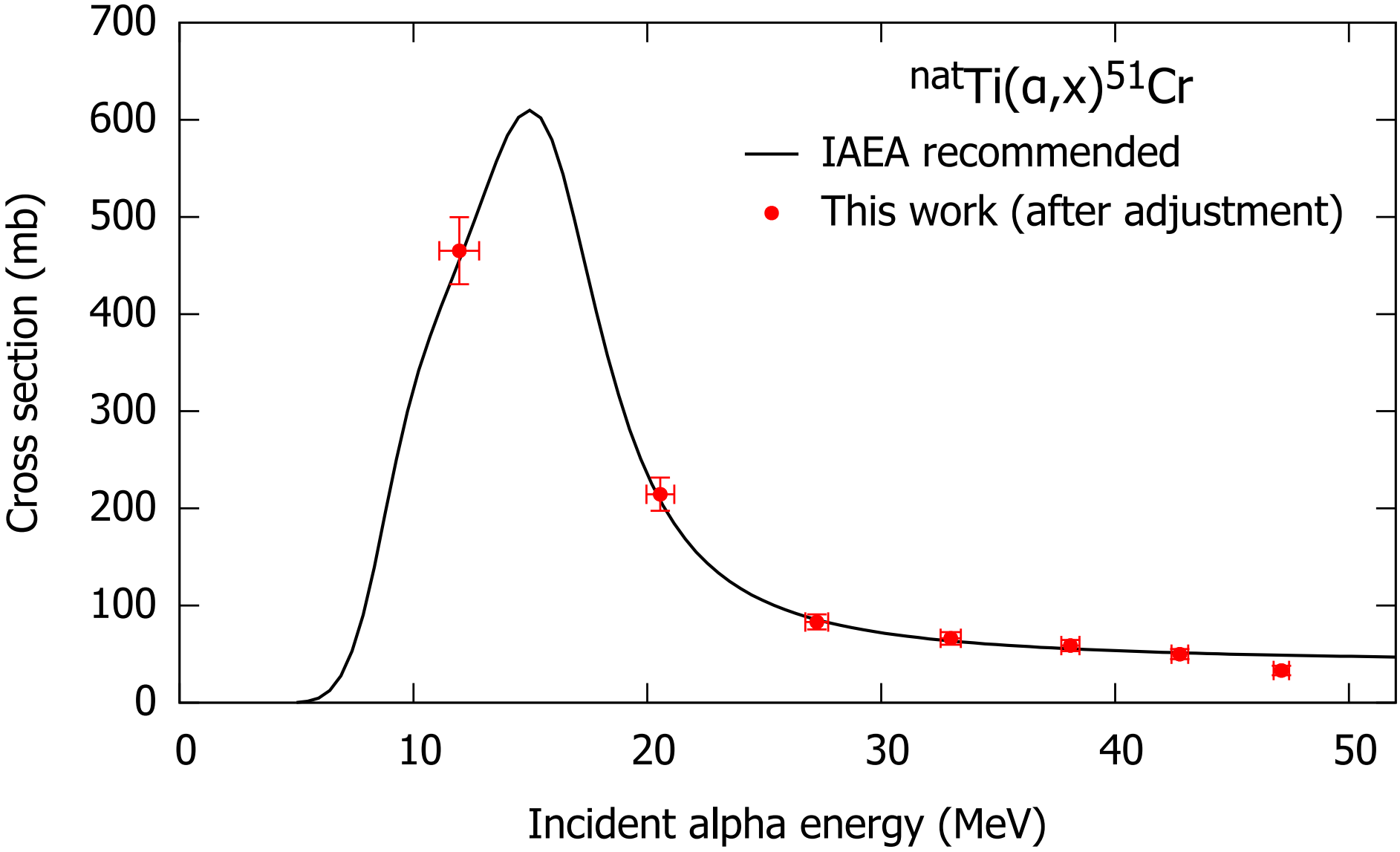
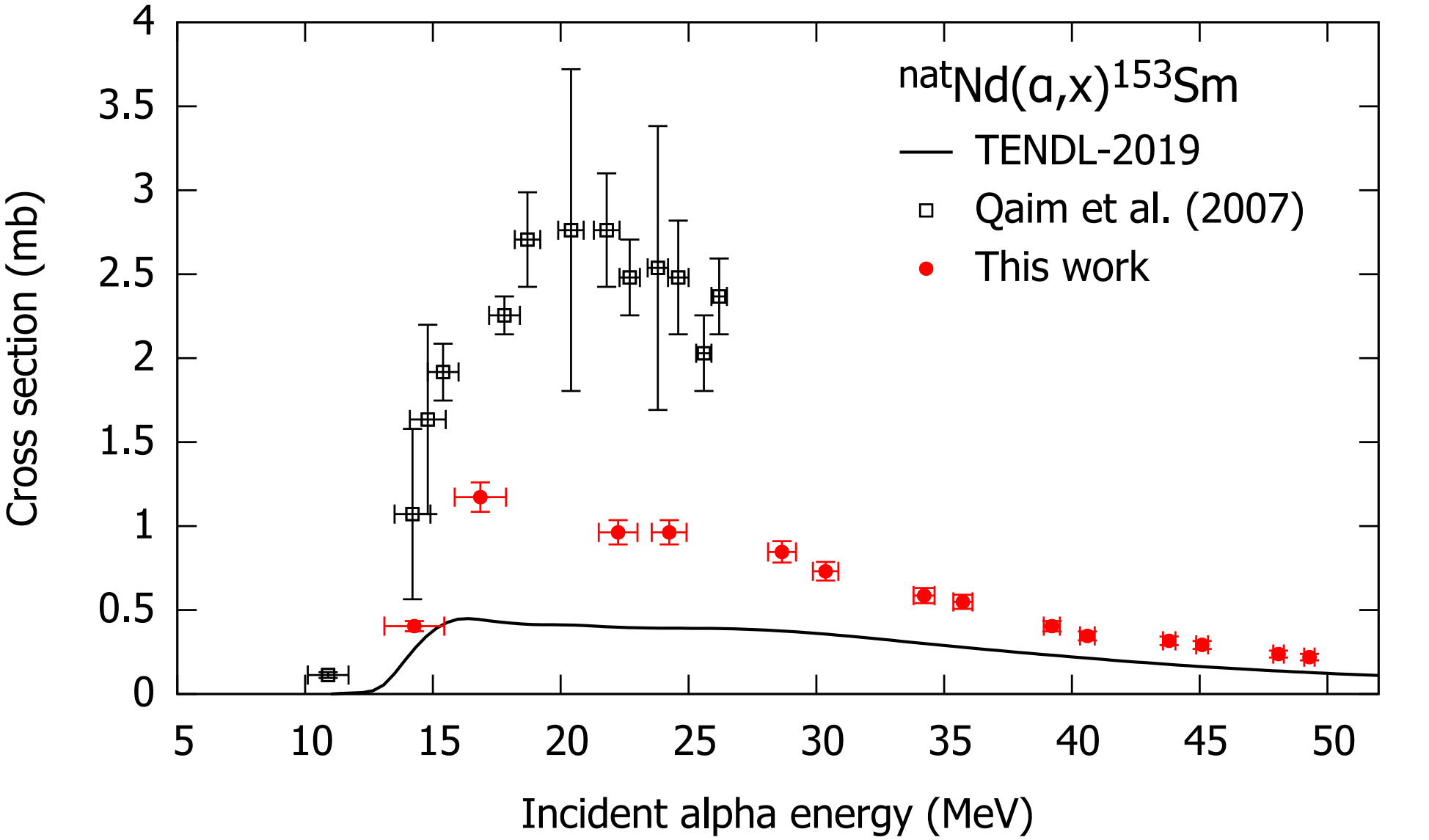
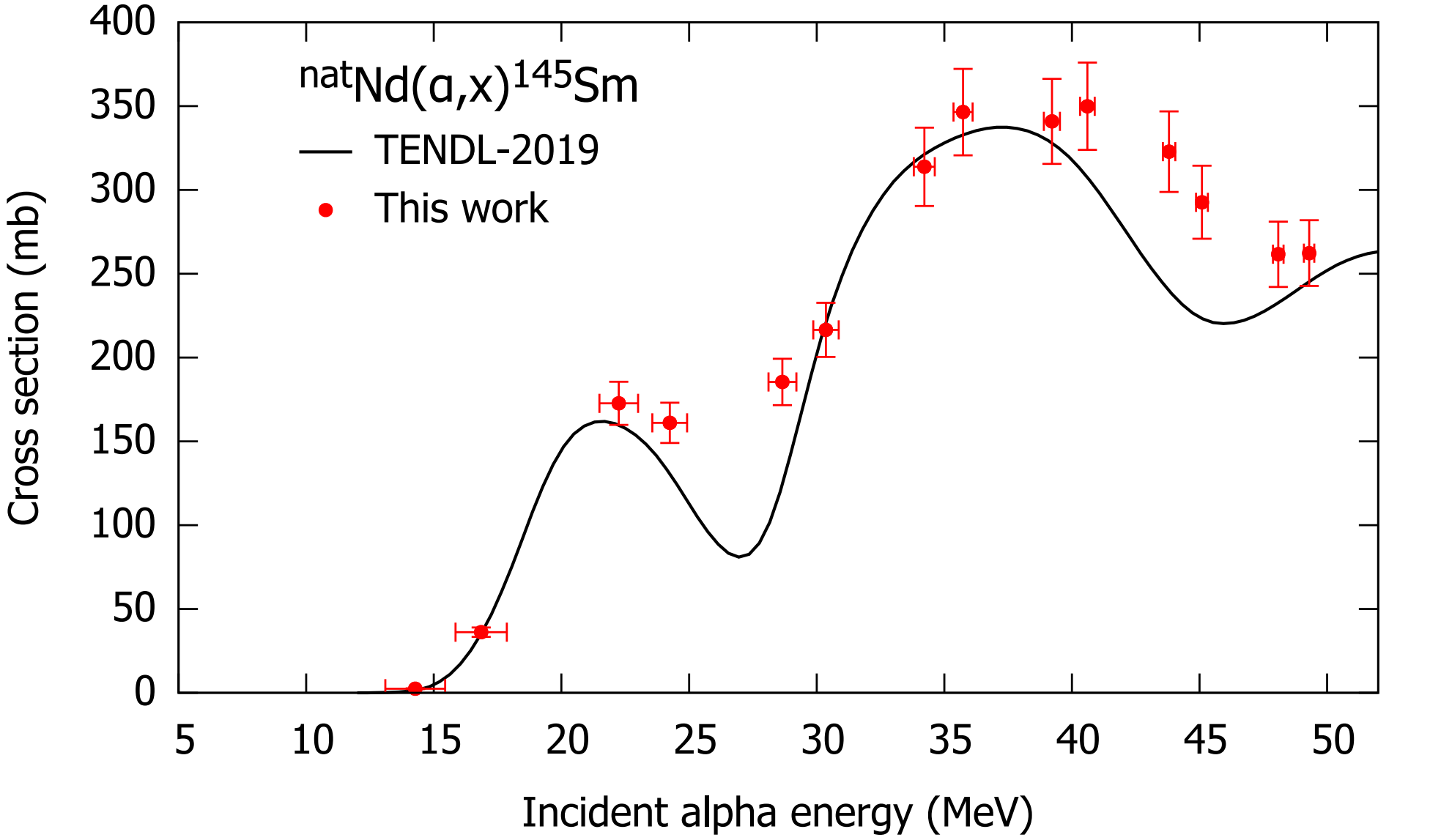
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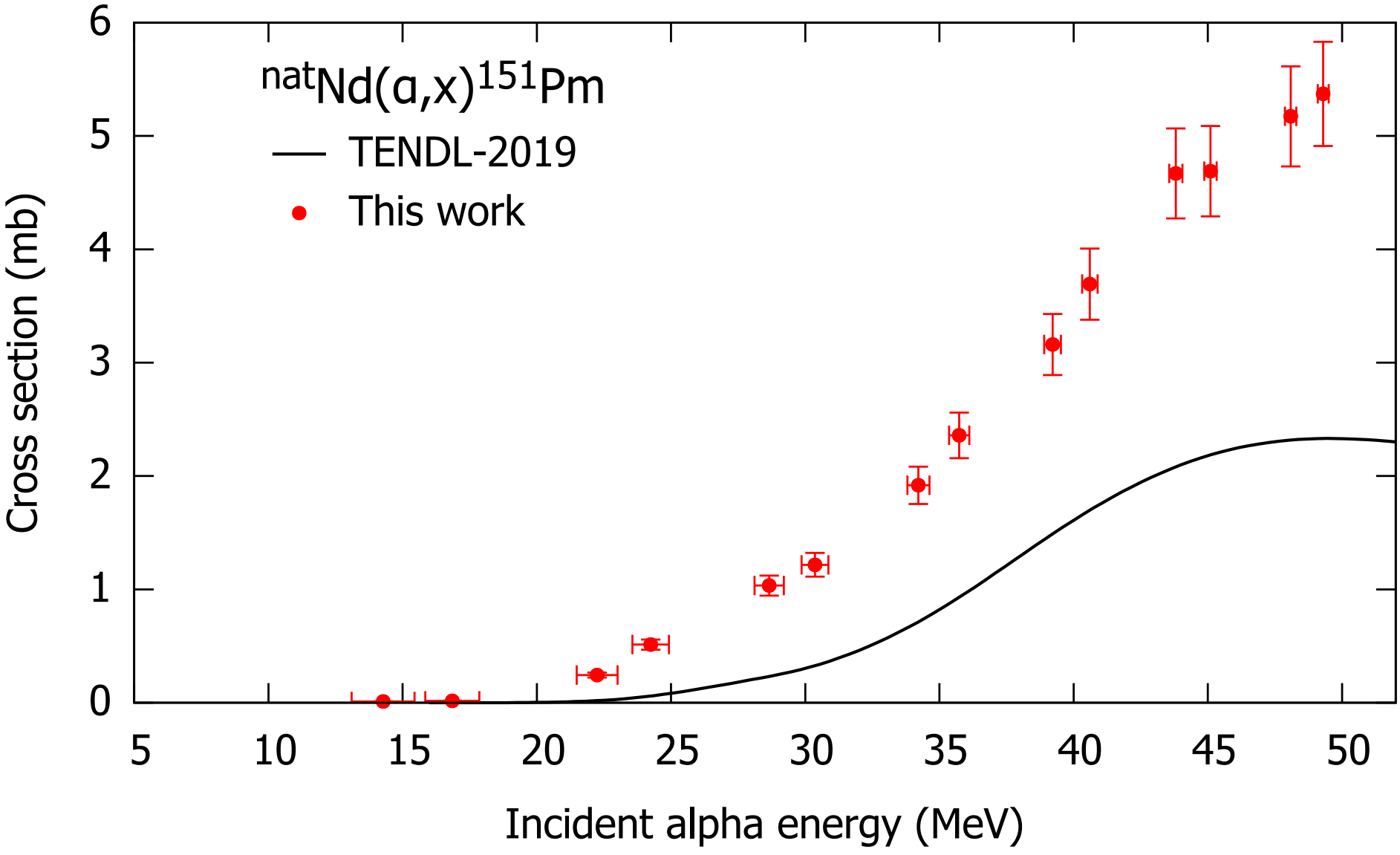
Title	Activation cross section measurement of alpha-particle induced reactions on natural neodymium
Author(s)	Sakaguchi, Michiya; Aikawa, Masayuki; Ukon, Naoyuki et al.
Citation	Applied Radiation and Isotopes, 176, 109826 https://doi.org/10.1016/j.apradiso.2021.109826
Issue Date	2021-10
Doc URL	https://hdl.handle.net/2115/90449
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Type	journal article
File Information	igure-Nd+a-final.pdf

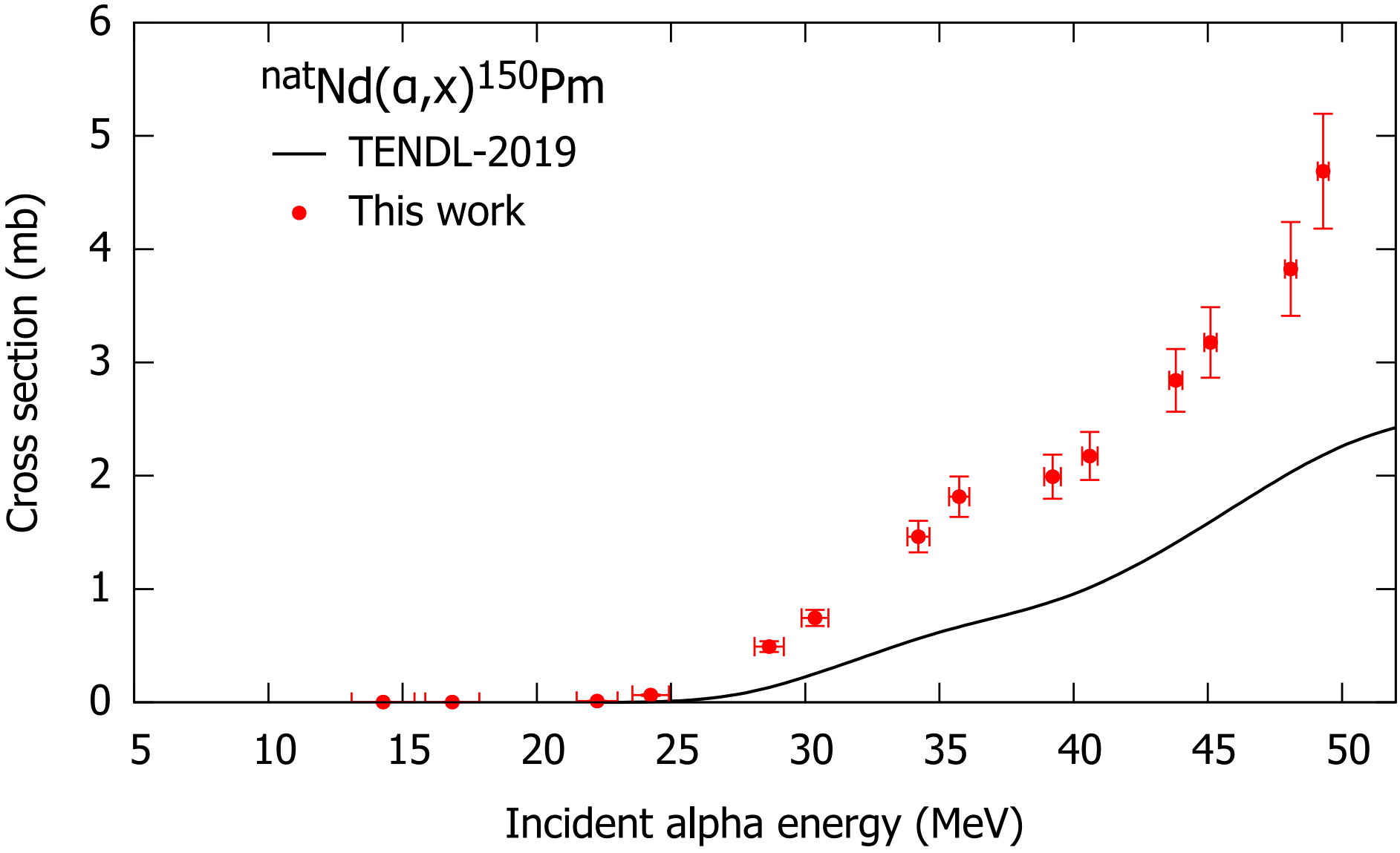
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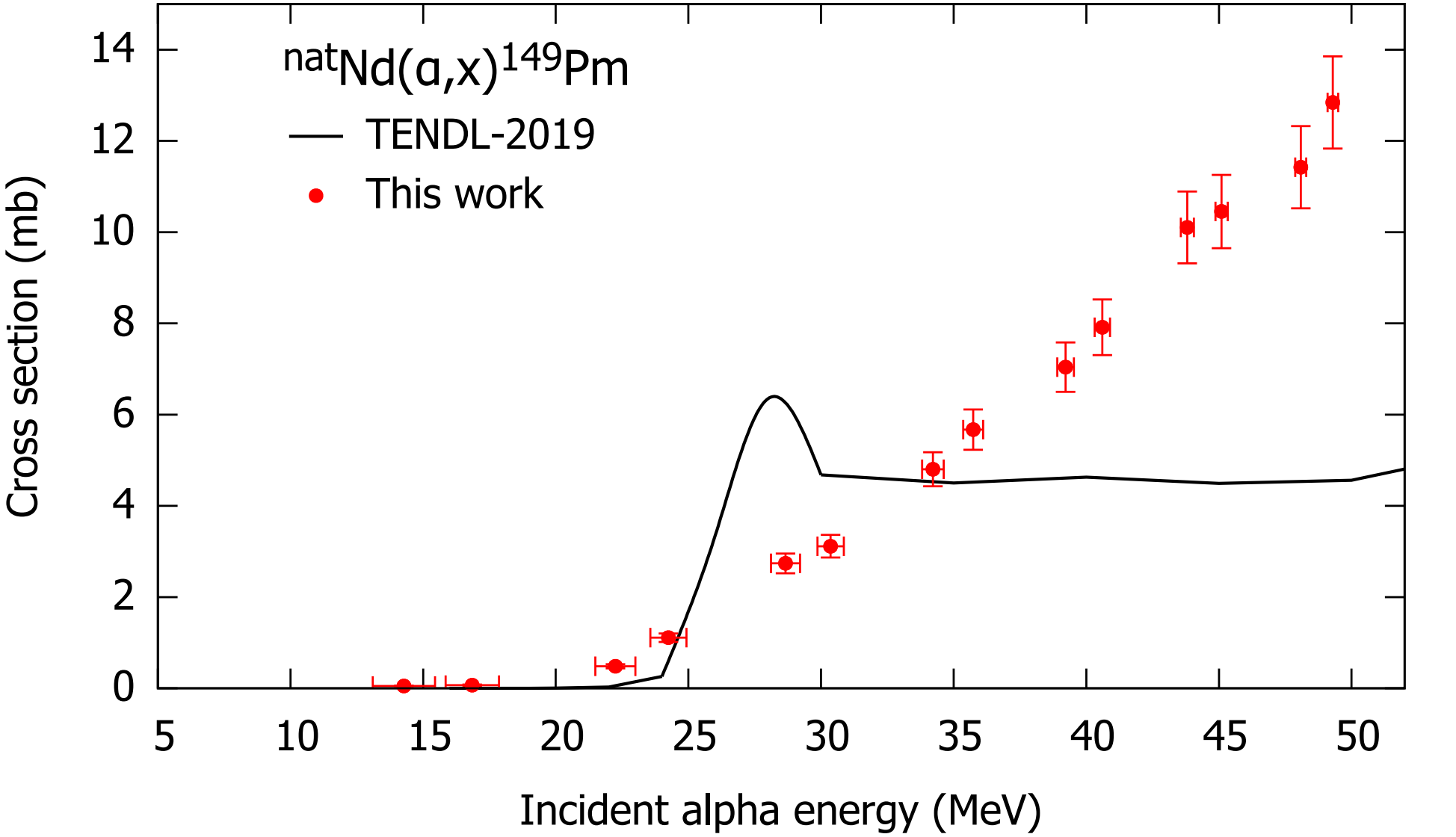

$^{nat}Ti(\alpha,x)^{51}Cr$
IAEA recommended
This work (after adjustment)
Cross section (mb)
Incident alpha energy (MeV)
0
100
200
300
400
500
600
700
0
10
20
30
40
50

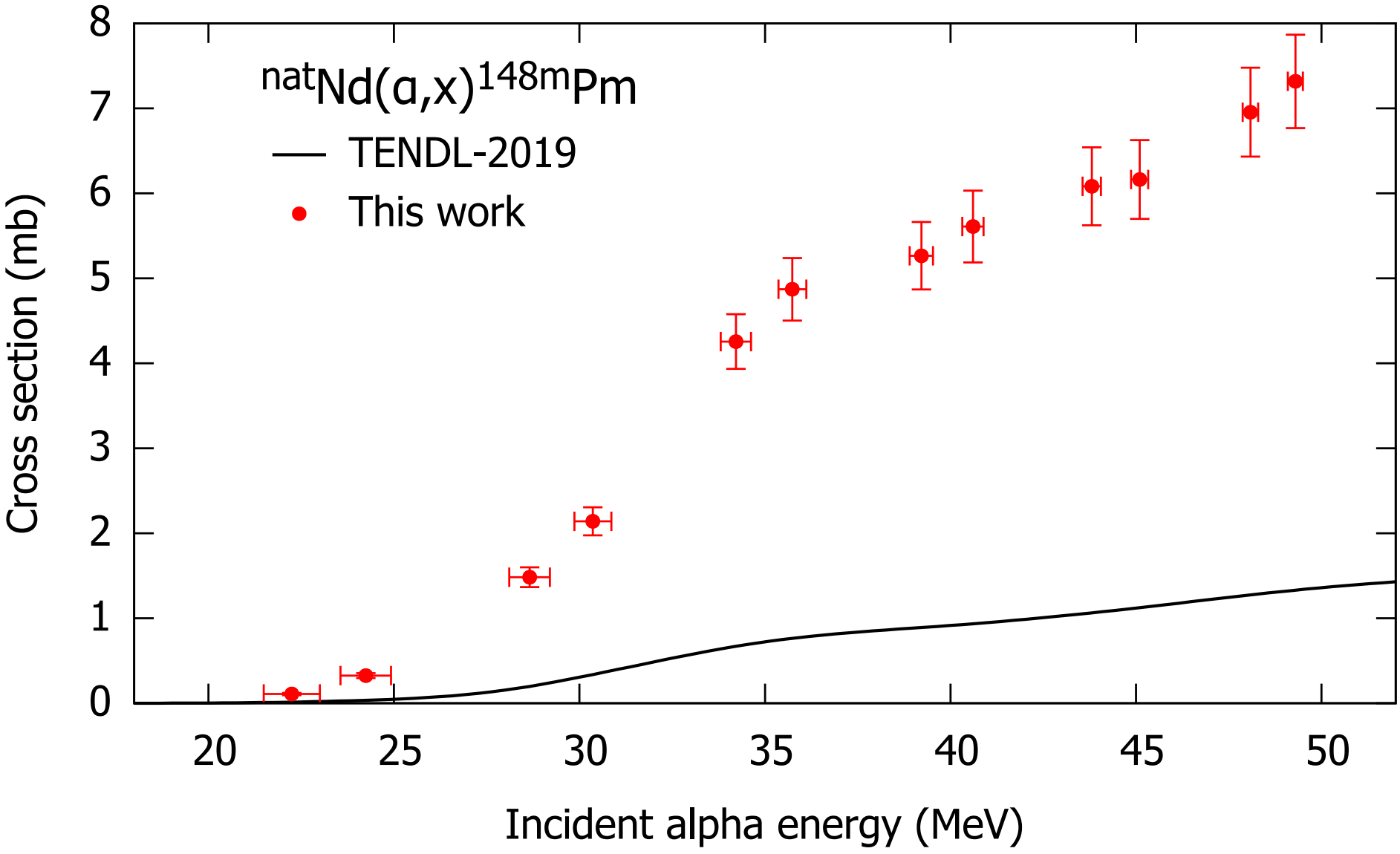

$^{nat}Nd(\alpha,x)^{153}Sm$
TENDL-2019
Qaim et al. (2007)
This work
Cross section (mb)
Incident alpha energy (MeV)
0
0.5
1
1.5
2
2.5
3
3.5
4
5
10
15
20
25
30
35
40
45
50

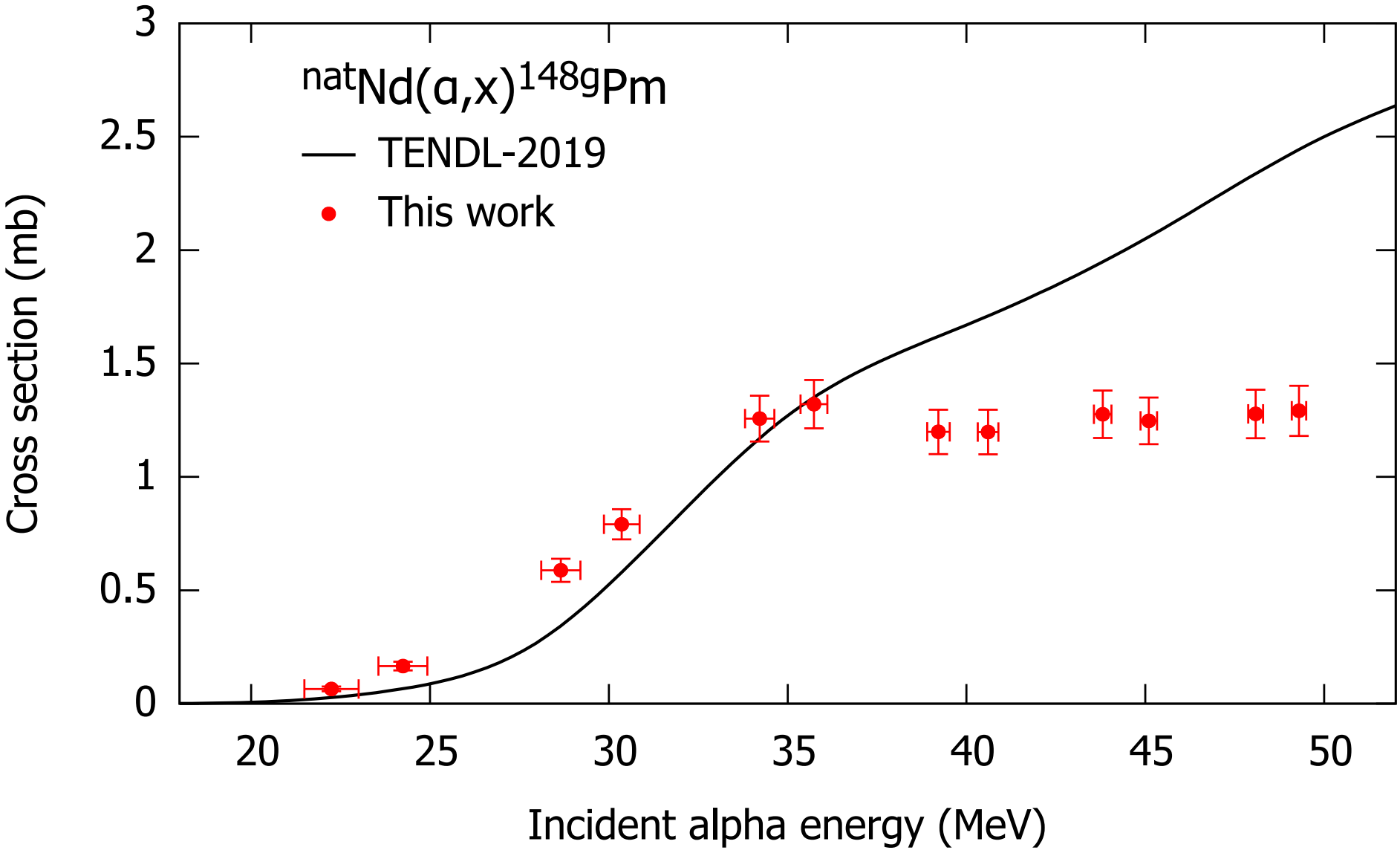

$^{nat}Nd(\alpha,x)^{145}Sm$
TENDL-2019
This work
Cross section (mb)
Incident alpha energy (MeV)
0
50
100
150
200
250
300
350
400
5
10
15
20
25
30
35
40
45
50

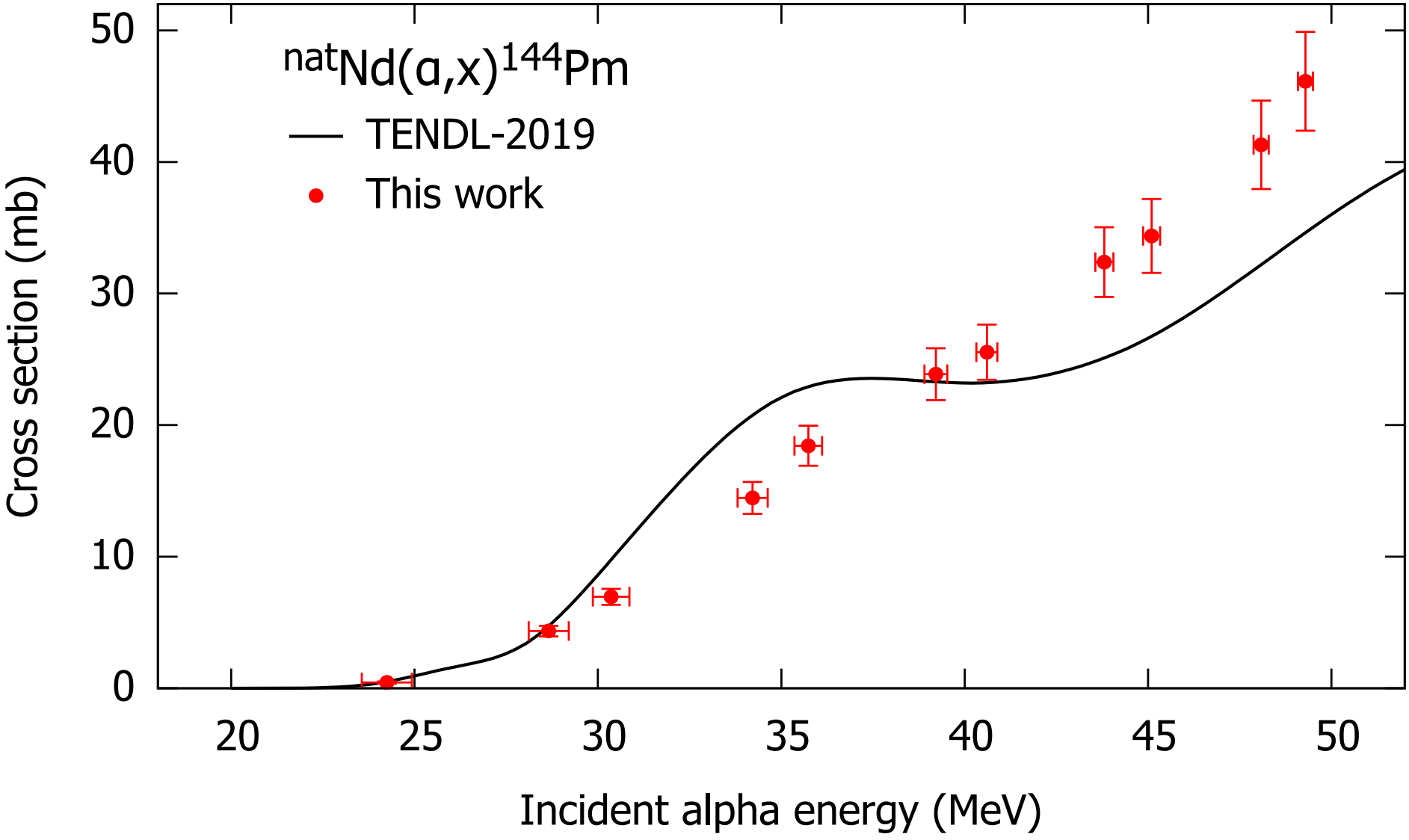

$^{nat}Nd(\alpha,x)^{151}Pm$
TENDL-2019
This work
Cross section (mb)
Incident alpha energy (MeV)
0
1
2
3
4
5
6
5
10
15
20
25
30
35
40
45
50

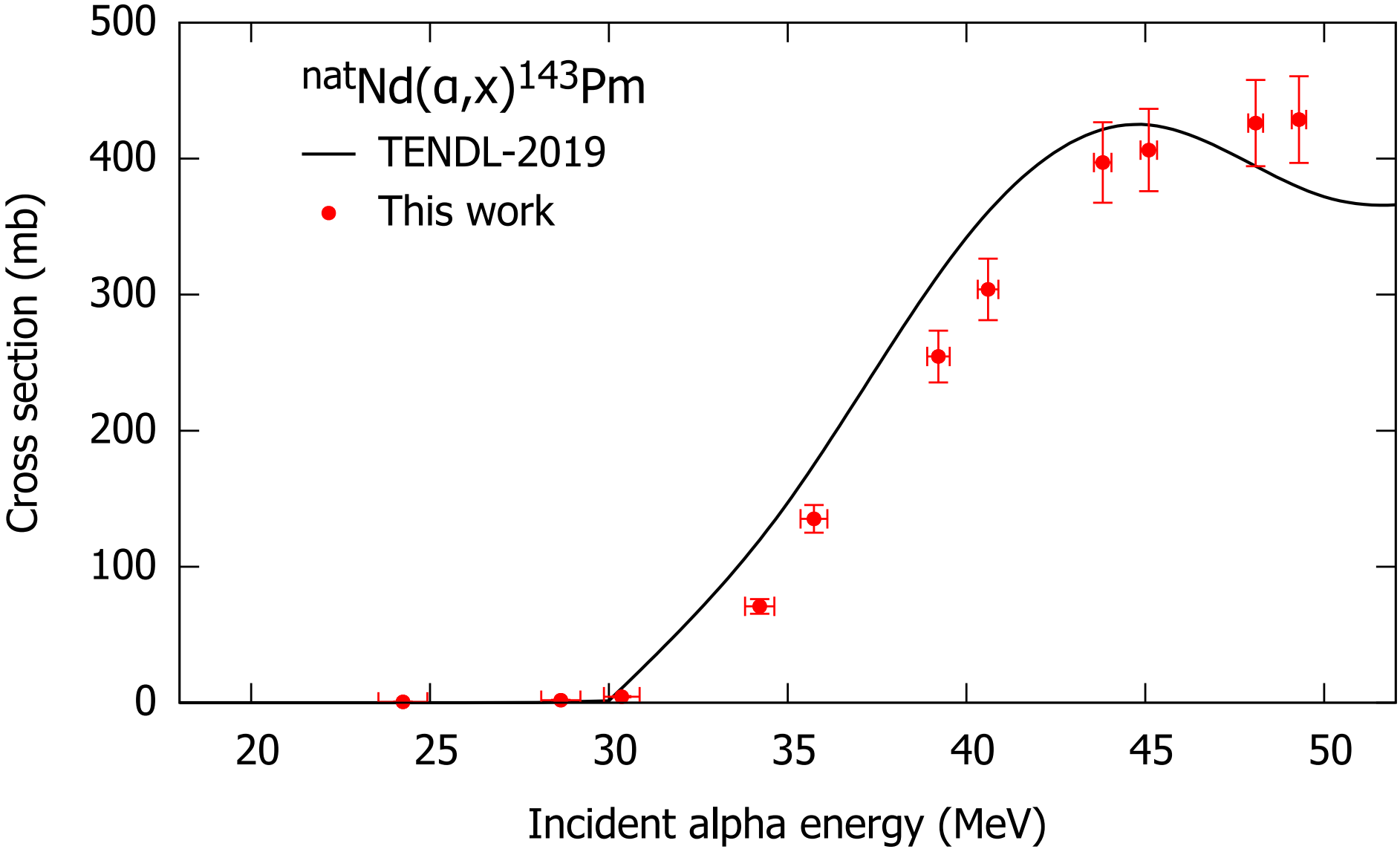

^{nat}Nd(α,x)^{150}Pm
TENDL-2019
This work
Cross section (mb)
Incident alpha energy (MeV)
0
1
2
3
4
5
6
5
10
15
20
25
30
35
40
45
50

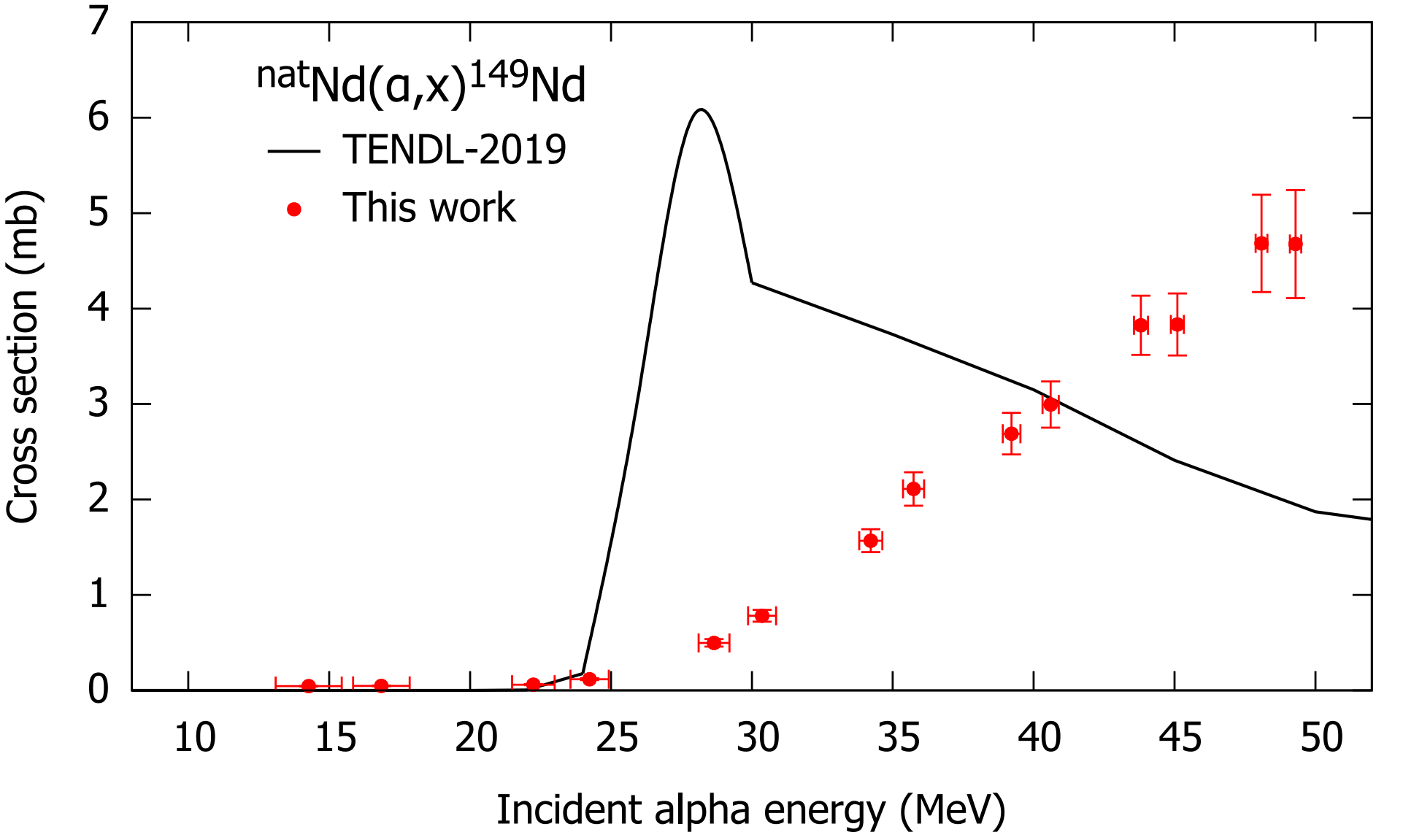

^{nat}Nd(α,x)^{149}Pm
TENDL-2019
This work
Cross section (mb)
Incident alpha energy (MeV)
0
2
4
6
8
10
12
14
5
10
15
20
25
30
35
40
45
50

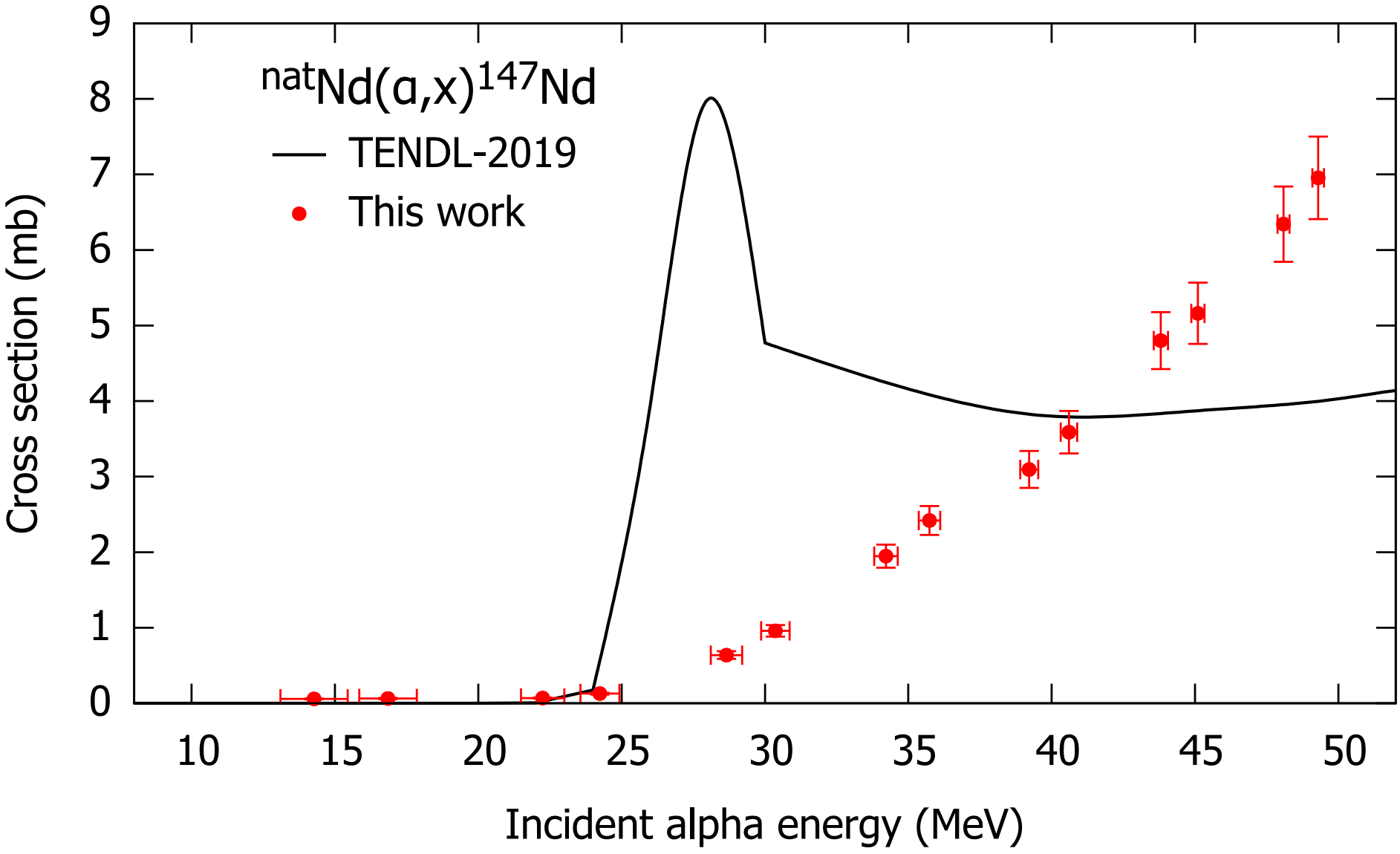

$^{nat}Nd(\alpha,x)^{148m}Pm$
TENDL-2019
This work
Cross section (mb)
Incident alpha energy (MeV)
0
1
2
3
4
5
6
7
8
20
25
30
35
40
45
50


$^{nat}Nd(\alpha,x)^{148g}Pm$
TENDL-2019
This work
Cross section (mb)
Incident alpha energy (MeV)
0
0.5
1
1.5
2
2.5
3
20
25
30
35
40
45
50


^{nat}Nd(α,x)^{144}Pm
TENDL-2019
This work
Cross section (mb)
Incident alpha energy (MeV)
0
10
20
30
40
50
20
25
30
35
40
45
50


$^{nat}Nd(\alpha,x)^{143}Pm$
TENDL-2019
This work
Cross section (mb)
Incident alpha energy (MeV)
0
100
200
300
400
500
20
25
30
35
40
45
50


^{nat}Nd(α,x)^{149}Nd
TENDL-2019
This work
Cross section (mb)
Incident alpha energy (MeV)
0
1
2
3
4
5
6
7
10
15
20
25
30
35
40
45
50


^{nat}Nd(α,x)^{147}Nd
TENDL-2019
This work
Cross section (mb)
Incident alpha energy (MeV)
0
1
2
3
4
5
6
7
8
9
10
15
20
25
30
35
40
45
50