

# MINIREVIEWS

## Asymmetric Organocatalysis

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A. Moyano,\* N. El-Hamdouni,  
A. Atlamsani

**Asymmetric Organocatalytic  
Rearrangement Reactions**

## Homogeneous Catalysis

2

D. A. Alonso,\* C. Nájera,  
I. M. Pastor,\* M. Yus

**Transition-Metal-Catalyzed Synthesis  
of Hydroxylated Arenes**

## Nanomaterials

G. Cravotto,\* P. Cintas\*

**Sonication-Assisted Fabrication and  
Post-Synthetic Modifications of  
Graphene-Like Materials**

# COMMUNICATIONS

## Asymmetric Catalysis

R. Robles-Machín, I. Alonso,  
J. Adrio,\* J. C. Carretero\*

**Catalytic Asymmetric 1,3-Dipolar  
Cycloaddition of  $\alpha$ -Iminonitriles**

## Acrylonitriles

M. Ma, G. Hou, T. Sun, X. Zhang,  
W. Li, J. Wang,\* X. Zhang\*

**Highly Efficient Rh<sup>I</sup>-Catalyzed Asym-  
metric Hydrogenation of  $\beta$ -Amino  
Acrylonitriles**

# FULL PAPERS

## Metal–Ligand Interactions

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P. Pérez-Galán, N. Delpont,  
E. Herrero-Gómez, F. Maseras,  
A. M. Echavarren\*

**Metal–Arene Interactions in Dialkyl-  
biarylphosphane Complexes of  
Copper, Silver, and Gold**  
(Cover picture)

## Programmed Self-Assembly

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M. Endo,\* T. Sugita, Y. Katsuda,  
K. Hidaka, H. Sugiyama\*

**Programmed-Assembly System Using  
DNA Jigsaw Pieces**

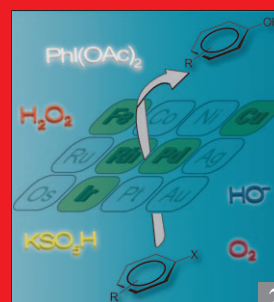
## Asymmetric Catalysis

E. Gómez-Bengoá, M. Maestro,  
A. Mielgo, I. Otazo, C. Palomo,\*  
I. Velilla

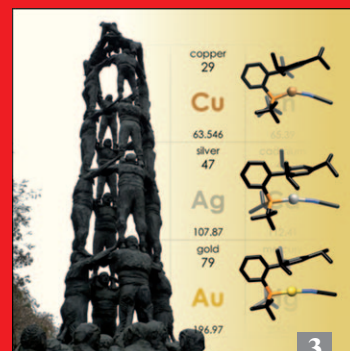
**A 4-Hydroxypyrrolidine-Catalyzed  
Mannich Reaction of Aldehydes:  
Control of *anti*-Selectivity by Hydro-  
gen Bonding Assisted by Brønsted  
Acids**



1



2



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