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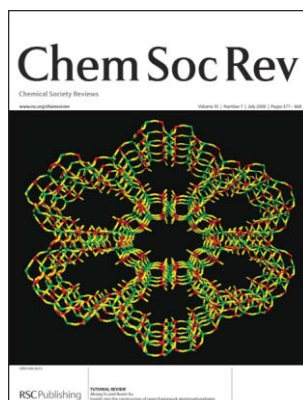
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Cover

See David A. Britz and Andrei N. Khlobystov, page 637.

Interactions of molecules with carbon nanotubes are used to tune physical properties of nanotubes and to control the chemistry of the molecules. Image reproduced by permission of David A. Britz and Andrei N. Khlobystov, *Chem. Soc. Rev.*, 2006, 35, 637.



Inside cover

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The open-framework aluminophosphates are composed of wonderful structural architectures; the cover shows JDF-20 with extra-large 20-ring channels. Image reproduced by permission of Jihong Yu and Ruren Xu, *Chem. Soc. Rev.*, 2006, 35, 593.

CHEMICAL SCIENCE

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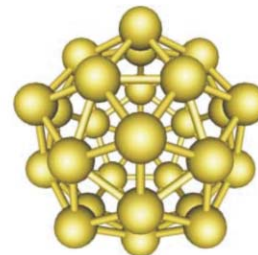
TUTORIAL REVIEWS

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Size matters: why nanomaterials are different

Emil Roduner*

Small clusters with delocalised electrons behave like atoms of new elements and are therefore called pseudo-atoms. The novel chemistry of these pseudo-atoms bares a fantastic perspective for young chemists. This *tutorial review* explains the basics.



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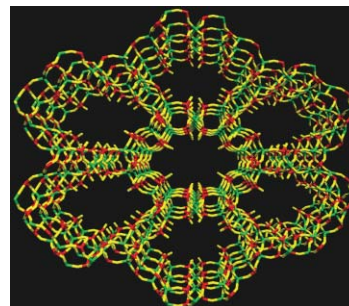
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Insight into the construction of open-framework aluminophosphates

Jihong Yu and Ruren Xu

The open-framework aluminophosphates are composed of wonderful structural architectures; the figure shows the structure of JDF-20 with extra-large 20-ring channels.

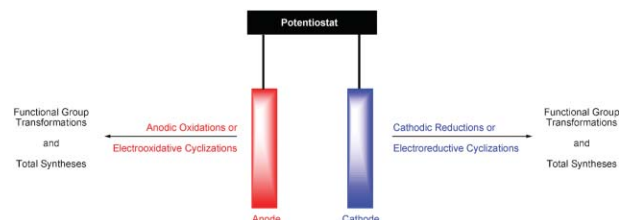


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The application of cathodic reductions and anodic oxidations in the synthesis of complex molecules

Jeffrey B. Sperry and Dennis L. Wright*

Electrochemistry provides a nice alternative to traditional chemical reagents for the synthesis of complex molecules.

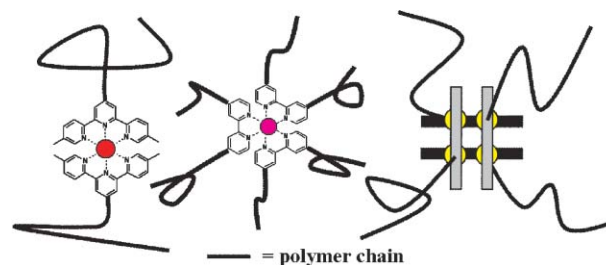


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The use of (metallo-)supramolecular initiators for living/controlled polymerization techniques

Richard Hoogenboom and Ulrich S. Schubert*

The use of (metallo-)supramolecular initiators is a promising approach towards novel materials that combine the advantages of metal-complexes and polymers.

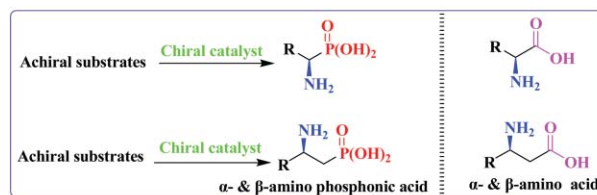


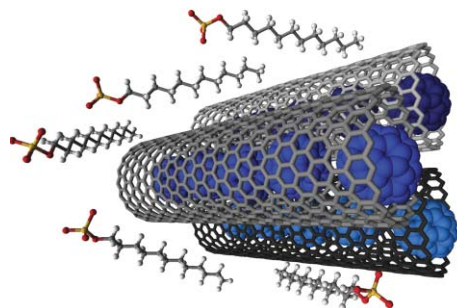
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Catalytic asymmetric synthesis of α - and β -amino phosphonic acid derivatives

Jun-An Ma*

This tutorial review illustrates some recent advances and related strategies for catalytic asymmetric synthesis of optically active α - and β -amino phosphonic acid derivatives





Noncovalent interactions of molecules with single walled carbon nanotubes

David A. Britz and Andrei N. Khlobystov*

Molecules form synergistic interactions with carbon nanotube exterior and interior, as molecules that affect nanotube properties are also altered in the presence of nanotubes.

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