

Supporting Information for

**Treatment of ultra-high concentration 2-diazo-4,6-dinitrophenol
(DDNP) industry wastewater by the combined Fe/Cu/air and
Fenton process**

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Table S1. Characteristics of DDNP industry wastewater

Items	Values	Items	Values
COD	4740 mg/L	pH	4.8
BOD ₅	—	Colority	50000 times
TOC	1022 mg/L	DDNP	3131 mg/L

Table S2. The operating conditions of three control experiments

NO.	Experiment	Operating conditions
1	1 st Fe/Cu/air-2 nd Fenton-3 rd Fe ⁰ /Cu/air	1stFe/Cu/air: Fe/Cu dosage of 40 g/L, initial pH of 2.0, stirring speed of 300 rpm, initial 1.0 h without aeration, and then aeration treatment (1.5 L/min) of 0.5 h; 2ndFenton: H ₂ O ₂ dosage of 10 mmol/L, initial pH of 3.0, stirring speed of 200 rpm, and treatment time of 2.0 h; 3rdFe⁰/air: Fe/Cu dosage of 40 g/L, initial pH of 3.0, stirring speed of 300 rpm, aeration (1.5 L/min) treatment time of 1.0 h.
1	1 st Fe ⁰ /air-2 nd Fenton-3 rd Fe ⁰ /air (Control experiment)	In the control, only Fe/Cu bimetallic particles were replaced by Fe ⁰ , and the other experiment conditions were same as the optimal condition of the above 1 st Fe/Cu/air-2 nd Fenton-3 rd Fe/Cu/air.
2	Fe/Cu/air (Control experiment)	Fe/Cu dosage of 40 g/L, initial pH of 2.0, stirring speed of 300 rpm, initial 1.0 h without aeration, and then aeration treatment (1.5 L/min) of 3.5 h.
3	Fenton process (Control experiment)	H ₂ O ₂ dosage of 10 mmol/L, Fe ²⁺ dosage of 890.1 mg/L, initial pH of 3.0, stirring speed of 200 rpm, and treatment time of 4.5 h.

