Erratum: “Predicting the influence of long-range molecular interactions on macroscopic-scale diffusion by homogenization of the Smoluchowski equation” [J. Chem. Phys. **140**, 174106 (2014)]

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We have updated Figure 3 to reflect the Hashin-Shtrikman (HS) bound¹ for diffusion in a lattice of uniformly spaced spheres, as opposed to bound for cylinders presented in the original article² (see Figure 1). Our submitted version plotted the HS bound incorrectly (plotted was $D = 1/(3 - \phi)$, whereas $D = 2/(3 - \phi)$ should have been shown). The updated Figure 3 shows the appropriate agreement between our computational estimates for hindered diffusion in a lattice of neutral, spherical proteins with the HS bound for spheres. As the change only involved the plotted analytical bound and not our original data, we can affirm that our analysis and conclusion is in no way impacted by this correction. All other figures and content are correct.

FIG. 1. Effective diffusion constant, D , for coions (red), counterions (blue), and neutral diffusers (black) for a unit cell with a 12.5 Å negatively charged, spherical protein. Attractive counterion/protein interactions have faster diffusion relative to neutral and negatively charged diffusers. Inclusion of attractive van der Waals interactions (+VDW) through the homogenized Smoluchowski equation with a DLVO potential increases the effective diffusion constants.

¹Z. Hashin and S. Shtrikman, “Conductivity of polycrystals,” *Phys. Rev.* **130**(1), 129 (1963).

²P. M. Kekeneshuskey, A. K. Gillette, and J. A. McCammon, “Predicting the influence of long-range molecular interactions on macroscopic-scale diffusion by homogenization of the Smoluchowski equation,” *J. Chem. Phys.* **140**(17), 174106 (2014).

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