

Supplementary data

Solvent-Dependent Mn Doping: Profound Effects on Microstructure and Enhanced Photothermal/Photodynamic Performance in $W_{18}O_{49}$ Diversified System

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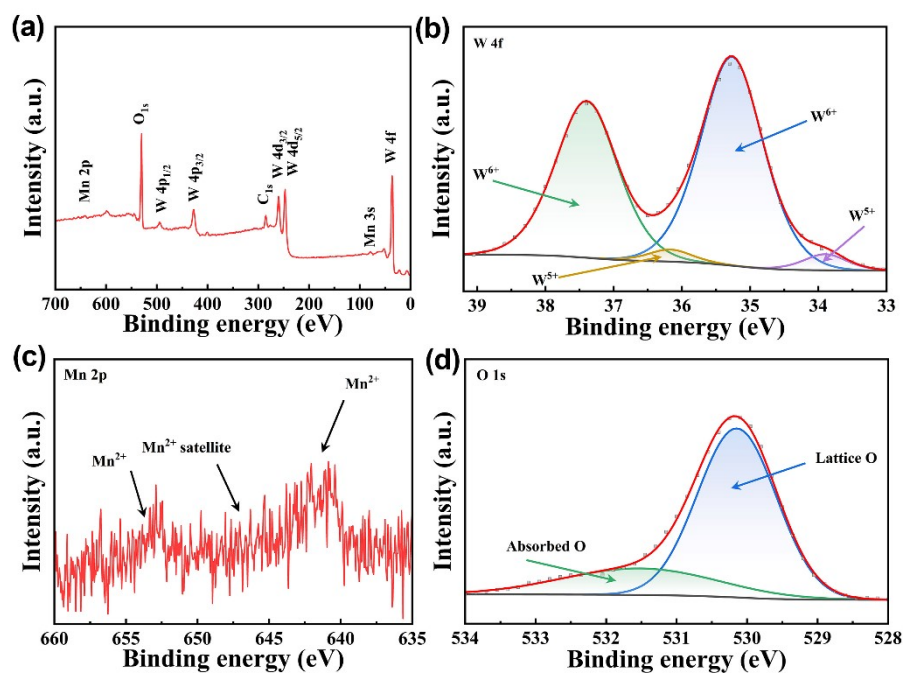


Figure. S1 The Survey and high resolution XPS spectra of 5%Mn-W₁₈O₄₉ prepared with isopropanol (a) Survey, (b) W 4f, (c) Mn 2p and (d) O 1s.

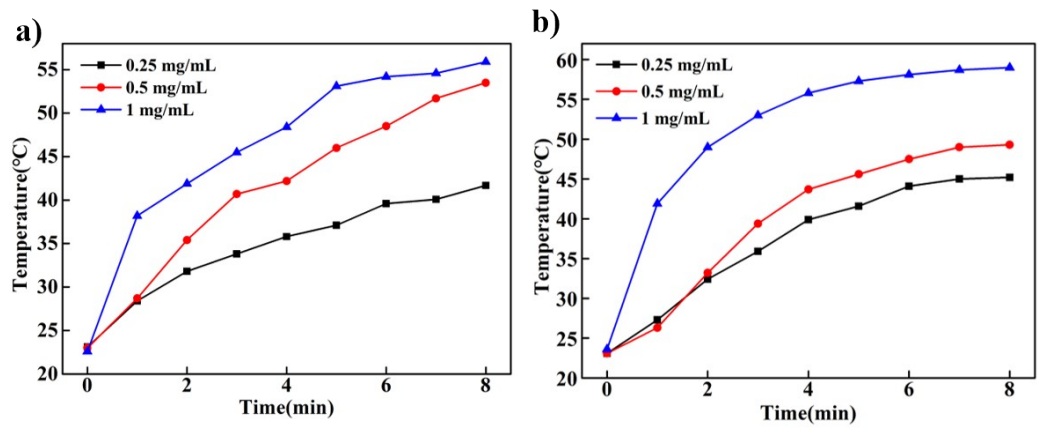


Figure. S2 Photothermal heating curve of $W_{18}O_{49}$ samples at different concentrations under different wavelength (a) with water as control, (b) 808 nm, and (c) 1064 nm

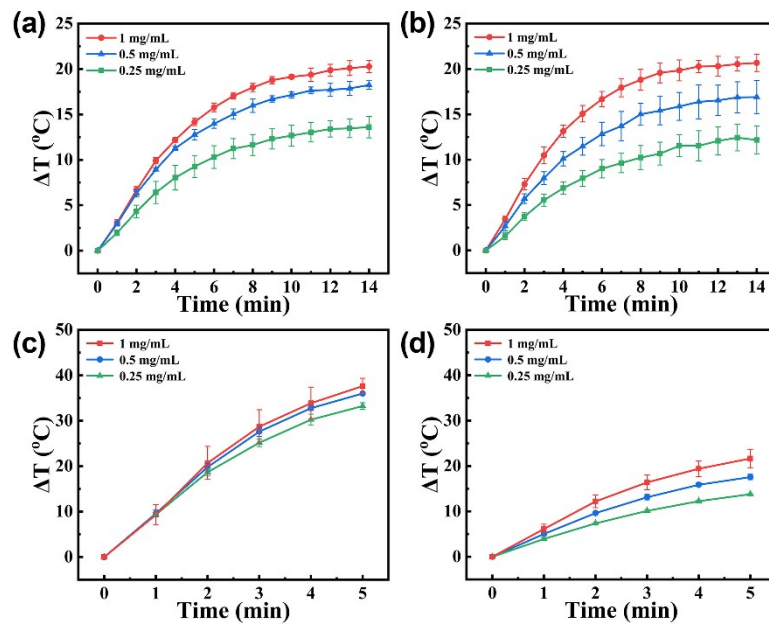


Figure. S3 Photothermal heating curve of $x\text{Mn-W}_{18}\text{O}_{49}$ samples prepared with n-propanol (above) and isopropanol (below) at different concentration under different wavelength (a)(b) 808 nm, (c)(d) 1064 nm.

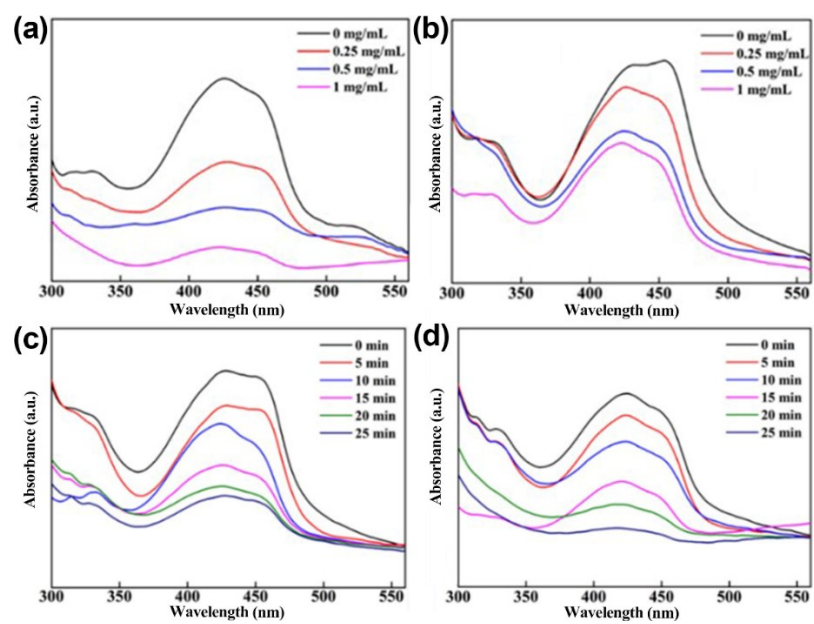


Figure. S4 Absorption spectra of DPBF for $W_{18}O_{49}$ samples under different illumination time, concentration and wavelengths (a)(b) 808 nm, (c)(d) 1064 nm

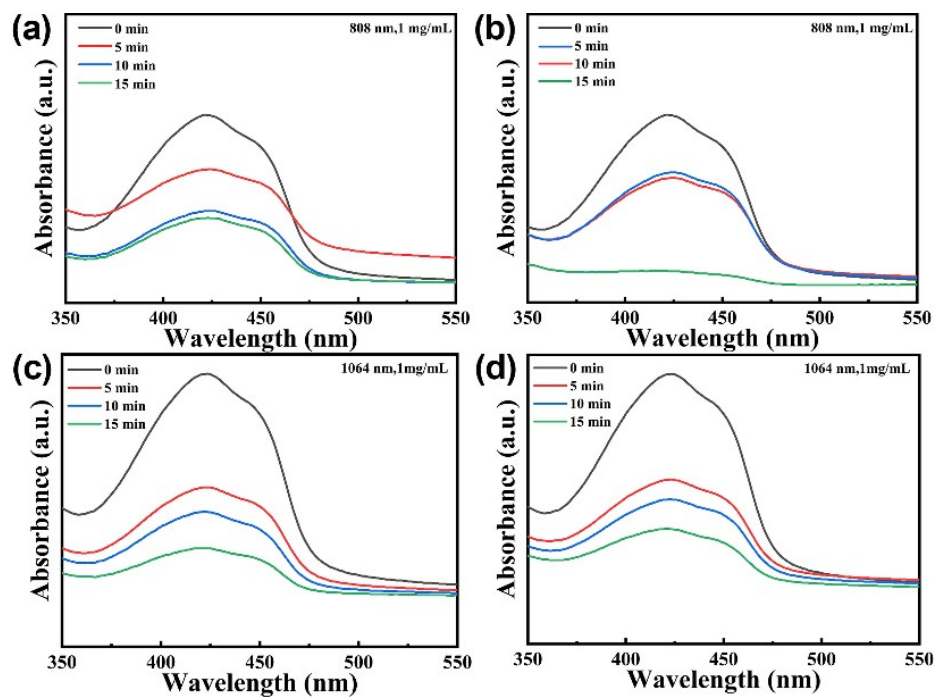


Figure. S5 Absorption spectra of DPBF by different illumination time of $x\text{Mn-W}_{18}\text{O}_{49}$ samples prepared with n-propanol (above) and isopropanol (below) (a)(b) 808 nm, (c)(d) 1064 nm.

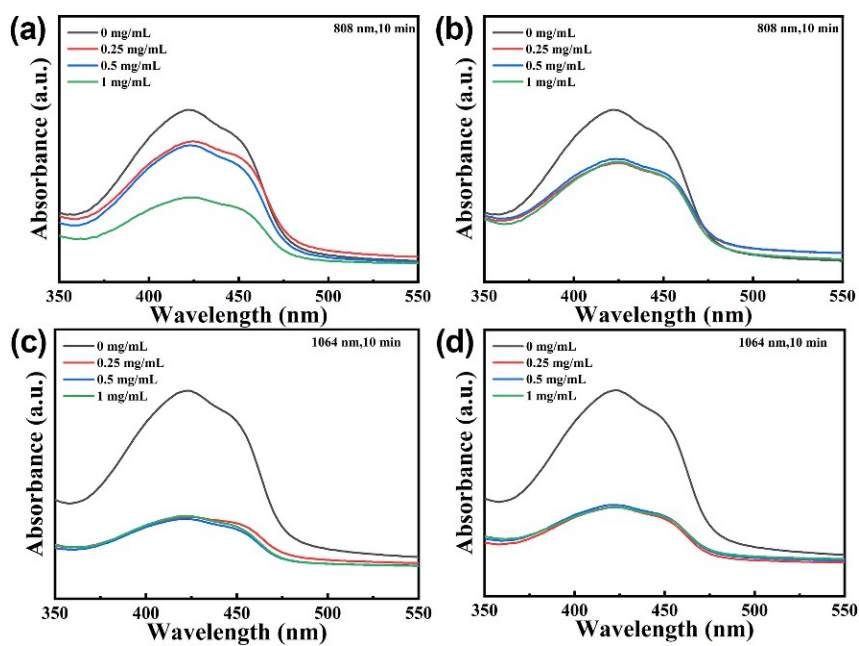


Figure. S6 Absorption spectra of DPBF by different concentrations of $x\text{Mn-W}_{18}\text{O}_{49}$ samples prepared with n-propanol (above) and isopropanol (below) (a)(b) 808 nm, (c)(d) 1064 nm.