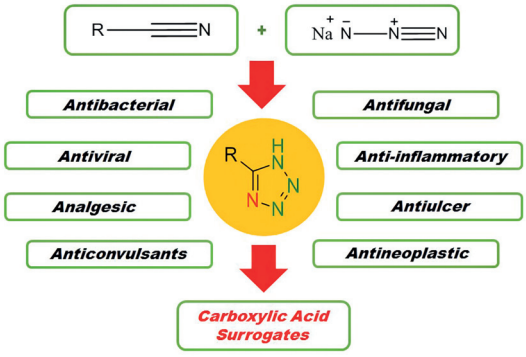
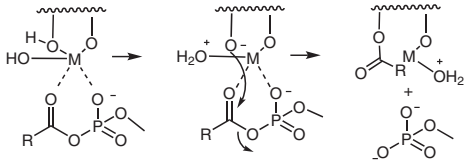
Synthesis

Reviews and Full Papers in Chemical Synthesis

2019
Vol. 51, No. 20
October II





Synthesis

A Practical Synthesis of Ammonia from Nitrogen Gas, Samarium Diiodide and Water Catalyzed by a Molybdenum–PCP Pincer Complex

PSP

Synthesis **2019**, *51*, 3792–3795
DOI: 10.1055/s-0039-1690151

Y. Ashida
S. Kondo
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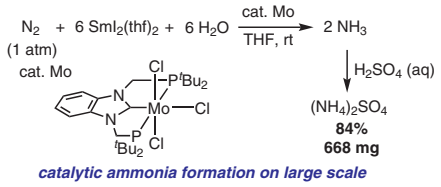

catalytic ammonia formation on large scale

Synthesis

Molybdenum-Mediated One-Pot Synthesis of Pyrazoles from Isoxazoles

Paper

Synthesis **2019**, *51*, 3796–3804
DOI: 10.1055/s-0039-1690615

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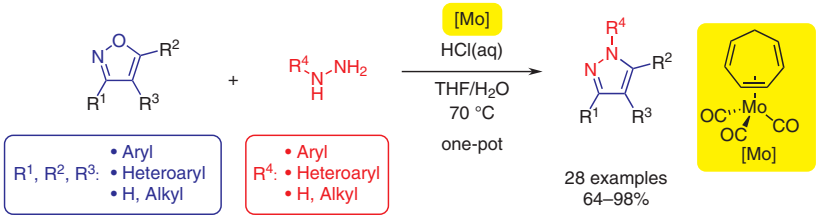

Synthesis

Treatment of Olefinic Amides with NBS in Water: Synthesis of Monobromo- and Multibromobenzoxazines

Paper

Synthesis **2019**, *51*, 3805–3814
DOI: 10.1055/s-0037-1610724

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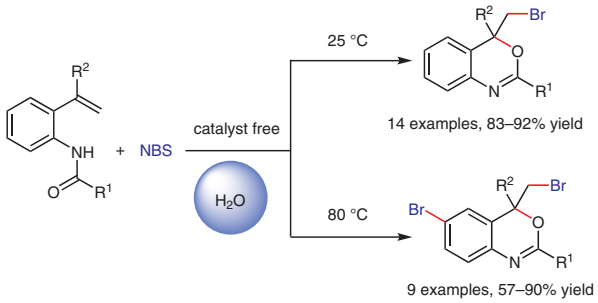

Synthesis

Synthesis **2019**, *51*, 3815–3824
DOI: 10.1055/s-0037-1611882

Medicinally Relevant Modification of the Isoquinoline-1,3-dione Scaffold via Metal-Free Arylation and Fluorination of Diazo Homophthalimides in Brønsted Acids

Paper

3815

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D. Dar'in
G. Kantin
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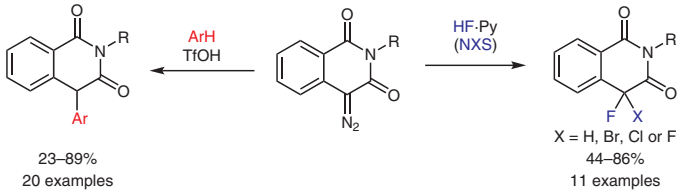
Saint Petersburg State Forest Technical University, Russian Federation



Synthesis

Synthesis **2019**, *51*, 3825–3833
DOI: 10.1055/s-0039-1690003

Regioselective Synthesis of 2-Acylbutadienes from β,γ-Unsaturated Ketones

Paper

3825

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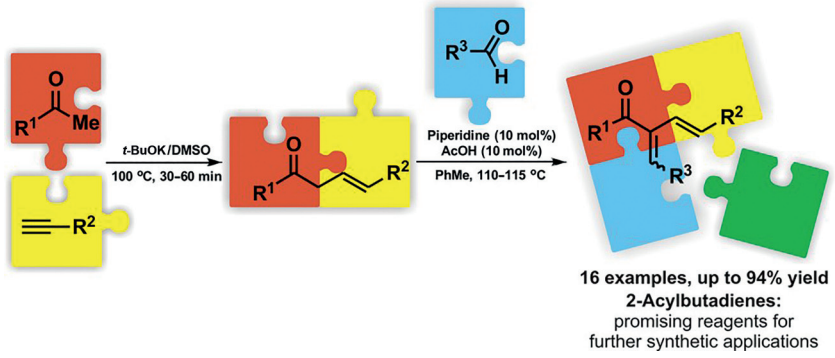

Synthesis

Synthesis **2019**, *51*, 3834–3846
DOI: 10.1055/s-0037-1611896

Enantioselective Synthesis of *cis*- and *trans*-Borocyclopropylmethanol: Simple Building Blocks To Access Heterocycle-Substituted Cyclopropylmethanols

Paper

3834

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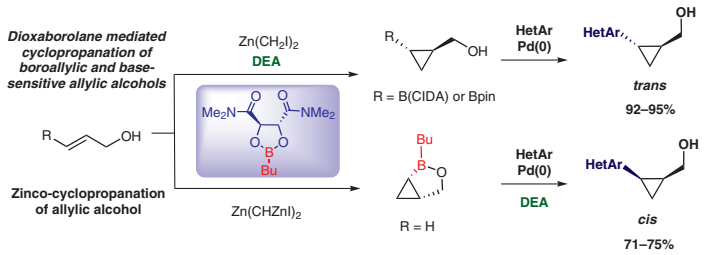

Synthesis

Synthesis **2019**, *51*, 3847–3858
DOI: 10.1055/s-0037-1611900

Facile Synthesis of Dispiroheterocycles through One-Pot [3+2] Cycloaddition, and Their Antiviral Activity

Paper

3847

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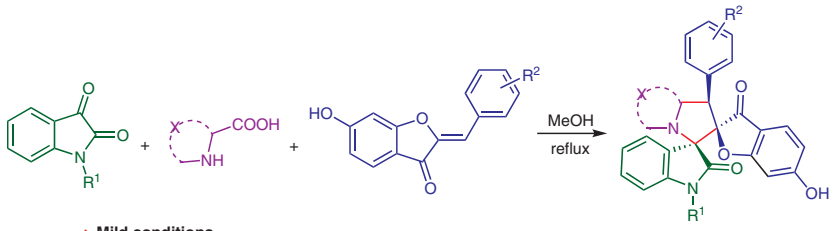

- **Mild conditions**
- **High efficiency for ring construction**
- **Broad substrate scope**
- **Potential antiviral agents**

Synthesis

Synthesis **2019**, *51*, 3859–3864
DOI: 10.1055/s-0037-1611895

Aryl Ketone Mediated Photoinduced Radical Coupling for the Alkylation of Benzazoles Employing Saturated Heterocyclic Compounds

Paper

3859

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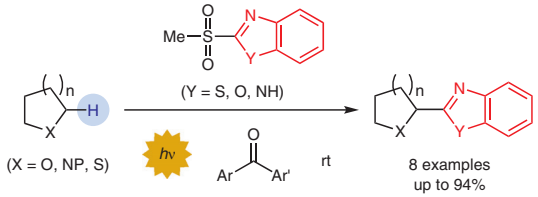

alkylation of benzazoles

Synthesis

Synthesis **2019**, *51*, 3865–3874
DOI: 10.1055/s-0037-1611908

Palladium-Catalyzed and Quinazoline-Directed C–H Selective Acetoxylation of 2-Arylquinazolines

Paper

3865

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Z. Deng
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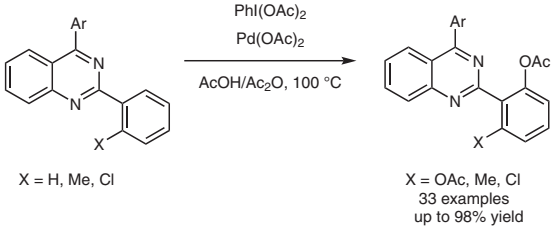
Y. Peng*

Key Laboratory of Small Functional Organic Molecule, P. R. of China



Synthesis

Synthesis **2019**, *51*, 3875–3882
DOI: 10.1055/s-0037-1610725

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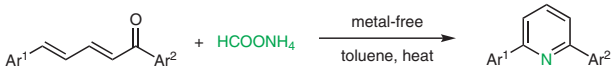
Synthesis of Asymmetrical 2,6-Diarylpyridines from Linear α,β,γ,δ-Unsaturated Ketones by Addition of Ammonium Formate Followed by Annulation

Paper



33 examples, up to 92% yield

Synthesis

Synthesis **2019**, *51*, 3883–3890
DOI: 10.1055/s-0037-1611906

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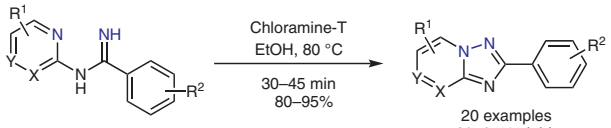
A Convenient Synthesis of 1,5-Fused 1,2,4-Triazoles from *N*-Arylamidines via Chloramine-T Mediated Intramolecular Oxidative N–N Bond Formation

Paper



20 examples
80–95% yield

X, Y = CH or N; R^1 = H, Me, Br, Cl
R^2 = H, Me, OMe, Br, Cl, F, CF_3, NO_2

Synthesis

Synthesis **2019**, *51*, 3891–3900
DOI: 10.1055/s-0039-1690132

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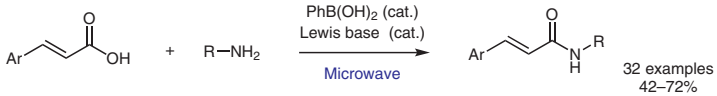
An Efficient Solvent-Free Microwave-Assisted Synthesis of Cinnamamides by Amidation Reaction Using Phenylboronic Acid/Lewis Base Co-catalytic System

Paper



32 examples
42–72%

- Highly chemoselective
- Solvent-free conditions
- Efficient with aromatic amines
- Metal-free conditions
- Short reaction time

Synthesis

Synthesis **2019**, *51*, 3901–3907
DOI: 10.1055/s-0039-1690017

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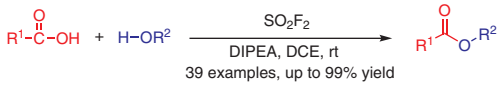
Construction of Esters through Sulfuryl Fluoride (SO_2F_2) Mediated Dehydrative Coupling of Carboxylic Acids with Alcohols at Room Temperature



Cheap inorganic SO_2F_2 as the coupling reagent
Coupling reagent removed by washing
Mild conditions and broad scope

Synthesis

Synthesis **2019**, *51*, 3908–3914
DOI: 10.1055/s-0037-1610720

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A Ruthenium-Catalyzed C–H Activation Strategy as an Efficient Shortcut in the Total Synthesis of 6,8-Dimethoxy-1,3-dimethylisoquinoline