



## Particle Irradiation Data Ensemble: Overview table

### Explanations

- a. Number of ion experiments within the publication
- b. Cell class: n = normal cells, t = tumor cells
- c. Cell cycle: a = asynchronous, s = synchronized in a particular phase of cell cycle
- d. Cell origin: h = human, r = rodent
- e. Irradiation conditions: m = monoenergetic; s = SOBP
- f. Values are in italic if not given in the publications, but derived by stopping power codes
- g. Photon reference radiation: X-ray energy in kVp or photon energy in MV for clinical accelerators if this unit is given, or Co =  $^{60}\text{Co}$  and Cs =  $^{137}\text{Cs}$  source.
- h. Remarks: For spread out Bragg peaks, the quantities LET<sub>T</sub> and LET<sub>D</sub> refer to track and dose averaged LET values, respectively. Also other additional information, e.g. on the origin of photon reference curves, is given in this column.

No.	Author / Year / Reference	No. s.c. <sup>a</sup>		Cell lines <sup>b</sup>	Cell cycle <sup>c</sup>	Cell origin <sup>d</sup>	Ion species	Irr. cond. <sup>e</sup>	LET (keV/ $\mu$ m) <sup>f</sup>	E (MeV/u) <sup>f</sup>	Phot. <sup>g</sup>	Remarks <sup>h</sup>
1	Chapman et al., 1977 [1]	13	V79	n	s	r	<sup>4</sup> He, <sup>12</sup> C, <sup>20</sup> Ne, <sup>40</sup> Ar	s	2.34 - 403	23.4 - 400	220	<LET <sub>T</sub> > given
2	Chapman et al., 1978 [2]	9	V79, T1	n	a, s	h, r	<sup>12</sup> C	s	12.2 - 75.0	26.1 - 319	220	<LET <sub>T</sub> > given
3	Blakely et al., 1979 [3]	24	T1	n	a	r	<sup>12</sup> C, <sup>20</sup> Ne, <sup>40</sup> Ar	m	11 - 640	10.7 - 680	220	
4	Raju et al., 1991 [4]	5	CHO-10B, HS-23, C3H_10T1/2, V79, AG1522	n	a	r	<sup>4</sup> He	m	121 - 136	0.65 - 0.8	Co	
5	Goodhead et al., 1992 [5]	10	HeLa, HeLa S3, C3H 10 T1/2	n	a	h, r	<sup>1</sup> H, <sup>4</sup> He	m	20.3 - 23.9	1.16 - 8.8	250	
6	Folkard et al., 1996 [6]	10	V79	n	a	r	<sup>1</sup> H, <sup>2</sup> H, <sup>3</sup> He, <sup>4</sup> He, <sup>12</sup> C, <sup>16</sup> O	m	10.1 - 105.8	0.47 - 3.7	240	
7	Eguchi-Kasai et al., 1996 [7]	22	irs1, irs2, L5178Y, M10, LTA, SL3-147	n	a	r	<sup>4</sup> He, <sup>12</sup> C, <sup>20</sup> Ne	m	18 - 327	3.1 - 123	200	
8	Suzuki et al., 1997 [8]	7	HE20	n	s	h	<sup>20</sup> Ne	m	63 - 335	14.3 - 120	Cs	
9	Bettega et al., 1998 [9]	8	C3H 10T1/2	n	a	r	<sup>1</sup> H, <sup>2</sup> H	m	11 - 33.2	0.72 - 3.18	Co	
10	Tsuboi et al., 1998 [10]	20	NB1RGB, ONS-76, A-172, U251MG, TK-1	n, t	a	h	<sup>12</sup> C	m	20 - 105	17.4 - 144	Cs	
11	Tsuchida et al., 1998 [11]	6	A172, TK1	t	a	h	<sup>12</sup> C	m	20 - 80	24.1 - 144	Cs	
12	Weyrather et al., 1999 [12]	21	V79, CHO-K1, xrs5	n	a	r	<sup>12</sup> C	m	13.7 - 482.7	2.4 - 266.4	250	
13	Furusawa et al., 2000 [13]	139	V79, HSG, T1	n	a	h, r	<sup>3</sup> He, <sup>12</sup> C, <sup>20</sup> Ne	m	18.5 - 654	1.27 - 131	200	

14	Suzuki et al., 2000 [14]	32	NB1RGB, HFL-III, LC-1sq, A-549, C32TG, Marcus, U-251MGKO, SK-MG-1, KNS-89, KS-1, A-172, ONS-76, KNS-60, Becker, T98G, SF126	n, t	a	h	<sup>12</sup> C	m	13.3 - 77.1	25.1 - 271	200	
15	Belli et al., 2000 [15]	12	HF19, M10, SCC25, SQ20B	n, t	a	h	<sup>1</sup> H	m	7.7 - 33	0.69 - 5.24	Co	
16	Tsuruoka et al., 2005 [16]	40	NB1RGB	n	a	h	<sup>12</sup> C, <sup>20</sup> Ne, <sup>28</sup> Si, <sup>56</sup> Fe	m	13 - 400	19.5 - 500	200	
17	Belli et al., 2008 [17]	37	HF19, M10, SCC25, SQ20B, V79	n, t	a	h, r	<sup>12</sup> C	m, s	13 - 303	4.5 - 290	Cs/Co	<LET <sub>D</sub> > given
18	Belli et al., 1998 [18]	6	V79	n	a	r	<sup>1</sup> H	m	7.7 - 37.8	0.57 - 5.01	N/A	Data in parts taken from Belli et al., 1993 [18b]
19	Hall et al., 1977 [19]	3	V79	n	a	r	<sup>40</sup> Ar	s	110.9 - 409.2	48 - 330	250	<LET <sub>D</sub> > given
20	Bird and Burki, 1975 [20]	6	V79	n	a	r	<sup>4</sup> He, <sup>7</sup> Li, <sup>11</sup> B, <sup>12</sup> C, <sup>20</sup> Ne, <sup>40</sup> Ar	m	19.1 - 2000	5.09 - 9.93	145	X-ray curve taken from Sinclair and Morton, 1966 [20b]
21	v. Neubeck, 2009 [21]	6	RAT-1, IEC-6	n, t	a	r	<sup>12</sup> C	m	13.3 - 163	9.9 - 270	250	
22	Perris et al., 1986 [22]	2	V79	n	a	r	<sup>1</sup> H	m	6 - 12	3 - 7.4	Co	
23	Bettega et al., 1983 [23]	3	EUE	n	a	h	<sup>1</sup> H	m	1.83 - 5.8	8 - 31	Co	Photon data taken from Bettega et al., 1979 [23b]
24	Cox et al., 1977 [24]	4	V79, HF19	n	a	h, r	<sup>4</sup> He	m	20 - 68	1.9 - 8.8	Co/250	
25	Wouters et al., 1996 [25]	11	V79	n	a	r	<sup>1</sup> H	s	2.33 - 6.23	6.8 - 22.8	Co	<LET <sub>D</sub> > given
26	Combs et al., 2009 [26]	4	U87-MG, LN229	t	a	h	<sup>12</sup> C	m, s	103 - 170	9.8 - 18	250	<LET <sub>D</sub> > given

27	Kitajima et al., 2010 [27]	8	SuSa, AT1OS	n	s	h	$^{12}\text{C}$	m	24 - 200	35 - 450	150	
28	Blomquist et al., 1993 [28]	2	LS-147T, V79	n, t	a	h, r	$^1\text{H}$	s	4	11.6	Co	<LET <sub>D</sub> > given
29	Yang et al., 1985 [29]	9	C3H 10T1/2	n	a	r	$^{12}\text{C}, ^{20}\text{Ne}, ^{28}\text{Si}, ^{56}\text{Fe}, ^{238}\text{U}$	m	10.5 - 2080	103 - 990	225	E and LET from remaining range
30	Miller et al., 1995 [30]	10	C3H 10T1/2	n	a	r	$^1\text{H}, ^2\text{H}, ^3\text{He}, ^4\text{He}, ^{12}\text{C}, ^{16}\text{O}$	m	3.8 - 418	0.28 - 12.9	250	
31	Czub et al., 2008 [31]	4	CHO	n	a	r	$^{12}\text{C}, ^{20}\text{Ne}$	m	438 - 1245	1.69 - 2.81	Co	
32	Kamlah et al., 2011 [32]	1	A594	t	a	h	$^{12}\text{C}$	m	168	9.9	6 MV	
33	Aoki et al., 2000 [33]	6	V79	n	a	r	$^{12}\text{C}$	m	13 - 237	6.4 - 283	200	
34	Han et al., 1998 [34]	6	SHE	n	a	r	$^{12}\text{C}, ^{26}\text{Si}$	m	13 - 400	18.5 - 283	250	
35	Hamada et al., 2010 [35]	8	H1299	t	a	h	$^{12}\text{C}, ^{20}\text{Ne}, ^{26}\text{Si}, ^{40}\text{Ar}, ^{56}\text{Fe}$	m	13 - 200	20 - 600	200	
36	Claesson et al., 2011 [36]	6	V79	n	a, s	r	$^4\text{He}$	m	110	0.8	100	
37	Wedenberg et al., 2010 [37]	5	T1	n	a	h	$^4\text{He}$	m	25 - 165	0.46 - 6.8	250	
38	Miller et al., 1990 [38]	1	C3H 10T1/2	n	a	h	$^2\text{H}$	m	40	0.55	250	Photon data taken from Miller, 1995 [38b]
39	Tobias et al., 1980 [39]	2	V79	n	s	r	$^{40}\text{Ar}$	m	370	55	220	E and LET from remaining range
40	Cox and Masson, 1979 [40],	7	HF19	n	a	h	$^4\text{He}, ^{11}\text{B}, ^{14}\text{N}$	m	20 - 470	1.24 - 10.3	250	
41	Ito et al., 2006 [41]	7	HL-60	t	a	h	$^{12}\text{C}, ^{26}\text{Si}, ^{56}\text{Fe}$	m	20 - 440	26 - 143	4 MV	
42	Tilly et al., 1999 [42]	3	V79	n	a	r	$^4\text{He}, ^{14}\text{N}$	m	6 - 165	14.4 - 39	Co	

43	Thacker et al., 1979 [43]	6	V79	n	a	r	${}^4\text{He}$ , ${}^{11}\text{B}$ , ${}^{14}\text{N}$	m	28 - 470	$1.24 - 10.3$	Co	
44	Hirayama et al., 2009 [44]	5	V79	n	a	r	${}^{12}\text{C}$ , ${}^{56}\text{Fe}$	m	20 - 2106	$16 - 416$	200	
45	Hirayama et al., 2005 [45]	1	CHO	n	a	r	${}^{12}\text{C}$	m	79.6	$24$	200	
46	Curtis et al., 1982 [46]	28	R-1	t	a	r	${}^{12}\text{C}$ , ${}^{20}\text{Ne}$ , ${}^{40}\text{Ar}$	s	11 - 750	$19.5 - 428$	225	$\langle \text{LET}_D \rangle$ given
47	Boehrnsen et al., 2002 [47]	2	V79	n	a	r	${}^{12}\text{C}$	m	27.5 - 153	$10.2 - 92.5$	6 MV	
48	Fournier et al., 2001 [48]	4	AG1522B, PS1	n	a	h	${}^{12}\text{C}$ , ${}^{48}\text{Ni}$	m	16.6 - 2455	$9.9 - 195$	250	
49	Wulf et al., 1985 [49]	106	B14FAF28, V79	n	a	r	${}^{12}\text{C}$ , ${}^{16}\text{O}$ , ${}^{40}\text{Ca}$ , ${}^{40}\text{Ar}$ , ${}^{48}\text{Ti}$ , ${}^{56}\text{Fe}$ , ${}^{58}\text{Ni}$ , ${}^{84}\text{Kr}$ , ${}^{132}\text{Xe}$ , ${}^{142}\text{Nd}$ , ${}^{208}\text{Pb}$ , ${}^{238}\text{U}$	m	150 - 15800	$0.1 - 400$	N/A	Photon parameters taken from Wulf, 1983 [49b] and Kraft, 1987 [49c]
50	Scholz, 2003 [50]	8	CHO, V79	n	a	r	${}^{12}\text{C}$ , ${}^{16}\text{O}$ , ${}^{20}\text{Ne}$ , ${}^{238}\text{U}$	m	$13.3 - 16500$	$5 - 396$	250	Photon parameters adapted from Weyrather et al., 1999 [50b]
51	Persson et al., 2002 [51]	3	AA	t	a	h	${}^{10}\text{B}$	m	40 - 160	$6.6 - 36.6$	Co	
52	Yang and Tobias, 1984 [52]	2	C3H 10 T1/2	n	a	r	${}^{56}\text{Fe}$ , ${}^{238}\text{U}$	m	500 - 1900	$300 - 960$	225	
53	Scholz et al., 1997 [53]	8	CHO	n	a	r	${}^{12}\text{C}$ , ${}^{16}\text{O}$	m	$13.5 - 265$	$11 - 395$	250	
54	Prise et al., 1990 [54]	4	V79	n	a	r	${}^1\text{H}$ , ${}^4\text{He}$	m	$16.9 - 108$	$0.76 - 1.9$	250	
55	Terato et al., 2008 [55]	4	AA8	n	a	r	${}^{12}\text{C}$	m	$13 - 200$	$43 - 290$	Co	
56	Suzuki et al., 1996 [56]	8	HE	n	s	h	${}^{12}\text{C}$	m	$22 - 230$	$6.6 - 126$	Cs	
57	Matsumoto et al., 2008 [57]	6	C32TG, Colo679, HMV-I, HMV-II, 92-1, MeWo	t	a	h	${}^{12}\text{C}$	s	50	$43.4$	200	$\langle \text{LET}_D \rangle$ given

58	Mehnati et al., 2005 [58]	13	CHO	n	a	r	$^{12}\text{C}$ , $^{20}\text{Ne}$ , $^{40}\text{Ar}$ , $^{56}\text{Fe}$	m	20 - 2000	<i>13 - 144</i>	200	
59	Stenerloew et al., 1995 [59]	10	HTh7, B16, IGR, V79, LS-174T, U-343MG, DU-145	n, t	a	h, r	$^{4}\text{He}$ , $^{14}\text{N}$	s,m	40 - 125	<i>3.82 - 20.3</i>	Co	Unclear if $\langle\text{LET}_T\rangle$ or $\langle\text{LET}_D\rangle$ given
60	Okayasu et al., 2006 [60]	10	CHO, xrs6, xrs6-hamKu80, HFLIII, 180BR	n	a	h, r	$^{12}\text{C}$ , $^{56}\text{Fe}$	m	70 - 200	<i>28.5 - 430</i>	N/A	
61	Tsuboi et al., 2007 [61]	9	U87MG, TK1	n, t	a	h	$^{12}\text{C}$	m	20 - 80	<i>24 - 144</i>	Cs	
62	Todd, 1975 [62]	10	ChangHL, M3-1	n	a	h, r	$^{7}\text{Li}$ , $^{11}\text{B}$ , $^{12}\text{C}$ , $^{14}\text{N}$ , $^{16}\text{O}$ , $^{20}\text{Ne}$ , $^{40}\text{Ar}$	m	55 - 1940	<i>5.3 - 7</i>	50	
63	Hall et al., 1972 [63]	1	V79	n	a	r	$^{4}\text{He}$	m	106	1.3	210	
64	Takahashi et al., 2000 [64]	8	A172, A172neo, A172mp53, TG98G	t	a	h	$^{4}\text{He}$ , $^{12}\text{C}$	s	70 - 156	<i>0.51 - 28.5</i>	150	$\langle\text{LET}_D\rangle$ given
65	Takahashi et al., 2004 [65]	12	H1299wtp53, H1299tp53, H1299tp53-null	t	a	h	$^{12}\text{C}$	m	30 - 100	<i>18.5 - 83</i>	200	
66	Matsuzaki et al., 1998 [66]	3	OCUB-M, CRL-1500, YMB-1	t	a	h	$^{12}\text{C}$	s	80	24	200	$\langle\text{LET}_D\rangle$ given
67	Kronenberg et al., 2009 [67]	1	Aprt	n	a	r	$^{56}\text{Fe}$	m	151.4	1000	150	
68	Hamada et al., 2006 [68]	6	AG01522	n	a	h	$^{4}\text{He}$ , $^{12}\text{C}$ , $^{20}\text{Ne}$ , $^{40}\text{Ar}$	m	16.2 - 1610	<i>7 - 25.5</i>	Co	
69	Zhou et al., 2006 [69]	1	V79	n	a	r	$^{12}\text{C}$	m	100	18.5	200	
70	Jenner et al., 1993 [70]	1	V79	n	a	r	$^{4}\text{He}$	m	120	<i>0.81</i>	Co	
71	Furusawa et al., 2002 [71]	2	V79	n	a	r	$^{40}\text{Ar}$ , $^{58}\text{Fe}$	m	86 - 442	<i>115 - 575</i>	150	
72	Takahashi et al., 2001 [72]	8	SASmp53, SASneo	t	a	h	$^{12}\text{C}$	m	30 - 150	<i>11 - 83</i>	150	

73	Bettega et al., 2005 [73]	5	AG1522	n	a	h	$^{26}\text{Si}$ , $^{48}\text{Ti}$ , $^{56}\text{Fe}$	m	56 - 442	20 - 1000	Co	
74	Ibañez et al., 2009 [74]	3	B16-F0	t	a	r	$^1\text{H}$ , $^6\text{Li}$	m	3.4 - 135	2.33 - 14.4	Cs	
75	Hellweg et al., 2011 [75]	2	HEK	n	a	h	$^{13}\text{C}$	m	33.2 - 73.2	27.8 - 72.4	150	
76	Napolitano et al., 1992 [76]	1	C3H 10T1/2	n	s	r	$^4\text{He}$	m	177	0.45	80	
77	Hill et al., 2004 [77]	7	V79-4, irs1, irs2, irs3, CHO-K1, xrs5	n	a	r	$^4\text{He}$	m	121	0.815	250	
78	Antonelli et al., 2015 [78]	2	AG01522	n	s	h	$^4\text{He}$ , $^{12}\text{C}$	m	39.4 - 125	0.75 - 58	Cs	
79	Bettega et al., 2009 [79]	3	CGL1	n	a	h	$^{12}\text{C}$	m	13.8 - 172	11.4 - 270	15 MV	
80	Beuve et al., 2008 [80]	6	SCC61, SQ20B	t	a	h	$^{12}\text{C}$ , $^{40}\text{Ar}$	m	33.6 - 302	9.8 - 85	250	
81	Britten et al., 2012 [81]	10	HEP2, V79	n, t	a	h, r	$^1\text{H}$	s	5.3 - 28.8	0.9 - 8.6	120	<LET <sub>D</sub> > given
82	Chaudhary et al., 2014 [82]	24	AG01522, U-87	n, t	a	h	$^1\text{H}$	m, s	1.11 - 25.9	1.02 - 59	225	<LET <sub>D</sub> > given
83	Cox et al., 1977b [83]	17	HF19, V79	n	a	h, r	$^4\text{He}$ , $^{11}\text{B}$ , $^{14}\text{N}$	m	20 - 470	1.16 - 10.6	N/A	
84	Folkard et al., 1989 [84]	4	V79	n	a	r	$^1\text{H}$ , $^4\text{He}$	m	17 - 105	0.76 - 1.9	250	
85	Franken et al., 2011 [85]	1	SW-1573	t	a	h	$^4\text{He}$	m	130	1	Cs	
86	Frankenberg-Schwager et al., 2009 [86]	8	AA8, irs1SF, UV41, V3	n	s	r	$^4\text{He}$	m	124	0.85	200	
87	Gerelchuluun et al., 2011 [87]	2	MOLT4, ONS76	t	a	h	$^1\text{H}$	s	2.2	25	10 MV	<LET <sub>D</sub> > given
88	Gerelchuluun et al., 2015 [88]	12	AA8, irs1, irs1SF, V3, V79, XR1	n	a	r	$^{12}\text{C}$ , $^1\text{H}$	s	2.2 - 50	25 - 45	Cs	<LET <sub>D</sub> > given

89	Habermehl et al., 2014 [89]	8	Hep3B, HepG2, HuH7, PLC	t	a	h	$^{12}\text{C}$ , $^{16}\text{O}$	s	112 - 146	11.8 - 16.3	N/A	Unclear if $\langle\text{LET}_T\rangle$ or $\langle\text{LET}_D\rangle$ given
90	Kraft et al., 1985 [90]	12	AT-25F, T1	t	a	h	$^{28}\text{Si}$ , $^{40}\text{Ar}$ , $^{56}\text{Fe}$ , $^{238}\text{U}$	m	118 - 15700	8 - 960	N/A	
91	Manti et al., 2012 [91]	2	AG01522	n	a	h	$^1\text{H}$	m, s	4 - 11	3.3 - 12	225	Unclear if $\langle\text{LET}_T\rangle$ or $\langle\text{LET}_D\rangle$ given
92	Petrović et al., 2010 [92]	4	HTB140	t	a	h	$^1\text{H}$	s	2.6 - 18.8	1.6 - 20	Co	Unclear if $\langle\text{LET}_T\rangle$ or $\langle\text{LET}_D\rangle$ given
93	Raju et al., 1978 [93]	8	T1	n	a	h	$^{12}\text{C}$ , $^{20}\text{Ne}$ , $^{40}\text{Ar}$ , $^4\text{He}$	m	1.8 - 183	79 - 430	250	
94	Hamada et al., 2008 [94]	12	Bcl-2, Neo	t	a	h	$^{12}\text{C}$ , $^{20}\text{Ne}$ , $^{40}\text{Ar}$ , $^4\text{He}$	m	16.2 - 1610	11.5 - 26.7	Co	
95	Šlonina et al., 2014 [95]	12	HFIB15, HFIB2, HFIB30	t	a	h	$^1\text{H}$	m, s	2.25 - 7.9	5.7 - 24	6 MV	$\langle\text{LET}_D\rangle$ given
96	Takahashi et al., 2014 [96]	8	MEF	n	a	r	$^{12}\text{C}$ , $^{20}\text{Ne}$ , $^{40}\text{Ar}$ , $^{56}\text{Fe}$	m, s	13 - 1370	13 - 500	200	Unclear if $\langle\text{LET}_T\rangle$ or $\langle\text{LET}_D\rangle$ given
97	Tracy et al., 2015 [97]	6	V79	n	a	r	$^4\text{He}$	m	112 - 201	0.275 - 1	Co	
98	Wada et al., 2013 [98]	4	HFL-I, NB1RGB	n	a	h	$^{12}\text{C}$	m	13 - 75	27 - 90	200	
99	Weber & Flentje, 1993 [99]	10	Caski, V79	n, t	a	h, r	$^{16}\text{O}$ , $^{20}\text{Ne}$ , $^{40}\text{Ar}$ , $^{132}\text{Xe}$ , $^{197}\text{Au}$ ,	m	250 - 11500	5.9 - 14	Co	
100	Wouters et al., 2015 [100]	10	V79	n	a	r	$^1\text{H}$	s	1.03 - 4.74	9.8 - 66	Co	$\langle\text{LET}_D\rangle$ given
101	Yashkin et al., 1995 [101]	1	Clone431	n	a	r	$^1\text{H}$	m	0.5	179	Co	
102	Fournier et al., 2012 [102]	1	AG1522D	n	a	h	$^{12}\text{C}$	m	290	4.8	250	
103	Antoccia et al., 2009 [103]	1	HFFF2	n	a	h	$^1\text{H}$	m	24.5	0.8	250	
104	Baggio et al., 2002 [104]	6	DLD1, HCT116	t	a	h	$^1\text{H}$ , $^4\text{He}$	m	7.7 - 101.7	1 - 5.2	Co	

105	Bird et al., 1980 [105]	16	V79	n	s	r	$^1\text{H}, ^2\text{H}, ^3\text{He}$	m	10.2 - 170	0.46 - 4	250	
106	Doria et al., 2012 [106]	5	V79	n	a	r	$^1\text{H}$	m	10 - 28	0.9 - 3.82	225	
107	Hei et al., 1988 [107]	3	HSF	n	a	h	$^1\text{H}, ^2\text{H}$	m	10 - 40	0.5 - 3.82	Cs	
108	Inada et al., 1981 [108]	2	HMF	t	a	h	$^1\text{H}$	m	1.3 - 13.5	2.57 - 50.8	200	
109	Jeynes et al., 2013 [109]	2	V79	n	a	r	$^1\text{H}, ^4\text{He}$	m	17.6 - 123	1 - 2	300	
110	Ogata et al., 2005 [110]	2	HT1080, LM8	t	a	h, r	$^{12}\text{C}$	m	46.6	49	4 MV	
111	Petrović et al., 2006 [111]	1	HTB140	t	a	h	$^1\text{H}$	m	5.2	8.5	Co	
112	Ristić-Fira et al., 2011 [112]	3	HTB140	t	a	h	$^1\text{H}, ^{12}\text{C}$	m, s	4.71 - 415.3	2.98 - 9.5	Co	Unclear if $\langle\text{LET}_T\rangle$ or $\langle\text{LET}_D\rangle$ given
113	Schuff et al., 2002 [113]	11	PDV, PDVC57, V79	n, t	a	r	$^1\text{H}, ^6\text{Li}, ^7\text{Li}$	m	2.69 - 269	0.99 - 20.2	Cs	
114	Williams et al., 1978 [114]	2	H4, HD1	t	a	r	$^1\text{H}$	m	0.52	160	130	
115	Guan et al., 2015 [115]	24	H1437, H460	t	a	h	$^1\text{H}$	s	0.9 - 19	1.6 - 74.9	Cs	$\langle\text{LET}_D\rangle$ given
116	Bennet et al., 2022 [116]	3	NFF28	n	a	h	$^1\text{H}$	m	0.22 - 1.26	50 - 1000	Cs	
117	Calipel et al., 2015 [117]	8	NCM, APFRE19, Sp6.5, MEL270, mu2, TP17, 92.1, MKT-Br	n	a	h	$^{12}\text{C}$	m	34	75	6 MV	
118	Chapman et al., 1979 [118]	3	V79	n	s	r	$^{12}\text{C}, ^{20}\text{Ne}, ^{40}\text{Ar}$	s	40 - 220	58.5 - 111	250	$\langle\text{LET}_T\rangle$ given
119	Chew et al., 2018 [119]	9	T98G, U87, LN18	t	a	h	$^{12}\text{C}, ^{28}\text{Si}$	m	55 - 200	18.8 - 479	200	
120	Chew et al., 2019 [120]	19	T98G, U87, LN18	t	a	h	$^4\text{He}, ^{12}\text{C}, ^{20}\text{Ne}$	m	2.3 - 100	18.8 - 413	200	

121	Furusawa et al., 2017 [121]	9	V79	n	a	r	$^{12}\text{C}$ , $^{28}\text{Si}$ , $^{40}\text{Ar}$ , $^{56}\text{Fe}$	m	13 - 860	$18.8 - 500$	200	
122	Gong et al., 2007 [122]	1	SMMC-7721	t	a	h	$^{12}\text{C}$	m	35	68	8 MV	
123	Konings et al., 2019 [123]	1	MCF-7	t	a	h	$^{12}\text{C}$	m	73	27.7	320	
124	Matsumoto et al., 2018 [124]	3	B16/BL6	t	a	r	$^{12}\text{C}$	s	14 - 75	$26.8 - 254$	200	$\langle\text{LET}_D\rangle$ given
125	Mein et al., 2019 [125]	6	Renca	n	a	h	$^4\text{He}$	m, s	4.8 - 26.5	$6.4 - 53.1$	Co	$\langle\text{LET}_D\rangle$ given
126	Schlag et al., 1981 [126]	1	V79	n	a	r	$^4\text{He}$	m	120	3.4	Co	
127	Staab & Lücke-Huhle, 2004 [127]	2	V79-37A	n	a	r	$^{12}\text{C}$	s	18 - 60	$35.2 - 171$	250	$\langle\text{LET}_D\rangle$ given
128	Topsch et al., 2007 [128]	4	SiHa, WiDr	t	a	h	$^{12}\text{C}$	s	11.5 - 90	$21.4 - 363$	250	$\langle\text{LET}_D\rangle$ given
129	Wang et al., 2008 [129]	3	NHDF, AG1522B	t	a	h	$^{12}\text{C}$	m	13.7 - 153	11 - 266	250	
130	Petrovic et al., 2020 [130]	17	CRL5876, HTB177, HTB140, MCF-7	t	a	h	$^1\text{H}$ , $^{12}\text{C}$	m, s	4.7 - 747	$1.8 - 27.4$	Co	$\langle\text{LET}_D\rangle$ given
131	Sokol et al., 2017 [131]	17	CHO	n	a	r	$^{16}\text{O}$	m	22 - 670	$1.9 - 320$	250	

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