

# Chemical Reviews

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Volume 113, Issue 1

Pages 1-854



Figure 1 of 15

## **Update 1 of:** Calorimetric Investigation of Phase Transitions Occurring in Molecule-Based Magnets

Michio Sorai, [Yasuhiro Nakazawa](#), Motohiro Nakano, and Yuji Miyazaki

pp PR41-PR122

Publication Date (Web): December 27, 2012 (Review)

DOI: 10.1021/cr300156s



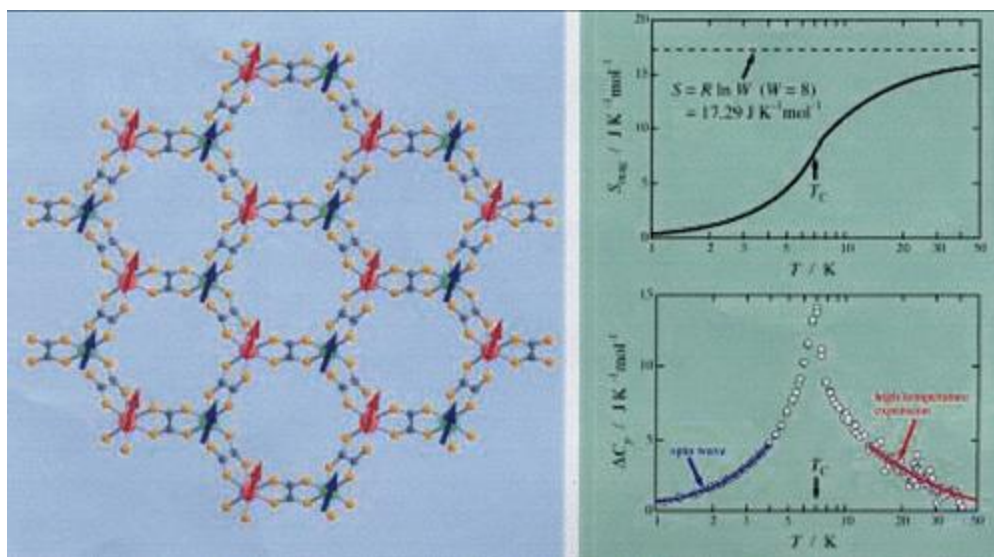


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## REVIEWS

### Synthesis of Heterocycles via Palladium-Catalyzed Carbonylations

Xiao-Feng Wu, Helfried Neumann, and Matthias Beller

pp 1-35

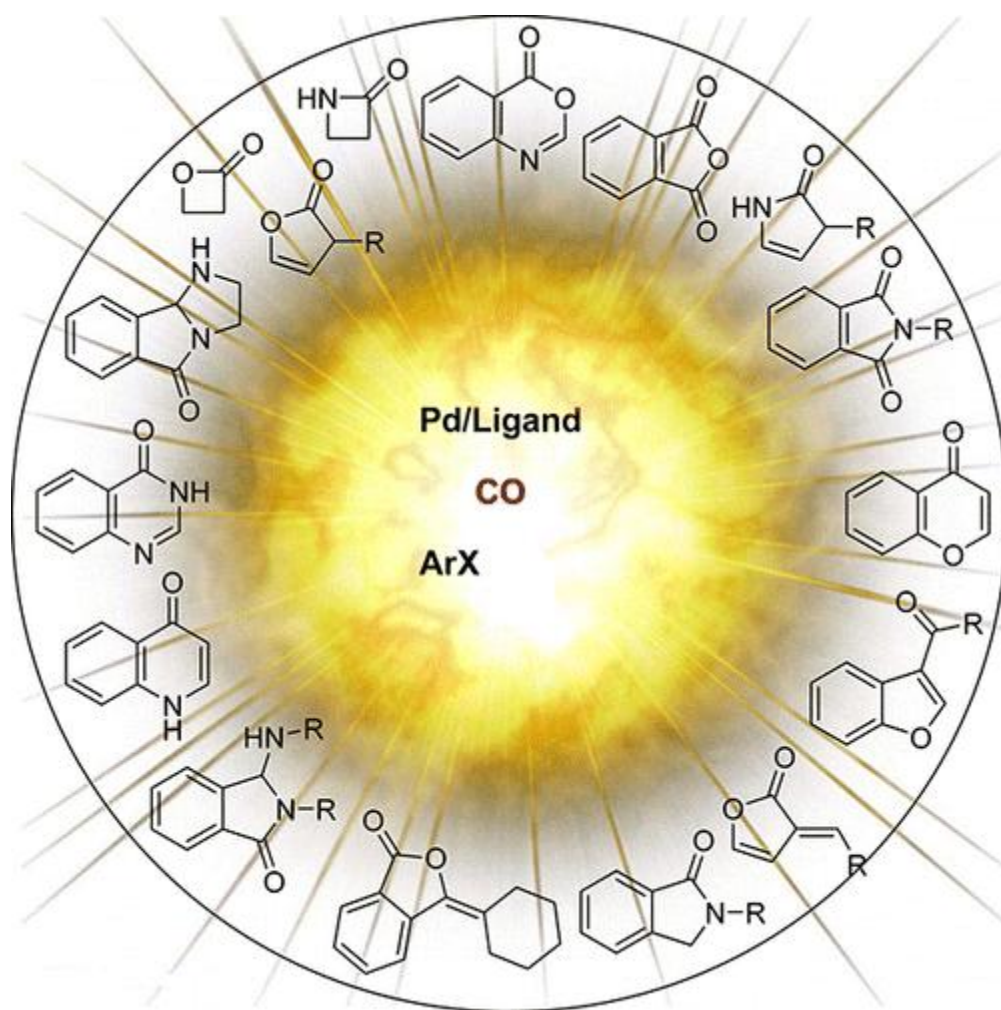
Publication Date (Web): October 5, 2012 (Review)

DOI: 10.1021/cr300100s

CCS Section:

Organometallic and Organometalloidal Compounds





## Born–Oppenheimer and Non-Born–Oppenheimer, Atomic and Molecular Calculations with Explicitly Correlated Gaussians

Sergiy Bubin, Michele Pavanello, Wei-Cheng Tung, Keeper L. Sharkey, and Ludwik Adamowicz

pp 36-79

Publication Date (Web): October 1, 2012 (Review)

DOI: 10.1021/cr200419d

CCS Section:

General Physical Chemistry



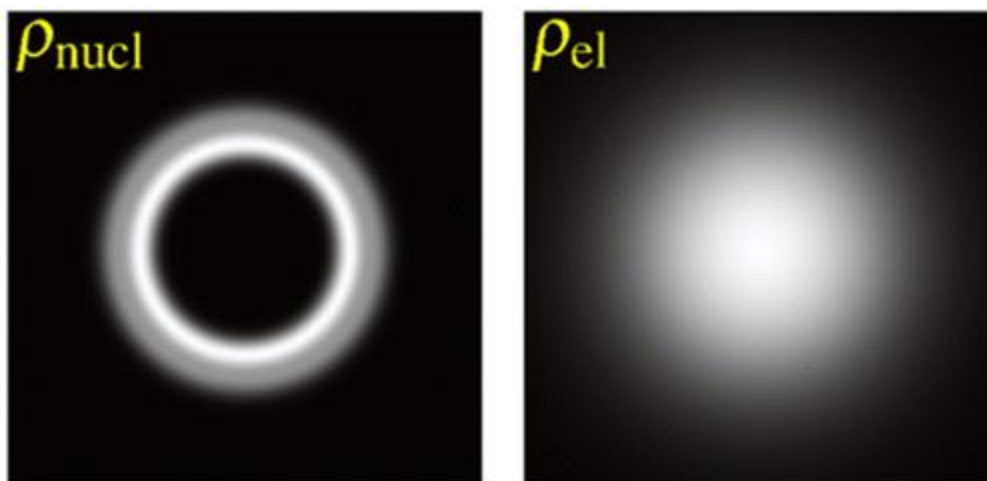


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## On the Versatility of Urethane/Urea Bonds: Reversibility, Blocked Isocyanate, and Non-isocyanate Polyurethane

Etienne Delebecq, Jean-Pierre Pascault, Bernard Boutevin, and François Ganachaud

pp 80-118

Publication Date (Web): October 19, 2012 (Review)

DOI: 10.1021/cr300195n

 Section:

Chemistry of Synthetic High Polymers



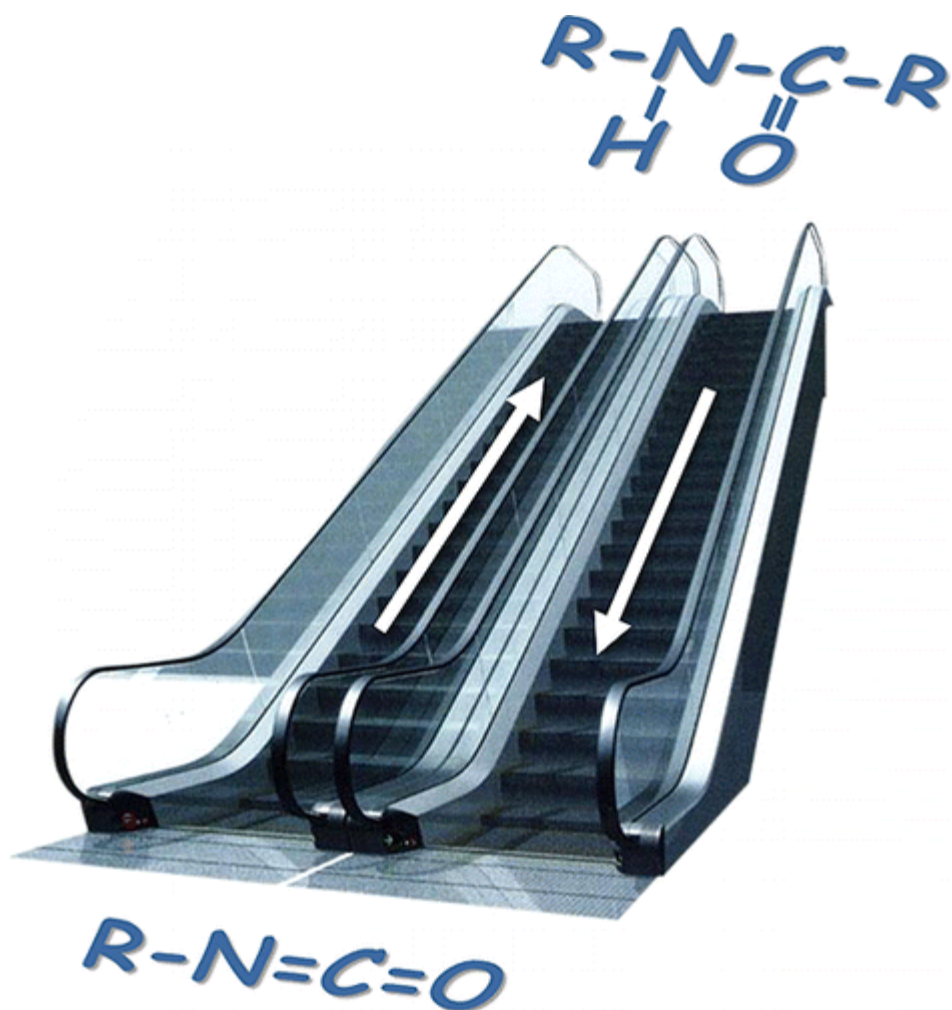


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## Photoremovable Protecting Groups in Chemistry and Biology: Reaction Mechanisms and Efficacy

Petr Klán, Tomáš Šolomek, Christian G. Bochet, Aurélien Blanc, Richard Givens, Marina Rubina, Vladimír Popik, Alexey Kostikov, and Jakob Wirz

pp 119-191

Publication Date (Web): December 21, 2012 (Review)

DOI: 10.1021/cr300177k

CCS Section:

General Organic Chemistry



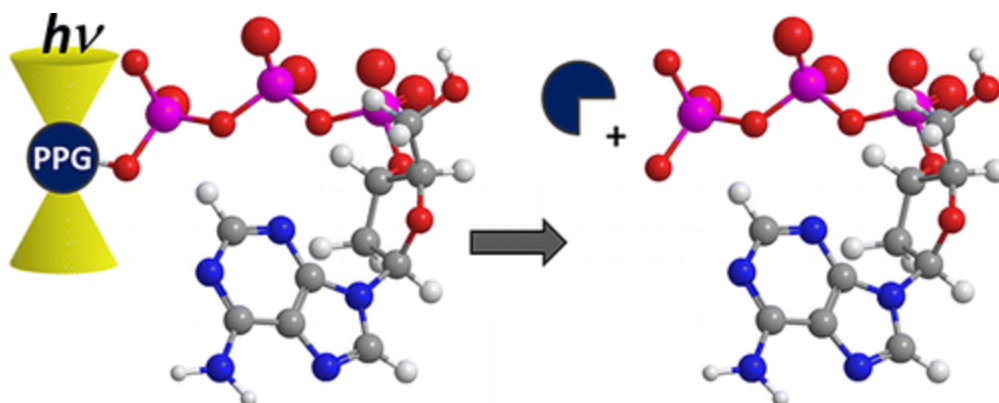


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## Luminescent Chemodosimeters for Bioimaging

Yuming Yang, Qiang Zhao, Wei Feng, and Fuyou Li

pp 192-270

Publication Date (Web): June 18, 2012 (Review)

DOI: 10.1021/cr2004103

CCS Section:

Biochemical Methods

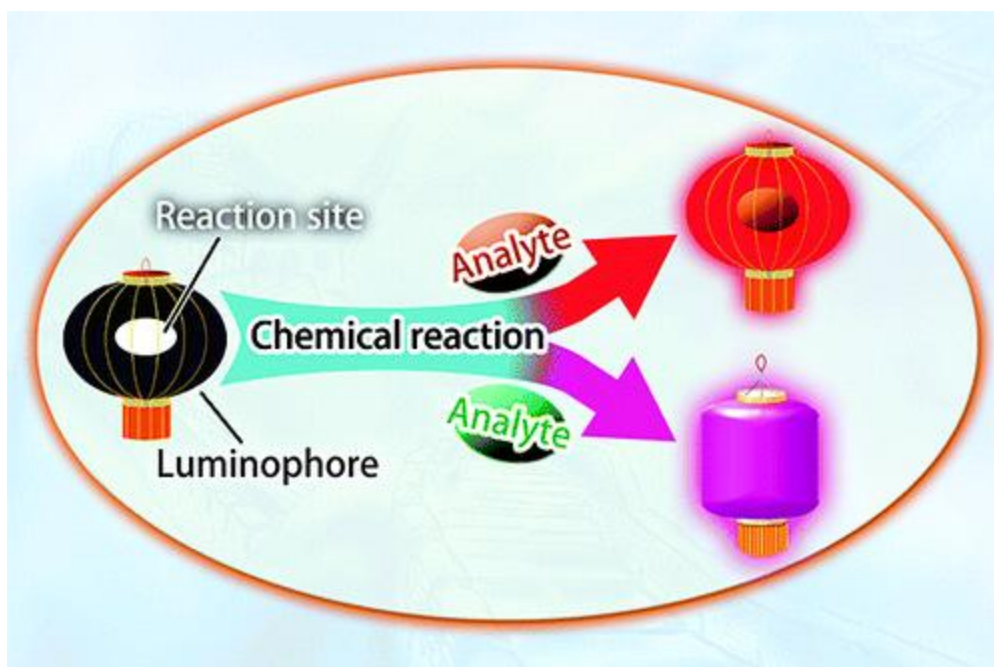


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# Organoindium Reagents: The Preparation and Application in Organic Synthesis

Zhi-Liang Shen, Shun-Yi Wang, Yew-Keong Chok, Yun-He Xu, and Teck-Peng Loh

pp 271-401

Publication Date (Web): October 31, 2012 (Review)

DOI: 10.1021/cr300051y

CCS Section:

Organometallic and Organometalloidal Compounds

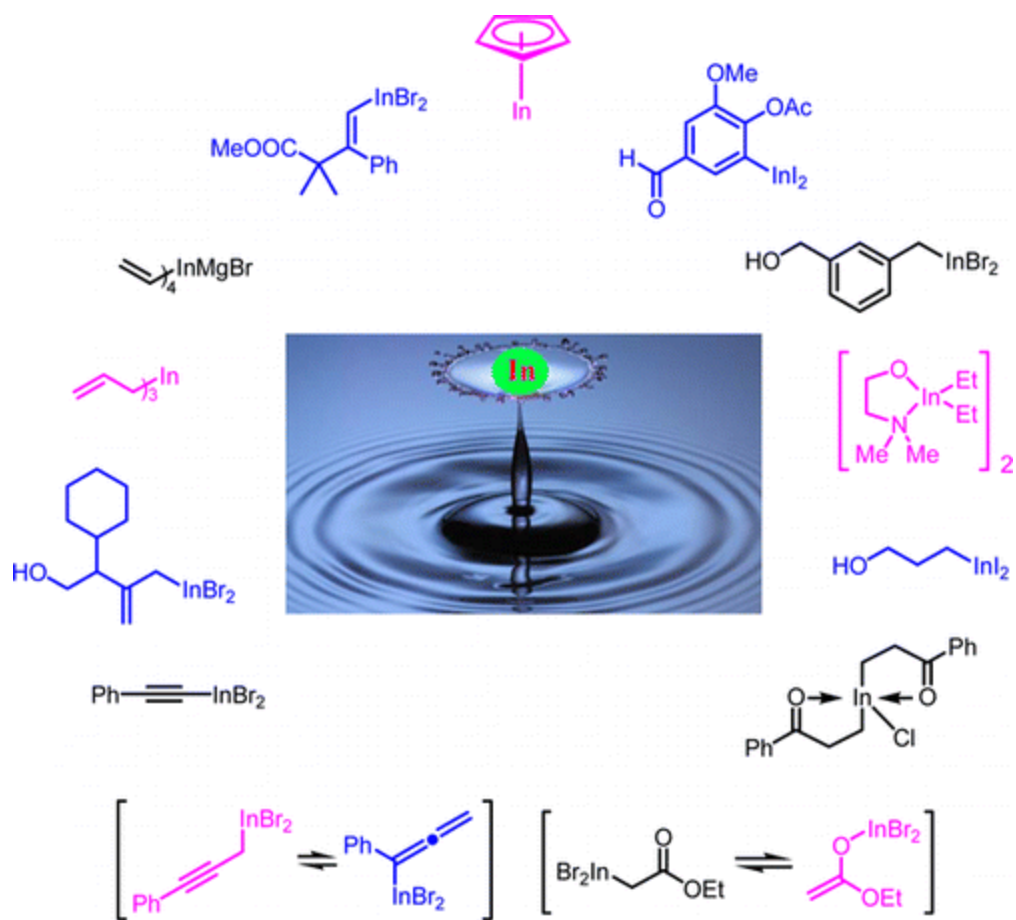


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# Activation of the Si–B Interelement Bond: Mechanism, Catalysis, and Synthesis

Martin Oestreich, Eduard Hartmann, and Marius Mewald

pp 402-441

Publication Date (Web): November 20, 2012 (Review)

DOI: 10.1021/cr3003517

CCS Section:

General Organic Chemistry

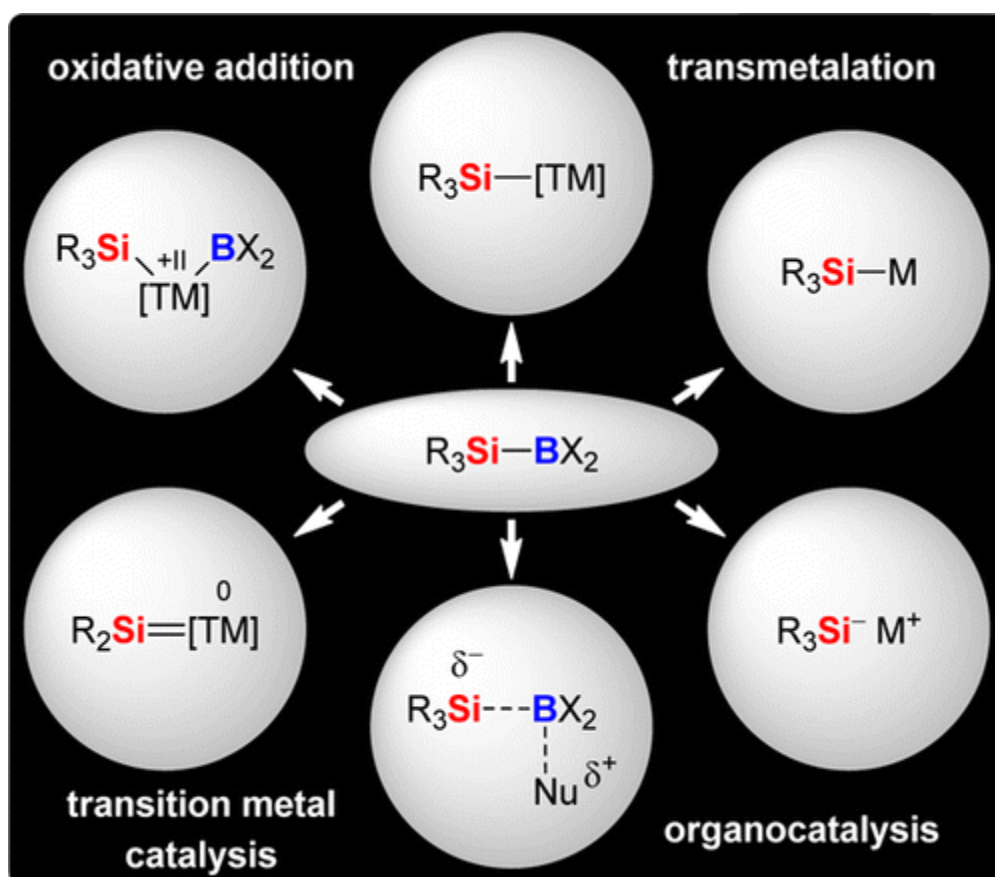


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## Stereocontrolled Domino Reactions

Hélène Pellissier

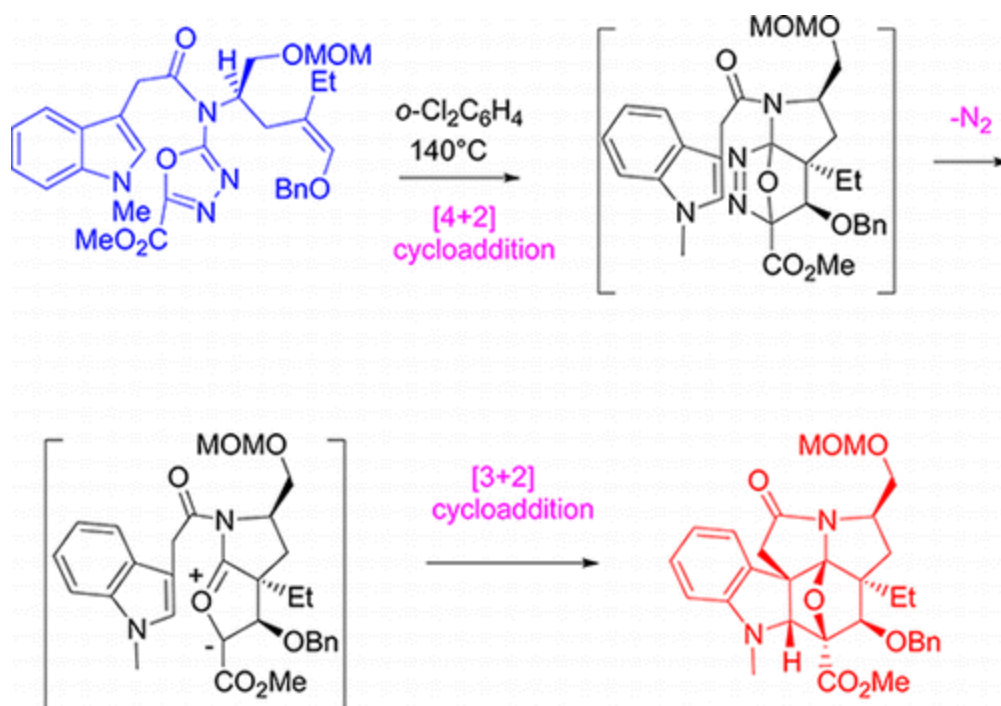
pp 442-524

Publication Date (Web): November 16, 2012 (Review)

DOI: 10.1021/cr300271k

CCS Section:

General Organic Chemistry



## Syntheses and Applications of Functionalized Bicyclo[3.2.1]octanes: Thirteen Years of Progress

Marc Presset, Yoann Coquerel, and Jean Rodriguez

pp 525-595

Publication Date (Web): October 19, 2012 (Review)

DOI: 10.1021/cr200364p

CCS Section:

General Organic Chemistry



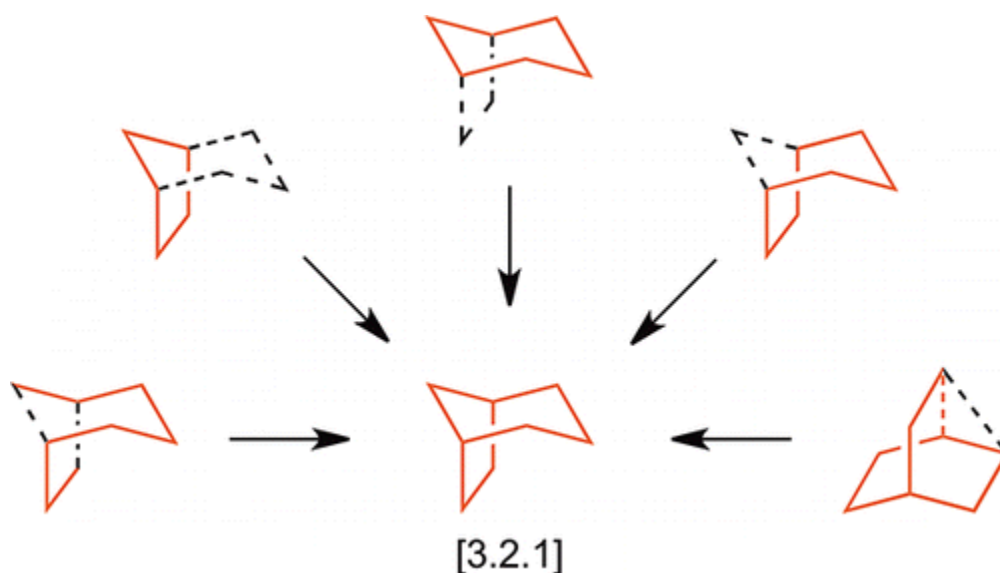


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## Redox Proteomics: Chemical Principles, Methodological Approaches and Biological/Biomedical Promises

Angela Bachi, Isabella Dalle-Donne, and Andrea Scaloni

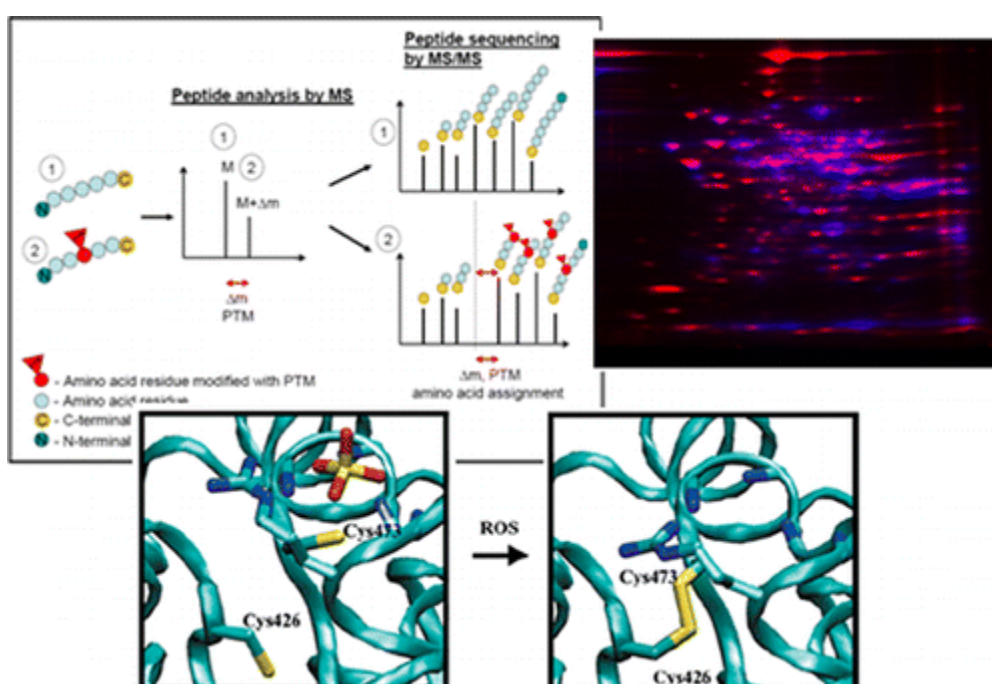
pp 596-698

Publication Date (Web): November 26, 2012 (Review)

DOI: 10.1021/cr300073p

CCS Section:

Biochemical Methods



## Trifluoromethanesulfonamides and Related Compounds

Bagrat A. Shainyan and Ljudmila L. Tolstikova

pp 699-733

Publication Date (Web): November 20, 2012 (Review)

DOI: 10.1021/cr300220h

Section:

Aliphatic Compounds

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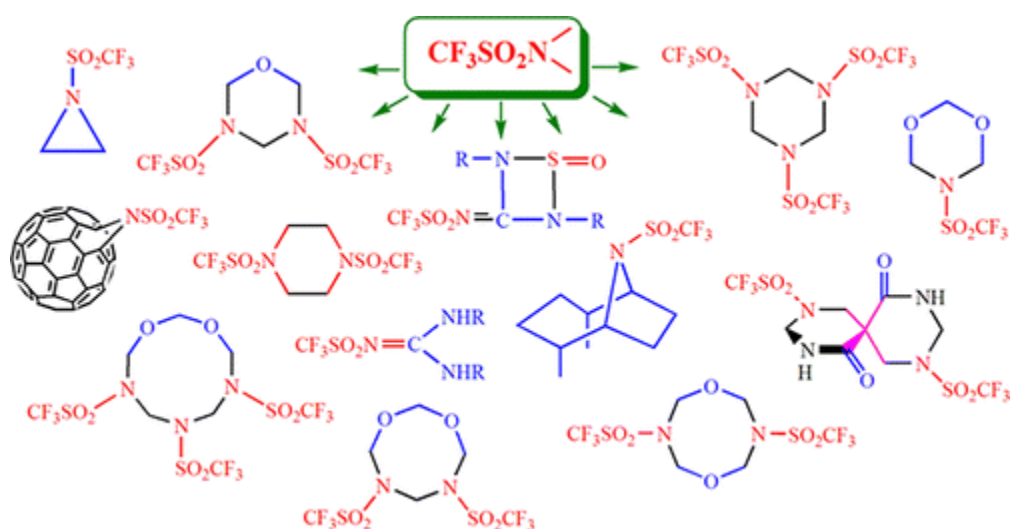


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## Metal–Organic Frameworks and Self-Assembled Supramolecular Coordination Complexes: Comparing and Contrasting the Design, Synthesis, and Functionality of Metal–Organic Materials

Timothy R. Cook, Yao-Rong Zheng, and Peter J. Stang

pp 734-777

Publication Date (Web): November 2, 2012 (Review)

DOI: 10.1021/cr3002824

Section:

Inorganic Chemicals and Reactions

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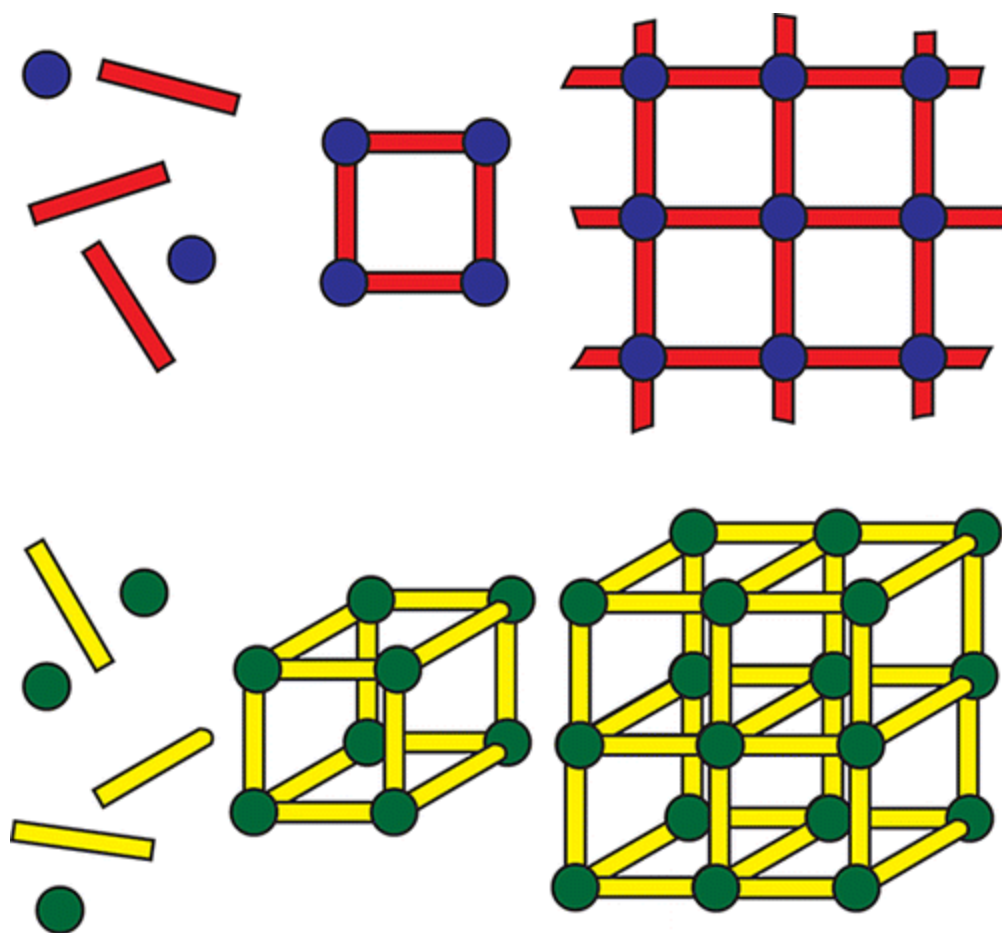


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## Element Speciation Analysis Using Capillary Electrophoresis: Twenty Years of Development and Applications

Andrei R. Timerbaev

pp 778-812

Publication Date (Web): October 11, 2012 (Review)

DOI: 10.1021/cr300199v

CCS Section:

Inorganic Analytical Chemistry



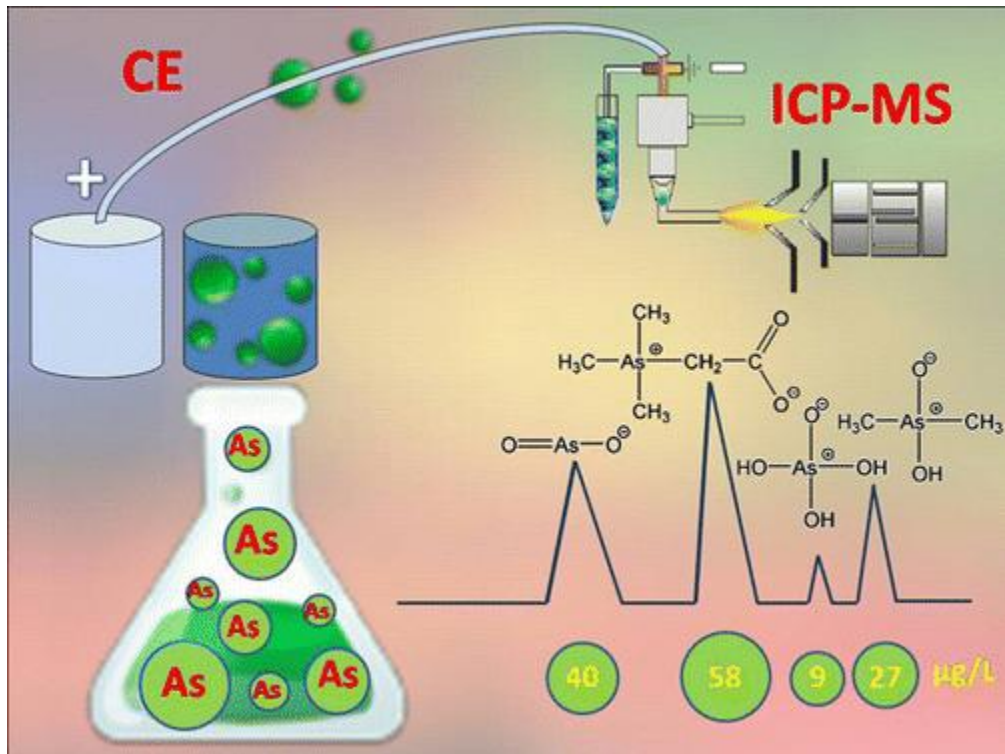


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# Radical Cascades Initiated by Intermolecular Radical Addition to Alkynes and Related Triple Bond Systems

Uta Wille

pp 813-853

Publication Date (Web): November 2, 2012 (Review)

DOI: 10.1021/cr100359d

CCS Section:

Physical Organic Chemistry

