Supporting Information.

**Figure S1.** Variation of the normalized tip current with the tip scan rate. Tip diameter: $2a = 50$ µm. Each symbol corresponds to one set of experiments. Line corresponds to simulated variations (see [Error! Bookmark not defined.]) for an SECM tip of RG=5.
Figure S2. Variation of the pattern width obtained from condensation figures (or ellipsometric microscopy for nitrobenzene at 1, 100, 200 and 400 μm/s) with the tip scan rate and the redox mediator reductive strength. Tip diameter: $2a = 50 \, \mu m$. 