

ERRATUM

Volume **127**, Number 2 (1996), in the article “Calculation of the Addition Coefficients in Electromagnetic Multisphere-Scattering Theory,” by Yu-lin Xu, pages 285–298: The conclusion on page 292 that Cruzan’s original formulas [Eqs. (50), (52), and (53)] lead to $B_{mn\mu\nu}^{lj} \equiv 0$ is incorrect. Multiplied by a factor of $E_{mn}^{\mu\nu}$ [see Eq. (81)], Cruzan’s original formulas should read

$$\begin{aligned}
 A_{mn\mu\nu}^{lj} &= (-1)^m \frac{(2\nu + 1)(n + m)!(\nu - \mu)!}{2n(n + 1)(n - m)!(\nu + \mu)!} \exp[i(\mu - m)\phi_{lj}] \\
 &\quad \times \sum_{q=0}^{q_{\max}} i^q [n(n + 1) + \nu(\nu + 1) - p(p + 1)] \\
 &\quad \times a(-m, n, \mu, \nu, p) z_p(kd_{lj}) P_p^{\mu-m}(\cos \theta_{lj}), \tag{1}
 \end{aligned}$$

$$\begin{aligned}
 B_{mn\mu\nu}^{lj} &= (-1)^{m+1} \frac{(2\nu + 1)(n + m)!(\nu - \mu)!}{2n(n + 1)(n - m)!(\nu + \mu)!} \exp[i(\mu - m)\phi_{lj}] \\
 &\quad \times \sum_{q=1}^{\Theta_{\max}} i^{p+1} \{[(p + 1)^2 - (n - \nu)^2][(n + \nu + 1)^2 - (p + 1)^2]\}^{1/2} \\
 &\quad \times b(-m, n, \mu, \nu, p + 1, p) z_{p+1}(kd_{lj}) P_{p+1}^{\mu-m}(\cos \theta_{lj}), \tag{2}
 \end{aligned}$$

where

$$\begin{aligned}
 a(-m, n, \mu, \nu, p) &= (-1)^{\mu-m} (2p + 1) \left[\frac{(n - m)!(\nu + \mu)!(p + m - \mu)!}{(n + m)!(\nu - \mu)!(p - m + \mu)!} \right]^{1/2} \\
 &\quad \times \begin{pmatrix} n & \nu & p \\ -m & \mu & m - \mu \end{pmatrix} \begin{pmatrix} n & \nu & p \\ 0 & 0 & 0 \end{pmatrix}, \tag{3}
 \end{aligned}$$

$$\begin{aligned}
 b(-m, n, \mu, \nu, p + 1, p) &= (-1)^{\mu-m} (2p + 3) \left[\frac{(n - m)!(\nu + \mu)!(p + m - \mu + 1)!}{(n + m)!(\nu - \mu)!(p - m + \mu + 1)!} \right]^{1/2} \\
 &\quad \times \begin{pmatrix} n & \nu & p + 1 \\ -m & \mu & m - \mu \end{pmatrix} \begin{pmatrix} n & \nu & p \\ 0 & 0 & 0 \end{pmatrix}, \tag{4}
 \end{aligned}$$

and

$$\begin{aligned}
 p &= n + \nu - 2q, & q_{\max} &= \min[n, \nu, (n + \nu - |m - \mu|)/2], \\
 \Theta_{\max} &= \min[n, \nu, (n + \nu + 1 - |m - \mu|)/2]. \tag{5}
 \end{aligned}$$

These equations provide numerical results identical to those of Eqs. (82) and (83).

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