

1. Data Assessment of  $^{14}\text{N}(p,p_0)^{14}\text{N}$  Cross Sections (*Lopes Ramos*)

Ref.Number	Authors	Reference	EXFOR	IBANDL
[BOL1957]	C.R. Bolmgren, G.D. Freier, J.G. Likely, K.F. Famularo,	Phys. Rev. 105 (1957) 210.	USA (no)	Y
[BAS1959]	S. Bashkin, R.R. Carlson, R.A. Douglas,	Phys. Rev. 114 (1959) 1552.	C0849 (SigmaBase)	Y
[FEG1959]	A.J. Ferguson, R.L. Clarke and H.E. Gove,	Phys. Rev. 115 (1959) 1655.	USA (no)	Y
[HAG1957]	F.B. Hagedorn, F.S. Mozer, T.S. Webb, W.A. Fowler, C.C. Lauritsen,	Phys. Rev. 105 (1957) 219.	C0851 (SigmaBase)	Y
[HAV1991]	V. Havranek, V. Hnatowic, J. Kvitek,	Czech. J. Phys. 41 (1991) 921.	D0105	Y
[JIA2005]	W. Jiang et al.,	Surf. Interface Anal. 37 (2005) 374.	C1341	Y
[LAM1967]	M. Lambert, M. Durand,	Phys. Let. 24B (1967) 287.	O0885 (SigmaBase)	Y (IBANDL has more angles)
[OLN1958]	J.W. Olness, J. Vorona, H.W. Lewis,	Phys. Rev. 112 (1958) 475.	C0850 (SigmaBase)	Y
[RAM2002]	A.R. Ramos et al.,	Nucl. Instr.& Meth. B190 (2002) 95.	D0078	Y
[RAU1985]	E. Rauhala,	Nucl. Instr.& Meth. B12 (1985) 447.	O0881	Y
[TAU1956]	G.W. Tautfest, S. Rubin,	Phys. Rev. 103 (1956) 196.	C0847 (SigmaBase)	Y
[YAN1991]	Yang Guohua et al.,	Nucl. Instr.& Meth. B61 (1991) 175.	F0569	Y

2. Data Assessment of  $^{14}\text{N}(\alpha,\alpha_0)^{14}\text{N}$  (*Lopes Ramos*)

[ART1992]	H. Artigas et al.,	Nucl. Instr.& Meth. B66 (1992) 237.	D0399	Y
[BER2002]	W. Berky, U.C. Steinbauer, H. Baumann, A.G. Balog,	Nucl. Instr.& Meth. B192 (2002) 249.	O1023	Y
[FEN1994]	Y. Feng, Z. Zhou, G.	Nucl. Instr. and	O0884	Y

	Zhou, F. Yang,	Meth. B94 (1994) 11.		
[FOS1993]	L.A.Foster et al.	Nucl.Instr.& Meth. B79 (1993) 454.	C1364	Y
[HER1958]	Herring et al.,	Phys. Rev. 112 (1958) 1210.	C1363	Y
[JIA2005]	W.Jiang et al.,	Surf. Interface Anal. 37 (2005) 374.	C1341	Y
[KAS1958]	E.Kashy, P.D.Miller, J.R.Risser,	Phys.Rev.112 (1958) 547.	C1032	Y
[QIU1992]	Y. Qiu, A.P. Rice, T.A. Tombrello,	Nucl.Instr.& Meth. B71 (1992) 324.	USA	Y
[SIL1961]	E.A. Silverstein, S.R. Salisbury, G. Hardie, L.D. Oppliger,	Phys. Rev. 124 (1961) 868.	C1008	Y

3. Data assessment on cross section data for  $^{11}\text{B}(\alpha,\alpha)^{11}\text{B}$  backscattering up to 9 MeV (*Mayer*)

[1]	W.R. Ott and H.R. Weller:	Nucl. Phys. A198 (1972) 505	C0754 (SIGMABASE)	Y
[2]	J.J. Ramirez et al.:	Phys.Rev. C5 (1972) 17	T0090	Y
[3]	L.C. McIntyre Jr. et al.:	Nucl. Instr. Meth. B64 (1992) 457	C0090 (author's data)	Y
[4]	<b>J.R. Liu et al.:</b>	Nucl. Instr. Meth. B108 (1996) 1	<b>C0159</b> (table)	Digitized by Mayer but not yet in IBANDL

4. Data assessment on cross section data for  $^{11}\text{B}(p,p)^{11}\text{B}$  backscattering up to 5 MeV (*Mayer*)

[1]	G.W. Tautfest and S. Rubin:	Phys. Rev. 103 (1956) 196	C0847 (SigmaBase)	Y
[2]	G.D. Symons and P.B. Treacy:	Nucl. Phys. 46 (1963) 93	F0214	Y
[3]	R.E. Segel et al.:	Phys. Rev. B139 (1965) 818	F0332	Y
[4]	J. Höhn et al.:	J. Phys. G: Nucl. Phys. 7 (1981) 803	F0288	No (unsuitable for IBA)
[5]	H.W. Becker et al.:	Zeitschrift für Physik A327 (1987) 196 (have to be p.341)	A0413	No (unsuitable for IBA)

[6]	M. Mayer et al.:	Nucl. Instr. Meth. B143 (1998) 244	O0864 (table)	Y
[7]	M. Chiari et al.:	Nucl. Instr. Meth. B184 (2001) 309	O0922 (author's data)	Y

5. Data assessment on cross section data for  $^{10}\text{B}(\alpha,\alpha)^{10}\text{B}$  backscattering up to 9 MeV (*Mayer*)

[1]	P. David et al.:	Nucl. Phys. A182 (1972) 234	F0220	No (unsuitable for IBA)
[2]	T. Mo and H.R.	Weller: Phys. Rev. C8 (1973) 972	F0486	No (unsuitable for IBA)
[3]	L.C. McIntyre Jr. et al.:	Nucl. Instr. Meth. B64 (1992) 457	C0090 (author's data)	Y

6. Data assessment on cross section data for  $^{10}\text{B}(p,p)^{10}\text{B}$  backscattering up to 5 MeV (*Mayer*)

[1]	A.B. Brown et al.:	Phys. Rev. 82 (1951) 159	A1457	Digitized by Mayer but not yet in IBANDL
[2]	J.C. Overley and W. Whaling:	Phys. Rev. 128 (1962) 315	F0211	Y
[3]	B.A. Watson et al.:	Phys. Rev. 182 (1969) 977	F0156	No (unsuitable for IBA)
[4]	B.A. Watson et al.:	Phys. Rev. 187 (1969) 1351	F0093	No (unsuitable for IBA)
[5]	J. Höhn et al.:	J. Phys. G: Nucl. Phys. 7 (1981) 803	F0288	Not in IBANDL under Höhn (reported by Chiari?)
[6]	M. Chiari et al.:	Nucl. Instr. Meth. B184 (2001) 309	O0922 (author's data)	Y

7. Data review of  $^{23}\text{Na}(p,p_0)^{23}\text{Na}$  cross-sections (*Chiari*)

[1]	N.P. Baumann et al.,	Phys. Rev. 104 (1956) 376	C0854 (SigmaBase)	Y
[2]	<b>G. Dearnaley,</b>	Philos. Mag. ser. 8, 1 (1956) 821	<b>D0319</b>	No
[3]	J.R. Vanhoy et al.,	Phys. Rev. C vol. 39 (1987) 920 have to be vol. 36	-- USA	No
[4]	<b>J.F. Wilkerson et al.,</b>	Nucl. Phys. A549 (1992) 223	<b>T0066</b>	No (limited interest to IBA)

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8. Data assessment of  $^{12}\text{C}(p,p)^{12}\text{C}$  cross sections from 3.5 to 5 MeV (*Bogdanovic Radovic*)

[1]	M. Tosaki et al.,	Nucl. Instr. and Meth. B168 (2000) 543	E1821	Y
[2]	H.L. Jackson et al.,	Phys. Rev. 89 (1953) 365	C0848 (SigmaBase)	Most angles missing
[3]	<b>Reich et al.,</b>	Phys. Rev. 104 (1956) 143	<b>O0226</b>	No
[4]	A. Caciolli et al.	accepted for publishing in Nucl. Instr. and Meth. (NIM/B,249,95,2006)	O1408 (not yet)	Y

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9. Data assessment of  $^{12}\text{C}(\alpha,\alpha)^{12}\text{C}$  Cross sections (*Bogdanovic Radovic*)

[1]	<b>J.A. Davies et al.,</b>	Nucl. Instr. and Meth. B85 (1994) 28	<b>C0913</b>	1 point missing in IBANDL (EXFOR ok)
[2]	<b>R. Somatri et al.,</b>	Nucl. Instr. and Meth. B113 (1996) 284	<b>D0097</b>	IBANDL has 5 keV discr. in energies (EXFOR ok)
[3]	<b>Y. Feng et al.,</b>	Nucl. Instr. and Meth. B86 (1994) 225	<b>O0879</b>	IBANDL has 1 wrong data point (EXFOR ok)
[4]	J.A.Leavitt,	Nucl. Instr. and Meth. B40/41 (1989) 776	C0748	Y
[5]	<b>C. Miller Jones et al.,</b>	Nucl. Phys.37 (1962)1	<b>C1029</b>	IBANDL has only 1 angle (lab); EXFOR has all (CM)
[6]	H.-S. Cheng et al.,	Acta Phys. Sinica 43 (1994) 1569	D0353	Y (agrees with EXFOR and article)
[7]	<b>T.P.Marvin et al.,</b>	Nucl.Phys.A180 (1972) 282	<b>C1360</b>	IBANDL has only 1 angle; EXFOR has all (CM)
[8]	<b>R.W. Hill,</b>	Phys.Rev.90 (1953) 845	<b>C1026</b>	EXFOR has more angles (CM), digitized numbers are different
[9]	<b>J.W. Bittner et</b>	Phys. Rev. 96 (1954) 374	<b>C1359</b>	IBANDL has

	<b>al.,</b>			only 1 angle; EXFOR has all (CM)
[10]	I. Bogdanović Radović et al. ,	Nucl. Instr. and Meth. B190 (2002) 10 – have to be 190 (2002) 100	D0079	Y

10. Assessment of the  $^{12}\text{C}(d,p)^{13}\text{C}$  cross sections (*Gurbich*)

1.	<b>R.V. Poore</b> , P.E. Shearin, D.R. Tilley, R.M. Willamson,	Nucl. Phys. A 92 (1967) 97.	<b>F0334</b>	No
2.	V. Quillet, F. Abel, M. Schott,	Nucl. Instr. and Meth. B 83 (1993) 47.	O0817 (sigmaDB)	Y
3.	J.A. Davies, P.R. Norton,	Nucl. Instr. and Meth. 168 (1980) 611.	C0193	Y
4.	W. Jiang, V. Shutthanandan, S. Thevuthasan, D.E. McCready, W.J. Weber,	Nucl. Instr. and Meth. B 222 (2004) 538; B 227 (2005) 450 (Erratum).	USA	Y
5.	W.N. Lennard, G.R. Massoumi, P.F.A. Alkemade, I.V. Mitchell, S.Y. Tong,	Nucl. Instr. and Meth. B61 (1991) 1.	USA	Y
6.	<b>G. Debras</b> and G. Deconnink,	J. Rad. Chem. 38 (1977)193 (reproduced by Jarjis).	<b>D0144</b>	Numbers in EXFOR are different (digitized from orig.paper)
7.	V.G.Balin, A.F.Gurbich, V.S.Shorin,	Preprint FEI-1341, Obninsk (1982).	D0108 (up to 1.76 MeV)	IBANDL has additional points (to 2.1MeV)
8.	<b>E. Kashy</b> , R.R. Perry, J.R. Risser,	Phys.Rev. 117 (1960) 1289.	<b>T0287</b> (Sig.DB)	EXFOR has additional data from Figs.5,6
9.	G.C. Phillips,	Phys. Rev. 80 (1950) 164 (reproduced by N.Jarmie and J.D.Seagrove in Los Alamos Report LA-2014 (1957)).	USA	Y (150 deg.)

10.	<b>M.T. McEllistrem,</b> K.W. Jones, Ren Chiba, R.A.Douglas, D.F. Herring, E.A.Silverstein,	Phys.Rev. 104 (1956) 1008.	<b>C0993</b>	(Y) EXFOR has several more angles
11.	I.Ya. Barit, D.L. Kogan, L.E. Kuzmin et al.	Short Communications in Physics PHIAS, No.7 (1986) 29 (in Russian).		No
12.	M. Kokkoris, P. Misaelides, A. Kontos, A. Lagoyannis, S. Harissopoulos, R. Vlastou, C.T. Papadopoulos	To be published (two papers)	D0398	Y
13.	D.G. Gerke et al.	Nucl. Phys. 75 (1966) 609. (angular distributions (d,p), (p,p) <sup>13</sup> C(p,p)).	USA	No

11. Assessment of the <sup>16</sup>O(d,p) <sup>17</sup>O and <sup>16</sup>O(d,α) <sup>14</sup>N cross sections (*Gurbich*)

1.	G. Amsel, D. Samuel,	Physics. Chem. Solids 23 (1962) 1707.	NO x4 DATA	No
2.	G. Amsel, D. Samuel,	Anal. Chem. 39 (1967) 1689.	D0104	Y
3.	G. Amsel, G. Bernager, B. de Gelas, P. Lacombe,	J. Appl. Phys. 39 (1968) 2246.	analysis data from AC, 39, 1689, 1967 =D0104	Y
4.	G. Amsel, D. David, G. Beranger, P. Boisot,	Rev. Phys. Appl. 3 (1968) 373.	analysis data from AC, 39, 1689, 1967 =D0104	Y
5.	G. Amsel, J.P. Nadai, E. d'Artemare, D. David, E. Girard, J. Moulin,	Nucl. Instr. and Meth. 92 (1971) 481.	analysis data from AC, 39, 1689, 1967 =D0104	Y
8.	G. Amsel, D. David, G. Beranger, P. Boisot, B. de	J. Nucl. Materials, 29 (1969) 144.	no X4 data	No

	Gelas, P. Lacombe,			
9.	V.A Karabash, A.N. Sosnin, V.S Shorin, Voprosy At. Nauky Techn. Ser.:	Yad. Const. No. 3 (1988) 31.	Sarov	Y
10.	R.F. Seiler, C.H. Jones, W.J. Anzick, D.F. Herring, K.W. Jones,	Nucl. Phys. 45 (1963) 647 (reproduced by H.J.Kim, W.T.Milner and F.K.McGowan Nuclear Data Tables v.A3 (1967) 123).	C1030	Y (EXFOR data converted to lab)
11.	<b>G. Amsel,</b>	Ann. Phys. 9 (1964) 197.	<b>D0086</b>	Y. Digitized independently, numbers are different from EXFOR
13.	V. Quillet, F. Abel, M. Schott,	Nucl. Instr. and Meth. B 83 (1993) 47.	O0817 (SigmaDB)	Y
14.	J.A. Davies, P.R. Norton,	Nucl. Instr. and Meth. 168 (1980) 611.	C0193	Y
15.	J. A. Davies, T.E. Jackman, H. Plattner, I. Bubb,	Nucl. Instr. and Meth. 218 (1983) 141.	C0192	Y
16.	W.N. Lennard, S.Y. Tong, I.V. Mitchel, G.R. Massoumi,	Nucl. Instr. and Meth. B43 (1989) 187.	C0198 (no d,p or d,a only he3,a, he3,p)	(d,p1) (data source ?)
17.	W. Jiang, V. Shutthanandan, S. Thevuthasan, D.E. McCrready, W.J. Weber,	Nucl. Instr. and Meth. B 207 (2003) 453.	C1365	Y
18.	A.F. Gurbich, S.L. Molodtsov,	Nucl. Instr. and Meth. B226 (2004) 637.	O1225	Y
19.	H.C. Kim, R.F. Seiler, D.F. Herring, K.W. Jones,	Nucl. Phys. 57 (1964) 526.	C1438	Y (EXFOR has also forward angles)
20.	<b>S. Cavallaro, A.</b> Cunsolo, R. Potenza, A. Rubbino,	Il Nuovo Cimento, 14A (1973) 692.	<b>D0390</b>	“Added to IBANDL” by Gurbich but not yet there
21.	W.N. Lennard,	Nucl. Instr. and Meth. B61 (1991)	USA	Y

	G.R. Massoumi, P.F.A. Alkemade, I.V. Mitchell, S.Y. Tong,	1.		
22.	M.Berty and A.V.Drigo, (name have to be Berti)	Nucl. Instr. and Meth. 201 (1982) 476. (page have to be 473)	D0131	Y
23.	S.T. Picraux,	Nucl. Instr. and Meth. 149 (1978) 289.	C1041	Y. Digitized independently from EXFOR, slightly diff.values. Errors missing in IBANDL.
24.	A. Turos, L. Wielunski, J. Olenski,	Phys. Stat. Sol. A 16 (1973) 211;	D0098	Y. Digitized independently from EXFOR, slightly diff.values
	A. Turos, L. Wielunski, A. Barcz,	Nucl. Instr. and Meth. 111 (1973) 605.	D0106	Y
25.	G. Debras and G. Deconnink,	J. Rad. Chem. 38 (1977)193 (reproduced by Jarjis).	D0144	Y (data from EXFOR)

12. Assessment on cross sections for  $D(^4\text{He}, D)^4\text{He}$  and  $T(^4\text{He}, T)^4\text{He}$  forward scattering  
(*Shi Liqun*)

[1]	S.Nagata et al.	Nucl.Instrum. & Meth. v.B6(1985) 533	E1862	Y
[2]	A.J.Kellock and J.E.E.Baglin	Nucl.Instrum.Methods B79 (1993) 493	C1345	Y
[3]	V. Quillet et al.,	Nucl. Instr. Meth. B83 (1993) 47	O0817 (SigmaDB)	Y
[4]	<b>F.Besenbacher</b> et al,	Nucl. Instr. Meth. B15 (1986) 123 (page have to be 459)	<b>A1213</b>	No
[5]	<b>J.A. Sawicki,</b>	Nucl. Instr. Meth. B30 (1988) 459 (page have to be 123)	<b>A1288</b>	No
[6]	J.F.Browning et al.,	Nucl. Instr. Meth. B161-163 (2000) 211	USA	No
[7]	J.F.Browning et al.,	Nucl. Instr. Meth. B219-220 (2004) 317	C1356	Y. Energy values slightly diff.from EXFOR



13. Cross sections for D(p, p) D and T(p, p) T scattering (*Shi Liqun*)

1.	F. A. Rodegers, etal.,	Phys. Rev. 78(1950)656	USA	No
2.	<b>R. Sherr</b> , etal.,	Phys. Rev. 72(1947)662.	<b>A1202</b>	No
3.	L. Rosen and J C Allred,	Phys. Rev. 52(1951)777 (volume have to be 82)	USA	No
4.	<b>J. E. Brolley</b> , etal.,	Phys. Rev. 78(1960)1307	<b>A1022</b>	No
5.	<b>D C Kocher</b> and T B Clegg , Bul\	Nuclear Physics A132(1969)457 ( <i>page have to be 455</i> )	<b>A1030</b> (not A1033)	No
-	<b>A.S. Wilson</b> et al.	Nucl.Phys.A 130,624 (1969) (4.5 – 11.5 MeV)	<b>A1033</b>	No
6.	Langley, R.A. (1976) in	Proc. Int. Conf. on Radiation Effect and Tritium Technology for Fusion Reactors, vol IV, (J.S. Walson and F.W. Wiffen, eds.)	USA	Y
7.	Langley, R.A. Sandia Laboratories	Report SaND75-0331,1975	USA	No
8.	<b>R S Classen</b> , etal.,	Phys. Rev.82(1951)589	<b>A1267</b>	No
9.	<b>Hemmendinger</b> , Jarvis, and Taschek,	Phys. Rev. 76(1949)1137.	<b>A1206</b>	No

Report on NRA Reference Data for  $^{10,11}\text{B}$ ,  $^{14}\text{N}$ ,  $^{19}\text{F}$ ,  $^{32}\text{S}$ ,  $^{6,7}\text{Li}$  (*Kokkoris*): see separate document