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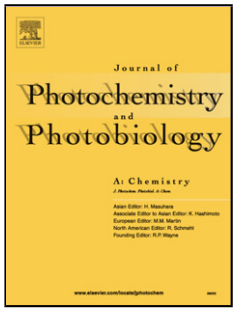

Title: A new "ON-OFF" fluorescent and colorimetric chemosensor based on 1,3,4-oxadiazole derivative for the detection of Cu^{2+} ions

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A new "ON-OFF" fluorescent and colorimetric chemosensor based on 1,3,4-oxadiazole derivative for the detection of Cu^{2+} ions

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Graphical Abstract

Highlights

- A new "ON-OFF" fluorescent and colorimetric chemosensor based on 1,3,4-oxadiazole derivative for the detection of Cu^{2+} ions
- Lin Wang, Qijing Bing, Jianxin Li, Guang Wang*
- *Faculty of Chemistry, Northeast Normal University, Changchun 130024, P. R. China*
- ► Pyrazole-containing oxadiazole derivative as fluorescent chemosensor (sensor 1) was synthesized successfully.
- ► Sensor 1 displayed high selective and sensitive fluorescence sensing for Cu^{2+}.
- ► Sensor 1 showed high anti-interference ability in the co-existence of other metal ions.
- ► Sensor 1 also showed the ability of naked-eye detection for Cu^{2+} ions.

Abstract: A symmetrical oxadiazole derivative (OXD) containing two pyrazole moieties was synthesized successfully and characterized by single crystal X-ray diffraction, nuclear magnetic resonance and mass spectrometry. The synthesized