

## **Supporting Information**

### **Comparative Study of ZnO thin films doping process using transition metals (Cu and Mn) for Methylene Blue photodegradation under visible irradiation**

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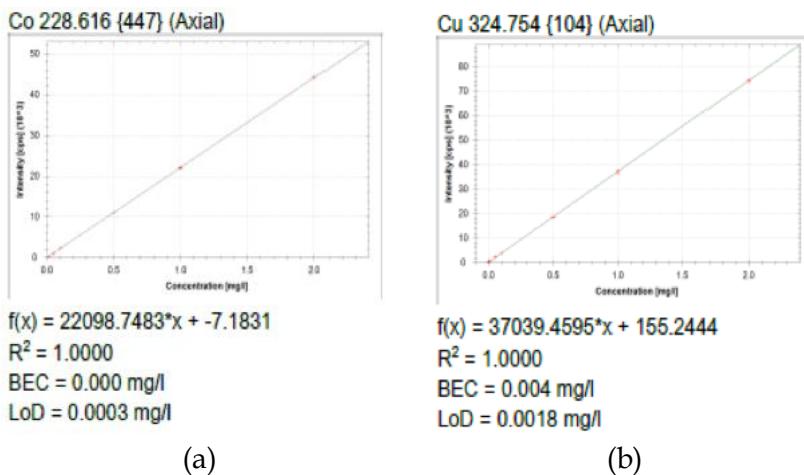


Figure S1. ICP Calibration curve for: (a) Co and (b) content. (Equipment: ICP -OES ICAP SERIE 7200 THERMOSCIENTIFIC – Method SM 3120 B, EPA 3015A adapted for solids).

Table S1. Results ICP for Co and Cu content in Metal-doped ZnO thin films.

Thin films	FD	ICP CPS average signal	mg Zn	ICP CPS average	mg metal	% metal	bias
ZnO:Co(1%)	50	1548451	4262	17282	39.12	0.92	-0.08
ZnO:Co(3%)	200	1035796	5700	18686	169.18	2.97	-0.03
ZnO:Co(5%)	500	459593	6319	13331	301.79	4.78	-0.22
ZnO:Cu(1%)	100	1541318	4242	16613	41.43	1.05	0.05
ZnO:Cu(3%)	200	1028064	5658	30255	162.53	2.87	-0.13
ZnO:Cu(5%)	500	436557	6002	23120	310	5.16	0.16

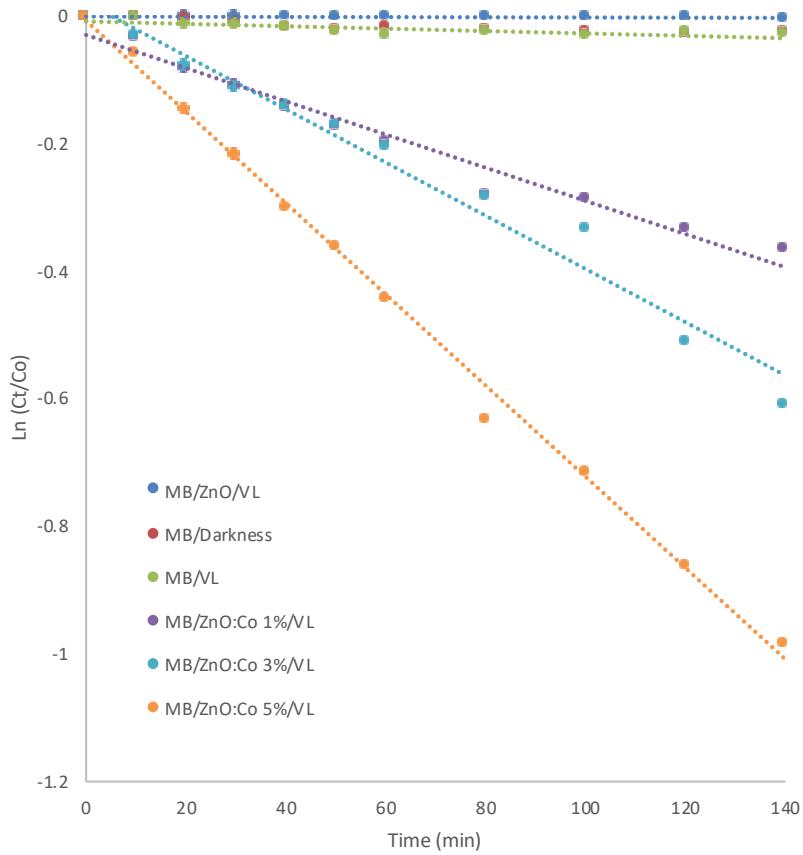


Figure S2. Fitting curves of kinetic model for ZnO:Co

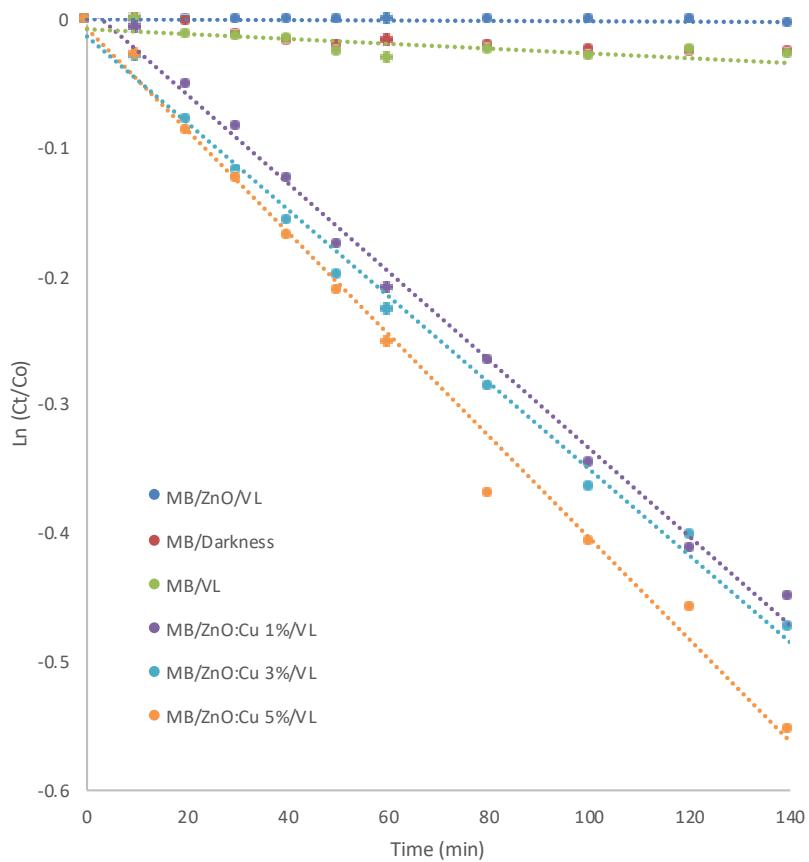


Figure S3. Fitting curves of kinetic model for ZnO:Cu