

Berichtigung

With sincere regret, we would like to inform the readers that our recent Communication quoted from Nishizawa and co-workers^[1] without marking it as such. This refers in particular to the first two sentences of our paper. In addition, phrases in lines 20–30 and 66–71 are very similar to parts of references [1] and [2] without indication of their origin.

Moreover, we would like to emphasize that the scientific concept of the electrochemical drawing of cell-adhesive regions, which enables the multipatterning of different cells, was proposed and demonstrated for the first time by Nishizawa and co-workers in reference [2]. This statement was deleted in the process of shortening the manuscript and was not reinserted, and our claim of introducing an alternative strategy (lines 73–76) is misleading. References [1] and [2] were cited as reference [1] in our Communication only in the context of a side aspect of the study.

The reports by Nishizawa and co-workers in references [1] and [2] describe the local generation of HBrO (or Br₂) in a scanning electrochemical microscopy (SECM) configuration to alter a cell-repellent surface that consists of a physisorbed serum albumin layer on a glass support.^[1] Subsequently, adhesion and motility of HeLa cells could be observed at these regions.^[2] The method could be used for stepwise introduction of new HeLa cell populations.^[2] The local oxidative treatment of surfaces by a bromide oxidation pulse in an SECM apparatus was already introduced much earlier by Mandler and Bard^[3] and since then has been used for many surface modifications.

Our Communication described the use of chemisorbed oligoethylene glycol terminated alkanethiols that are bound as a self-assembled monolayer to a gold support. Such layers are frequently used as a standard surface that resists protein adsorption and cell adhesion. We demonstrated that the monolayer can be switched to allow protein adsorption and cell adhesion by local treatment with Br₂ as described in references [1] and [2]. We used the permeability change of the self-assembled monolayer during the patterning to characterize the modified surfaces by feedback imaging in SECM. In this way, we could characterize independently the extent of the modified area (which is not identical) after Br₂ treatment, after the adsorption of proteins, and after cell adhesion.

Finally, we reemphasize our regret at this oversight and wish to give full credit to Nishizawa and co-workers for the idea of using a local oxidative treatment to lift the cell-repellent properties of surfaces through the recent improvements and applications that they have described.^[4–6]

Switching On Cell Adhesion with
Microelectrodes

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