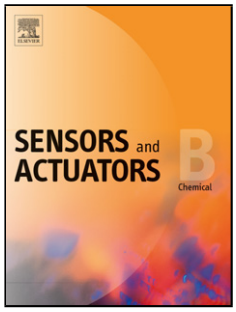

Title: Polyamidoamine dendrimer-armed fluorescent magnetic nanoparticles for sensitive and selective determination of nitrite in beverages

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Highlights

- Magnetic silica nanoparticles were grafted with polyamidoamine dendron structures as arms
- Fluorophores were covalently bound to nanoparticles via Griess reaction during measurement
- Presence of dendritic arms significantly improved the fluorescence intensity
- The method was selective for directly determining nitrite in real samples without pretreatment
- Ultrahigh sensitivity could be realized by large-sample-volume strategy with high recovery