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Corrigendum: Exciton dynamics in conjugated polymer systems

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KEYWORDS

transient delocalization, exciton dynamics, Anderson localization, conjugated polymers, exciton diffusion, exciton-polaron

A Corrigendum on
Exciton dynamics in conjugated polymer systems

by Barford W (2022). Front. Phys. 10:1004042. doi: 10.3389/fphy.2022.1004042

In the published article, there was an error in Eq. 41 and the associated sentence.

A correction has been made to **5. Intrachain exciton motion,** *5.1 Solvent dynamics* [Paragraph Number 6]. This sentence previously stated:

"As a consequence of these Brownian fluctuations the monomer rotations are characterized by the autocorrelation function [88],

$$\langle \delta\phi(t)\delta\phi(0)\rangle = \langle \delta\phi^2\rangle\left(\cos(\omega_{rot}t) + \left(\frac{\gamma}{2\omega_{rot}}\right)\sin(\omega_{rot}t)\right)\exp(-\gamma t/2),$$

where $\langle \delta\phi^2\rangle = k_BT/K_{rot}$, K_{rot} is the stiffness, and $\omega_{rot} = (K_{rot}/I)^{1/2}$ is the angular frequency of the torsional mode."

The corrected sentence appears below:

"As a consequence of these Brownian fluctuations the monomer rotations are characterized by the autocorrelation function [88],

$$\langle \delta\phi(t)\delta\phi(0)\rangle = \langle \delta\phi^2\rangle\left(\cos(\omega t) + \left(\frac{\gamma}{2\omega}\right)\sin(\omega t)\right)\exp(-\gamma t/2), \quad (41)$$

where $\langle \delta\phi^2\rangle = k_BT/K_{rot}$, K_{rot} is the stiffness, $\omega = (\omega_{rot}^2 - \gamma^2/4)^{1/2}$, and $\omega_{rot} = (K_{rot}/I)^{1/2}$ is the angular frequency of the torsional mode."

The author apologizes for this error and states that this does not change the scientific conclusions of the article in any way. The original article has been updated.

Publisher's note