

研究简报

## 以金纳米粒子为探针比色法检测顺铂

孙琳琳, 刘殿骏, 王振新

中国科学院长春应用化学研究所电分析化学国家重点实验室, 长春 130022

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**摘要** 报道了一种以金纳米粒子表面等离子吸收带变化为基础, 通过DNA与*cis*-Pt相互作用来检测溶液中*cis*-Pt浓度的新型比色法.

**关键词** [顺铂](#) [金纳米粒子](#) [比色法](#)

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## Colorimetric Detection of *cis*-Pt with Gold Nanoparticle Probes

SUN Lin-Lin, LIU Dian-Jun, WANG Zhen-Xin\*

State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, China

**Abstract** A novel method of colorimetric assay for determining *cis*-Pt (*cis*-diammino-dichloroplatinum II) was found by the binding affinities between *cis*-Pt and DNA based on the change of surface plasmon resonance band of gold nanoparticles. The red-shift of the maximum band of the surface plasmon resonance band of gold nanoparticles increased linearly with the logarithm of the *cis*-Pt concentration from 40 to 2000 nmol/L and the detection limit is 40 nmol/L when the concentration of gold nanoparticles is 4 nmol/L. The colorimetric readout can be visualised with the naked eyes.

**Key words** [cis-Pt](#) [Gold nanoparticle](#) [Colorimetric assay](#)

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通讯作者 王振新 [wangzx@ciac.jl.cn](mailto:wangzx@ciac.jl.cn)

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