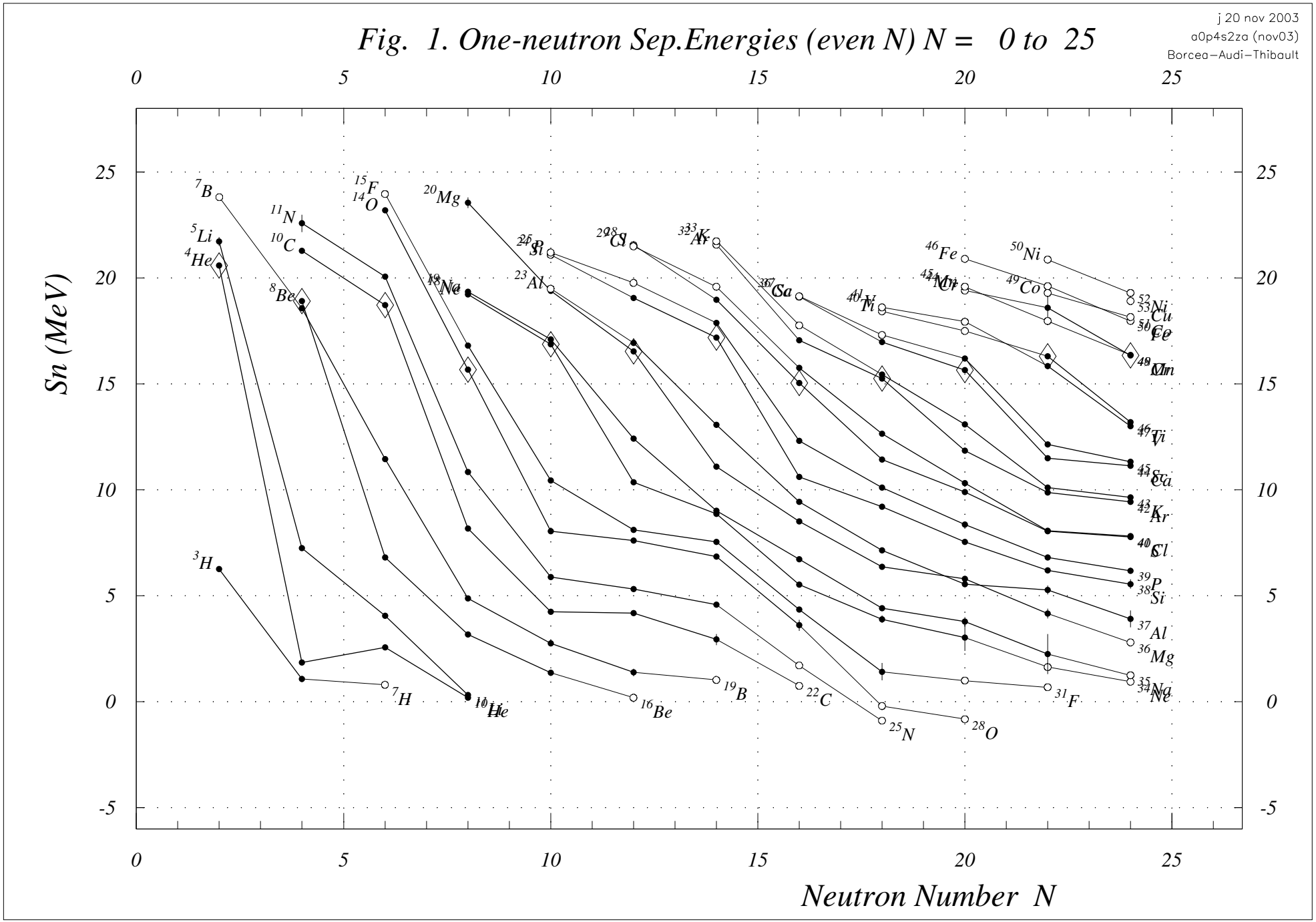


Fig. 1. One-neutron Sep.Energies (even N) N = 0 to 25
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sn (MeV)
Neutron Number N
0
5
10
15
20
25
-5
^{7}B
^{5}Li
^{4}He
^{11}N
^{10}C
^{8}Be
^{15}F
^{14}O
^{20}Mg
^{19}Ne
^{23}Al
^{25}P
^{24}Si
^{28}S
^{27}Cl
^{33}K
^{32}Ar
^{37}Ca
^{41}Ti
^{46}Fe
^{45}Mn
^{50}Ni
^{49}Co
^{52}Ni
^{51}Cu
^{50}Fe
^{49}Mn
^{47}Ti
^{45}Sc
^{44}Ca
^{43}K
^{42}Ar
^{40}S
^{39}Cl
^{38}P
^{37}Si
^{37}Al
^{36}Mg
^{35}Na
^{34}Ne
^{3}H
^{7}H
^{10}He
^{16}Be
^{19}B
^{22}C
^{25}N
^{28}O
^{31}F

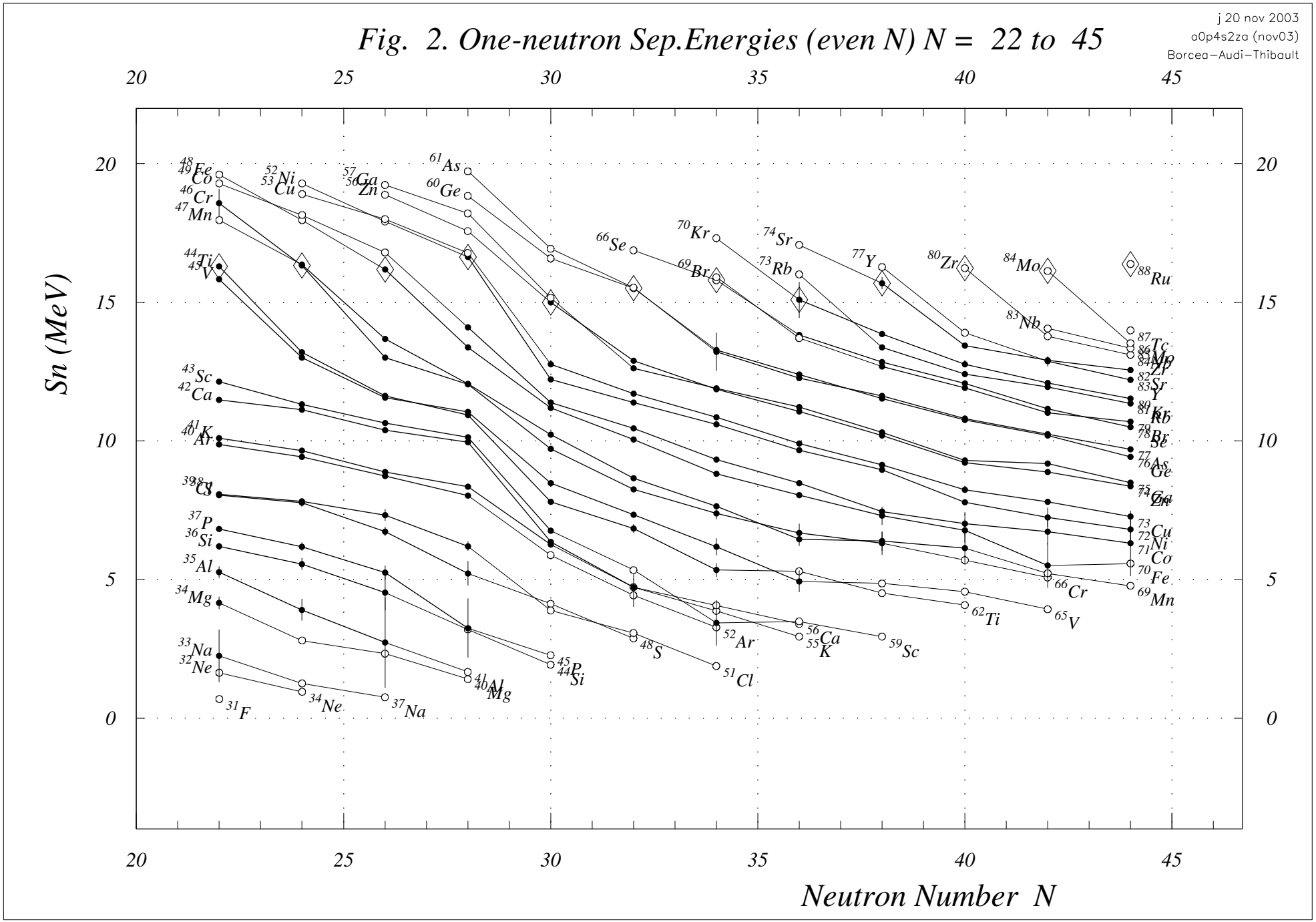


Fig. 2. One-neutron Sep.Energies (even N) N = 22 to 45
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sn (MeV)
Neutron Number N
20
25
30
35
40
45
0
5
10
15
48Fe
49Co
46Cr
47Mn
44Ti
45V
43Sc
42Ca
41K
40Ar
39Cl
38S
37P
36Si
35Al
34Mg
33Na
32Ne
31F
52Ni
53Cu
57Ga
56Zn
61As
60Ge
66Se
70Kr
69Br
74Sr
73Rb
77Y
80Zr
84Mo
83Nb
88Ru
87Tc
86Mo
85Nb
84Zr
82Zr
83Sr
83Y
81Kr
81Rb
79Br
78Se
77As
76Ge
75Ga
74Zn
73Cu
72Ni
71Co
70Fe
69Mn
66Cr
65V
62Ti
59Sc
56Ca
55K
52Ar
51Cl
48S
45P
44Si
41Al
40Mg
37Na
34Ne

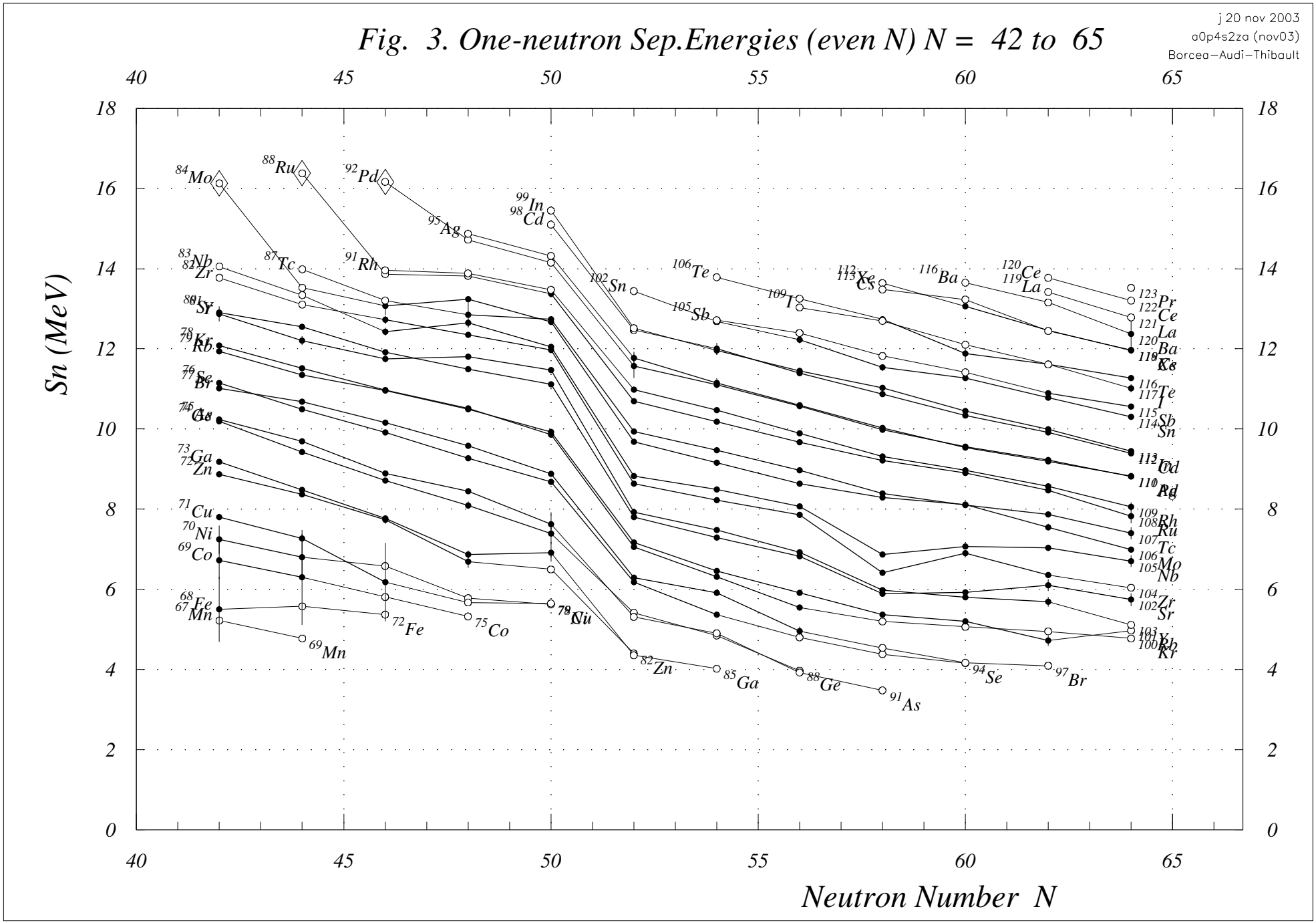


Fig. 3. One-neutron Sep.Energies (even N) N = 42 to 65
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sn (MeV)
Neutron Number N
84Mo
88Ru
92Pd
99In
98Cd
95Ag
83Nb
82Zr
87Tc
91Rh
102Sn
106Te
105Sb
109I
113Xe
112Cs
116Ba
120Ce
119La
123Pr
122Ce
121La
120Ba
116Te
117Te
115Sb
114Sn
113Cd
110Ag
109Rh
108Ru
107Tc
106Mo
105Nb
104Zr
102Sr
103Y
100Kr
81Sr
78Kr
79Rb
76Se
77Br
74Ge
73Ga
72Zn
71Cu
70Ni
69Co
68Fe
67Mn
69Mn
72Fe
75Co
82Zn
85Ga
88Ge
91As
94Se
97Br

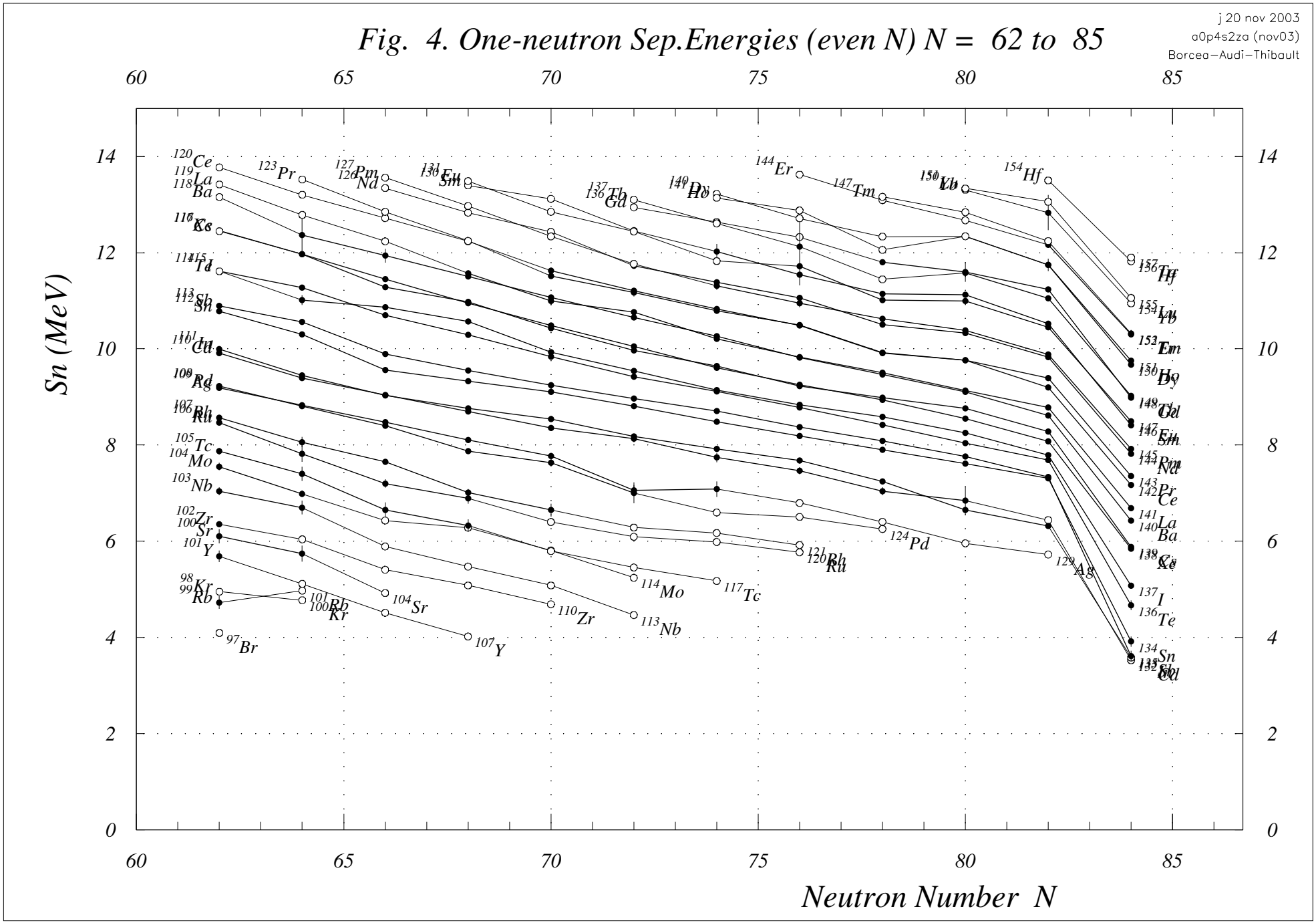


Fig. 4. One-neutron Sep.Energies (even N) N = 62 to 85
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sn (MeV)
Neutron Number N
60
65
70
75
80
85
0
2
4
6
8
10
12
14
120Ce
119La
118Ba
123Pr
127Pm
126Nd
131Eu
130Sm
137Tb
136Gd
140Dy
139Ho
144Er
147Tm
150Yb
149Lu
154Hf
157Ta
156Hf
155Lu
154Yb
153Tm
152Er
151Ho
150Dy
149Tb
148Gd
147Eu
146Sm
145Pm
144Nd
143Pr
142Ce
141La
140Ba
138Xe
137I
136Te
134Sn
133Sb
132Sn
129As
124Pd
121Rh
120Ru
117Tc
114Mo
113Nb
110Zr
107Y
104Sr
101Rb
100Kr
97Br
105Tc
104Mo
103Nb
102Zr
100Sr
101Y
98Kr
99Rb

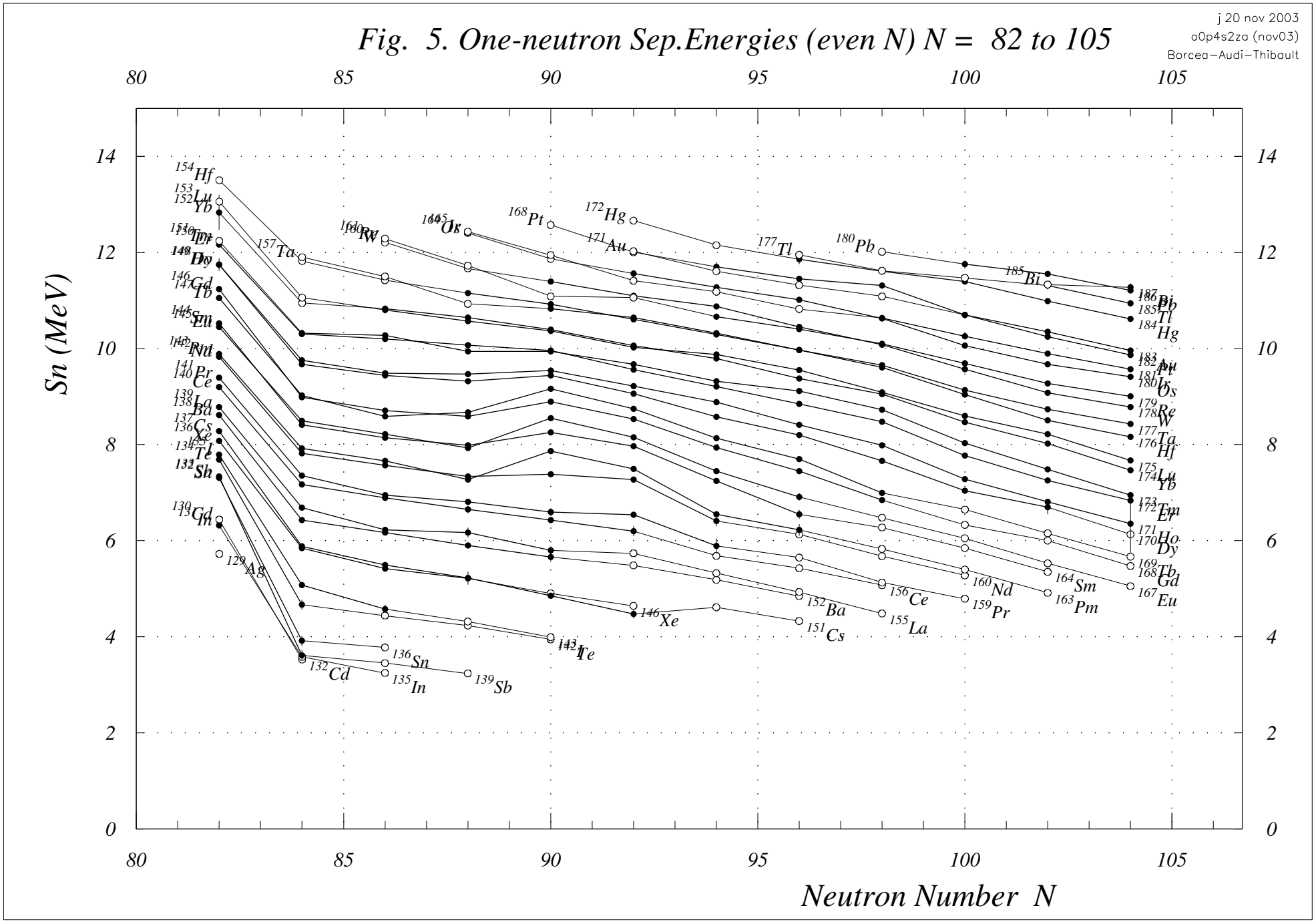


Fig. 5. One-neutron Sep.Energies (even N) N = 82 to 105
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sn (MeV)
Neutron Number N
80
85
90
95
100
105
0
2
4
6
8
10
12
14
154Hf
153Lu
152Yb
157Ta
160W
165Os
168Pt
172Hg
171Au
177Tl
180Pb
185Bi
187Bi
185Pb
184Tl
184Hg
183Au
182Pt
181Ir
180Os
179Re
178W
177Ta
176Hf
175Lu
174Yb
173Tm
172Er
171Ho
170Dy
169Tb
168Gd
167Eu
164Sm
163Pm
160Nd
159Pr
156Ce
155La
152Ba
151Cs
146Xe
142Te
139Sb
136Sn
135In
132Cd
129Ag

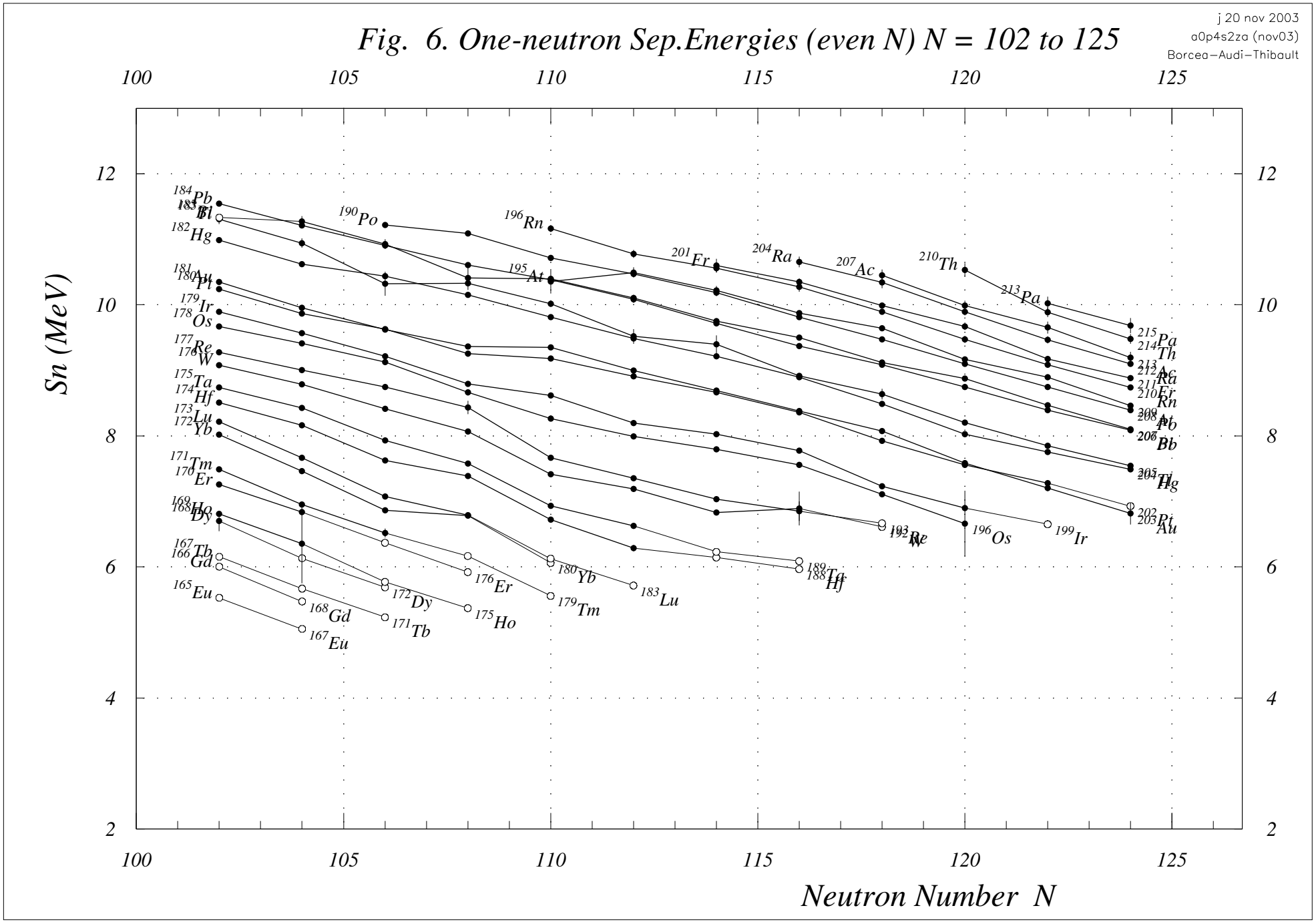


Fig. 6. One-neutron Sep.Energies (even N) N = 102 to 125
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sn (MeV)
Neutron Number N
100
105
110
115
120
125
2
4
6
8
10
12
184Pb
183Bi
182Hg
181Au
180Pt
179Ir
178Os
177Re
176W
175Ta
174Hf
173Lu
172Yb
171Tm
170Er
169Ho
168Dy
167Tb
166Gd
165Eu
190Po
196Rn
201Fr
204Ra
207Ac
210Th
213Pa
195At
215Pa
214Th
213Ac
212Ac
211Ra
210Fr
209Rn
208At
207Po
206Bi
205Pb
204Tl
203Hg
202Pi
Au
199Ir
196Os
193Re
192W
189Ta
188Hf
183Lu
180Yb
179Tm
176Er
175Ho
172Dy
171Tb
168Gd
167Eu

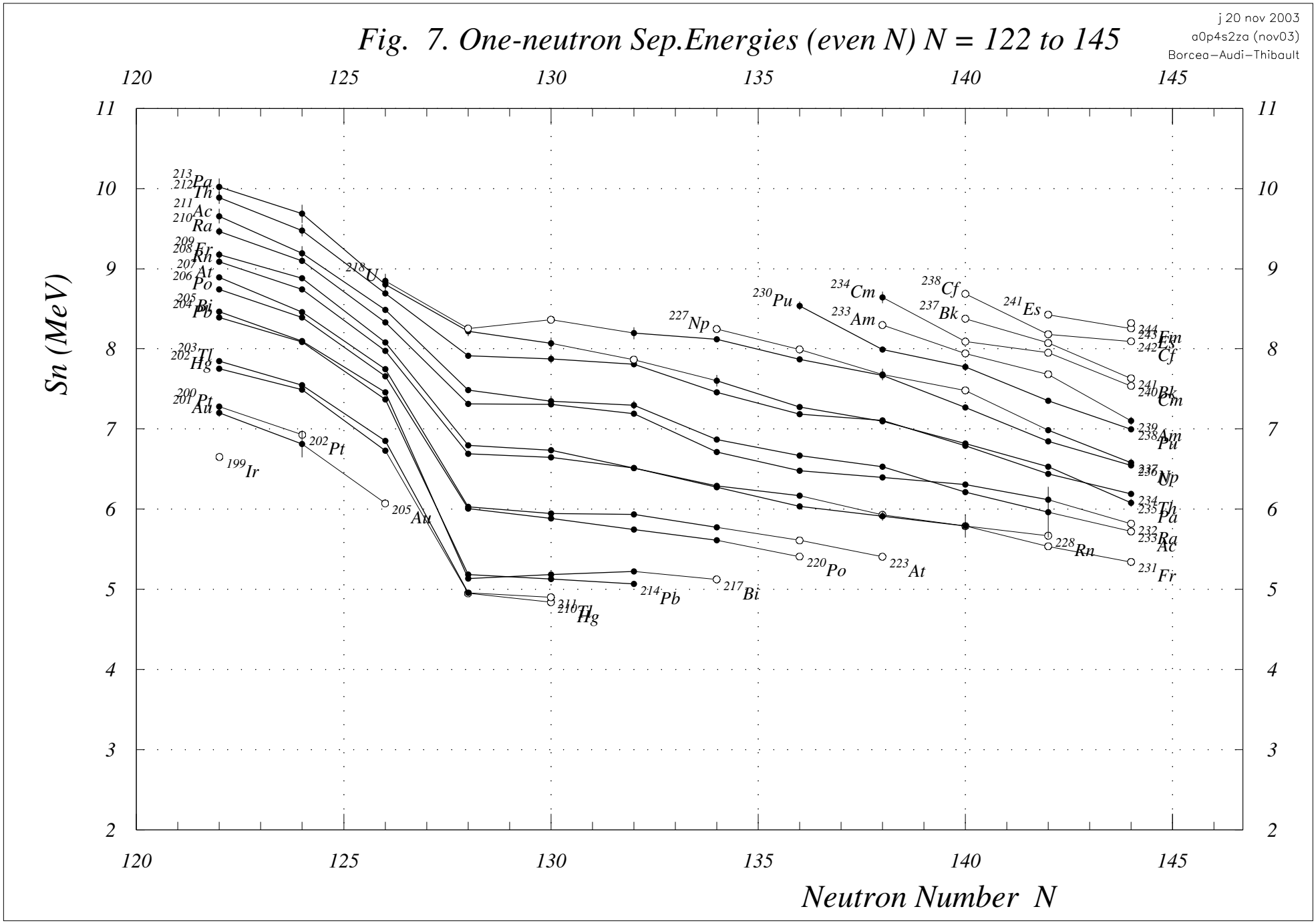


Fig. 7. One-neutron Sep.Energies (even N) N = 122 to 145
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sn (MeV)
Neutron Number N
120
125
130
135
140
145
2
3
4
5
6
7
8
9
10
11
213Pa
212Th
211Ac
210Ra
209Fr
208Rn
207At
206Po
205Bi
204Pb
203Tl
202Hg
200Pt
201Au
199Ir
202Pt
205Au
218U
227Np
230Pu
234Cm
233Am
238Cf
237Bk
241Es
244Fm
243Es
242Cf
241Bk
240Cm
239Am
238Pu
237Np
236U
234Th
235Pa
232Ra
233Ac
231Fr
228Rn
220Po
223At
214Pb
217Bi
211Tl
210Hg

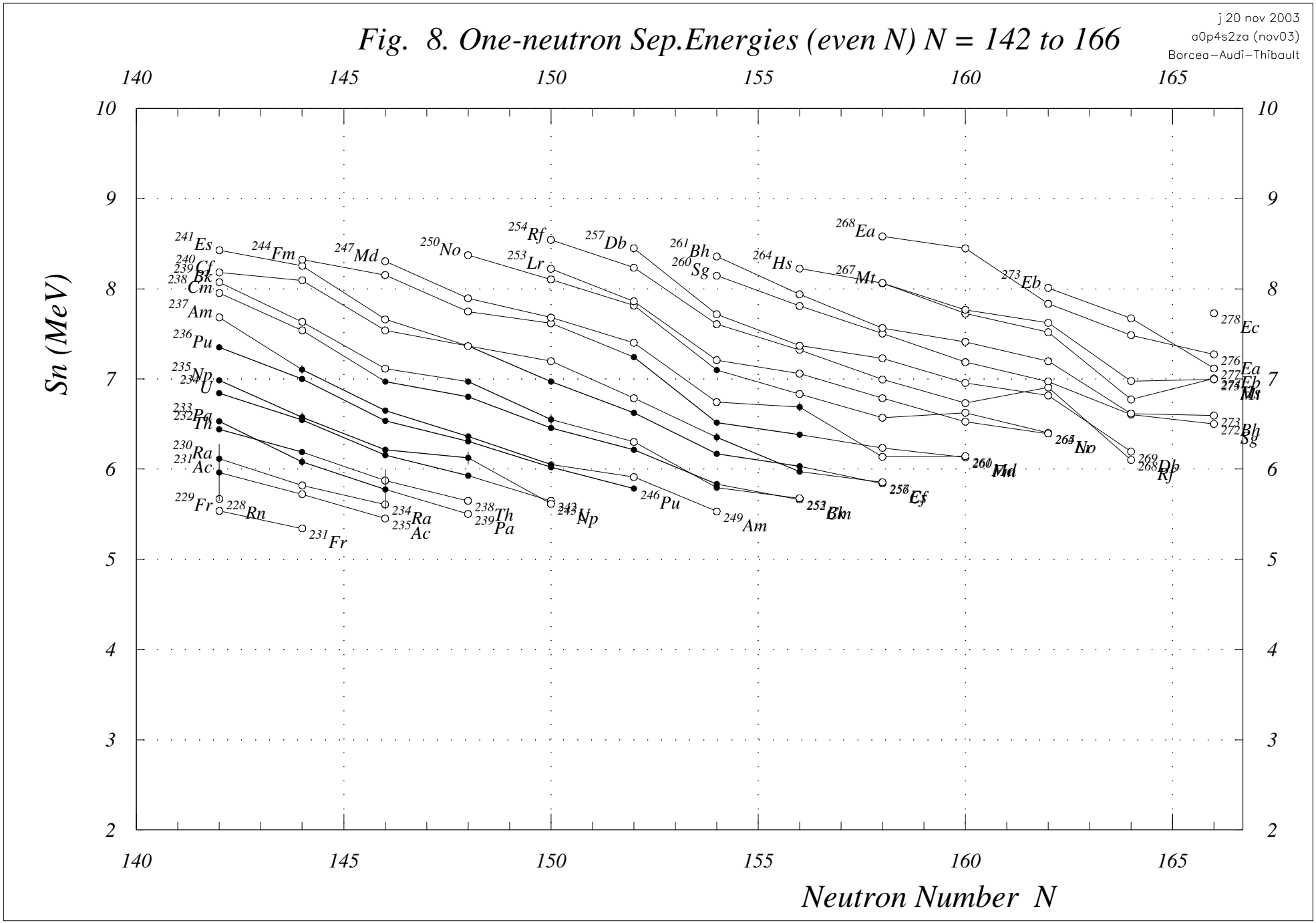
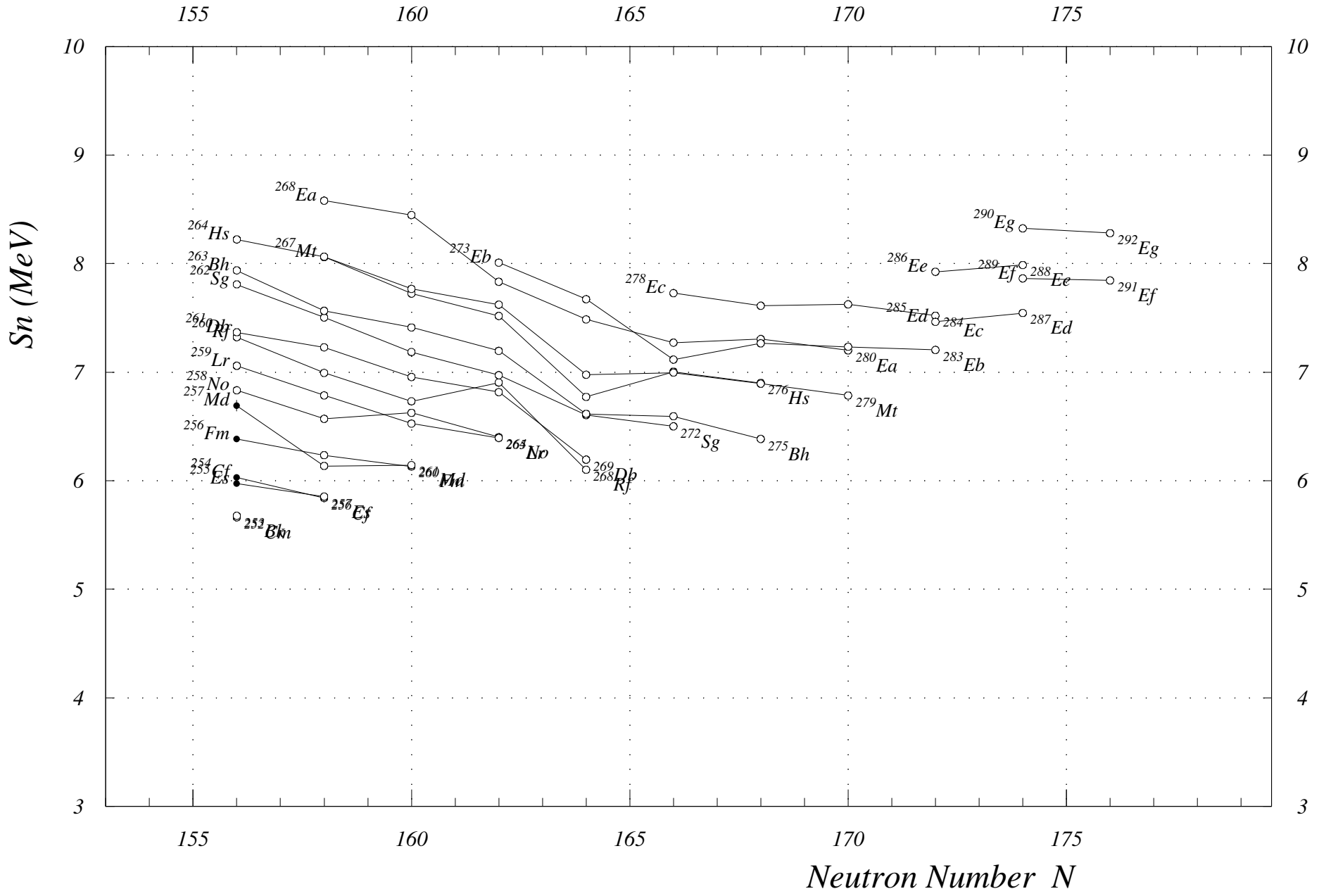


Fig. 8. One-neutron Sep.Energies (even N) N = 142 to 166
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sn (MeV)
Neutron Number N
140
145
150
155
160
165
2
3
4
5
6
7
8
9
10
241Es
240Cf
239Bk
238Cm
237Am
236Pu
235Np
234U
233Pa
232Th
230Ra
231Ac
229Fr
228Rn
231Fr
234Ra
235Ac
238Th
239Pa
242Np
243Np
246Pu
249Am
253Bk
256Es
244Fm
247Md
250No
254Rf
253Lr
257Db
261Bh
260Sg
264Hs
267Mt
268Ea
273Eb
278Ec
276Ea
272Bh
269Db
268Rf

Fig. 9. One-neutron Sep.Energies (even N) N = 155 to 178

j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault


Sn (MeV)
Neutron Number N
155
160
165
170
175
10
9
8
7
6
5
4
3
268Ea
264Hs
267Mt
263Bh
262Sg
261Db
260Rf
259Lr
258No
257Md
256Fm
254Cf
253Es
252Fm
251Md
250No
249Rf
248Db
247Lr
246No
245Md
244Fm
243Cf
242Es
241Fm
240Md
239No
238Rf
237Db
236Lr
235No
234Md
233Fm
232Cf
231Es
230Fm
229Md
228No
227Rf
226Db
225Lr
224No
223Md
222Fm
221Cf
220Es
219Fm
218Md
217No
216Rf
215Db
214Lr
213No
212Md
211Fm
210Cf
209Es
208Fm
207Md
206No
205Rf
204Db
203Lr
202No
201Md
200Fm
199Cf
198Es
197Fm
196Md
195No
194Rf
193Db
192Lr
191No
190Md
189Fm
188Cf
187Es
186Fm
185Md
184No
183Rf
182Db
181Lr
180No
179Md
178Fm
177Cf
176Es
175Fm
174Md
173No
172Rf
171Db
170Lr
169No
168Md
167Fm
166Cf
165Es
164Fm
163Md
162No
161Rf
160Db
159Lr
158No
157Md
156Fm
155Cf
154Es
153Fm
152Md
151No
150Rf
149Db
148Lr
147No
146Md
145Fm
144Cf
143Es
142Fm
141Md
140No
139Rf
138Db
137Lr
136No
135Md
134Fm
133Cf
132Es
131Fm
130Md
129No
128Rf
127Db
126Lr
125No
124Md
123Fm
122Cf
121Es
120Fm
119Md
118No
117Rf
116Db
115Lr
114No
113Md
112Fm
111Cf
110Es
109Fm
108Md
107No
106Rf
105Db
104Lr
103No
102Md
101Fm
100Cf
99Es
98Fm
97Md
96No
95Rf
94Db
93Lr
92No
91Md
90Fm
89Cf
88Es
87Fm
86Md
85No
84Rf
83Db
82Lr
81No
80Md
79Fm
78Cf
77Es
76Fm
75Md
74No
73Rf
72Db
71Lr
70No
69Md
68Fm
67Cf
66Es
65Fm
64Md
63No
62Rf
61Db
60Lr
59No
58Md
57Fm
56Cf
55Es
54Fm
53Md
52No
51Rf
50Db
49Lr
48No
47Md
46Fm
45Cf
44Es
43Fm
42Md
41No
40Rf
39Db
38Lr
37No
36Md
35Fm
34Cf
33Es
32Fm
31Md
30No
29Rf
28Db
27Lr
26No
25Md
24Fm
23Cf
22Es
21Fm
20Md
19No
18Rf
17Db
16Lr
15No
14Md
13Fm
12Cf
11Es
10Fm
9Md
8No
7Rf
6Db
5Lr
4No
3Md
2Fm
1Cf
0Es
-1Fm
-2Md
-3No
-4Rf
-5Db
-6Lr
-7No
-8Md
-9Fm
-10Cf
-11Es
-12Fm
-13Md
-14No
-15Rf
-16Db
-17Lr
-18No
-19Md
-20Fm
-21Cf
-22Es
-23Fm
-24Md
-25No
-26Rf
-27Db
-28Lr
-29No
-30Md
-31Fm
-32Cf
-33Es