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Supporting Information for:

Hydroxyl radical induced chemiluminescence of hyperbranched polyethyleneimine protected silver nanoclusters and its application in tea plolypehenols detection

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Fig. S1 (a) FL spectra and (b) CL intensity of AgNCs capped by hPEI with different molecular weights (1-4: 0.6, 1.8, 10, and 25K) in the presence of 214 μ M· OH solution.



Fig. S2 FL emission intensity of four AgNCs solution in the presence of (a) H_2O_2 (0, 1, 5 and 10 mM) and (b) NaCl (0, 0.003, 0.03 and 0.3M).



Fig. S3 Cyclic voltammograms recorded for hPEI (blue line) and hPEI-AgNCs (red line).



Fig. S4 FL emission spectra (a), UV absorption spectra (b) and FT-IR spectra (c) of hPEI-AgNCs upon addition of different concentrations of \cdot OH (1-4: 0, 0.104, 0.167, and 1.67 mM).



Fig. S5 FL spectra of hPEI-Ag NCs in the presence of a various of ROS (a: H_2O , b: H_2O_2 , c: $O_2 \cdot ,$ d: 1O_2 , e: ClO⁻, f: ONOO⁻, and g: ·OH). The concentration of each ROS was 214 μ M.



Fig. S6 Calculated molecular size of different ROSs using GaussView software.



Fig. S7 CL intensity of hPEI-AgNCs upon adding 214 μ M ·OH in the absence and in the presence of TPPs or thiourea.



Fig. S8 CL intensity of hPEI-AgNCs upon adding ·OH with different concentrations in the absence (blue) and in the presence (orange) of TPPs.



Fig. S9 CL intensity of hPEI-AgNCs upon adding \cdot OH (214 μ M) without and with Green tea infusion by different immersion times.