

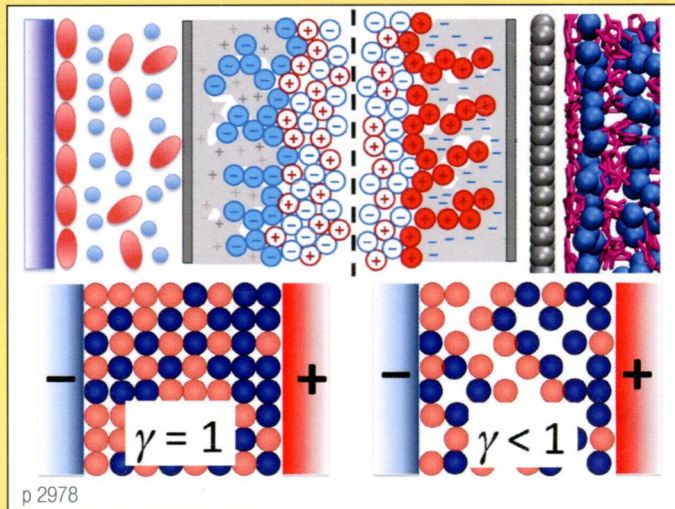
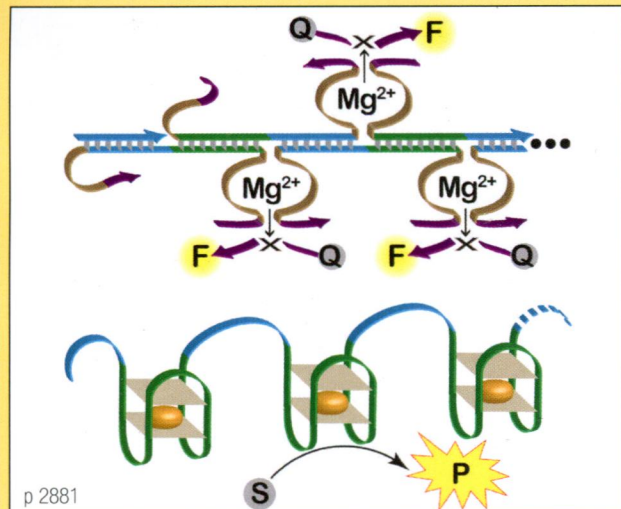
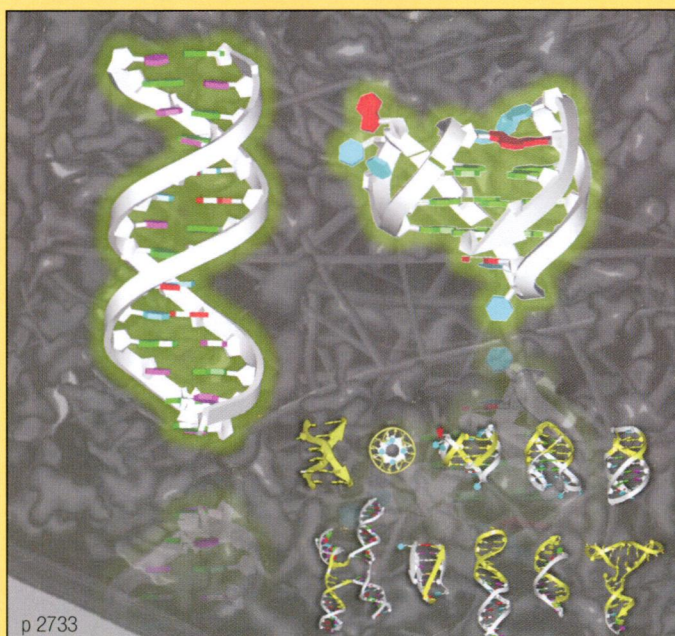
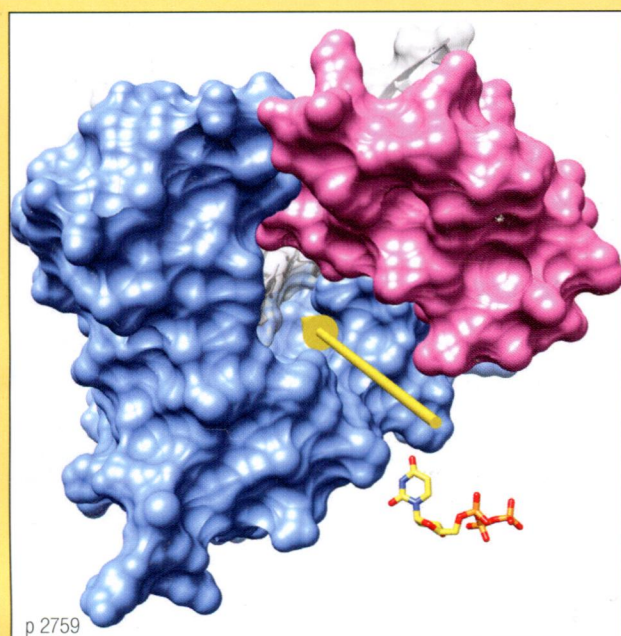
PH
C51/2R

CHEMICAL REVIEWS

MARCH 12, 2014

VOLUME 114 NUMBER 5

pubs.acs.org/CR



ACS Publications
MOST TRUSTED. MOST CITED. MOST READ.

www.acs.org

CHEMICAL REVIEWS

MARCH 12, 2014

VOLUME 114 ISSUE 5

CHREAY 114(5) 2587–3068 (2014)

ISSN 0009-2665

Registered in the U.S. Patent and Trademark Office

© 2014 by the American Chemical Society

Reviews

2587

[dx.doi.org/10.1021/cr400441m](https://doi.org/10.1021/cr400441m)

Thiyl Radicals in Organic Synthesis

Fabrice Dénès,* Mark Pichowicz, Guillaume Povie, and Philippe Renaud

2694

[dx.doi.org/10.1021/cr400169m](https://doi.org/10.1021/cr400169m)

Chemical and Physical Pathways for the Preparation of Superoleophobic Surfaces and Related Wetting Theories

Hervé Bellanger, Thierry Darmanin, Elisabeth Taffin de Givenchy, and Frédéric Guittard*

2717

[dx.doi.org/10.1021/cr300048m](https://doi.org/10.1021/cr300048m)

Brevianes Revisited

Francisco A. Macías,* Ceferino Carrera, and Juan C. G. Galindo

2733

[dx.doi.org/10.1021/cr400113m](https://doi.org/10.1021/cr400113m)

Effects of Molecular Crowding on the Structures, Interactions, and Functions of Nucleic Acids

Shu-ichi Nakano,* Daisuke Miyoshi,* and Naoki Sugimoto*

2759

[dx.doi.org/10.1021/cr3005179](https://doi.org/10.1021/cr3005179)

Structural Comparison of DNA Polymerase Architecture Suggests a Nucleotide Gateway to the Polymerase Active Site

Sangwook Wu, William A. Beard, Lee G. Pedersen,* and Samuel H. Wilson*

2775

[dx.doi.org/10.1021/cr4004055](https://doi.org/10.1021/cr4004055)

Enantioselective Cobalt-Catalyzed Transformations

Hélène Pellissier* and Hervé Clavier

2824

[dx.doi.org/10.1021/cr4003243](https://doi.org/10.1021/cr4003243)

Electron-Deficient Diphosphines: The Impact of DIFLUORPHOS in Asymmetric Catalysis

Jean-Pierre Genet,* Tahar Ayad, and Virginie Ratovelomanana-Vidal*

2881

[dx.doi.org/10.1021/cr400354z](https://doi.org/10.1021/cr400354z)

From Cascaded Catalytic Nucleic Acids to Enzyme–DNA Nanostructures: Controlling Reactivity, Sensing, Logic Operations, and Assembly of Complex Structures

Fuan Wang, Chun-Hua Lu, and Itamar Willner*

2942

[dx.doi.org/10.1021/cr300122t](https://doi.org/10.1021/cr300122t)

Acid Hydrazides, Potent Reagents for Synthesis of Oxygen-, Nitrogen-, and/or Sulfur-Containing Heterocyclic Rings

Poulomi Majumdar, Anita Pati, Manabendra Patra, Rajani Kanta Behera, and Ajaya Kumar Behera*

2978

[dx.doi.org/10.1021/cr400374x](https://doi.org/10.1021/cr400374x)

Ionic Liquids at Electrified Interfaces

Maxim V. Fedorov* and Alexei A. Kornyshev*

3037

[dx.doi.org/10.1021/cr400462e](https://doi.org/10.1021/cr400462e)

Thermochromic Polymers—Function by Design

Arno Seeboth,* Detlef Löttsch, Ralf Ruhmann, and Olaf Muehling