Erratum: Simple Method for Obtaining Electron Scattering Phase Shifts from Energies of an Atom in a Cavity [Phys. Rev. Lett. 96, 073202 (2006)]

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Equation (4) in the Letter contains misprints. The correct version is given below.

$$\Sigma_{ij}(\varepsilon_0) = \sum_{kcmn} \frac{(-1)^{j_m+j_n-j_i-j_c}}{(2j_i+1)(2k+1)} \frac{X_k(icmn)Z_k(mnjc)}{\varepsilon_0+\varepsilon_c-\varepsilon_m-\varepsilon_n} + \sum_{kbcn} \frac{(-1)^{j_i+j_n-j_b-j_c}}{(2j_i+1)(2k+1)} \frac{X_k(inbc)Z_k(bcjn)}{\varepsilon_0+\varepsilon_n-\varepsilon_b-\varepsilon_c}. \quad (4)$$

All presented results remain unaffected.

Several references have to be added with respect to Eq. (3), which was used to convert energies to phase shifts. In 1960, Percival [1] derived an equation [Eq. (26)] showing the relation between phase shifts and energy spectrum in a box. In 1984, Alhassid and Koonin [2] reintroduced a similar energy-phase shift conversion equation in the context of single-channel (potential) scattering in a formulation restricted to a single-particle potential $V(r)$, s wave, and lowest quasicontinuum energy. This idea is used for estimates of scattering phase shifts in Monte Carlo calculations [3] and for estimates of scattering phase shifts from available literature energies [4].

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