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Erratum: Instantaneous frequency and amplitude identification using wavelets: Application to glass structure [Phys. Rev. E 66, 026703 (2002)]

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We regret that it has come to our attention that some typographical errors appeared in the paper in the description of the new mother wavelet function and associated normalization expressions.

The correct expressions for the mother wavelet function are (the equation numbers refer to those in the original paper)

$$\psi(t;\sigma) = e^{-t^2/2} \{ p(\sigma) [\cos(\sigma t) - \kappa(\sigma)] + iq(\sigma) \sin(\sigma t) \}, \tag{5}$$

$$p(\sigma) = \pi^{-1/4} (1 + 3e^{-\sigma^2} - 4e^{-3\sigma^2/4})^{-1/2},$$
(6a)

$$q(\sigma) = \pi^{-1/4} (1 - e^{-\sigma^2})^{-1/2}.$$
 (6b)

The variance of the Gaussian approximation to the envelope of the mother wavelet is

$$\sigma_{\psi}^{2}(\sigma) = \frac{1}{4}\sqrt{\pi}\left\{q^{2}\left[1 + (2\sigma^{2} - 1)e^{-\sigma^{2}}\right] + p^{2}\left\{\left[1 + (3 - 2\sigma^{2})e^{-\sigma^{2}}\right] - 2(2 - \sigma^{2})e^{-3\sigma^{2}/4}\right\}\right\}. \tag{11}$$

With this formulation, the remainder of the paper is correct and all results are unaffected.

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