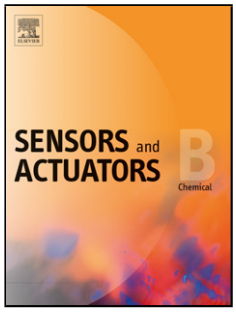

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Green anhydrous synthesis of hydrophilic carbon dots on large-scale and their application for broad fluorescent pH sensing

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Graphical abstract

A green and convenient anhydrous method was developed in this work, and it is suitable for industrial synthesis of fluorescent hydrophilic carbon dots (H-CDs) on large-scale. Interestingly, the H-CDs exhibit excellent reversible pH-sensitive property in the range of 3.0-13.0.