

Errata

Method of Correlated Basis Functions, JOHN W. CLARK AND PAUL WESTHAUS [Phys. Rev. **141**, 833-857 (1966)].

(1) On p. 837, 2nd column, line 34, replace "up to" by "through".

(2) On p. 838, Eq. (II.4), insert the factor $\exp\{\beta[H_1(1)+H_1(2)+H_1(3)]\}$ at the end of the first line of the integrand employed in the definition of I_{ijk} .

(3) On p. 845, Eq. (III.7) must be modified to take account of the fact that the orbitals in which \mathbf{p} differs from \mathbf{m} and \mathbf{n} need not occur in the first two places, i.e., need not be p_1 and p_2 . However, the correct result is generated by H^{eff} .

(4) On p. 846, 2nd column, line 40, replace " $c_{\kappa}^{\dagger}, c_{\kappa}$ " by " $a_{\kappa}^{\dagger}, a_{\kappa}$ ".

(5) On p. 847, replace line 1 by "where the U matrices are to be determined from the requirement that, at least to within a factor -1 (see below)".

(6) On p. 847, line 4, replace " $Q=1, \dots 4$ " by " $Q=2, 3, 4$ ".

(7) On p. 847, line 15, replace " $[\mathcal{Q}_{\delta_{\{\kappa\lambda\mu\nu\},\{\kappa'\lambda'\mu'\nu'\}}}] + (1 - \delta_{\{\kappa\lambda\mu\nu\},\{\kappa'\lambda'\mu'\nu'\}})]$ " by " $\mathcal{Q}(\kappa\lambda\mu\nu, \kappa'\lambda'\mu'\nu')$ " alone. Explicit reference to $\mathcal{Q}(\kappa\lambda\mu\nu, \kappa'\lambda'\mu'\nu')$ may be eliminated and equivalent results obtained by the further replacement of $\mathcal{Q}(\kappa\lambda\mu\nu, \kappa'\lambda'\mu'\nu')$ with $(1 - \delta_{\{\kappa, \lambda\}, \{\kappa', \lambda'\}}) \times (1 - \delta_{\{\mu, \nu\}, \{\mu', \nu'\}})$.

(8) On p. 847, in the last two sentences, replace "diagonal elements $\mathfrak{S}_{\mathbf{m}\mathbf{n}}$; the step function . . . in the Appendix." by "matrix elements $\mathfrak{S}_{\mathbf{m}\mathbf{n}}$ with \mathbf{m} and \mathbf{n} differing in less than four orbitals. [See the last of (II.7).]".

(9) On p. 848, 1st column, in the sentence beginning in line 38, replace "Thus . . . must attach" by "Then . . . obtain $H_{\mathbf{m}\mathbf{n}}$ of Sec. III multiplied by". In this same sentence, replace "in Sec II . . . energy ordering." by "for the single-particle states in the Slater determinants to this energy ordering."

(10) On p. 850, add this final paragraph to Sec. IV:

Indeed, for an infinite medium, $H_{\mathbf{m}\mathbf{n}}$ and, manifestly, H^{eff} are *invariant as a whole* under the transformation from one translationally invariant V to another. This invariance, in fact, appears to hold *order by order in ω* . (The corresponding invariance of $\mathfrak{S}_{\mathbf{m}\mathbf{n}}$ could be added to the list of invariance properties examined in the Appendix.) Of course, the

component of H^{eff} that is selected as the unperturbed Hamiltonian in the perturbation calculation may well depend on V , so that successive approximations of physical quantities such as energy may not in practice possess this V invariance. At any rate, when in the following section we discuss the asset of the flexibility introduced into the method by the freedom in the choice of V , we are anticipating the extension of the present treatment to *finite systems*.

(11) On p. 852, replace the sentence beginning in the last main-text line of the 1st column by "However, the only contributions to E which appear immediately susceptible to practical evaluation are those labeled (0,0), (1,0), and (0,2).⁶⁸ (Note there is no first order perturbative correction to E in the Feshbach scheme.)".

Total Cross Sections and Angular Distributions of the $C^{12}(\text{Li}^6, p)\text{O}^{17}$, $C^{12}(\text{Li}^6, d)\text{O}^{16}$, and $C^{12}(\text{Li}^6, \alpha)\text{N}^{14}$ Reactions from 4.5 to 5.5 MeV, D. W. HEIKKINEN [Phys. Rev. **141**, 1007 (1966)]. Due to omission of a scale factor of $\frac{1}{10}$ the values of A_L/A_0 given in the paper are 10 times too large. This does not affect the quoted total cross sections or averaged cross sections in Table II.

I would like to thank T. G. Dzubay for finding this inconsistency.

Recoil-Free Absorption Hyperfine Spectra of the 90-keV Mixed Transition in Ru^{99} , O. C. KISTNER [Phys. Rev. **144**, 1022 (1966)]. Several misprints appear in the equations at the top of the right-hand column on p. 1026. The second and third equations should read:

$$I(\theta)_{\Delta m = \pm 1} = \frac{3}{4}(1 + \cos^2\theta) |C(J_1 1 J_0; m_1, \mp 1, m_0)|^2 \\ \mp \frac{1}{2}(\sqrt{15}) \cos\varphi (\cos^2\theta + \cos 2\theta) \\ \times C(J_1 1 J_0; m_1, \mp 1, m_0) \\ \times C(J_1 2 J_0; m_1, \mp 1, m_0) |\delta| \\ + (5/4)(\cos^2\theta + \cos^2 2\theta) \\ \times |C(J_1 2 J_0; m_1, \mp 1, m_0)|^2 \delta^2,$$

$$I(\theta)_{\Delta m = \pm 2} = (5/4)(\sin^2\theta + \frac{1}{4}\sin^2 2\theta) \\ \times |C(J_1 2 J_0; m_1, \mp 2, m_0)|^2 \delta^2.$$

In the abstract, the two values given for g_1 should have a negative sign. (The sign is correctly given in the text.)