Supporting Information for:

Layered Double Hydroxide-Supported Carbon Dots as an Efficient Heterogeneous Fenton-Like Catalyst for Generation of Hydroxyl Radicals

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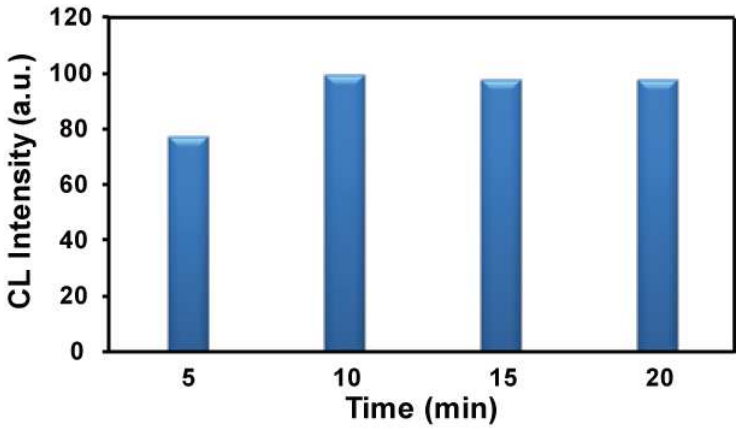

Figure S1 Effect of stirring time for the CL intensity of the carbon dot-DBS-LDH-acidified H_2O_2 system.

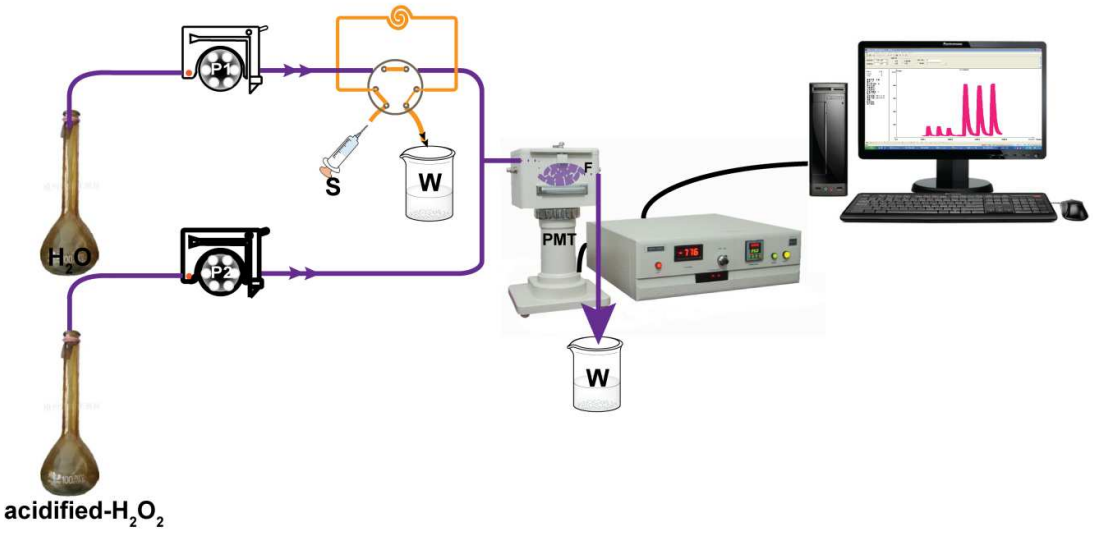

Figure S2 Schematic diagram of the CL flow-through device. P_1 and P_2, peristaltic pumps; S, sample injector (carbon dot-DBS-LDHs); F, flow cell; W, waste; PMT, photomultiplier tube (-1100 V); H_2O at 1.0 mL/min; acidified H_2O_2 at 2.0 mL/min.

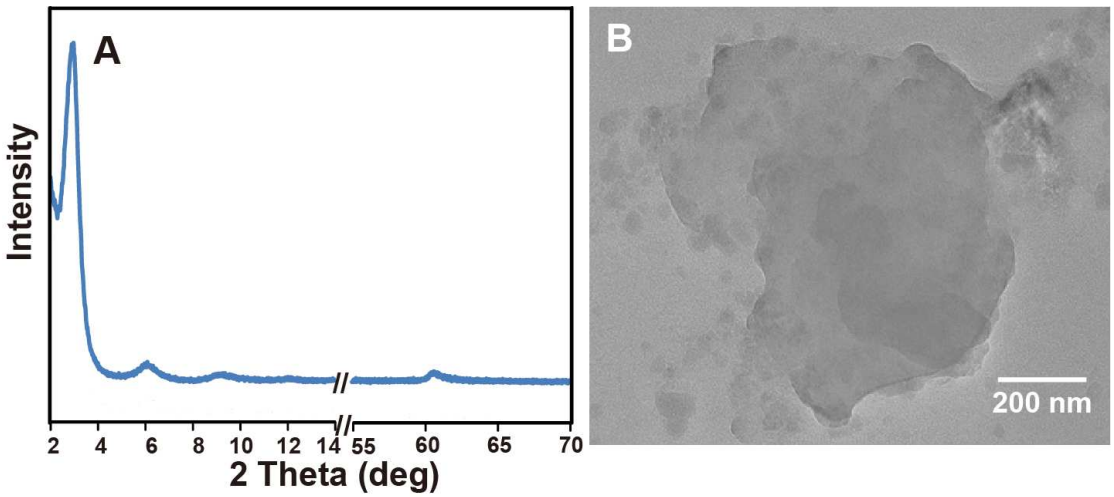

Figure S3 (A) Powder XRD patterns, (B) TEM image of DBS-LDHs.

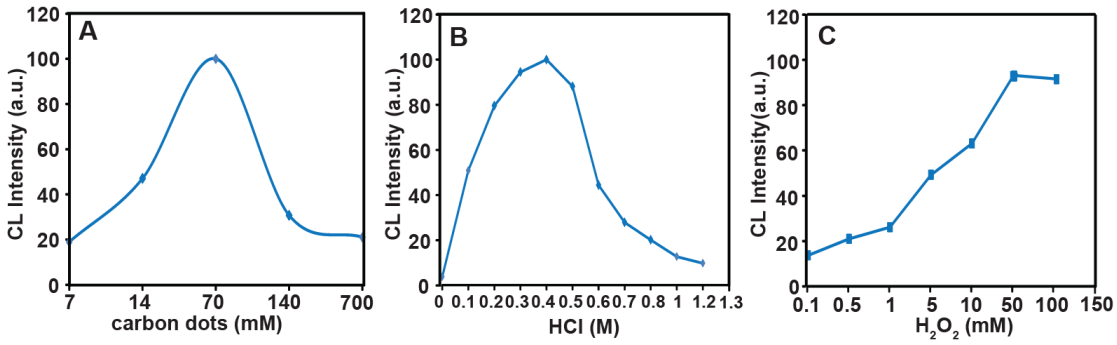

Figure S4 Effects of various conditions on the CL intensity, (A) concentration of carbon dots, (B) concentration of HCl, (C) concentration of H_2O_2.

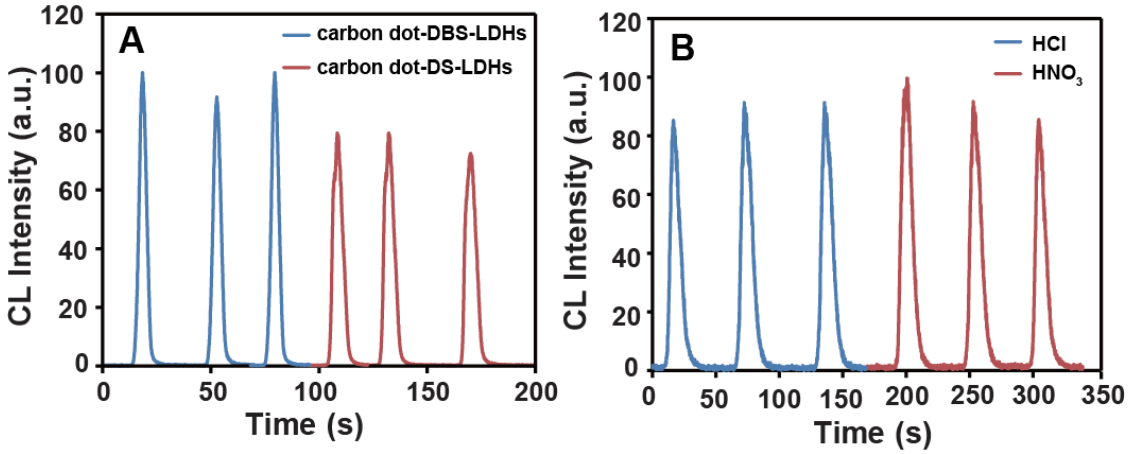

Figure S5 CL intensity of (A) acidified H_2O_2 mixed with carbon dot-DBS-LDHs or carbon dot-DS-LDHs, (B) carbon dot-DBS-LDH-H_2O_2 mixed with HCl or HNO_3.

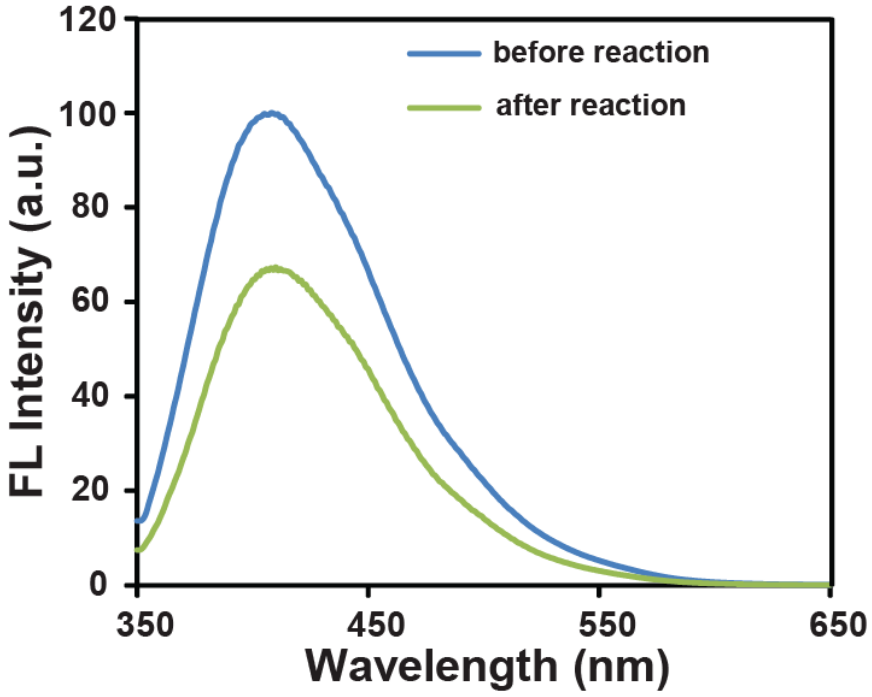

Figure S6 Fluorescence spectra of carbon dot-DBS-LDHs before and after reaction.

Table S1 Effects of radical scavengers on carbon dot-DBS-LDH-acidified H_2O_2 system[a].

Radical scavengers	**Concentration (mM)**	**CL intensity[b]**
H_2O		100
ascorbic acid	10	28
thiourea	50	33.9
histidine	30	99.8
DABCO	30	97.1
NaN_3	30	99.7
NBT	30	98.4

[a] The experiments were carried out with flow injection system.

[b] All of the results were the mean of three determinations.