Journal of Biomedical Optics

SPIEDigitalLibrary.org/jbo

Errata: Localization capability and limitation of electron-multiplying charge-coupled, scientific complementary metal-oxide semiconductor, and charge-coupled devices for superresolution imaging

Tingwei Quan
Shaoqun Zeng
Zhen-Li Huang

Errata: Localization capability and limitation of electron-multiplying charge-coupled, scientific complementary metal-oxide semiconductor, and charge-coupled devices for superresolution imaging

Tingwei Quan,^{a,b} Shaoqun Zeng,^a and Zhen-Li Huang^a

^aWuhan National Laboratory for Optoelectronics-Huazhong University of Science and Technology, Britton Chance Center for Biomedical Photonics, Wuhan 430074, China

^bHubei University of Education, College of Mathematics and Economics, Wuhan 430205, China

[DOI: [10.1117/1.JBO.17.4.049801](https://doi.org/10.1117/1.JBO.17.4.049801)]

This article [*J. Biomed. Opt.* **15**(6), 066005 (2010)] was originally published online on Nov. 19, 2010 with an error in Eqs. (12) and (20). These equations contain errors in the factor of the second term. The error was due to the reason that electron multiplication process to background noise was not being fully included into the equation. The corrected form of these identical equations is

$$\langle \Delta x^2 \rangle = \frac{2s^2 + a^2/12}{\phi N} + \frac{16\pi s^4(\phi I_b)}{a^2(\phi N)^2}.$$

The correction has a negligible effect on Fig. 6, but has no effect on the remainder of the manuscript.