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Errata: Stochastic modeling in lithography: autocorrelation behavior of catalytic reaction–diffusion systems

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This article [*J. Micro/Nanolith. MEMS MOEMS* **8**, 029701 (2009)] was originally published online 18 June 2009 with two errors. Equation (6) for the two-dimensional reaction-diffusion point spread function is missing a 2 in the denominator. The correct equation is

$$2\text{-}D\text{: } R_{\mathrm{PSF}}(r) = -\frac{1}{2\pi\sigma_D^2} Ei\left(-\frac{r^2}{2\sigma_D^2}\right),$$

$$r = (x^2 + y^2)^{1/2}.$$

Also, Fig. 1 shows the numerical evaluation of the reaction-diffusion autocorrelation function for the 1-D, 2-D, and 3-D cases. Unfortunately, an error in the algorithm used to perform the 2-D and 3-D numerical convolutions needed to generate the 2-D and 3-D autocorrelation functions was in error. When performed correctly, the calculations for the 2-D and 3-D cases produce the exact same results as for the 1-D case. Thus, the 1-D curve shown in Fig. 1 is correct, and the 2-D and 3-D curves should fall exactly on top of the 1-D curve.

Likewise, Table 1 shows the results of fitting these three curves to a function. The fitting parameters obtained for the 1-D case are correct, and the 2-D and 3-D cases should be identical to the 1-D case.