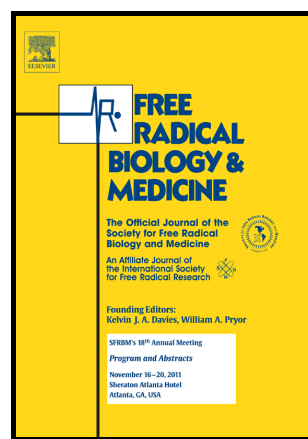


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LAURDAN fluorescence and phasor plots reveal the effects of a H₂O₂ bolus in NIH-3T3 fibroblast membranes dynamics and hydration.

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Abstract

Fluorescence spectroscopy, coupled with microscopy, opens new frontiers for the study of dynamic processes with high spatio-temporal resolution. The application of phasor plots to FLIM and hyperspectral imaging demonstrate unprecedented capabilities to study complex photophysics at the subcellular level. Using these approaches we studied the effects of an H₂O₂ bolus on NIH-3T3 membranes dynamics monitored by LAURDAN fluorescence. Exposure of NIH-3T3 cells to a bolus of H₂O₂ modifies the cell membranes and, in particular, the plasma membrane in a complex manner. The LAURDAN results reveal that the peroxide treatment decreases membrane fluidity but

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