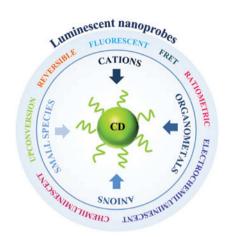
In this issue

Isabel Costas-Mora, Vanesa Romero, Isela Lavilla and Carlos Bendicho Luminescent assays based on carbon dots for inorganic trace analysis

DOI 10.1515/revac-2015-0003 Rev Anal Chem 2015; 34(3-4): 61-76 **Review:** In this overview, insight into the significant advances involving the application of carbon dots to inorganic trace analysis is provided.

Keywords: carbon dots; chemiluminescence; fluorescence; inorganic trace analysis; optical sensing.



Yi-Pin Chang, Wei-Chun Liu, Ming-Chung Tseng and Yen-Ho Chu Ionic liquids tailored for reactionbased gas sensing on quartz crystal microbalance

DOI 10.1515/revac-2015-0009 Rev Anal Chem 2015; 34(3-4): 77-86 **Review:** This mini-review vignettes some conventional gas sensing approaches, collates our latest research results in the exploration of sensing ionic liquids on QCM chips, and gives an account of the state-of-the-art gas sensing technology.

Keywords: chemoselective gas sensing; ionic liquid; label-free detection; quartz crystal microbalance; volatile organic compound.



Feng Zhu, Bingwei Mao and Jiawei Yan

Double electrode systems with microelectrode arrays for electrochemical measurements

DOI 10.1515/revac-2015-0012 Rev Anal Chem 2015; 34(3-4): 87–101 **Review:** The coupling of double electrode systems with microelectrode arrays gives the device the characteristics of versatile potential control and signal amplification, thus facilitating electrochemical measurements greatly.

Keywords: bipolar electrode; collection efficiency; double electrode systems; microelectrode arrays; redox cycling.

