

Table 4.

Summation of the large-D series for (3,0,1) and (6,1,0) states of helium and (n, 0, 0) states of the positive ion of lithium

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shift0 = 2 n1 - 1
shift1 = E1/(2 E0)

Helium asymmetric-configuration state ( 3, 0, 1)

Ncoef = 15 Shift-0 = 5 Shift-1 = 7.30 2.55

Table with columns n, l/(D+shift0)-expansion, and Padé. Contains 15 rows of data for Helium asymmetric-configuration state (3, 0, 1).

Helium asymmetric-configuration state ( 6, 1, 0)

Ncoef = 15 Shift-0 = 11 Shift-1 = 16.28 2.41

Table with columns n, l/(D+shift0)-expansion, and Padé. Contains 15 rows of data for Helium asymmetric-configuration state (6, 1, 0).

Table with 4 columns of numerical values: 12 -1.320418570D+22 -6.278147654D+21 -0.3767 -0.0024, 13 .5694176871D+23 .1234323795D+24 -.03690 .00016, 14 .4153254402D+25 -.1307437043D+26 -.03730 -.00073

Lithium asymmetric-configuration state ( 0, 0, 0)
Ncoef = 15 Shift-0 = -1 Shift-1 = .05 .26

Table with columns n, l/(D+shift0)-expansion, and Padé. Contains 15 rows of data for Lithium asymmetric-configuration state (0, 0, 0).

Lithium asymmetric-configuration state ( 1, 0, 0)
Ncoef = 15 Shift-0 = 1 Shift-1 = 2.52 1.24

Table with columns n, l/(D+shift0)-expansion, and Padé. Contains 15 rows of data for Lithium asymmetric-configuration state (1, 0, 0).

Lithium asymmetric-configuration state ( 2, 0, 0)
Ncoef = 15 Shift-0 = 3 Shift-1 = 4.99 .22

Table with columns n, l/(D+shift0)-expansion, and Padé. Contains 15 rows of data for Lithium asymmetric-configuration state (2, 0, 0).



1	.1108949781D+04	.1053678194D+04	-.17000	-.00166
2	-.4330218242D+05	-.8398950771D+05	-.58292	-.04453
3	.2707893637D+07	.6810124708D+07	-.17834	-.00462
4	-.2757585295D+09	-.5520405943D+09	.34964	.24029
5	.3333095048D+11	.4022685568D+11	-.16465	-.04018
6	-.3927727340D+13	-.2094049367D+13	.41840	-.07631
7	.4076244362D+15	-.1605804410D+14	-.12875	.01494
8	-.3434916215D+17	.2363109914D+17	.22018	-.02098
9	.2177250916D+19	-.4014344562D+19	-.12716	.02244
10	-.1233074835D+21	.4470200385D+21	.31212	.00907
11	.5664399996D+22	-.2678108611D+23	-.06721	.04541
12	.6622355305D+25	.1072695430D+25	.25882	-.00336
13	-.2920674141D+28	-.2512228497D+28	-.06039	-.02737
14	.4623485257D+28	.1255758678D+31	.22449	-.04506
n	1/(D+shift0)	-expansion	Padé	
0	-.2666405244D+02	-.1048858124D+02	-.05509	-.02167
1	.9571578836D+02	.6551121067D+03	-.03292	.00548
2	-.8969213699D+04	-.3528898414D+05	-.05383	-.00393
3	.1087358056D+07	.2421424375D+07	-.04897	.00196
4	-.1161410770D+09	-.1428434946D+09	-.05860	.00259
5	.1238918344D+11	.4553293893D+10	-.04907	.00323
6	-.1083795061D+13	.3742145283D+12	-.04899	-.00151
7	.6156763333D+14	-.8798945706D+14	-.04726	.00203
8	-.3090616420D+15	.9608169171D+16	-.04871	.00124
9	-.1970802290D+18	-.6933806740D+18	-.04733	.00205
10	-.2502654330D+20	.4798084176D+19	-.04702	-.00041
11	-.2540082952D+22	.1141966325D+23	-.04671	.00207
12	.6647349251D+25	.1202899615D+25	-.04505	.00004
13	-.1120077852D+28	-.2404105687D+28	-.04694	.00120
14	-.5709394983D+30	.5518233404D+30	-.04517	-.00096
n	1/(D+shift1)	-expansion	Padé	
1	.4263256415D-13	.0000000000D+00	-.03127	.01033
2	-.1799847433D+05	-.2820975296D+05	-.07225	.02691
3	.1969356912D+07	.1118491574D+07	-.04543	.00740
4	-.1606807485D+09	-.1289976318D+08	-.04715	.00756
5	.1207749244D+11	-.6925677725D+10	-.04532	.00723
6	-.4670549266D+12	.1233989597D+13	-.04801	.00120
7	-.4486490121D+14	-.1167313207D+15	-.04653	.00367
8	.1021367980D+17	.4995730378D+16	-.04847	.00282
9	-.7250480794D+18	.3002985395D+18	-.04670	.00364
10	-.3071113939D+20	-.7261462924D+20	-.04771	.00196
11	.4938582017D+21	.7170544408D+22	-.04594	.00253
12	.5234621129D+25	.1700460751D+25	-.04704	.00125
13	-.8501403389D+27	-.1463142024D+28	-.04810	.00178
14	-.3656411784D+30	.2406690446D+30	-.04698	.00124