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Rapid and Universal Detection of Ovalbumin Based on N,O,P

-co-doped Carbon dots-Fluorescence Resonance Energy Transfer

Technology

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Highlights

Novel NOP-co-doped CDs were synthesized via hydrothermal treatment

The fluorescence of NOP-CDs could be effectively guenched by GO via FRET.

A fast and universial FRET based method for OVA determination was established.

The immunosensor show highly selectivity towards ovalbumin

Abstract: Fluorescence resonance energy transfer (FRET), a near-field energy

transfer from a fluorescent donor to a fluorescent acceptor within close proximity, has

been widely used in biosensing. In this study, a rapid and universal sensor for the

detection of ovalbumin (OVA) using nitrogen, oxygen, phosphoric co-doped CDs

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