

Electronic Supplementary Information (ESI)

Gold Nanoring-Enhanced Generation of Singlet Oxygen: An Intricate Correlation with Surface Plasmon Resonance and Polyelectrolyte Bilayers

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Table S1. Summary of film thickness of PSS/PAH multilayers in H₂O.

Bilayer No.	1	2	3	4	5	10	15	20
Thickness(nm)	1.3	3	5.4	7.3	10.1	26.6	42.0	68.1
STD.	0.2	0.4	0.2	0.3	0.2	0.5	2.2	3.3

Table S2. LSPR peak position, outer diameter, inner diameter, height and **ratio of outer/inner diameter** of five different Au NRs.

Au NR	LSPR (nm)	outer dia. (nm)	inner dia. (nm)	height (nm)	ratio of outer/ inner dia.
Au NR I	823	46.6 ± 2.6	34.7 ± 2.1	14.0 ± 1.4	1.3 ± 0.1
Au NR II	737	32.9 ± 1.1	15.7 ± 1.7	13.4 ± 0.4	2.1 ± 0.2
Au NR III	723	29.5 ± 1.3	16.7 ± 1.0	9.7 ± 2.1	1.8 ± 0.1
Au NR IV	607	24.8 ± 0.8	6.3 ± 0.8	10.2 ± 0.4	4.0 ± 0.5
Au NR V	574	21.5 ± 1.5	5.9 ± 0.7	9.8 ± 0.8	3.7 ± 0.4

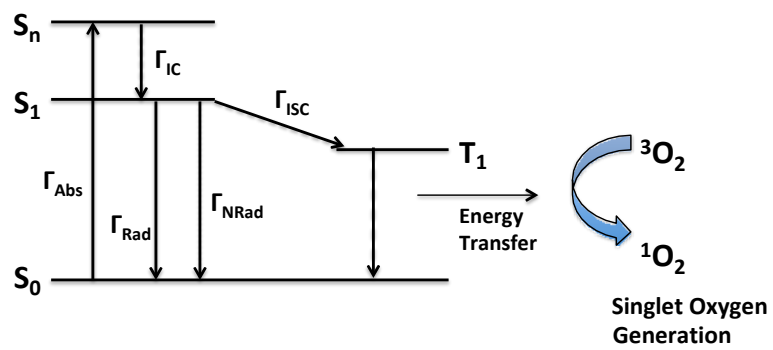


Fig.S1. Schematic Jablonski diagram for photosensitized 1O_2 generation.