

Erratum: Tunable negative permeability in a quantum plasmonic metamaterial **[Phys. Rev. A 89, 013822 (2014)]**

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Here we correct some typographical errors which were mistakenly made in the published version of our paper. First, the numerical value of the plasma frequency ω_p below Eq. (5) should be given by $\omega_p = 2\pi \times 2175$ THz. Second, the Ohmic damping of the metal nanoparticle γ_{nr} below Eqs. (7) and (A3) should be given by $\gamma_{nr} = \gamma + \frac{\gamma^3(2\epsilon_b + \epsilon_\infty)}{\omega_p^2}$. Third, the radiative emission rate γ_r below Eq. (7) should be given by $\gamma_r = \frac{2k^3\omega_0 r^3 \epsilon_b^2}{\epsilon_\infty + 2\epsilon_b}$. Fourth, the plasmonic field annihilation operator $\langle \hat{a} \rangle$ in Eq. (10) should be given by

$$\langle \hat{a} \rangle = \frac{g\langle \hat{\sigma} \rangle}{i\Delta_0 + \frac{\gamma_0}{2}} + \frac{i\chi E_0}{\hbar(i\Delta_0 + \frac{\gamma_0}{2})}. \quad (10)$$

Fifth, in Appendix A, the dipole moment of the metal nanoparticle p_{MNP} in Eq. (A2) should be given by

$$p_{\text{MNP}} = 4\pi\epsilon_0\epsilon_b r^3 \left(\frac{\epsilon_m(\omega) - \epsilon_b}{\epsilon_m(\omega) + 2\epsilon_b} \right) \left(E_0 + \frac{Sp_{\text{QD}}}{4\pi\epsilon_0\epsilon_b d^3} \right). \quad (A2)$$

Sixth, in Appendix A, the quantum expectation value of the MNP electric field $\langle \hat{E}_m \rangle$ in Eq. (A6) should be given by

$$\langle \hat{E}_m \rangle = \frac{i\hbar g^2 \langle \hat{\sigma} \rangle}{\mu(i\Delta_0 + \frac{\gamma_0}{2})} + \frac{-g\chi E_0}{\mu(i\Delta_0 + \frac{\gamma_0}{2})}. \quad (A6)$$

Nevertheless, all the results and the associated discussion of the paper are still correct.