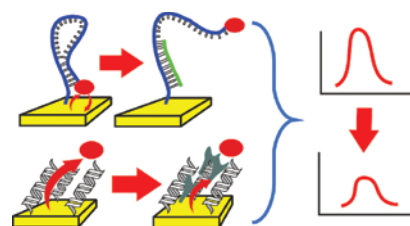


Gennady A. Evtugyn, Anna V. Porfireva and Ivan I. Stoikov
Electrochemical DNA sensors based on spatially distributed redox mediators: challenges and promises

DOI 10.1515/pac-2016-1124
 Pure Appl. Chem. 2017; 89(10): 1471–1490

Conference paper: Application of spatially distributed redox indicators for DNA sensor and aptasensor assembling is reviewed and illustrated by various biological targets detection.

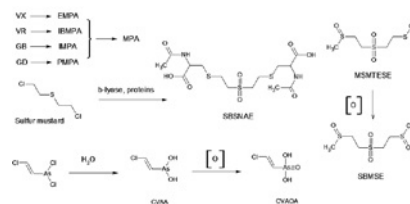


Keywords: aptasensor; DNA damage; DNA sensor; E-sensor; mediated electron transfer; Mendeleev XX; pillar[5]arene; thiacalix[4]arene.

Igor V. Rybalchenko, Igor A. Rodin, Timur M. Baygildiev, Andrey N. Stavrianidi, Arcady V. Braun, Yury I. Morozik and Oleg A. Shpigun
Novel analytical approaches to determination of chemical warfare agents and related compounds for verification of nonproliferation of chemical weapons

DOI 10.1515/pac-2016-1208
 Pure Appl. Chem. 2017; 89(10): 1491–1503

Conference paper: In this paper developed complex of approaches for fast and sensitive determination of the majority of known chemical weapon degradation products is described.



Keywords: biomonitoring; chemical warfare agents; lewisite; mass spectrometry; Mendeleev XX; nerve agent; sulfur mustard.

Mikhail G. Zuev, Vladislav G. Il'ves, Sergey Yu. Sokovnin, Andrei A. Vasin and Elena Yu. Zhuravleva
New amorphous nanophosphors obtained by evaporation of silicates and germanates REE

DOI 10.1515/pac-2016-1118
 Pure Appl. Chem. 2017; 89(10): 1505–1520

Conference paper: The TEM pictures of the NP (a) and the PL spectra of bulk- (b) and nanophosphors based on $\text{Ca}_2\text{La}_{6.4}\text{Eu}_{1.6}\text{Ge}_6\text{O}_{26}$ (c).

Keywords: Eu^{2+} ; Eu^{3+} ; luminescence; Mendeleev XX; nanophosphors; nanotechnology; synthesis; UV-visible spectroscopy; vibrational spectra; X-ray diffraction.

