

# JOC *Recent Reviews*

## Number 72

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Reviews are listed in order of appearance in the sources indicated. In multidisciplinary review journals, only those reviews which fall within the scope of this Journal are included. Sources are listed alphabetically in three categories: regularly issued review journals and series volumes, contributed volumes, and other monographs. Titles are numbered serially, and these numbers are used for reference in the index.

Major English-language sources of critical reviews are covered. Encyclopedic treatises, annual surveys such as *Specialist Periodical Reports*, and compilations of symposia proceedings are omitted.

This installment of Recent Reviews covers principally the latter part of the 2003 literature. Previous installment: *J. Org. Chem.* **2004**, 69(1), 225–32.

**Supporting Information Available:** A file containing this Recent Review compilation in Microsoft Word and the data in rtf format. This material is available free of charge via the Internet at <http://pubs.acs.org>.

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#### Accounts of Chemical Research

1. Meyer, C.; Blanchard, N.; Deffosseux, M.; Cossy, J. Stereoselective Synthesis of Polypropionate Units and Heterocyclic Compounds by Cyclopropylcarbinol Ring-Opening with Mercury(II) Salts. **2003**, 36(10), 766–72.

2. Gronert, S. Gas-Phase Studies of the Competition between Substitution and Elimination Reactions. **2003**, 36(11), 848–57.

3. Nair, V.; Rajesh, C.; Vinod, A. U.; Bindu, S.; Sreekanth, A. R.; Mathen, J. S.; Balagopal, L. Strategies for Heterocyclic Construction via Novel Multicomponent Reactions Based on Isocyanides and Nucleophilic Carbenes. **2003**, 36(12), 899–907.

4. Klaerner, F.-G.; Kahlert, B. Molecular Tweezers and Clips as Synthetic Receptors. Molecular Recognition and Dynamics in Receptor–Substrate Complexes. **2003**, 36(12), 919–32.

5. Oh, M.; Carpenter, G. B.; Sweigart, D. A. Supramolecular Metal–Organometallic Coordination Networks Based on Quinonoid  $\pi$ -Complexes. **2004**, 37(1), 1–11.

6. Nair, V.; Balagopal, L.; Rajan, R.; Mathew, J. Recent Advances in Synthetic Transformations Mediated by Cerium(IV) Ammonium Nitrate. **2004**, 37(1), 21–30.

7. Singh, R. P.; Shreeve, J. n. M. Recent Highlights in Electrophilic Fluorination with 1-Chloromethyl-4-fluoro-1,4-diazoniabicyclo[2.2.2]octane Bis(tetrafluoroborate). **2004**, 37(1), 31–44.

#### Advanced Synthesis and Catalysis

8. Braese, S.; Lauterwasser, F.; Ziegert, R. E. Recent Advances in Asymmetric C–C and C–Heteroatom Bond

Forming Reactions using Polymer-Bound Catalysts. **2003**, 345(8), 869–929.

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9. Redlich, M. D.; Mayer, M. F.; Hossain, M. M. Iron Lewis Acid [( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)Fe(CO)<sub>2</sub>(THF)]<sup>+</sup> Catalyzed Organic Reactions. **2003**, 36(1), 3–13.

10. Murugan, R.; Scriven, E. F. V. Applications of Dialkylaminopyridine (DMAP) Catalysts in Organic Synthesis. **2003**, 36(1), 21–7.

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11. Scott, L. T. Conjugated Belts and Nanorings with Radially Oriented p Orbitals. **2003**, 42(35), 4133–5.

12. Boger, D.; Desharnais, J.; Capps, K. Solution-Phase Combinatorial Libraries: Modulating Cellular Signaling by Targeting Protein–Protein or Protein–DNA Interactions. **2003**, 42(35), 4138–76.

13. Ma, J.-A. Recent Developments in the Catalytic Asymmetric Synthesis of  $\alpha$ - and  $\beta$ -Amino Acids. **2003**, 42(36), 4290–9.

14. Knochel, P.; Dohle, W.; Gommermann, N.; Kneisel, F. F.; Kopp, F.; Korn, T.; Sapountzis, I.; Vu, V. A. Highly Functionalized Organomagnesium Reagents Prepared through Halogen–Metal Exchange. **2003**, 42(36), 4302–20.

15. Kennedy, J. W. J.; Hall, D. G. Recent Advances in the Activation of Boron and Silicon Reagents for Stereocontrolled Allylation Reactions. **2003**, 42(39), 4732–9.

16. Houk, K. N.; Leach, A. G.; Kim, S. P.; Zhang, X. Binding Affinities of Host–Guest, Protein–Ligand, and Protein–Transition-State Complexes. **2003**, 42(40), 4872–97.

17. Schmidt, B. Ruthenium-Catalyzed Cyclizations: More than Just Olefin Metathesis! **2003**, *42*(41), 4996–9.

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20. Thiel, W. R. On the Way to a New Class of Catalysts—High-Valent Transition-Metal Complexes that Catalyze Reductions. **2003**, *42*(44), 5390–2.

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23. Gansauer, A.; Lauterbach, T.; Narayan, S. Strained Heterocycles in Radical Chemistry. **2003**, *42*(45), 5556–73.

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26. Jeanmart, S. Trends in Chrysanthemic Acid Chemistry: A Survey of Recent Pyrethrum Syntheses. **2003**, *56*(6), 559–66.

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34. Corma, A.; Garcia, H. Lewis Acids: From Conventional Homogeneous to Green Homogeneous and Heterogeneous Catalysis. **2003**, *103*(11), 4307–65.

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36. Barker, J. R.; Golden, D. M. Master Equation Analysis of Pressure-Dependent Atmospheric Reactions. **2003**, *103*(12), 4577–91.

37. Mellouki, A.; Le Bras, G.; Sidebottom, H. Kinetics and Mechanisms of the Oxidation of Oxygenated Organic Compounds in the Gas Phase. **2003**, *103*(12), 5077–96.

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46. Lacour, J.; Hebbe-Viton, V. Recent Developments in Chiral Anion Mediated Asymmetric Chemistry. **2003**, *32*(6), 373–82.

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47. Christoffers, J. Formation of Quaternary Stereocenters by Copper-Catalyzed Michael Reactions with L-Valine Amides as Auxiliaries. **2003**, *9*(20), 4862–7.

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49. Arsenyan, P.; Oberte, K.; Pudova, O.; Lukevics, E. Transformations of 1,2,3-Selenadiazoles. (Review). **2002**, *38*(12), 1437–47.

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**55.** Bianchini, C.; Volacchi, M. Enantioselective Addition of Alcohols to Ketenes Catalyzed by a Planar-Chiral Azaferrocene: Catalytic Asymmetric Synthesis of Arylpropionic Acids. Enantioselective Staudinger Synthesis of  $\beta$ -Lactams Catalyzed by a Planar-Chiral Nucleophile. **2003**, *16*(8), 491–5.

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**57.** Glaser, R.; Knotts, N.; Wu, H. Polar Order in Crystalline Molecular Organic Materials by Rational Design. **2003**, *16*(11), 643–52.

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**58.** Simonyi, M.; Bikadi, Z.; Zsila, F.; Deli, J. Supramolecular Exciton Chirality of Carotenoid Aggregates. **2003**, *15*(8), 680–98.

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**72.** Ungvary, F. Application of Transition Metals in Hydroformylation. Annual Survey Covering the Year 2002. **2003**, *241*(1–2), 295–312.

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