Template for ATOMIC DATA AND NUCLEAR DATA TABLES

A. Author[a,1,*], B. Author[a,b,2], C. Author[b]

[a] *First Address Line*
[b] *Second Address First Line*
Second Address Second Line

Abstract

Insert abstract text here.

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[1] First author footnote.
[2] Second author footnote.

Contents

1. Introduction

This file is a template to assist authors in writing new articles for Atomic Data and Nuclear Data Tables. It employs the package `adndt` and the class `elsarticle`.

This file is typeset using in the preample the command `\documentclass[reviewcopy]{elsarticle}` which produces one-column layout with double line spacing for reviewing. *This is the format to be used for the version submitted for review!*

If you have not done so already, please read the *Information for Authors* published at the back of issues before beginning.

2. Section Title

This version is a prototype for an article with a long introduction which needs several numbered `\section` headings. Correct section numbering is obtained by using the command `\setcounter{secnumdepth}{3}` in the preamble.

In case your introductory text is short, use only one `\section` command, `\section{Introduction}`, and use `\subsection` commands to produce the remaining headings. Don't forget to change to `\setcounter{secnumdepth}{0}` in the preamble.

Taking into account what was said above, use as many sections, subsections, and subsubsections as you need. This is an example of section text.

2.1. Subsection Title

For example, this is a `\subsection`.

2.1.1. Subsubsection Title

This is a `\subsubsection`.

Paragraph Title. This is a named `\paragraph`. This is the lowest level of section headings.

3. Equations

Here are some sample equations. The LaTeX equation and math environments have been redefined in the `elsarticle.cls` document class, but this should not cause any difficulties.

The equations

$$p(t, x, y) = (2\pi t)^{-m/2} \exp(-|x - y|^2/2t) \tag{1}$$

and

$$e_k \leq c \cdot \begin{cases} 1 & \text{if} \quad 1 \leq k \leq \log n \\ \left(\frac{\log\left(\frac{n}{k}+1\right)}{k}\right)^{1/p-1/q} & \text{if} \quad \log n \leq k \leq n \\ 2^{-\frac{k-1}{n}} n^{1/q-1/p} & \text{if} \quad k \geq n \end{cases} \tag{2}$$

both fit in a single column and also in two-column format.

For references to the equations, use the command `\eqnref` in order to obtain the correct format for the journal style, as in Eq. 1 and 2. Below is an example of how to obtain subequation numbers and references to them.

$$\begin{aligned} \rho(\mathbf{r}, t) &= -e\psi_f^*(\mathbf{r}, t)\psi_i(\mathbf{r}, t) = \rho(\mathbf{r})e^{+i\omega t} , \\ \rho(\mathbf{R}, t) &= +e\Psi_f^*(\mathbf{R}, t)\Psi_i(\mathbf{R}, t) = \rho(\mathbf{R})e^{-i\omega t} , \qquad \text{(3a)} \\ \mathbf{J}(\mathbf{r}, t) &= \psi_f^*(\mathbf{r}, t)\hat{J}_{\text{el}}(\mathbf{r}, t)\psi_i(\mathbf{r}, t) = \mathbf{J}(\mathbf{r})e^{+i\omega t} , \\ \mathbf{J}(\mathbf{R}, t) &= \Psi_f^*(\mathbf{R}, t)\hat{J}_{\text{nucl}}(\mathbf{R}, t)\Psi_i(\mathbf{R}, t) = \mathbf{J}(\mathbf{R})e^{-i\omega t} . \qquad \text{(3b)} \end{aligned}$$

In Eq. 3 $\psi(\mathbf{r})$ and $\Psi(\mathbf{R})$ are the electron and proton wavefunctions in the initial (i) and final (f) states, and in Eq. 3b $\hat{J}_{\text{nucl}}$ is the proton current operator.

4. Reference Guidelines

For formatting of references, please see the Information for Authors in the journal or on the journal home page for samples of correct formatting. The references in this document give some guidelines for Atomic Data and Nuclear Data Tables.

Only references directly cited in the text will appear, such as [1, 2]. Numeric ranges are automatically compressed, like in [3–6].

Acknowledgments

The acknowledgments, if used, should be placed after all sections, but before appendixes. Produced with the `\ack` command.

Appendix

Text of the appendix. Numbered equations in appendixes have the section numbers attached to them:

$$\mathrm{div} \cdot \vec{\mathbf{B}} = 0 \tag{A.1}$$

A.1. This is also an appendix

Text of a subsection in appendix.

This is how an unnamed appendix looks. You must use the command `\section*{}` for a appendix without a title. Such an appendix doesn't produce an entry in the Table of Contents.

Note added in proof

A note added in proof, if there is one, should be the final text before the references.

References

[1] S. Raman, C. H. Malarkey, W. T. Milner, C. W. Nestor, Jr., P. H. Stelson, Atomic Data and Nuclear Data Tables 36 (1987) 1.

[2] I. M. Band, M. B. Trzhaskovskaya, Atomic Data and Nuclear Data Tables 55 (1993) 43.

[3] A. M. Lane, *Nuclear Theory* (Benjamin, New York, 1964) p. 80.

[4] G. R. Satchler, *Direct Nuclear Reactions* (Oxford Univ. Press (Clarendon), London, 1983) p. 599.

[5] A. Bohr, B. R. Mottelson, Mat. Fys. Medd. Dan. Vid. Selsk. 27 (1953).

[6] D. J. Rowe, *Nuclear Collective Motion* (Methuen, London, 1970) p. 21.

Figures

The figures that appear in the introduction text should follow the References in the review copy. Note how the optional argument `[ht!]` in the `figure` environment is used for forcing the placement of the figures.

Fig. 1: This is the caption for the first figure. This figure belongs to the introductory text.

Fig. 2: This is the caption for the second figure. This figure belongs also to the introductory text.

Fig. 3: This is the caption.

The figure above was included as follows (for details of the use of the `\includegraphics` command, see the documentation of the `graphicx` package):

```
\begin{figure}[ht!]
\begin{center}
\includegraphics{FigA}
\caption{This is the caption.}
\end{center}
\end{figure}
```

The tables that are part of the introductory material should be located after the figures, one table per page.

Table A
The logical structure that manuscripts to be submitted to ATOMIC DATA AND NUCLEAR DATA TABLES should follow.

Command	Explanation
`\begin{frontmatter}`	Titlepage material
`\title{ }`	Title of the article
`\author{ }`, `\address`,...	Author names, addresses etc.
`\date`	Manuscript version
`\begin{abstract}`...`\end{abstract}`	Text of the Abstract
`\end{frontmatter}`	Closes titlepage material
`\tableofcontents`	Contents
`\listofDtables`	List of Data Tables
`\listofDfigures`	List of Data Graphs
`\section{ }`	Sectioning
`\subsection{ }`	commands
⋮	Introductory text
`\ack`	Acknowledgements
`\begin{appendix}`...`\end{appendix}`	Appendixes
`\noteinproof`	Note added in proof
`\begin{thebibliography}`...`\end{...}`	References for text
`\section*{Figure captions}`	For figures
`\begin{figure}`...`\end{figure}`	in the text
`\begin{table}`...`\end{table}`	Tables in the text
`\TableExplanation`	For data tables
`\GraphExplanation`	For data graphs
`\datatables`	Initialization for
`\begin{longtable}`...`\end{longtable}`	long tables
`\begin{theDTbibliography}`...`\end{...}`	References for Data Tables

Explanation of Tables

The table captions and explanation of the symbols used in the tables must be given here. The use of the `\tabular` environment is recommended.

Please note that the explanations below are just examples and don't correspond to the tables that follow later in this template.

Table 1. Adopted values of $B(E2)\uparrow$ and related quantities

(Throughout this table, italicized numbers refer to the uncertainties in the last digits of the quoted values.)

Nuclide	The even Z, even N nuclide studied
E(level)	Energy of the first excited 2^+ state in keV either from a compilation or from current literature
$B(E2)\uparrow$	Reduced electric quadrupole transition rate for the ground state to 2^+ state transition in units of e^2b^2
τ	Mean lifetime of the state in ps $\tau = 40.81 \times 10^{13} E^{-5}[B(E2)\uparrow /e^2b^2]^{-1}(1+\alpha)^{-1}$ (see Table 4 for the α values when $\alpha > 0.001$)
β	Deformation parameter $\beta = (4\pi/3ZR_0^2)[B(E2)\uparrow /e^2]^{1/2}$, where $R_0^2 = (1.2 \times 10^{-13} A^{1/3}\mathrm{cm})^2$ $= 0.0144 A^{2/3}\mathrm{b}$
$\beta_{(\mathrm{sp})}$	β from the single-particle model $\beta_{(\mathrm{sp})} = 1.59/Z$
Q_0	Intrinsic quadrupole moment in b $Q_0 = \left[\frac{16\pi}{5}\frac{B(E2)\uparrow}{e^2}\right]^{1/2}$
EWSR(I)	$E \times B(E2)\uparrow$ expressed as a percentage of S(I) [see Eq. (4) with proton mass used for m] $S(\mathrm{I}) = 30e^2(\hbar^2/8\pi m)AR_0^2 = 7.13A^{5/3}$ keV·e^2b^2 [S(I) is the (nearly) model-independent sum-rule $E2$ strength]
EWSR(II)	$E \times B(E2)\uparrow$ expressed as a percentage of S(II) $S(\mathrm{II}) = S(\mathrm{I})(Z/A)^2$ [S(II) is the sum-rule isoscalar $E2$ strength]

Table 2. Dirac-Fock ICCs for all elements from Z=10 to Z=120

Z	Atomic number
A	Mass number
K, L_1, etc.	Atomic shell, subshell, etc.
E_γ	Gamma-ray energy in keV
Total	Sum of partial ICCs for all atomic shells

Table 3. Values of $B\left(E3; 0_1^+ \rightarrow 3_1^-\right)$ determined from miscellaneous procedures

	When given, the italicized numbers refer to the uncertainties in the last digits of the quoted values.
Nuclide	Even Z, even N nuclide studied
$B\left(E3; 0_1^+ \rightarrow 3_1^-\right)$	Reduced electric-octupole transition rate, in e^2b^3
Method	Method employed in the measurement
(d, d') $(\theta)(E)$	Semiempirical relationship between $B\left(E3; 0_1^+ \rightarrow 3_1^-\right)$ value and cross-section for (d, d') at angle $\theta°$ and bombarding energy E (in MeV)
$^{181}\mathrm{Ta}(p, 2n\gamma)^{180}\mathrm{W}$	Analysis of γ decay in $^{181}\mathrm{Ta}(p, 2n\gamma)^{180}\mathrm{W}$
γ	Model-dependent analysis of γ-ray transitions
(t, t'), (d, d'), (p, p'), $(^{17}\mathrm{O}, ^{17}\mathrm{O}')$	From cross section in (t, t'), (d, d'), (p, p') and $(^{17}\mathrm{O}, ^{17}\mathrm{O}')$ relative to ^{208}Pb, assuming $B\left(E3; 0_1^+ \rightarrow 3_1^-\right) = 0.611 \pm 0.009$ e^2b^3 for ^{208}Pb
References	References keyed to the list following Table 7

The multi-page data tables should be typeset using the `\longtable` environment. Note that there is no need to put any extra pagebreaks or horizontal lines manually, each table runs continuously from beginning to end. See the examples below.

Explanation of Graphs

Graph 1. Dirac-Fock ICCs for Selected Elements.

Z	Atomic number
K, L_1, etc.	Atomic shell, subshell, etc.
E_γ	Gamma-ray energy in keV

Graph 2. Another Graph showing Dirac-Fock ICCs for Selected Elements.

Z	Atomic number
K, L_1, etc.	Atomic shell, subshell, etc.
E_γ	Gamma-ray energy in keV

Although this template contains all its tables (and figures) it is possible to have separate files for the introductory text and the tables.

If you have the data tables in separate files, like 'table1.tex', 'table2.tex' etc., use the following form:

```
\include{table1}
\include{table2}
```

Table 1
Experimental Data on $B(E2)\uparrow$ Values. See page 8 for Explanation of Tables

$B(E2)\uparrow$ (e^2b^2)	τ(ps)	Method	Reference
$^{4}_{2}$He$_{2}$ 27420 *90* keV			
$^{6}_{2}$He$_{4}$ 1797 *25* keV			
$^{8}_{2}$He$_{6}$ 3590 *60* keV			
$^{10}_{2}$He$_{8}$ 3240 *200* keV			
$^{6}_{4}$Be$_{2}$ 1670 *50* keV			
$^{8}_{4}$Be$_{4}$ 3040 *30* keV			
$^{10}_{4}$Be$_{6}$ 3368.03 *3* keV			
0.0053 *6*	0.181 *21*	ADOPTED VALUE	
0.0061 *11*	0.160 *30*	Doppler Shift	1966Wa10
0.0050 *5*	0.189 *20*	Doppler Shift	1968Fi09
$^{12}_{4}$Be$_{8}$ 2102 *12* keV			
$^{14}_{4}$Be$_{10}$ 1590 *120* keV			
$^{10}_{6}$C$_{4}$ 3353.6 *7* keV			
0.0064 *10*	0.155 *25*	Doppler Shift	1968Fi09
$^{12}_{6}$C$_{6}$ 4438.91 *31* keV			
0.00397 *33*	0.060 *5*	ADOPTED VALUE	
0.0038 *7*	0.065 *12*	Reson Fluor	1958Ra14
0.0048 *6*	0.050 *6*	Doppler Shift	1961De38
0.0044 *15*	0.060 *20*	Doppler Shift	1966Wa10
0.0052 *11*	0.048 *10*	Doppler Shift	1967Ca02
0.0044 *6*	0.055 *7*	Doppler Shift	1968Ri16
0.0037 *5*	0.065 *9*	Doppler Shift	1970Co09
0.0035 *20*	0.10 *6*	Reson Fluor	1971Fa14
0.0055 *12*	0.045 *10*	Doppler Shift	1976Be64
0.0043 *13*	0.061 *18*	Doppler Shift	1980Li14
0.00411 *36*	0.058 *5*	Doppler Shift	1988Ku33
0.0041 *8*	0.060 *13*	Doppler Shift	1988Lu04
0.0047 *10*	0.053 *11*	Electron Scatt	1956He83
0.00406 *41*	0.059 *6*	Electron Scatt	1964Cr11
0.00386 *37*	0.062 *6*	Electron Scatt	1967Cr01
0.00397 *33*	0.060 *5*	Electron Scatt	1970St10
$^{14}_{6}$C$_{8}$ 7012 *4* keV			
0.00187 *25*	0.0131 *18*	Electron Scatt	1972CrZN
$^{16}_{6}$C$_{10}$ 1766 *10* keV			
$^{18}_{6}$C$_{12}$ 1620 *20* keV			
$^{14}_{8}$O$_{6}$ 6590 *10* keV			
$^{16}_{8}$O$_{8}$ 6917.1 *6* keV			
0.00406 *38*	0.0064 *6*	ADOPTED VALUE	
0.0023 *6*	0.0120 *30*	Reson Fluor	1957Sw17
0.0028 *8*	0.0100 *30*	Reson Fluor	1960Re05
0.00317 *27*	0.0082 *7*	Reson Fluor	1968Ev03
0.0043 *12*	0.0065 *18*	Doppler Shift	1970Co09
0.00432 *20*	0.00598 *27*	Reson Fluor	1970Sw03
0.00372 *40*	0.0070 *7*	Reson Fluor	1977La15
0.00368 *42*	0.0071 *8*	Electron Scatt	1968St04
0.00512 *36*	0.00506 *35*	Electron Scatt	1973Be49
0.00392 *16*	0.00658 *26*	Electron Scatt	1975Mi08
$^{18}_{8}$O$_{10}$ 1982.07 *9* keV			
0.00451 *20*	2.96 *13*	ADOPTED VALUE	
0.0037 *7*	3.7 *7*	Doppler Shift	1963Li07
0.0022 *10*	7.6 *35*	Doppler Shift	1964Es02
0.0049 *11*	2.9 *6*	Coul Ex (x,x′γ)	1967DeZW
0.0046 *14*	3.2 *10*	Coul Ex (x,x′γ)	1968An20
0.00412 *25*	3.25 *20*	Doppler Shift	1968LaZZ
0.00390 *40*	3.46 *35*	Coul Ex (x,x′)	1971HaXH
0.0048 *13*	3.0 *8*	Doppler Shift	1973Ol02
0.00374 *19*	3.58 *18*	Recoil Dist	1974Be25
0.00400 *24*	3.35 *20*	Recoil Dist	1974Mc17
0.00476 *19*	2.81 *11*	Doppler Shift	1975He25
0.00480 *20*	2.78 *12*	Coul Ex (x,x′)	1975Kl09
0.00447 *18*	2.99 *12*	Recoil Dist	1976As04

Table 1 (continued)

$B(E2)\uparrow$ (e^2b^2)		τ(ps)	Method	Reference
	0.00461 *19*	2.90 *12*	Recoil Dist	1976As07
	0.00453 *25*	2.95 *16*	Coul Ex (x,x′)	1977Fl10
	0.00432 *28*	3.10 *20*	Doppler Shift	1977LiZS
	0.00402 *14*	3.32 *12*	Coul Ex (x,x′γ)	1977Vo07
	0.00390 *18*	3.43 *16*	Coul Ex (x,x′)	1979Fe06
	0.00477 *12*	2.80 *7*	Doppler Shift	1982Ba06
	0.0051 *23*	3.3 *15*	Electron Scatt	1961La09
	0.00448 *13*	2.98 *9*	Electron Scatt	1982No04
$^{20}_{8}O_{12}$ 1673.68 *15* keV				
	0.00281 *20*	11.1 *8*	ADOPTED VALUE	
	0.00220 *13*	14.2 *8*	Recoil Dist	1975Be15
	0.00319 *23*	9.8 *7*	Doppler Shift	1977He12
	0.00291 *11*	10.70 *40*	Recoil Dist	1980Ru01
$^{22}_{8}O_{14}$ 3190 *15* keV				
	0.0021 *8*	0.69 *28*	Coul Ex (x,x′γ)	2000Th11
$^{16}_{10}Ne_{6}$ 1690 *70* keV				
$^{18}_{10}Ne_{8}$ 1887.3 *2* keV				
	0.0269 *26*	0.64 *6*	ADOPTED VALUE	
	0.034 *8*	0.53 *13*	Doppler Shift	1969Ro08
	0.028 *6*	0.63 *13*	Doppler Shift	1974Mc17
	0.0256 *23*	0.67 *6*	Doppler Shift	1976Mc02
	0.0125 *34*	1.47 *40*	Coul Ex (x,x′γ)	2000Ri15
$^{20}_{10}Ne_{10}$ 1633.674 *15* keV				
	0.0340 *30*	1.04 *9*	ADOPTED VALUE	
	0.057 *25*	0.76 *33*	Doppler Shift	1956De22
	0.041 *10*	0.91 *22*	Coul Ex (x,x′γ)	1959Al95
	0.047 *9*	0.77 *15*	Coul Ex (x,x′γ)	1960An07
	0.061 *19*	0.64 *20*	Doppler Shift	1961Cl06
	0.0288 *28*	1.23 *12*	Doppler Shift	1965Ev03
	0.030 *9*	1.25 *35*	Doppler Shift	1969An08
	0.0044 *10*	0.84 *20*	Doppler Shift	1969Gr03
	0.0540 *20*	0.650 *24*	Coul Ex (x,x′γ)	1969ScZV
	0.029 *5*	1.26 *24*	Doppler Shift	1969Th01
	0.048 *7*	0.75 *11*	Coul Ex (x,x′γ)	1970Na07
	0.031 *5*	1.15 *20*	Doppler Shift	1971Ha26
	0.0370 *30*	0.95 *8*	Coul Ex (x,x′γ)	1972Ol02
	0.0319 *30*	1.11 *10*	Coul Ex (x,x′γ)	1973ScWZ
	0.047 *12*	0.80 *20*	Recoil Dist	1975Ho15
	0.0322 *26*	1.10 *9*	Coul Ex (x,x′γ)	1977Sc36
	0.032 *7*	1.14 *24*	Doppler Shift	1982Sp02
	0.0280 *40*	1.28 *18*	Electron Scatt	1973Si31

Table 2
Dirac-Fock ICCs for all elements from $Z = 10$ to $Z = 120$. See page 8 for Explanation of Tables

E_γ	$E1$	$E2$	$E3$	$E4$	$E5$	$M1$	$M2$	$M3$	$M4$	$M5$
1	3.352E+03	1.695E+05	5.989E+06	3.559E+08	2.714E+10	3.845E+02	3.017E+05	1.729E+07	7.912E+08	6.103E+10
2	5.982E+02	1.315E+05	2.368E+07	4.274E+09	8.062E+11	5.276E+01	2.217E+04	5.087E+06	1.118E+09	2.506E+11
3	1.936E+02	3.988E+04	6.849E+06	1.168E+09	2.032E+11	1.598E+01	4.566E+03	9.384E+05	1.897E+08	3.903E+10
4	8.472E+01	1.527E+04	2.318E+06	3.453E+08	5.225E+10	6.881E+00	1.496E+03	2.608E+05	4.541E+07	7.995E+09
5	4.397E+01	6.975E+03	9.305E+05	1.217E+08	1.603E+10	3.600E+00	6.316E+02	9.464E+04	1.420E+07	2.161E+09
7	1.605E+01	2.037E+03	2.166E+05	2.253E+07	2.344E+09	1.370E+00	1.740E+02	2.017E+04	2.345E+06	2.769E+08
10	5.401E+00	5.252E+02	4.283E+04	3.388E+06	2.678E+08	4.998E−01	4.515E+01	3.883E+03	3.364E+05	2.949E+07
12	3.072E+00	2.586E+02	1.827E+04	1.248E+06	8.502E+07	3.005E−01	2.283E+01	1.674E+03	1.239E+05	9.266E+06
15	1.529E+00	1.074E+02	6.330E+03	3.593E+05	2.031E+07	1.624E−01	9.978E+00	5.997E+02	3.644E+04	2.234E+06
17	1.031E+00	6.524E+01	3.467E+03	1.772E+05	8.991E+06	1.154E−01	6.294E+00	3.378E+02	1.834E+04	1.005E+06
18	8.603E−01	5.192E+01	2.629E+03	1.281E+05	6.184E+06	9.880E−02	5.103E+00	2.601E+02	1.341E+04	6.979E+05
20	6.159E−01	3.402E+01	1.576E+03	7.018E+04	3.093E+06	7.428E−02	3.472E+00	1.608E+02	7.533E+03	3.562E+05
25	3.022E−01	1.380E+01	5.284E+02	1.941E+04	7.040E+05	4.081E−02	1.545E+00	5.837E+01	2.228E+03	8.584E+04
32	1.366E−01	5.044E+00	1.559E+02	4.616E+03	1.347E+05	2.121E−02	6.373E−01	1.918E+01	5.834E+02	1.789E+04
40	6.640E−02	2.017E+00	5.134E+01	1.248E+03	2.991E+04	1.183E−02	2.888E−01	7.078E+00	1.752E+02	4.369E+03
50	3.213E−02	8.037E−01	1.681E+01	3.357E+02	6.605E+03	6.643E−03	1.320E−01	2.638E+00	5.316E+01	1.078E+03
65	1.365E−02	2.713E−01	4.509E+00	7.147E+01	1.114E+03	3.402E−03	5.323E−02	8.378E−01	1.327E+01	2.116E+02
80	6.925E−03	1.148E−01	1.591E+00	2.103E+01	2.729E+02	2.017E−03	2.622E−02	3.421E−01	4.490E+00	5.927E+01
100	3.342E−03	4.557E−02	5.213E−01	5.676E+00	6.059E+01	1.159E−03	1.238E−02	1.324E−01	1.424E+00	1.539E+01
120	1.846E−03	2.148E−02	2.104E−01	1.959E+00	1.787E+01	7.414E−04	6.769E−03	6.170E−02	5.652E−01	5.199E+00
150	8.962E−04	8.614E−03	6.994E−02	5.390E−01	4.074E+00	4.328E−04	3.273E−03	2.464E−02	1.863E−01	1.412E+00
200	3.576E−04	2.696E−03	1.728E−02	1.051E−01	6.282E−01	2.194E−04	1.313E−03	7.785E−03	4.630E−02	2.755E−01
300	1.024E−04	5.528E−04	2.575E−03	1.144E−02	4.973E−02	8.690E−05	3.814E−04	1.649E−03	7.120E−03	3.077E−02
450	3.206E−05	1.258E−04	4.356E−04	1.445E−03	4.697E−03	3.597E−05	1.191E−04	3.864E−04	1.248E−03	4.025E−03
650	1.257E−05	3.769E−05	1.021E−04	2.666E−04	6.878E−04	1.689E−05	4.458E−05	1.148E−04	2.937E−04	7.493E−04
1000	4.979E−06	1.132E−05	2.389E−05	4.923E−05	1.004E−04	7.400E−06	1.553E−05	3.181E−05	6.454E−05	1.304E−04
2000	1.581E−06	2.568E−06	4.031E−06	6.233E−06	9.458E−06	2.264E−06	3.575E−06	5.547E−06	8.526E−06	1.295E−05

E_γ	$E1$	$E2$	$E3$	$E4$	$E5$	$M1$	$M2$	$M3$	$M4$	$M5$
1	1.537E+02	2.333E+04	2.366E+04	7.487E+09	1.604E+13	2.316E+01	3.522E+04	2.674E+07	1.905E+10	1.403E+13
2	2.762E+01	6.238E+03	9.579E+05	9.226E+07	8.401E+08	2.956E+00	1.782E+03	7.502E+05	3.093E+08	1.302E+11
3	9.308E+00	1.890E+03	3.022E+05	4.277E+07	5.158E+09	8.927E−01	3.287E+02	9.563E+04	2.778E+07	8.162E+09
4	4.167E+00	7.390E+02	1.067E+05	1.443E+07	1.847E+09	3.845E−01	1.013E+02	2.260E+04	5.054E+06	1.146E+09
5	2.200E+00	3.432E+02	4.406E+04	5.405E+06	6.435E+08	2.011E−01	4.120E+01	7.468E+03	1.357E+06	2.507E+08
7	8.215E−01	1.026E+02	1.064E+04	1.064E+06	1.050E+08	7.646E−02	1.086E+01	1.432E+03	1.898E+05	2.555E+07
10	2.818E−01	2.704E+01	2.168E+03	1.674E+05	1.284E+07	2.786E−02	2.721E+00	2.550E+02	2.412E+04	2.309E+06
12	1.615E−01	1.344E+01	9.362E+02	6.272E+04	4.175E+06	1.675E−02	1.356E+00	1.067E+02	8.483E+03	6.818E+05
15	8.109E−02	5.638E+00	3.286E+02	1.839E+04	1.020E+06	9.042E−03	5.842E−01	3.707E+01	2.383E+03	1.547E+05
17	5.489E−02	3.445E+00	1.811E+02	9.146E+03	4.569E+05	6.420E−03	3.658E−01	2.060E+01	1.174E+03	6.760E+04
18	4.589E−02	2.748E+00	1.377E+02	6.633E+03	3.157E+05	5.495E−03	2.958E−01	1.577E+01	8.506E+02	4.638E+04
20	3.296E−02	1.807E+00	8.294E+01	3.656E+03	1.591E+05	4.130E−03	2.002E−01	9.654E+00	4.707E+02	2.320E+04
25	1.627E−02	7.384E−01	2.806E+01	1.022E+03	3.673E+04	2.267E−03	8.834E−02	3.442E+00	1.356E+02	5.395E+03
32	7.396E−03	2.716E−01	8.349E+00	2.455E+02	7.115E+03	1.177E−03	3.616E−02	1.114E+00	3.470E+01	1.090E+03
40	3.607E−03	1.092E−01	2.765E+00	6.686E+01	1.595E+03	6.559E−04	1.629E−02	4.067E−01	1.026E+01	2.605E+02
50	1.752E−03	4.366E−02	9.101E−01	1.809E+01	3.545E+02	3.682E−04	7.415E−03	1.503E−01	3.073E+00	6.325E+01
65	7.464E−04	1.480E−02	2.452E−01	3.875E+00	6.021E+01	1.885E−04	2.979E−03	4.738E−02	7.589E−01	1.223E+01
80	3.795E−04	6.275E−03	8.682E−02	1.145E+00	1.481E+01	1.117E−04	1.464E−03	1.926E−02	2.550E−01	3.396E+00
100	1.835E−04	2.498E−03	2.852E−02	3.099E−01	3.301E+00	6.416E−05	6.898E−04	7.427E−03	8.040E−02	8.750E−01
120	1.015E−04	1.179E−03	1.153E−02	1.072E−01	9.762E−01	4.104E−05	3.767E−04	3.452E−03	3.180E−02	2.942E−01
150	4.933E−05	4.737E−04	3.841E−03	2.957E−02	2.232E−01	2.395E−05	1.819E−04	1.375E−03	1.044E−02	7.953E−02
200	1.971E−05	1.485E−04	9.509E−04	5.780E−03	3.451E−02	1.214E−05	7.286E−05	4.336E−04	2.587E−03	1.545E−02
300	5.651E−06	3.050E−05	1.420E−04	6.306E−04	2.740E−03	4.808E−06	2.114E−05	9.164E−05	3.965E−04	1.718E−03
450	1.771E−06	6.947E−06	2.406E−05	7.977E−05	2.593E−04	1.990E−06	6.599E−06	2.144E−05	6.933E−05	2.240E−04
650	6.945E−07	2.083E−06	5.645E−06	1.474E−05	3.802E−05	9.344E−07	2.468E−06	6.366E−06	1.630E−05	4.163E−05
1000	2.752E−07	6.261E−07	1.321E−06	2.723E−06	5.555E−06	4.093E−07	8.594E−07	1.762E−06	3.578E−06	7.235E−06
2000	8.737E−08	1.420E−07	2.229E−07	3.448E−07	5.235E−07	1.252E−07	1.978E−07	3.070E−07	4.721E−07	7.176E−07

E_γ	$E1$	$E2$	$E3$	$E4$	$E5$	$M1$	$M2$	$M3$	$M4$	$M5$
1	3.059E+01	2.439E+05	6.763E+08	1.019E+12	1.241E+15	9.751E−01	1.735E+03	2.052E+06	2.155E+09	2.152E+12
2	2.456E+00	7.085E+03	1.002E+07	8.572E+09	5.936E+12	1.065E−01	1.008E+02	6.834E+04	4.098E+07	2.302E+10
3	5.315E−01	8.892E+02	8.346E+05	4.997E+08	2.421E+11	2.892E−02	1.861E+01	8.896E+03	3.741E+06	1.479E+09
4	1.759E−01	2.026E+02	1.422E+05	6.534E+07	2.450E+10	1.139E−02	5.573E+00	2.055E+03	6.701E+05	2.039E+08
5	7.379E−02	6.415E+01	3.589E+04	1.339E+07	4.099E+09	5.514E−03	2.178E+00	6.542E+02	1.745E+05	4.332E+07
7	1.955E−02	1.128E+01	4.475E+03	1.215E+06	2.724E+08	1.837E−03	5.243E−01	1.153E+02	2.257E+04	4.116E+06
10	4.680E−03	1.776E+00	4.890E+02	9.468E+04	1.517E+07	5.699E−04	1.149E−01	1.812E+01	2.540E+03	3.326E+05

Table 2 (continued)

E_γ	$E1$	$E2$	$E3$	$E4$	$E5$	$M1$	$M2$	$M3$	$M4$	$M5$
12	2.237E−03	6.891E−01	1.574E+02	2.561E+04	3.452E+06	3.125E−04	5.271E−02	7.008E+00	8.279E+02	9.136E+04
15	9.015E−04	2.159E−01	3.927E+01	5.158E+03	5.631E+05	1.495E−04	2.028E−02	2.185E+00	2.094E+02	1.869E+04
17	5.403E−04	1.125E−01	1.803E+01	2.098E+03	2.035E+05	9.876E−05	1.186E−02	1.135E+00	9.668E+01	7.668E+03
18	4.275E−04	8.356E−02	1.263E+01	1.391E+03	1.278E+05	8.170E−05	9.282E−03	8.412E−01	6.793E+01	5.103E+03
20	2.773E−04	4.827E−02	6.558E+00	6.526E+02	5.426E+04	5.759E−05	5.906E−03	4.843E−01	3.542E+01	2.409E+03
25	1.106E−04	1.510E−02	1.637E+00	1.314E+02	8.840E+03	2.743E−05	2.265E−03	1.504E−01	8.910E+00	4.910E+02
32	3.985E−05	4.179E−03	3.533E−01	2.238E+01	1.191E+03	1.206E−05	7.840E−04	4.123E−02	1.935E+00	8.453E+01
40	1.582E−05	1.311E−03	8.869E−02	4.537E+00	1.953E+02	5.734E−06	3.007E−04	1.281E−02	4.873E−01	1.729E+01
50	6.282E−06	4.126E−04	2.237E−02	9.247E−01	3.227E+01	2.725E−06	1.155E−04	3.988E−03	1.232E−01	3.549E+00
65	2.125E−06	1.067E−04	4.471E−03	1.441E−01	3.937E+00	1.137E−06	3.758E−05	1.016E−03	2.462E−02	5.561E−01
80	9.047E−07	3.684E−05	1.261E−03	3.344E−02	7.544E−01	5.704E−07	1.551E−05	3.462E−04	6.937E−03	1.295E−01
100	3.634E−07	1.186E−05	3.274E−04	7.062E−03	1.299E−01	2.723E−07	6.016E−06	1.097E−04	1.795E−03	2.737E−02
120	1.736E−07	4.742E−06	1.100E−04	2.009E−03	3.135E−02	1.491E−07	2.788E−06	4.317E−05	6.005E−04	7.781E−03
150	7.097E−08	1.565E−06	2.943E−05	4.398E−04	5.630E−03	7.159E−08	1.096E−06	1.394E−05	1.594E−04	1.700E−03
200	2.289E−08	3.848E−07	5.560E−06	6.454E−05	6.446E−04	2.800E−08	3.335E−07	3.317E−06	2.967E−05	2.485E−04
300	4.899E−09	5.699E−08	5.754E−07	4.747E−06	3.406E−05	7.610E−09	6.464E−08	4.617E−07	2.984E−06	1.802E−05
450	1.140E−09	9.342E−09	6.714E−08	4.031E−07	2.123E−06	2.133E−09	1.323E−08	6.970E−08	3.333E−07	1.490E−06
650	3.329E−10	2.023E−09	1.089E−08	5.012E−08	2.045E−07	6.982E−10	3.333E−09	1.368E−08	5.105E−08	1.792E−07
1000	8.978E−11	3.936E−10	1.554E−09	5.393E−09	1.694E−08	1.997E−10	7.248E−10	2.291E−09	6.649E−09	1.829E−08
2000	1.503E−11	4.169E−11	1.072E−10	2.548E−10	5.644E−10	3.152E−11	7.855E−11	1.768E−10	3.732E−10	7.489E−10

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References in the data tables may be either those given in the introductory material or a separate list given following the tables. An example of the formatting that could be used is shown above. This list of references for the tables should begin on a new page.

Graph 1. Dirac-Fock ICCs for Selected Elements.

Graph 2. Another Graph showing Dirac-Fock ICCs for Selected Elements.