$$
\begin{aligned}
\gamma_0 &= \frac{\kappa^2}{3} - \frac{1}{6}\sqrt{\eta^{4/3} + 24(1+\nu)\kappa^2 + 16\kappa^4} \\
a &= \frac{\eta^{4/3}}{12} + \frac{6(1+\nu) - \eta^{2/3}}{3}\kappa^2 + \frac{\kappa^4}{3} + \tilde{a}_2\Sigma_e \\
b &= 3(1+\nu)\kappa^3 \\
c &= \frac{2(1+\nu)\eta^{2/3}}{3}c_1 + (1+\nu)\kappa^4 \\
\Gamma_1 &= \frac{1+\nu}{2}\kappa \\
\Gamma_2 &= \frac{1+\nu}{2}\kappa^2 \\
\tilde{a}_2 &= -\frac{\eta^{4/3}(c + 3|\gamma_0|\Gamma_2)}{48\gamma_0^2}
\end{aligned}
$$

TABLE I: List of parameters for Eq. (1) in units $h = 1$, with $\eta = 3E_s/E_f$, $\gamma_2 = 1/12$, $\Sigma_e = (\sigma/\sigma_c) - 1$ and $\kappa = h/R$. The only remaining fitting parameter of the model is c_1.