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Magnetic Relaxation-Based Sensing of Phosphate Ion

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#### **ACCEPTED MANUSCRIPT**

### **Magnetic Relaxation-Based Sensing of Phosphate Ion**

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#### ABSTRACT

We report a novel magnetic relaxation-based sensing method for sensitive and selective detection of phosphate ions in aqueous media using paramagnetic nanoparticles. The method can detect phosphate ions at physiological pH quantitatively with high selectivity, even in a commercial fertilizer without separation.

#### Graphical abstract



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