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Erratum: "How accurate is the strongly orthogonal geminal theory in predicting excitation energies? Comparison of the extended random phase approximation and the linear response theory approaches" [J. Chem. Phys. 140, 014101 (2014)]

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In the original publication[1] the expression for elements of the **A** and **B** matrices, Eq. (A1) in the Appendix, is mistaken. The correct form reads

$$\begin{aligned}
\forall_{\substack{p\neq q\\ r\neq s}} \quad B_{pq,rs} = A_{pq,sr} &= (n_p - n_q)(\delta_{ps}h_{qr} - \delta_{qr}h_{ps}) \\
&+ (c_p c_s \delta_{I_p I_s} + c_q c_r \delta_{I_q I_r})(\langle pq|rs\rangle + \langle pq|sr\rangle) \\
&+ [n_p n_s(1-\delta_{I_p I_s}) + n_q n_r(1-\delta_{I_q I_r}) - n_p n_r(1-\delta_{I_p I_r}) - n_q n_s(1-\delta_{I_q I_s})]\,\langle pr||qs\rangle \\
&- \delta_{qr}c_p \sum_t \delta_{I_p I_t} c_t\,\langle ps|tt\rangle - \delta_{ps}c_q \sum_t \delta_{I_q I_t} c_t\,\langle qr|tt\rangle - \delta_{pr}c_r \sum_t \delta_{I_r I_t} c_t\,\langle qs|tt\rangle - \delta_{qs}c_s \sum_t \delta_{I_s I_t} c_t\,\langle pr|tt\rangle \\
&+ \delta_{ps}\sum_t n_t[n_p(1-\delta_{I_p I_t}) - n_q(1-\delta_{I_q I_t})]\,\langle qt||rt\rangle - \delta_{qr}\sum_t n_t[n_p(1-\delta_{I_p I_t}) - n_q(1-\delta_{I_q I_t})]\,\langle pt||st\rangle\,,
\end{aligned}$$

where

$$\langle pq||rs\rangle = 2\,\langle pq|rs\rangle - \langle pq|sr\rangle\,.$$

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