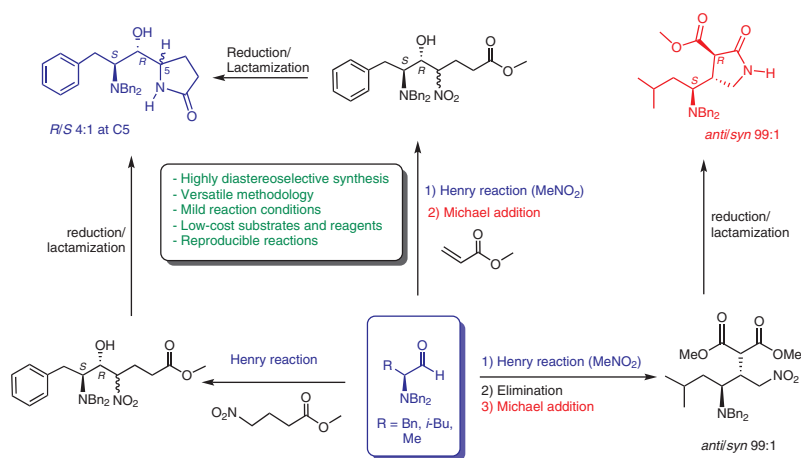


# Synthesis

Reviews and Full Papers in Chemical Synthesis

December 1, 2020 • Vol. 52, 3493–3692



Divergent and Diastereoselective Synthesis of  $\alpha$ -Monosubstituted and  $trans$ - $\alpha,\beta$ -Disubstituted  $\gamma$ -Lactams from  $(S)$ - $N,N$ -Dibenzyl- $\alpha$ -amino Aldehydes via Henry and Michael Reactions

F. P. Meirelis, B. G. N. Vieira, V. L. P. Pereira

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## Synthesis

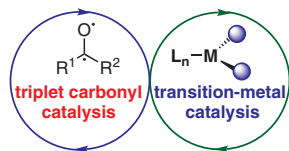
*Synthesis* 2020, 52, 3493–3510  
DOI: 10.1055/s-0040-1707183

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D. J. Young  
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## Carbonyl-Photoredox/Metal Dual Catalysis: Applications in Organic Synthesis

Review

3493



## Synthesis

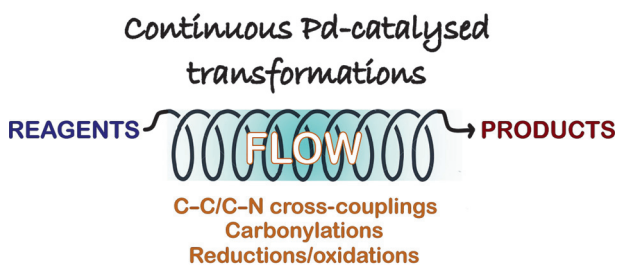
*Synthesis* 2020, 52, 3511–3529  
DOI: 10.1055/s-0040-1707212

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## Recent Applications of Continuous Flow in Homogeneous Palladium Catalysis

Review

3511



## Synthesis

## Recent Advances in the Synthesis and Applications of 2-Arylbenzothiazoles

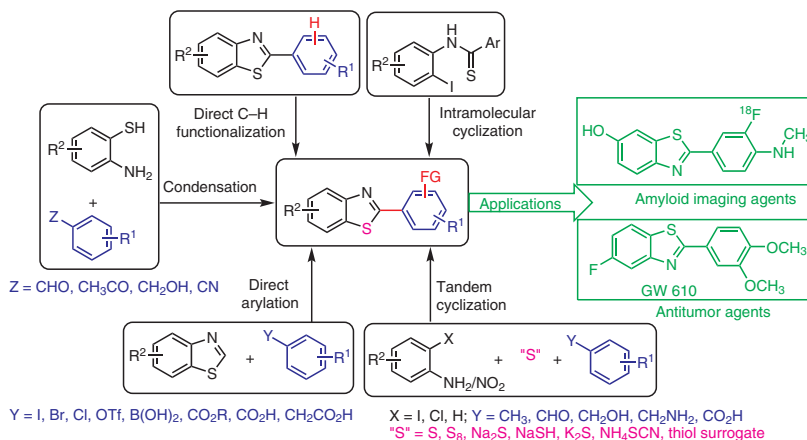
## Short Review

3530

*Synthesis* 2020, 52, 3530–3548  
DOI: 10.1055/s-0040-1707208

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## Synthesis

## Progress on Iridium-Catalyzed Hydrosilylation of Alkenes and Alkynes

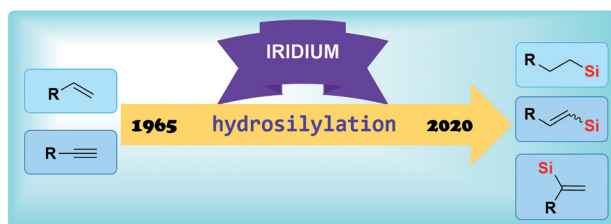
## Short Review

3549

*Synthesis* 2020, 52, 3549–3563  
DOI: 10.1055/s-0040-1707239

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## Synthesis

## Recent Advances in Denitrogenative Reactions of Pyridotriazoles

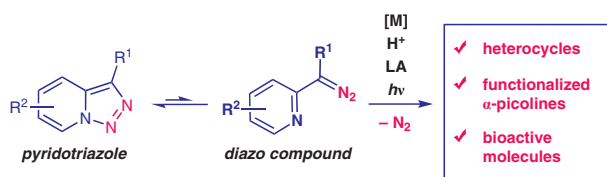
## Short Review

3564

*Synthesis* 2020, 52, 3564–3576  
DOI: 10.1055/s-0040-1707254

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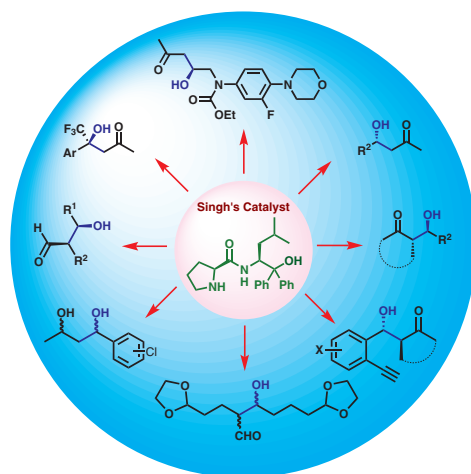


*Synthesis* **2020**, 52, 3577–3582  
DOI: 10.1055/s-0040-1707235

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3577

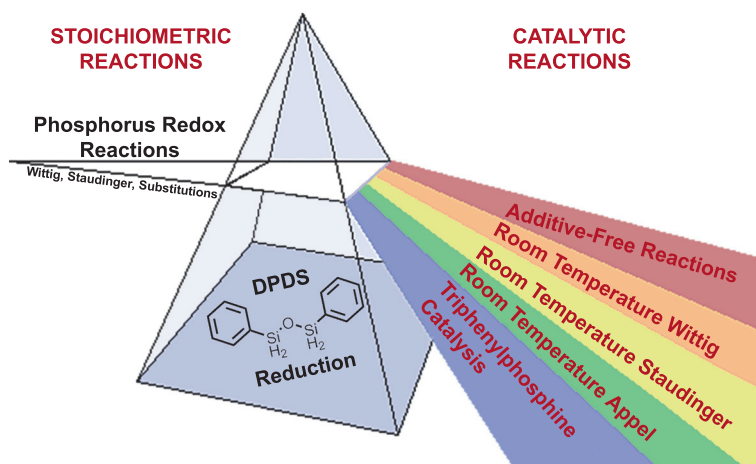


3583

*Synthesis* **2020**, 52, 3583–3594  
DOI: 10.1055/s-0040-1707345

J. A. Buonomo  
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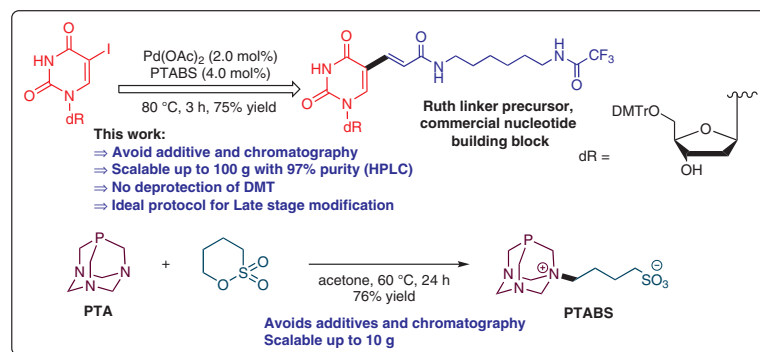


3595

*Synthesis* **2020**, 52, 3595–3603  
DOI: 10.1055/s-0040-1707260

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## Synthesis

*Synthesis* 2020, 52, 3604–3621  
DOI: 10.1055/s-0040-1707209

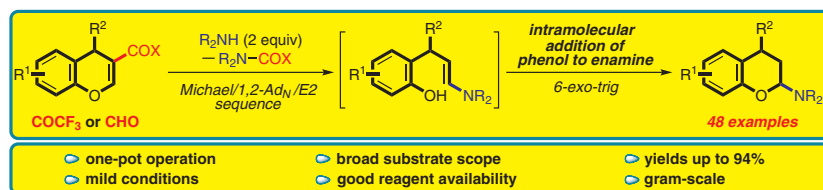
V. A. Osyanin\*  
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I. V. Melnikova  
K. S. Korzhenko  
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## Catalyst-Free Synthesis of Chromane-Type N,O-Acetals via Intramolecular Addition of Phenols to Enamines

Paper

3604



## Synthesis

*Synthesis* 2020, 52, 3622–3631  
DOI: 10.1055/s-0040-1707228

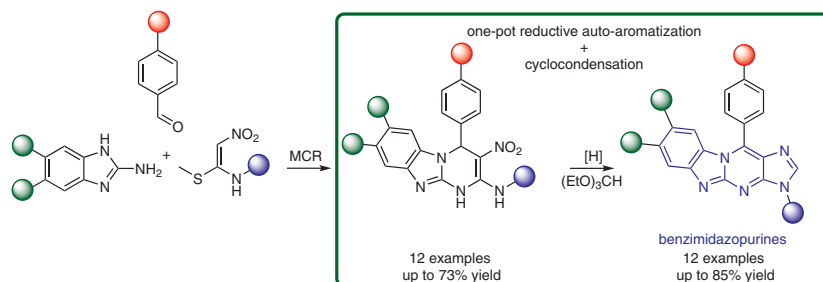
V. V. Fedotov\*  
E. N. Ulomsky  
K. V. Savateev  
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D. A. Gazizov  
E. B. Gorbunov  
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## A PASE Approach to the Synthesis of Benzimidazopurines as Polycondensed Purine Derivatives

Paper

3622



## Synthesis

*Synthesis* 2020, 52, 3632–3639  
DOI: 10.1055/s-0040-1707352

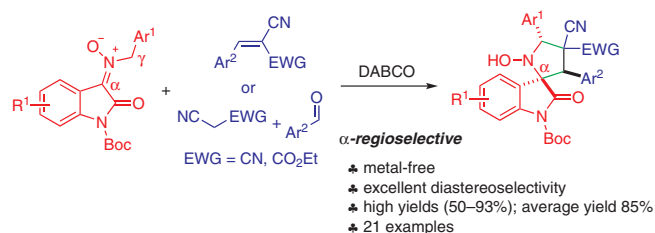
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DABCO-Catalyzed  $\alpha$ -Regio- and Diastereoselective (3+2) Cycloadditions of Nitron Ylides from Isatins and Activated Alkenes

Paper

3632



## Synthesis

Synthesis 2020, 52, 3640–3649  
DOI: 10.1055/s-0040-1707348

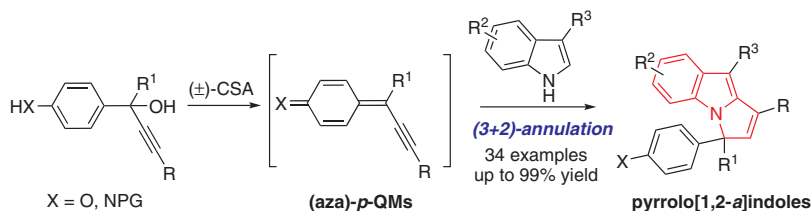
X.-Z. Zhang\*  
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A.-J. Ma  
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J.-Y. Du  
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## Synthesis of Pyrrolo[1,2-*a*]indoles via (3+2)-Annulations of (Aza)-*para*-Quinone Methides with Indoles

Paper

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## Synthesis

Synthesis 2020, 52, 3650–3656  
DOI: 10.1055/s-0040-1706423

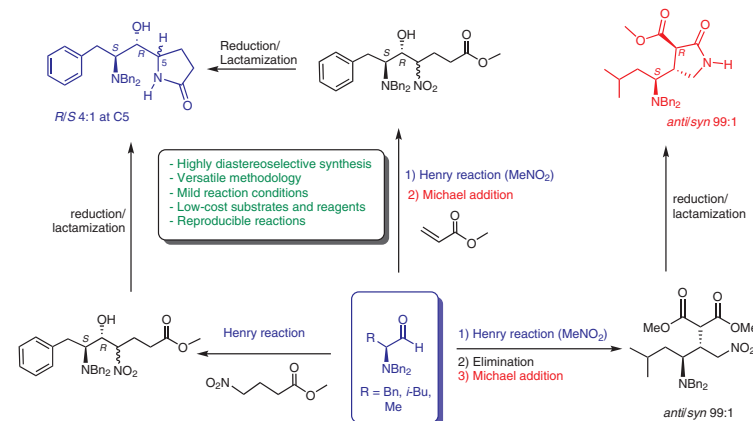
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## Divergent and Diastereoselective Synthesis of $\alpha$ -Monosubstituted and *trans*- $\alpha,\beta$ -Disubstituted $\gamma$ -Lactams from (*S*)-*N,N*-Dibenzyl- $\alpha$ -amino Aldehydes via Henry and Michael Reactions

Paper

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## Synthesis

Synthesis 2020, 52, 3657–3666  
DOI: 10.1055/s-0040-1707238

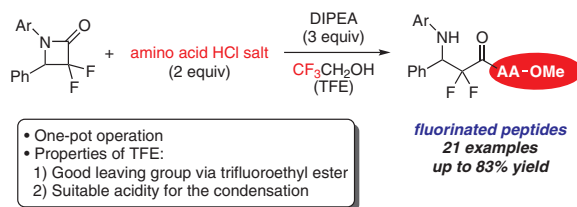
A. Tarui  
M. Ueo  
M. Morikawa  
M. Tsuta  
S. Iwasaki  
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Y. Karuo  
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## One-Pot Ring-Opening Peptide Synthesis Using $\alpha,\alpha$ -Difluoro- $\beta$ -Lactams

Paper

3657



- One-pot operation
- Properties of TFE:
  - 1) Good leaving group via trifluoroethyl ester
  - 2) Suitable acidity for the condensation

fluorinated peptides  
21 examples  
up to 83% yield

## Synthesis

Synthesis 2020, 52, 3667–3674  
DOI: 10.1055/s-0040-1706421

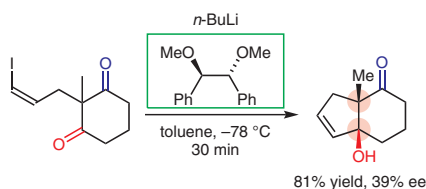
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J.-i. Matsuo

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### Asymmetric Synthesis of a Bicyclo[4.3.0]nonene Derivative Bearing a Quaternary Carbon Stereocenter: Desymmetrization of $\sigma$ -Symmetrical Diketones through Intramolecular Addition of an Alkenyl Anion

Paper

3667



## Synthesis

Synthesis 2020, 52, 3675–3683  
DOI: 10.1055/s-0040-1707236

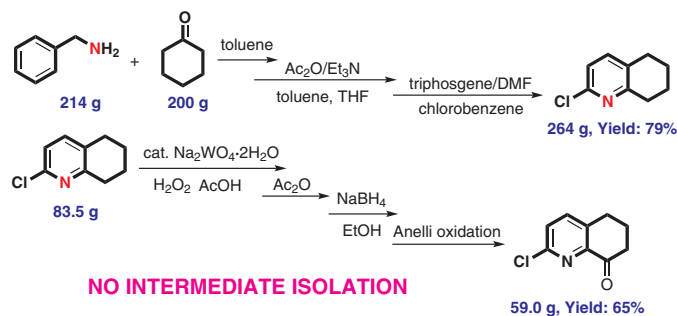
Z. Zong  
K. Wu  
L. Jin\*  
N. Sun  
B. Hu  
Z. Shen  
X. Hu\*

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### Large-Scale Synthesis of 2-Chlorotetrahydroquinoline and 2-Chlorotetrahydroquinolin-8-one

Paper

3675



## Synthesis

Synthesis 2020, 52, 3684–3692  
DOI: 10.1055/s-0040-1707237

J.-P. Lan  
Y.-N. Lu  
K.-W. Chen  
F. Jiang  
F. Gao\*  
Y.-C. Zhang\*  
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### Catalytic Asymmetric Substitution Reaction of 3-Substituted 2-Indolylmethanols with 2-Naphthols

Paper

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