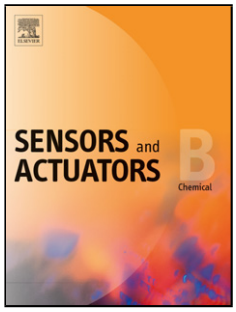

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Rapid and Universal Detection of Ovalbumin Based on N,O,P -co-doped Carbon dots-Fluorescence Resonance Energy Transfer Technology

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Highlights

- Novel NOP-co-doped CDs were synthesized via hydrothermal treatment
- The fluorescence of NOP-CDs could be effectively quenched 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