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Multiplexed analysis combining distinctly-sized CdTe-MPA quantum dots and chemometrics for multiple mutually interfering analyte determination

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Abstract

Semiconductor quantum dots (QDs) have demonstrated a great potential as fluorescent probes for heavy metals monitoring. However, their great reactivity, whose tunability could be difficult to attain, could impair selectivity yielding analytical results with poor accuracy. In this work, the combination in the same analysis of multiple QDs, each with a particular ability to interact with the analyte, assured a multi-point detection that was not only exploited for a more precise analyte

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