

Chem Soc Rev

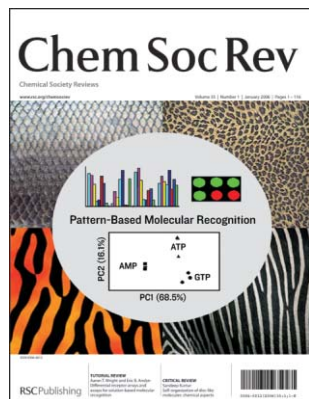
Chemical Society Reviews

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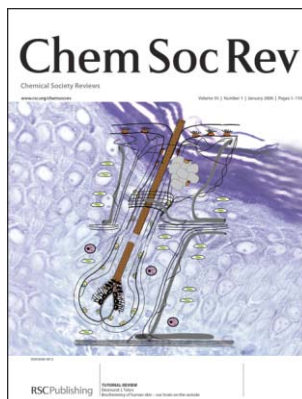
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ISSN 0306-0012 CODEN CSRVR 35(1) 1–116 (2006)



Cover

See Aaron T. Wright and Eric B. Anslyn, page 14. Just as with the patterns found on animals, patterns created from arrays of receptors can be used for differentiation. Image reproduced by permission of Aaron T. Wright and Eric B. Anslyn from *Chem. Soc. Rev.*, 2006, 35, 14.



Inside cover

See Desmond J. Tobin, page 52. Biology has lifted the skin's veil only to find it's more than skin deep – now it's Chemistry's turn. Image reproduced by permission of Desmond J. Tobin from *Chem. Soc. Rev.*, 2006, 35, 52.

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C1

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Chemical Science

January 2006/Volume 3/Issue 1

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EDITORIAL

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Editorial

Professor David Parker, Chairman of the Editorial Board, and Robert Eagling, Editor, look back on the achievements of 2005 and look forward to 2006.



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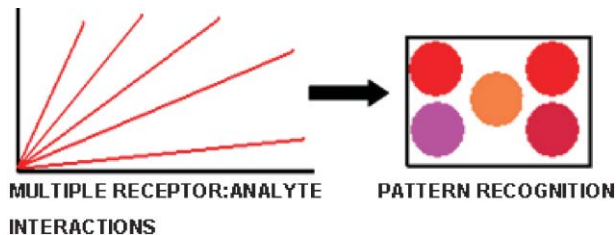
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Differential receptor arrays and assays for solution-based molecular recognition

Aaron T. Wright and Eric V. Anslyn*

Multiple differential receptors provide patterns that are readily identifiable for complex analytes and mixtures.

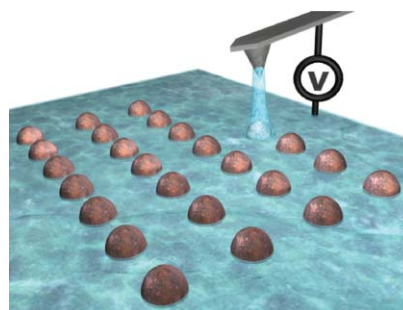


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Nano-chemistry and scanning probe nanolithographies

Ricardo Garcia, Ramsés V. Martinez and Javier Martinez

Local chemical nanolithographies open unconventional approaches to the academic researcher to both fabricate sophisticated devices and to confine and control chemical reactions at the nanoscale.

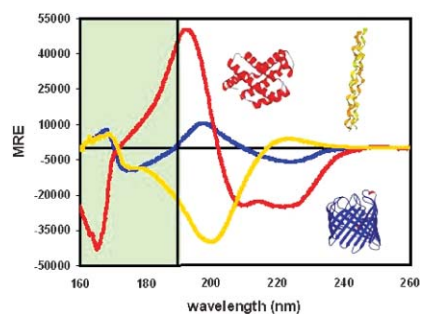


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Synchrotron radiation circular dichroism spectroscopy of proteins and applications in structural and functional genomics

Andrew J. Miles and B. A. Wallace*

Synchrotron Radiation Circular Dichroism (SRCD) spectra of proteins: The green shaded region indicates the additional data accessible using a synchrotron light source.

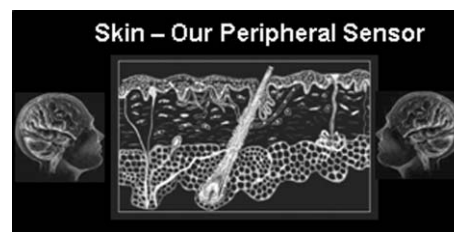


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Biochemistry of human skin—our brain on the outside

Desmond J. Tobin

Biology has lifted the skin's veil only to find it's much more than skin deep—now it's chemistry's turn.

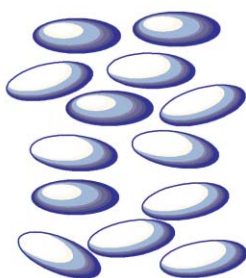




Organic chemistry in water

Chao-Jun Li* and Liang Chen

Water has been developed as a versatile solvent for organic chemistry in recent years. Water as a solvent is not only inexpensive and environmentally benign, but also gives completely new reactivity to organic reactions. There are many types of organic reactions that can proceed in water. Aqueous organic reactions have broad applications such as direct synthesis of biological compounds from carbohydrates and chemical modification of biomolecules.



Self-organization of disc-like molecules: chemical aspects

Sandeep Kumar

This article presents recent advances in basic design principles and synthetic approaches towards the preparation of the most frequently encountered discotic liquid crystals.

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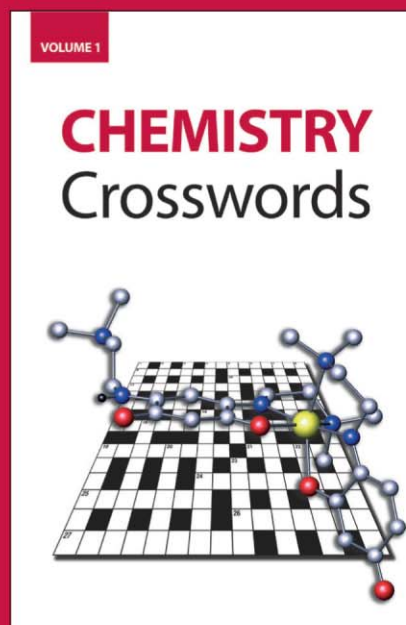
**14 across. Alchemy provokes
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Answer: Chemistry Crosswords

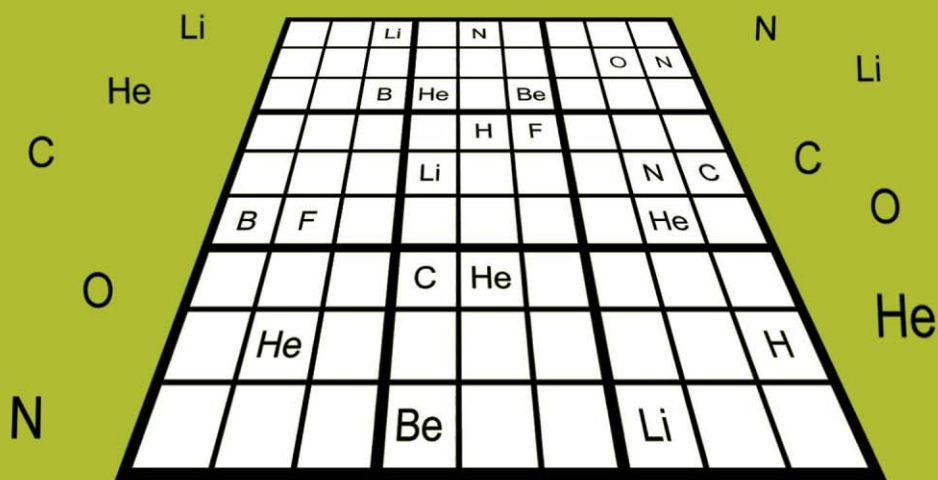
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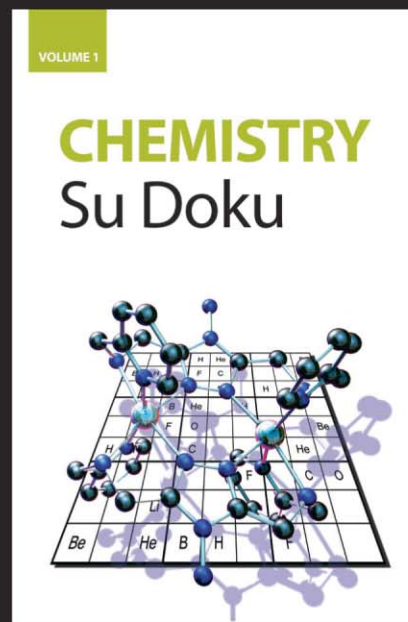


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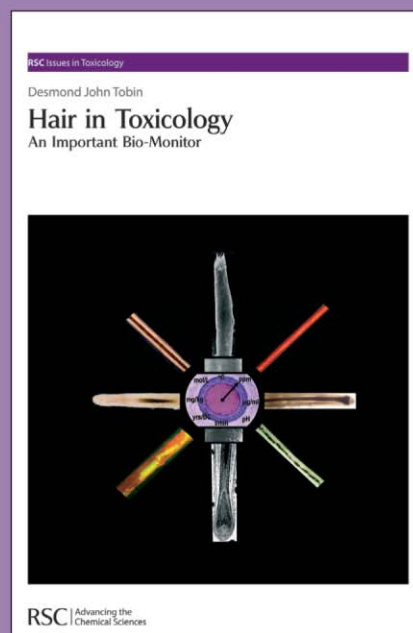
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