CORRECTION

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Correction: Dielectric metalens for miniaturized imaging systems: progress and challenges

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After the publication of this article[1], it is brought to our attention that some mathematical expressions contained errors. Details are listed below.

1. In the paragraph below Eq. (1) on p.3, the expression of the root mean square of WAF contains a typo, which should be: $\mathrm{WAF_{rms}} = \sqrt{\langle \mathrm{WAF} \rangle^2 - \langle \mathrm{WAF}^2 \rangle}$.

2. In the paragraph at the end of p.12, the expression illustrating the relation between time delay and group delay needs to be changed as: $\Delta T(r) = GD(r) - GD(R)$.

3. The correct expression related to the Bode–Fano limit (at the end of p.13) should be: $\Delta \omega_{\max} = -2\pi c / [\log|\Gamma| H(n_{\mathrm{eff}}^2 - n_b^2)]$.

4. We are correcting Eq. (5) on p. 8, Eq. (7) on p. 12, and Eq. (9) on p. 13, where the refractive index of background (n_b) was missing. According to Eq. (1)

in the article[1], the correct form of these equations should be:

$$\varphi(r, \lambda, \theta_i) = -\frac{2\pi n_b}{\lambda} \left(r \sin \theta_i + \sqrt{(r - f \tan \theta_i)^2 + f^2} - \frac{f}{\cos \theta_i} \right) \quad (5)$$

$$GD(r) = \frac{\partial \varphi(r, \omega)}{\partial \omega} = \frac{n_b}{c} \left(f - \sqrt{r^2 + f^2} \right) \quad (7)$$

$$\Delta \omega \leq \Delta \omega_{\max} = \frac{\kappa c}{n_b \left(\sqrt{f^2 + R^2} - f \right)} = \frac{\kappa c \sqrt{1 - (NA/n_b)^2}}{n_b f \left[1 - \sqrt{1 - (NA/n_b)^2} \right]} \quad (9)$$

We would like to apologize for any inconvenience these errors may have caused.
The original article has been updated.

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Reference
1. Pan, M., Fu, Y. & Zheng, M. et al. Dielectric metalens for miniaturized imaging systems: progress and challenges. *Light Sci. Appl.* **11**, 195, https://doi.org/10.1038/s41377-022-00885-7 (2022).