

ERRATA

**Erratum: Elasticity of Poissonian fiber networks
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Equations (3), (4), and (7) contain an unnecessary approximation in the determination of the elastic energy. The more accurate expressions are

$$\begin{aligned}
 W = & \frac{Ew^2}{2} \epsilon_x^2 q \frac{L_x L_y}{L_f} \int_{-\pi/2}^{\pi/2} \frac{\cos^4(\theta)}{\pi} d\theta \int_0^{l_c} \frac{2q}{\pi L_f} \frac{l}{\hat{l}} \exp\left(\frac{-2ql}{\pi L_f}\right) dl \\
 & + \frac{Gw^2}{2} \epsilon_x^2 q \frac{L_x L_y}{L_f} \int_{-\pi/2}^{\pi/2} \frac{\cos^2(\theta) \sin^2(\theta)}{\pi} d\theta \int_0^{l_c} \frac{2q}{\pi L_f} \frac{l}{\hat{l}} \exp\left(\frac{-2ql}{\pi L_f}\right) dl \\
 & + \frac{Ew^4}{2} \epsilon_x^2 q \frac{L_x L_y}{L_f} \int_{-\pi/2}^{\pi/2} \frac{\cos^2(\theta) \sin^2(\theta)}{\pi} d\theta \int_{l_c}^{\infty} \frac{2q}{\pi L_f} \frac{l}{\hat{l}} \exp\left(\frac{-2ql}{\pi L_f}\right) dl,
 \end{aligned} \tag{3}$$

$$E_e = \frac{Ew^2 q}{8L_f} \left[\left(\frac{2qw}{\pi L_f} \right)^2 E_1(z) + \left(3 + \frac{1}{2(1+\nu)} \right) [1 - e^{-z}(z+1)] \right], \tag{4}$$

and

$$E_r(z) = z_l \left[\frac{z^2}{2(1+\nu)} E_1(z) + \left(3 + \frac{1}{2(1+\nu)} \right) [1 - e^{-z}(z+1)] \right]. \tag{7}$$

These modified equations mean that the analytical results of the paper are slightly changed, and that Figs. 4–7 in which the model and the numerical simulations are compared should also be slightly modified. The modified figures are given below. Also the fitted parameter l_c will now be slightly different. It is $l_c = (0.8w + 0.043) \sqrt{2(1+\nu)}$. These corrections are rather of a formal nature and do not alter in any way the conclusions of the original paper.

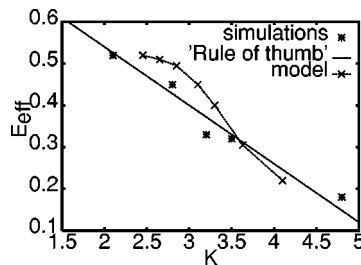


FIG. 4. E_{eff} as a function of K . Values are given by Eq. (4) (model), published finite-element simulations (simulations), and the ‘‘rule of thumb’’ of Ref. [5].

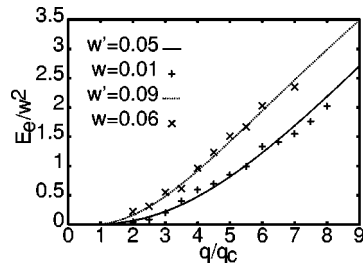


FIG. 5. A comparison of the model results (lines) with w' fitted and the simulation results (markers); $w=0.01, 0.06$, and $w'=0.05, 0.09$.

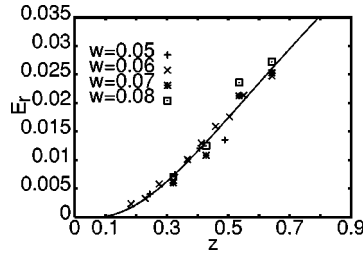


FIG. 6. E_r vs z as given by Eq. (7), and simulation results for $w=0.05, 0.06, 0.07, 0.08$.

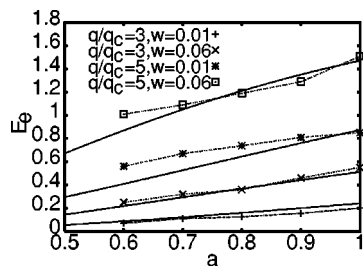


FIG. 7. E_e vs bonding probability a ; $q/q_c=3, 5$, and $w=0.01, 0.06$.