Publisher's Note: Loading-unloading hysteresis loop of randomly rough adhesive contacts
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This paper was published online on 8 December 2015 with errors in Figs. 6 and 7 and their captions. Figures 6 and 7 have been replaced and their captions corrected as of 20 April 2016. The figures and their captions are incorrect in the printed version of the journal; therefore for the benefit of the print readership, the figures and their captions are replicated below.

FIG. 6. The true contact area A/A_0 as a function of the dimensionless quantity $m_2^{-1/2}\tilde{\sigma}$ for two different Hurst exponents $H = 0.8$ ($m_2 = 2.7 \times 10^{-3}$), $H = 0.9$ ($m_2 = 1.5 \times 10^{-3}$), and for three different values of energy of adhesion, $\gamma = 0.01$ J/m² (black curves), $\gamma = 0.04$ J/m² (blue curves), and $\gamma = 0.07$ J/m² (red curves). As predicted by the theories, there is a marginal influence of the fractal dimension on the true contact area at small loads under loading conditions. The influence of D_f becomes important during unloading. This leads to the formation of a hysteresis loading-unloading loop, which is strongly affected by the adhesion energy γ .

FIG. 7. The dimensionless load $\tilde{\sigma} = 2\sigma/(E^*q_0h_{\max})$ (a) and the quantity A/A_0 (b) as a function of the nondimensional penetration $\tilde{\Delta}$, for two different Hurst exponents $H = 0.8$ ($m_2 = 2.7 \times 10^{-3}$), $H = 0.9$ ($m_2 = 1.5 \times 10^{-3}$), and for three different values of energy of adhesion, $\gamma = 0.01$ J/m² (black curves), $\gamma = 0.04$ J/m² (blue curves), and $\gamma = 0.07$ J/m² (red curves).