Erratum: Towards a Unified Description of the Rheology of Hard-Particle Suspensions [Phys. Rev. Lett. 115, 088304 (2015)]

B. M. Guy, M. Hermes, and W. C. K. Poon
(Received 22 December 2015; published 2 February 2016)

DOI: [10.1103/PhysRevLett.116.059901](https://doi.org/10.1103/PhysRevLett.116.059901)

The graph of onset stress σ^* versus particle diameter d , Fig. 2 in the original Letter, contains a set of literature measurements that has been inadvertently plotted twice, once as Ref. [15] [P. D’Haene, J. Mewis, and G. G. Fuller, *J. Colloid Interface Sci.* 156, 350 (1993)] and again as Ref. [16] [L. N. Krishnamurthy, N. J. Wagner, and J. Mewis, *J. Rheol.* 49, 1347 (2005)]. We have removed the second instance of the data and the revised figure is shown in Fig. 1, below.

The correct values of the fitting parameters for the least-squares fit are $\alpha = -1.9(2)$ and $B = 3 \times 10^{-11} \text{ J m}^{-1.1}$. The caption of Fig. 2 in the original Letter should, therefore, read as follows: “[...] The solid line is a least-squares fit to a power

FIG. 1. Onset stress σ^* versus particle diameter d for PHSA-stabilized PMMA spheres in this and previous [9,14,15,17–19] work. The solid line is a least-squares fit to a power law $\sigma^* = Bd^\alpha$, with $B = 3 \times 10^{-11} \text{ J m}^{-1.1}$ and $\alpha = -1.9(2)$.

FIG. 2. Rheology in the granular size regime. The figure caption is as in the original Letter.

law $\sigma^* = Bd^\alpha$, with $B = 3 \times 10^{-11} \text{ J m}^{-1.1}$ and $\alpha = -1.9(2)$.”; the penultimate paragraph on page 088304-3 should read “We find, Fig. 2, that σ^* decreases with particle size as $\sigma^* \simeq Bd^\alpha$ with $B = 3 \times 10^{-11} \text{ J m}^{-1.1}$ and $\alpha = -1.9(2)$.”; and the final paragraph on page 088304-3 should read “[...] a constant force f^* is needed to push particles into frictional contact: $\sigma^* \simeq f^*/d^2$ with $f^* = 3k_B T/\text{nm}$.”

There is an error in the position of the vertical line marking the onset stress σ^* in Fig. 1(d) in the original Letter. A corrected version of the figure is shown in Fig. 2, below. The expression for the high-viscosity branch $\eta_2(\phi)$ in the caption of Fig. 1 in the original Letter is also incorrect, and should be $\eta_2(\phi) = A(\phi_m - \phi)^{-n}$. These corrections do not change any of the conclusions of the Letter.