

**Erratum: Computing the Kubo formula for large systems**  
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Tsuneyoshi Nakayama and Hiroyuki Shima

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Equation (22) gives the imaginary part of the generalized susceptibility for a system with real matrix elements. For complex elements, Eq. (22) should read

$$\begin{aligned} \chi''_{\alpha\beta}(\omega) = & \frac{\pi}{\hbar} \sum_{\lambda} \operatorname{Re}[\langle \omega_{\lambda 0} | \hat{x}_{\alpha} | \omega_{\lambda} \rangle \langle \omega_{\lambda} | \hat{x}_{\beta} | \omega_{\lambda 0} \rangle] \{ \delta(\omega_{\lambda\lambda 0} - \omega) - \delta(\omega_{\lambda\lambda 0} + \omega) \} \\ & - \frac{1}{\hbar} \operatorname{P} \sum_{\lambda} \operatorname{Im}[\langle \omega_{\lambda 0} | \hat{x}_{\alpha} | \omega_{\lambda} \rangle \langle \omega_{\lambda} | \hat{x}_{\beta} | \omega_{\lambda 0} \rangle] \left( \frac{1}{\omega_{\lambda\lambda 0} - \omega} - \frac{1}{\omega_{\lambda\lambda 0} + \omega} \right), \end{aligned} \quad (1)$$

where the symbol P means the principal value integral. Equation (27) is expressed, using the above Eq. (1), by

$$\sigma_{\alpha\beta}(\omega) = \frac{2}{\omega L^d} \sum_{\omega_{\lambda 0}} \chi''_{\alpha\beta}(\omega) f(\omega_{\lambda 0}). \quad (2)$$