

## Synthesis

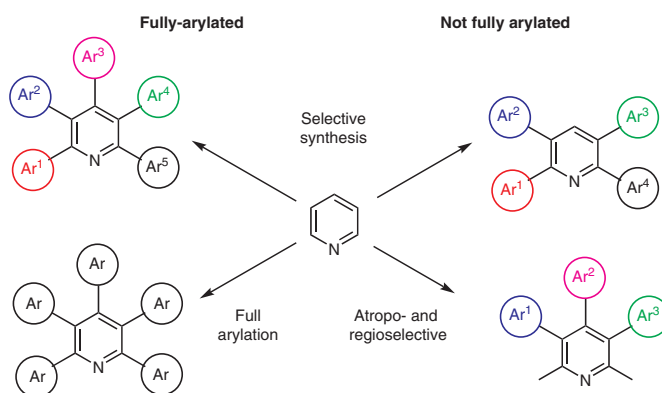
## Arylpyridines: A Review from Selective Synthesis to Atropisomerism

## Review

*Synthesis* 2019, 51, 587–611  
DOI: 10.1055/s-0037-1611365

P. Pomarański  
Z. Czarnocki\*  
University of Warsaw, Poland

587



## Synthesis

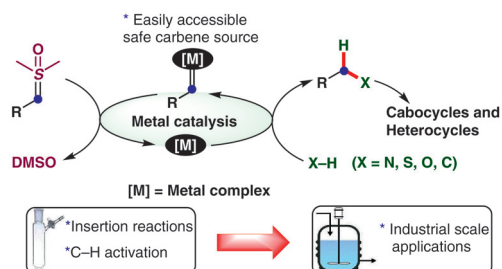
## Sulfoxonium Ylide Derived Metal Carbenoids in Organic Synthesis

## Short Review

*Synthesis* 2019, 51, 612–628  
DOI: 10.1055/s-0037-1610328

J. Vaitla\*  
A. Bayer\*  
UiT – The Arctic University of  
Norway, Norway

612



## Synthesis

## Directed C–H Functionalization of the Adamantane Framework

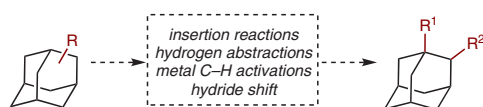
## Short Review

629

Synthesis 2019, 51, 629–642  
DOI: 10.1055/s-0037-1610321

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Germany



## Synthesis

## Recent Developments in Palladium-Catalysed Non-Directed C–H Bond Activation in Arenes

## Short Review

643

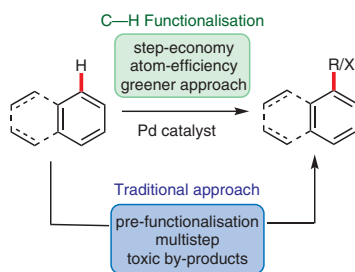
Synthesis 2019, 51, 643–663  
DOI: 10.1055/s-0037-1610852

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## Synthesis

2-[<sup>18</sup>F]Fluorophenylalanine: Synthesis by Nucleophilic <sup>18</sup>F-Fluorination and Preliminary Biological Evaluation

## Feature

664

Synthesis 2019, 51, 664–676  
DOI: 10.1055/s-0037-1611370

D. J. Modemann

B. D. Zlatopolskiy

E. A. Urusova

J. Zischler

A. Craig

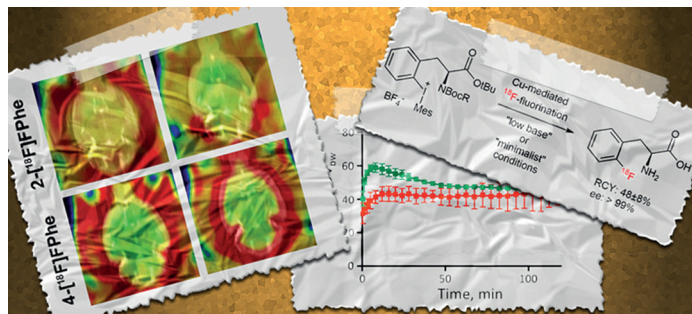
J. Ermert

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## Synthesis

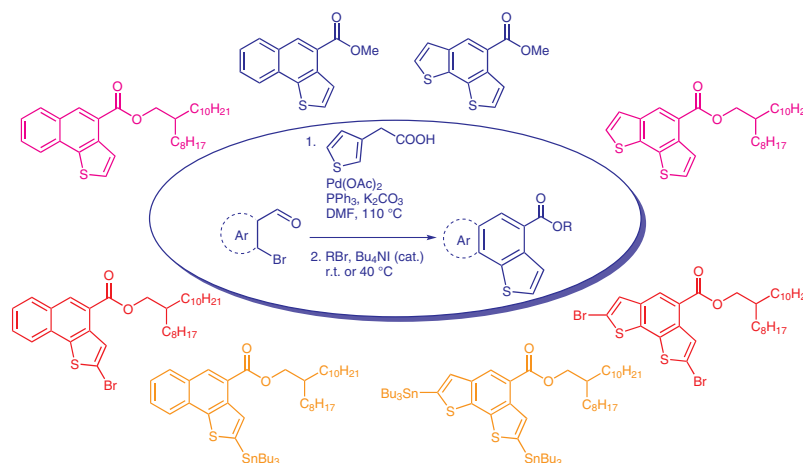
Synthesis 2019, 51, 677–682  
DOI: 10.1055/s-0037-1611368

A. Nitti\*  
G. Bianchi  
R. Po  
D. Pasini\*  
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### Scalable Synthesis of Naphthothiophene and Benzodithiophene Scaffolds as $\pi$ -Conjugated Synthons for Organic Materials

Feature

677



## Synthesis

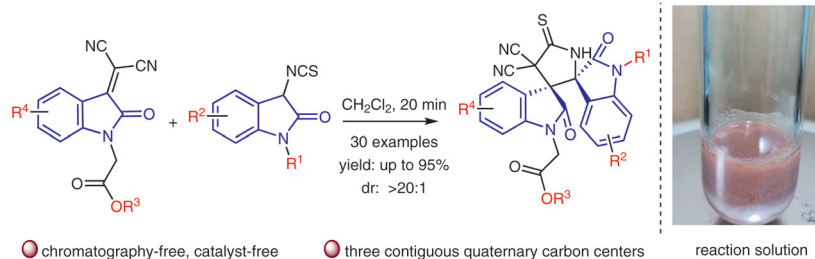
Synthesis 2019, 51, 683–692  
DOI: 10.1055/s-0037-1610290

X.-L. Liu  
S.-Q. Chang  
Y. Jiang\*  
S.-W. Xu  
X. Zuo  
S. Chen  
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Sichuan University of Science & Engineering, P. R. of China  
Guizhou University, P. R. of China

### Highly Diastereo-, $\alpha$ -Regioselective Catalyst-Free Construction of Adjacent Dispirobisoxindoles with Three Contiguous Quaternary Carbon Centers

Paper

683



## Synthesis

Synthesis 2019, 51, 693–703  
DOI: 10.1055/s-0037-1610267

J. Ma  
J. Zhang  
H. Gong\*  
Xiangtan University, P. R. of China

### Mn(II)-Catalyzed *N*-Acylation of Amines

Paper

693



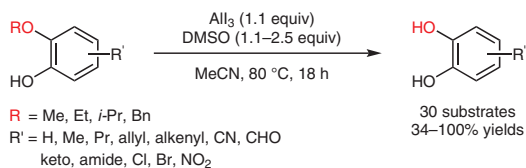
## Synthesis

Synthesis 2019, 51, 704–712  
DOI: 10.1055/s-0037-1610996

D. Sang  
J. Tian\*  
X. Tu  
Z. He  
M. Yao

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## Cleavage of Catechol Monoalkyl Ethers by Aluminum Triiodide–Dimethyl Sulfoxide



Paper

704

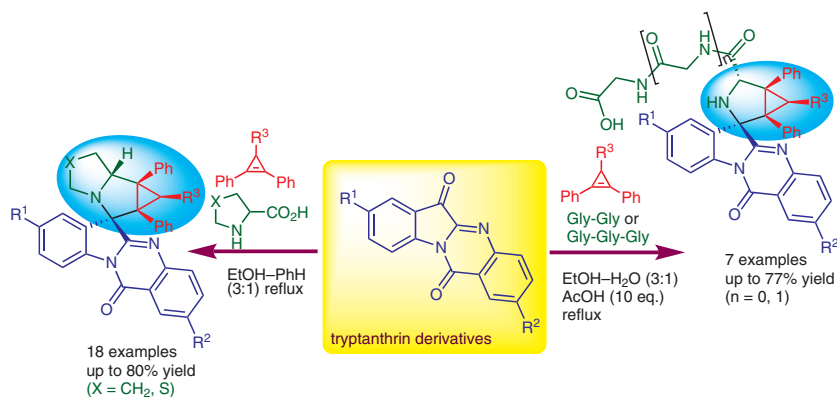
## Synthesis

Synthesis 2019, 51, 713–729  
DOI: 10.1055/s-0037-1611059

A. S. Filatov  
N. A. Knyazev  
S. V. Shmakov  
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M. N. Ryazantsev  
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Technology, Russian Federation

## Concise Synthesis of Tryptanthrin Spiro Analogues with In Vitro Antitumor Activity Based on One-Pot, Three-Component 1,3-Dipolar Cycloaddition of Azomethine Ylides to Cyclopropenes



Paper

713

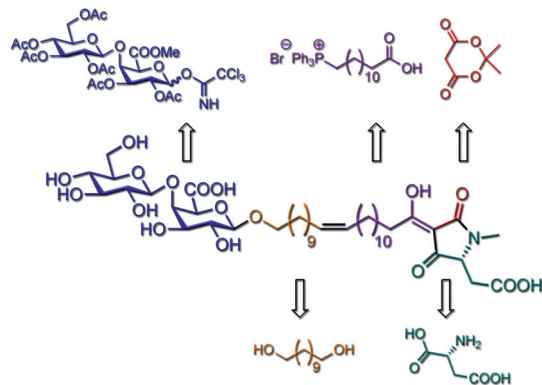
## Synthesis

Synthesis 2019, 51, 730–738  
DOI: 10.1055/s-0037-1610287

M. Petermichl  
C. Steinert  
R. Schobert\*

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## A Synthetic Route to the MT1-MMP Inhibitor Ancorinose D



Paper

730

## Synthesis

Selective Conversion of CO<sub>2</sub> and Switchable Alcohols into Linear or Cyclic Carbonates via Versatile Zinc Catalysis

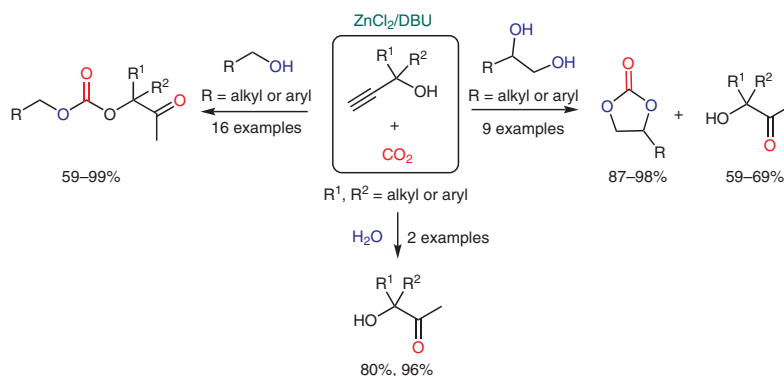
Paper

739

*Synthesis* 2019, 51, 739–746  
DOI: 10.1055/s-0037-1611058

Q.-W. Song\*  
Q.-N. Zhao  
J.-Y. Li  
K. Zhang  
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## Synthesis

## N-Oxide-Controlled Chemoselective Reduction of Nitrofuraxans

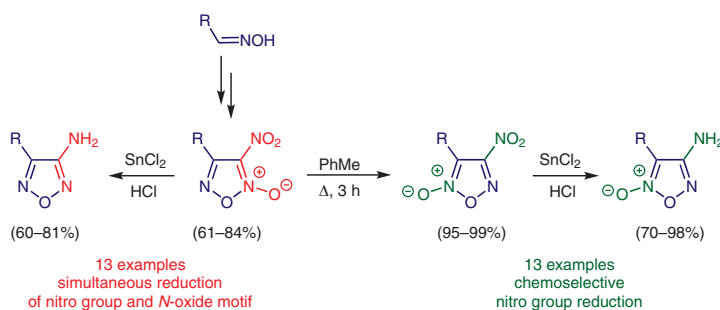
Paper

747

*Synthesis* 2019, 51, 747–756  
DOI: 10.1055/s-0037-1611056

L. L. Fershtat\*  
D. M. Bystrov  
E. S. Zhilin  
N. N. Makhova

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## Synthesis

## General Method for the Preparation of Indole-2-Weinreb Amides

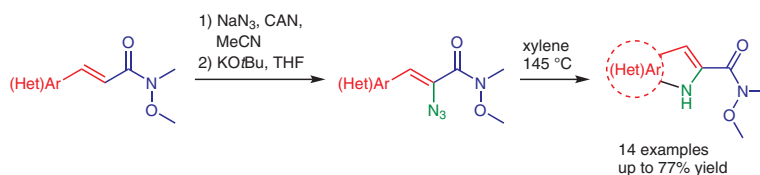
Paper

757

*Synthesis* 2019, 51, 757–768  
DOI: 10.1055/s-0037-1610660

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## Synthesis

Synthesis 2019, 51, 769–779  
DOI: 10.1055/s-0037-1610296

B. Suchand

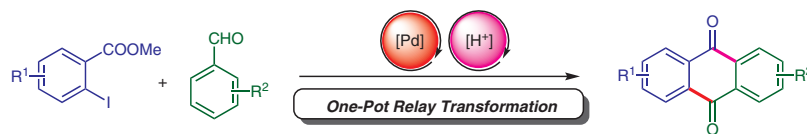
G. Satyanarayana\*

Indian Institute of Technology  
Hyderabad, India

## Palladium-Catalyzed Direct Acylation: One-Pot Relay Synthesis of Anthraquinones

Paper

769



21 examples  
(55–69% yields)

R<sup>1</sup> = H, Me, F, Br

R<sup>2</sup> = OH, OMe, OEt, -OCH<sub>2</sub>O-

- \* [Pd]-catalyzed direct acylation as the key step
- \* No need for toxic CO gas as carbonylating agent
- \* Simple bench-top aldehydes were used
- \* Friedel–Crafts intramolecular acylation
- \* One-pot synthesis of anthraquinones

## Synthesis

Synthesis 2019, 51, 780–786  
DOI: 10.1055/s-0037-1610997

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G. Jin

S. Kantavari\*

CSIR-Indian Institute of Chemical  
Technology, India

## Total Synthesis of 5-Hydroxygoniothalamin

Paper

780

