

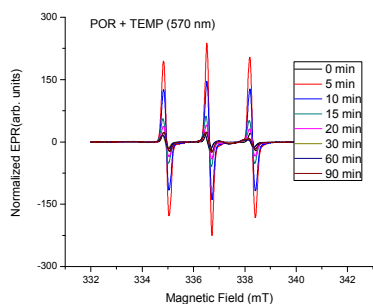
Supporting Information for

**Enhanced Oxygen Singlet Production by Hybrid System of Porphyrin
and Enriched (6,5) Single-Walled Carbon Nanotubes for
Photodynamic Therapy**

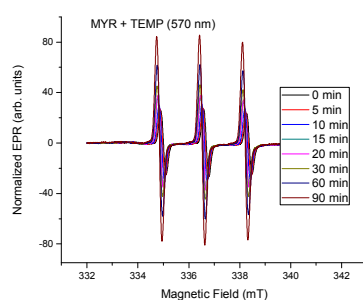
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Ynara M. Idemori², Maurício V. B. Pinheiro¹, Klaus Krambrock¹.

¹ *Departamento de Física, Universidade Federal de Minas Gerais, Belo Horizonte-MG, 31270-901, Brazil.*

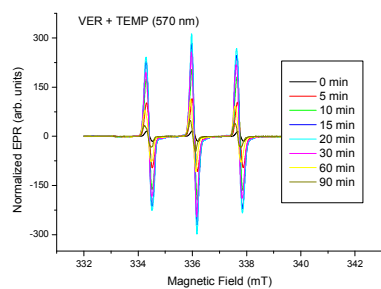
² *Departamento de Química, Universidade Federal de Minas Gerais, Belo Horizonte-MG, 31270-901, Brazil.*



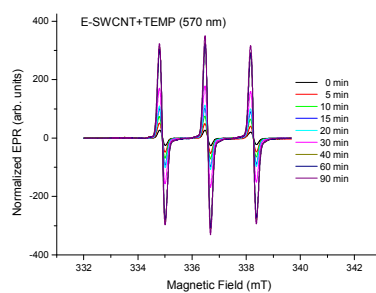
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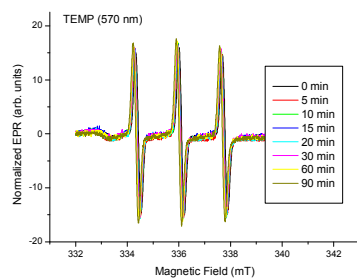
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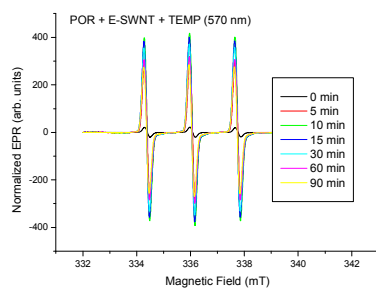
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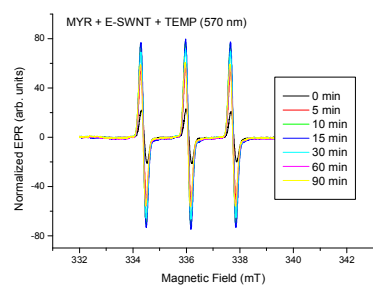
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(e)

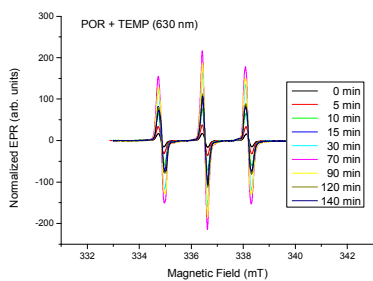


(f)

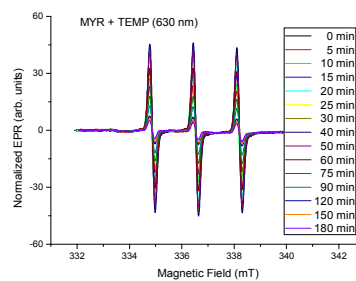


(g)

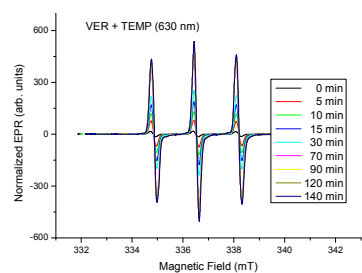
Figure S1 - EPR spectra of mixed aqueous solutions of (a) POR + TEMP, (b) MYR + TEMP, (c) VER + TEMP, (d) E-SWNT + TEMP, (e) TEMP, (f) POR + E-SWNT +TEMP and (g) MYR + E-SWNT + TEMP after successive yellow light (570 nm) illumination times.



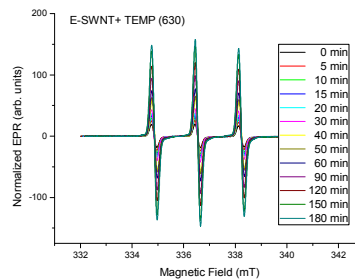
(a)



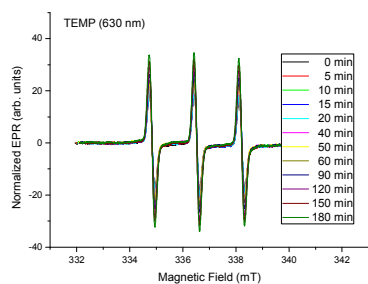
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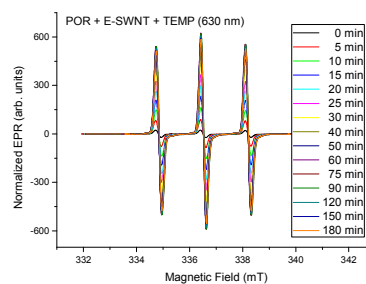
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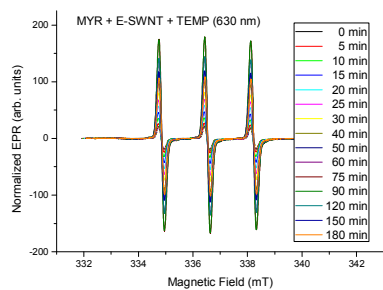
(d)



(e)

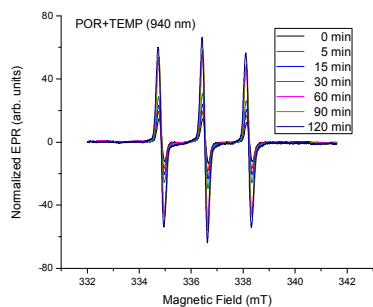


(f)

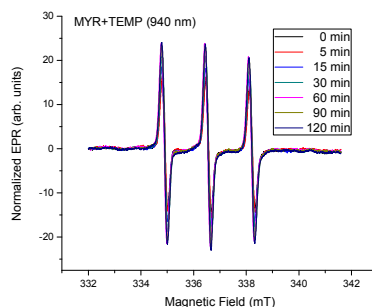


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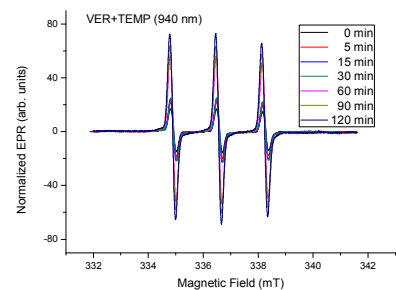
Figure S2 - EPR spectra of mixed aqueous solutions of (a) POR + TEMP, (b) MYR + TEMP, (c) VER + TEMP, (d) E-SWNT + TEMP, (e) TEMP, (f) POR + E-SWNT + TEMP and (g) MYR + E-SWNT + TEMP after successive red light (630 nm) illumination times.



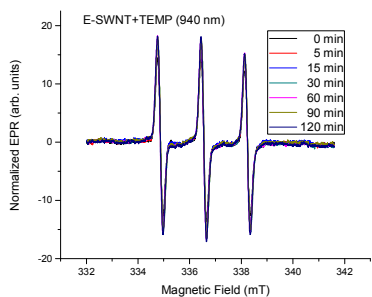
(a)



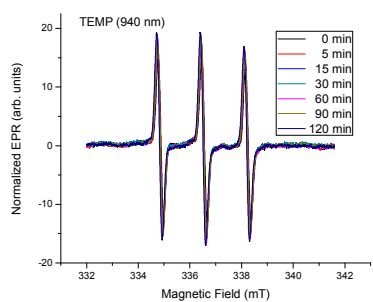
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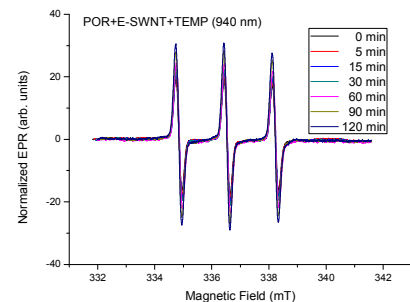
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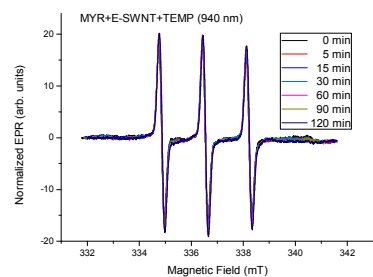
(d)



(e)



(f)



(g)

Figure S3 - EPR spectra of mixed aqueous solutions of (a) POR + TEMP, (b) MYR + TEMP, (c) VER + TEMP, (d) E-SWNT + TEMP, (e) TEMP, (f) POR + E-SWNT +TEMP and (g) MYR + E-SWNT + TEMP after successive infrared (940 nm) illumination times.

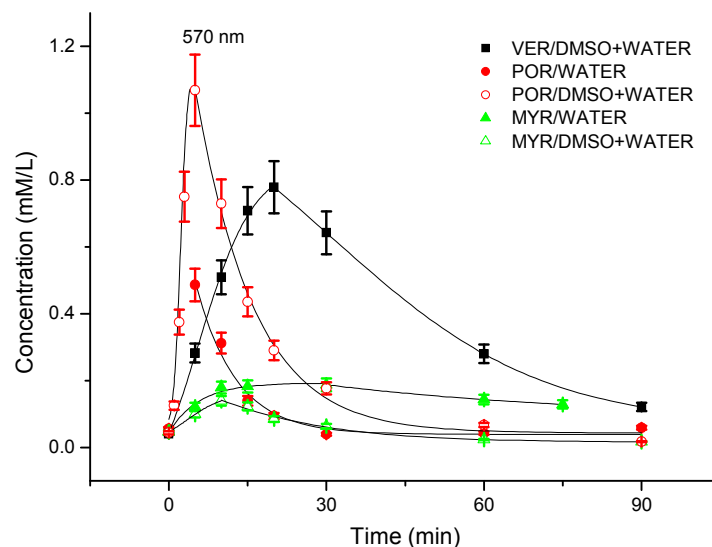


Figure S4 - Comparison of absolute concentrations of formed spin adduct TEMPOL (mM/L) in aqueous and mixed aqueous / DMSO (1:8) solutions containing spin trap TEMP and the three different porphyrins POR, MYR and VER as a function of yellow (570 nm) light illuminations.

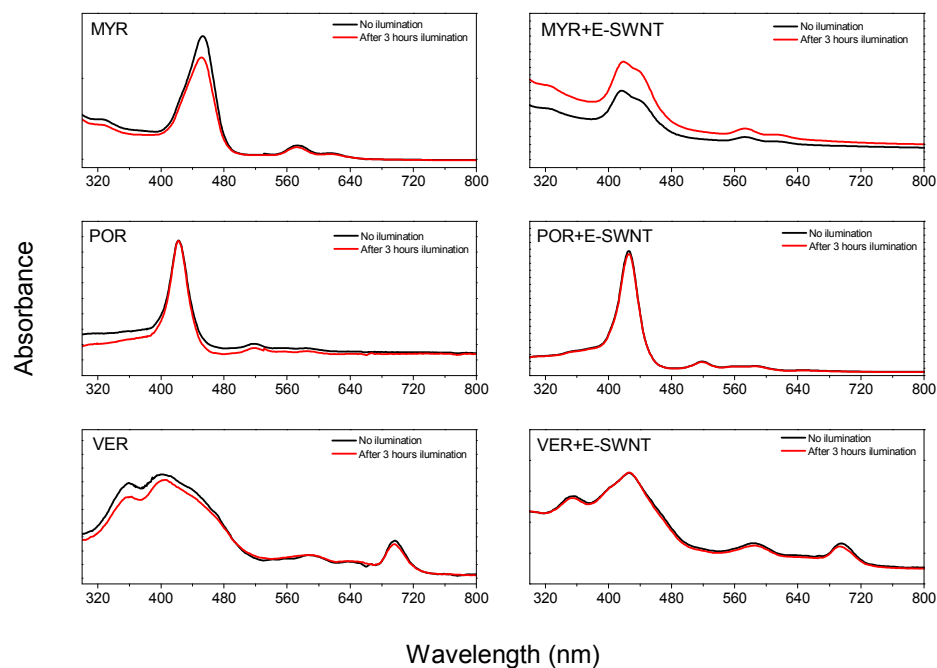


Figure S5 – Optical absorbance spectra of different porphyrin solutions before and after 3h of yellow (570 nm) illumination, same illumination conditions as used in the EPR experiments.