

Highlight of a Hot Article in Volume 34, Number 2 (p. 127)**Simple Formation of Cell Arrays Embedded in Hydrogel Sheets and Cubes**Takatomo SUGANO, Yui SASAKI, Fumio MIZUTANI, and Tomoyuki YASUKAWA[†]

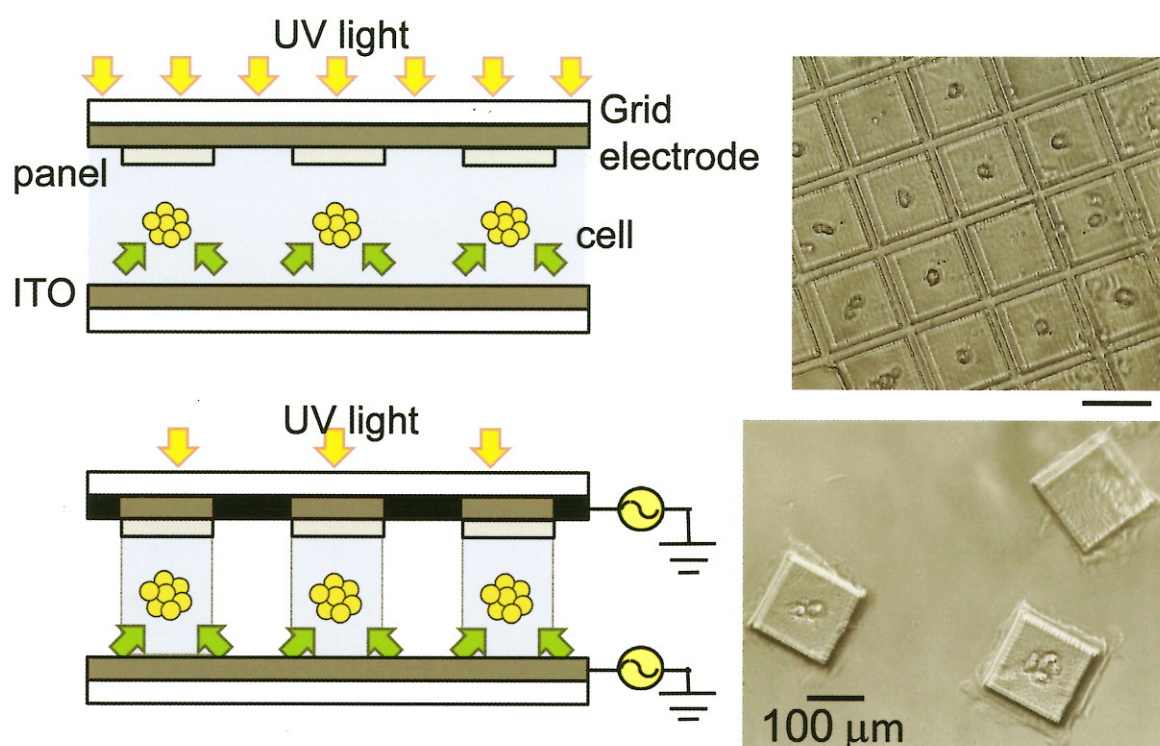
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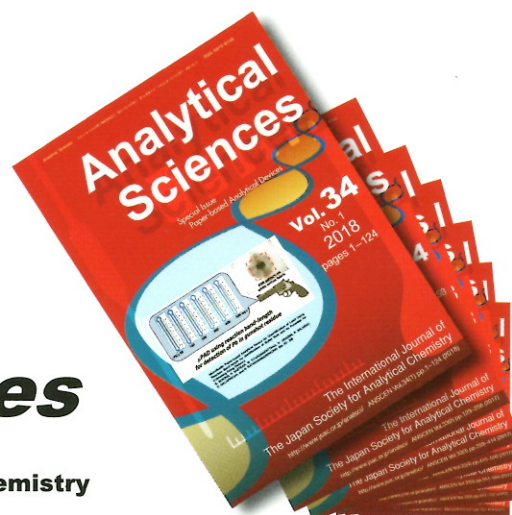
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Arrays with cell aggregations and single-cell arrays embedded in hydrogel sheets were fabricated by negative dielectrophoretic (n-DEP) cell-manipulation techniques and hydrogel gelation. Cells suspended randomly in a prepolymer solution were rapidly manipulated to form an island-like organization of cells through the repulsive force of n-DEP by using a DEP device consisting of grid electrodes. The cell patterns were retained by irradiating ultraviolet (UV) light so as to urge gelation. Moreover, control of the optical transparency of the grid electrode allows for the fabrication of cubes with single cells and cell aggregation.

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