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A Versatile Fluorimetric Chemosensor for Mercury (II) Assay Based on Carbon Nanodots

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Highlights

- 2,6-pyridinedicarboxylic acid-derived carbon nanodots (PECs) have been fabricated.
- PECs were used for Hg²⁺ sensing based on photoluminescence quenching.
- The structural characterization of as-obtained PECs was thoroughly investigated.
- The PECs were capable of rapidly detecting Hg²⁺ in reservoir water, tap water, female and male human urines.

Abstract

Human urine mercury level functions as a pre-warning signal for mercury exposure, either in acute or chronic events. Unlike common hydrargyris due to

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