

Application of Paramagnetic Graphene Quantum Dots as a Platform for Simultaneous Dual-modality Bioimaging and Tumor-targeted Drug Delivery

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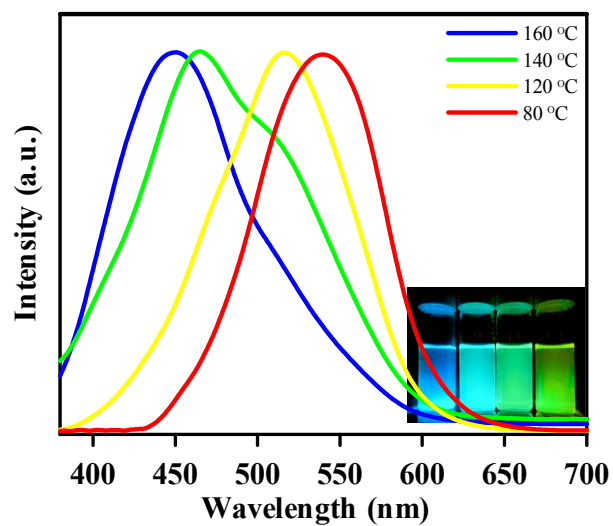


Figure S1. PL emission spectra of GQD obtained at different reaction temperature ($\lambda_{\text{ex}} = 350$ nm). The insets are digital photographs of the GQD prepared at 160 °C, 140 °C, 120 °C, and 80 °C (from left to right), respectively, under illumination of UV light (365 nm).

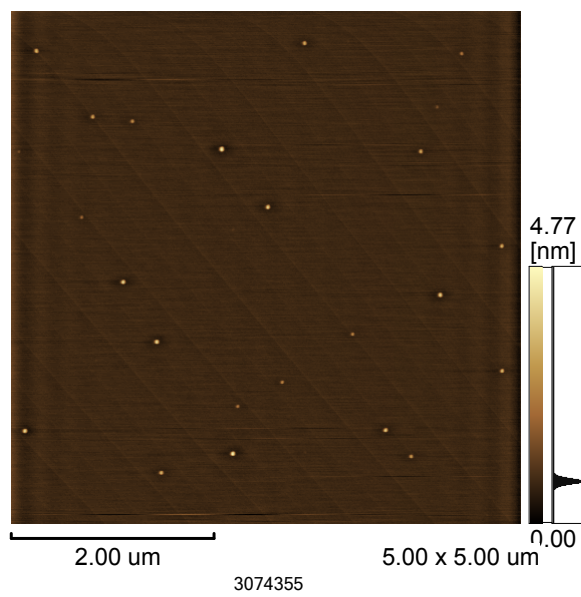


Figure S2. AFM images of GQDs deposited on a freshly cleaved mica substrate. The dimensions of the scanned area are $5 \times 5 \mu\text{m}^2$.

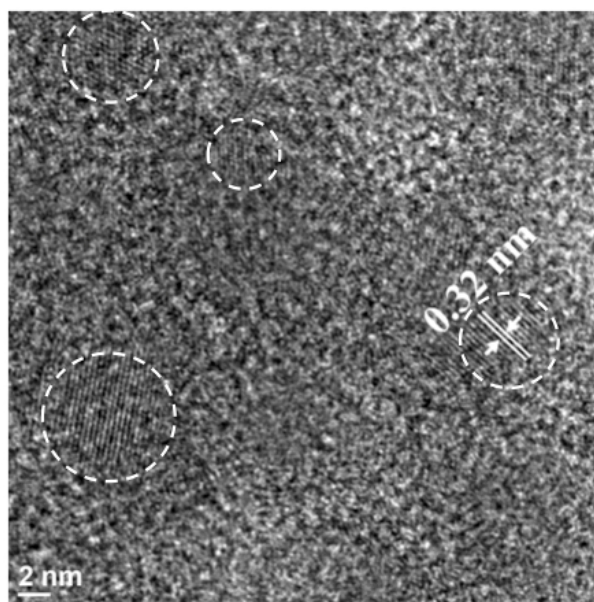


Figure S3. High magnification TEM image of the as-prepared GQDs.

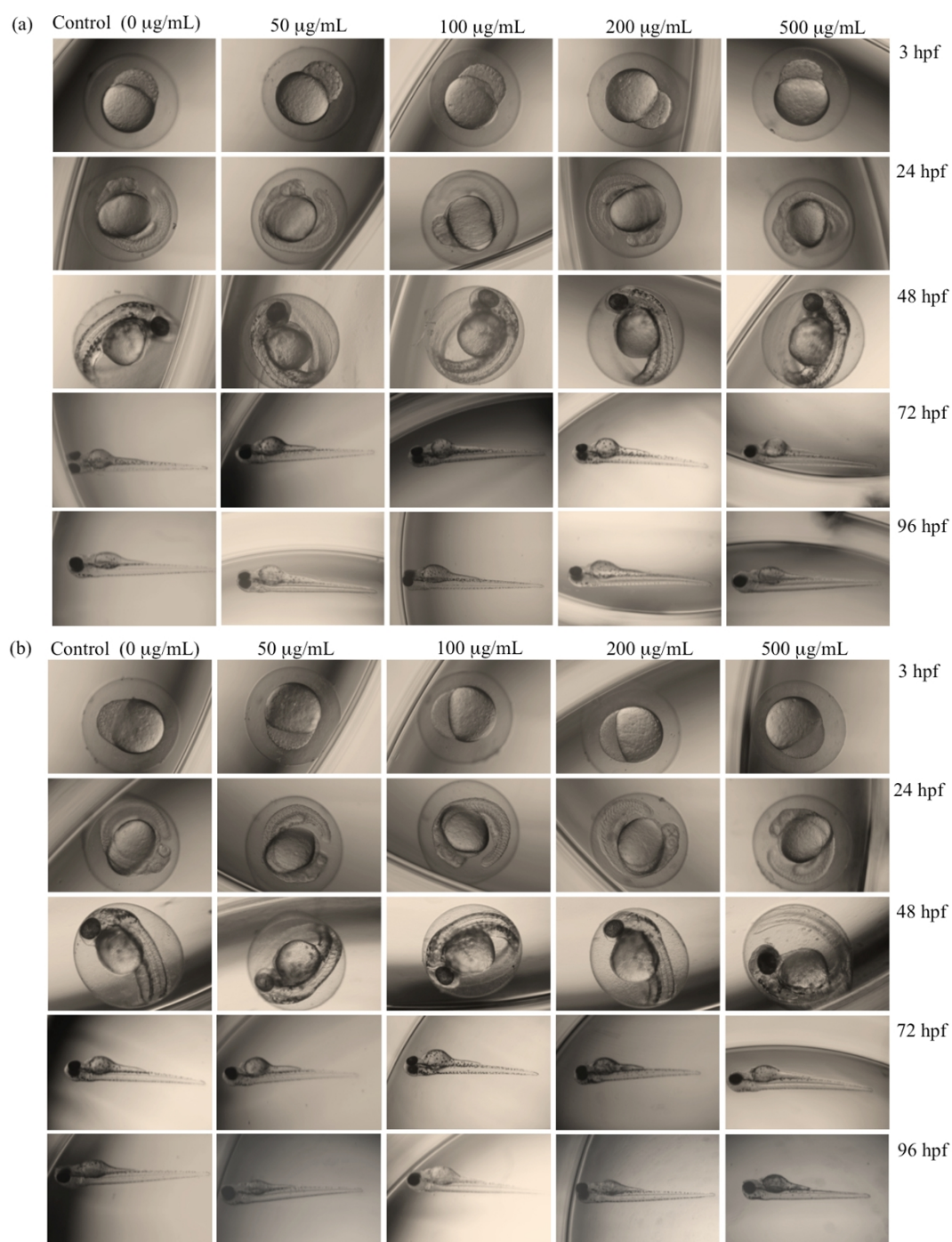


Figure S4. Optical microscopic images showing the representative morphological characteristics of zebrafish embryos exposed to different concentrations of (a) GQDs and (b) folate-GdGQDs at different developmental stages.

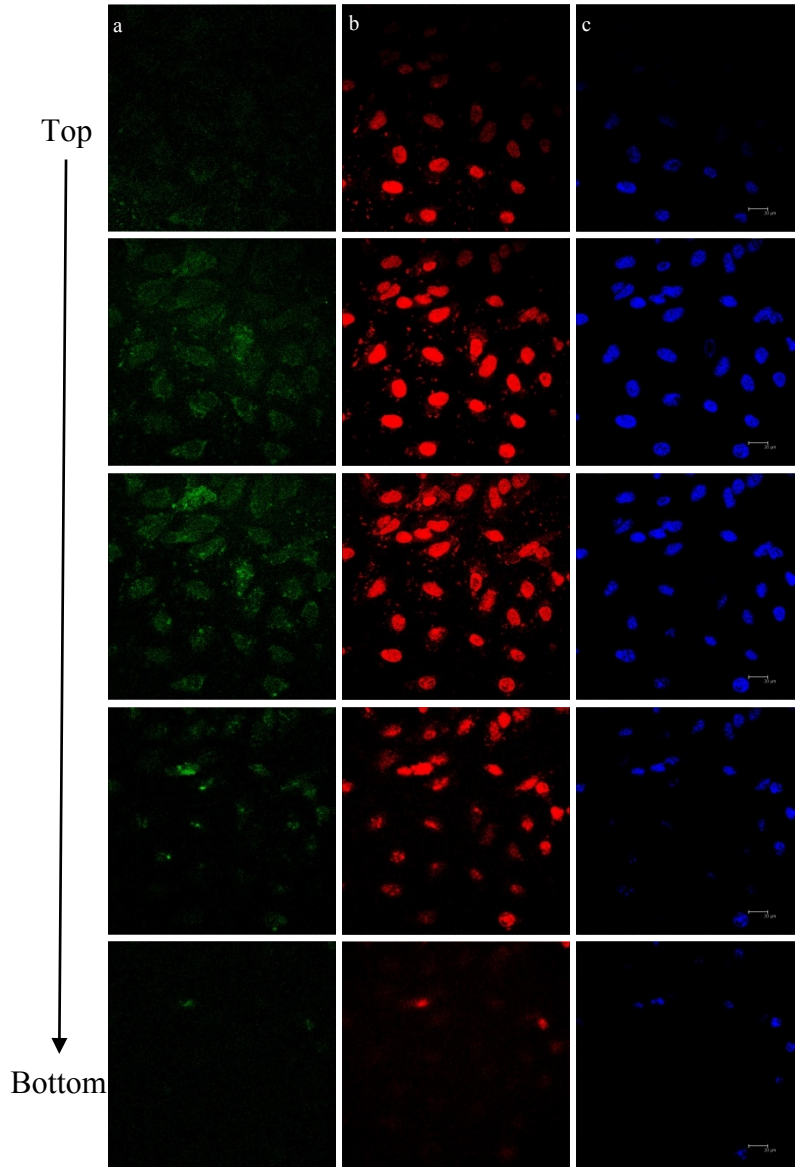


Figure S5. Z-stack confocal imaging obtained from HeLa cell incubated with nanocarriers. Images were taken from the top to the bottom of the cell with consecutive Z-axis slices. (a) Green fluorescence originating from nanocarriers; (b) red emission emitting from DOX; and (c) blue emission emitting from DAPI. Scale bars represent 20 μm .