

Electronic Supplementary Information (ESI[†])

Vanadium coordination compounds loaded on Graphene Quantum Dots (GQD) exhibit improved pharmaceutical properties and enhanced anti-diabetic effects

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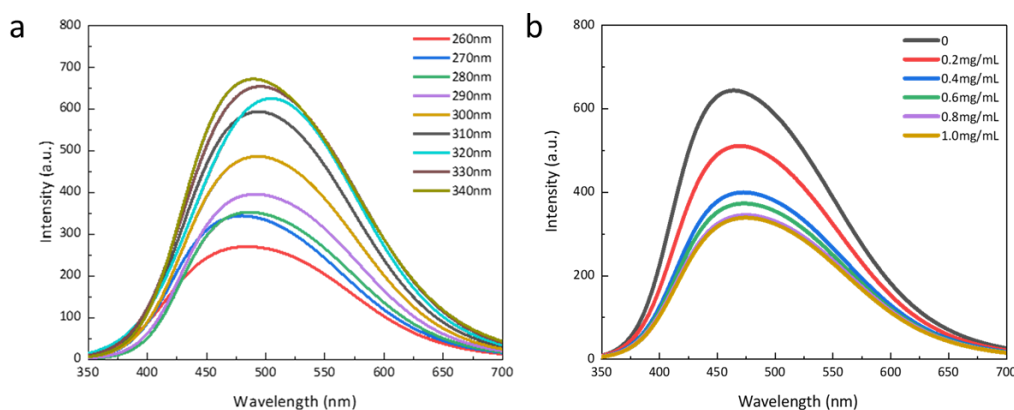


Figure S1 (a) Emission spectra upon different excitation wavelength.(b) The fluorescent spectra of GQD-VO(p-dmada) upon addition of different concentration of VO(p-dmada), $\lambda_{EX}=260$ nm.

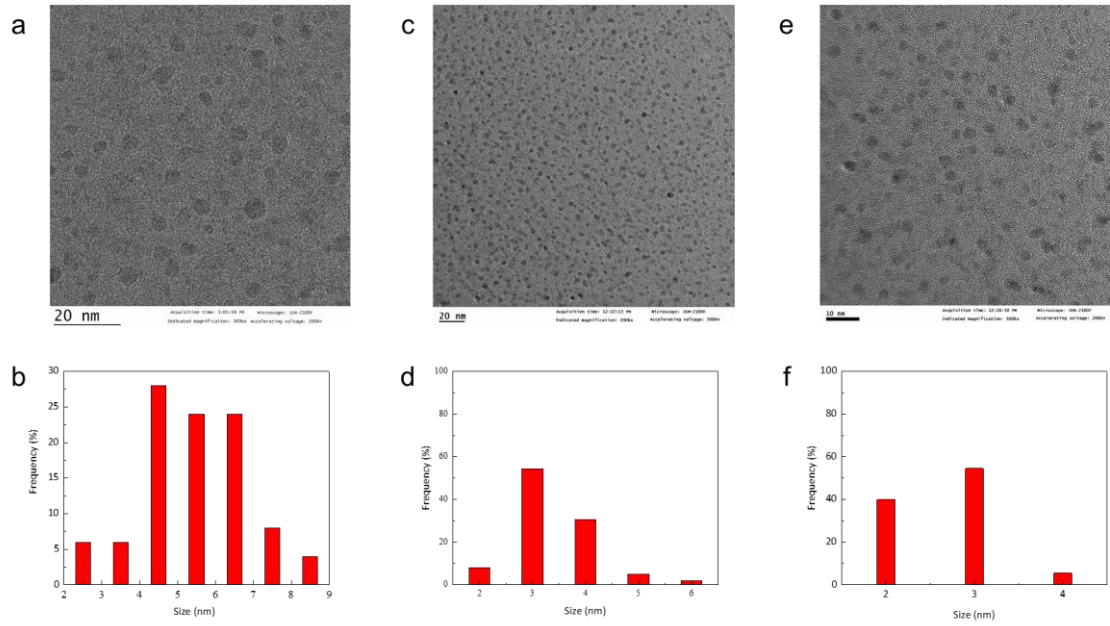


Figure S2 (a and b) HRTEM images of the GQD prepared at 80°C and diameter distribution. $\phi = 4.94 \pm 1.42$ nm, $n=50$. (c and d) HRTEM images of the GQD prepared at 105°C and diameter distribution. $\phi = 3.39 \pm 0.79$ nm, $n=100$. (e and d) HRTEM images of the GQD prepared at 120°C and diameter distribution. $\phi = 2.65 \pm 0.58$ nm, $n=55$.

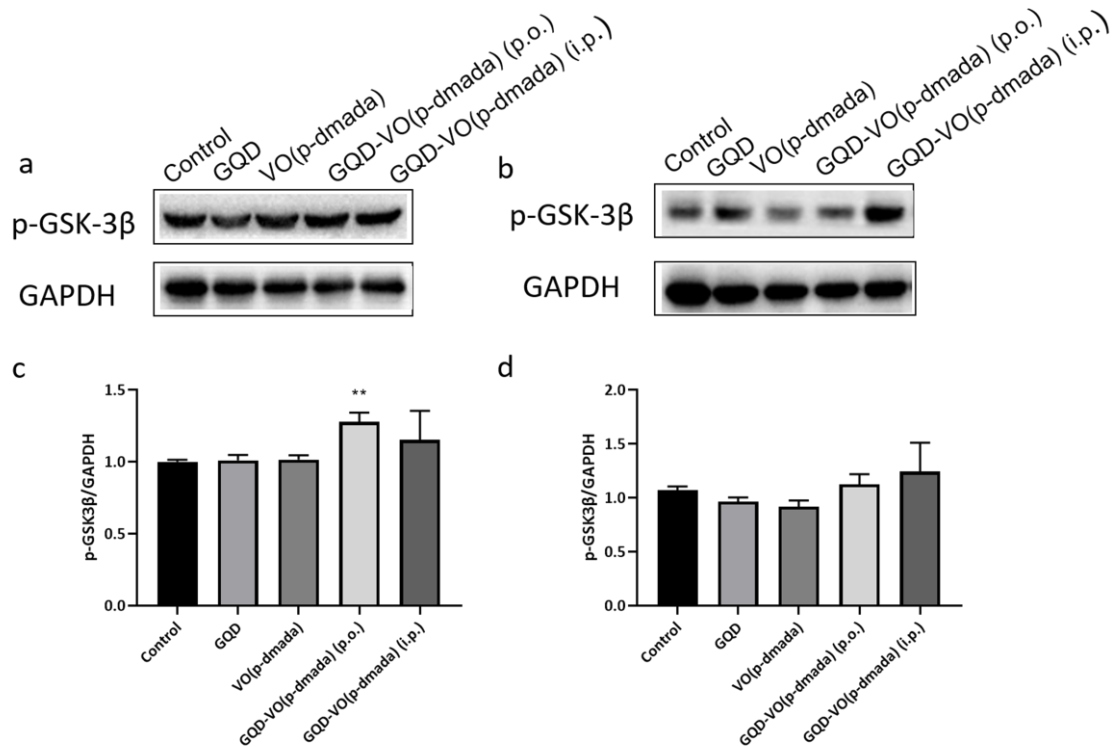


Figure S3 Effects of vanadium coordination compounds on p-GSK3β in liver (a and c) and fat (b and d) tissues. Proteins were extracted and analyzed by western blot in the experimental section. Data were average of triplicate independent experiments. ** $p < 0.01$ vs. the diabetic control