Erratum: Analytic static structure factors and pair-correlation functions for the unpolarized homogeneous electron gas [Phys. Rev. B 61, 7353 (2000)]

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Two misprints have been found in Eqs. (33) and (44). They do not affect our results and they are not present in the fortran subroutine available at http://axtnt2.phys.uniroma1.it/PGG/elegas.html. The corrected equations are, respectively,

$$\alpha_6^{\uparrow\downarrow}=(a^{\uparrow\downarrow})^3\left\{\alpha_4^{\uparrow\downarrow}\left(-\frac{11}{a^{\uparrow\downarrow}}-\frac{512}{21}q_F\right)-\frac{2048}{21\pi}\left[\frac{1}{3}+\sum_{n=1}^{6}c_n^{\uparrow\downarrow}\frac{(n+2)!}{(b^{\uparrow\downarrow})^{n+3}}\right]\right\},$$

$$\alpha_8^{\uparrow\uparrow}=\frac{2048}{3\pi}(a^{\uparrow\uparrow})^5\sum_{n=1}^{6}\frac{c_n^{\uparrow\uparrow}}{(b^{\uparrow\uparrow})^{n+3}}\left[(n+2)!-\frac{5(n+4)!}{11(a^{\uparrow\uparrow}b^{\uparrow\uparrow})^2}\right]+\frac{4096}{33\pi}(a^{\uparrow\uparrow})^3-\alpha_6^{\uparrow\uparrow}(a^{\uparrow\uparrow})^3\left(\frac{2560q_F}{33}+\frac{26}{a^{\uparrow\uparrow}}\right).$$

We are very grateful to Martin Vogt for checking all our formulas and for pointing out the two misprints.

Also, in the paper it has been assumed that Eqs. (12), (13), and (14) are exact beyond the random-phase approximation (RPA). Our further studies showed that this is only approximately true in the density range under consideration: there is a correction beyond RPA, which, however, turns out to be almost negligible for $r_s \lesssim 10$. Useful discussions on these equations with Gaetano Senatore are acknowledged.

