

$$\left(\mathbf{P}_{\text{RF}}(\mathbf{q}, \mathbf{0})^m + \left(\frac{1 - \exp(-(\hat{\mathbf{a}}\mathbf{q})^2)}{1 + \mathbf{L}\mathbf{q}^2/\pi} \right)^m \right)^{1/m}$$