

Erratum: Cell size distribution in random tessellations of space
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The correct form of Eq. (20) of the original article should have been

$$f_{\tau}^{*}(s) = \frac{s}{E_{\tau}(s)} f_{\tau}(s), \quad (20)$$

where $f_{\tau}^{*}(s)$ is defined as the probability density function that a point randomly chosen in the fraction of space occupied by crystals nucleated at time τ (τ crystals) belongs to a crystal of size s . As a probability density function, $f_{\tau}^{*}(s)$ would have to be normalized, which was not the case in the original article. With this change in definition, $f_{\tau}^{*}(s)$ is now normalized and the correct forms of Eqs. (21) and (22) are

$$\text{var}_{\tau}(s) = E_{\tau}^{*}(s)E_{\tau}(s) - [E_{\tau}(s)]^2 \quad (21)$$

and

$$\nu_{\tau} = \left(\frac{E_{\tau}^{*}(s)}{E_{\tau}(s)} - 1 \right)^{-1} = \left(\frac{\rho_{\tau} E_{\tau}^{*}(s)}{x_{\tau}} - 1 \right)^{-1}. \quad (22)$$

The term x_{τ} in Eq. (20) of the paper, which is the probability that a random chosen point in the whole tessellation belongs to the space fraction occupied by τ crystals, drops out of the equation if we restrict the possible chosen points only to the space occupied by these τ crystals.

On the other hand, the correct form of Eq. (28) should be

$$x_{\tau} E_{\tau}^{*}(s) = \frac{D \pi^{D/2}}{\Gamma(D/2 + 1)} \int_0^{\infty} P_{\tau}(b) b^{D-1} db. \quad (28)$$

$P_{\tau}(b)$ is the probability that two points separated by a distance b belong to the same τ crystal. The integration of this probability in Eq. (28) gives the expected value corresponding to the probability that a random chosen point in the whole tessellation belongs to a τ crystal of size s . This mean size is the expected value of $f_{\tau}^{*}(s)$, as defined here, multiplied by the probability x_{τ} that the random chosen point falls in the space occupied by τ crystals.

The combination of the two corrections holds the validity of the calculations presented in the original article. One can check easily that the substitution of the values obtained from the integration of Eq. (28) in Eq. (22) leads to the same result in both the original and corrected equations. However, the modifications presented here are necessary because the original definition of $f_{\tau}^{*}(s)$ in Eq. (20) did not lead to the expressions given in the original Eqs. (21) and (22).

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