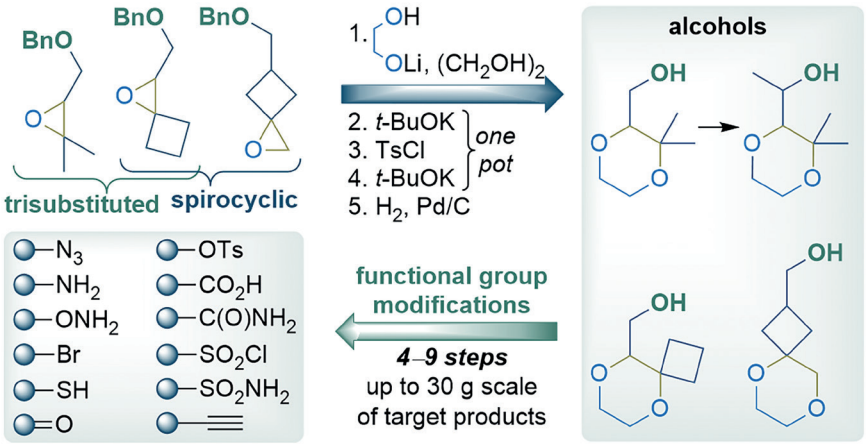
Synthesis

Reviews and Full Papers in Chemical Synthesis

October 18, 2023 • Vol. 55, 3209–3414



Synthesis of 2,2-Disubstituted and 2,2,3-Trisubstituted 1,4-Dioxane-Derived Building Blocks

A. V. Bondarenko, Y. K. Kozyriev, B. V. Vashchenko, O. O. Grygorenko

20

Thieme

Synthesis

Reviews and Full Papers in Chemical Synthesis

2023
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October II

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Synthesis **2023**, *55*, 3209–3238
DOI: 10.1055/a-2083-8591

M. C. D'Amaral
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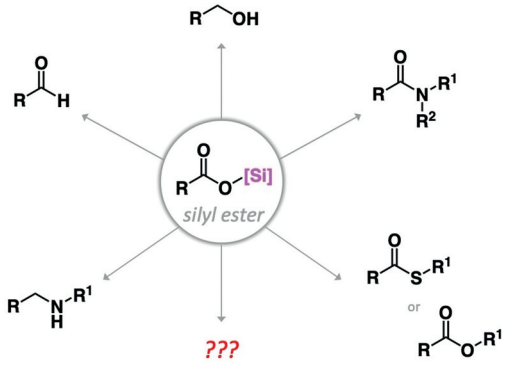
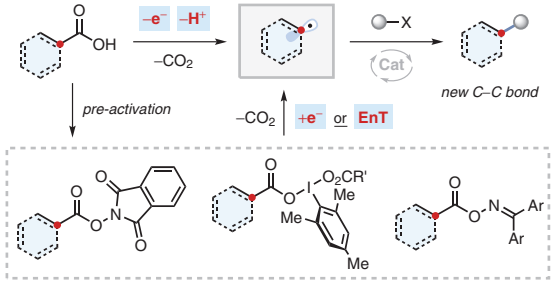


Synthesis **2023**, *55*, 3239–3250
DOI: 10.1055/a-2081-1830

J. D. Tibbetts*
H. E. Askey
Q. Cao
J. D. Grayson
S. L. Hobson
G. D. Johnson
J. C. Turner-Dore
A. J. Cresswell*
University of Bath, UK



Synthesis

Synthesis **2023**, *55*, 3251–3262
DOI: 10.1055/a-2111-2333

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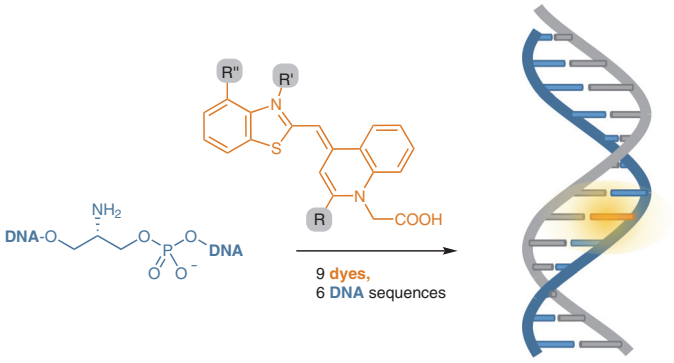
O. Seitz*
Humboldt-Universität zu Berlin, Germany

New Thiazole Orange Derivatives for Improved Fluorescence Signaling of DNA FIT Probes

Feature



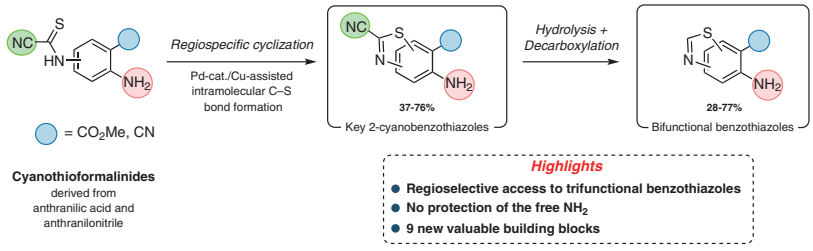
Synthesis

Synthesis **2023**, *55*, 3263–3271
DOI: 10.1055/a-2086-3015

N. Broudic
A. Pacheco-Benichou
C. Fruit
T. Besson*
Univ Rouen Normandie, France

Synthesis of Trifunctional Thiazole-Fused Anthranilonitrile and Anthranilic Acid Derivatives

PSP



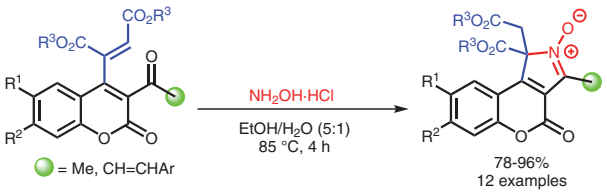
Synthesis

Synthesis **2023**, *55*, 3272–3280
DOI: 10.1055/s-0042-1751976

A. Alizadeh*
A. Rostampoor
H. Hasanpour
Tarbiat Modares University, Iran

Green Synthesis of Five-Membered Hetarene *N*-Oxides: A Designed Approach to the Synthesis of Substituted Chromeno[3,4-*c*]pyrrole-2-oxides

Paper



- Available starting materials used
- Mild reaction conditions
- HAC as NO source
- Chemoselective reaction
- Metal-free procedure
- GAP chemistry

Synthesis

Synthesis **2023**, *55*, 3281–3288
DOI: 10.1055/a-2116-5517

D. Enagandhula
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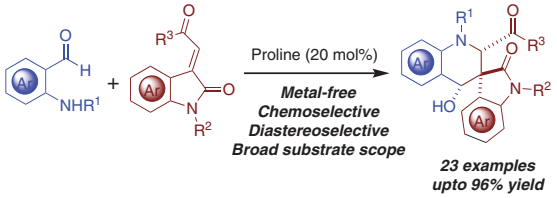
P. S. Mainkar*
CSIR-Indian Institute of Chemical Technology, India
Academy of Scientific and Innovative Research (AcSIR), India

Proline-Catalyzed Diastereoselective Synthesis of Dihydroquinolinyl-Spirooxindole *via* Aza-Michael/Aldol Reaction

Paper



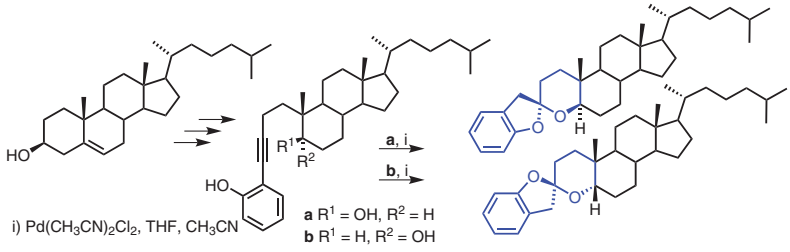
Synthesis

Synthesis **2023**, *55*, 3289–3296
DOI: 10.1055/a-2093-3333

W. H. García-Santos
A. M. Quiroz-Mendoza
M. C. Mayorquín-Torres
M. Flores-Álamo
M. A. Iglesias-Arteaga*
Universidad Nacional Autónoma de México, México

Palladium-Catalyzed Synthesis of Benzofuran Spiroketals Derived from Cholesterol; NMR and X-ray Characterization

Paper



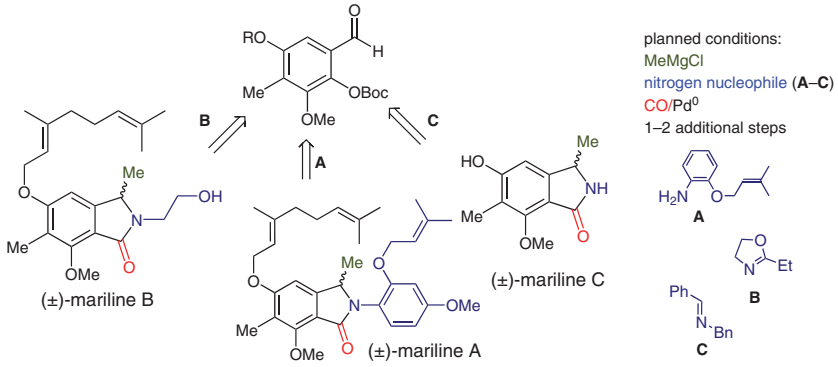
Synthesis

Synthesis **2023**, *55*, 3297–3302
DOI: 10.1055/s-0041-1738443

Y. F. Wong
T. R. Pettus*
University of California at Santa Barbara, USA

Synthesis of Naturally Racemic Marilines B & C through Multicomponent Reactions Involving *ortho*-Quinone Methides and Various Nitrogen Nucleophiles

Paper



Synthesis

Synthesis **2023**, *55*, 3303–3314
DOI: 10.1055/a-2116-5206

Synthesis of Quinoline and Quinolin-2(1*H*)-one Derivatives via Nickel Boride Promoted Reductive Cyclization

R. Sarkar
S. K. Samanta
A. M. Menon
D. Chopra
D. Ganguly
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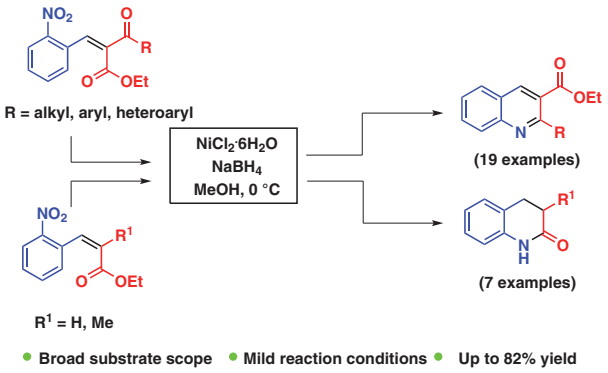


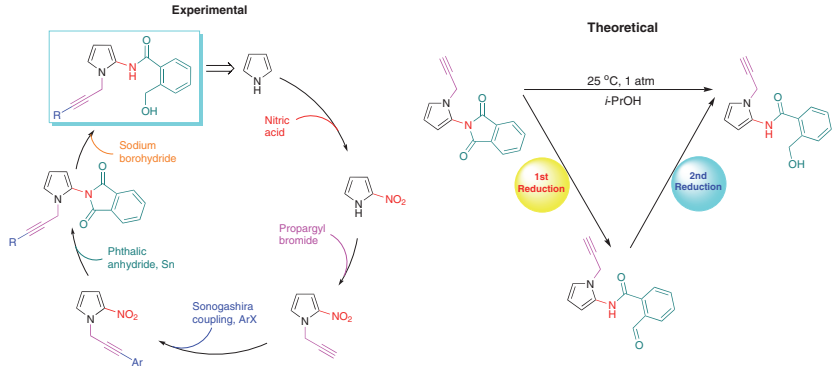
Synthesis

Synthesis **2023**, *55*, 3315–3328
DOI: 10.1055/s-0042-1751483

Synthesis of *N*-Propargyl Pyrrolylamides and Theoretical Study of Pyrrolylimide Reduction by $NaBH_4$

S. Basceken*

Hitit University, Turkey



Synthesis

Synthesis **2023**, *55*, 3329–3341
DOI: 10.1055/s-0041-1738447

Transition-Metal-Free Cascade C–N Bond Formation: An Effective Strategy for the Synthesis of β-Carboline N-Fused Imidazolium Acetates and Estimation of their Light-Emitting Properties

M. Singh
Vaishali
Deepika
Jyoti
S. Sharma
N. Banyal
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B. Budhalakoti
C. C. Malakar
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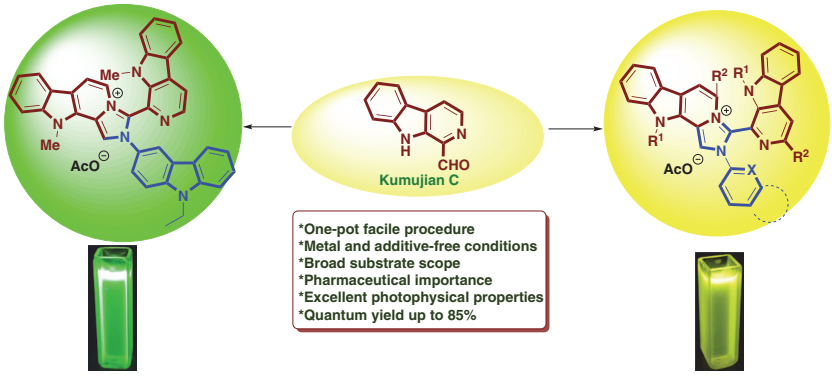

Synthesis

Synthesis **2023**, *55*, 3342–3348
DOI: 10.1055/a-2131-0116

Y. Sato
T. Ukei
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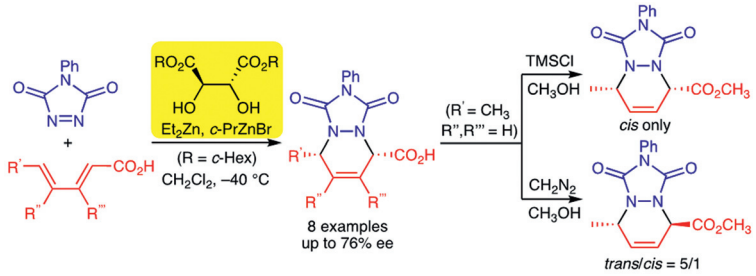
Asymmetric Hetero-Diels–Alder Reaction of 4-Phenyl-1,2,4-triazole-3,5-dione with 2,4-Dienyl Carboxylic Acids

Paper



Synthesis

Synthesis **2023**, *55*, 3349–3363
DOI: 10.1055/a-2105-2774

C.-C. Bian
Y.-Q. Li
H.-r. Yang
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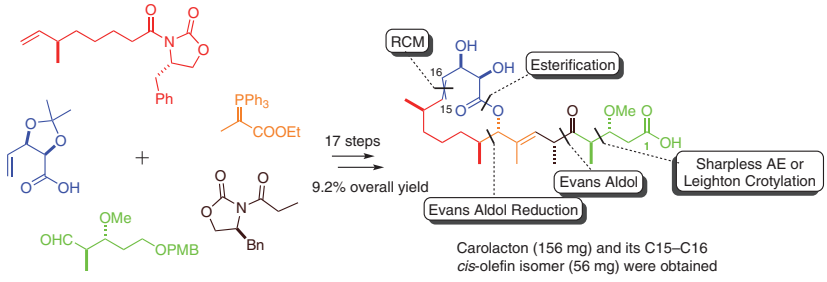
Scalable, Stereocontrolled, Total Synthesis of Carolacton

Paper



Synthesis

Synthesis **2023**, *55*, 3364–3372
DOI: 10.1055/a-2147-2620

X. Zhang
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Q. Yang
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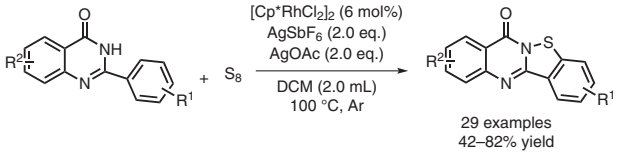
Rhodium-Catalyzed C–H Activation of 2-Arylquinazolinones and Cyclization with Elemental Sulfur *via* C–S/S–N Bond Formation to Access 7*H*-Benzo[4,5]isothiazolo[3,2-*b*]quinazolinones

Paper



Synthesis

Synthesis **2023**, *55*, 3373–3381
DOI: 10.1055/s-0041-1738449

X.-F. Tao
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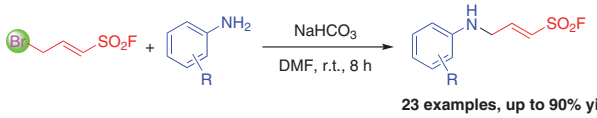
Wuhan University of Technology, P. R. of China

A General Protocol for the Chemo- and Stereoselective Construction of α,β-Unsaturated γ-Amino Sulfonyl Fluorides



23 examples, up to 90% yield

- Easy work-up
- Gram-scale
- Broad functional group compatibility
- Mild conditions
- Drug modification
- Excellent chemo- and stereoselectivity

Synthesis

Synthesis **2023**, *55*, 3382–3392
DOI: 10.1055/a-2109-1419

M. K. Zaheer
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A. Kumar
S. Mishra
R. Kant
K. Mohanan*
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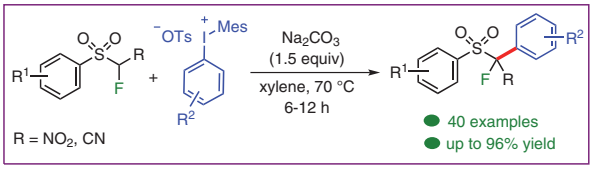
Efficient α-Arylation of α-Fluoro-α-nitrosulfonylmethanes Employing Diaryliodonium Salts



Synthesis

Synthesis **2023**, *55*, 3393–3401
DOI: 10.1055/a-2096-4223

Y.-L. Zhu*
J. Yan
X.-X. Xu
Z.-Y. Sun
J. Chen*
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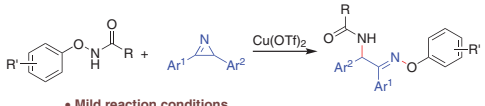
Northwest University, P. R. China

Copper-Catalyzed Coupling of *N*-Phenoxyacetamides and 2*H*-Azirines for Synthesis of α-Amino Oxime Ethers



- Mild reaction conditions
- High atom economy
- High regioselectivity

- 30 examples
- Up to 86% yield

Synthesis

Synthesis **2023**, *55*, 3402–3414
DOI: 10.1055/a-2092-9205

A. V. Bondarenko
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B. V. Vashchenko*
O. O. Grygorenko
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Synthesis of 2,2-Disubstituted and 2,2,3-Trisubstituted 1,4-Dioxane-Derived Building Blocks