Supplementary Material

Self-Organizing Map-Based Assessment of Compost Maturity and Cu/Zn Passivation in Biochar-Amended Pig Manure

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Table S1. Basic physical and chemical properties of compost raw materials

Raw materials	Water content (%)	Total carbon mass fraction (%)	Total nitrogen mass fraction (%)	C/N ratio
Pig manure	21.62±1.87	38.82±1.08	2.00±0.17	7.75
Corn stover	34.33±0.62	46.21±2.17	0.66±0.11	70.02
Biochar	2.41±0.28	73.66±2.69	1.28±0.12	57.55

Table S2. Percentage of similarity between microbial genus and composting parameters

	pH	Temperature	EC	GI	Moisture	Zn	Cu	UV_{254}	UV_{280}
modul1	0.195804	0.683013	-0.36141	0.41958	-0.50527	0.160839	0.223776	0.531469	0.538462
modul2	-0.1049	0.542908	-0.4	0.706294	-0.69123	0.587413	0.552448	0.804196	0.804196
modu3	-0.04895	0.654992	-0.14737	0.776224	-0.76843	0.531469	0.608392	0.671329	0.657343
modul4	0.293706	0.227671	-0.12632	-0.11888	0.063158	0.272727	-0.34965	-0.11189	-0.06993
modul5	0.132867	0.774082	0	0.58042	-0.53334	-0.04196	0.433566	0.405594	0.496503
modul6	0.258741	-0.52189	0.235089	-0.62238	0.61053	0.090909	-0.56643	-0.44056	-0.64336

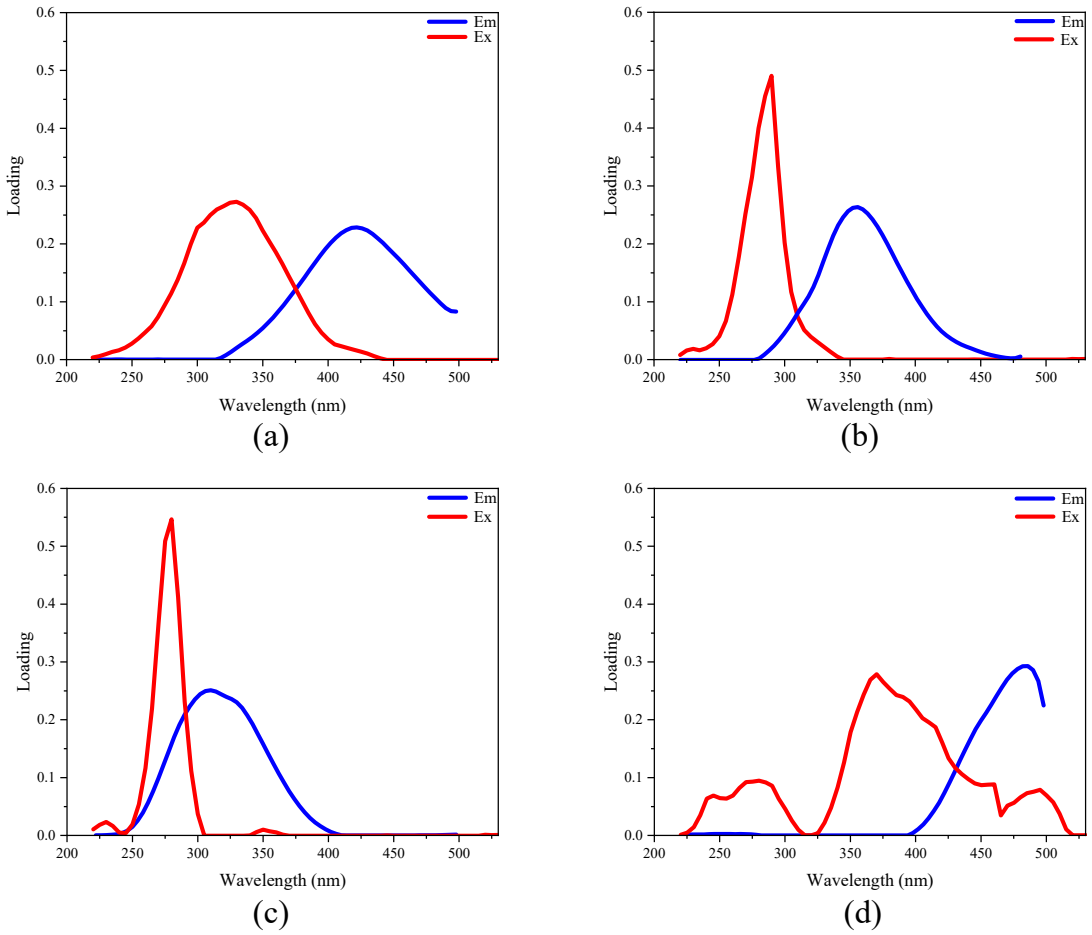


Figure S1. Fluorescence intensity of four organic components at different wavelengths. (a) Anthropogenic humic substance; (b) Tryptophan-like substance; (c) Tyrosine-like substance; (d) Terrestrially derived humic substance.

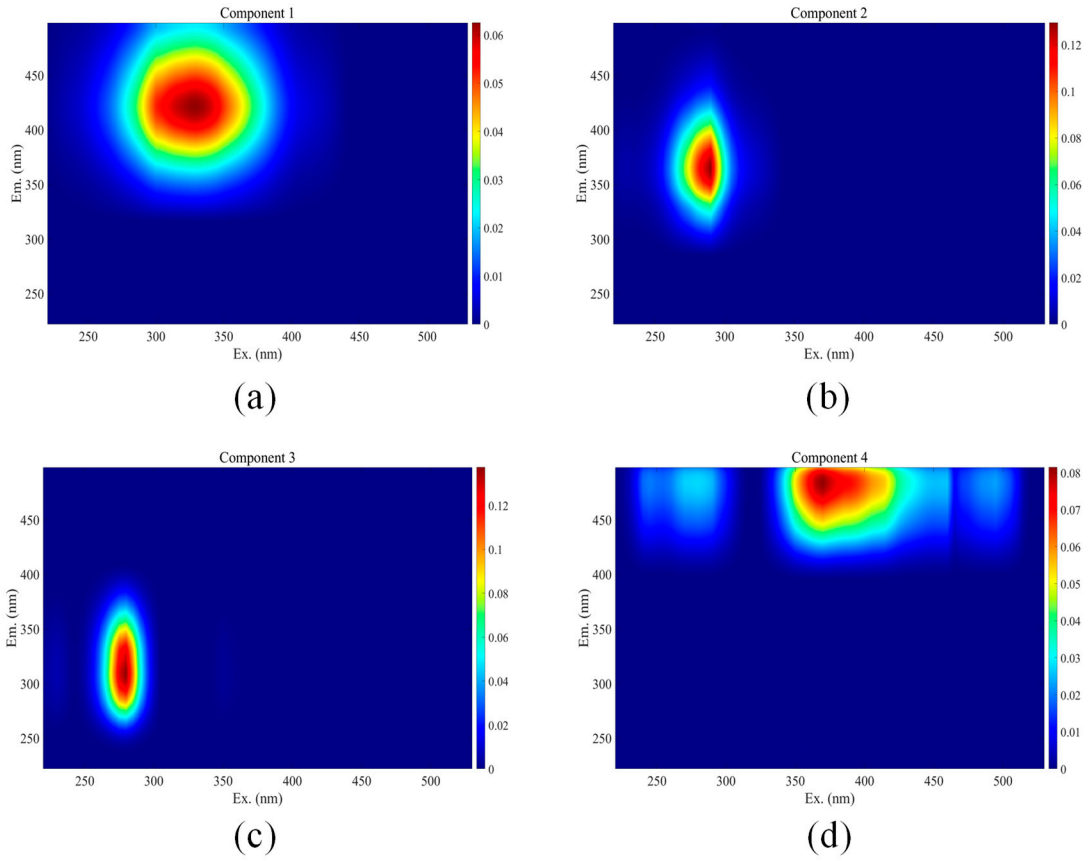


Figure S2. EEM-PARAFAC identification of four fluorescence components: (a) Anthropogenic humic substance; (b) Tryptophan-like substance; (c) Tyrosine-like substance; (d) Terrestrially derived humic substance.

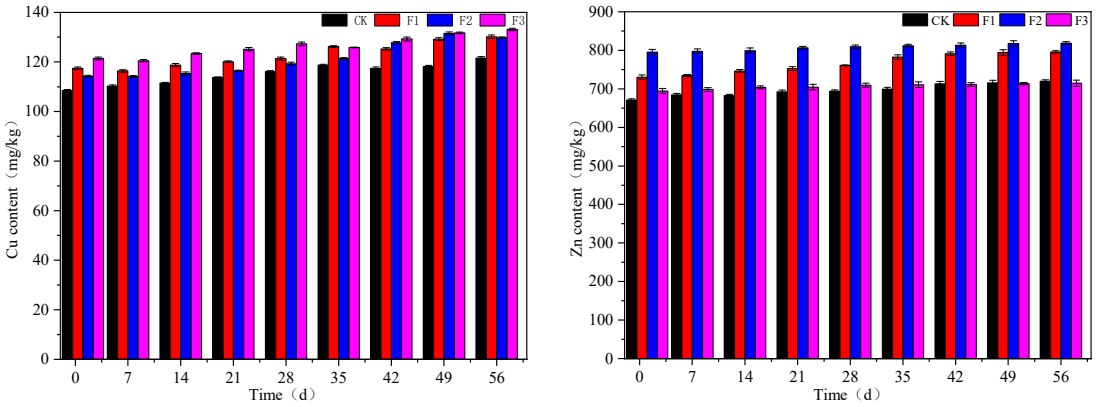


Figure S3. Cu and Zn contents under different treatments: CK (without BC), F1 (8% BC), F2 (10% BC), and F3 (12% BC).