DATABASE
NANO ONLINE
THE ONE-STOP-SHOP FOR NANO

- Full compilation of De Gruyter‘s Nano program covering nano science and technology
- Research results from all relevant disciplines including physics, chemistry, materials science, engineering and medicine
COMPREHENSIVE CONTENT

- The database contains more than 1,900 entries (an equivalent of more than 15,000 print pages) from a variety of sources:
  - 144 chapters from 14 books
  - 1,142 articles from 55 De Gruyter journals
  - 636 articles from third party Open Access journals
- Including annual updates of more than 250 articles (about 5,000 print pages)
KEY FEATURES

- Quick access due to classification of articles in multi-dimensional search grid: material, technology, property, structure, application, impact on society
- Time-saving access via extensive linking between documents to additional relevant content
KEY FEATURES

- Supreme search functionalities for improved user experience and faster search results
- Non-restrictive DRM allows for an unlimited number of simultaneous users per campus or institutions
1. SEARCH

SIMPLE SEARCH

ADVANCED SEARCH (MORE SEARCH OPTIONS)

Search for “HCV RNA” (Full text search)

Choose from a number of search criteria
2 RESULT LIST

Number of entries

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Results can be sorted by, e.g. title, book title, year or relevance

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Additional information: book title, year, category
Detection of unamplified HCV RNA in serum using a novel two metallic nanoparticle platform

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Abstract

Background: The unique properties of metallic nanoparticles have enabled their utilization in biosensing applications. A novel assay for the detection of hepatitis C virus (HCV) RNA in serum specimens has been developed using magnetic nanoparticles and unmodified cationic gold nanoparticles (AuNPs).

Methods: HCV RNA was extracted using magnetic nanoparticles functionalized with an oligonucleotide specific to HCV RNA. Extracted RNA is reacted with oligonucleotide sequence specific for HCV RNA in presence of unmodified cationic AuNPs. In positive samples, AuNPs are aligned onto the phosphate backbone of the RNA, and their aggregation changes the color from red to blue. In the absence of target, solution color remains red. The assay has been validated on serum samples from infected patients.
FIGURE DISPLAY

Enriched content through numerous graphics, illustrations and tables

Figure 1
The principle of the developed AuNPs-based assay

Figure 2
SEM analysis of AuNPs in positive and negative sample. AuNPs aggregate on other molecules in the presence of phosphate buffer.
5 RELATED CONTENT

3. Fabrication and characterization of electrospun poly(ε-caprolactone)/tricalcium phosphate hybrid meshes for potential applications in hard tissue repair by Lorendina Tsampar, Victoria Vittoria, Ralf Woyw, Jürgen Wäscher, Sigrid Beer, Susanne Thein, Matthias Schonbrunn (2014)
5. Enhanced Antibacterial Activity of CeO2 Nanoparticles by Surfactants by Rosalia Cuajtroort-Cedrón, Miguel A. Mendoza-Rivas, Eroza R. Banatid, Marco A. Quintero, Sonia Rodas, Jose Luis Sanchez-Salas (2013)
6. Synthetic routes to magnetic nanoparticles for MRI by Harold Kralj, Dietmar Eberle, Susanne Wagner, Matthias Taupitz, Jörg Schmer (2013)
9. Preparation of graphene adsorbers and their applications in water purification by Jing Xu, Hongda Lv, Sheng-Tao Yang, Jianbin Lu (2013)
12. Functionalization of clay nanocomposites by Virue Kumar, Amanpreet Singh (2013)

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6 BROWSE FUNCTION

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