**Self-exothermic reaction assisted green synthesis of carbon dots for the detection of para-nitrophenol and β-glucosidase activity**

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1. **Stability of G-CDs**

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**Fig. S1** Study on the stability of G-CDs. Effect of NaCl concentration on the fluorescence intensity of G-CDs (A), Effect of storage time on the fluorescence intensity of G-CDs (B), Effect of irradiation time on the fluorescence intensity of G-CDs (C).

1. **Comparison of analytical performance**

**Table S1** Analytical performance of fluorescence assays for β-Glu activity based on CDs.

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| Carbon source | Methods | Conditions | Linear range  (U·L-1) | Detection limit  (U·L-1) | Ref |
| 1,2-diaminobenzene, EDA | Solvothermal method | 180 °C, 12 h | 0-250 | 12.3 | (Kong et al., 2020) |
| 1,2-diaminobenzene, EDA | Hydrothermal method | 180 °C, 12 h | 1-60 | 0.3 | (Lu et al., 2016) |
| Hydroquinone,  EDA | Hydrothermal method | 180 °C, 12 h | 1-15 | 0.3 | (Gong et al., 2019) |
| Cysteine,  CuCl2 | Hydrothermal method | 150 °C, 21 h | 0.5-700 | 0.2 | (Liu et al., 2019) |
| Ganpu tea | Self-exothermic reaction | Room temperature, 5 min | 0.1-20 | 0.074 | This work |

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