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Recent Developments in Inorganic Hg<sup>2+</sup> Detection by Voltammetry

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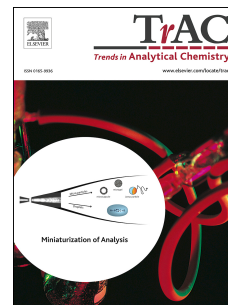
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**REVIEW PAPER****Recent Developments in Inorganic Hg<sup>2+</sup> Detection by Voltammetry**

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**Abstract**

This review presents recent developments in electrochemical Hg<sup>2+</sup> detection by voltammetry, summarizing and evaluating the use of different voltammetric techniques, working electrodes, and surface modifications. The remaining technical challenges are discussed and a future outlook offered.

**Keywords:** inorganic Hg<sup>2+</sup>, voltammetry, mercury, electrode, surface modifier agents, limit of detection

**Abbreviations**

AdSV	- Adsorptive Stripping Voltammetry
AS	- Anodic Stripping
AuNPs	- Gold nanoparticles
BDD	- Boron Doped Diamond electrode
CILE	- Carbon Ionic Liquid Electrode
CPE	- Carbon Paste Electrode
CV	- Cyclic Voltammetry
DP	- Differential Pulse
GC	- Glassy Carbon
g-C <sub>3</sub> N <sub>4</sub>	- Graphitic Carbon Nitride
ITO	- Indium Tin Oxide
LS	- Linear Sweep
MWCNTs	- Multi-walled carbon nanotubes
PbNPs	- Lead nanoparticles
rGO	- Reduced-Graphene Oxide
SPCE	- Screen Printed Carbon Electrode
SPE	- Screen Printed Electrodes
SW	- Square Wave
SWCNTs	- Single-walled carbon nanotubes
TiO <sub>2</sub>	- Titanium Dioxide

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