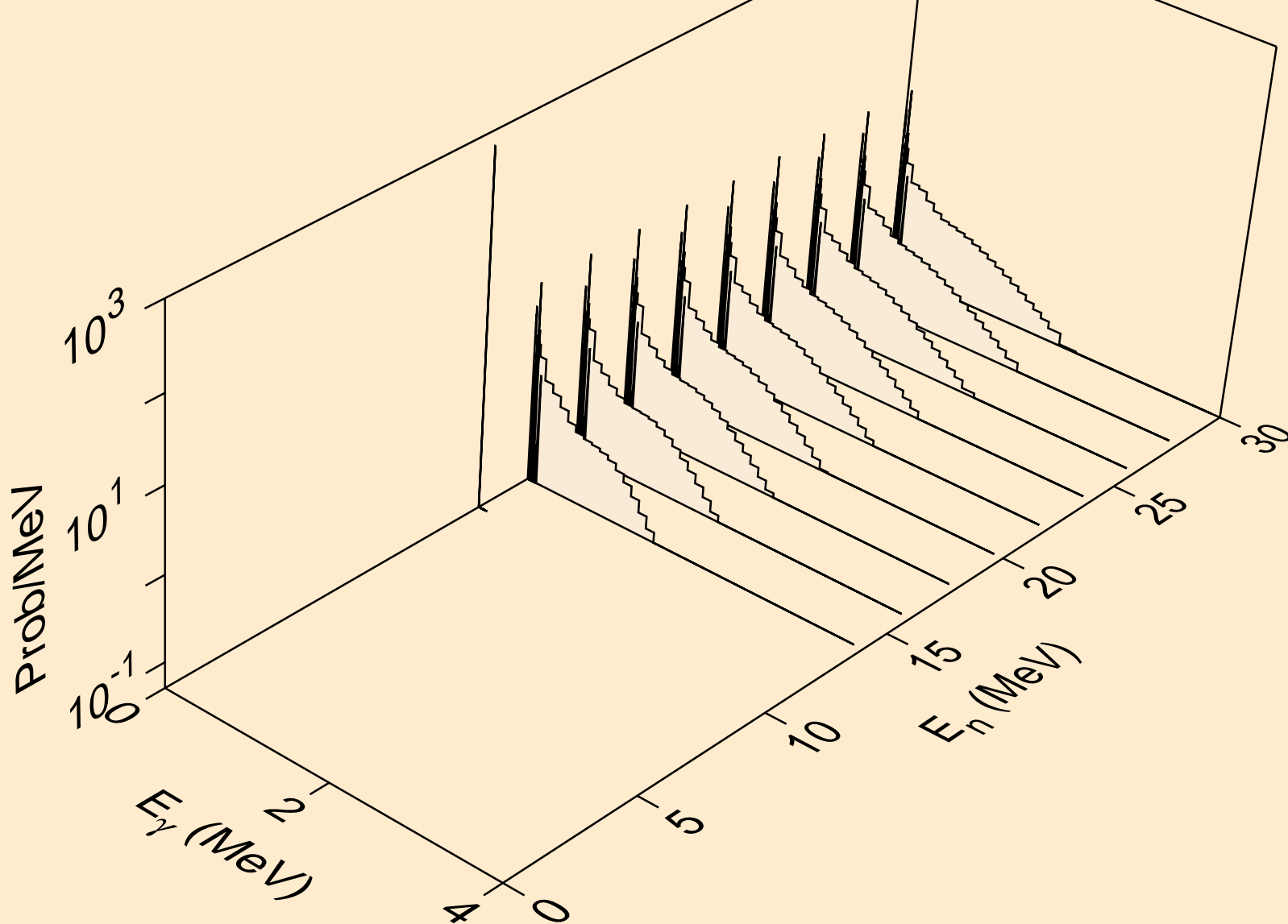
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,d)



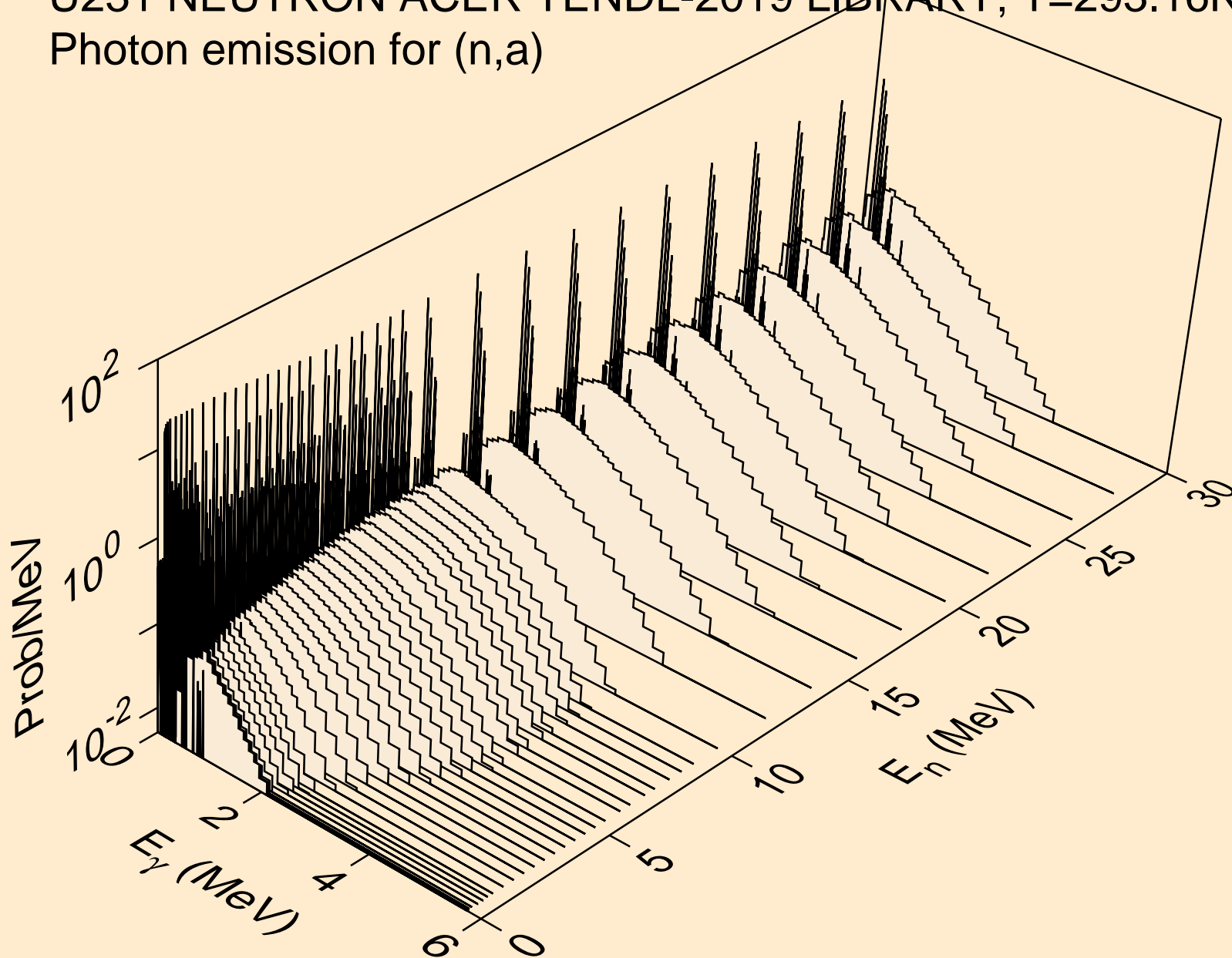
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,t)



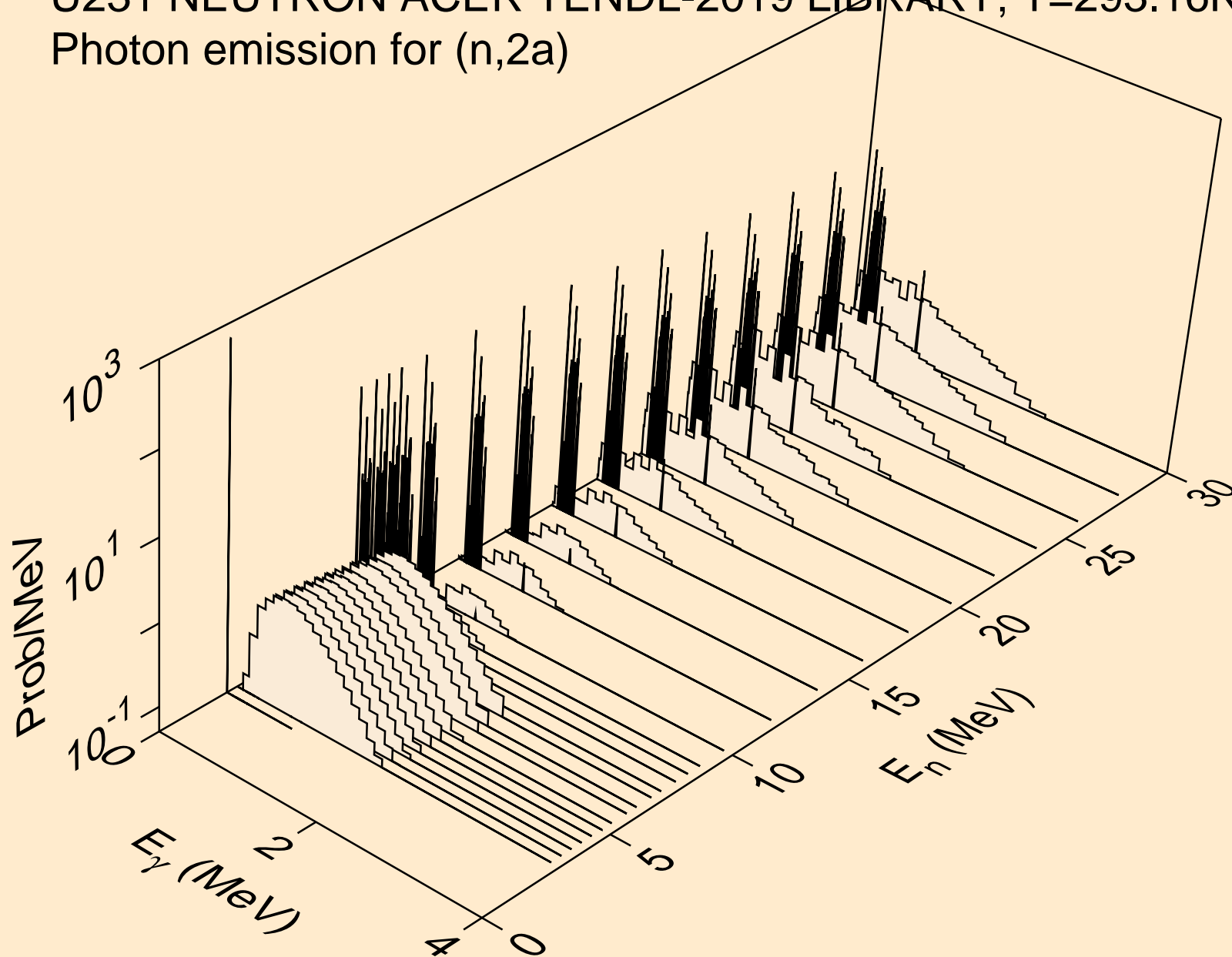
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,he3)



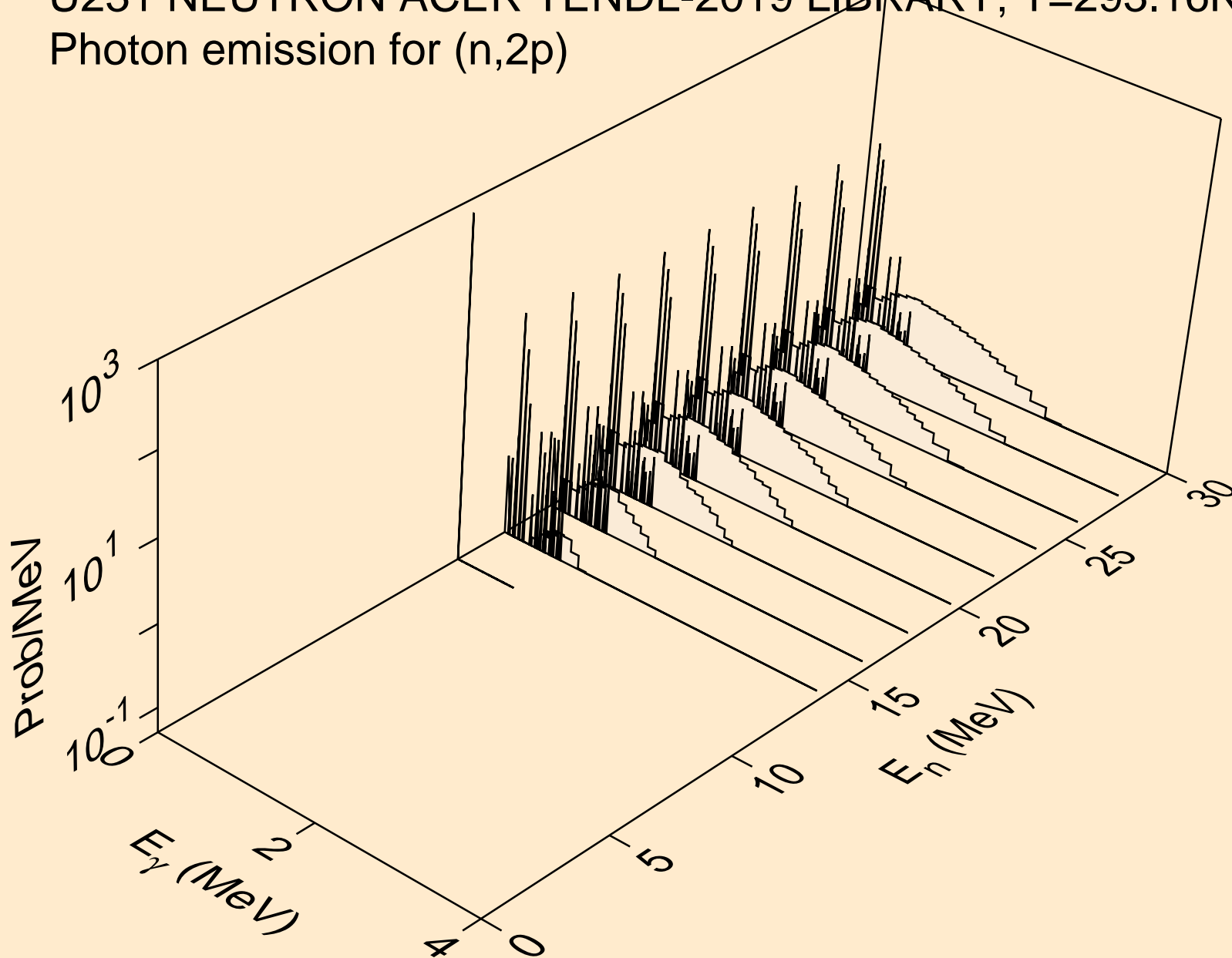
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,a)



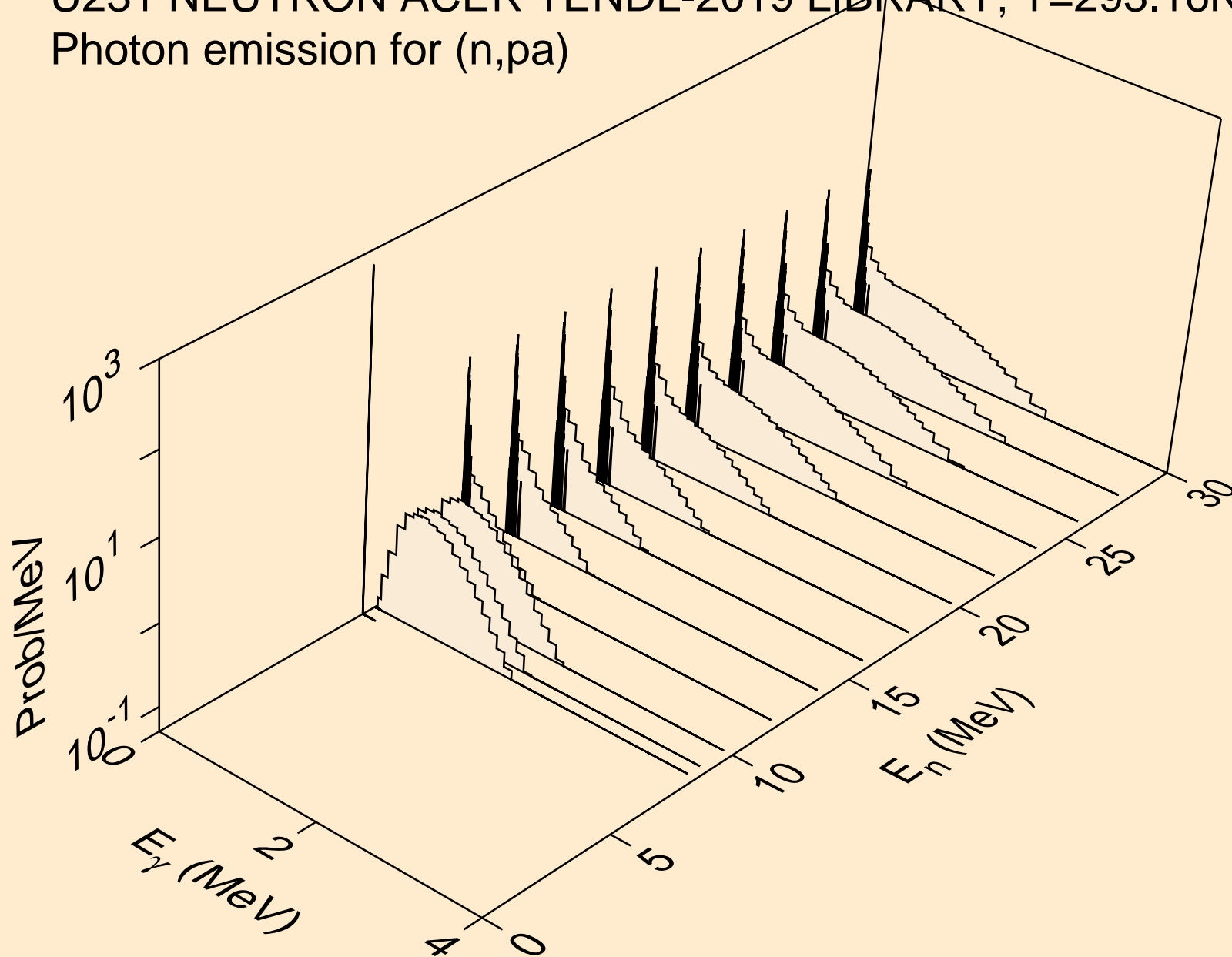
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,2a)



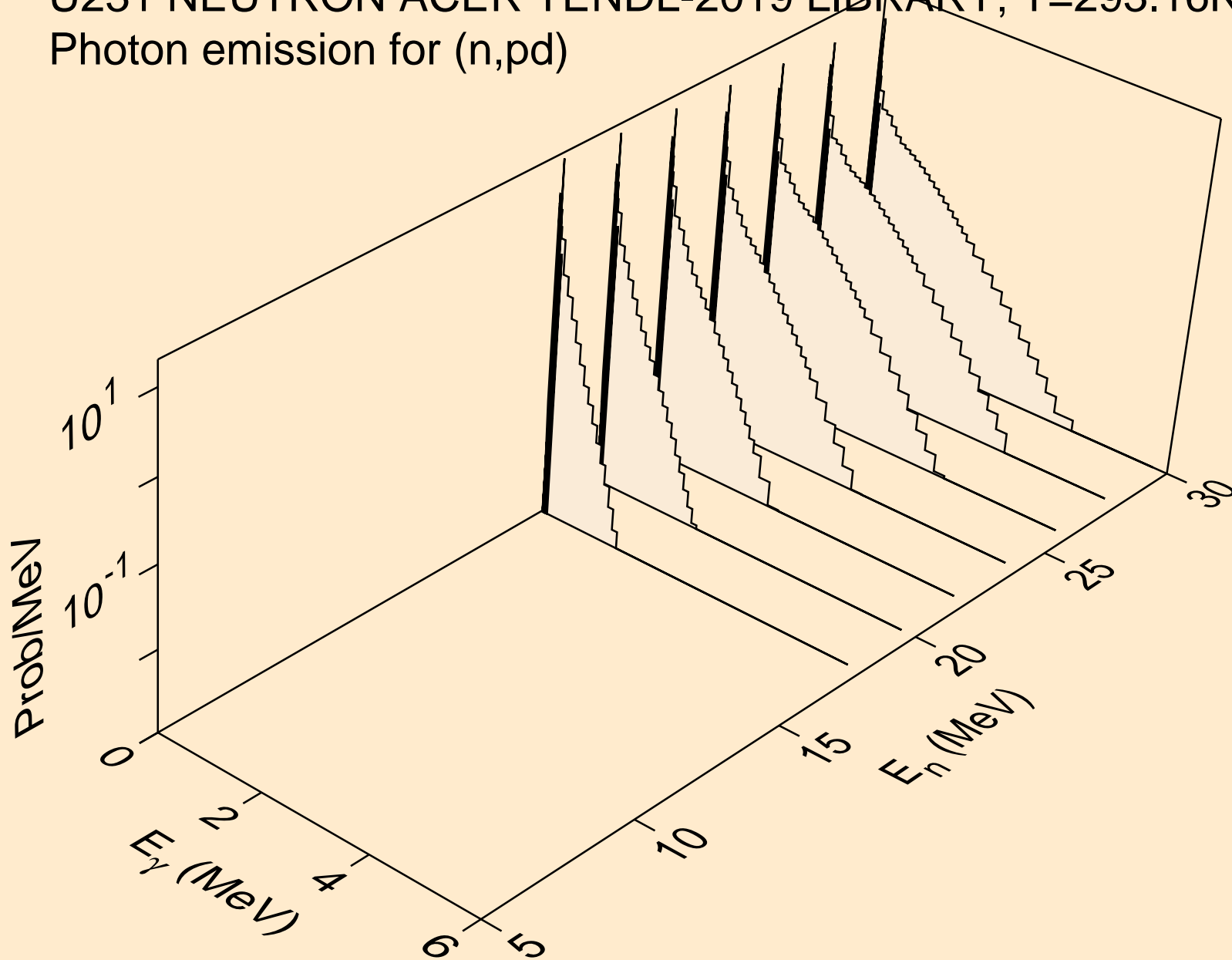
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,2p)



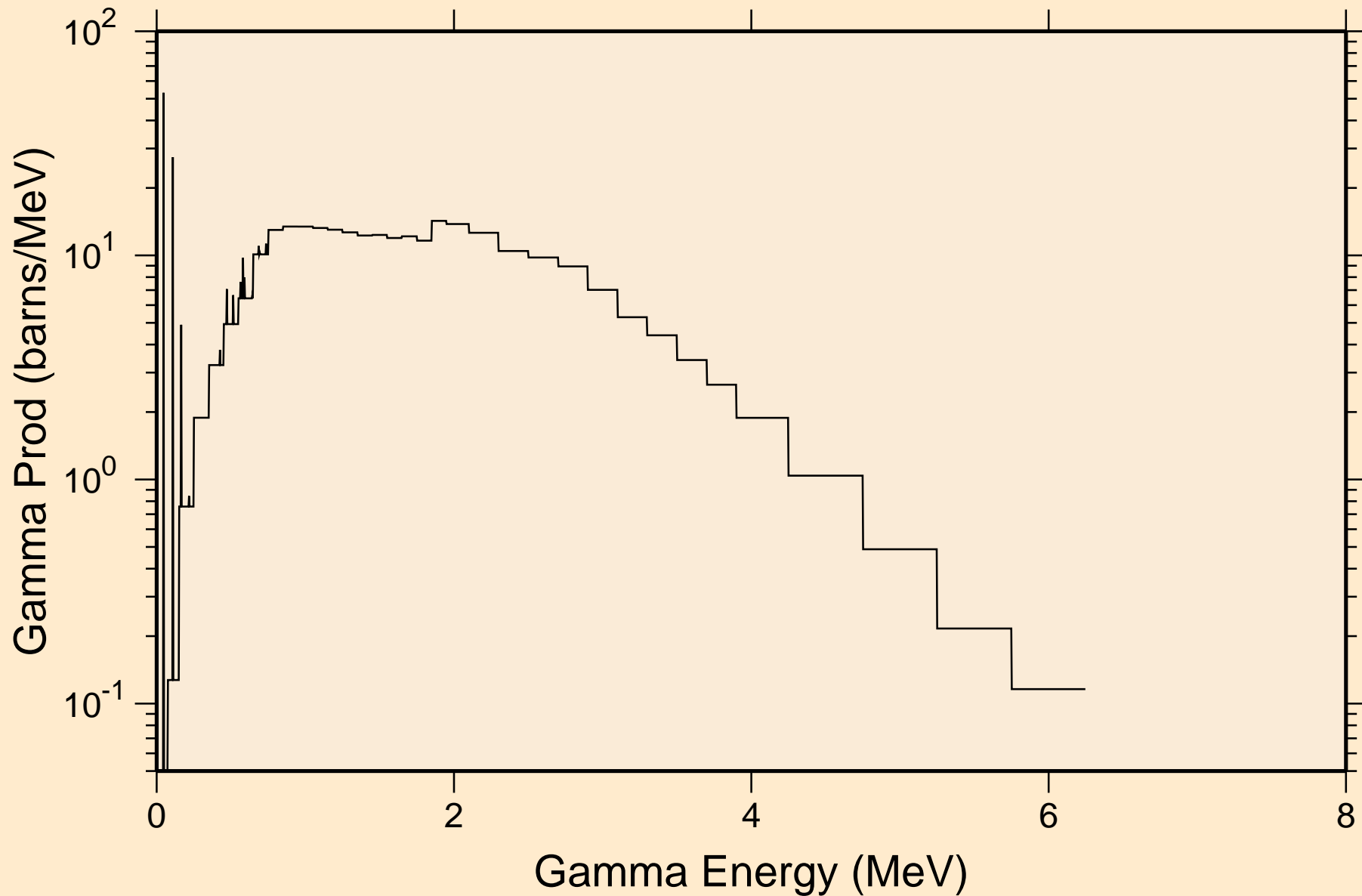
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,p $\alpha$ )



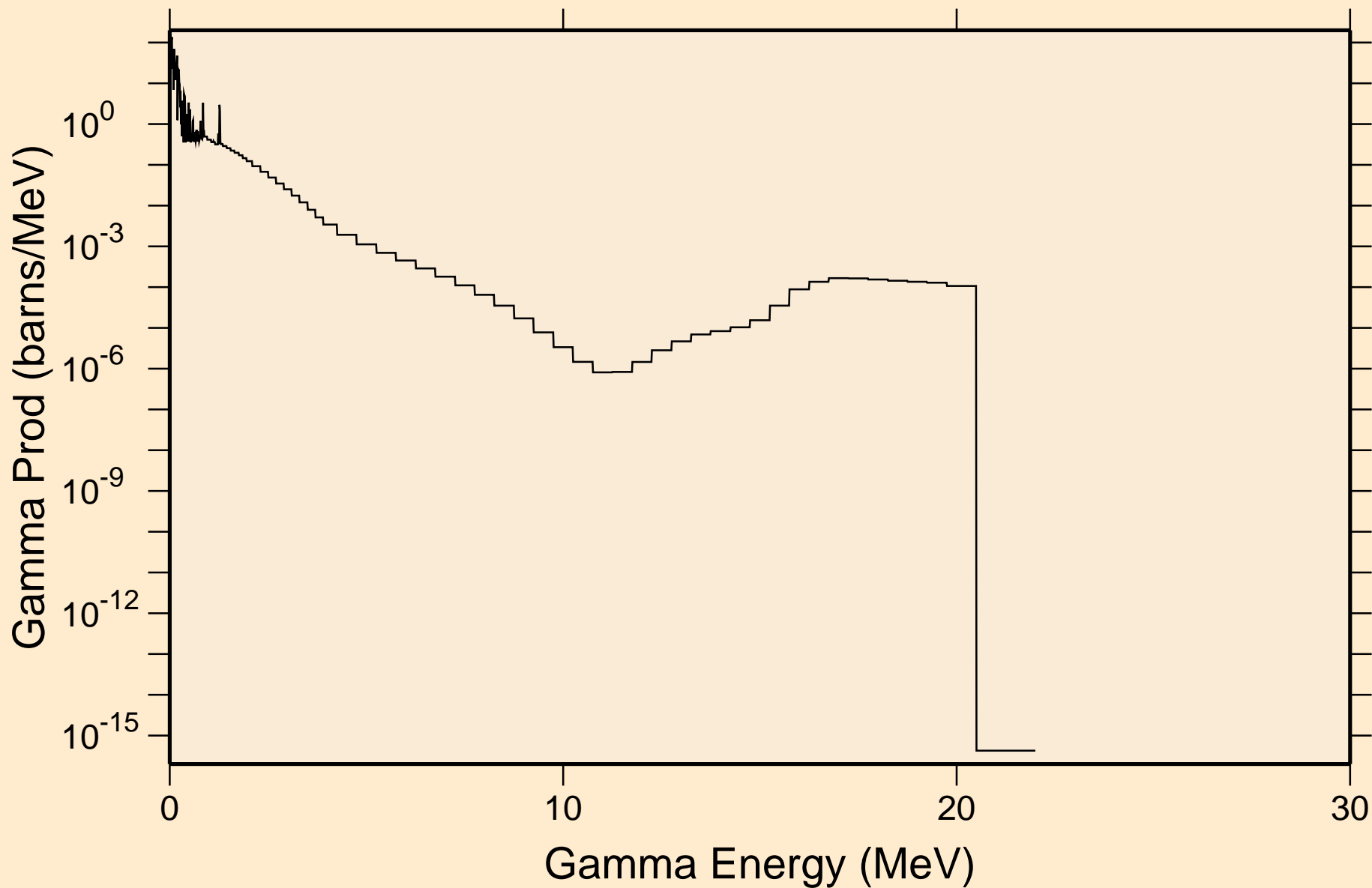
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Photon emission for (n,pd)



U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
thermal capture photon spectrum

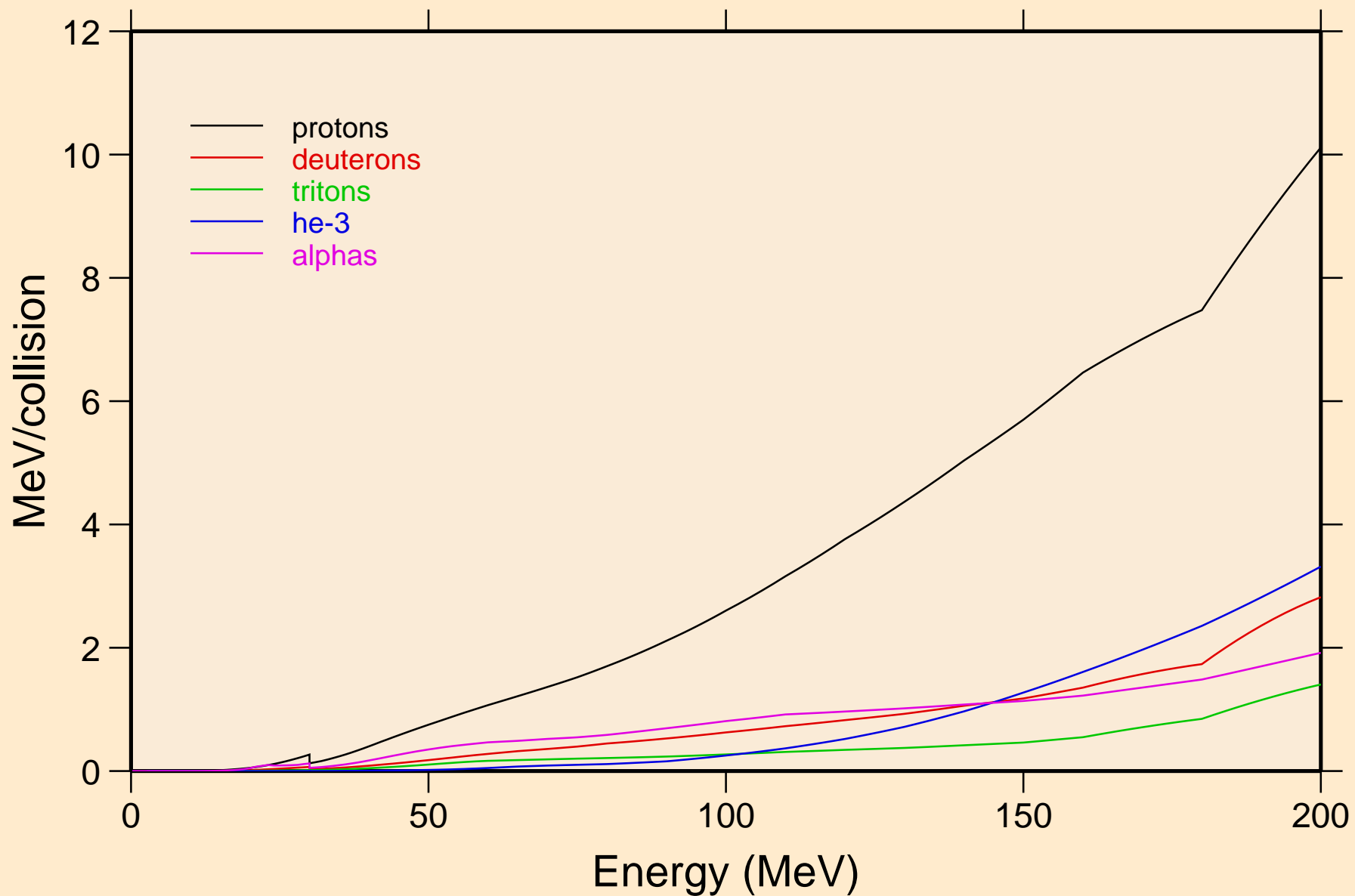


U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
14 MeV photon spectrum

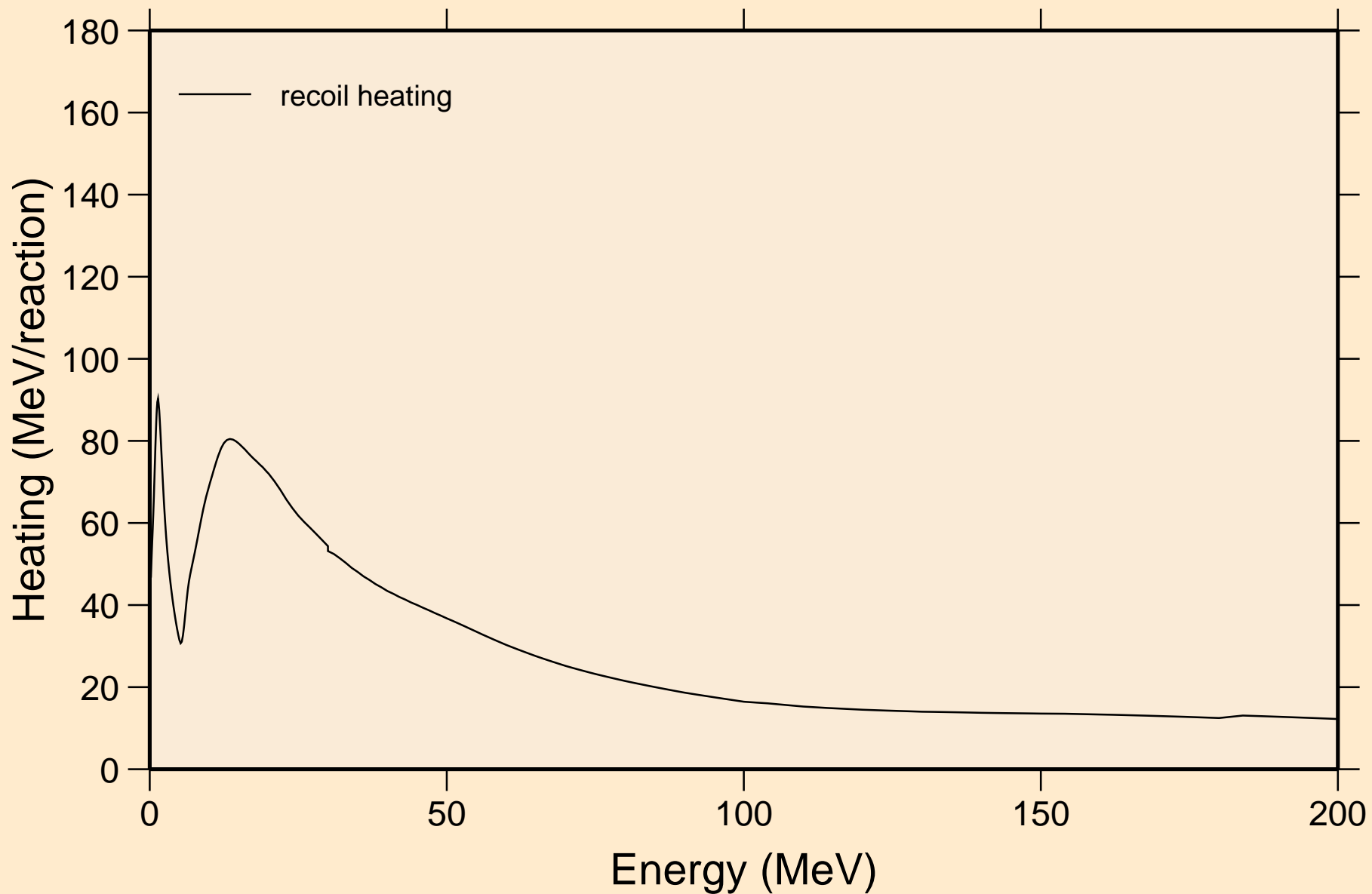


# U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K

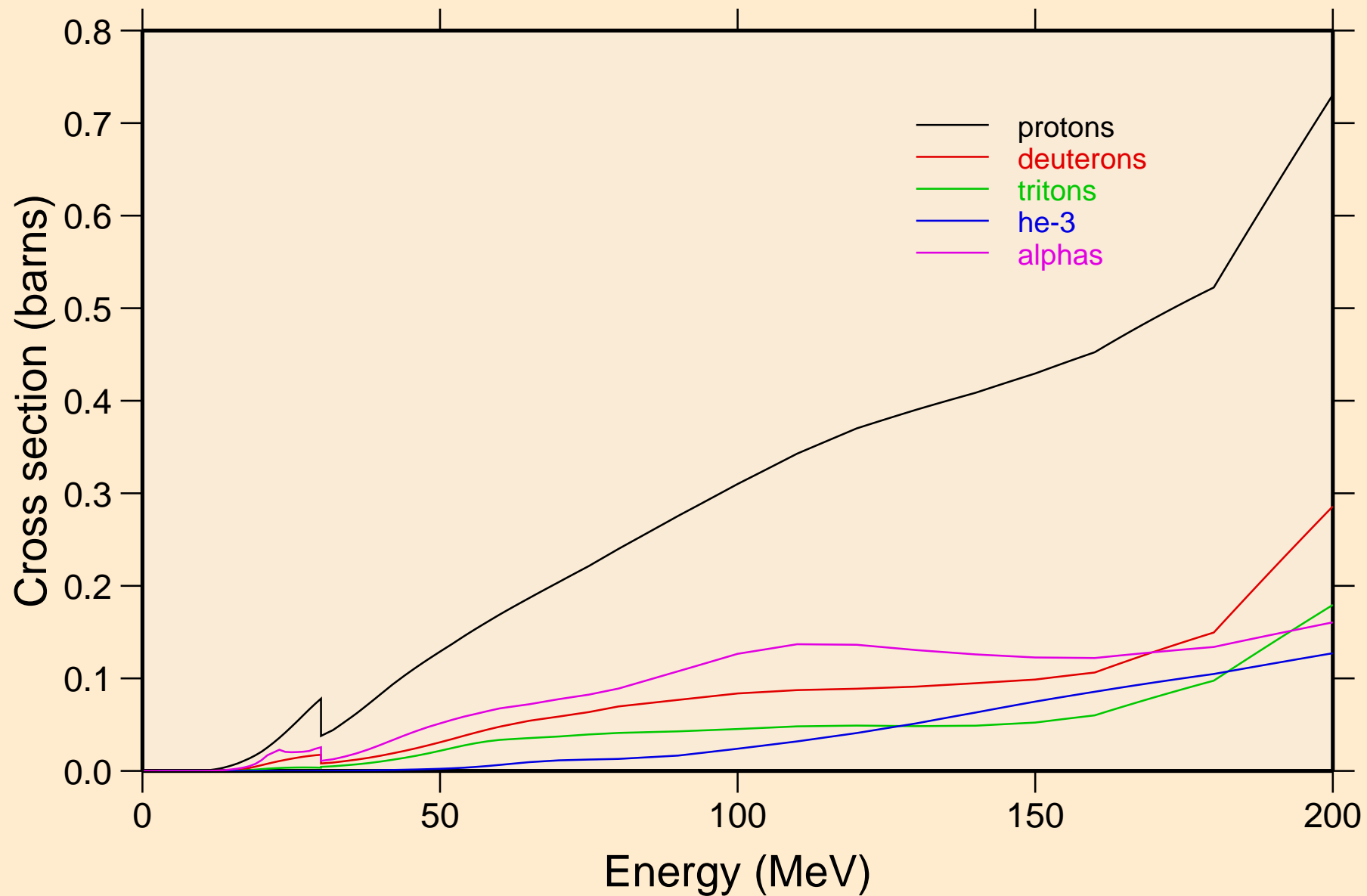
## Particle heating contributions



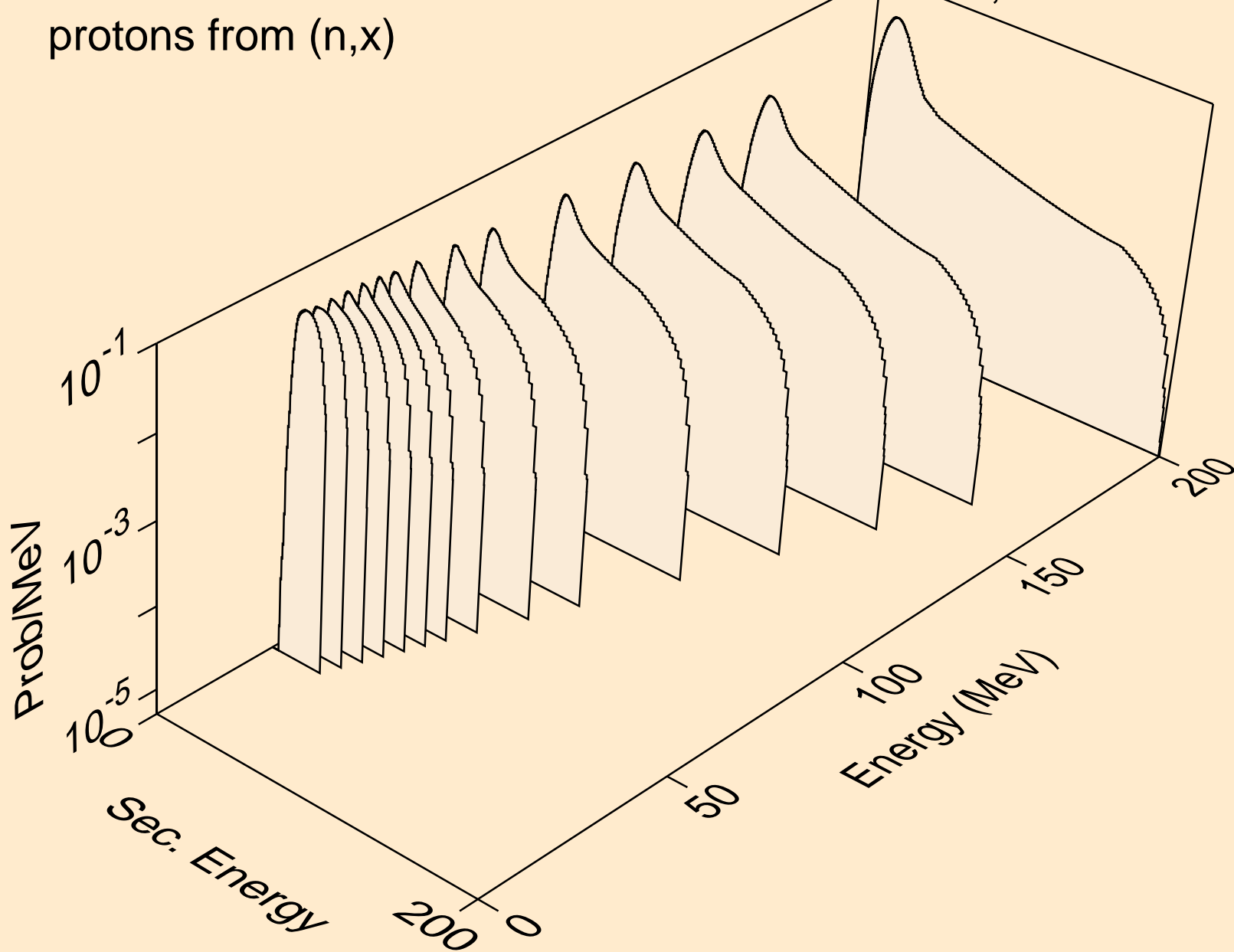
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Recoil Heating



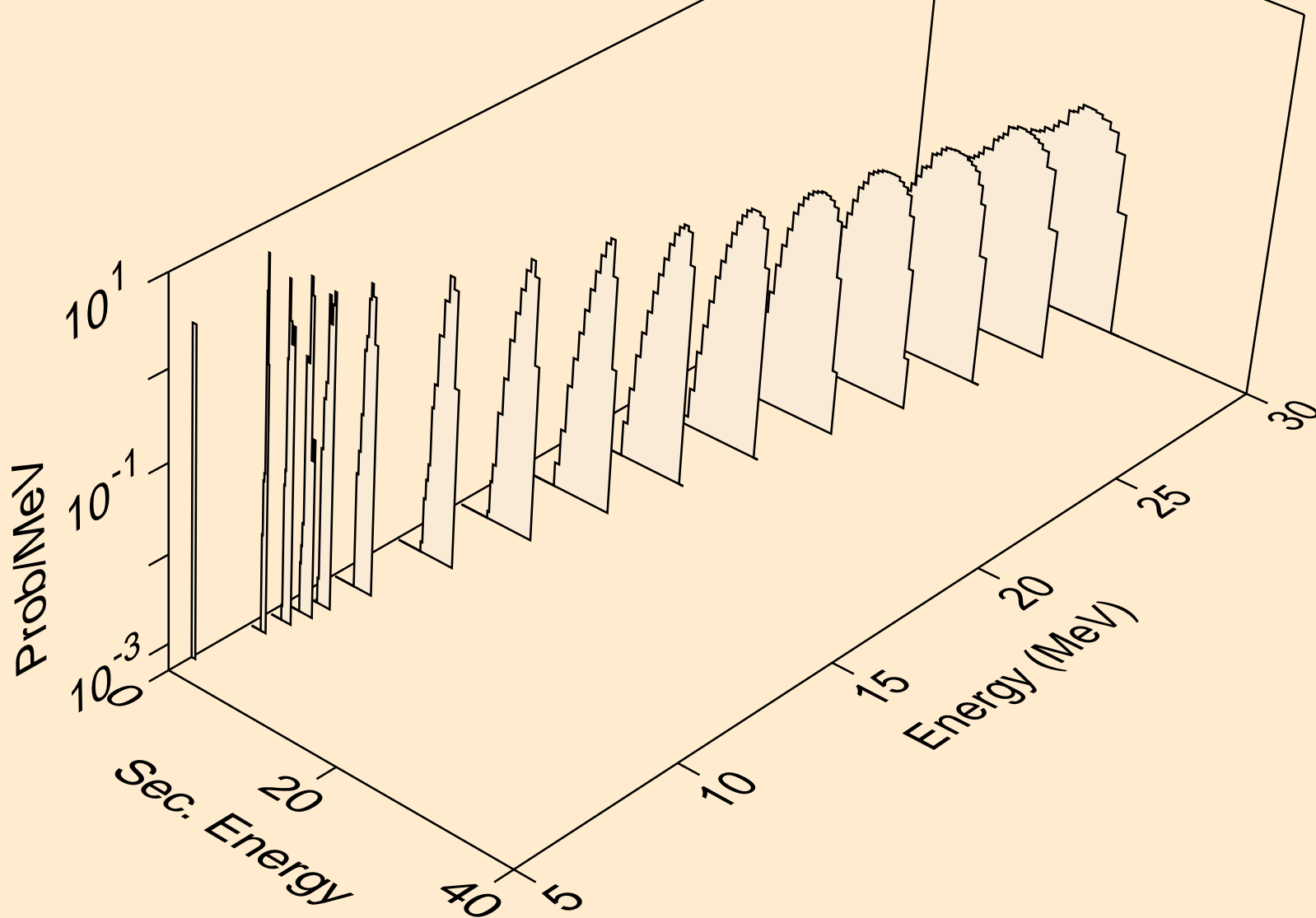
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
Particle production cross sections



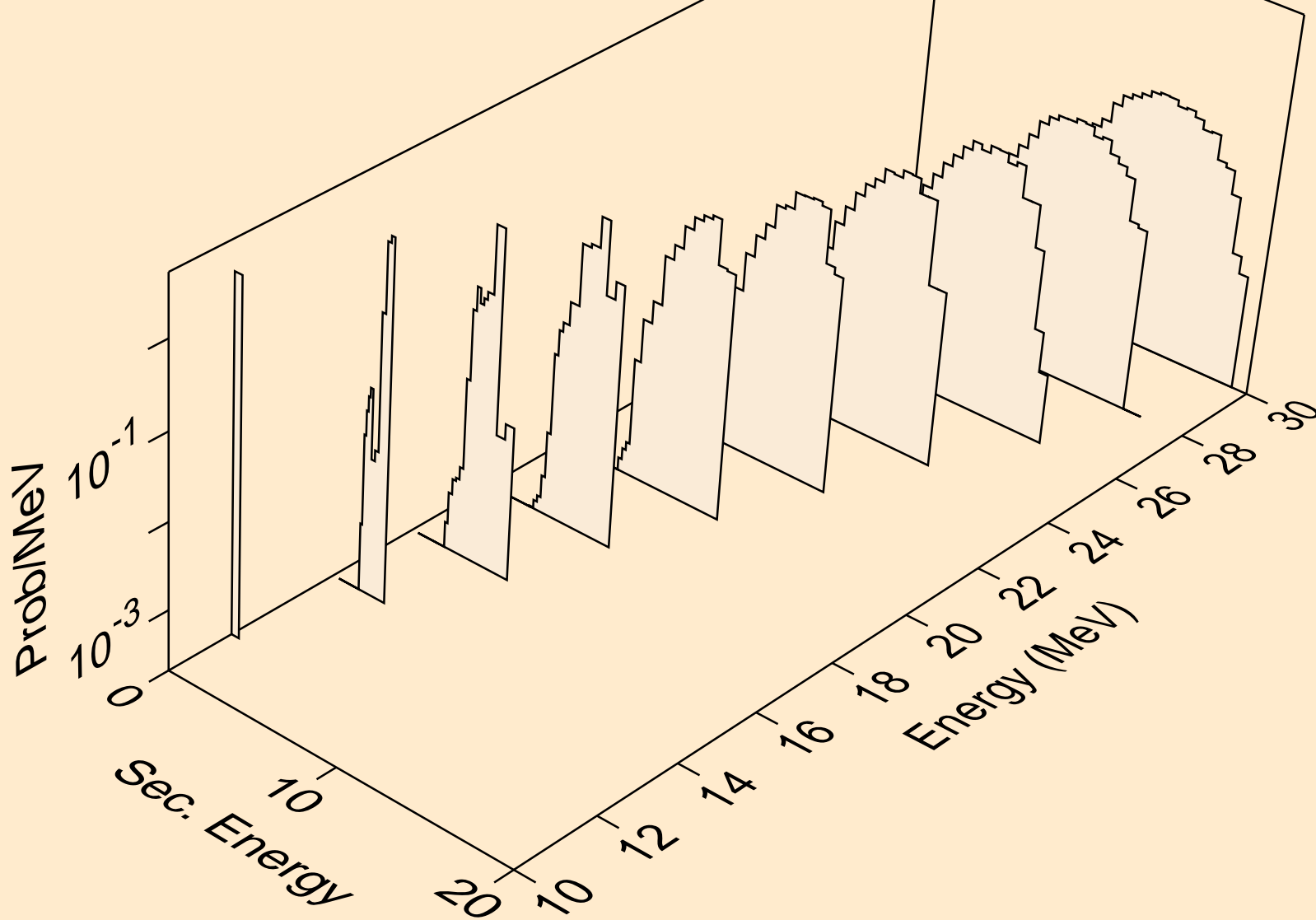
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
protons from (n,x)



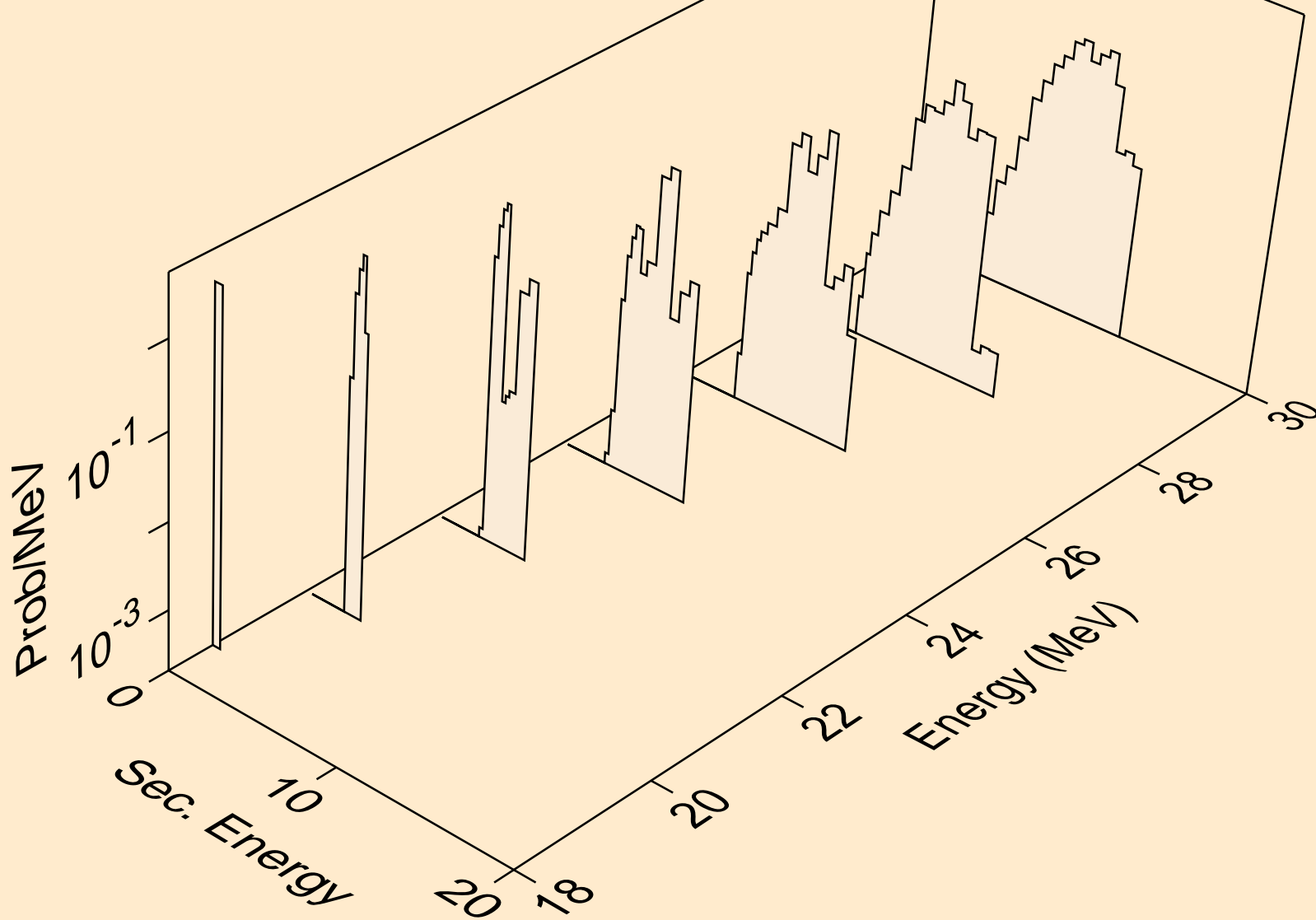
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
protons from (n,n\*)p



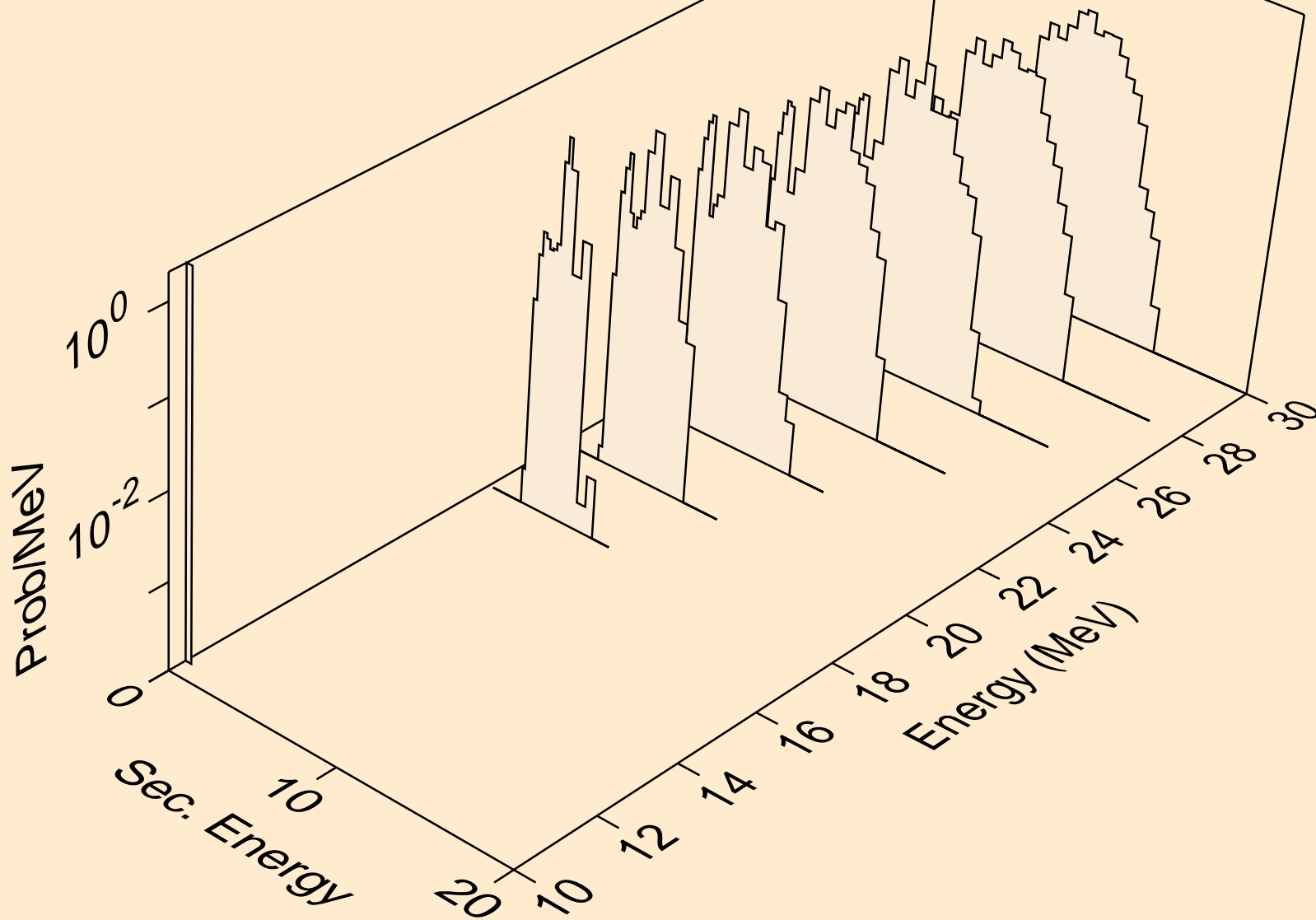
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protons from (n,2np)



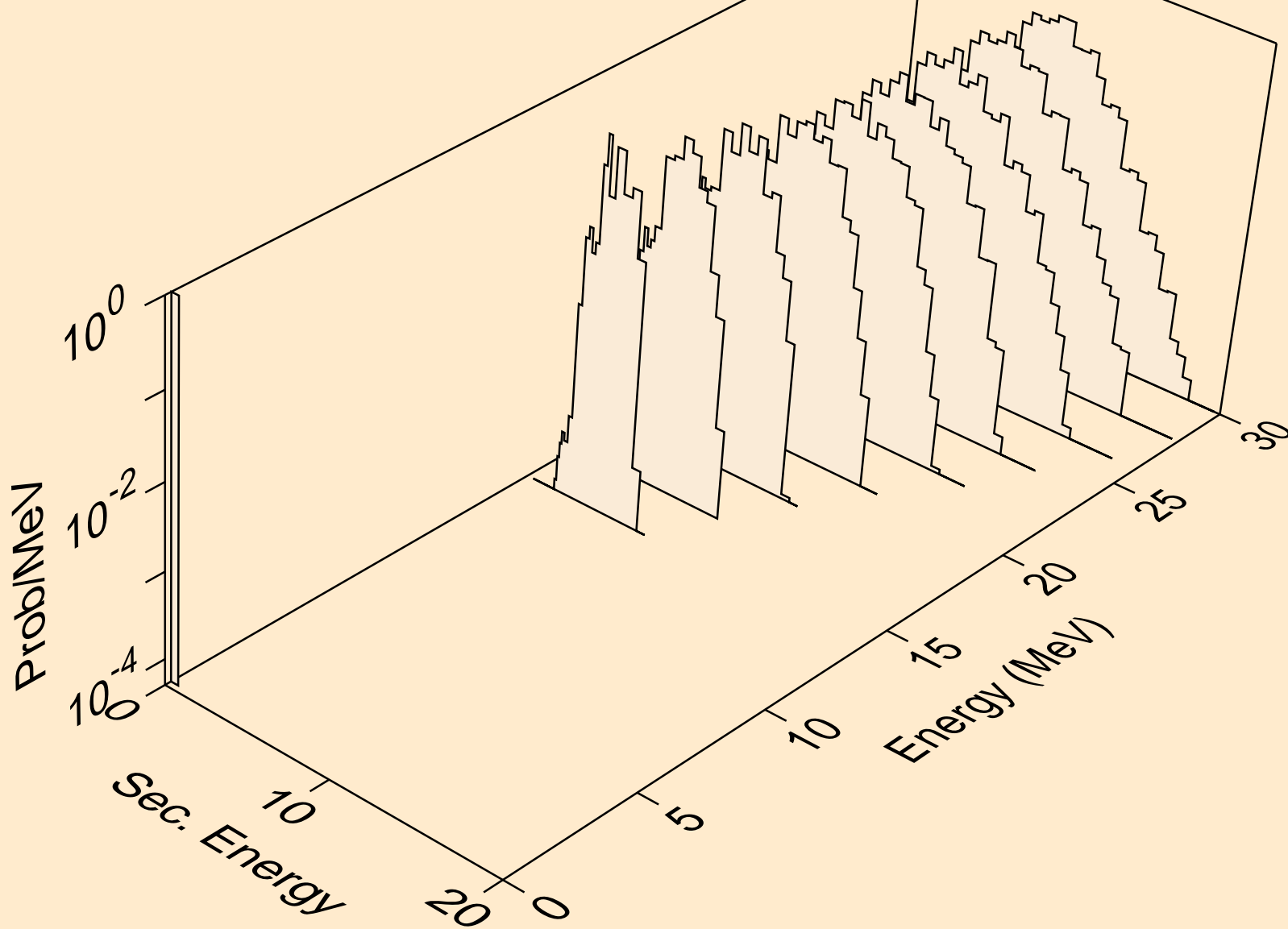
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protons from (n,3np)



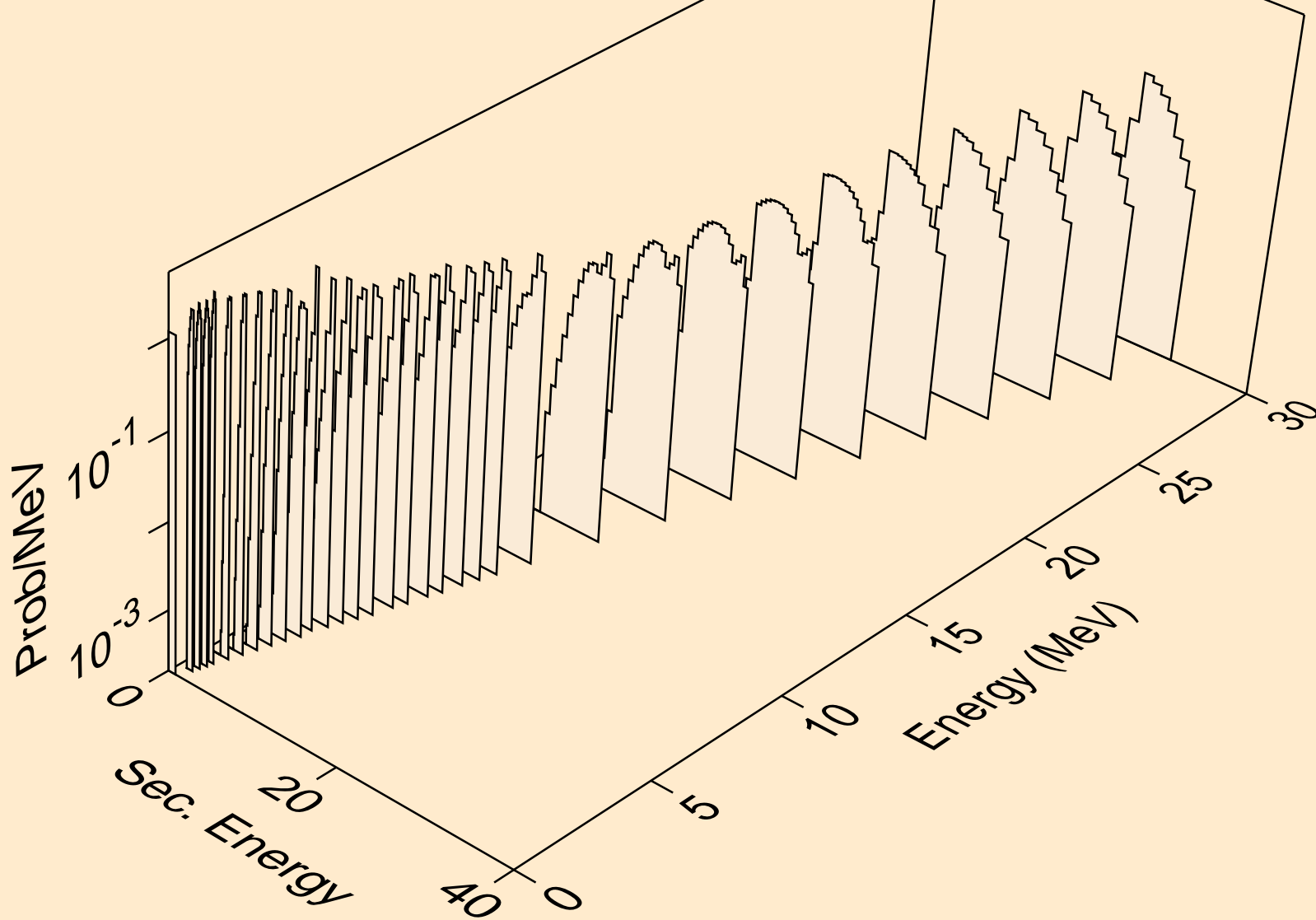
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protons from (n,2np)



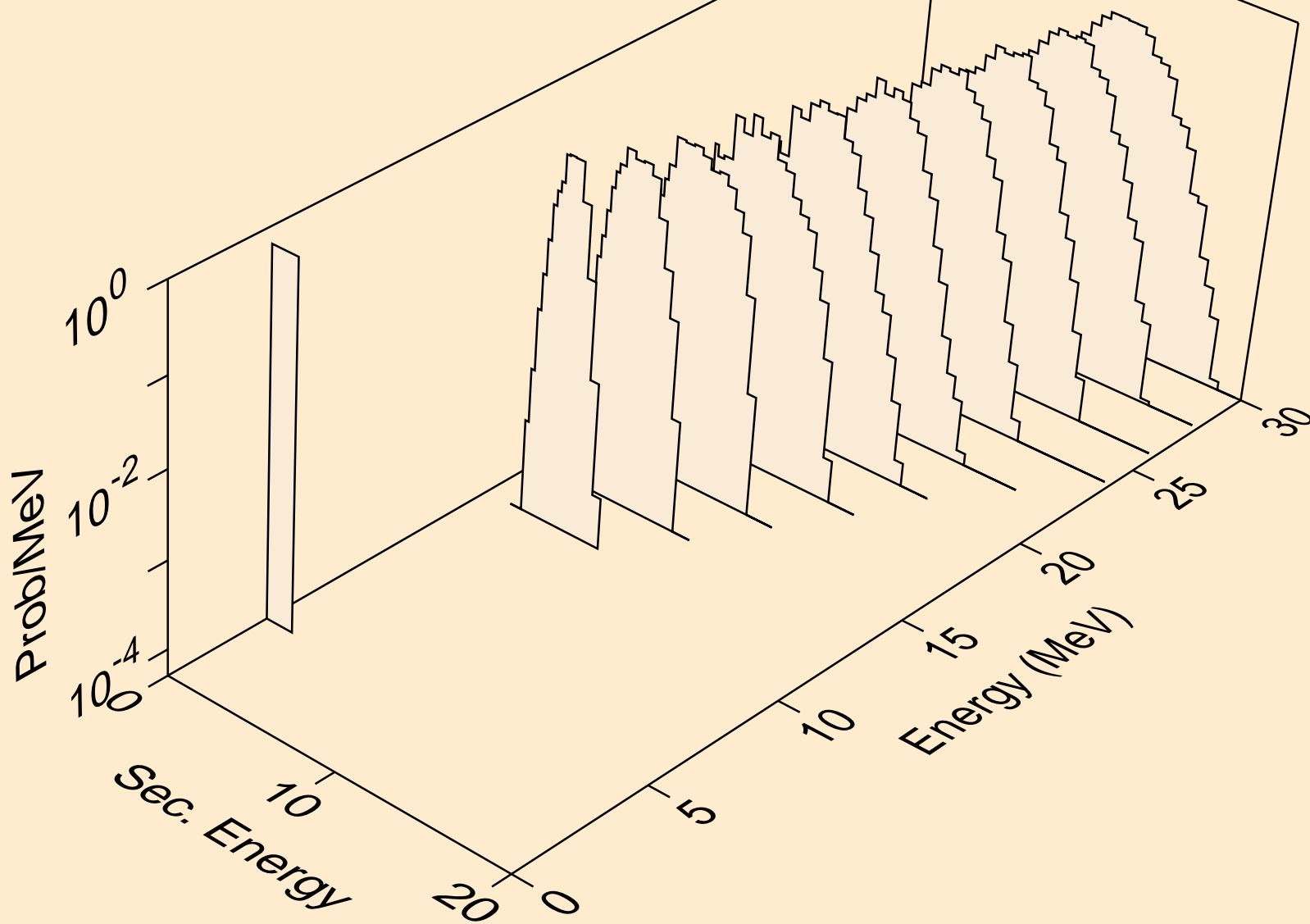
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protons from (n,npa)



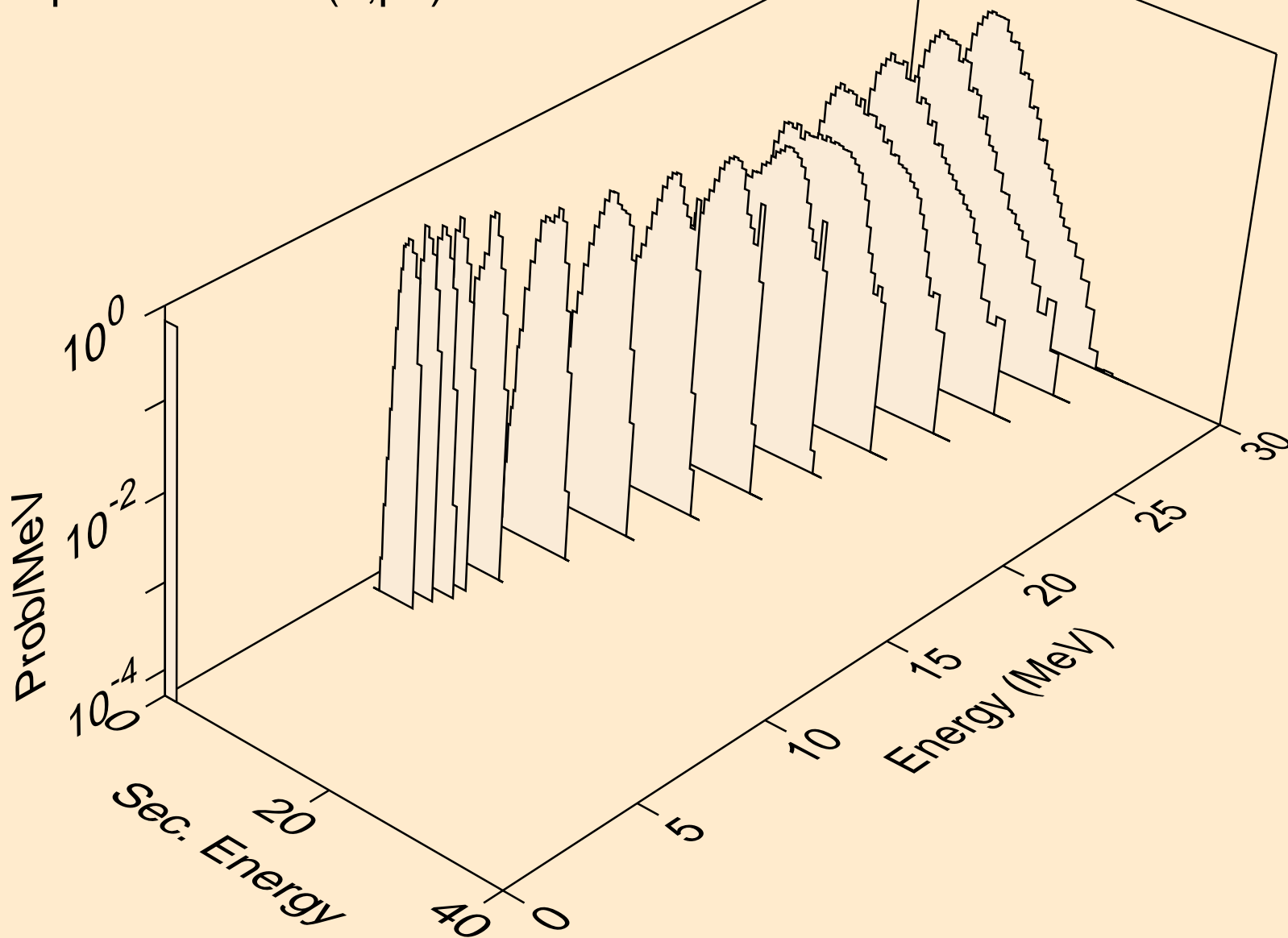
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protons from (n,p)



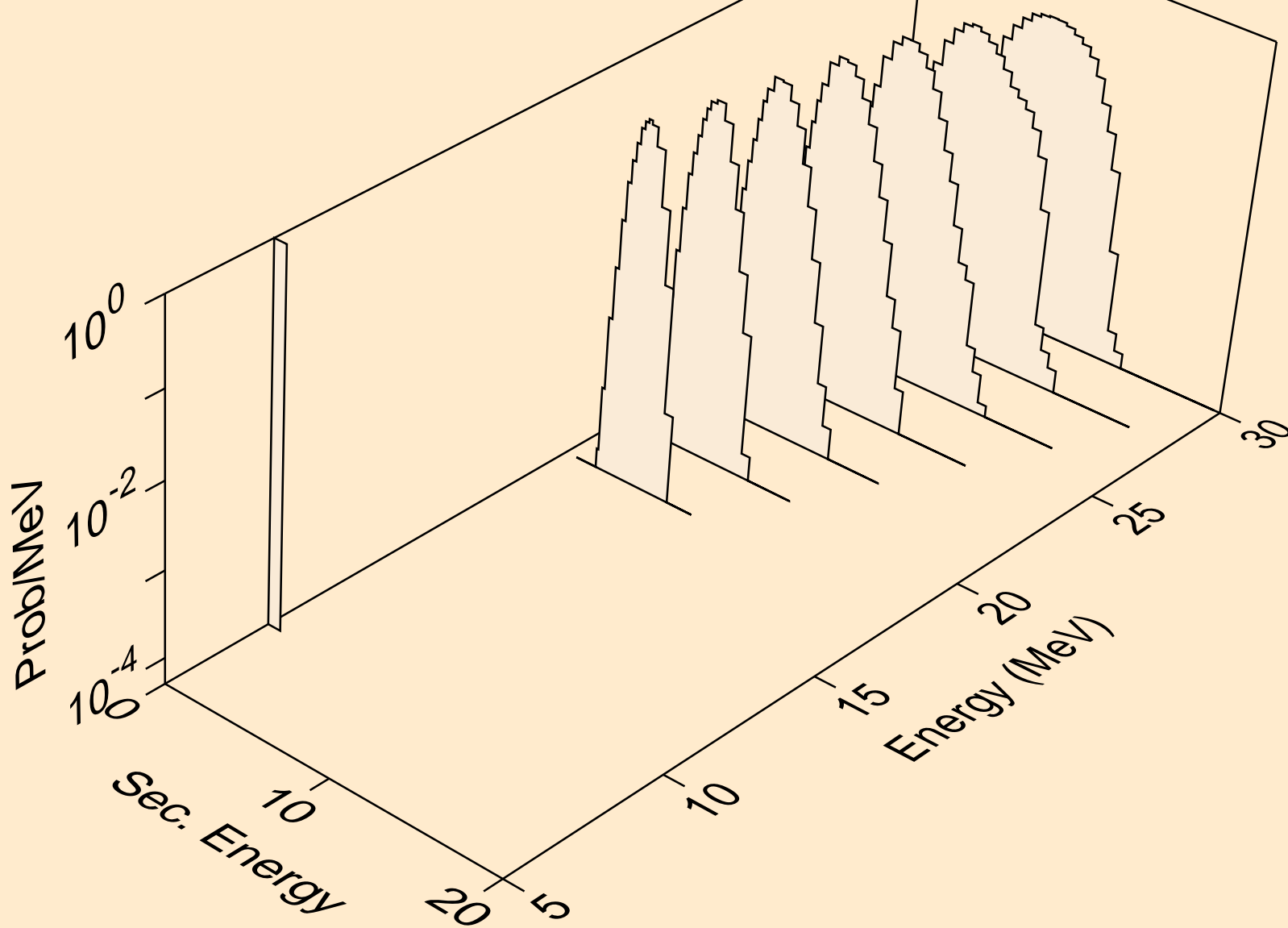
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protons from (n,2p)



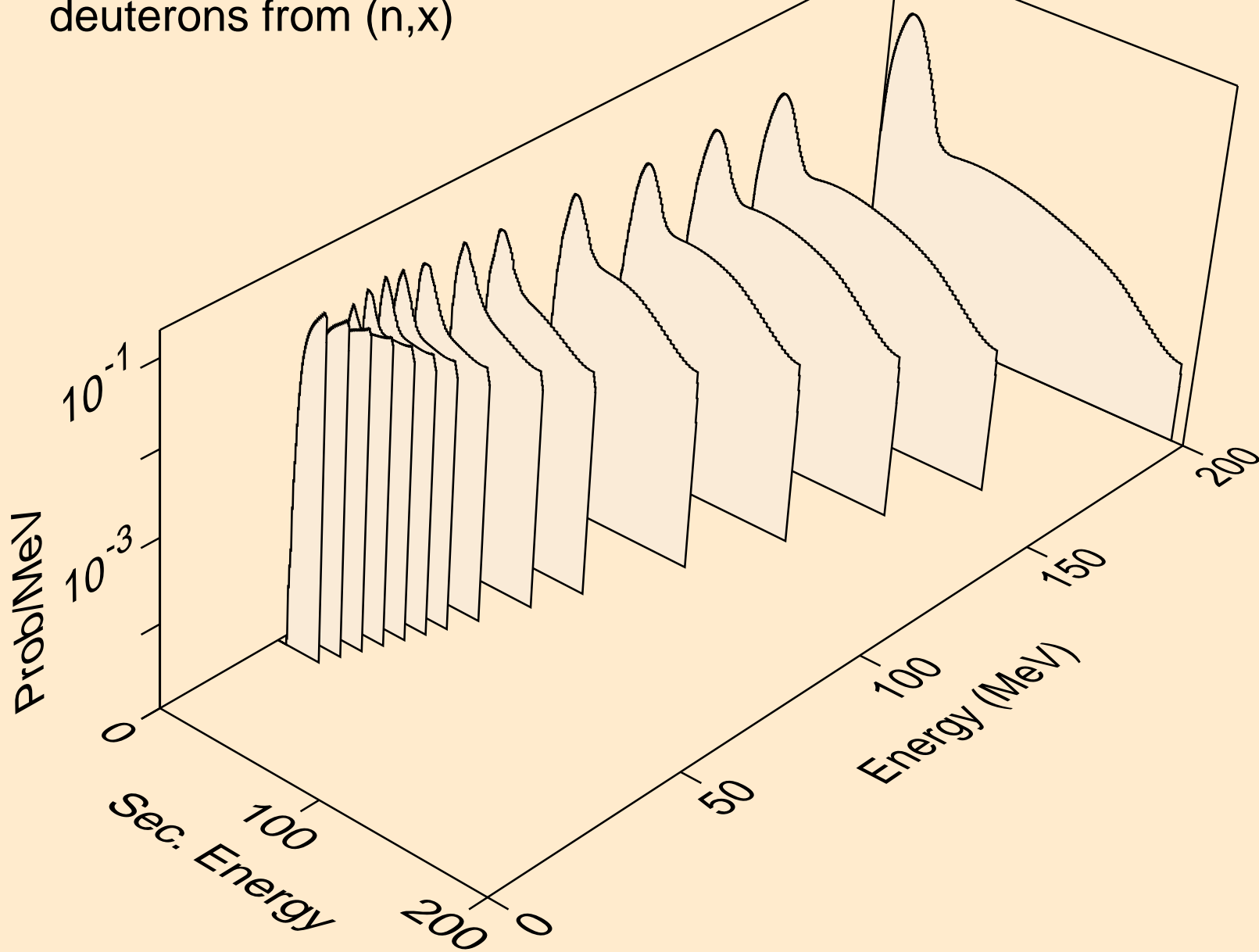
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protons from (n,p)



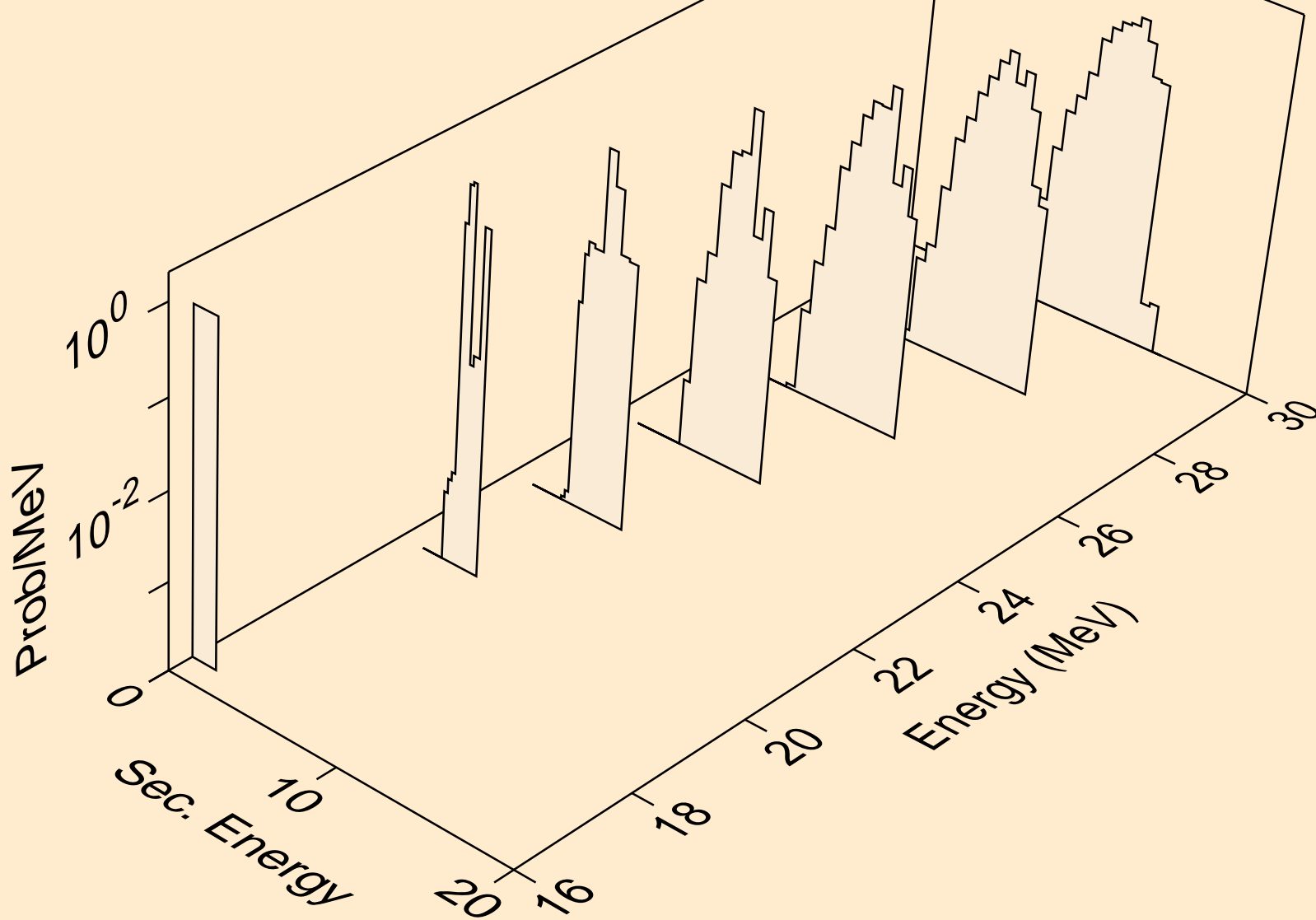
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protons from (n,pd)



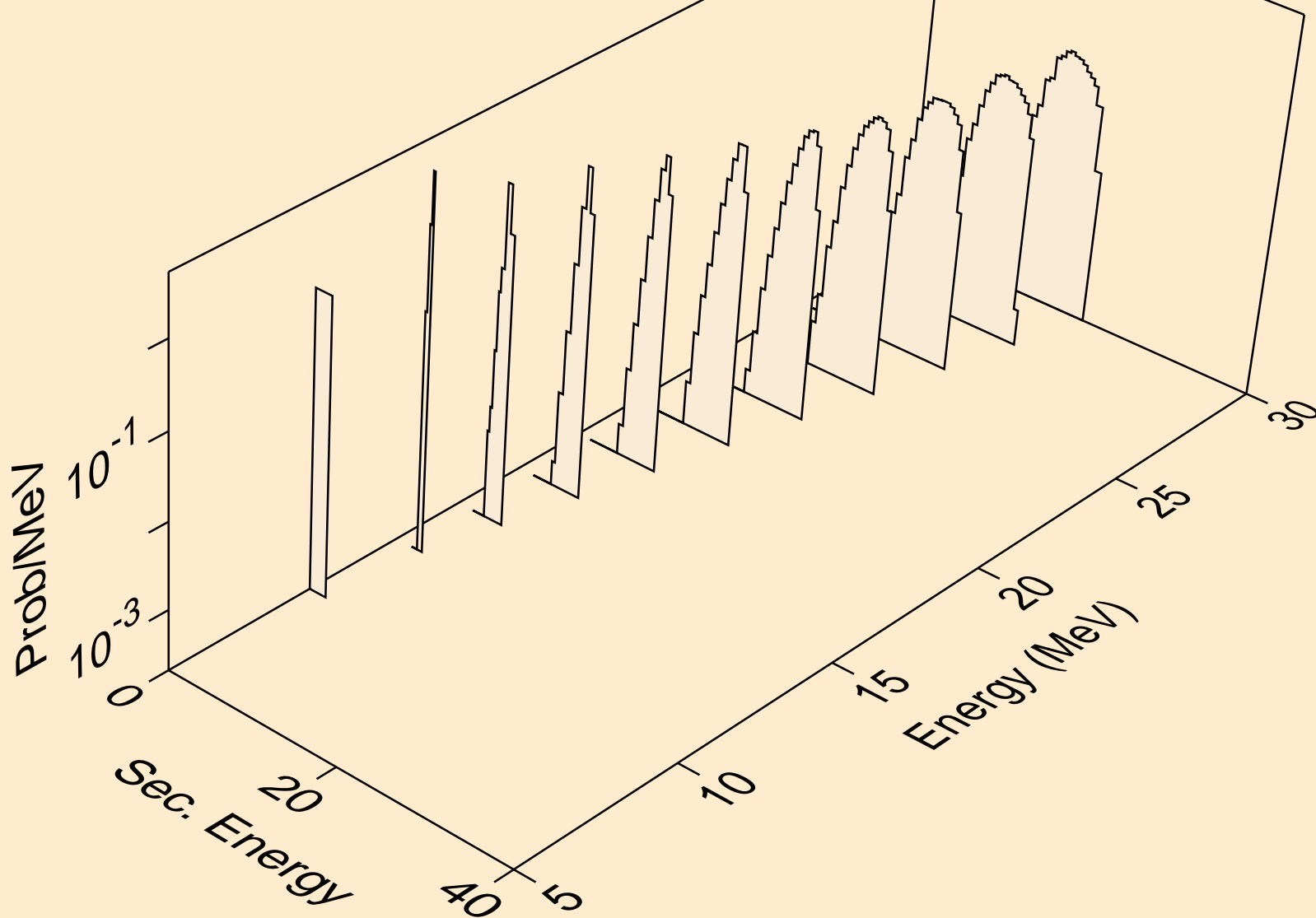
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deuterons from (n,x)



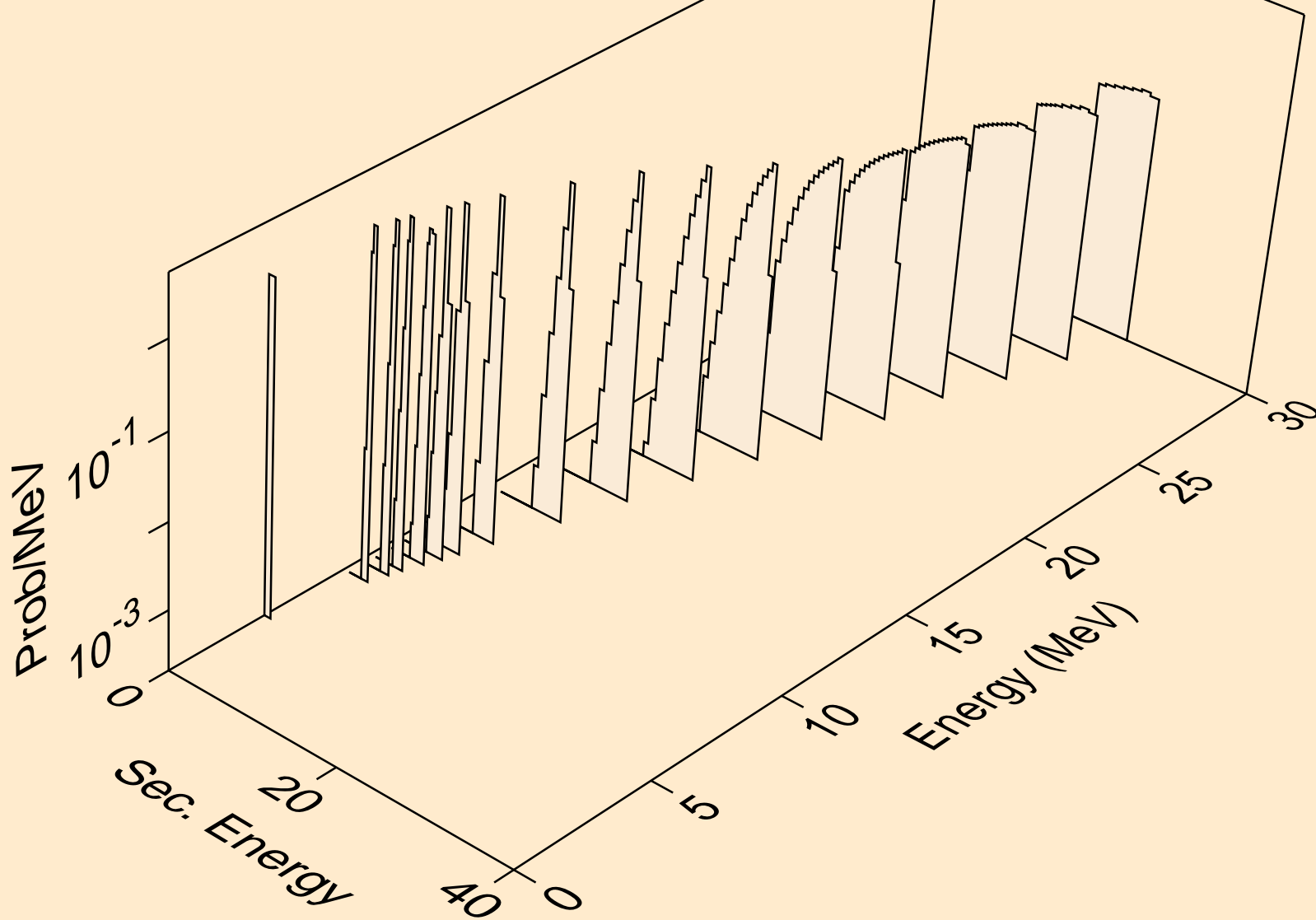
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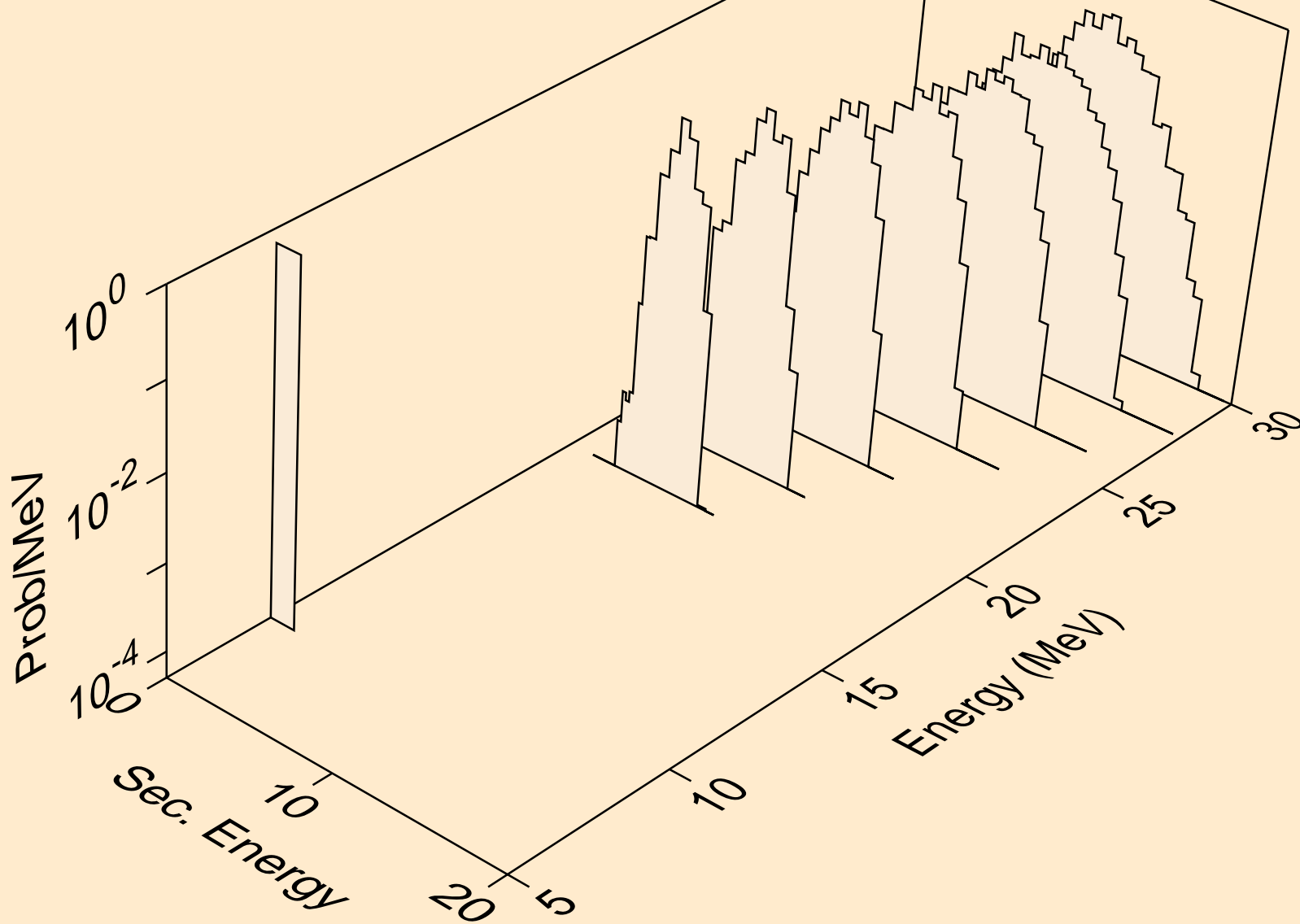
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deuterons from (n,n\*)d



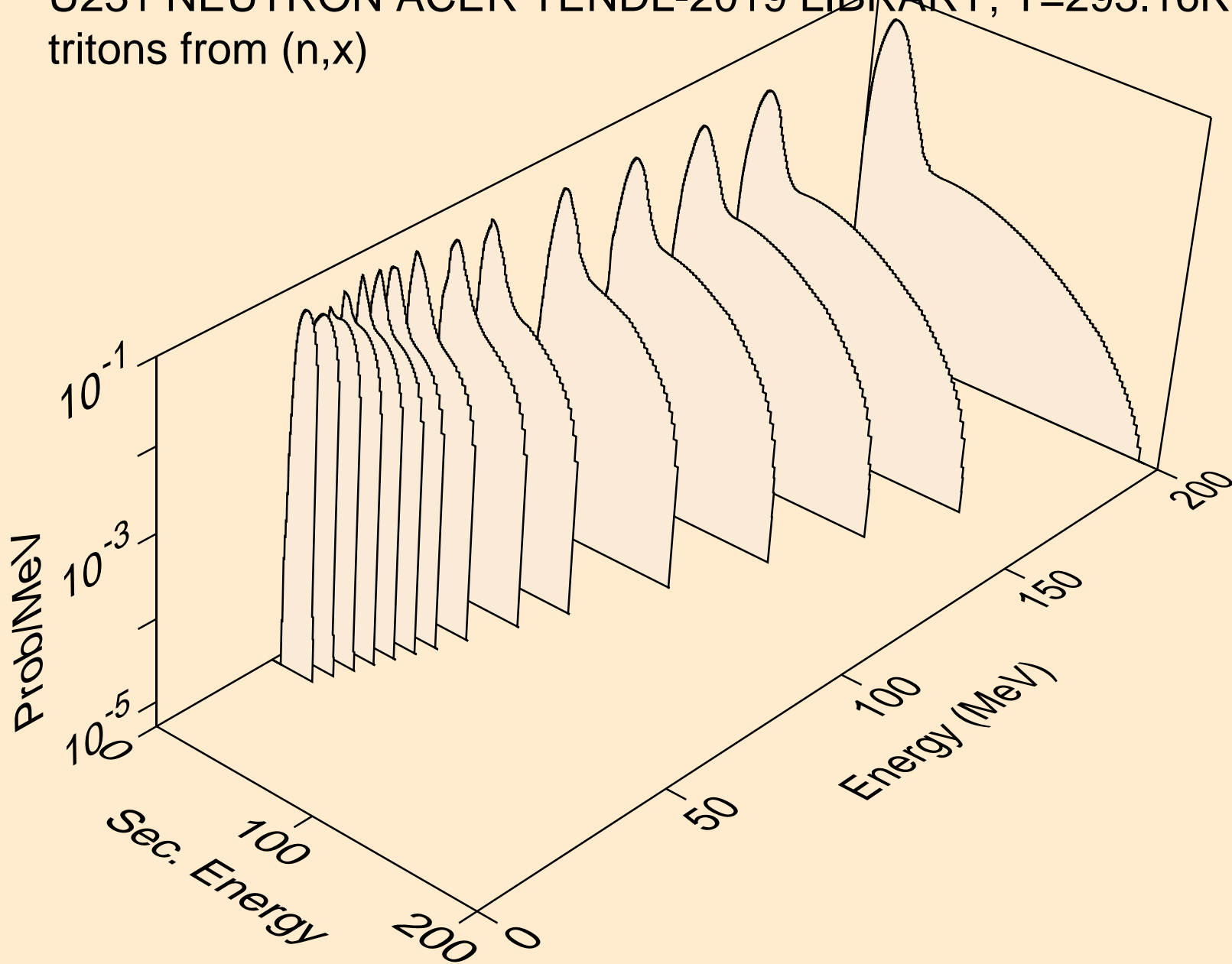
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deuterons from (n,d)



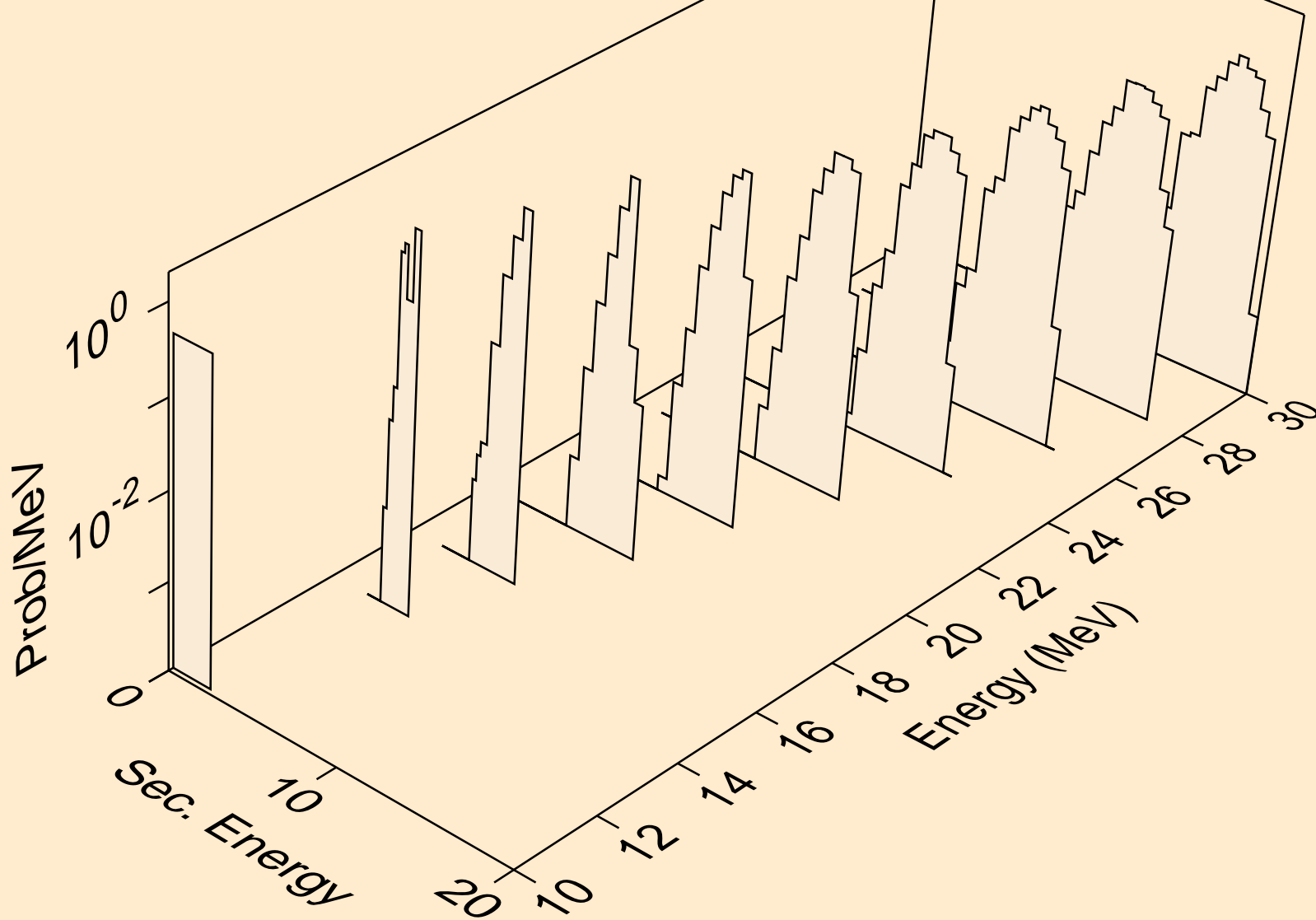
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deuterons from (n,pd)



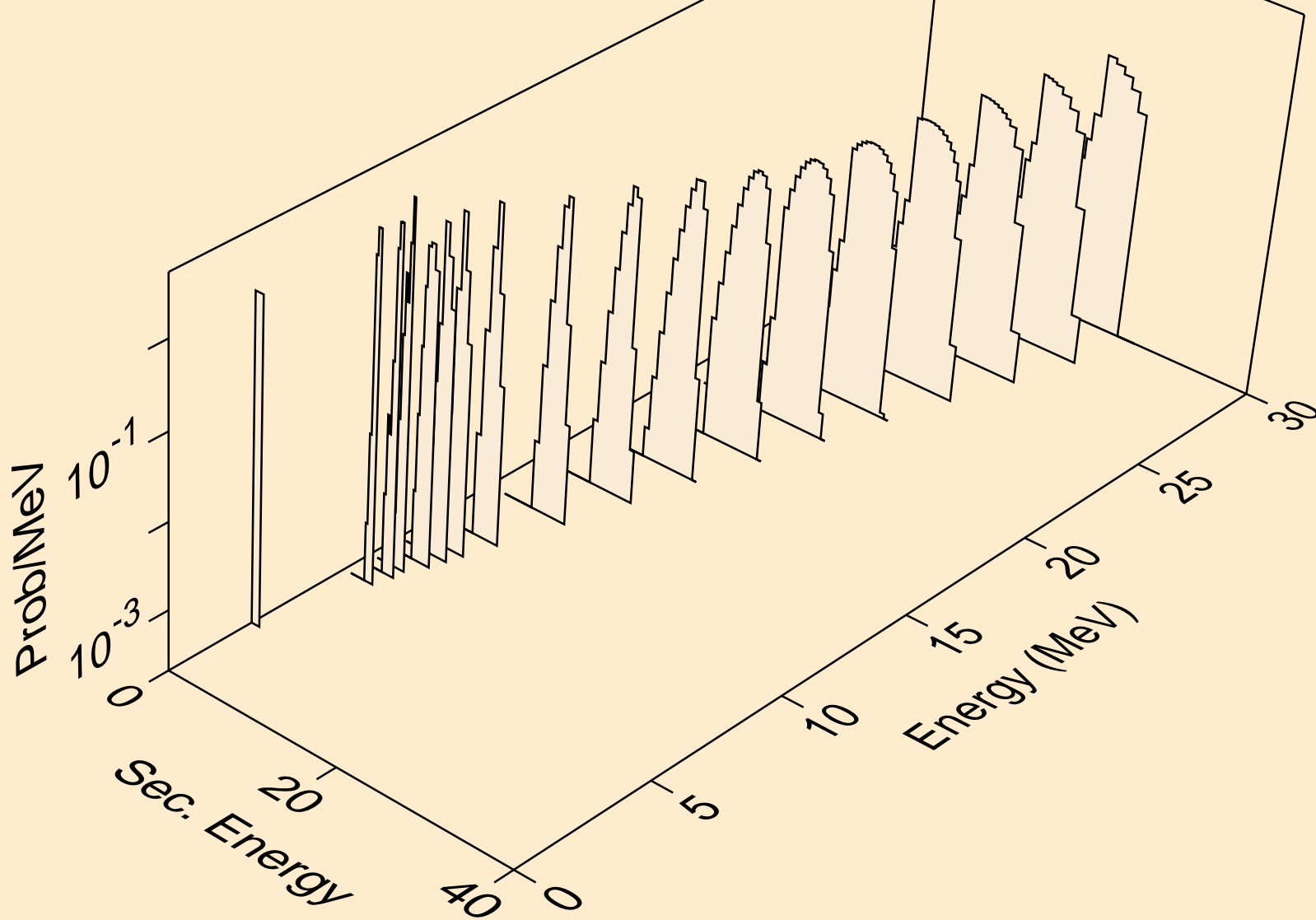
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tritons from (n,x)



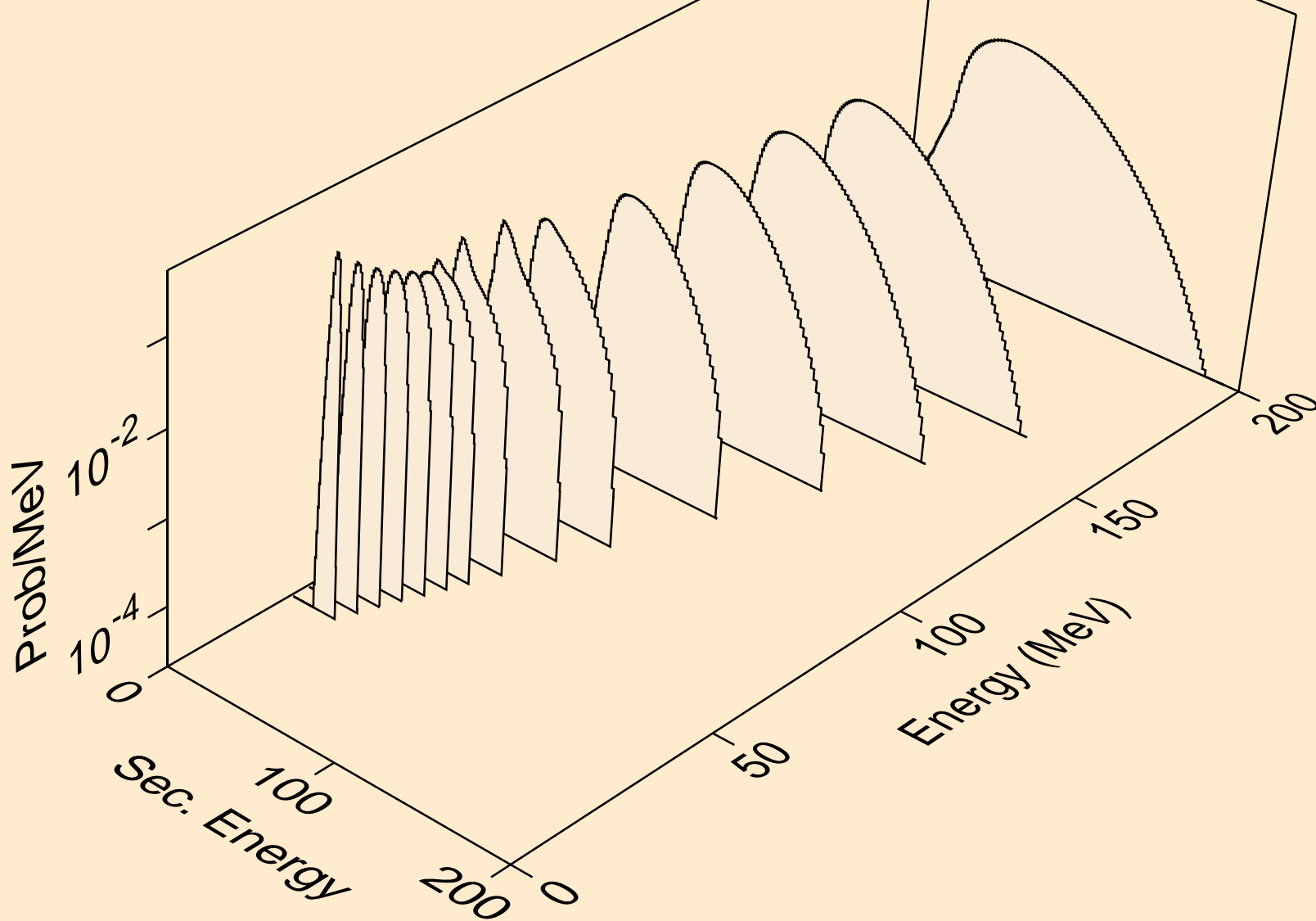
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tritons from (n,n\*)t



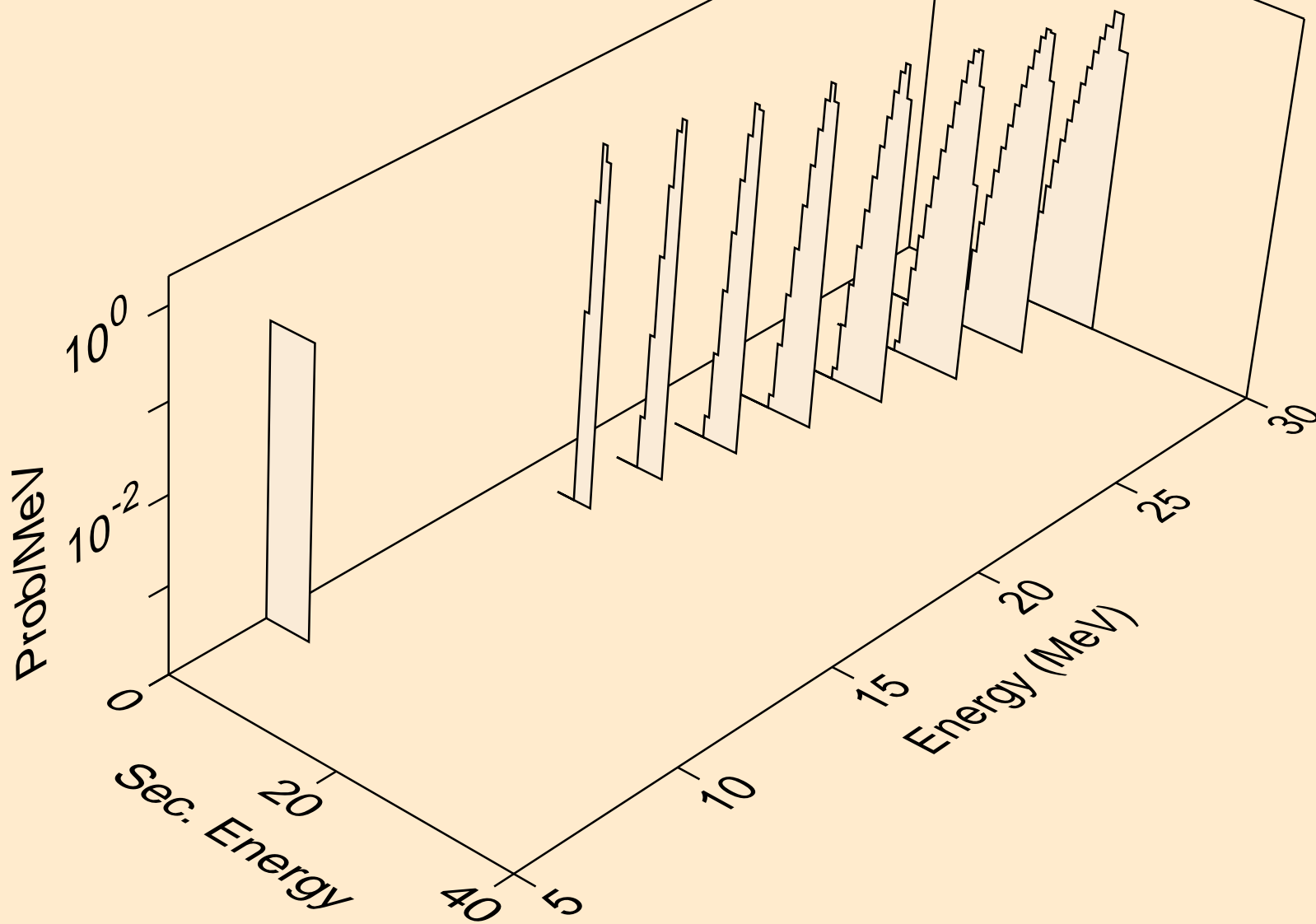
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tritons from (n,t)



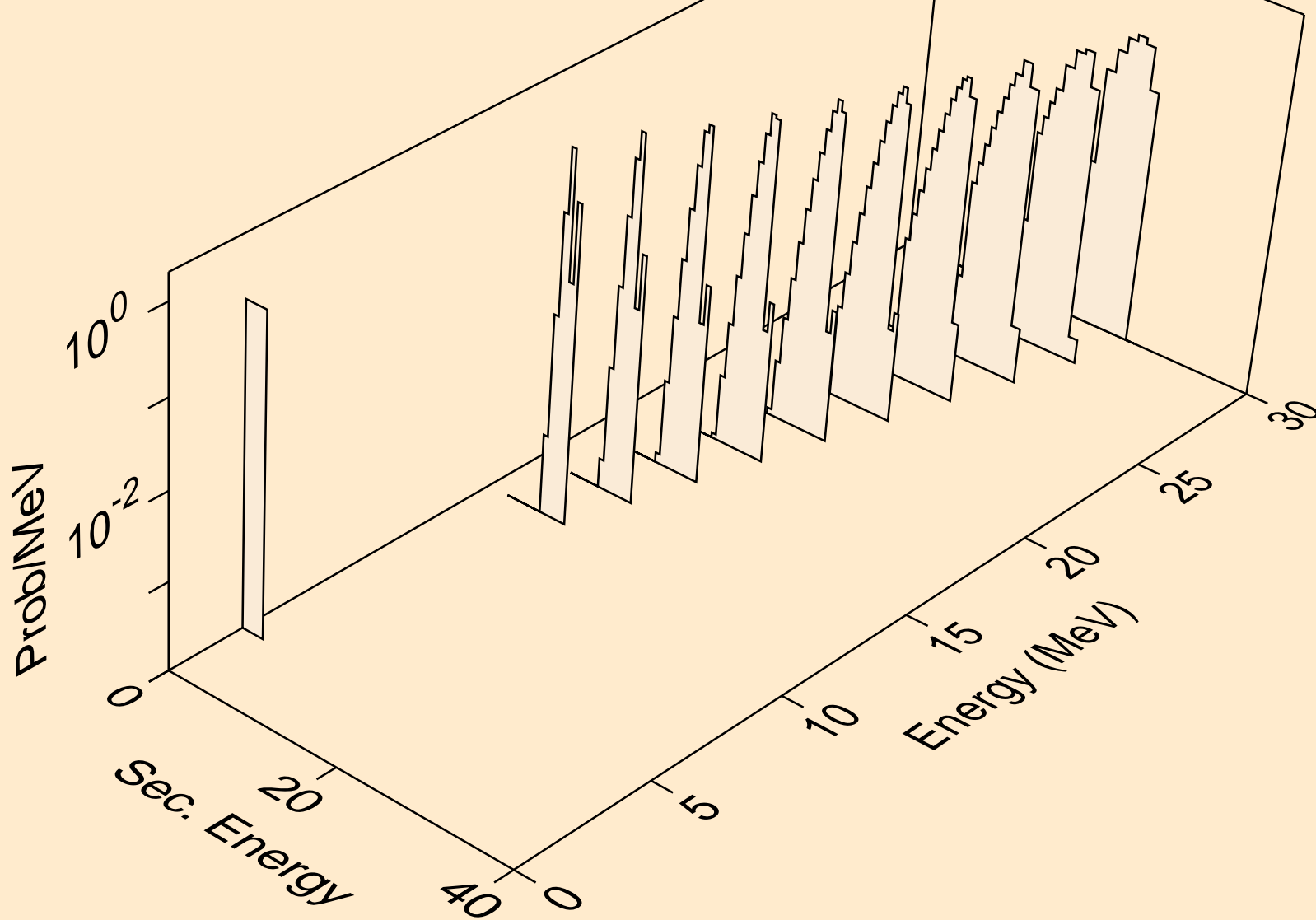
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he3s from (n,x)



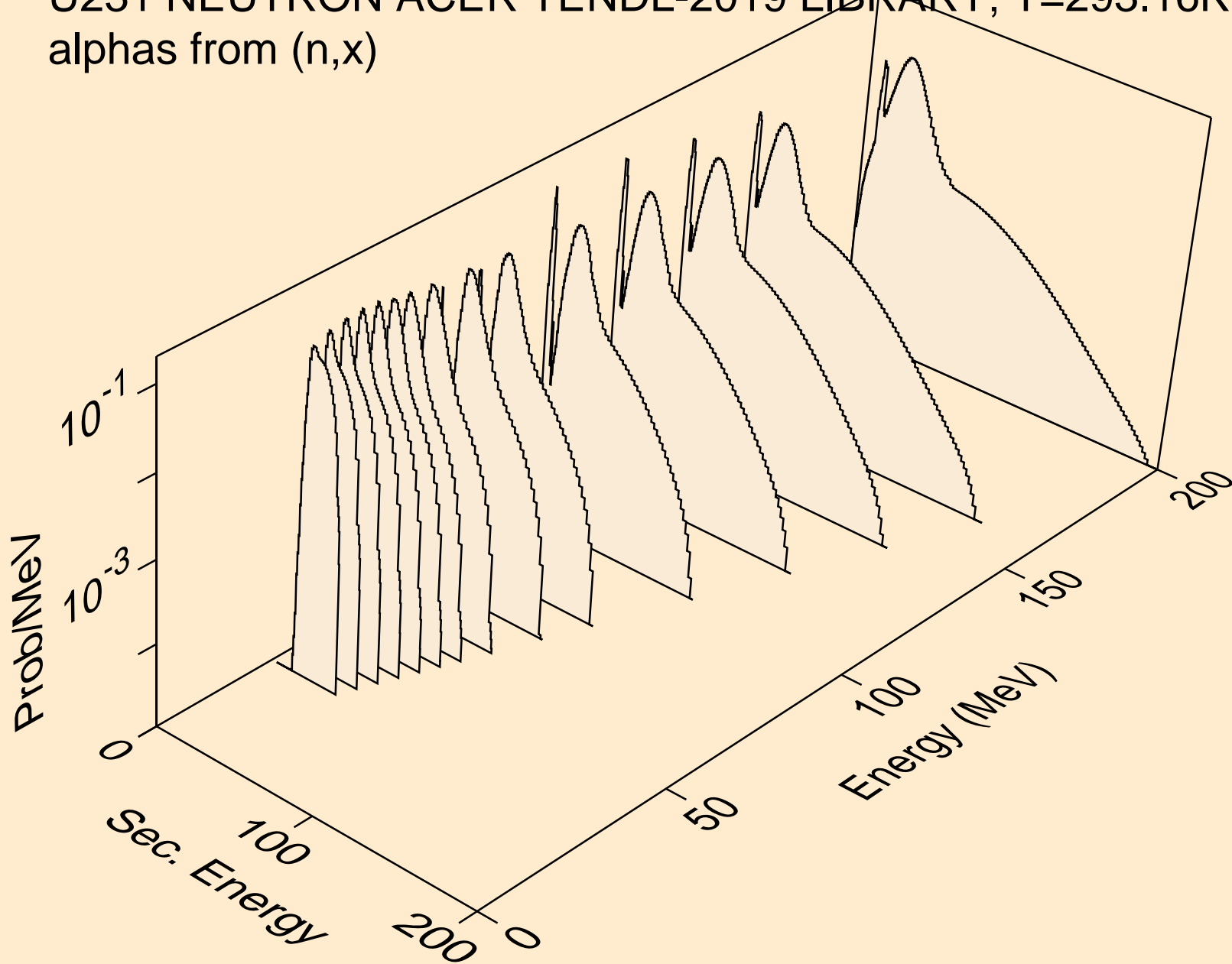
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he3s from (n,n\*)he3



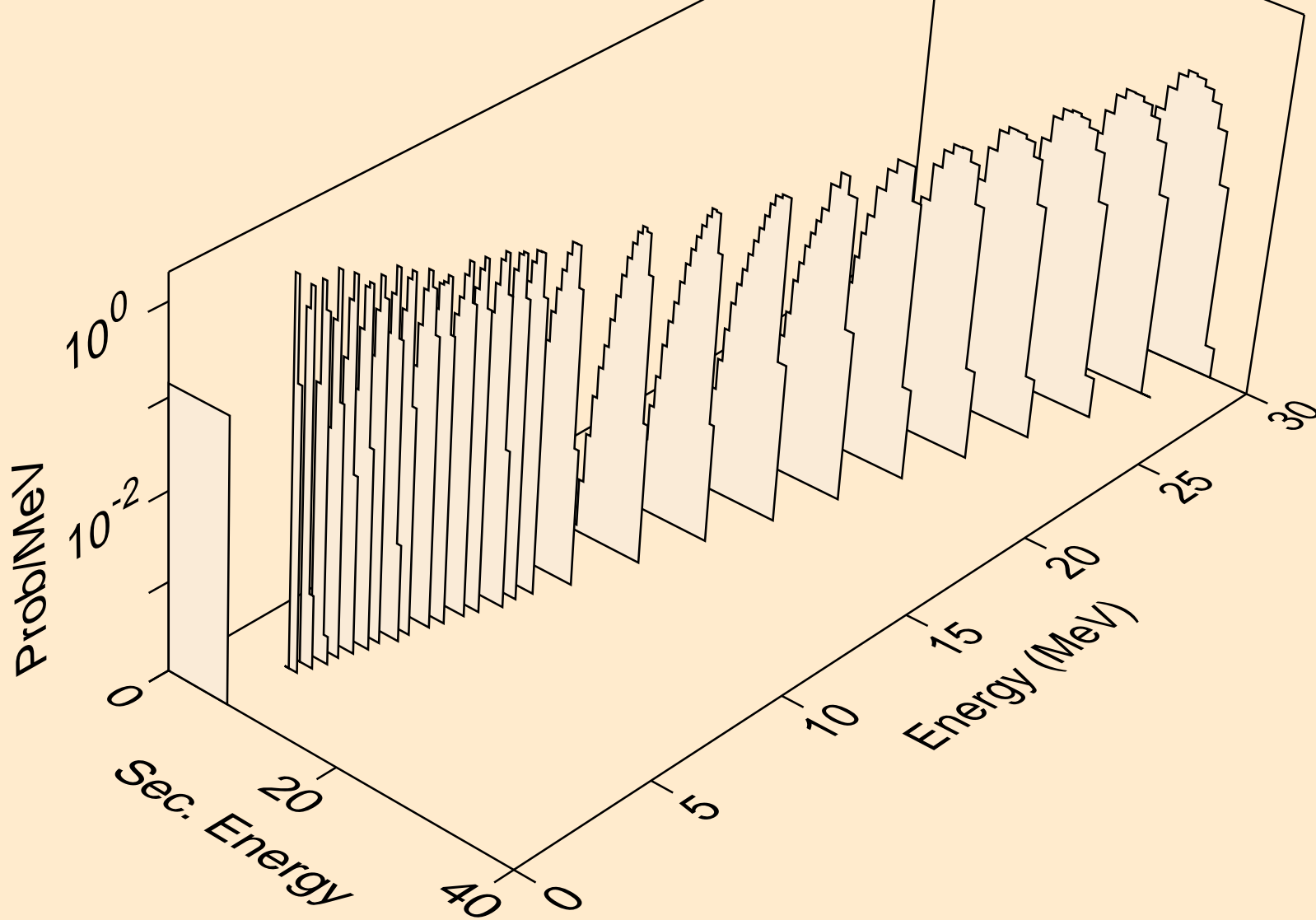
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he3s from (n,he3)



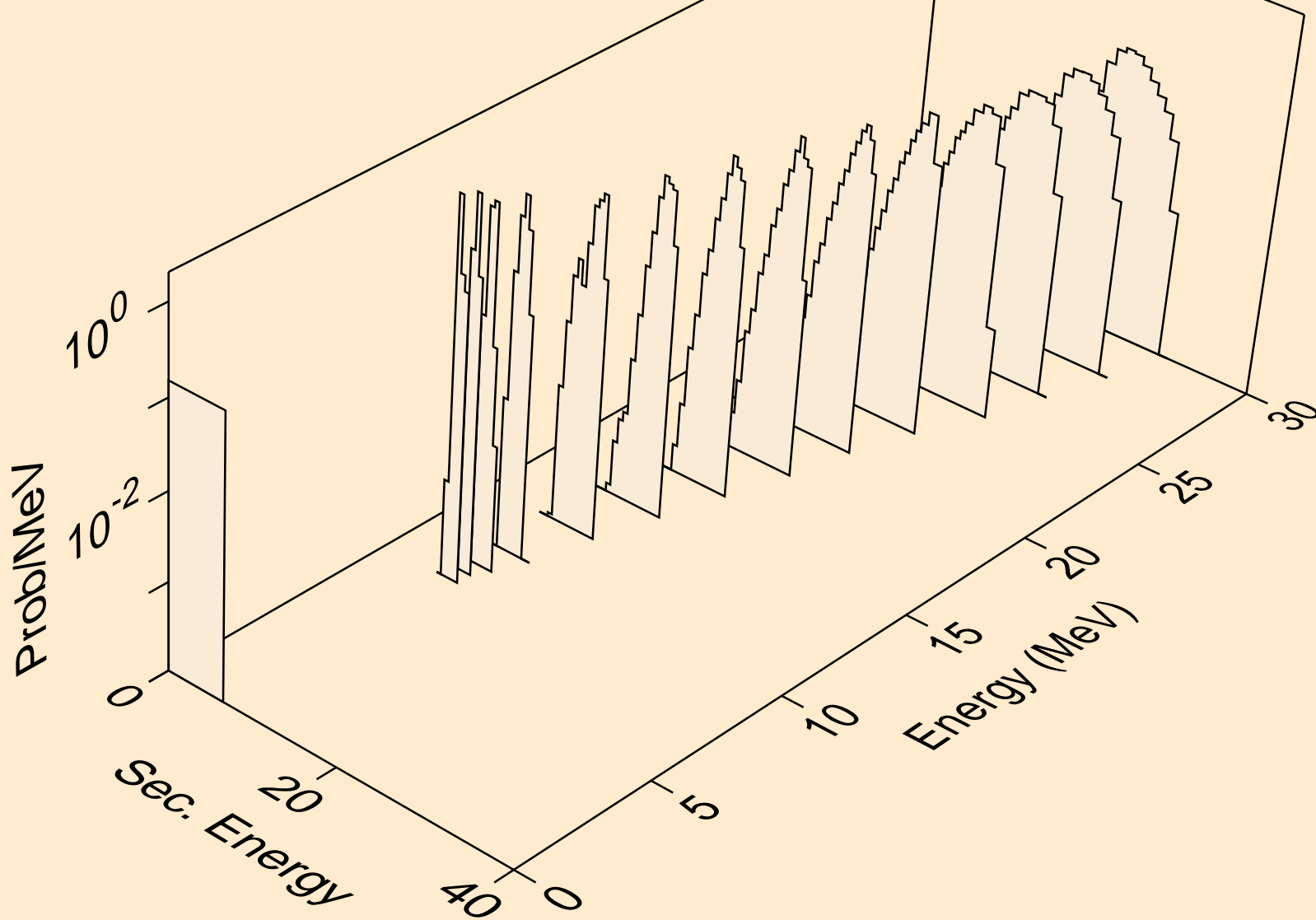
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alphas from (n,x)



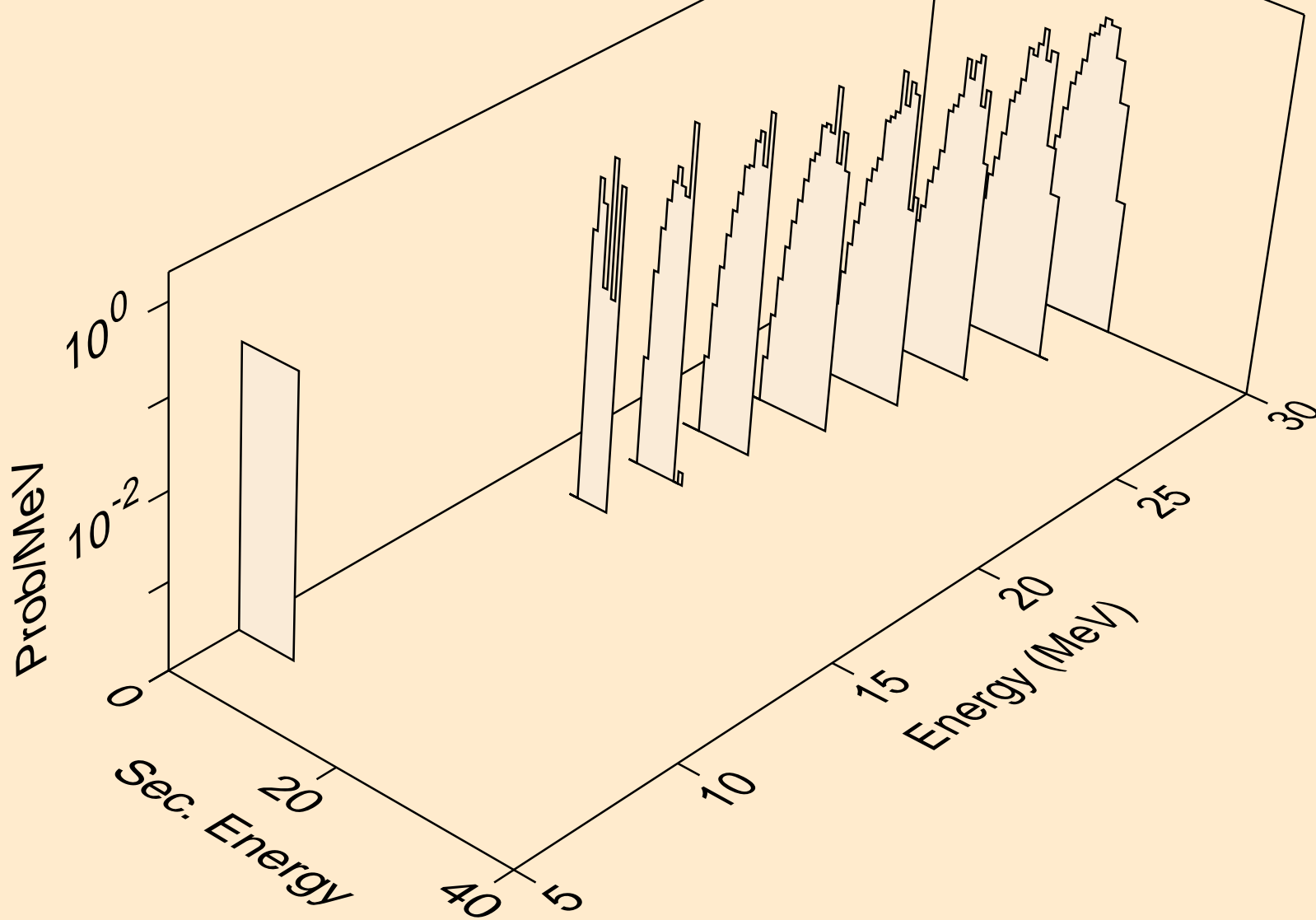
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alphas from (n,n\*)a



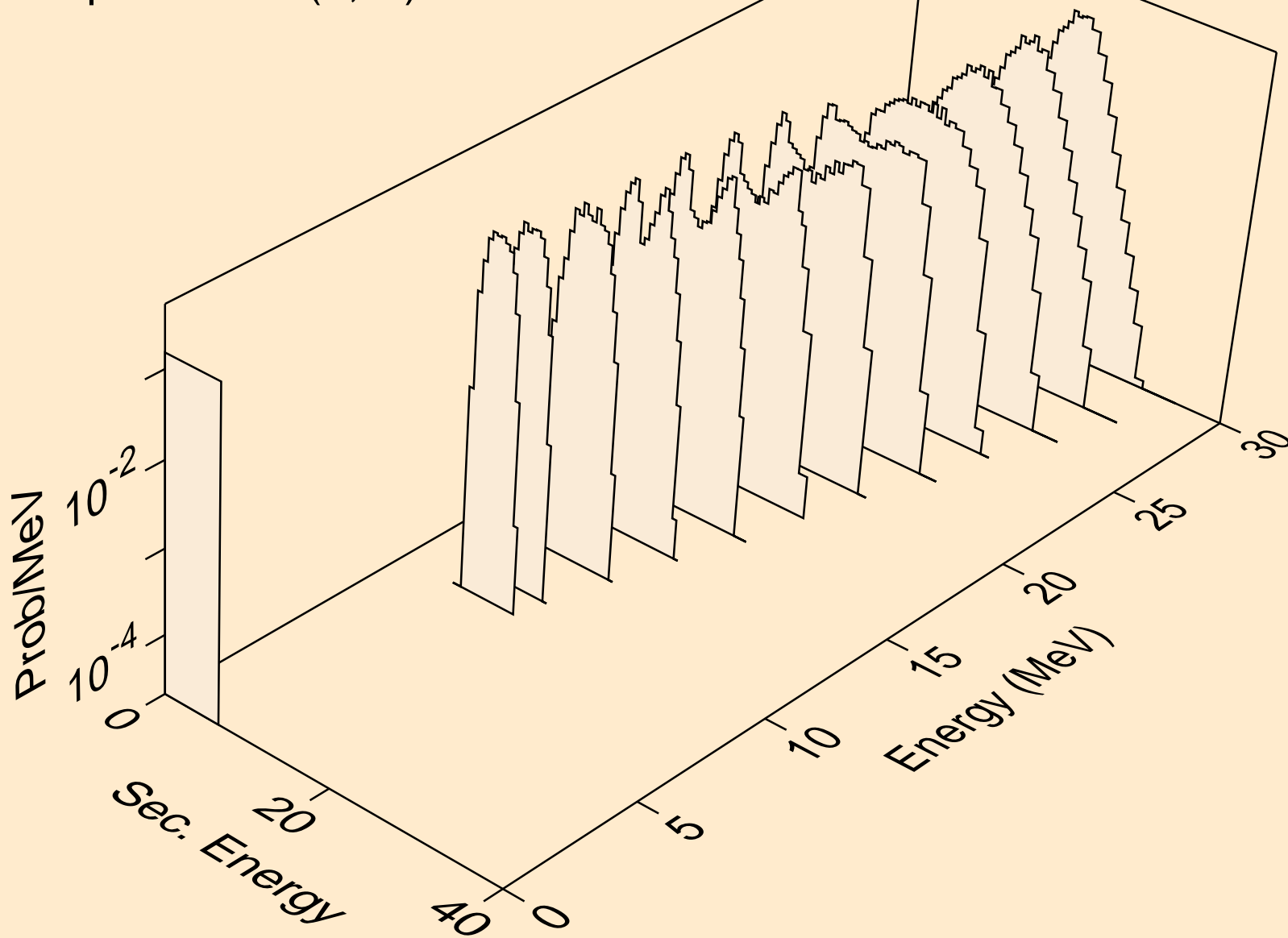
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,2n)a



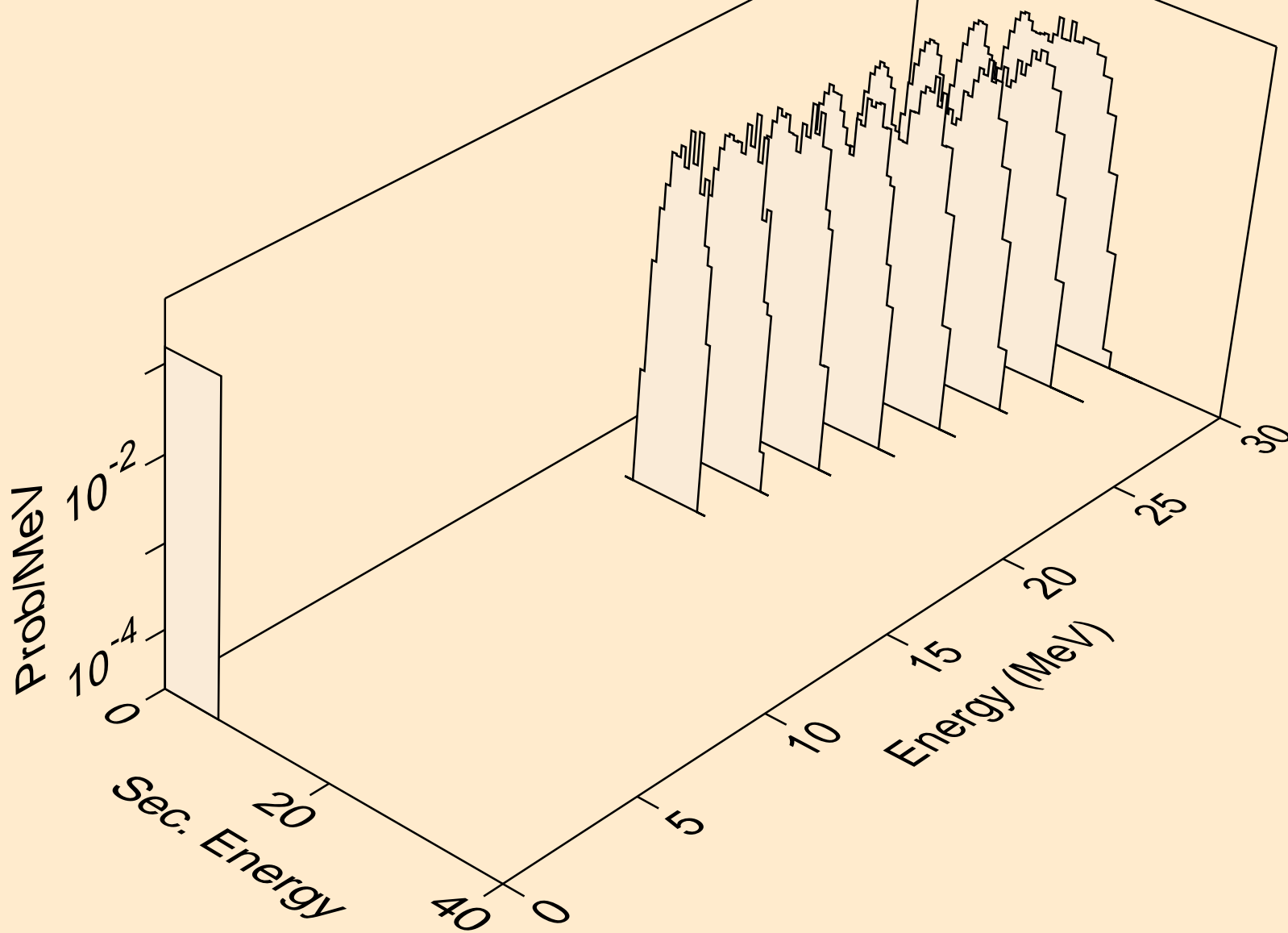
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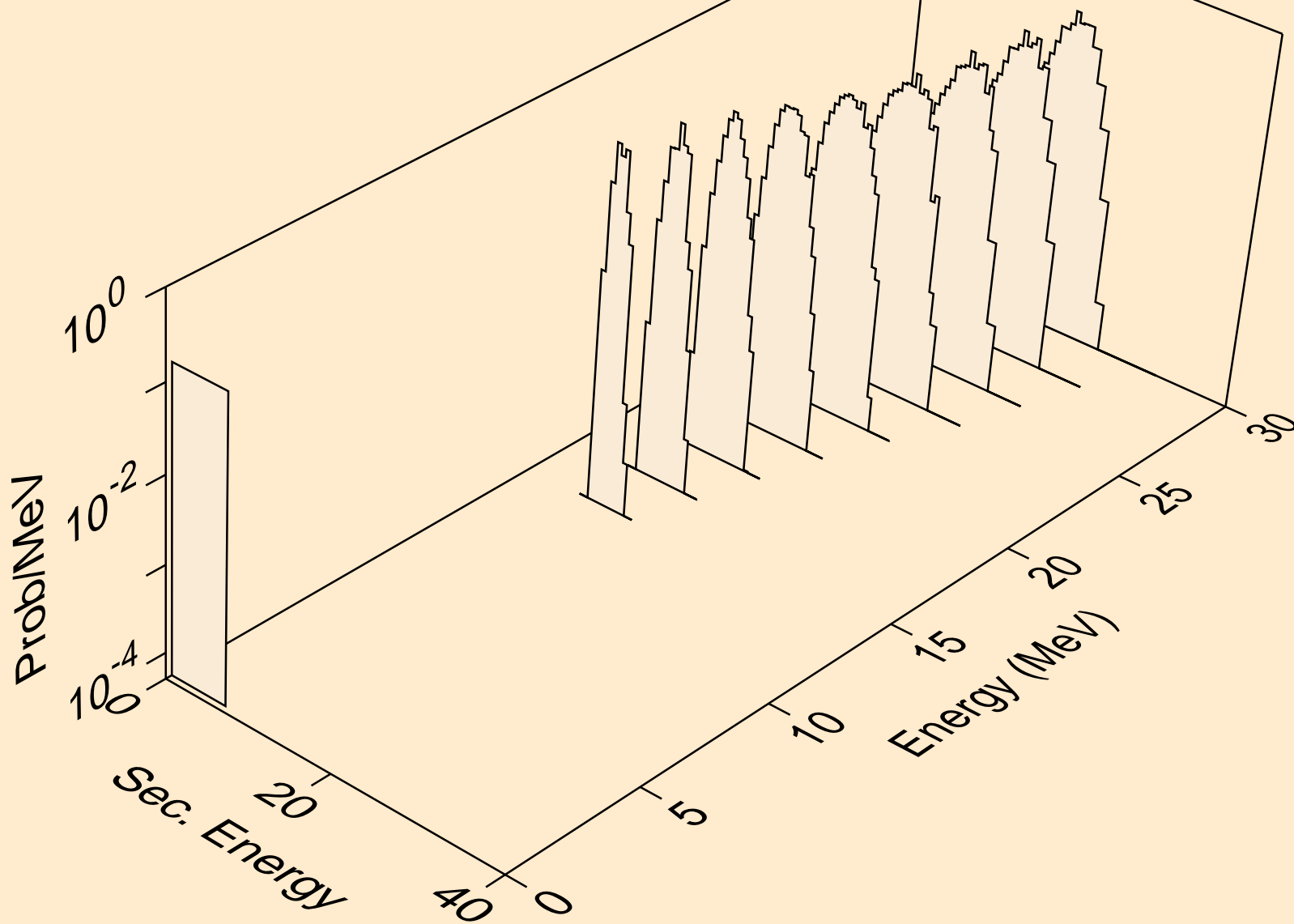
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alphas from (n,n\*)2a



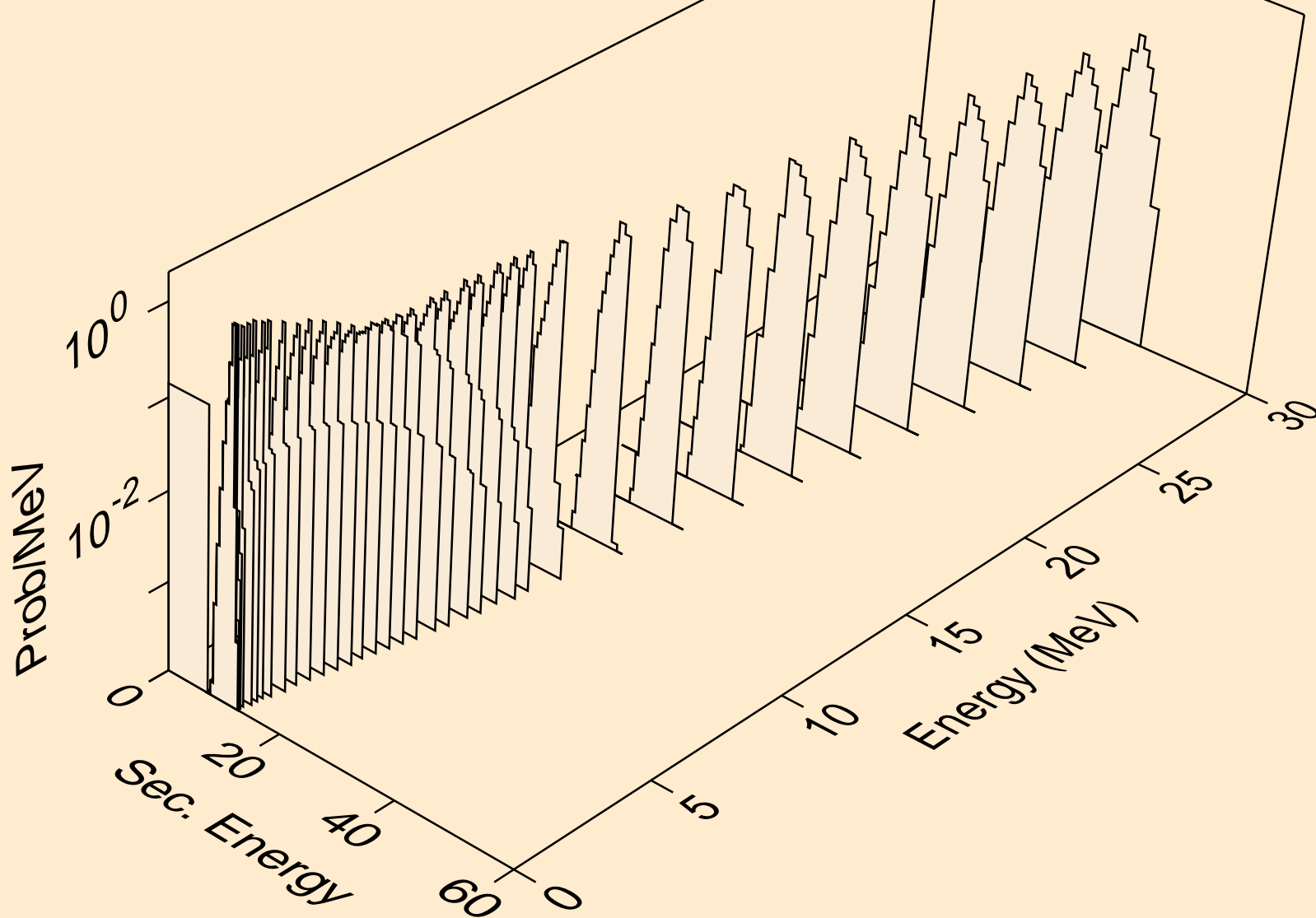
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alphas from (n,2n)2a



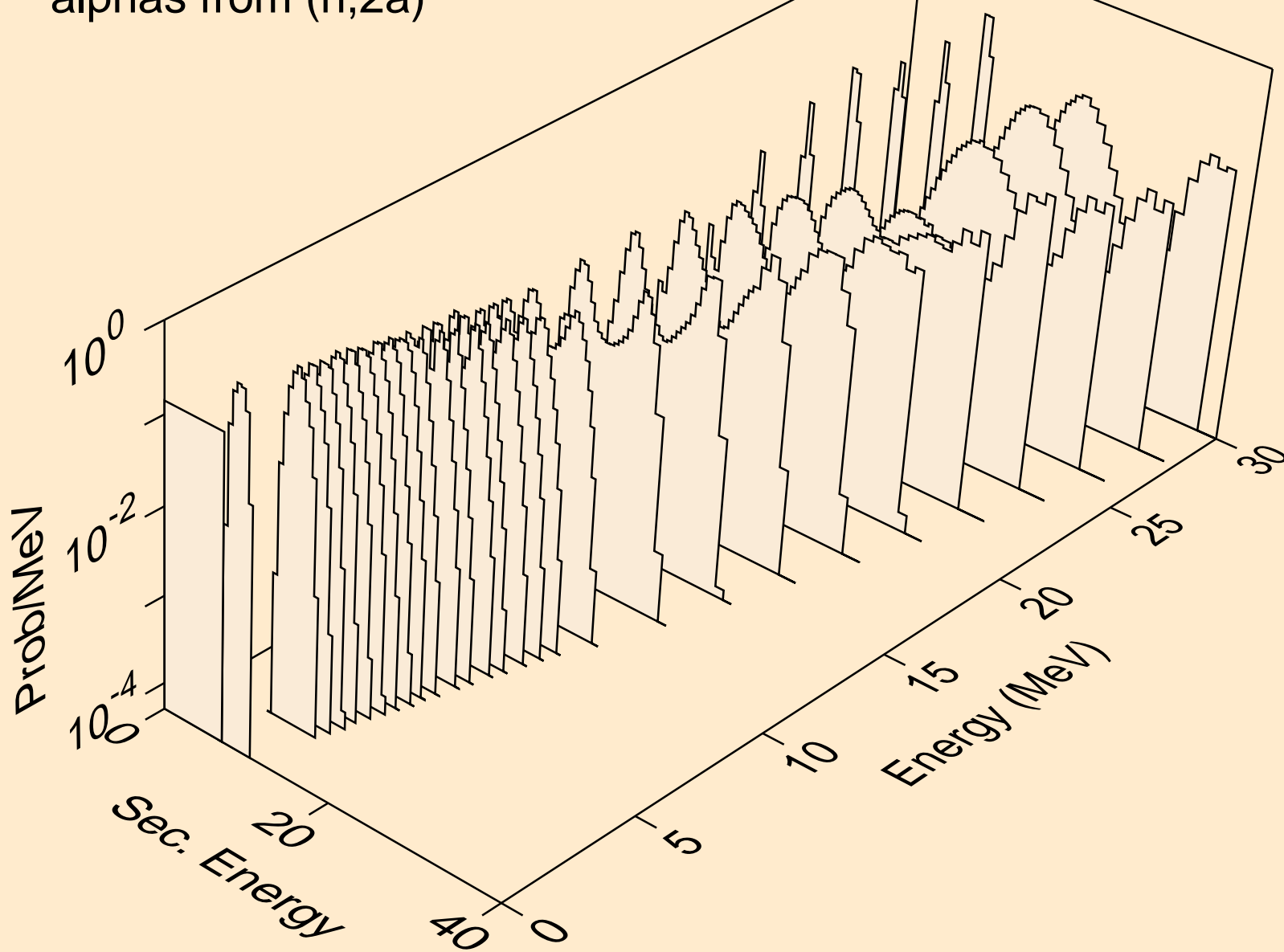
U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,npa)



U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,a)



U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,2a)



U231 NEUTRON ACER TENDL-2019 LIBRARY; T=293.16K  
alphas from (n,pa)

