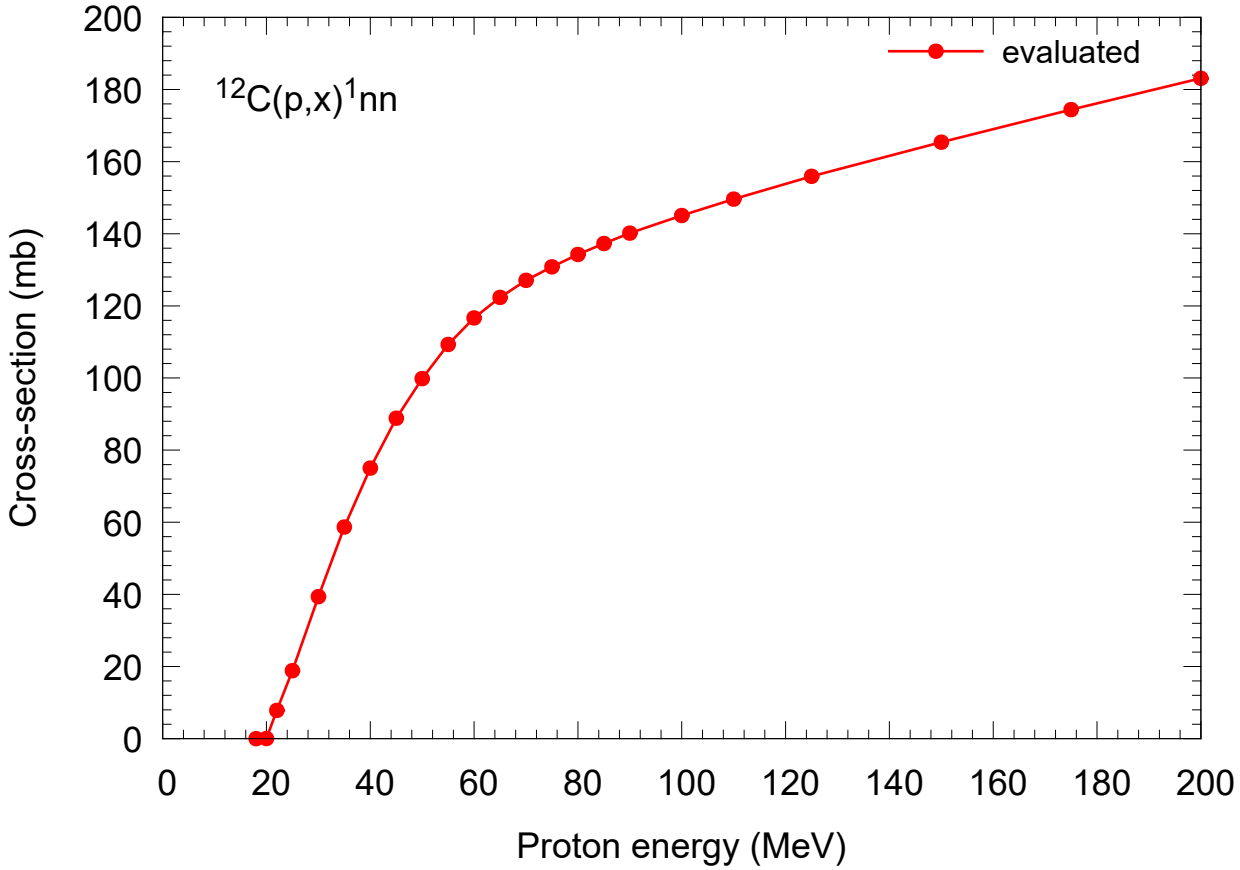
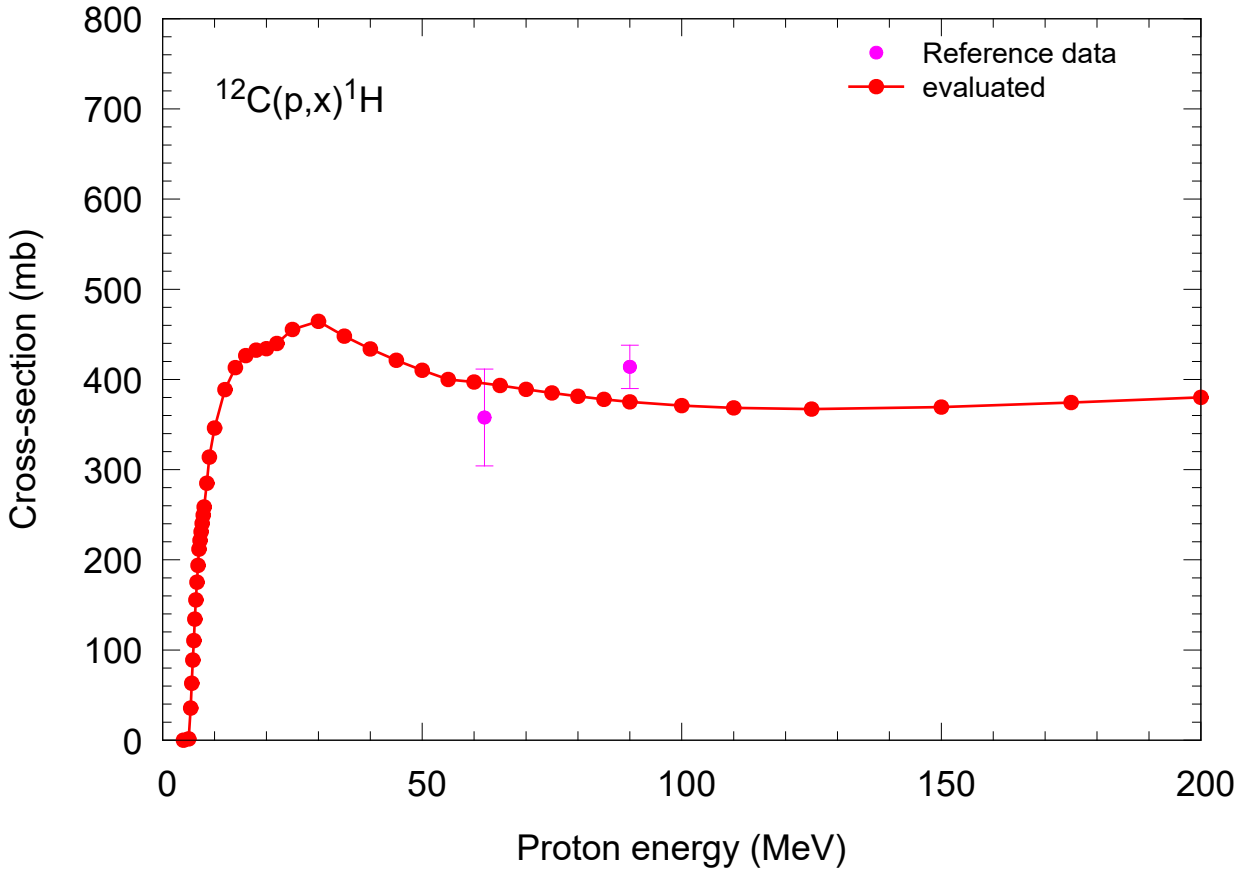
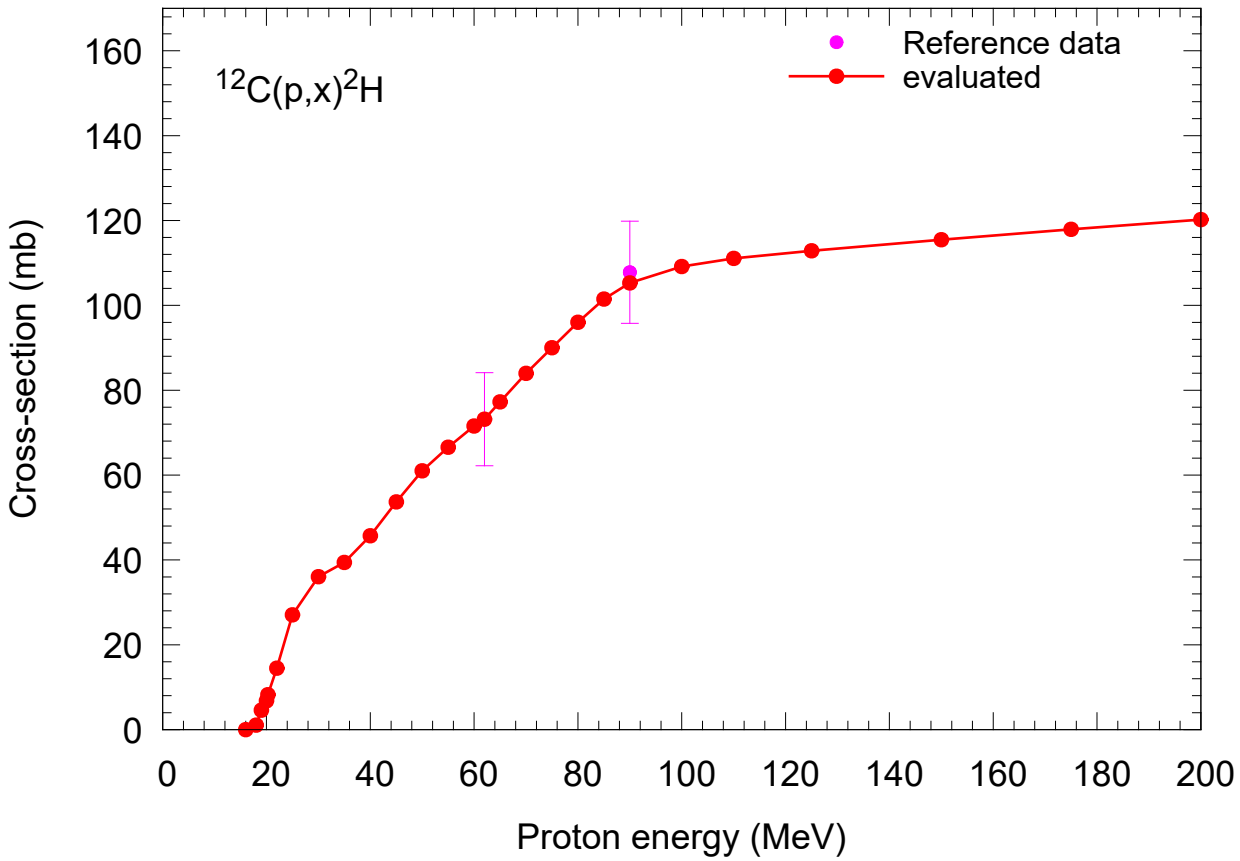
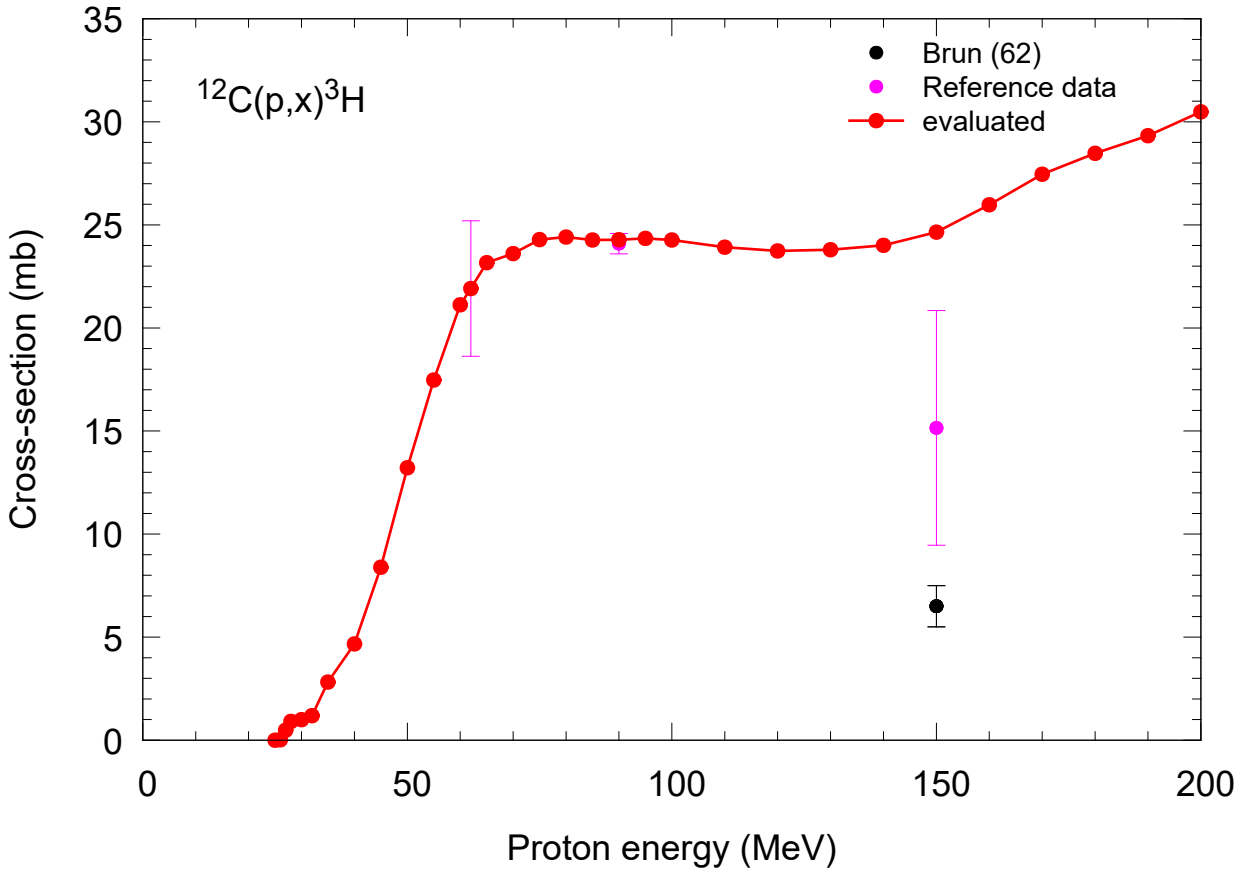
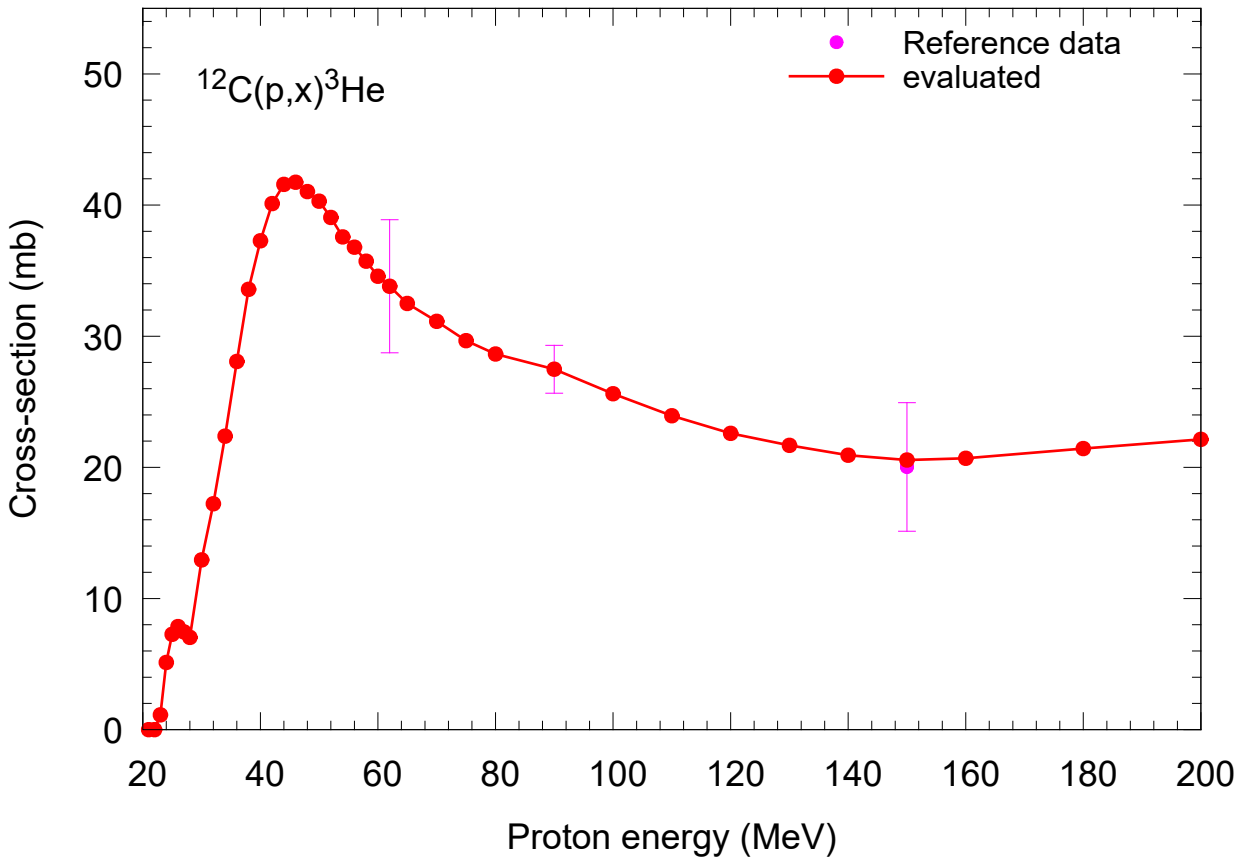
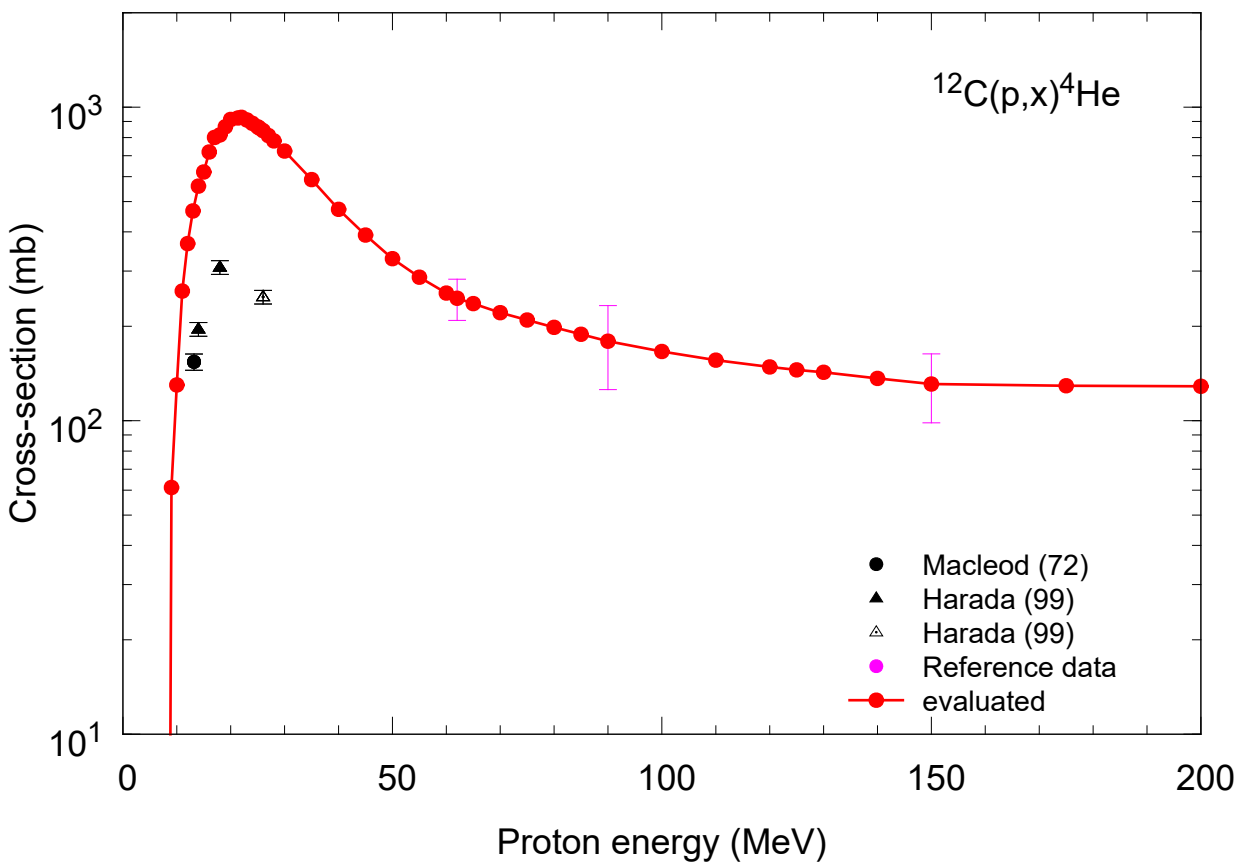

$^{12}C(p,x)^{1}nn$
evaluated
Cross-section (mb)
Proton energy (MeV)
0
20
40
60
80
100
120
140
160
180
200

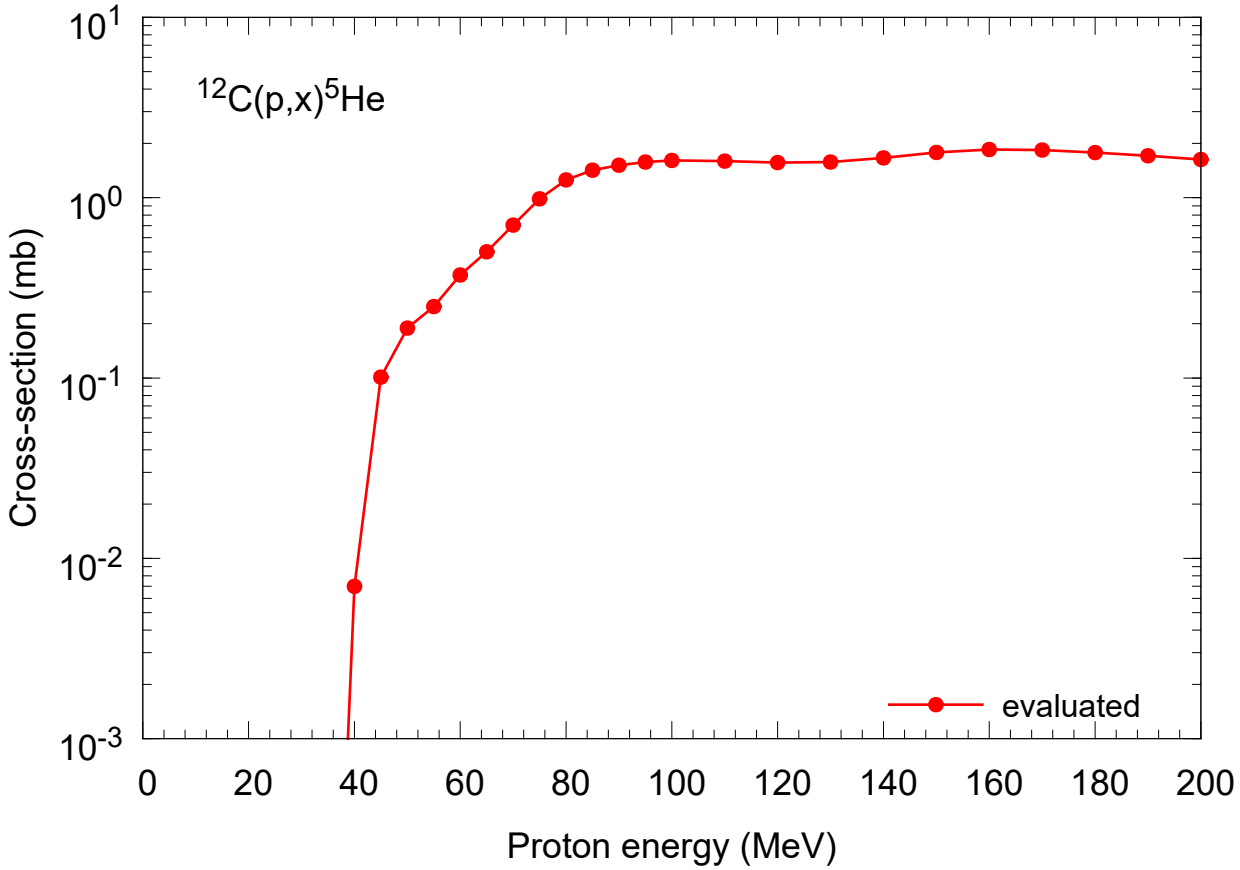

$^{12}C(p,x)^{1}H$
Reference data
evaluated
Cross-section (mb)
Proton energy (MeV)
0
50
100
150
200
300
400
500
600
700
800

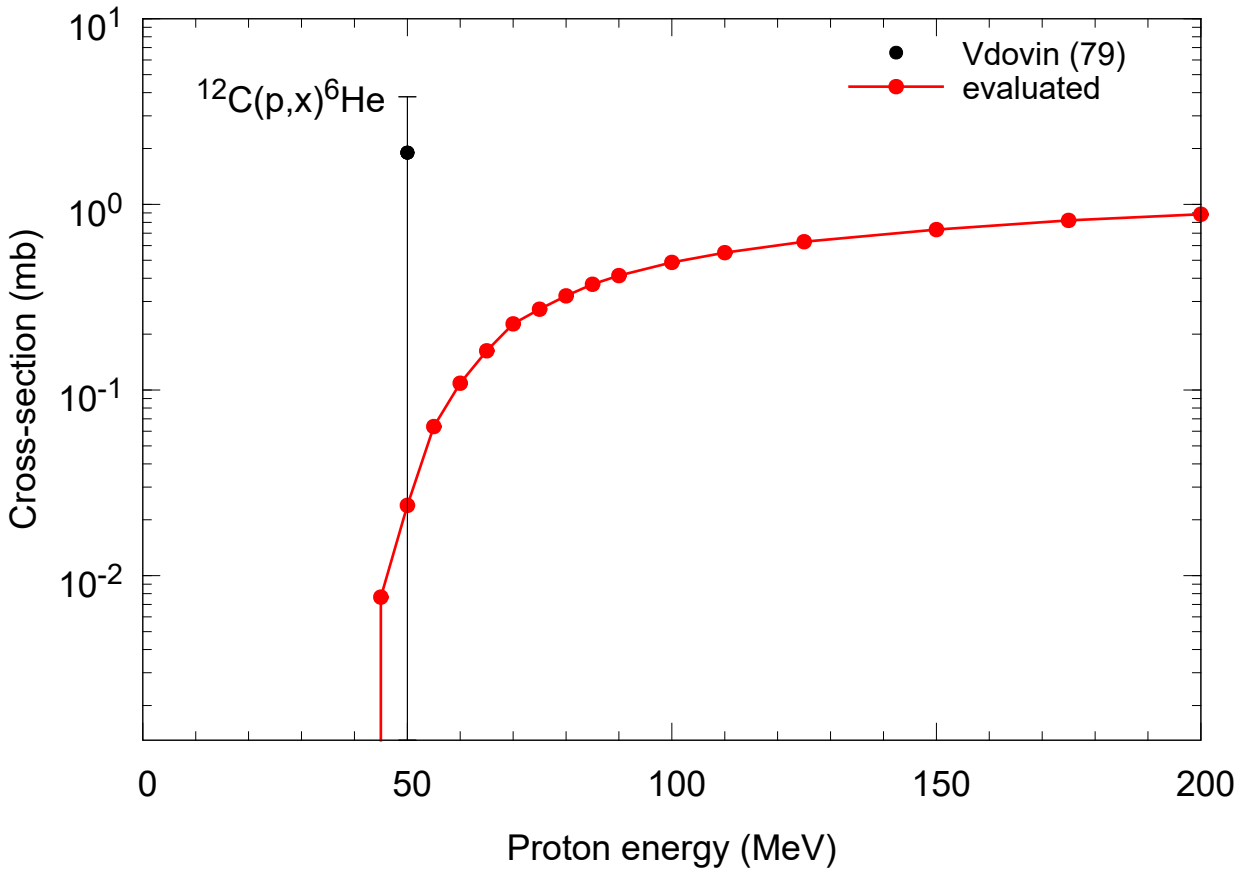

$^{12}C(p,x)^{2}H$
Reference data
evaluated
Cross-section (mb)
Proton energy (MeV)
0
20
40
60
80
100
120
140
160
180
200

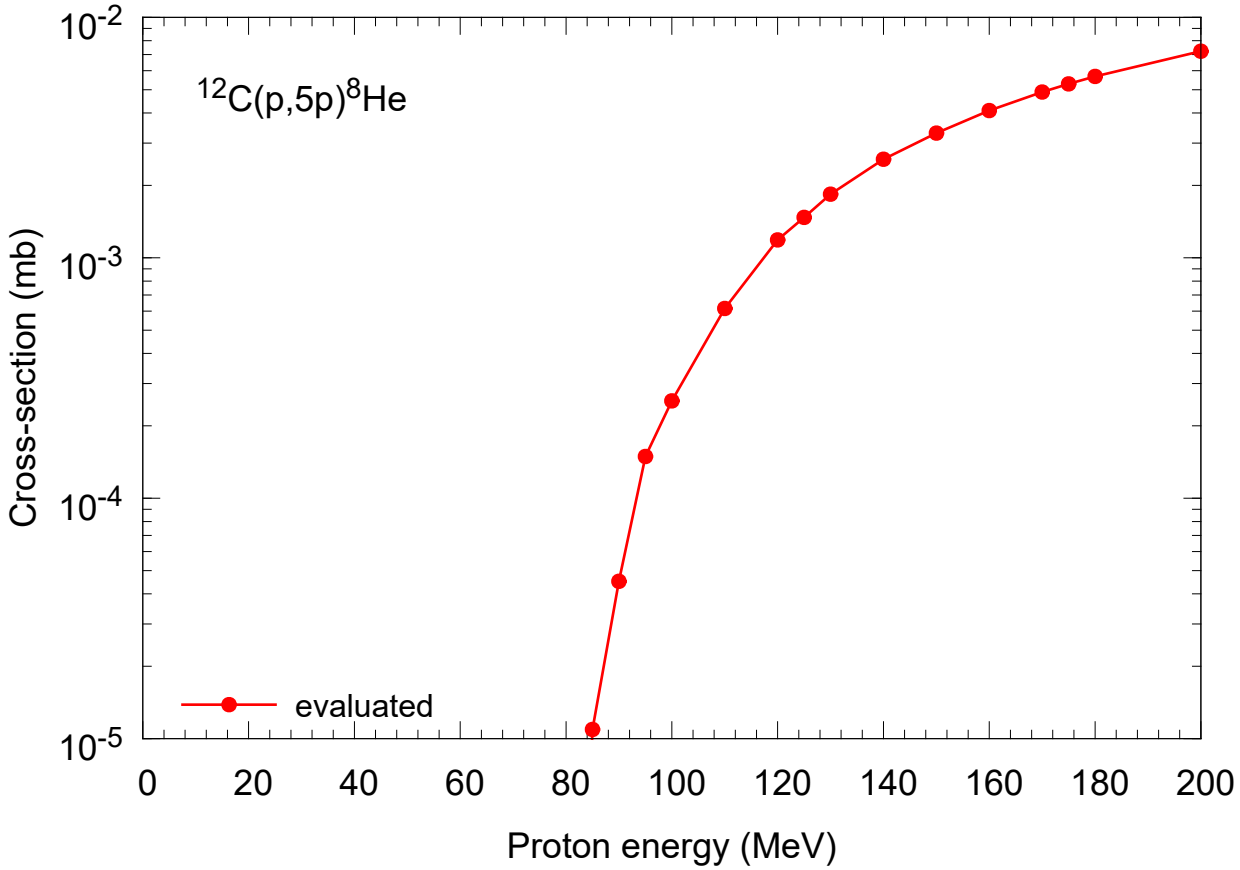

$^{12}C(p,x)^{3}H$
Brun (62)
Reference data
evaluated
Cross-section (mb)
Proton energy (MeV)
0
5
10
15
20
25
30
35
50
100
150
200

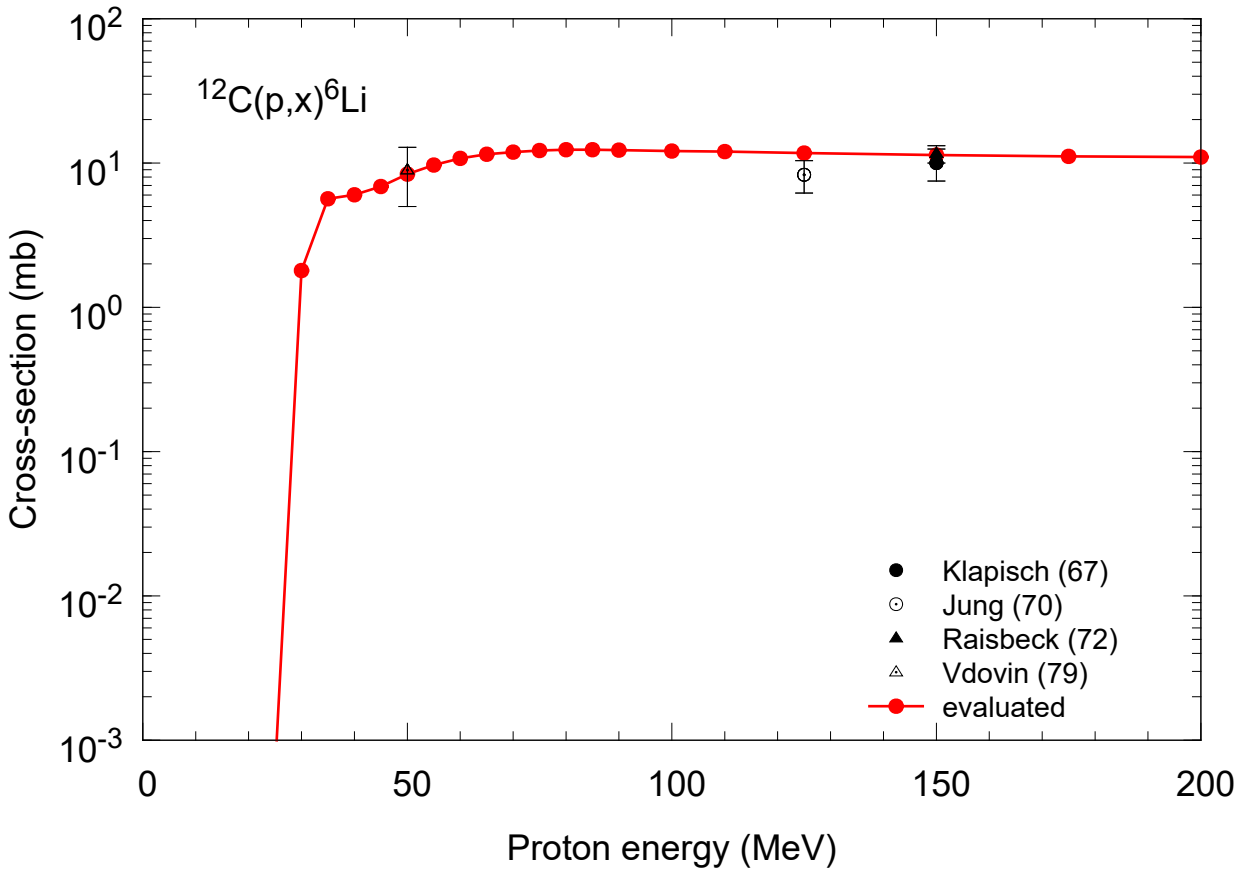

$^{12}C(p,x)^{3}He$
Reference data
evaluated
Cross-section (mb)
Proton energy (MeV)
0
10
20
30
40
50
20
40
60
80
100
120
140
160
180
200

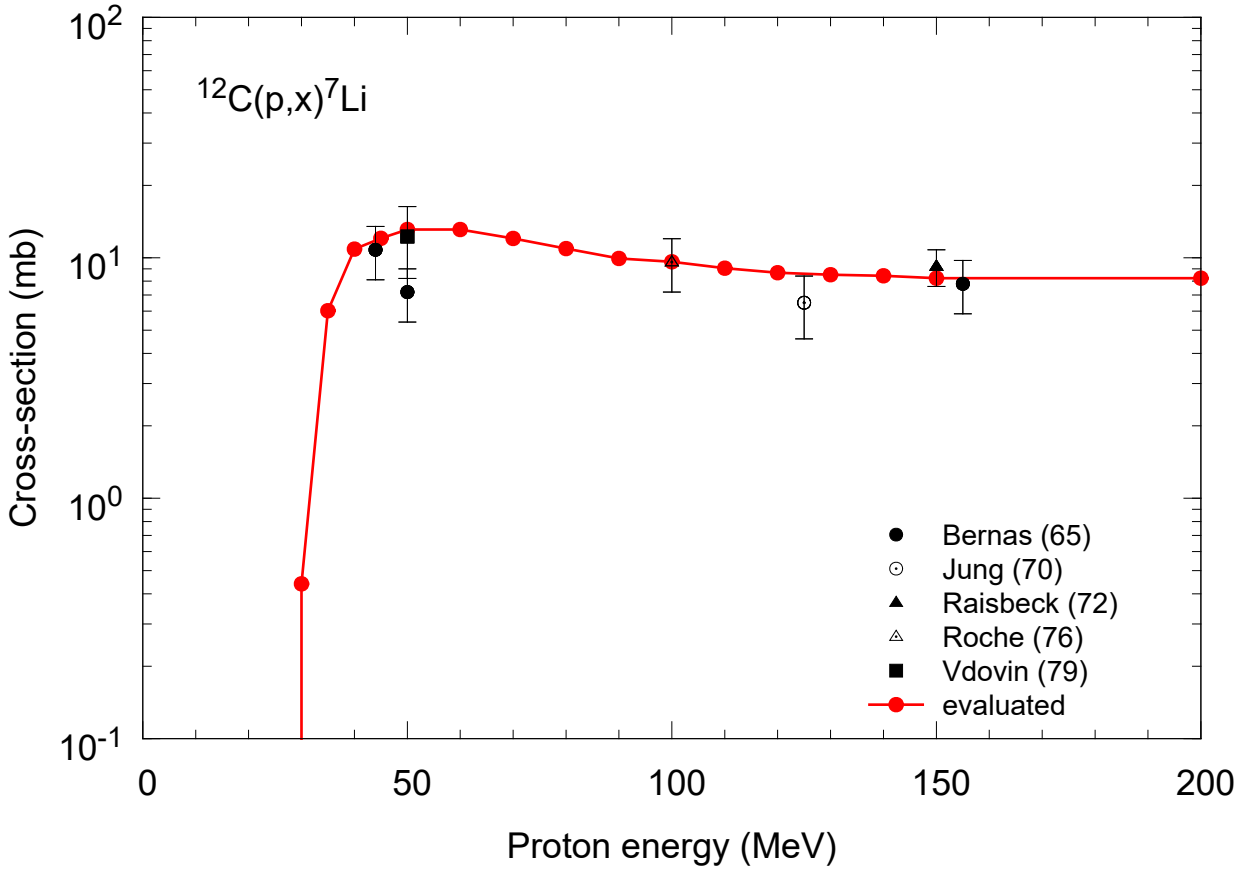

$^{12}C(p,x)^{4}He$
Macleod (72)
Harada (99)
Harada (99)
Reference data
evaluated
Cross-section (mb)
Proton energy (MeV)
10^{1}
10^{2}
10^{3}
0
50
100
150
200

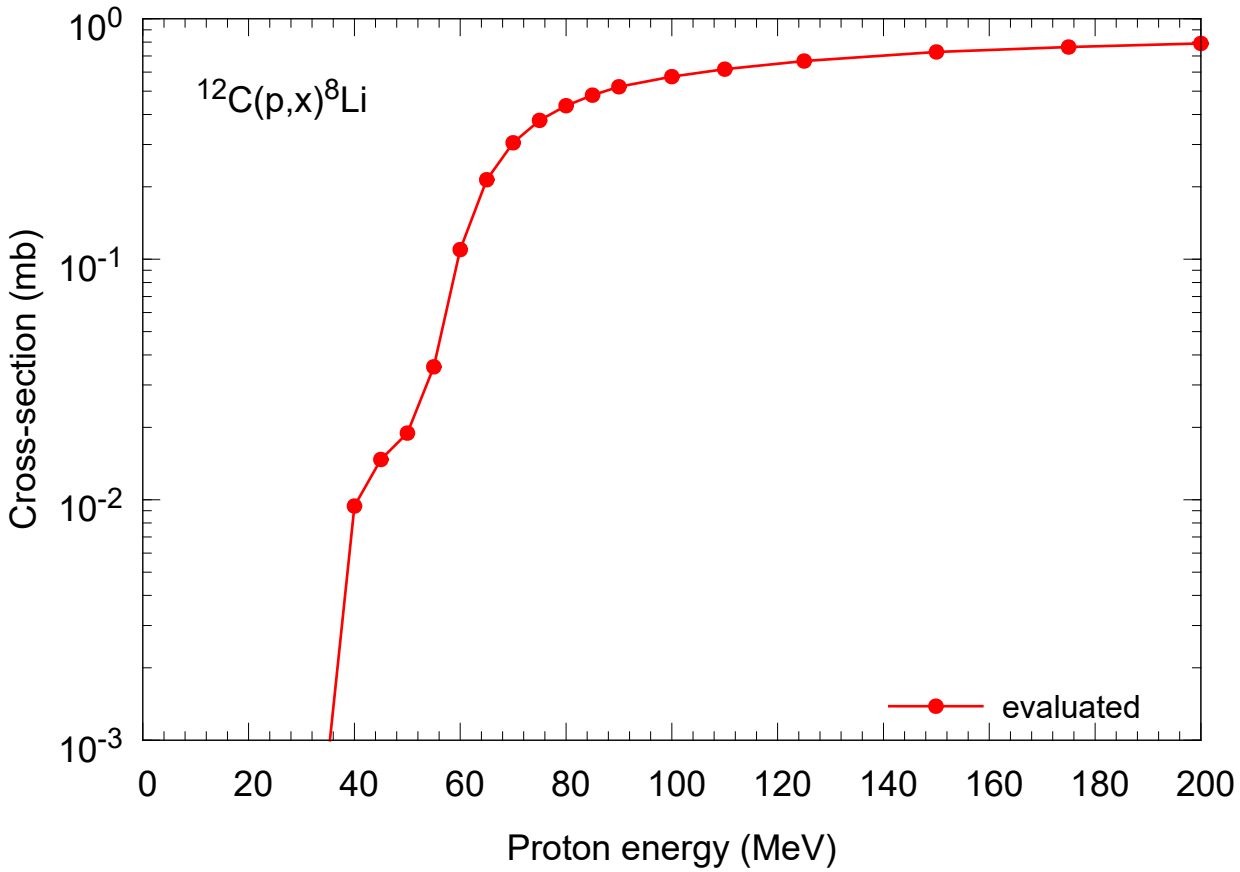

$^{12}C(p,x)^{5}He$
evaluated
Cross-section (mb)
Proton energy (MeV)
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
0
20
40
60
80
100
120
140
160
180
200

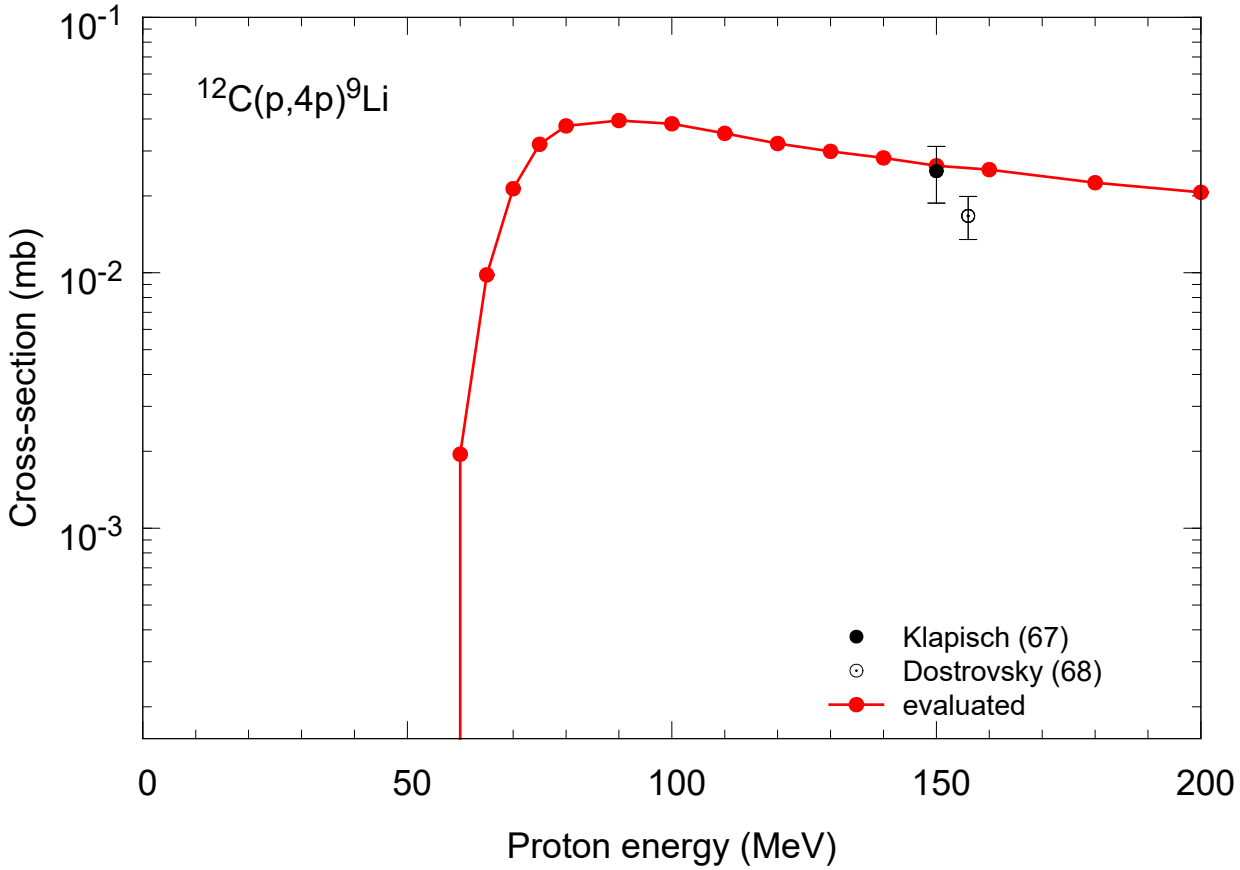

$^{12}C(p,x)^{6}He$
Vdovin (79)
evaluated
Cross-section (mb)
Proton energy (MeV)
10^{1}
10^{0}
10^{-1}
10^{-2}
0
50
100
150
200

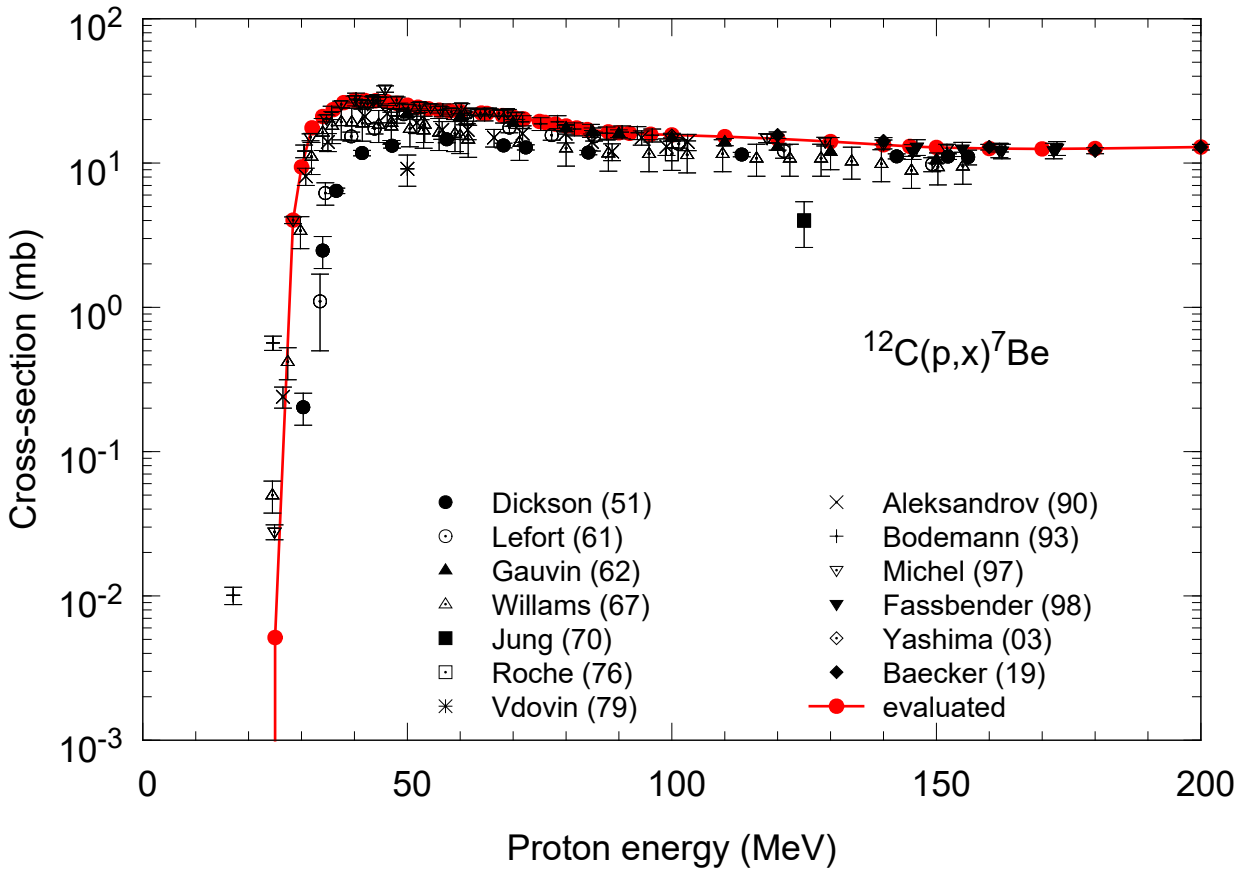

$^{12}C(p,5p)^{8}He$
evaluated
Cross-section (mb)
Proton energy (MeV)
10^{-2}
10^{-3}
10^{-4}
10^{-5}
0
20
40
60
80
100
120
140
160
180
200

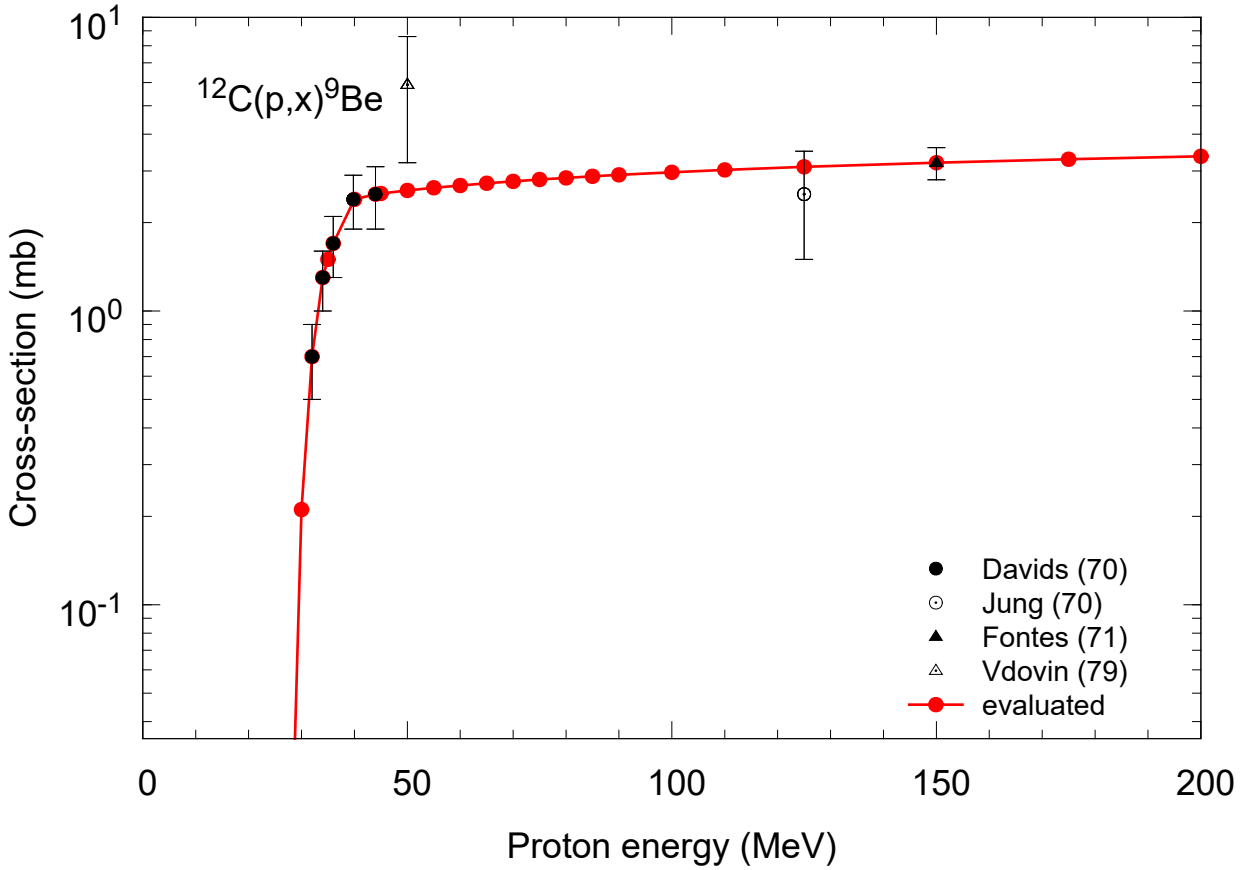

$^{12}C(p,x)^{6}Li$
Klapisch (67)
Jung (70)
Raisbeck (72)
Vdovin (79)
evaluated
Cross-section (mb)
Proton energy (MeV)
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
0
50
100
150
200

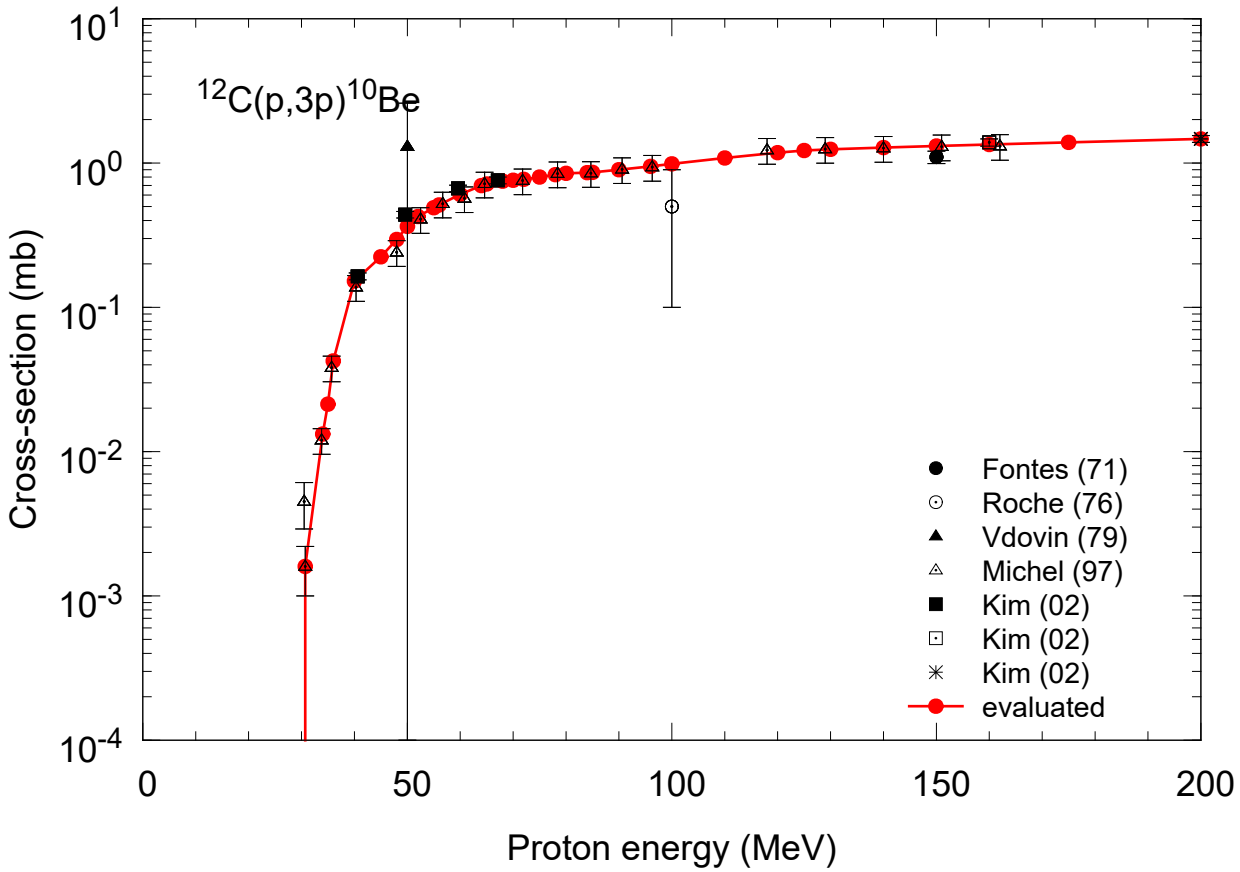

$^{12}C(p,x)^{7}Li$
Cross-section (mb)
Proton energy (MeV)
Bernas (65)
Jung (70)
Raisbeck (72)
Roche (76)
Vdovin (79)
evaluated

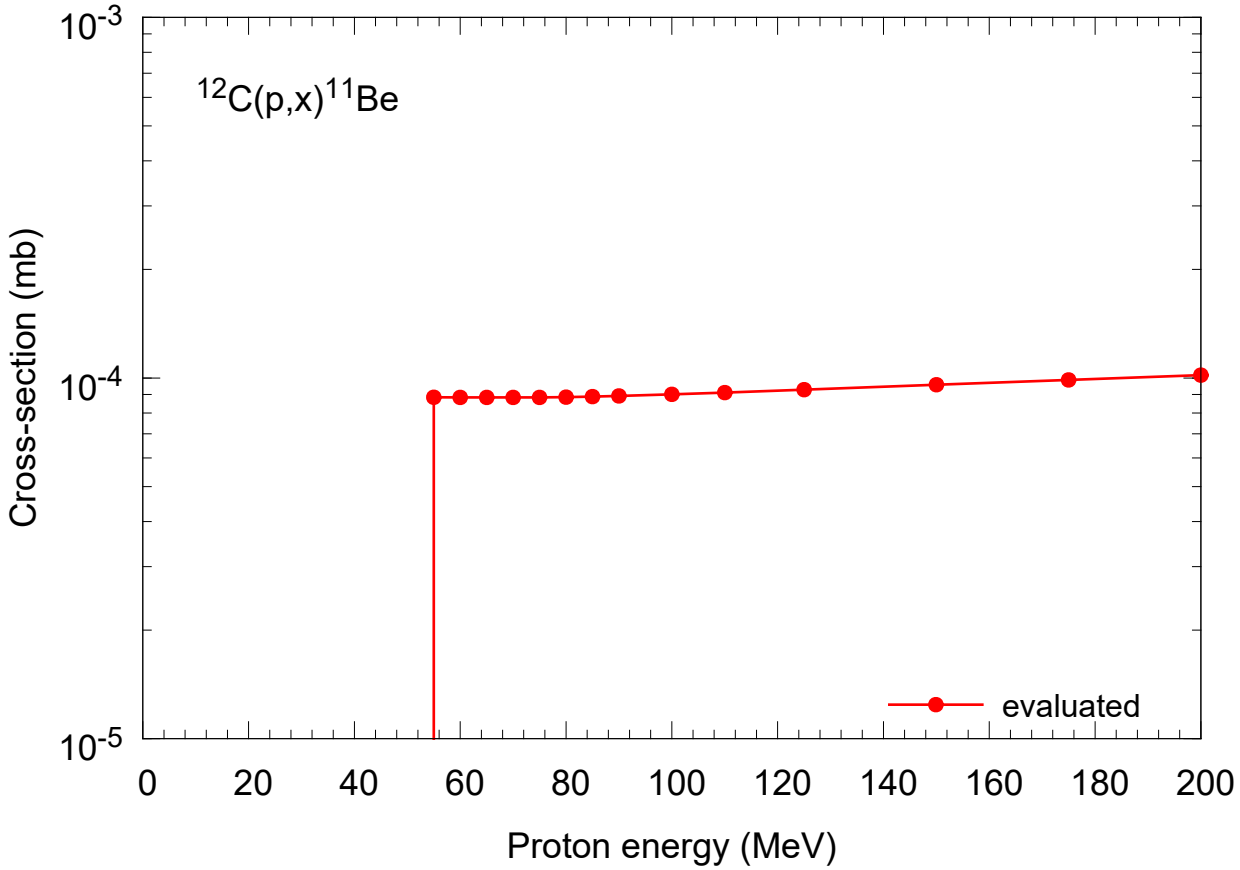

$^{12}C(p,x)^{8}Li$
Cross-section (mb)
Proton energy (MeV)
evaluated

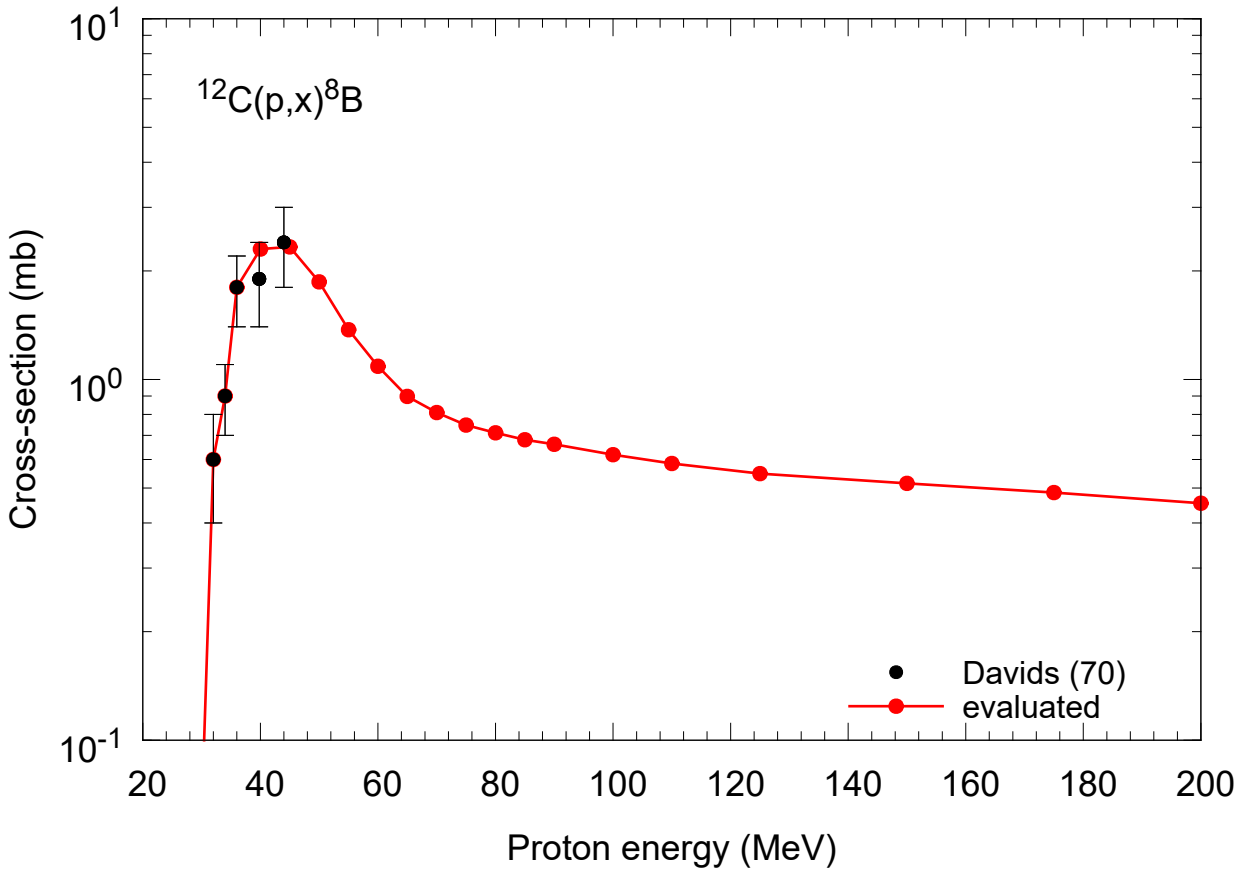

$^{12}C(p,4p)^{9}Li$
Cross-section (mb)
Proton energy (MeV)
Klapisch (67)
Dostrovsky (68)
evaluated

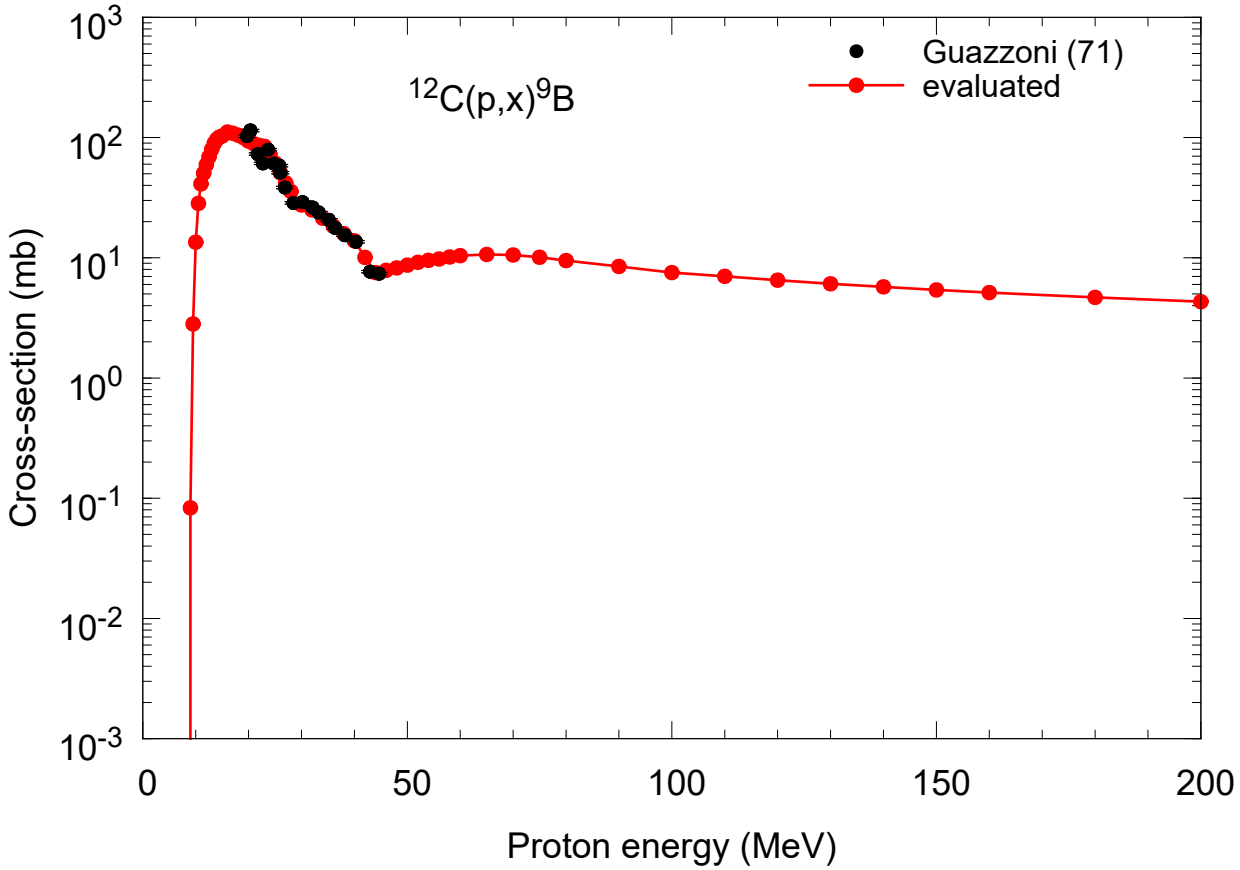

$^{12}C(p,x)^{7}Be$
Cross-section (mb)
Proton energy (MeV)
Dickson (51)
Lefort (61)
Gauvin (62)
Willams (67)
Jung (70)
Roche (76)
Vdovin (79)
Aleksandrov (90)
Bodemann (93)
Michel (97)
Fassbender (98)
Yashima (03)
Baecker (19)
evaluated

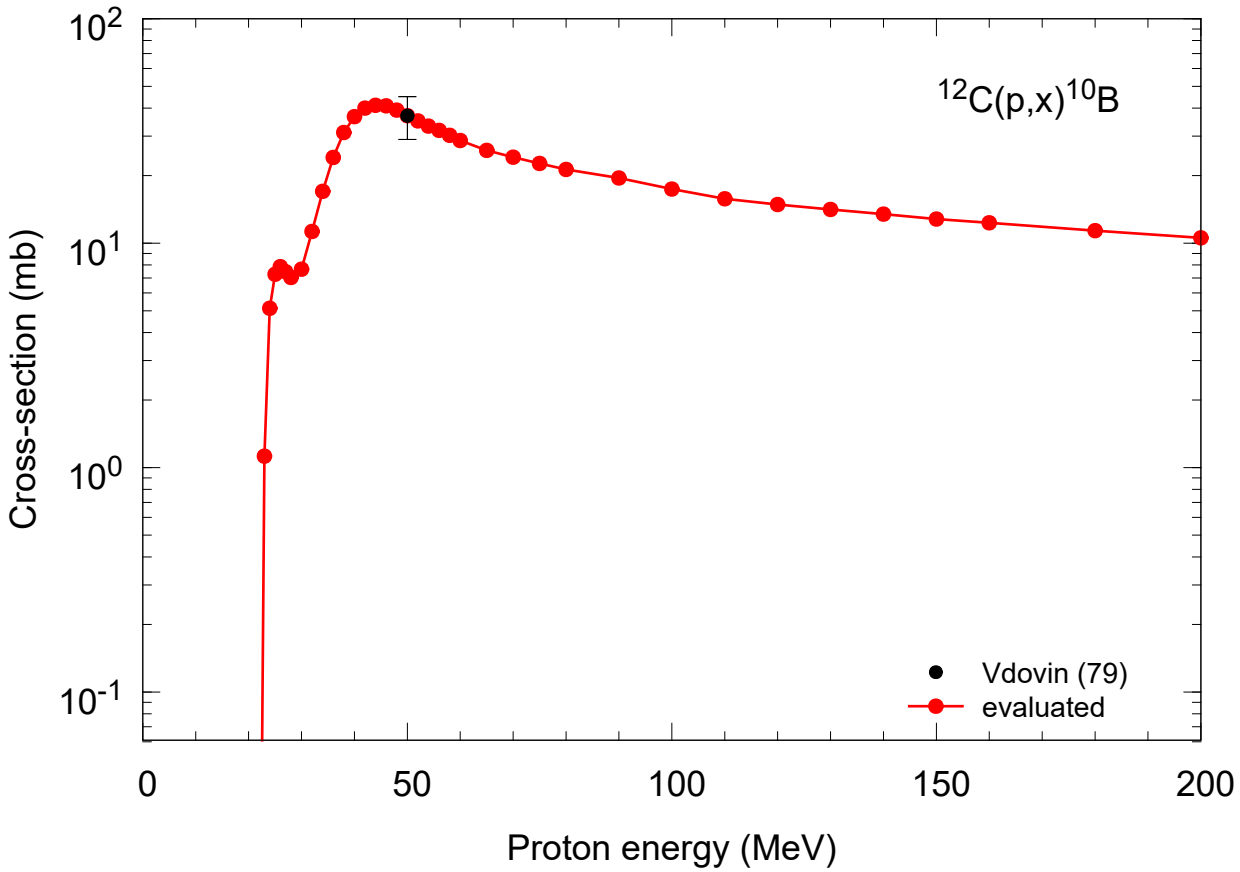

$^{12}C(p,x)^{9}Be$
Cross-section (mb)
Proton energy (MeV)
Davids (70)
Jung (70)
Fontes (71)
Vdovin (79)
evaluated

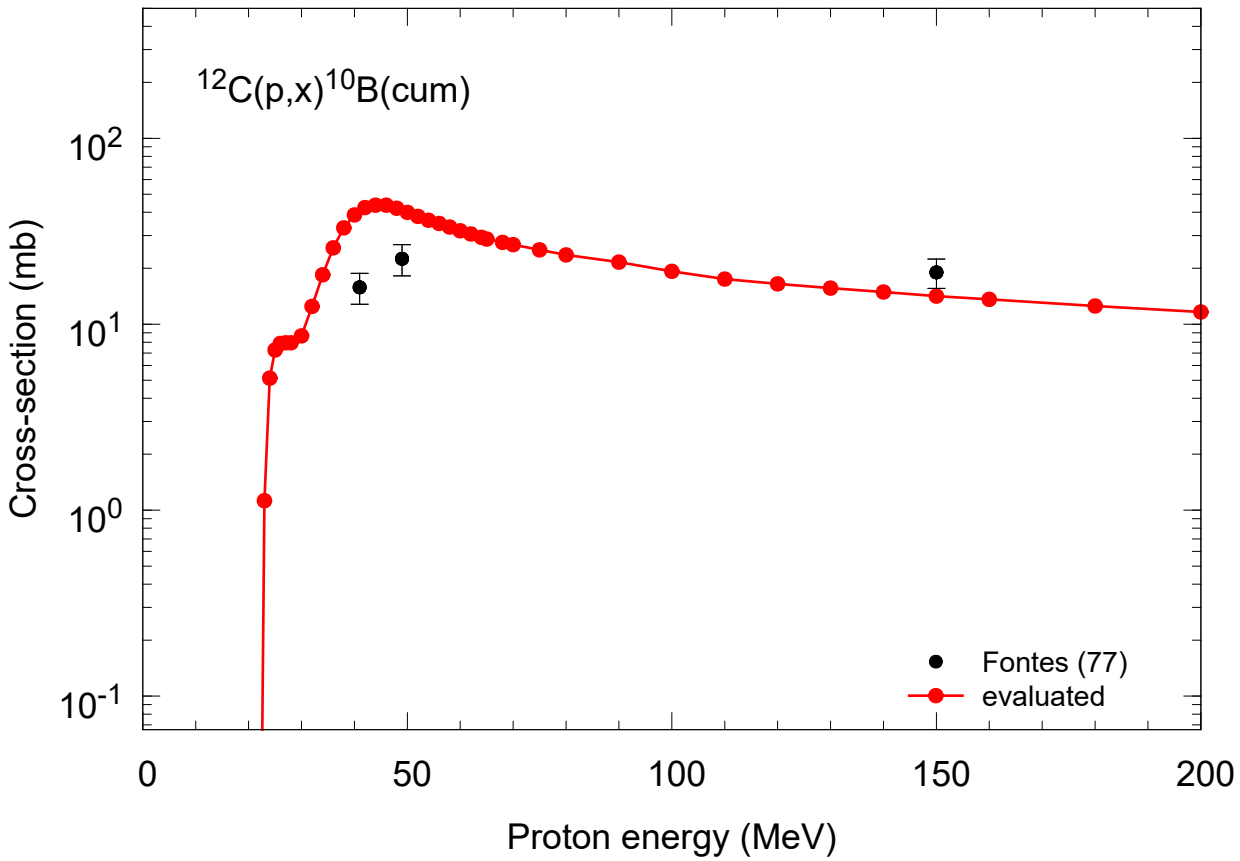

$^{12}C(p,3p)^{10}Be$
Cross-section (mb)
Proton energy (MeV)
Fontes (71)
Roche (76)
Vdovin (79)
Michel (97)
Kim (02)
Kim (02)
Kim (02)
evaluated

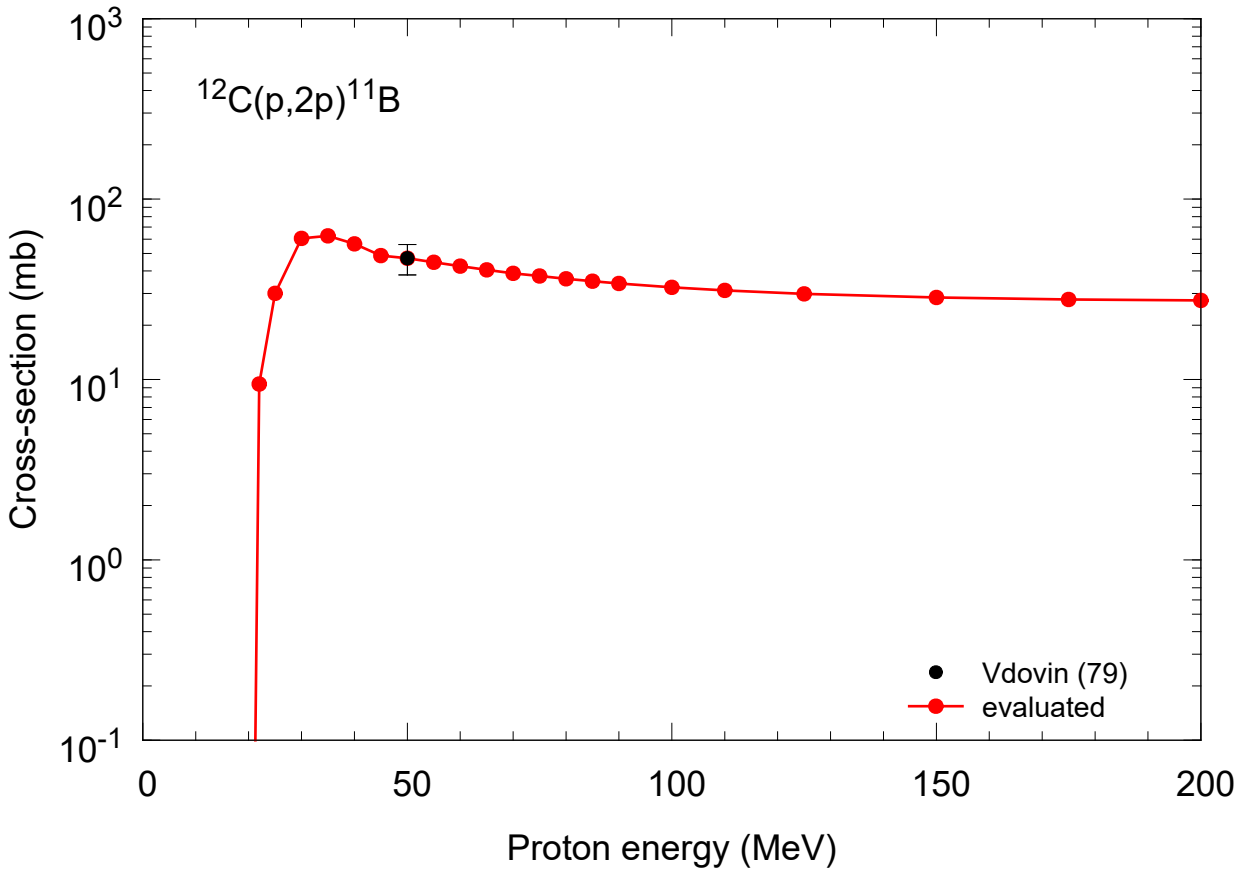

$^{12}C(p,x)^{11}Be$
Cross-section (mb)
10^{-3}
10^{-4}
10^{-5}
0
20
40
60
80
100
120
140
160
180
200
Proton energy (MeV)
evaluated

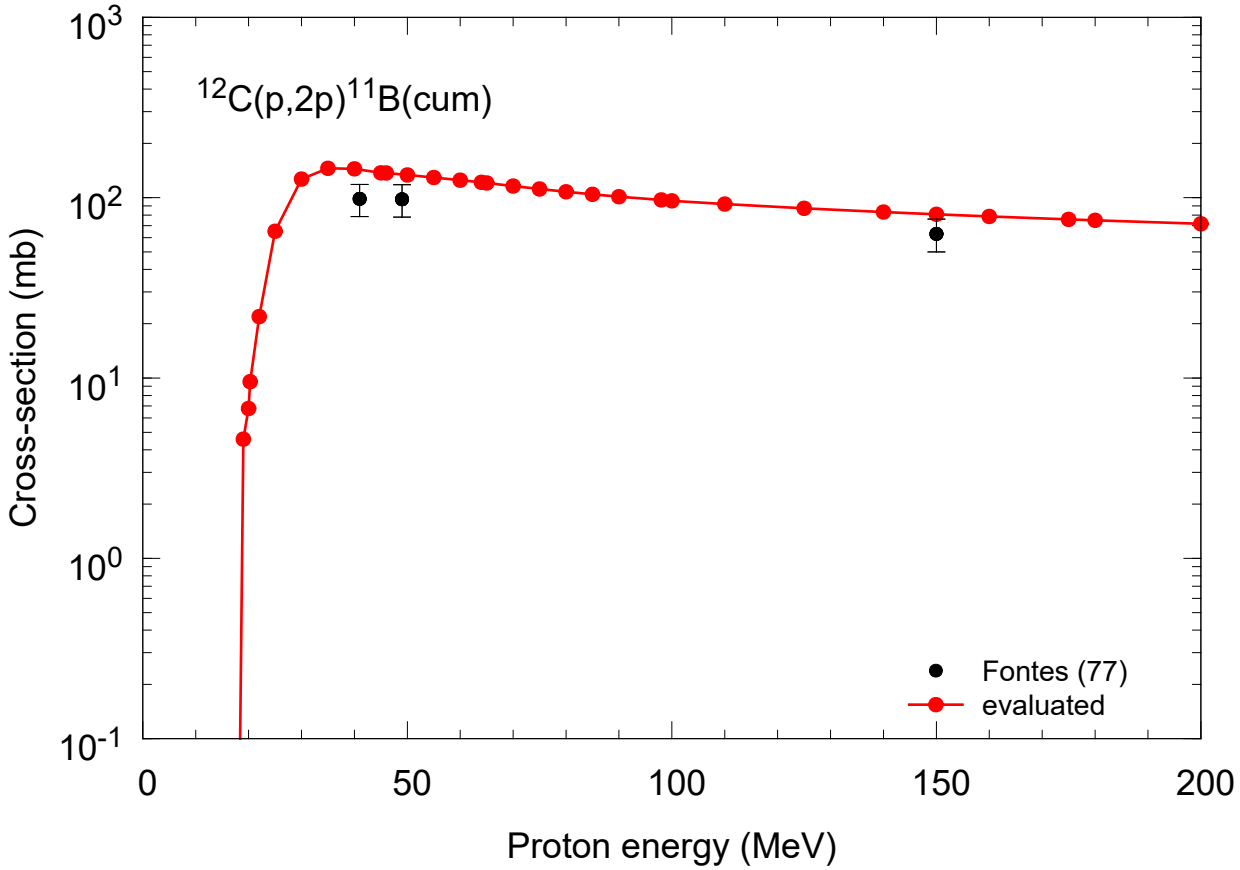

$^{12}C(p,x)^{8}B$
Cross-section (mb)
10^{1}
10^{0}
10^{-1}
20
40
60
80
100
120
140
160
180
200
Proton energy (MeV)
Davids (70)
evaluated

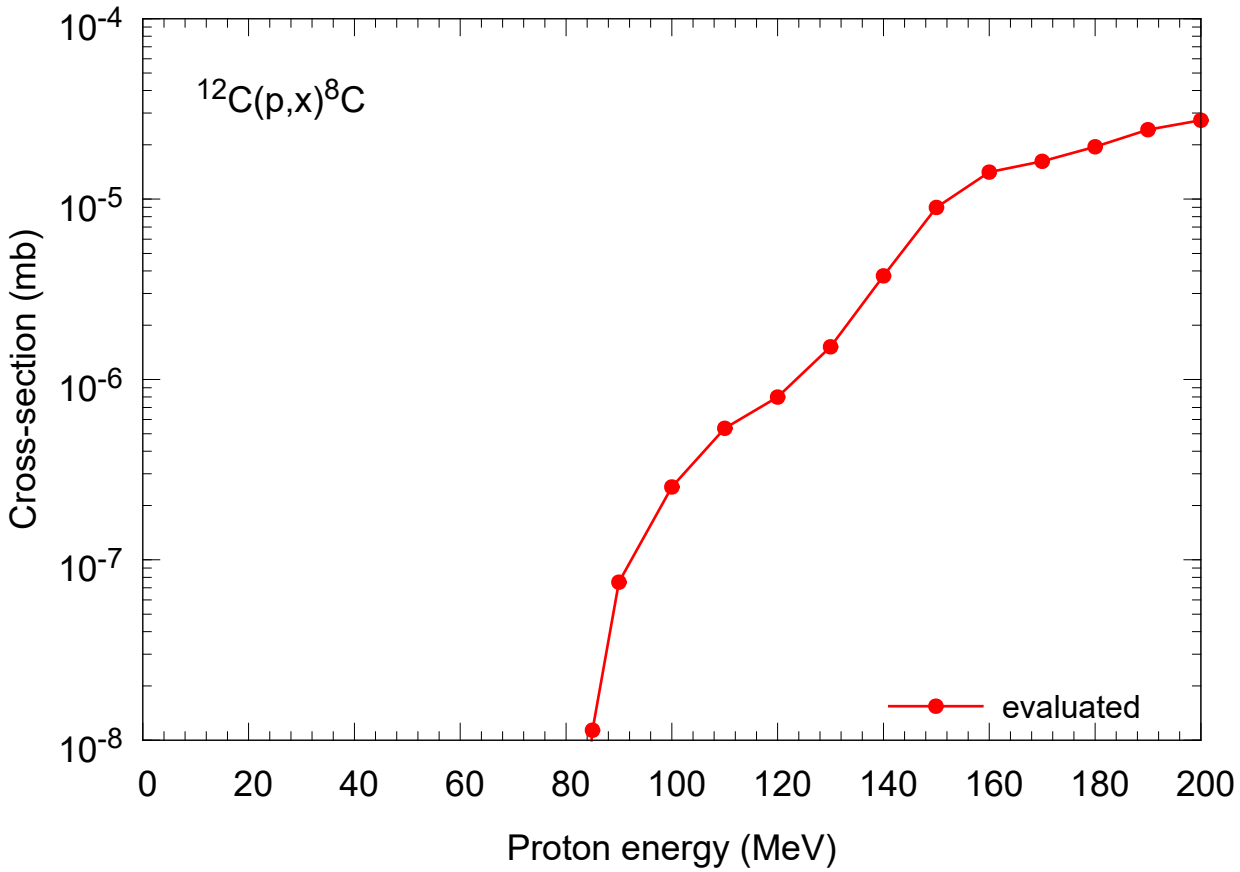

$^{12}C(p,x)^{9}B$
Guazzoni (71)
evaluated
Cross-section (mb)
Proton energy (MeV)
10^{3}
10^{2}
10^{1}
10^{0}
10^{-1}
10^{-2}
10^{-3}
0
50
100
150
200

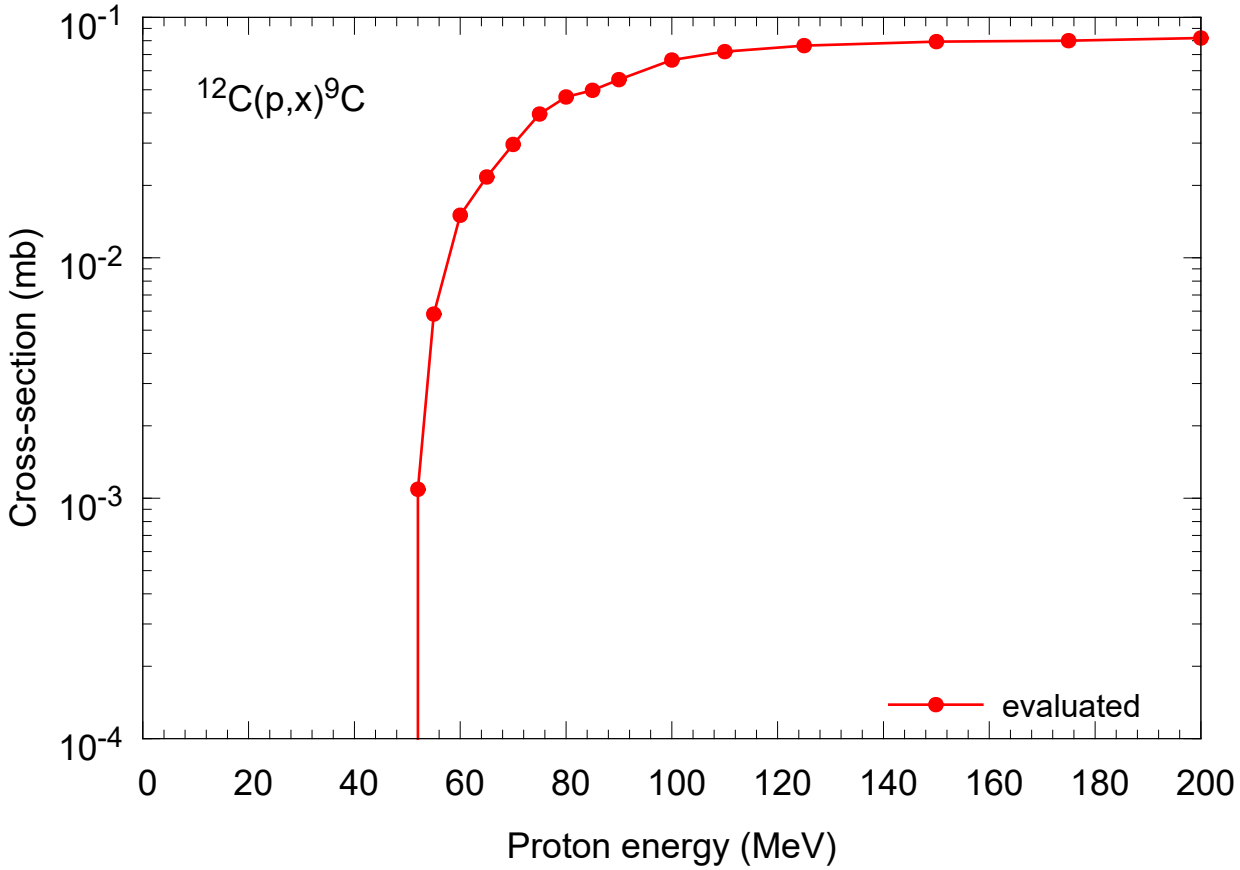

$^{12}C(p,x)^{10}B$
Vdovin (79)
evaluated
Cross-section (mb)
Proton energy (MeV)
10^{2}
10^{1}
10^{0}
10^{-1}
0
50
100
150
200

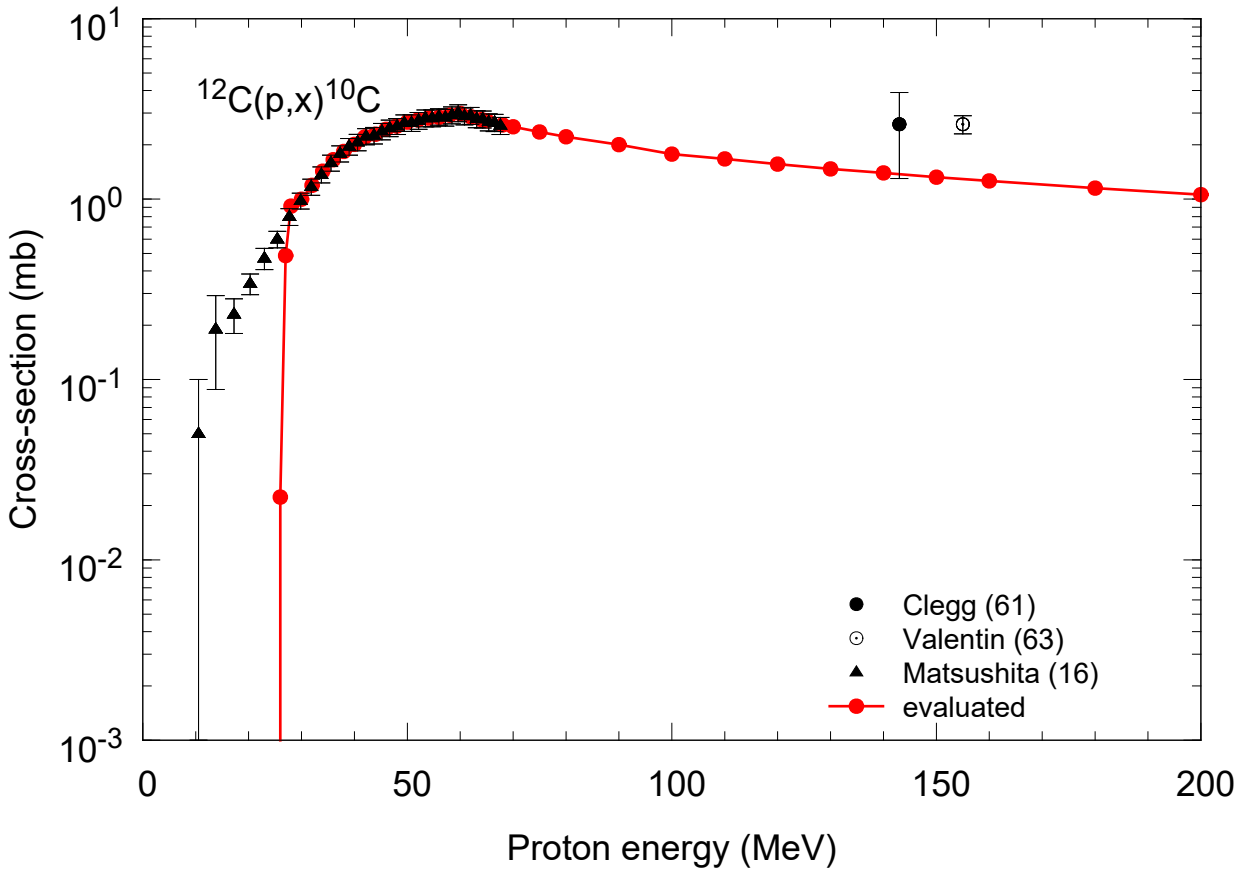

$^{12}C(p,x)^{10}B(cum)$
Cross-section (mb)
Proton energy (MeV)
Fontes (77)
evaluated

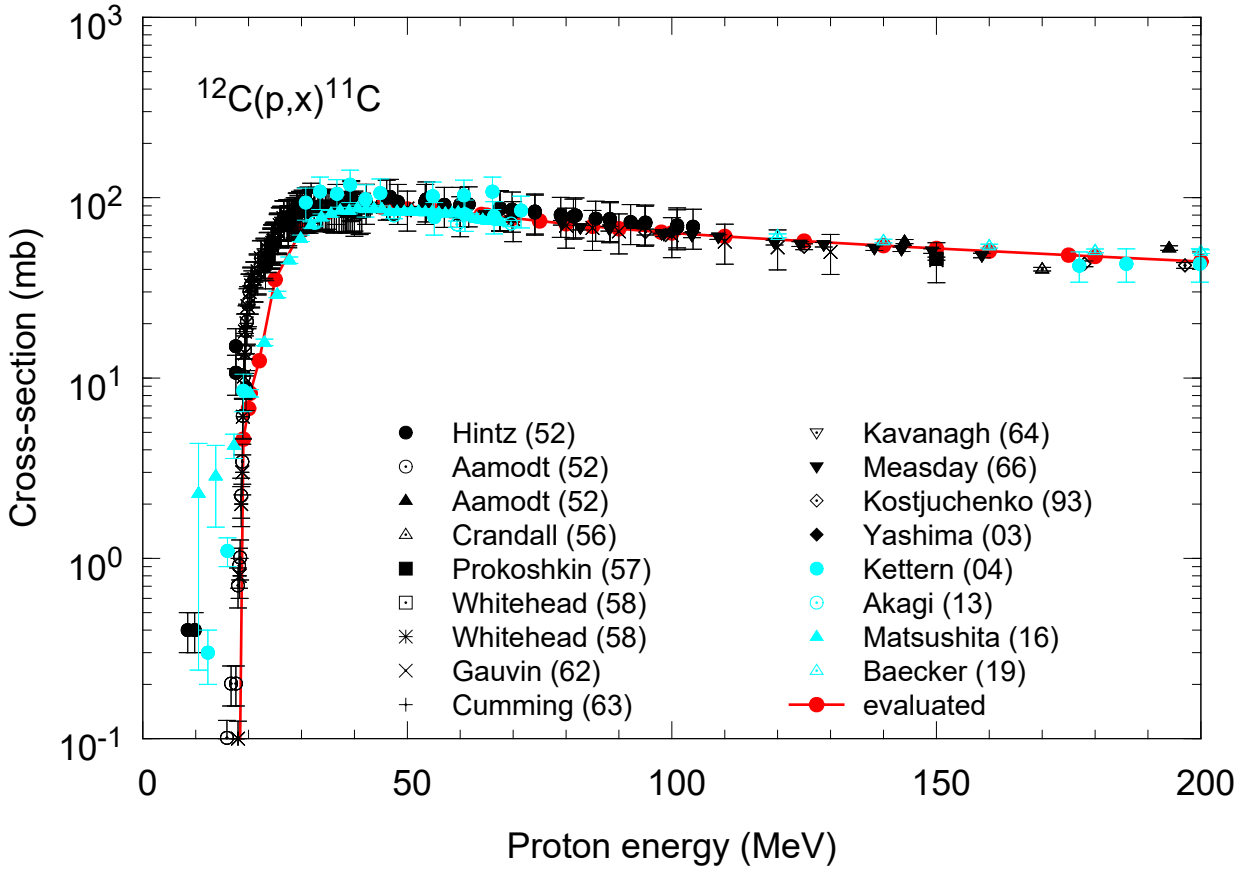

$^{12}C(p,2p)^{11}B$
Cross-section (mb)
Proton energy (MeV)
Vdovin (79)
evaluated

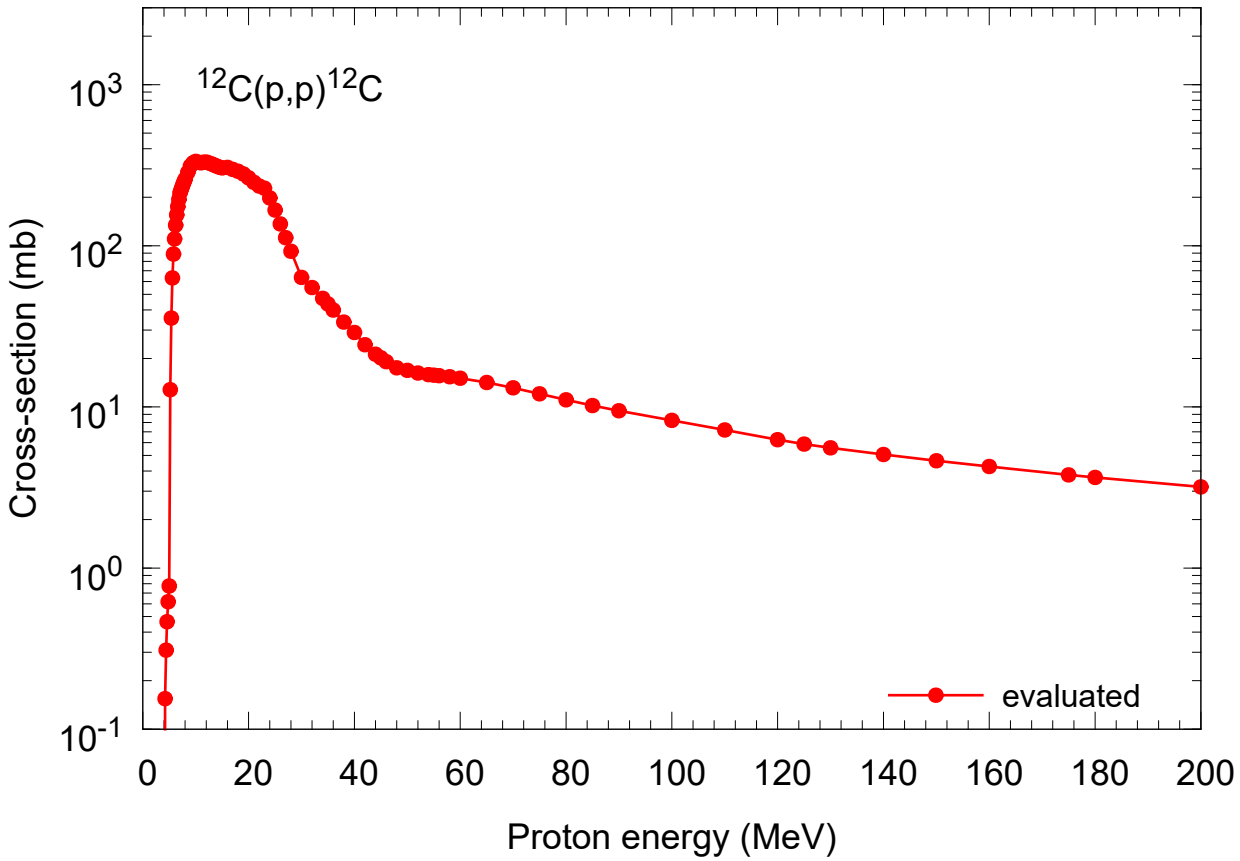

$^{12}C(p,2p)^{11}B(cum)$
Cross-section (mb)
Proton energy (MeV)
Fontes (77)
evaluated

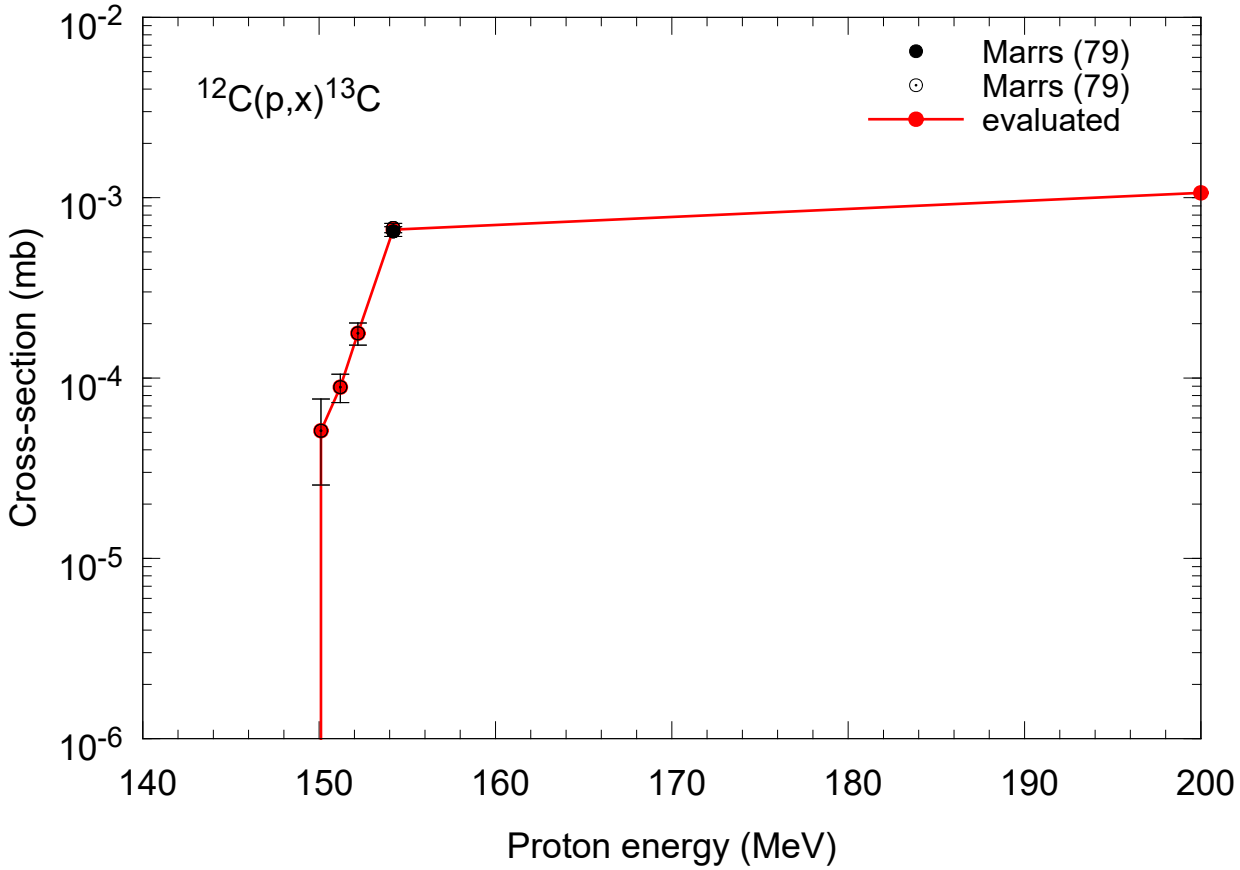

$^{12}C(p,x)^{8}C$
Cross-section (mb)
Proton energy (MeV)
evaluated

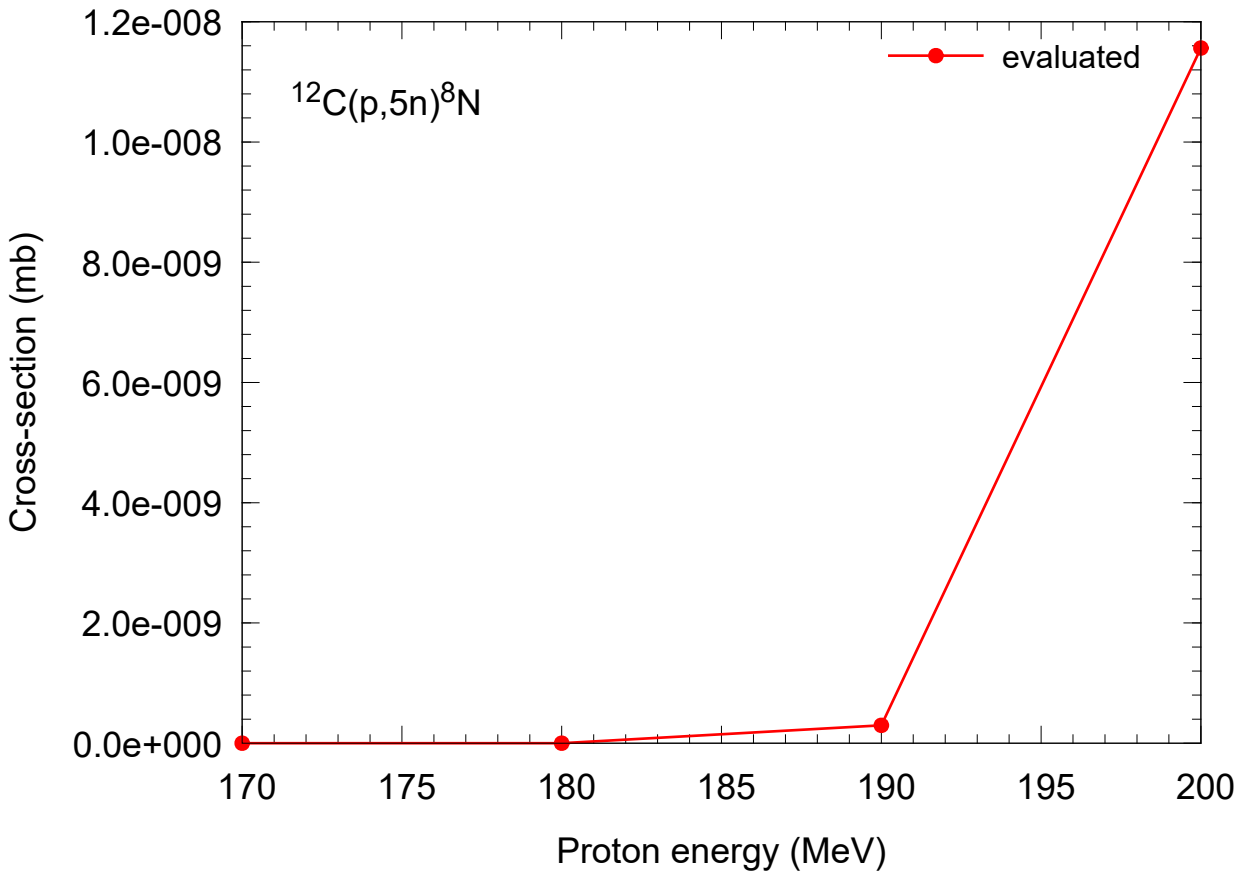

$^{12}C(p,x)^{9}C$
Cross-section (mb)
Proton energy (MeV)
evaluated

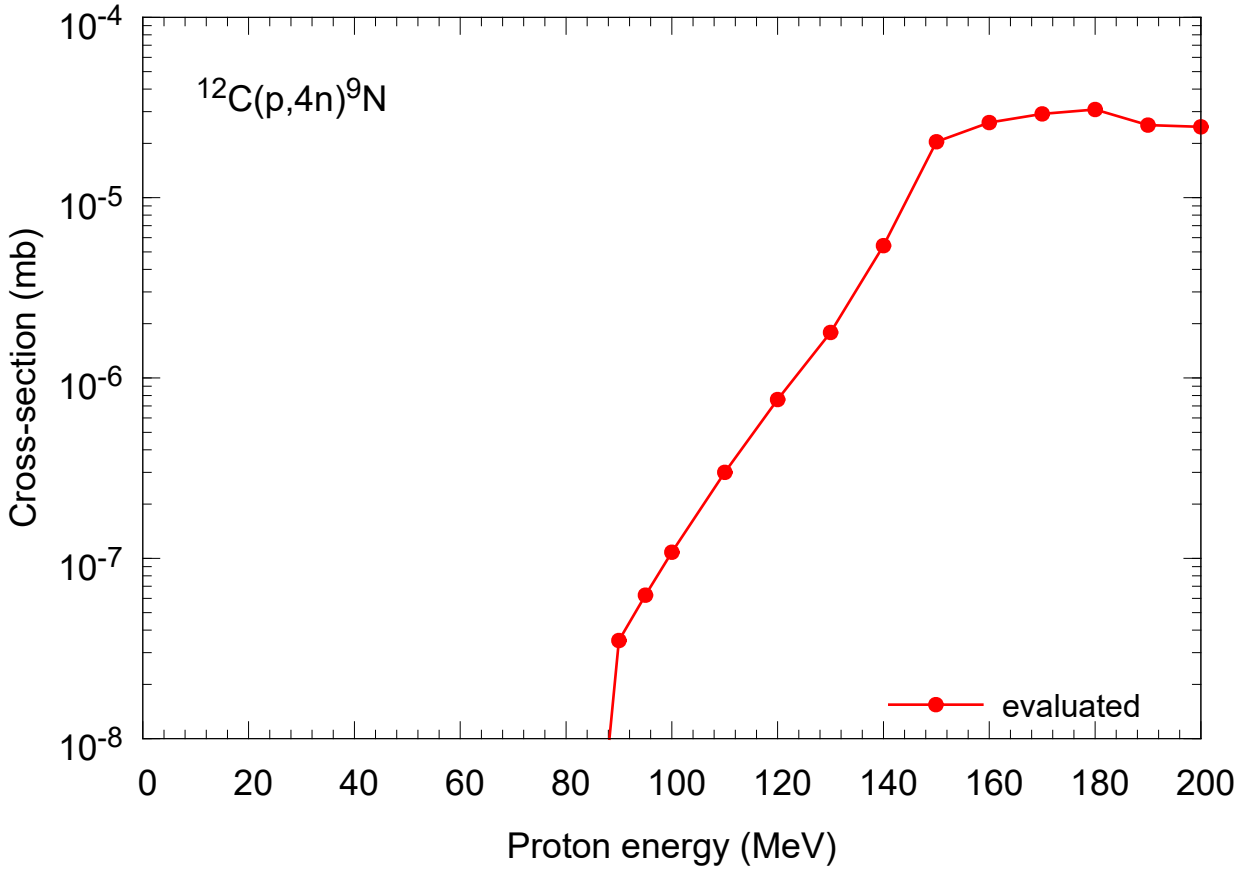

$^{12}C(p,x)^{10}C$
Cross-section (mb)
Proton energy (MeV)
Clegg (61)
Valentin (63)
Matsushita (16)
evaluated

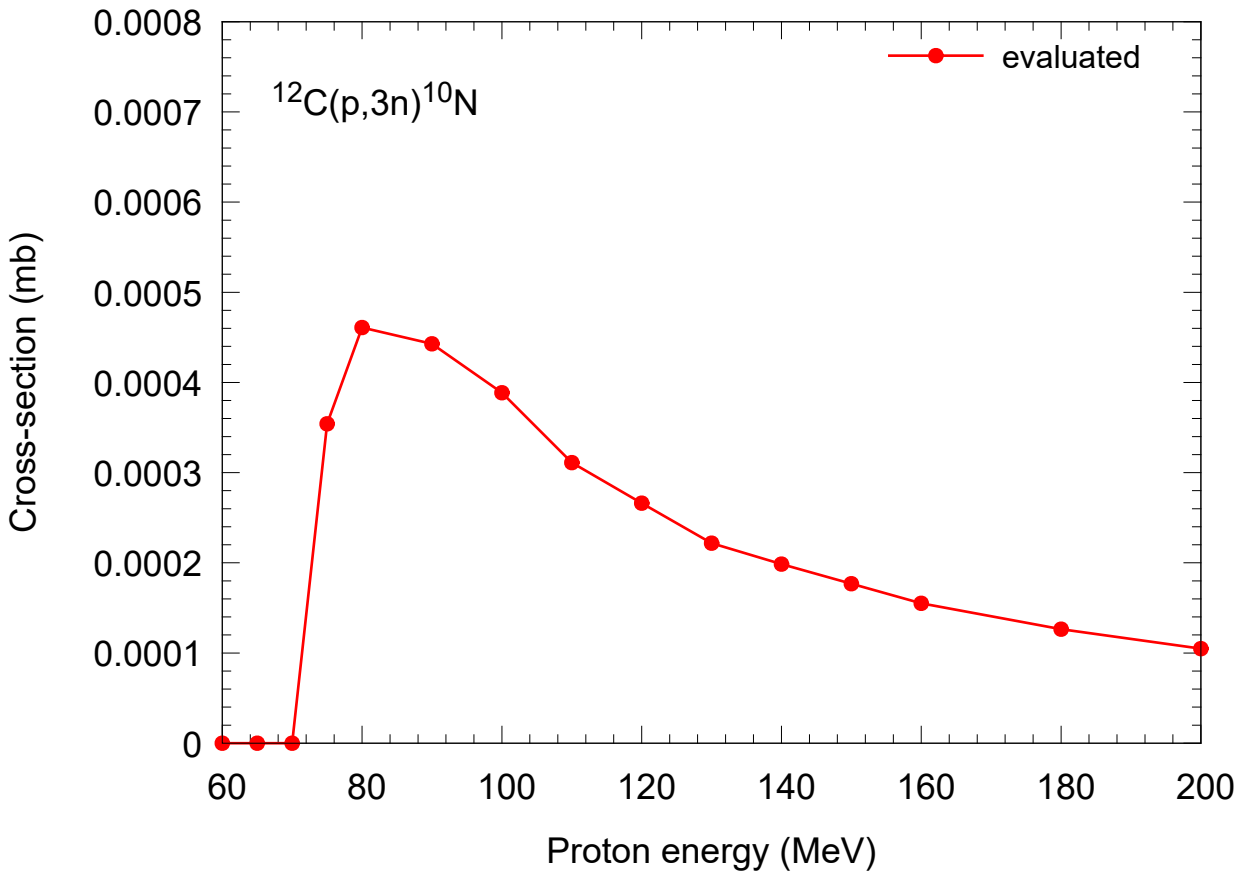

$^{12}C(p,x)^{11}C$
Cross-section (mb)
Proton energy (MeV)
Hintz (52)
Aamodt (52)
Aamodt (52)
Crandall (56)
Prokoshkin (57)
Whitehead (58)
Whitehead (58)
Gauvin (62)
Cumming (63)
Kavanagh (64)
Measday (66)
Kostjuchenko (93)
Yashima (03)
Kettern (04)
Akagi (13)
Matsushita (16)
Baecker (19)
evaluated

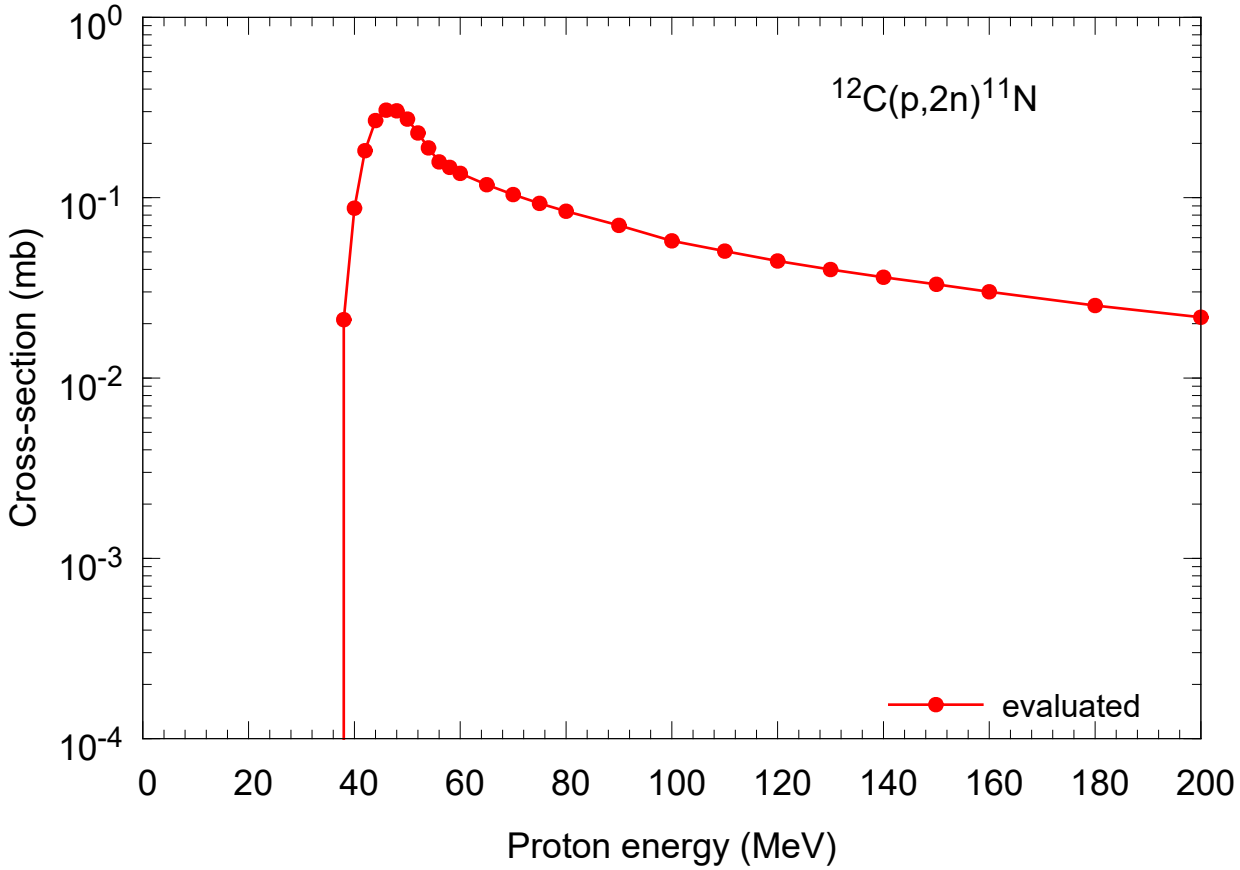

$^{12}C(p,p)^{12}C$
Cross-section (mb)
Proton energy (MeV)
evaluated

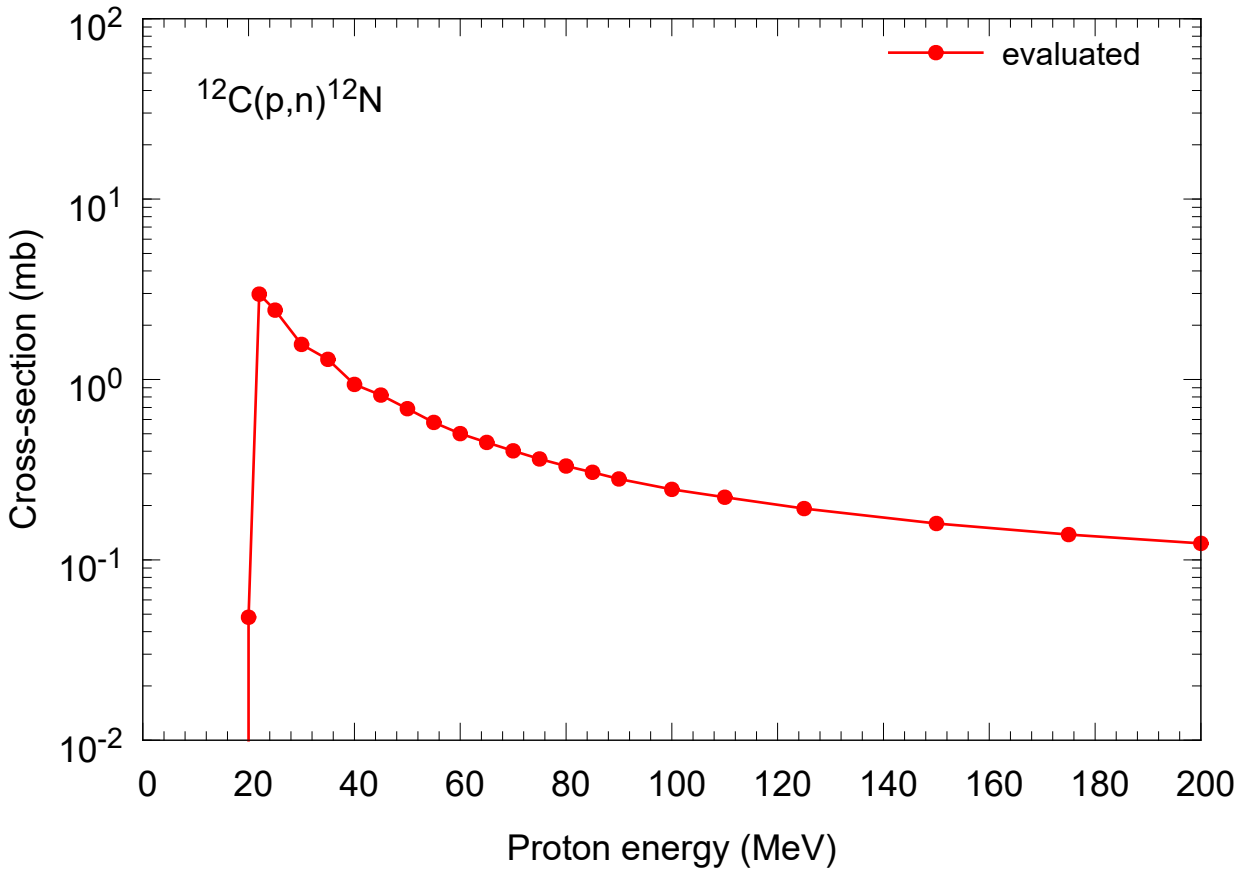

$^{12}C(p,x)^{13}C$
Marrs (79)
Marrs (79)
evaluated
Cross-section (mb)
Proton energy (MeV)
10^{-2}
10^{-3}
10^{-4}
10^{-5}
10^{-6}
140
150
160
170
180
190
200

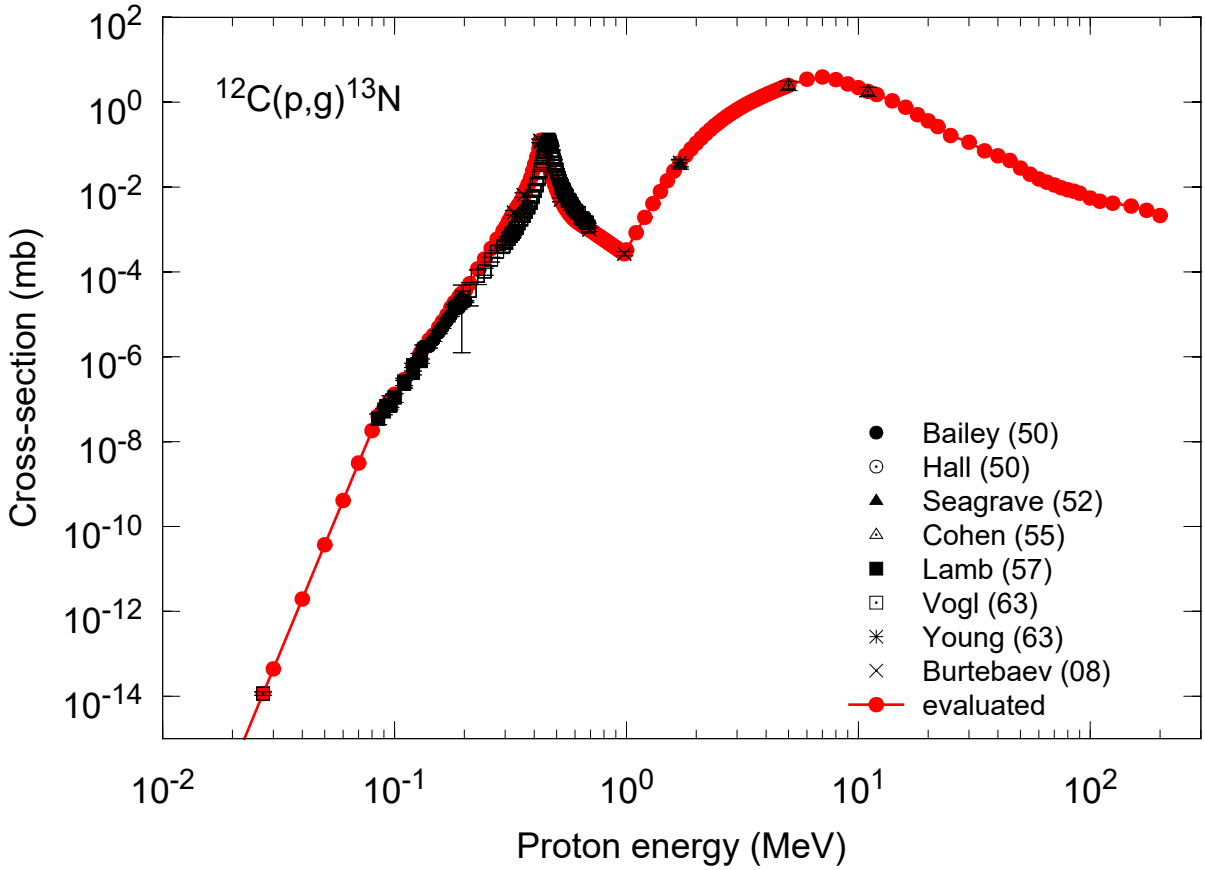

$^{12}C(p,5n)^{8}N$
evaluated
Cross-section (mb)
Proton energy (MeV)
1.2e-008
1.0e-008
8.0e-009
6.0e-009
4.0e-009
2.0e-009
0.0e+000
170
175
180
185
190
195
200

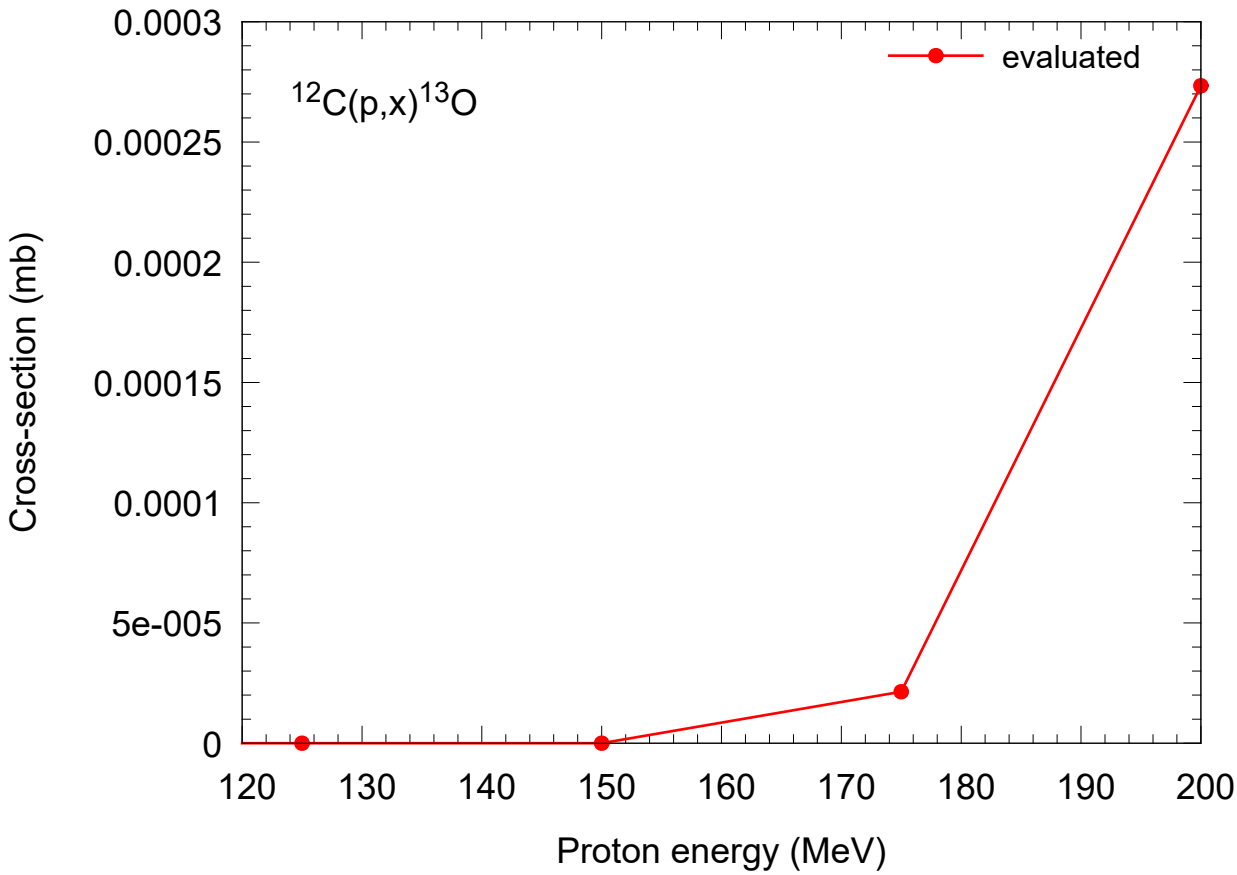

$^{12}C(p,4n)^{9}N$
Cross-section (mb)
10^{-4}
10^{-5}
10^{-6}
10^{-7}
10^{-8}
0
20
40
60
80
100
120
140
160
180
200
Proton energy (MeV)
evaluated


$^{12}C(p,3n)^{10}N$
Cross-section (mb)
0.0008
0.0007
0.0006
0.0005
0.0004
0.0003
0.0002
0.0001
0
60
80
100
120
140
160
180
200
Proton energy (MeV)
evaluated


$^{12}C(p,2n)^{11}N$
evaluated
Cross-section (mb)
Proton energy (MeV)
10^0
10^{-1}
10^{-2}
10^{-3}
10^{-4}
0
20
40
60
80
100
120
140
160
180
200


$^{12}C(p,n)^{12}N$
evaluated
Cross-section (mb)
Proton energy (MeV)
10^2
10^1
10^0
10^{-1}
10^{-2}
0
20
40
60
80
100
120
140
160
180
200


$^{12}C(p,g)^{13}N$
Cross-section (mb)
Proton energy (MeV)
Bailey (50)
Hall (50)
Seagrave (52)
Cohen (55)
Lamb (57)
Vogl (63)
Young (63)
Burtebaev (08)
evaluated


$^{12}C(p,x)^{13}O$
evaluated
Cross-section (mb)
Proton energy (MeV)