Erratum: Qualitative explanation for the Schäfer-Hubert effect: A boundary effect at the crossroads of magneto-optics and near-field optics [Phys. Rev. A 77, 033818 (2008)]

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An error was made in Eq. (9); the correct expression [1] is

$$\theta_{\mathrm{SHT}} \sim -\frac{\partial m_x}{\partial x} + \frac{\partial m_y}{\partial y} \propto \sin\frac{\omega}{2}\cos(\alpha+\gamma).$$

In the derivation of this equation in Appendix B, the proper transformations, $\Delta x = d/\cos\gamma$ and $\Delta y = d/\sin\gamma$, result in Eq. (B1) without a singularity in the angular dependence,

$$\begin{aligned}\theta_{\mathrm{SHT}} &\sim -\frac{\partial m_x}{\partial x} + \frac{\partial m_y}{\partial y} \\ &\simeq \frac{2m}{d}\sin\frac{\omega}{2}(-\cos\alpha\cos\gamma + \sin\alpha\sin\gamma) \\ &= -\frac{2m}{d}\sin\frac{\omega}{2}\cos(\alpha+\gamma).\end{aligned}$$

The conclusions described in Sec. VII are maintained as it was. In the previous sections, the following three parts are based on the incorrect Eq. (9) and should be omitted:

(i) The following sentence in the last part in Sec. II; "As I will indicate in Sec. V, the formula derived in these two papers is physically unacceptable because the rotation angle diverges in certain cases."

(ii) The entire column of θ_{SHT}. (This omission is because of the correct relationship $\theta_{\mathrm{SHT}} = \theta_{\mathrm{SH}}$ [1].)

(iii) The sentences below Eq. (9) within that paragraph.

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[1] V. Kambersky and R. Schäfer, Phys. Rev. A **84**, 013815 (2011).

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