

FIG. 5. Argand diagram of transition amplitude for  $e + \text{H}_2 \rightarrow \text{H} + \text{H}^-$ . The solid circles denote the electron collision energies  $E_k$  where the peaks of the total cross sections occur. The open circles are placed at an interval of 0.01 eV. For (a)  $v = 0$ , the peak position is located at  $E_k = 3.77$  eV; for (b)  $v = 1$ , the peak position is located at  $E_k = 3.30$  eV; and for (c)  $v = 2$ , the peak position is located at  $E_k = 2.77$  eV. The Argand diagram is plotted in an arbitrarily normalized scale.