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Supporting Information

for

Coordination-assembled myricetin nanoarchitectonics for sustainably scavenging free radicals

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Additional experimental data

Materials and Instruments

Materials: Myricetin (95%) was bought from Thermo Fisher Scientific. L-Glutathione (reduced) was obtained from Solarbio. Zinc(II) chloride ($ZnCl_2$) (98%) was purchased from Beijing Chemical Works. 2,2′-Azinobis-(3-ethylbenzthiazoline-6-sulfonate) was bought from Innochem (Beijing). 2′,7′-Dichlorodihydrofluorescein diacetate was bought from MedChemexpress. Dulbecco's Modified Eagle medium, fetal bovine serum (FBS), penicillin/ streptomycin, and trypsin-EDTA were bought from BioLegend.

Instruments: TEM images of nanoparticles were exhibited by a model JEM-1011 transmission scanning electron microscope (JEM-1011, JEOL, Japan). The size distribution and zeta potential of nanoparticles were measured by a Malvern DLS instrument (Zetasizer Nano ZS ZEN3600). UV/vis absorption spectra were tested by a Shimadzu UV-2600 spectrophotometer. FTIR spectra were obtained by a TENSOR 27 FTIR spectrometer (BRUKER). The cell viability was evaluated using MTT assay, in which the absorbance was measured by a microplate reader (Multiskan FC, Thermo Fisher Scientific). Confocal laser scanning microscopy (CLSM) images of cells were captured by CLSM (Olympus FV1000). Inductively coupled plasma-optical emission spectroscopy (ICP-OES, Prodigy, Leeman, USA) was used for evaluating concentration of Zn^{2+} in quantitative component analysis of MZG.

Table S1: Component analysis of MZG NPs.

Component	Myr	GSH	Zn^{2+}
Feeding concentration (mM)	3	6	1.57
Measured concentration (mM)	1.5	1.5	1.3

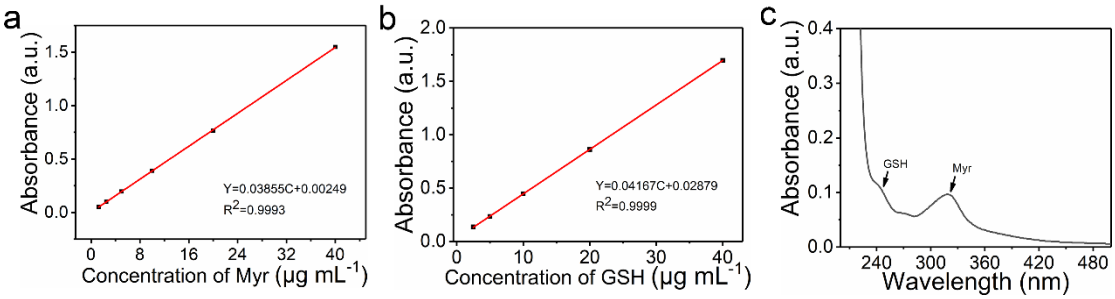

Figure S1: (a) The standard curve of Myr in 0.1 M NaOH. (b) The standard curve of GSH in 0.1 M NaOH. GSH dissolved in 0.1 M NaOH has an UV–vis absorption peak at ca. 240 nm. (c) The UV–vis absorption spectrum of diluted MZG nanoparticles (2000-fold) in 0.1 M NaOH.

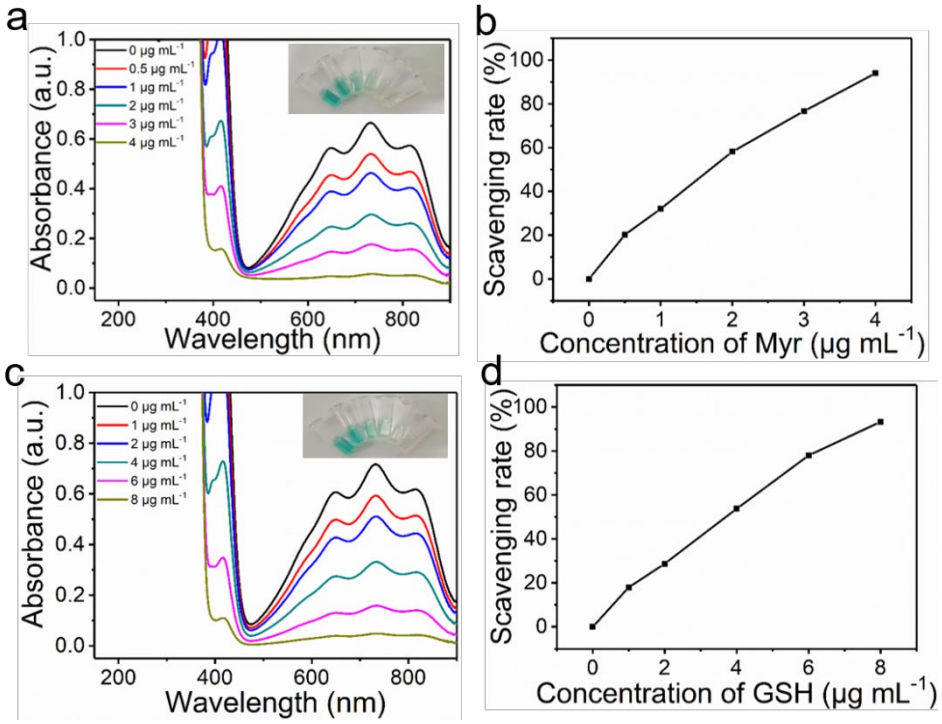

Figure S2: (a) UV–vis absorption spectra of ABTS solution incubated with different concentrations of Myr. A sample picture is shown in the inset. (b) Scavenging rate of Myr. (c) UV–vis absorption spectra of ABTS solution incubated with different concentrations of GSH. The inset shows a sample picture. (d) Scavenging rate of GSH.