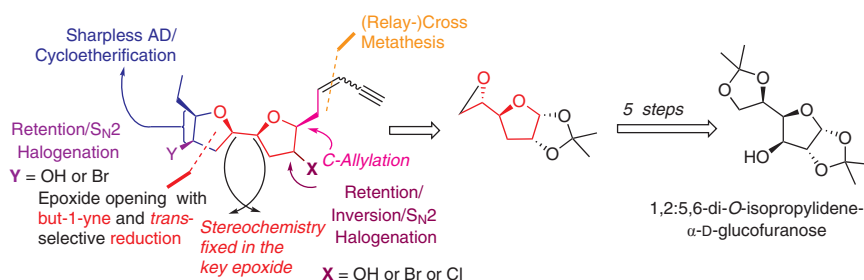


Synthesis

Reviews and Full Papers in Chemical Synthesis

August 17, 2021 • Vol. 53, 2713–2910



Unified Approach for the Total Synthesis of Bis-THF C₁₅ Acetogenins: A Chloroenyne from *Laurencia majuscula*, Laurendecumenyne B and Laurefurenynes A/B

S. Senapati, N. A. Unmesh, M. N. Shet, I. Ahmad, N. Ajikumar, C. V. Ramana

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Synthesis

Synthesis 2021, 53, 2713–2739
DOI: 10.1055/a-1493-6331

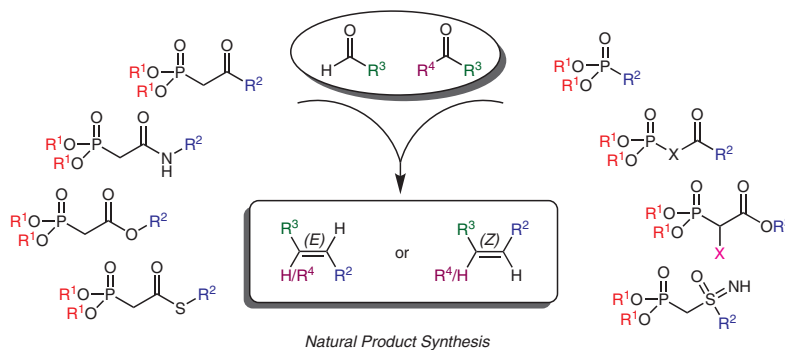
D. Roman
M. Sauer
C. Beemelmanns*

Leibniz Institute for Natural
Product Research and Infection
Biology – Hans-Knöll-Institute
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Applications of the Horner–Wadsworth–Emmons Olefination in Modern Natural Product Synthesis

Review

2713



Synthesis

Synthesis 2021, 53, 2740–2766
DOI: 10.1055/a-1493-6840

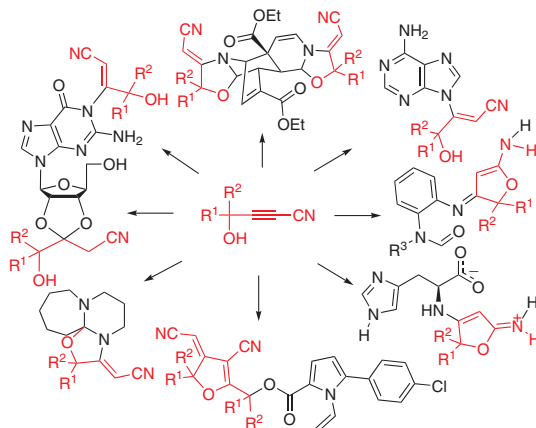
B. A. Trofimov*
A. G. Mal'kina

A. E. Favorsky Irkutsk Institute of
Chemistry, Russian Federation

Cyanoacetylenic Alcohols: Molecules of Interstellar Relevance in the Synthesis of Essential Heterocycles, Amino Acids, Nucleobases and Nucleosides

Review

2740



Synthesis

Synthesis 2021, 53, 2767–2776
DOI: 10.1055/a-1463-4266

S. P. Roche*

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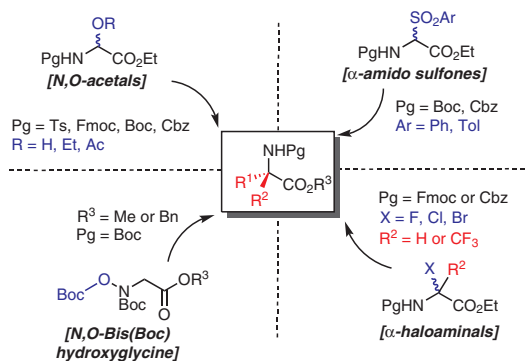
In the Pursuit of (Ald)Imine Surrogates for the Direct Asymmetric Synthesis of Non-Proteinogenic α -Amino Acids

Short Review

2767

(Ald)Imine Surrogates: Walking on a Tightrope!

Between stability and reactivity



Synthesis

Synthesis 2021, 53, 2777–2786
DOI: 10.1055/a-1472-7999

M. Majdecki

P. Niedbała

A. Tyszcza-Gumkowska

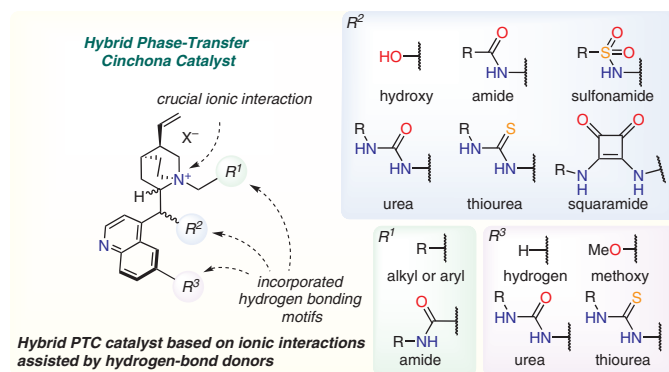
J. Jurczak*

Polish Academy of Sciences,
Poland

Assisted by Hydrogen-Bond Donors: Cinchona Quaternary Salts as Privileged Chiral Catalysts for Phase-Transfer Reactions

Short Review

2777



Synthesis

Synthesis 2021, 53, 2787–2797
DOI: 10.1055/a-1464-2524

S. Zhang

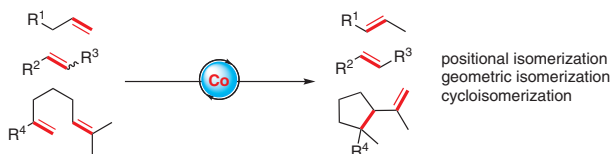
M. Findlater*

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Cobalt-Catalyzed Isomerization of Alkenes

Short Review

2787



Synthesis

Synthesis 2021, 53, 2798–2808
DOI: 10.1055/a-1472-7914

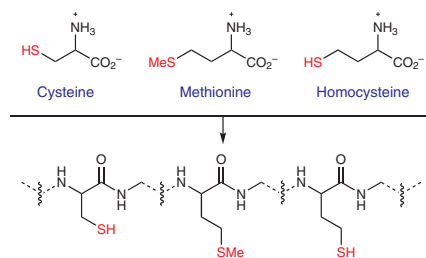
S. Youssef-Saliba
Y. Vallée*

Université Grenoble Alpes,
France

Sulfur Amino Acids: From Prebiotic Chemistry to Biology and Vice Versa

Short Review

2798



Synthesis

Synthesis 2021, 53, 2809–2818
DOI: 10.1055/a-1463-4219

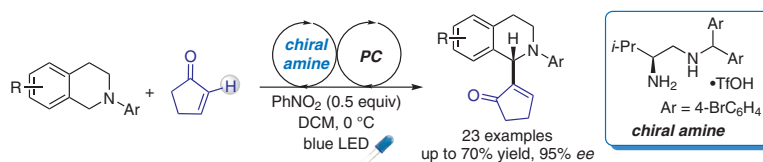
Z. Jia
Q. Yang
S. Luo*

University of Chinese Academy
of Sciences, Beijing,
P. R. of China
Tsinghua University, Beijing,
P. R. of China

Photoredox-Mediated Asymmetric Cross-Dehydrogenative Coupling of Enones and Tertiary Amines by Chiral Primary Amine Catalysis

Feature

2809



Synthesis

Synthesis 2021, 53, 2819–2827
DOI: 10.1055/s-0040-1720693

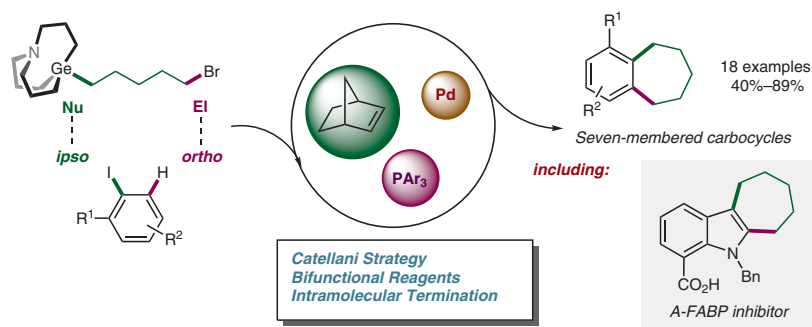
X.-Y. Xie
W.-T. Jiang
B. Xiao

University of Science and Tech-
nology of China, P. R. of China

Alkyl Carbagermatrane Enabled Synthesis of Seven-Membered Carbocycle-Fused Aromatics through Catellani Strategy

Feature

2819



Synthesis

Proton-Mediated Practical Synthesis of McGeachin-Type Bisaminals

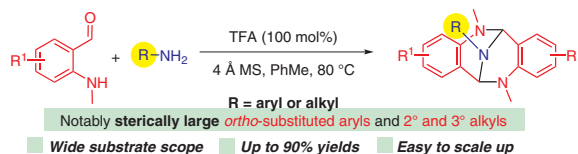
Paper

2828

Synthesis 2021, 53, 2828–2840
DOI: 10.1055/a-1490-1241

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T. Wang
H. Du*
J. Xu*
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Synthesis

Synthesis of Highly Functionalized 4-Amino-2-(trifluoromethyl)-1H-pyrroles

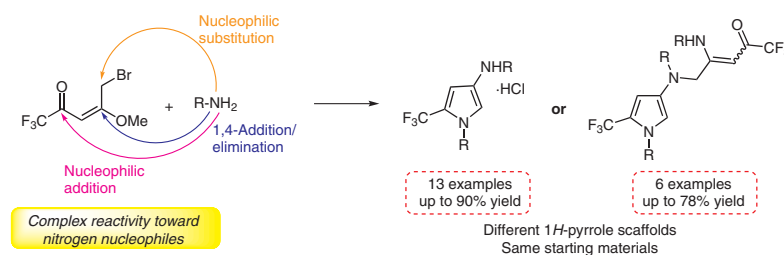
Paper

2841

Synthesis 2021, 53, 2841–2849
DOI: 10.1055/a-1503-9057

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M. Mittersteiner
E. C. Aquino
H. G. Bonacorso
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Maria, Brazil



Synthesis

Nickel-Catalyzed Difunctionalization of Alkynyl Bromides with Thiosulfonates and *N*-Arylthio Succinimides: A Convenient Synthesis of 1,2-Thiosulfonylethenes and 1,1-Dithioethenes

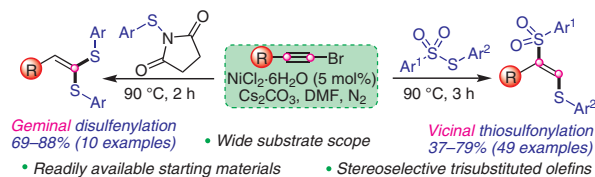
Paper

2850

Synthesis 2021, 53, 2850–2864
DOI: 10.1055/a-1482-2486

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Synthesis

Synthesis **2021**, 53, 2865–2873
DOI: 10.1055/a-1503-8068

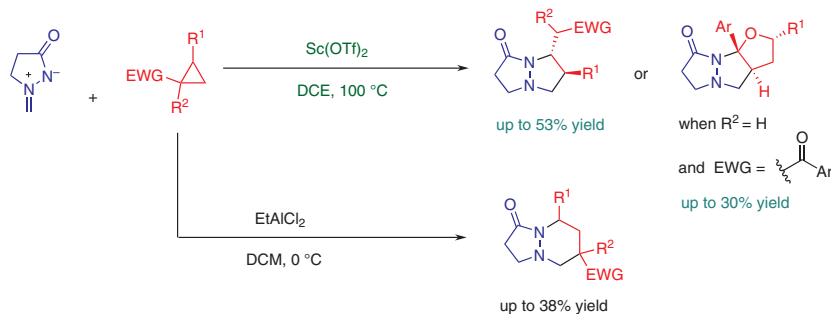
R. Mandadapu
A. S. Dehade
S. A. Shete
M. Montgomery
V. Sikervar*
R. Sonawane*

Syngenta Biosciences Pvt. Ltd.
Santa Monica Works, India

Lewis Acid Mediated [3+2] and [3+3] Annulations of an Azomethine Imine with Donor–Acceptor Cyclopropanes

Paper

2865



Synthesis

Synthesis **2021**, 53, 2874–2880
DOI: 10.1055/a-1478-9088

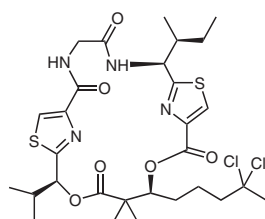
Y. Zhang
Y. Liu*
Y. Du*

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Yantai University, P. R. of China

First Total Synthesis of 27-Deoxylyngbyabellin A

Paper

2874



27-Deoxylyngbyabellin A

10 linear steps, 9.7% overall yield

Synthesis

Synthesis **2021**, 53, 2881–2888
DOI: 10.1055/a-1481-2023

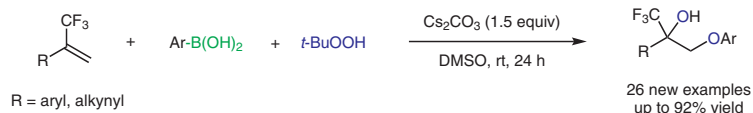
H. Li
C. Zhu*

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Dual Roles of TBHP-Enabled Regioselective Hydroetherification of (Trifluoromethyl)alkenes with Boronic Acids: Access to α -Trifluoromethyl β -Aryloxy Tertiary Alcohols

Paper

2881



- ✦ Three-starting-materials four-component strategy
- ✦ TBHP as the oxidant and the nucleophile
- ✦ Broad substrate scope and functional group tolerance
- ✦ High yields with exclusive regioselectivity

Synthesis

Synthesis 2021, 53, 2889–2896
DOI: 10.1055/a-1488-4467

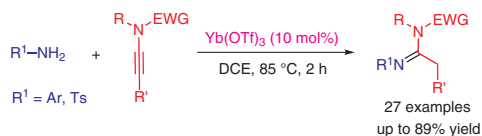
X. Zeng*
Q. Gu
W. Dai
Y. Xie
X. Liu
G. Wu

Nantong University,
P. R. of China

Yb(OTf)₃-Mediated Regioselective Hydroamination of Ynamides with Anilines and *p*-Toluenesulfonamide

Paper

2889



Synthesis

Synthesis 2021, 53, 2897–2902
DOI: 10.1055/a-1477-6043

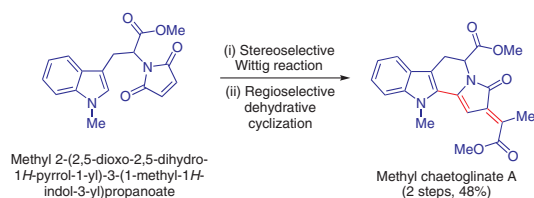
S. V. Shelar
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(CSIR), India

Wittig Reactions of Maleimide-Derived Stabilized Ylides with Alkyl Pyruvates: Concise Approach to Methyl Ester of (\pm)-Chaetogline A

Paper

2897



Synthesis

Synthesis 2021, 53, 2903–2910
DOI: 10.1055/a-1500-1407

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N. A. Unmesh
M. N. Shet
I. Ahmad
N. Ajikumar
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Unified Approach for the Total Synthesis of Bis-THF C₁₅ Acetogenins: A Chloroenyne from *Laurencia majuscula*, Laurendecumenyne B and Laurefurenynes A/B

Paper

2903

