

## SUPPORTING INFORMATION

### The Role of Humic Acid Aggregation on the Kinetics of Photosensitized Singlet Oxygen Production and Decay.

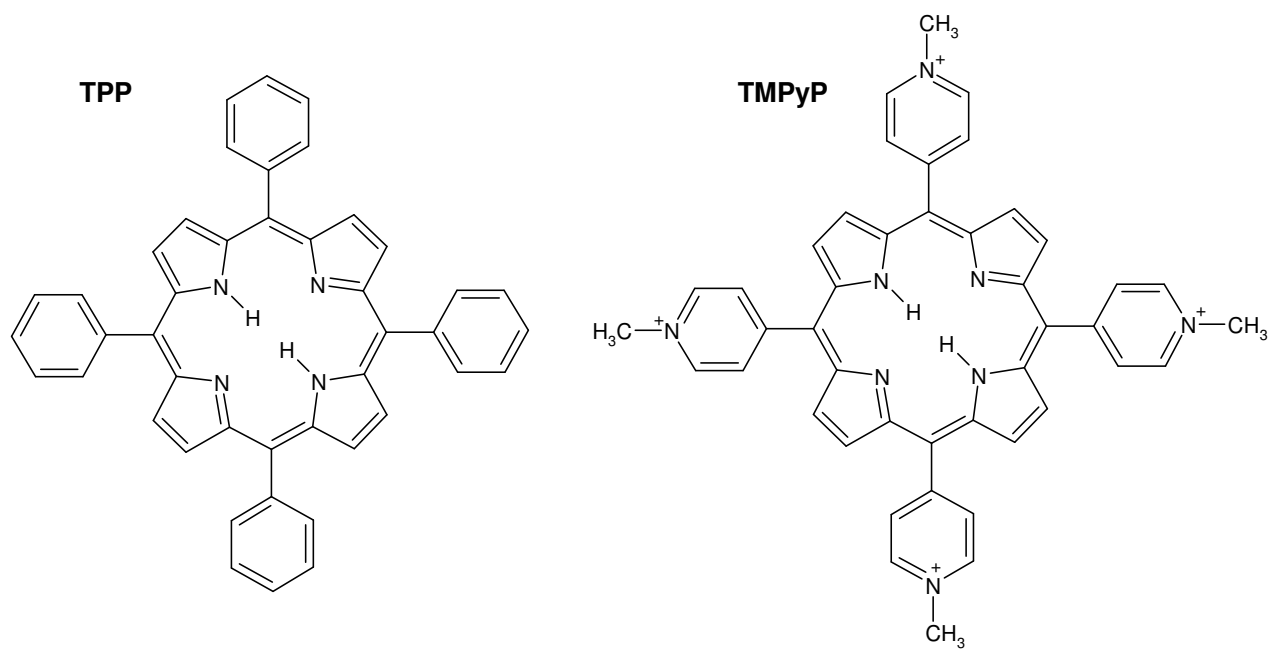
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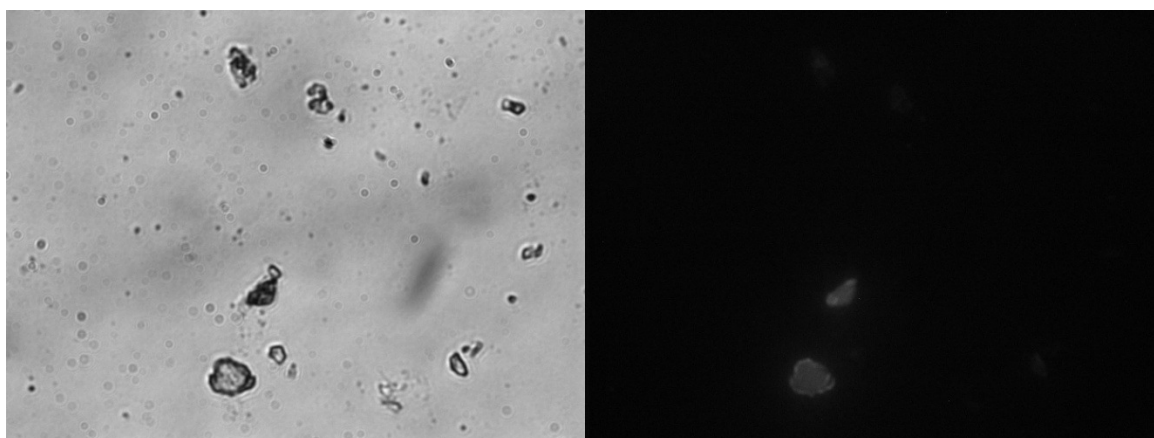
Number of Figures: 9

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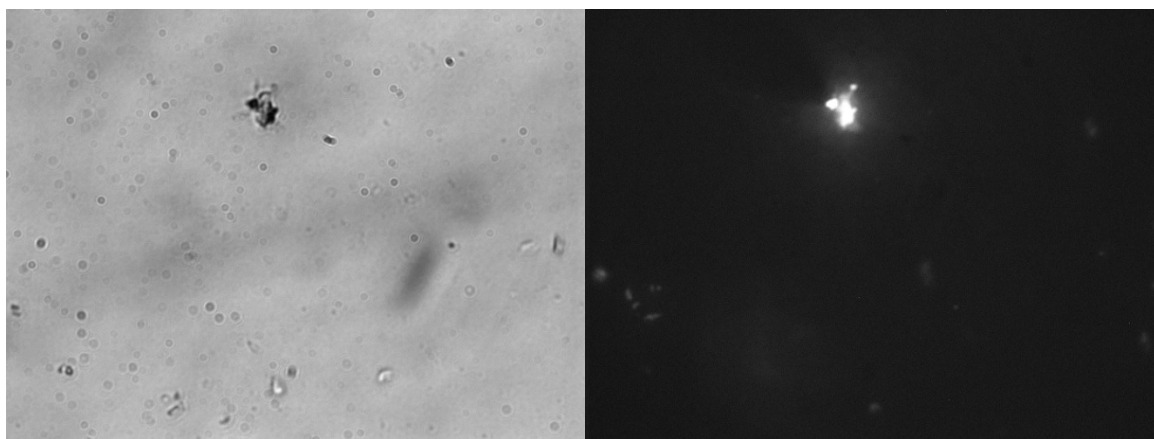
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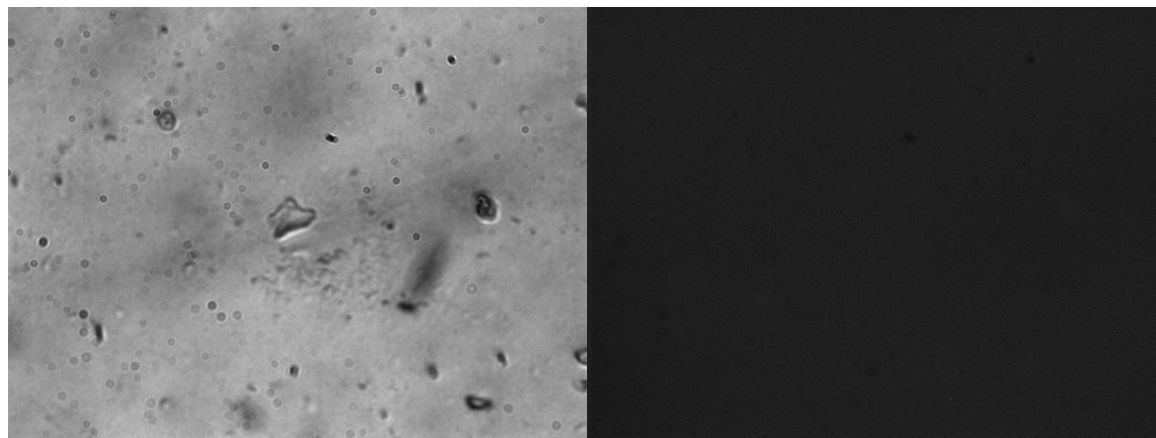
**Figure S1.** Structure of the porphyrins used as independent  $O_2(a^1\Delta_g)$  sensitizers in this study.



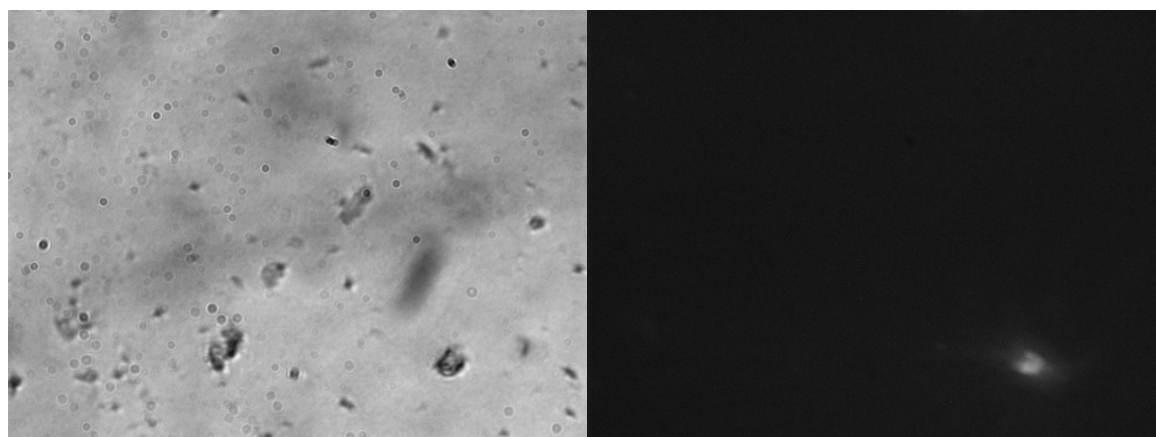
**Figure S3.** Bright-field (left) and fluorescence (right) images of the HA aggregates containing TMPyP washed with D<sub>2</sub>O.



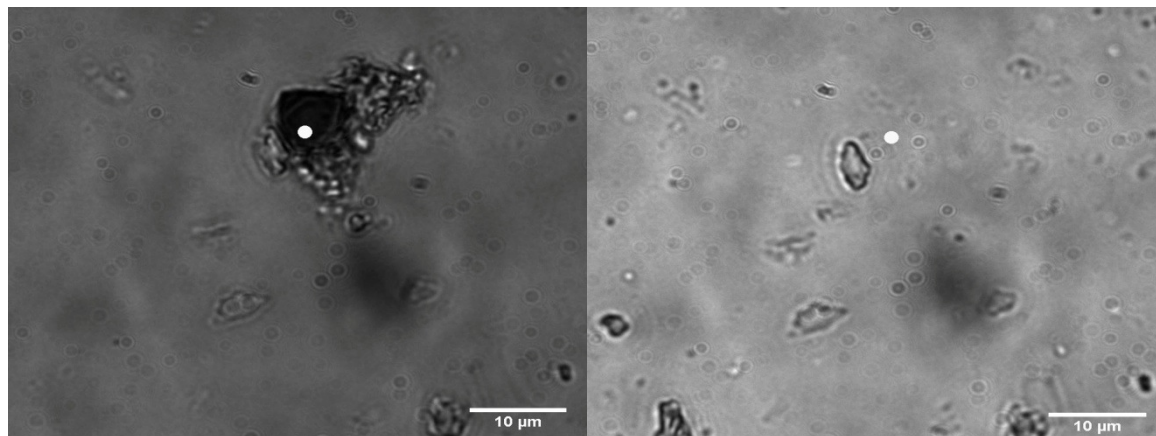
**Figure S4.** Bright-field (left) and fluorescence (right) images of the HA aggregates containing TPP washed with D<sub>2</sub>O.



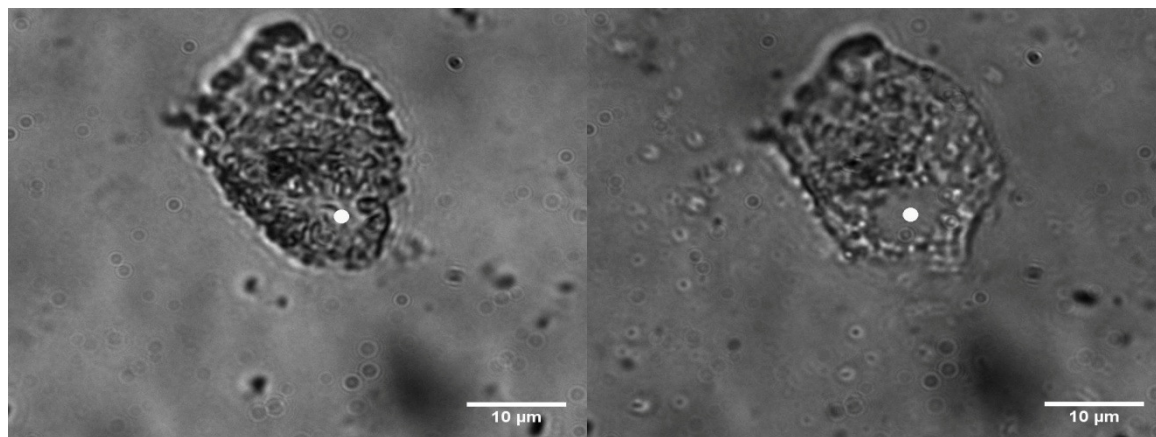
**Figure S5.** Bright-field (left) and fluorescence (right) images of the HA aggregates containing TMPyP washed with HA dispersion.



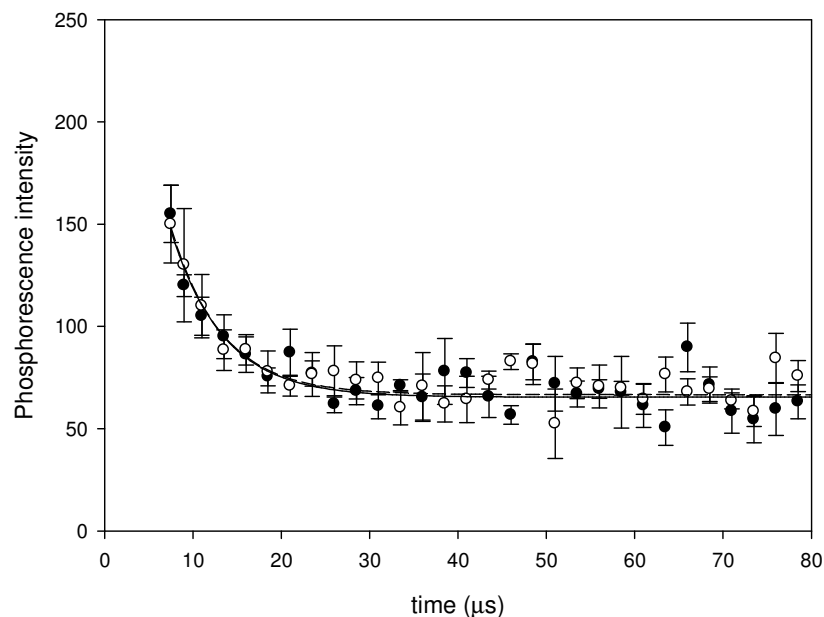
**Figure S6.** Bright-field (left) and fluorescence (right) images of the HA aggregates containing TPP washed with HA dispersion.



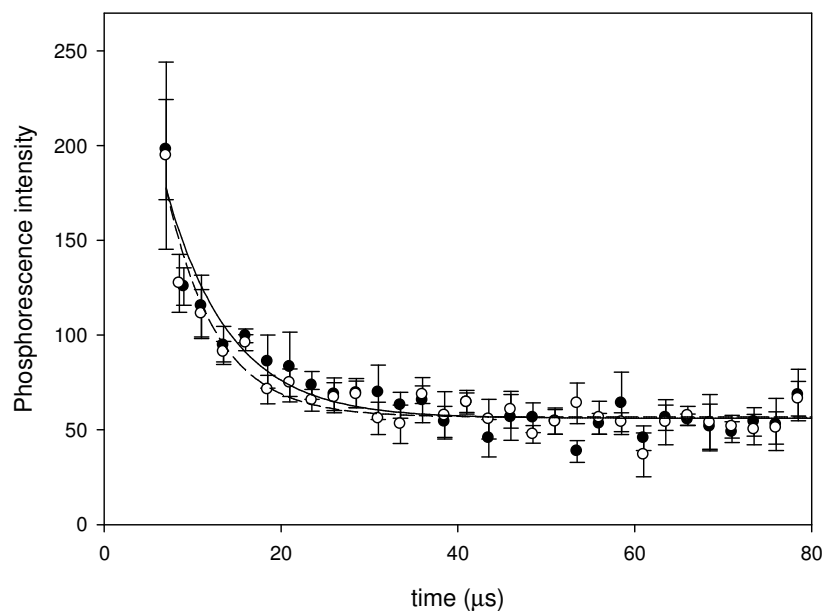
**Figure S7.** Bright-field images before (left) and after (right) the irradiation of the HA aggregates containing TMPyP. The superimposed white spots approximate the cross sectional area at the waist of the focused 420 nm laser beam.



**Figure S8.** Bright-field images before (left) and after (right) the irradiation of the HA aggregates containing TMPyP. The superimposed white spots approximate the cross sectional area at the waist of the focused 420 nm laser beam.



**Figure S9.** Comparison between time-resolved signals recorded at 1270 nm upon irradiation on the bulk solution HA dispersion containing TMPyP (●) and TPP (○).



**Figure S10.** Comparison between time-resolved signals recorded at 1270 nm upon irradiation on HA aggregate containing TPP exposed to an atmosphere of N<sub>2</sub> (●) and O<sub>2</sub> (○).