In this issue

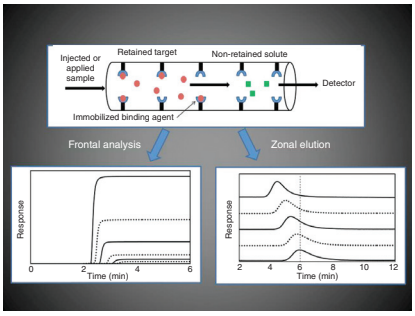
Ryan Matsuda, So-Hwang Kye, Jeanethe Anguizola and David S. Hage

Studies of drug interactions with glycated human serum albumin by high-performance affinity chromatography

DOI 10.1515/revac-2013-0029
Rev Anal Chem 2014; 33(2): 79–94

Review: High-performance affinity chromatography has been used in various formats, such as frontal analysis and zonal elution, to examine drug interactions between sulfonylurea drugs and normal or glycated human serum albumin.

Keywords: binding studies; diabetes; drug-protein binding; human serum albumin; glycation; high-performance affinity chromatography; sulfonylurea drugs.



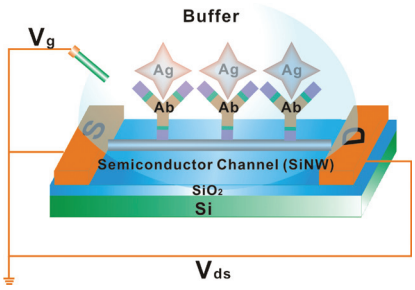
Fan Yang and Guo-Jun Zhang

Silicon nanowire-transistor biosensor for study of molecule-molecule interactions

DOI 10.1515/revac-2014-0010
Rev Anal Chem 2014; 33(2): 95–110

Review: The SiNW FET biosensor serves as a promising tool to study molecule-molecule interactions.

Keywords: biosensor; field-effect transistor; molecule-molecule interactions; silicon nanowire.



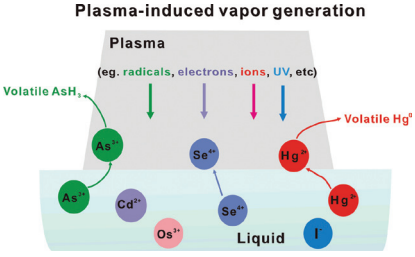
Qian He, Zhenli Zhu and Shenghong Hu

Plasma-induced vapor generation technique for analytical atomic spectrometry

DOI 10.1515/revac-2014-0012
Rev Anal Chem 2014; 33(2): 111–121

Review: Plasma-induced vapor generation (plasma-CVG), where the dissolved ions are converted to volatile species by the plasma-induced chemical process without the use of chemical reduction/oxidation reagents, is an emerging green vapor generation technique.

Keywords: atmospheric plasma; atomic spectrometry; plasma chemistry; vapor generation.



Prajesh Prajapati and Yadvendra K. Agrawal

Analysis and impurity identification in pharmaceuticals

DOI 10.1515/revac-2014-0001
Rev Anal Chem 2014; 33(2): 123–133

Review: This article reviews identification and different methods for estimation of impurity in pharmaceutical science.

Keywords: analytical methods; genotoxic impurity; inorganic impurity; organic impurity; regulatory requirement in impurity profile.

Mohammed Zougagh and
Ángel Ríos

Interfacing commercially available capillary electrophoresis to sample preparation and/or detection systems to solve analytical problems

DOI 10.1515/revac-2014-0009
Rev Anal Chem 2014; 33(2): 135–152

Review: A critical revision of capillary electrophoresis interfaced approaches is presented.

Keywords: commercially available capillary electrophoresis equipment; coupling; interfaced devices; interfaced sample preparation; non-commercially interfaced detection modes.