



Fig. S.1. The TEM picture of ZnO NPs

Table S.1 Effects of Zn treatments on N, P, K, Cu, Fe, Mn concentration of potato tuber ($\text{mg}\cdot\text{kg}^{-1}$)

Treatments	N	P	K	Cu	Fe	Mn
CK	11.00a	22.18bc	22.57ab	6.49b	16.56ab	5.62ab
ZnO10	10.58a	21.82bc	20.25b	7.50b	19.55a	6.44a
ZnO50	11.58a	23.95bc	22.18a	9.00a	15.99ab	5.92ab
ZnO200	11.85a	28.55a	22.99a	9.49a	13.12b	5.07b
ZnO500	12.22a	24.66b	22.97ab	8.75a	12.82b	5.25b
ZnO800	12.90a	21.37c	20.88ab	7.50b	16.34ab	5.59ab

Note: Different lower case letters indicate significant differences between treatments ($p < 0.05$).

Table S.2 The BCFs and translocation factor of each tissue of potato under different Zn treatments

Treatment	BCFs	TF _{root - stem}	TF _{stem - leaves}	TF _{root - tuber}	TF _{underground - above ground}
CK	1.02	0.87	0.63	0.27	1.21
ZnO10	0.85	1.56	0.28	0.24	1.76
ZnO50	0.58	3.08	0.18	0.26	3.14
ZnO200	0.89	2.64	0.13	0.14	2.63
ZnO500	0.68	1.96	0.10	0.08	2.07
ZnO800	1.03	1.14	0.17	0.06	1.50