Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary material

VUV/UV light inducing accelerated phenol degradation with a low electric input

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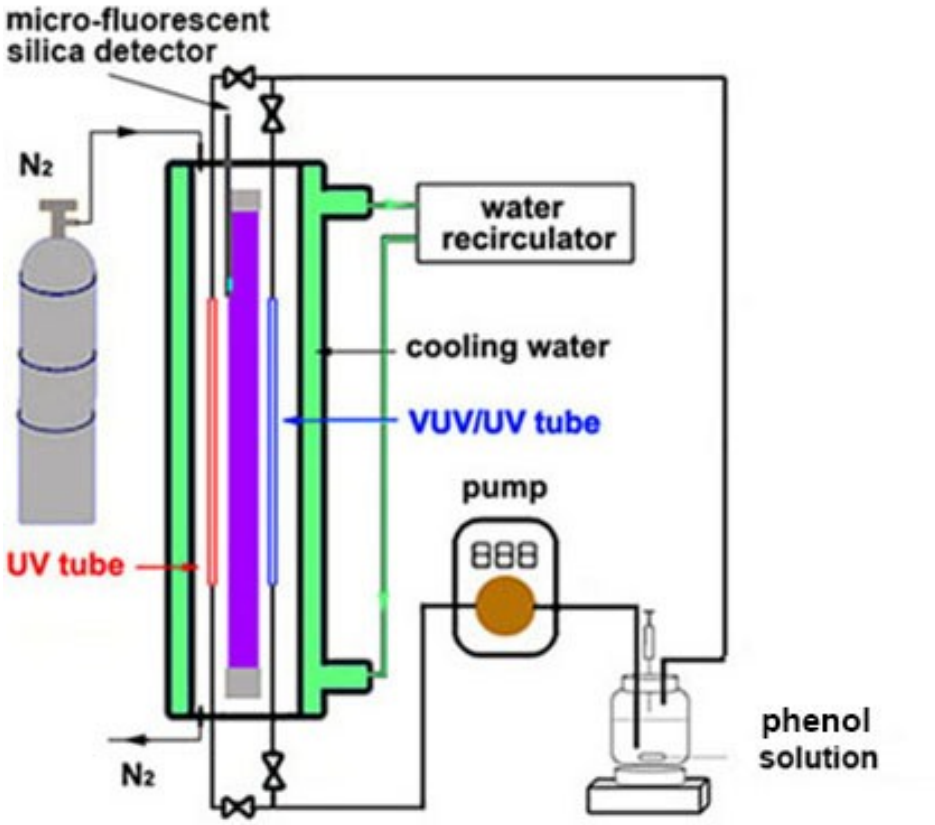

Fig. S1. Schematic diagram of the mini-fluidic VUV/UV photoreaction system (MVPS).[1]

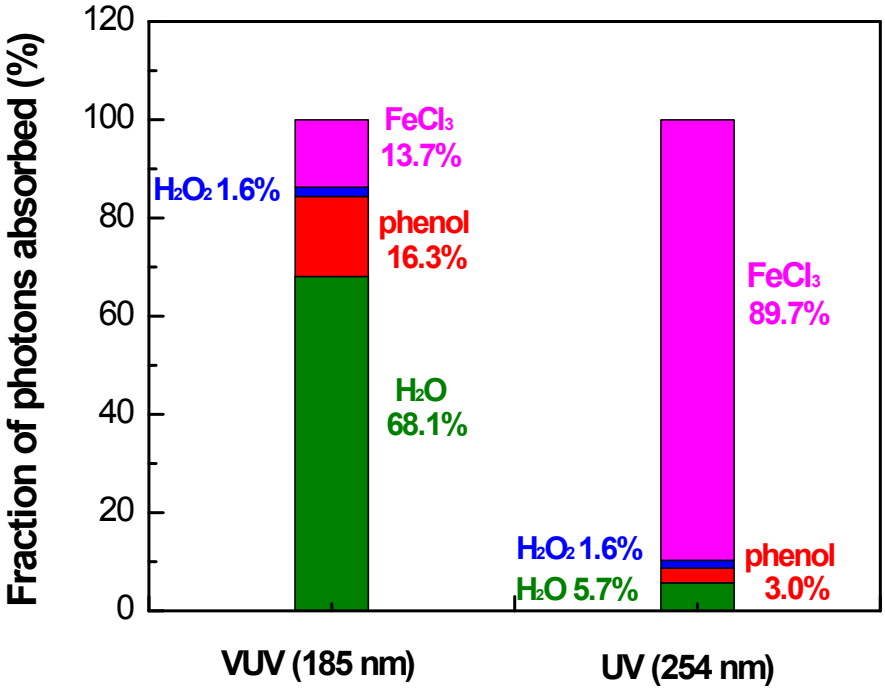

Fig. S2. Fractions of the photons absorbed by each solution component in the VUV/UV photo-Fenton process. Conditions: $[phenol]_0$ = 0.055 mM, $[H_2O_2]_0$ = 0.735 mM, $[Fe^{3+}]_0$ = 0.25 mM, and pH_0 = 3.7.

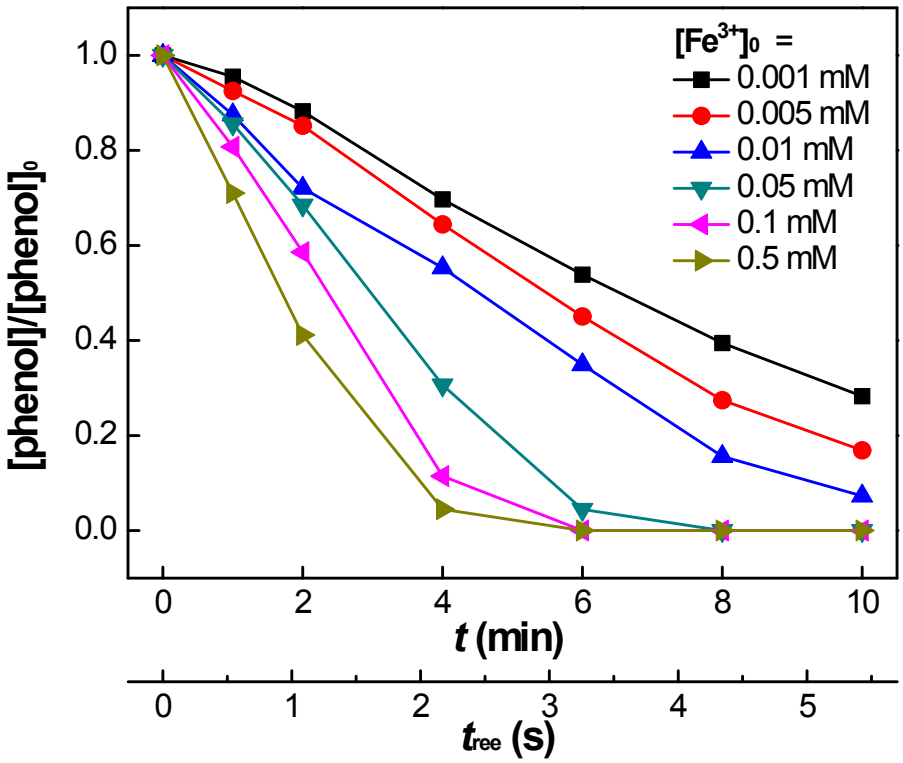

Fig. S3. Phenol degradation by the VUV/UV photo-Fenton process at various initial Fe^{3+} concentrations. Conditions: $[phenol]_0$ = 0.011 mM, $[H_2O_2]_0$ = 0.147 mM, and pH_0 = 3.7.

Reference

1 M. K. Li, Z. M. Qiang, P. Hou, J. R. Bolton, J. H. Qu, P. Li, C. Wang, *Environ. Sci. Technol.* 2016, **50**, 5849–5856.