

instantaneous current

At a dropping electrode, the total current that flows at the instant when a time t has elapsed since the fall of the preceding drop. At any other electrode, the total current that flows at the instant when a time t has elapsed since the beginning of an electrolysis. The instantaneous current is usually time-dependent and may have the character of an adsorption, catalytic, diffusion, double-layer, or kinetic current, and may include a migration current. A plot of the dependence of instantaneous current on time is commonly called an ' i - t curve'.

Source:

PAC, 1985, 57, 1491 (*Recommended terms, symbols, and definitions for electroanalytical chemistry (Recommendations 1985)*) on page 1496