

## Supporting Information

Photocatalytic ability of visible-light-responsive hybrid ZrO<sub>2</sub> particles

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**Supporting Information 1.** The degradation percentages of CV as a function of time under the UV-C light excitation of ZrO<sub>2</sub>/5-ASA and ZrO<sub>2</sub>/5-ASA/Ag (1 mg/mL); initial concentrations of CV: 5.0, 7.5, and 10.0 μM.

UV-C Lamp						
time (min)	ZrO <sub>2</sub> /5-ASA			ZrO <sub>2</sub> /5-ASA/Ag		
	5 μM	7.5 μM	10.0 μM	5 μM	7.5 μM	10.0 μM
0	0.0	0.0	0.0	0.0	0.0	0.0
15	65.0	55.5	61.8	89.4	74.0	67.5
30	84.4	65.5	71.6	100.0	84.3	73.3
60	100.0	82.8	80.1	100.0	95.7	80.6
120	100.0	96.4	87.5	100.0	100.0	86.7

**Supporting Information 2.** The degradation percentages of CV as a function of time under the Vis light excitation of ZrO<sub>2</sub>/5-ASA and ZrO<sub>2</sub>/5-ASA/Ag (1 mg/mL); initial concentrations of CV: 5.0, 7.5, and 10.0 μM.

Vis Lamp						
time (min)	ZrO <sub>2</sub> /5-ASA			ZrO <sub>2</sub> /5-ASA/Ag		
	5 μM	7.5 μM	10.0 μM	5 μM	7.5 μM	10.0 μM
0	0.0	0.0	0.0	0.0	0.0	0.0
15	51.2	36.2	32.9	84.8	64.3	57.4
30	64.8	46.3	37.3	91.2	70.3	64.9
60	72.3	51.8	43.1	100.0	72.4	68.5
120	82.5	68.0	54.7	100.0	78.6	74.9