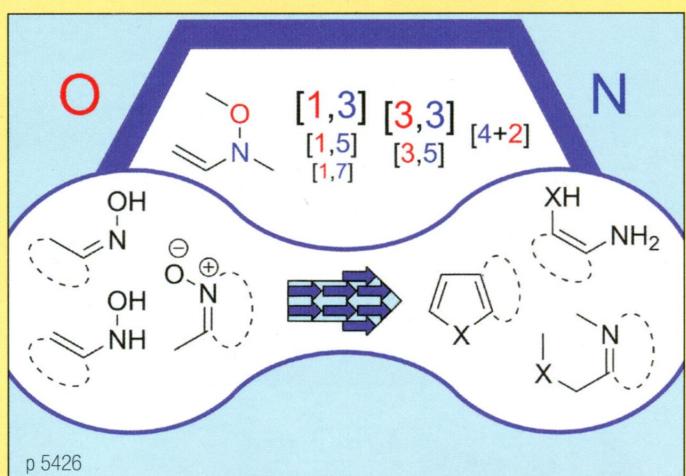
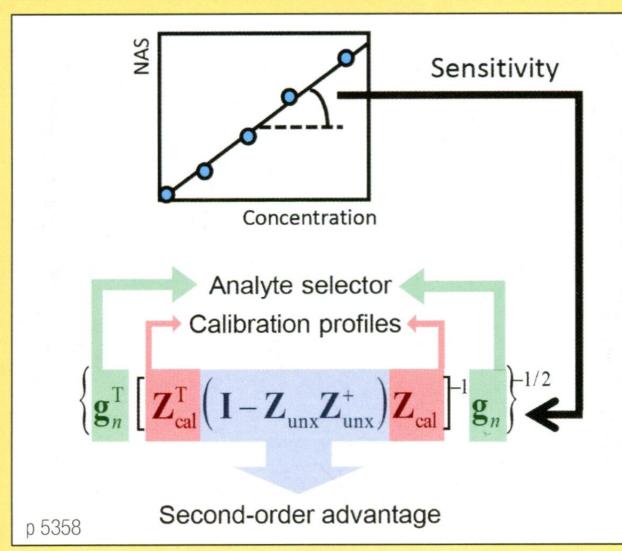
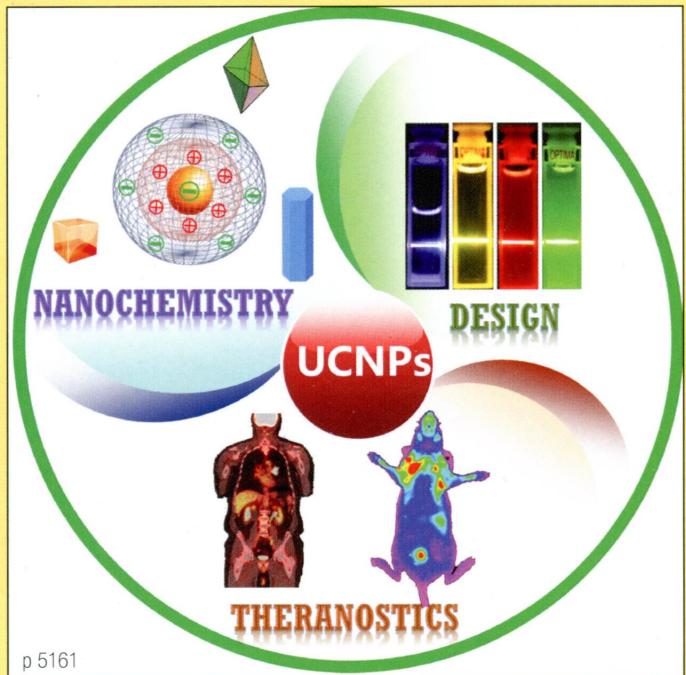
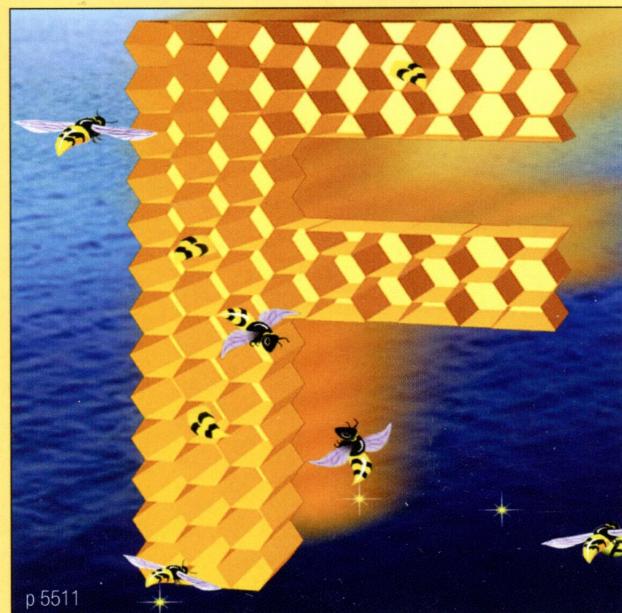


ПН
С 51/2 R

CHEMICAL REVIEWS

MAY 28, 2014

VOLUME 114 NUMBER 10 pubs.acs.org/CR



ACS Publications
Most Trusted. Most Cited. Most Read.

www.acs.org

CHEMICAL REVIEWS

MAY 28, 2014
VOLUME 114 ISSUE 10

CHREAY 114(10) 5117–5610 (2014)
ISSN 0009-2665
Registered in the U.S. Patent and Trademark Office
© 2014 by the American Chemical Society

Reviews

5117

[dx.doi.org/10.1021/cr400523y](https://doi.org/10.1021/cr400523y)

Graphene-Supported Nanoelectrocatalysts for Fuel Cells: Synthesis, Properties, and Applications

Minmin Liu, Ruizhong Zhang, and Wei Chen*

5161

[dx.doi.org/10.1021/cr400425h](https://doi.org/10.1021/cr400425h)

Upconversion Nanoparticles: Design, Nanochemistry, and Applications in Theranostics

Guanying Chen,* Hailong Qiu, Paras N. Prasad,* and Xiaoyuan Chen*

5215

[dx.doi.org/10.1021/cr4006439](https://doi.org/10.1021/cr4006439)

Chemistry of Iron *N*-Heterocyclic Carbene Complexes: Syntheses, Structures, Reactivities, and Catalytic Applications

Korbinian Riener, Stefan Haslinger, Andreas Raba, Manuel P. Högerl, Mirza Cokoja, Wolfgang A. Herrmann,* and Fritz E. Kühn*

5273

[dx.doi.org/10.1021/cr400518y](https://doi.org/10.1021/cr400518y)

How Biology Handles Nitrite

Luisa B. Maia and José J. G. Moura*

5358



[dx.doi.org/10.1021/cr400455s](https://doi.org/10.1021/cr400455s)

Analytical Figures of Merit: From Univariate to Multiway Calibration

Alejandro C. Olivieri*

5379

[dx.doi.org/10.1021/cr300471v](https://doi.org/10.1021/cr300471v)

Excited State Aromaticity and Antiaromaticity: Opportunities for Photophysical and Photochemical Rationalizations

Martin Rosenberg, Christian Dahlstrand, Kristine Kilså,* and Henrik Ottosson*

5426

[dx.doi.org/10.1021/cr400196x](https://doi.org/10.1021/cr400196x)

Rearrangement of *N*-Oxygenamines and Related Reactions

Andrey A. Tabolin* and Sema L. Ioffe

5477

[dx.doi.org/10.1021/cr400609m](https://doi.org/10.1021/cr400609m)

Review of Methods for the Catalytic Hydrogenation of Carboxamides

Andrew M. Smith and Robin Whyman*

5511

[dx.doi.org/10.1021/cr400352m](https://doi.org/10.1021/cr400352m)

Fluorescence and Colorimetric Chemosensors for Fluoride-Ion Detection

Ying Zhou, Jun Feng Zhang, and Juyoung Yoon*

5572

[dx.doi.org/10.1021/cr400131u](https://doi.org/10.1021/cr400131u)

1,3,4-Thiadiazole: Synthesis, Reactions, and Applications in Medicinal, Agricultural, and Materials Chemistry

Yang Hu, Cui-Yun Li, Xiao-Ming Wang, Yong-Hua Yang,* and Hai-Liang Zhu*