

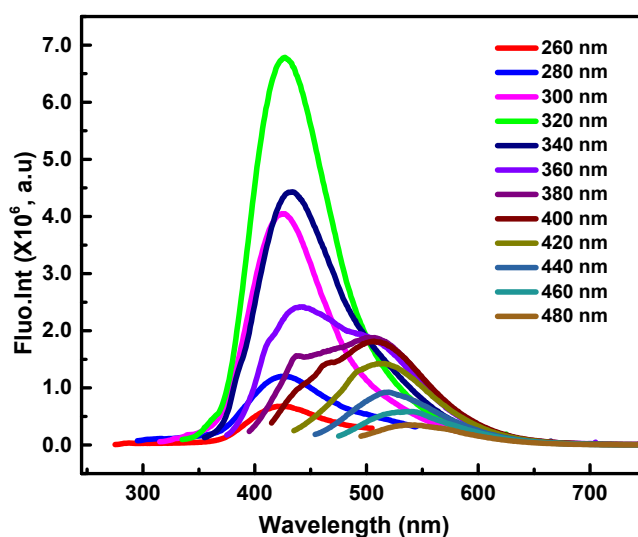
## Supporting materials

### Conjugated Polymer Covalently Modified Graphene Oxide Quantum Dots for Ternary Electronic Memory Device

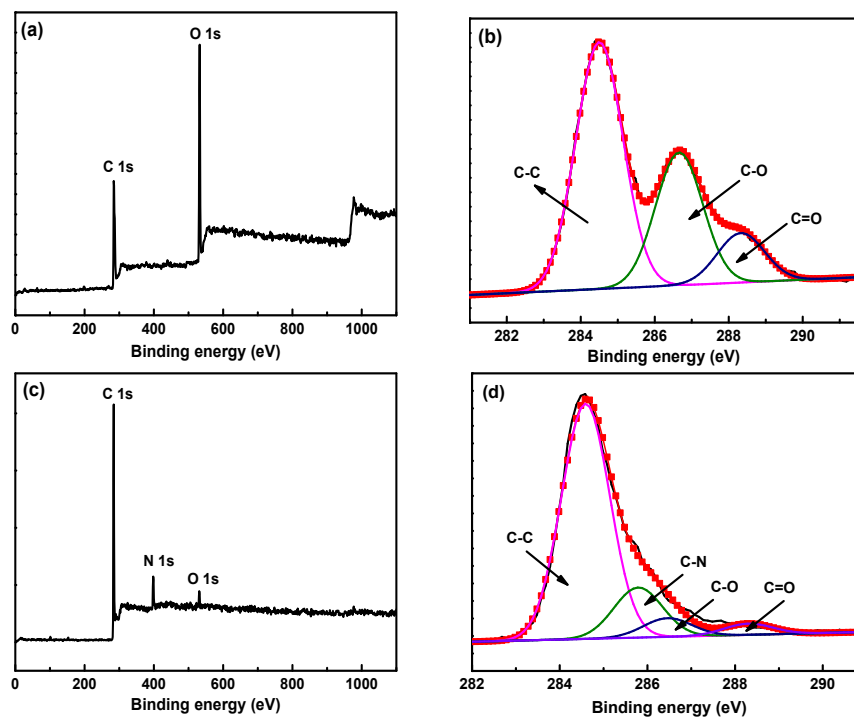
Fei Fan<sup>a</sup>, Bin Zhang<sup>a</sup>, Yaming Cao<sup>a</sup>, Xutong Yang<sup>b</sup>, Junwei Gu<sup>\*,b</sup>, Yu Chen<sup>\*,a</sup>

<sup>a</sup>Key Laboratory for Advanced Materials, Institute of Applied Chemistry, East China University of Science and Technology, 130 Meilong Road, Shanghai 200237, China. Email: chentangyu@yahoo.com

<sup>b</sup>Shaanxi Key Laboratory of Macromolecular Science and Technology, Department of Applied Chemistry, School of Science, Northwestern Polytechnical University, Xi'an, Shaanxi, 710072, China. Email: gjw@nwpu.edu.cn



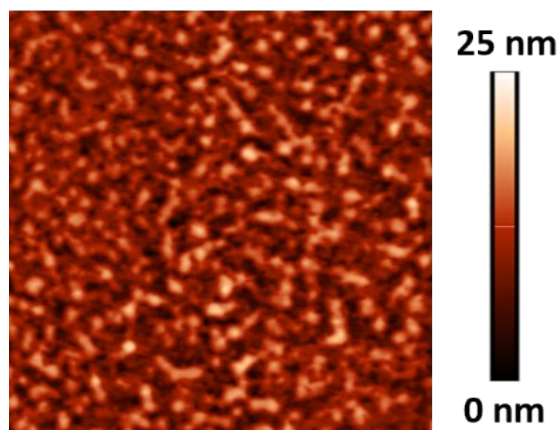
**Figure S1.** The fluorescence spectra of GOQDs obtained at different excitation wavelengths.



**Figure S2.** X-ray photoelectron spectroscopy wide scan spectra of (a) GOQDs and (c) TPAPAM-GOQDs; C1s core-level spectra of (b) GOQDs and (d) TPAPAM-GOQDs.



**Figure S3** Images of GO, QGDs, TPAPAM-GOQDs and TPAPAM (from left to right)



**Figure S4.** AFM images of the TPAPAM-GOQDs film on ITO substrate.