

Supplementary Information

Polystyrene nanoplastics exposure induces cognitive impairment in mice via induction of oxidative stress and ERK/MAPK- mediated neuronal cuproptosis

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Figure S1:

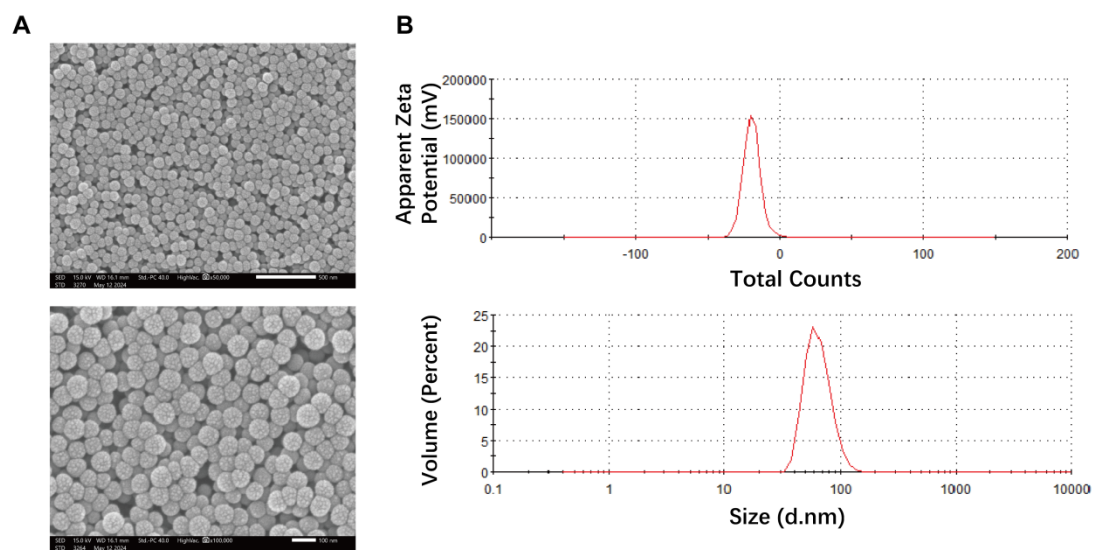


Fig. S1. (A) Scanning electron microscopy (SEM) images of PS-NPs. (B) Zeta potential maps and size analysis of PS-NPs.

Figure S2:

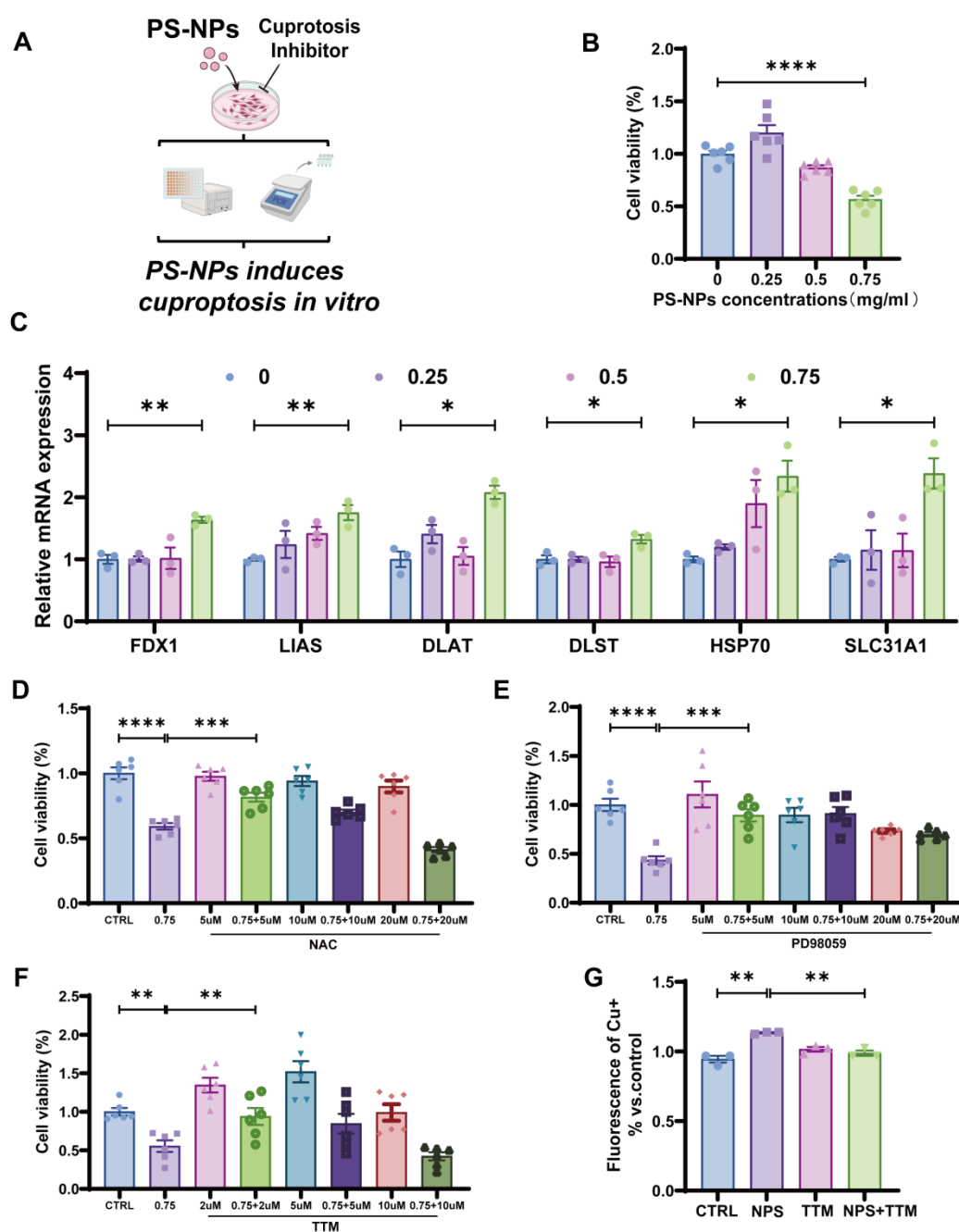


Fig. S2. (A) Schematic diagram summarizing the cell experiment. (B) CCK-8 assay for the viability of SH-SY5Y cells after 24 h exposure to PS-NPs (0.25, 0.5, 0.75, 1 mg/mL). (C) Relative mRNA levels of cuprotoxin-related biomarkers in cells. (D-F) Cell viability detected by CCK-8 after 24 h co-treatment with different concentrations of NAC, PD98059 and TTM. (G) Monovalent copper levels in cells. The data was expressed as the mean $\pm$ SEM. * $p < 0.05$, ** $p < 0.01$ (vs control treatment). N = 3.