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Figure S1. IR spectra of B1NIn, B2NIn, B3NIn and as-prepared boehmite.

**Figure S2**. Calibration curve for the determination of the amount of attached indole in B1NIn, B2NIn and B3NIn.

**Figure S3.** A and B show Emission Intensity vs. Concentration of  $Cu^{2+}$  Ions and Fluorescence Emission Intensity *vs.* pH curves for the system  $Cu^{2+}$ -**B3NIn**. Figures C and D represent similar plots for the sytem  $Zn^{2+}$ -**B3NIn**.

**Figure S4**. Fluorescence Emission vs. molar concentration of ATP (A) and Fluorescence Emission Intensity *vs.* pH (B) curves for the system ATP-**B2NIn**.

**Figure S5**. Fluorescence Emission vs. molar concentration of ADP (A) and Fluorescence Emission Intensity *vs.* pH (B) curves for the system ADP-**B2NIn**.

**Figure S6**. Fluorescence Emission vs. molar concentration of AMP (A) and Fluorescence Emission Intensity *vs*. pH (B) curves for the system AMP-**B2NIn**.

**Figure S7.** Fluorescence Emission vs. molar concentration of ATP (A) and Fluorescence Emission Intensity *vs.* pH (B) curves for the system ATP-**B1NIn**.

**Figure S8.** Fluorescence Emission vs. molar concentration of ADP (A) and Fluorescence Emission Intensity *vs.* pH (B) curves for the system ADP-**B1NIn**.

**Figure S9.** Fluorescence Emission vs. molar concentration of AMP (A) and Fluorescence Emission Intensity *vs.* pH (B) curves for the system AMP-**B1NIn**.

Figure S10. Stern-Volmer plot for the system ADP-B2NIn.

Figure S11. Stern-Volmer plot for the system AMP-B2NIn.



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