

Functionalized Graphene Quantum Dots Based Non-Enzymatic Sensor for Selective Tyrosine Detection

Priyadharshini Sriram ^{a,b}, Noel Nesakumar^c, & John Bosco Balaguru Rayappan^{a,b*}

*^aCentre for Nanotechnology & Advanced Biomaterials (CeNTAB), SASTRA Deemed University,
Thanjavur - 613 401, India*

*^bSchool of Electrical & Electronics Engineering (SEEE), SASTRA Deemed University, Thanjavur
- 613 401, India*

*^cSchool of Chemical & Biotechnology (SCBT), SASTRA Deemed University,
Thanjavur - 613 401, India*

*** Corresponding Author**

John Bosco Balaguru Rayappan, Ph.D.

Centre for Nanotechnology & Advanced Biomaterials (CeNTAB) &

School of Electrical & Electronics Engineering

SASTRA Deemed University, Thanjavur - 613 401, Tamil Nadu, India

Phone: +91 4362 350009; Ext: 2255; Fax: +91 4362 264 120

Email: rjbosco@ece.sastra.edu

S1. Raman Spectra of GQDs

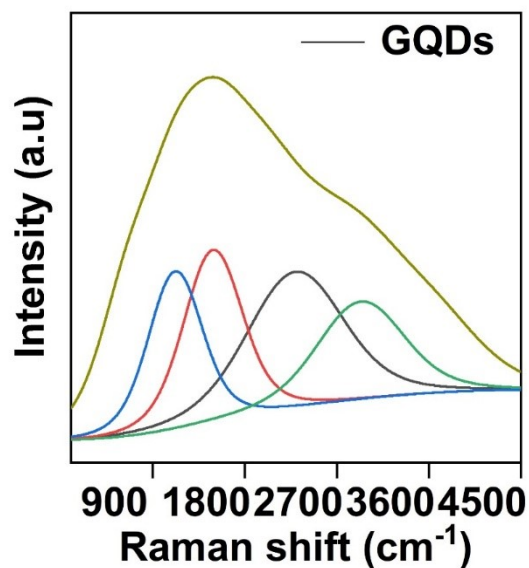
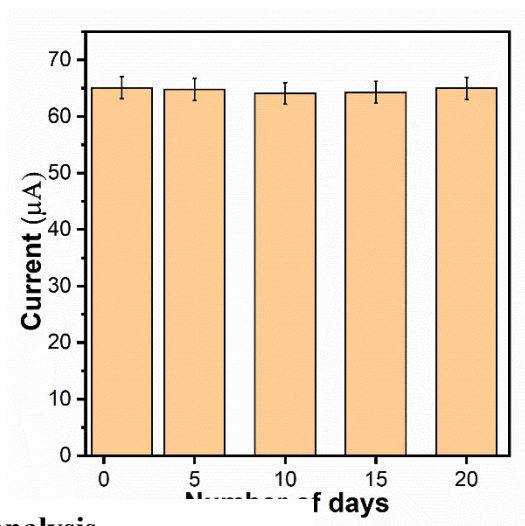


Fig S1. Raman spectra of GQDs

S2. Reproducibility of the f-GQDs/SPCE

Thank you for the valuable comment. The sensor exhibited excellent reproducibility across 20 days with an RSD of 0.79%, encompassing both batch-to-batch fabrication consistency and long-term stability over 1–2 weeks.



S3. DLS and Zeta potential analysis

Fig. S2. Reproducibility of f-GQDs/SPCE

