

## Highlights

### Soft Lithography

W. T. S. Huck

Self-Assembly Meets Nanofabrication:  
Recent Developments in Microcontact  
Printing and Dip-Pen Nanolithography

### Gold Catalysis

S. P. Nolan and N. Marion

Propargylic Esters in Gold Catalysis:  
Access to Diversity

## Essays

### History of Science

M. D. Gordin

D. I. Mendeleev: Reflecting on His Death  
in 1907

## Reviews

### Palladium Catalysis

M. G. Organ et al.

Palladium Complexes of N-Heterocyclic  
Carbenes as Catalysts for Cross-Coupling  
Reactions—A Synthetic Chemist's  
Perspective

## Communications

### N–C Bond Formation

P. J. Chirik et al.

Nitrogen–Carbon Bond Formation from  
 $N_2$  and  $CO_2$  Promoted by a Hafnocene  
Dinitrogen Complex Yields a Substituted  
Hydrazine (**Cover Picture**)

### Molecular Recognition

P. Wentworth, Jr. et al.

O-Glycoside Orientation Is an Essential  
Aspect of Base J Recognition by the  
Kinetoplastid DNA-Binding Protein JBP1

### Peptide Ubiquitylation

T. W. Muir et al.

Auxiliary-Mediated Site-Specific Peptide  
Ubiquitylation

### $N_2$ Activation

M. Zhou, J. Li et al.

Remarkable Dinitrogen Activation and  
Cleavage by the Gd Dimer: From  
Dinitrogen Complexes to Ring and Cage  
Nitrides

### Biocatalysis

M. T. Reetz et al.

A Light-Driven Stereoselective  
Biocatalytic Oxidation

### Coordination Compounds

M. Fujita et al.

Solvato-Controlled Assembly of  $Pd_3L_6$  and  
 $Pd_4L_8$  Coordination “Boxes”

