

## Synthesis

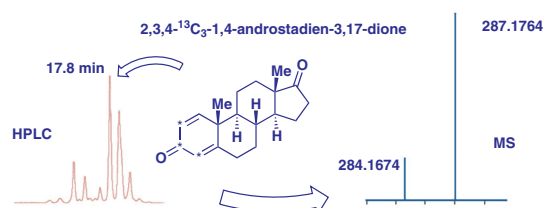
## Synthesis of $^{13}\text{C}$ -Labeled Steroids

## Review

*Synthesis* 2019, 51, 4311–4337  
DOI: 10.1055/s-0037-1611914

F. Dénès  
J. Farard  
J. Lebreton\*  
Université de Nantes, France

4311



## Synthesis

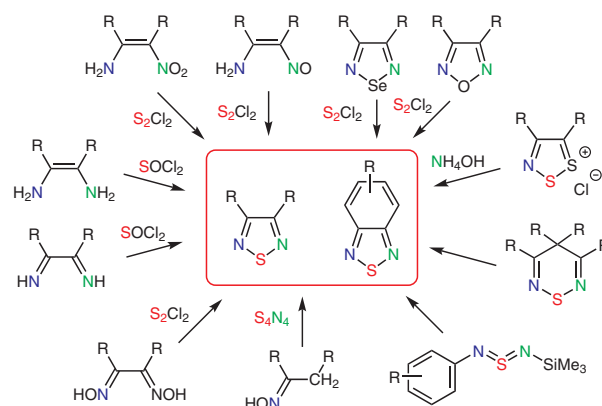
## Recent Developments in the Synthesis of 1,2,5-Thiadiazoles and 2,1,3-Benzothiadiazoles

## Short Review

*Synthesis* 2019, 51, 4338–4347  
DOI: 10.1055/s-0039-1690679

O. A. Rakitin\*  
N. D. Zelinsky Institute of Organic  
Chemistry, Russian Federation

4338



## Synthesis

Synthesis 2019, 51, 4348–4358  
DOI: 10.1055/s-0037-1610732

F. Li

F. He

R. M. Koenigs\*

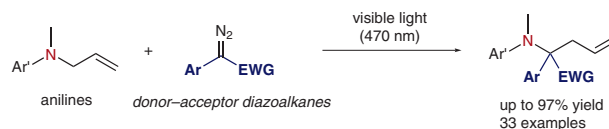
RWTH Aachen University,  
Germany

## Catalyst-Free [2,3]-Sigmatropic Rearrangement Reactions of Photochemically Generated Ammonium Ylides

Feature

4348

metal-free photochemical rearrangement reactions of ammonium ylides



key features

- ✓ mild reaction conditions
- ✓ operationally simple
- ✓ compatibility with cyclic amines
- ✓ metal-free
- ✓ broad applicability

## Synthesis

Synthesis 2019, 51, 4359–4365  
DOI: 10.1055/s-0039-1690694

B. Zilate

C. Fischer

L. Schneider

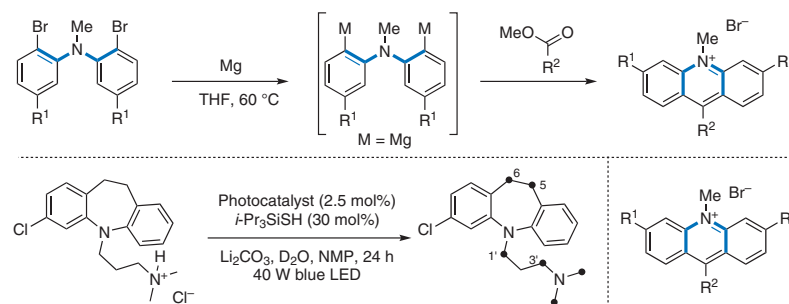
C. Sparr\*

University of Basel, Switzerland

## Scalable Synthesis of Acridinium Catalysts for Photoredox Deuterations

PSP

4359



## Synthesis

Synthesis 2019, 51, 4366–4367  
DOI: 10.1055/s-0039-1689994

## Special Topic Cover Page: Halogenation Methods (with a View towards Radioimaging Applications)

Special Topic

4366



## Synthesis

*Synthesis* **2019**, *51*, 4368–4373  
DOI: 10.1055/s-0037-1611885

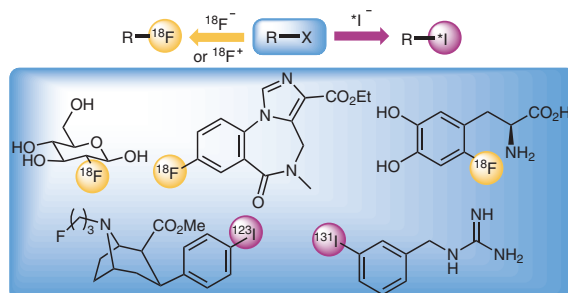
**A. Sutherland\***

University of Glasgow, UK

### Radiohalogenation of Organic Compounds: Practical Considerations and Challenges for Molecular Imaging

## Special Topic

4368



## Synthesis

*Synthesis* **2019**, *51*, 4374–4384  
DOI: 10.1055/s-0039-1690522

**S. Milicevic Sephton\***

**X. Zhou**

**S. Thompson**

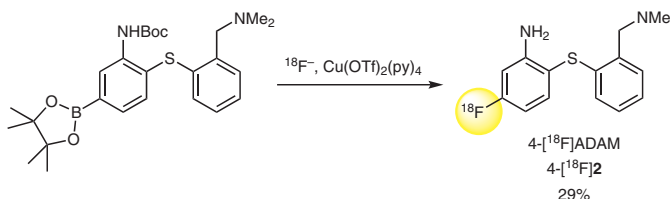
**F. I. Aigbirhio**

University of Cambridge, UK

### Preparation of the Serotonin Transporter PET Radiotracer 2-((2-[(Dimethylamino)methyl]phenyl)thio)-5- $^{18}F$ fluoroaniline (4- $^{18}F$ ADAM): Probing Synthetic and Radiosynthetic Methods

## Special Topic

4374



## Synthesis

*Synthesis* **2019**, *51*, 4385–4392  
DOI: 10.1055/s-0039-1690009

**K. Kitahara**

**H. Mizutani**

**S. Iwasa**

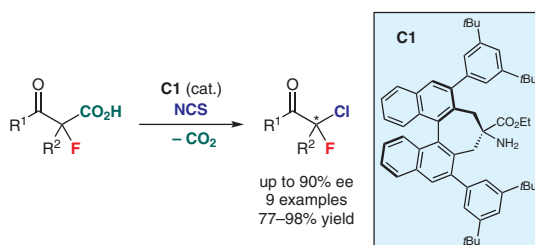
**K. Shibatomi\***

Toyohashi University of Technology,  
Japan

### Asymmetric Synthesis of $\alpha$ -Chloro- $\alpha$ -halo Ketones by Decarboxylative Chlorination of $\alpha$ -Halo- $\beta$ -keto-carboxylic Acids

## Special Topic

4385



## Synthesis

Synthesis 2019, 51, 4393–4400  
DOI: 10.1055/s-0037-1611884

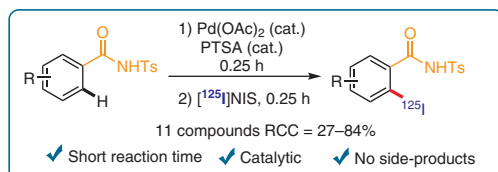
E. Dubost  
V. Babin  
F. Benoist  
A. Hébert  
G. Pigrée  
J.-P. Bouillon  
F. Fabis  
T. Cailly\*

Normandie Univ, France  
CHU Côte de Nacre, France

Improvements of C–H Radio-Iodination of *N*-Acylsulfonamides toward Implementation in Clinics

## Special Topic

4393



## Synthesis

Synthesis 2019, 51, 4401–4407  
DOI: 10.1055/s-0039-1690012

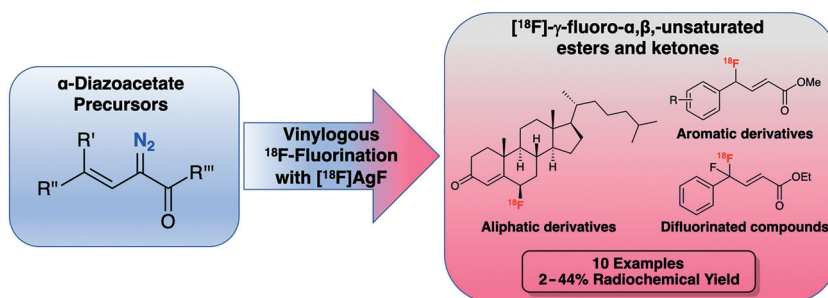
S. Thompson  
S. J. Lee  
I. M. Jackson  
N. Ichiishi  
A. F. Brooks  
M. S. Sanford\*  
P. J. H. Scott\*

University of Michigan Medical  
School, USA  
University of Michigan, USA

Synthesis of [<sup>18</sup>F]-γ-Fluoro-α,β-unsaturated Esters and Ketones via Vinylogous <sup>18</sup>F-Fluorination of α-Diazoacetates with [<sup>18</sup>F]AgF

## Special Topic

4401



## Synthesis

Synthesis 2019, 51, 4408–4416  
DOI: 10.1055/s-0037-1611886

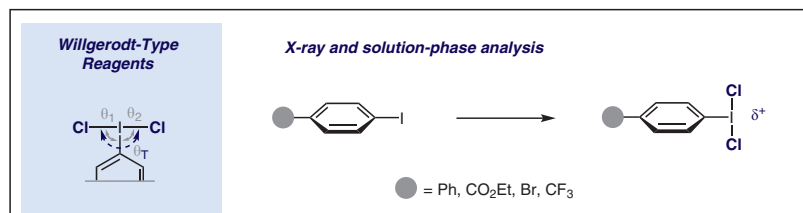
J. C. Sarie  
J. Neufeld  
C. G. Daniliuc  
R. Gilmour\*

Westfälische Wilhelms-Universi-  
tät Münster, Germany

Willgerodt-Type Dichloro(aryl)-λ<sup>3</sup>-Iodanes: A Structural Study

## Special Topic

4408



## Synthesis

Synthesis 2019, 51, 4417–4424  
DOI: 10.1055/s-0039-1690034

L. Wimberger

T. Kratz

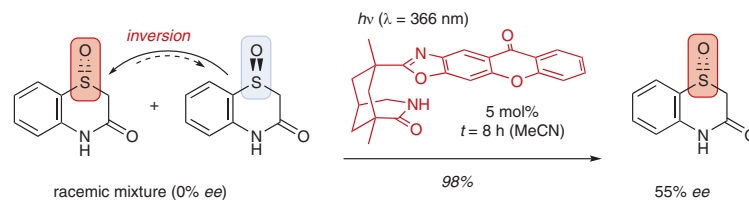
T. Bach\*

Technische Universität  
München, Germany

### Photochemical Deracemization of Chiral Sulfoxides Catalyzed by a Hydrogen-Bonding Xanthone Sensitizer

Paper

4417



## Synthesis

Synthesis 2019, 51, 4425–4433  
DOI: 10.1055/s-0039-1690984

Y. Jian

M. Chen

C. Yang\*

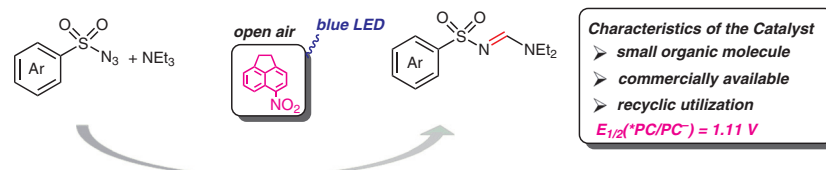
W. Xia\*

Harbin Institute of Technology  
(Shenzhen), P. R. of China

### Nitroacenaphthene as a New Photocatalyst for the Synthesis of Sulfonyl Amidines

Paper

4425



## Synthesis

Synthesis 2019, 51, 4434–4442  
DOI: 10.1055/s-0039-1690677

D. Roy

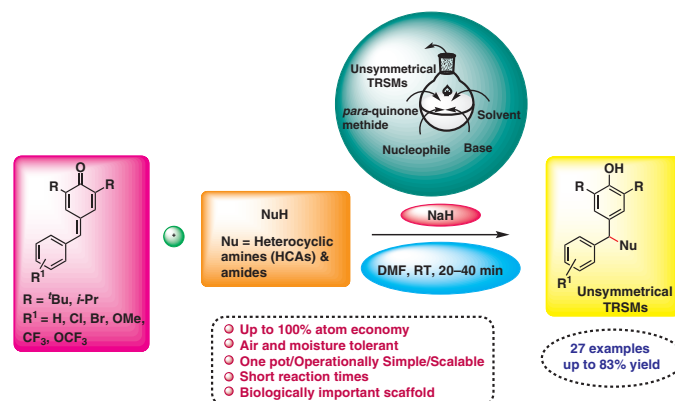
G. Panda\*

CSIR-Central Drug Research In-  
stitute, India

### Base-Mediated 1,6-Aza-Michael Addition of Heterocyclic Amines and Amides to *para*-Quinone Methides Leading to Meclizine-, Hydroxyzine- and Cetirizine-like Architectures

Paper

4434



## Synthesis

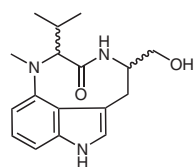
## The Synthesis and Biological Evaluation of Indolactam Alkaloids

## Paper

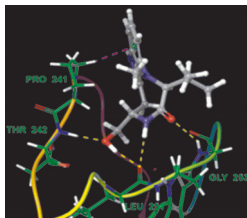
*Synthesis* **2019**, *51*, 4443–4451  
DOI: 10.1055/s-0039-1690198

**M. Mendoza**  
**R. Eom**  
**C. Salas**  
**J. Haynes-Smith**  
**K. L. Billingsley\***

California State University Fullerton, USA



EC<sub>50</sub> = 142 nM to >10 μM



4443

## Synthesis

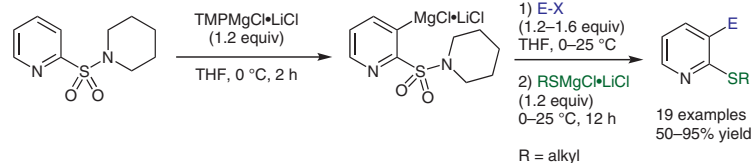
## Thiolation of Pyridine-2-sulfonamides using Magnesium Thiolates

## Paper

*Synthesis* **2019**, *51*, 4452–4462  
DOI: 10.1055/s-0039-1690199

**B. Heinz**  
**M. Balkenhohl**  
**P. Knochel\***

Ludwig-Maximilians-Universität München, Germany



4452

## Synthesis

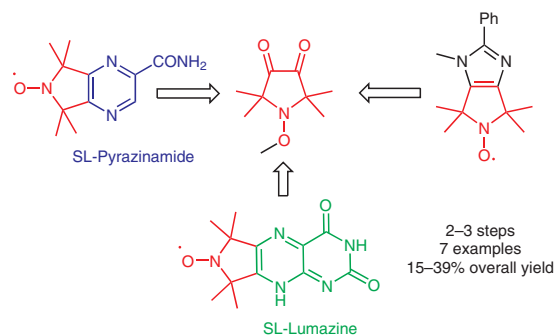
## Syntheses of Pyrazine-, Quinoxaline-, and Imidazole-Fused Pyrroline Nitroxides

## Paper

*Synthesis* **2019**, *51*, 4463–4472  
DOI: 10.1055/s-0039-1690678

**M. Isbera**  
**B. Bognár**  
**G. Gulyás-Fekete**  
**K. Kish**  
**T. Kálai\***

University of Pécs, Hungary  
Szentágotthai Research Centre, Hungary



4463

## Synthesis

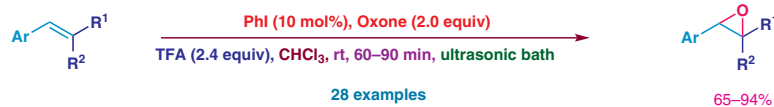
Hypervalent Iodine(III)-Catalyzed Epoxidation of  $\beta$ -Cyanostyrenes

Paper

*Synthesis* 2019, 51, 4473–4486  
DOI: 10.1055/s-0039-1690621

S. R. Mangaonkar  
F. V. Singh\*

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$R^1 = \text{CN}, \text{CO}_2\text{Et}; R^2 = \text{H}, \text{CN}; \text{Ar} = \text{Ph}, 4\text{-FC}_6\text{H}_4, 2\text{-ClC}_6\text{H}_4, 4\text{-ClC}_6\text{H}_4, 2,3\text{-(Cl)}_2\text{C}_6\text{H}_3, 3\text{-BrC}_6\text{H}_4, 4\text{-BrC}_6\text{H}_4, 4\text{-NCC}_6\text{H}_4, 3\text{-HOC}_6\text{H}_4, 4\text{-MeC}_6\text{H}_4, 3,4\text{-(MeO)}_2\text{C}_6\text{H}_3, 3,4,5\text{-(MeO)}_3\text{C}_6\text{H}_2, 2,3,4\text{-(MeO)}_3\text{C}_6\text{H}_2, 4\text{-(BnO)C}_6\text{H}_4, 3\text{-(HO)-4-(MeO)C}_6\text{H}_3, 1\text{-Naphthyl}, 2\text{-Naphthyl}, 9\text{-Anthryl}$

4473

## Synthesis

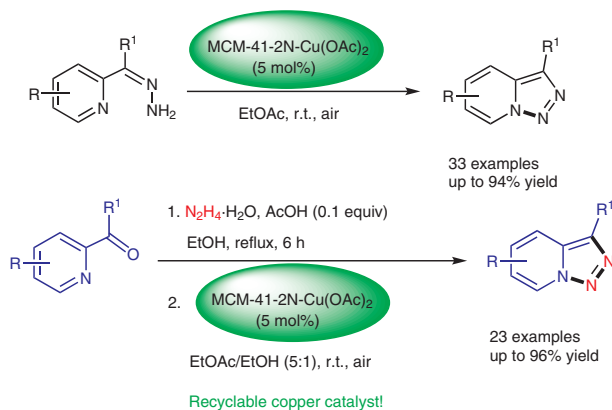
Recyclable Heterogeneous Copper(II)-Catalyzed Oxidative Cyclization of 2-Pyridine Ketone Hydrazones Towards [1,2,3]Triazolo[1,5-*a*]pyridines

Paper

*Synthesis* 2019, 51, 4487–4497  
DOI: 10.1055/s-0037-1610726

G. Jiang  
Y. Lin  
M. Cai\*

H. Zhao\*  
Guangdong Pharmaceutical University, P. R. of China  
Jiangxi Normal University, P. R. of China



4487

## Synthesis

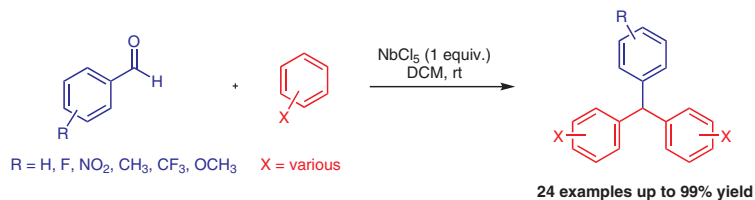
## Niobium Pentachloride Mediated (Hetero)aromatic Aldehyde Friedel–Crafts Hydroxyalkylation with Arenes: An Efficient Strategy to Synthesize Triarylmethanes

Paper

*Synthesis* 2019, 51, 4498–4506  
DOI: 10.1055/s-0037-1610727

S. M. M. Rodrigues\*  
D. Previdi  
G. S. Baviera  
A. A. Matias  
P. M. Donatè

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4498