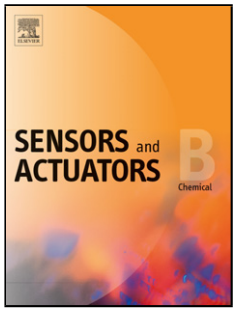

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Thiophene-Thiazole Functionalized Oligomers-Excellent fluorescent sensing and selective probe for copper and iron ion

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Highlights

- Developed a new thiophene-thiazole type colorimetric and fluorescent chemosensor for Cu^{2+} and Fe^{2+} recognition in water samples from other metal ions such as Li^{+}, Na^{+}, Mg^{2+}, Ni^{2+} , Cd^{2+} and Zn^{2+}.
- Very rapid and remarkable recognition over the conventional detection methods.
- Achieved detection limit (LOD) of Cu^{2+} was 1.04×10^{-5} M for OBTV-TZ and 0.988×10^{-5} M for OTTV-TZ
- Both oligomers are successfully regained from the Fe^{2+} complexed system by using EDTA