

# Syn **lett**

Accounts and Rapid Communications in Chemical Synthesis

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## Special Issue

dedicated to Prof. Hisashi Yamamoto

*Guest Editor: Keiji Maruoka*



**20**

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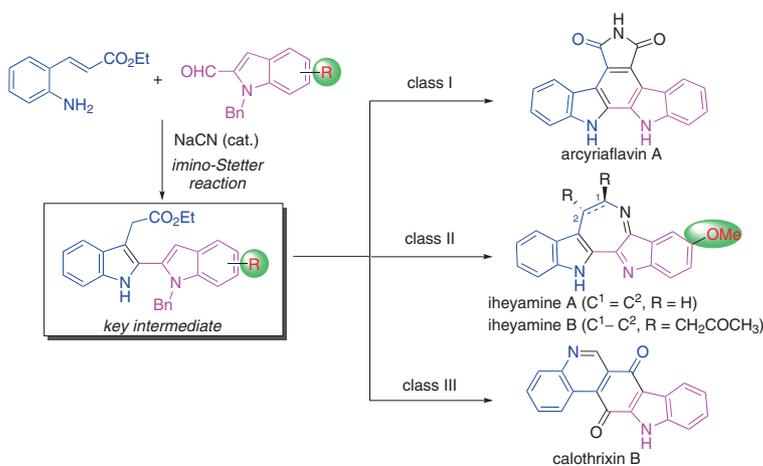
## Total Syntheses of 2,2'-Biindolyl Alkaloids via Cyanide-Catalyzed Imino-Stetter Reaction

Cluster Account

2351

Synlett 2023, 34, 2351–2360  
DOI: 10.1055/a-2069-3913

J. Park  
T. L. Kim  
C.-H. Cheon\*  
Korea University, R. of Korea



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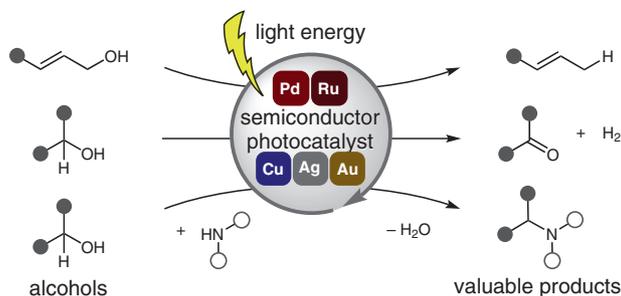
## Metal-Loaded Semiconductor-Photocatalysis of Alcohols for Selective Organic Synthesis: A Personal Account

Cluster Account

2361

Synlett 2023, 34, 2361–2373  
DOI: 10.1055/a-2124-4037

S. Mori\*  
S. Sakurai  
H. Naka\*  
S. Saito\*  
Nagoya University, Japan  
Kyoto University, Japan

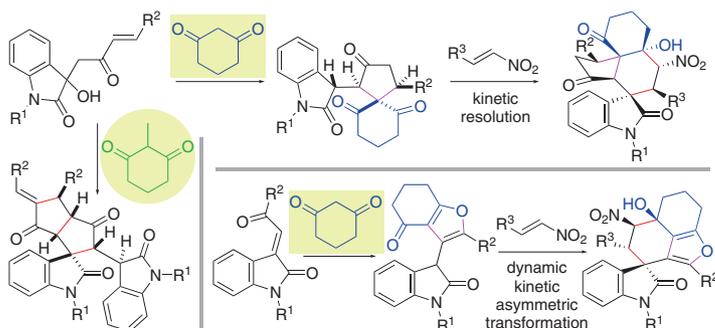


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## Synthesis of Functionalized Spirooxindole Polycycles: Use of Cyclic 1,3-Diones as Reactants or as Condition-Tuning Molecules

Cluster Account

2374

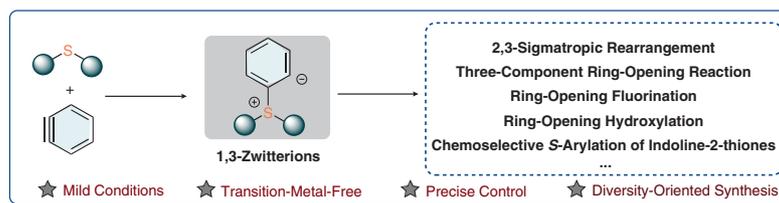
Synlett 2023, 34, 2374–2378  
DOI: 10.1055/a-2061-0855M. Sohail  
F. Tanaka\*Okinawa Institute of Science and  
Technology Graduate University,  
Japan  
Kyoto University, Japan

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## When Aryne Chemistry Meets Organosulfur Compounds

Cluster Account

2379

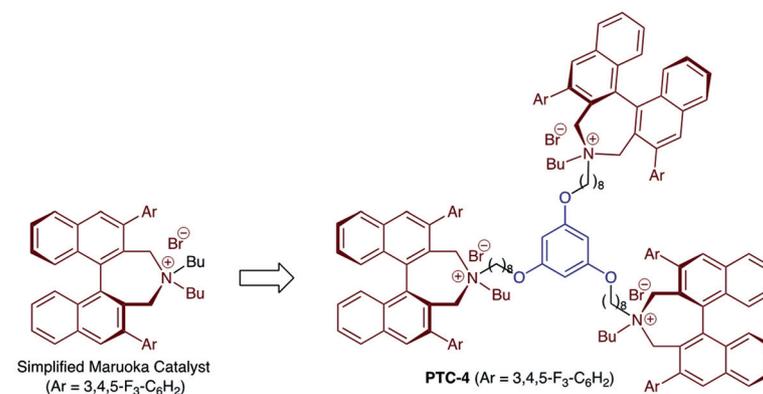
Synlett 2023, 34, 2379–2387  
DOI: 10.1055/s-0042-1751476J. Tan\*  
X. Feng  
R. Fan  
Z. Zhuang  
Y. GuoBeijing University of Chemical  
Technology, P. R. of China

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## Design of Y-Shaped Trimers of Chiral Phase-Transfer Catalysts for the Asymmetric Alkylation of Amino Acid Derivatives

Cluster

2388

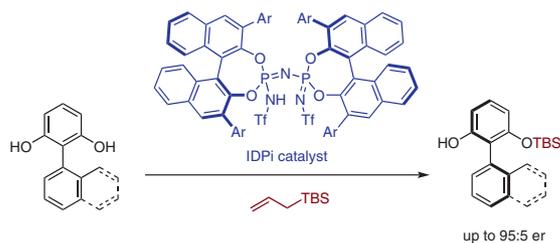
Synlett 2023, 34, 2388–2392  
DOI: 10.1055/a-2065-3962S. Yu  
J. Liu  
Z. Wang  
T. Kato  
Y. Liu\*  
K. Maruoka\*Guangdong University of Tech-  
nology, P. R. of China

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## Brønsted Acid Catalyzed Asymmetric Silylation of Biaryl Diols

Cluster

2393

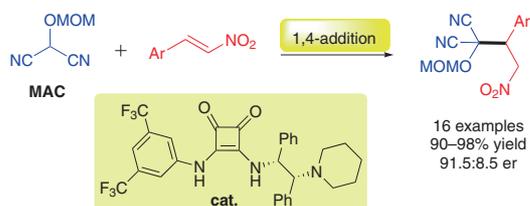
Synlett 2023, 34, 2393–2395  
DOI: 10.1055/a-2100-1575J. T. Han  
H. Zhou  
B. List\*Max-Planck-Institut für Kohlen-  
forschung, Germany

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## Synthesis of (2-Nitro-1-AfAlemphenylethyl)malononitriles by Michael Addition of Masked Acyl Cyanides to Nitroalkenes

Cluster

2396

Synlett 2023, 34, 2396–2400  
DOI: 10.1055/s-0041-1738437H. Sun  
Y. Guo  
H. Li  
M. Wang  
T. Ding  
Y. Zhi\*  
K. Zhao\*  
Q. Yao\*Shandong First Medical Universi-  
ty & Shandong Academy of Med-  
ical Sciences, P. R. of China  
Shandong University, P. R. of  
China

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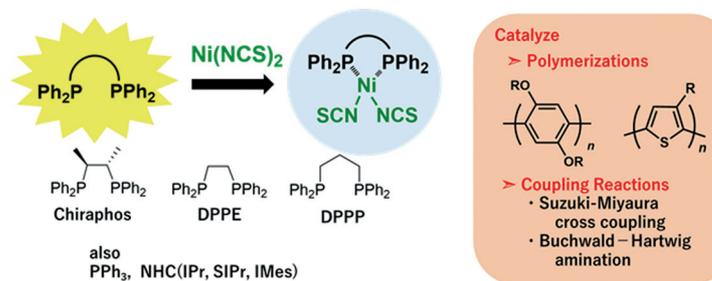
## Nickel(II) Thiocyanate Complex as a Catalyst for Cross-Coupling Reactions

Cluster

2401

Synlett 2023, 34, 2401–2404  
DOI: 10.1055/a-2060-3179S. Yamaoka  
H. Fukuoka  
N. Noda  
K. Okano  
M. Horie  
A. Mori\*

Kobe University, Japan



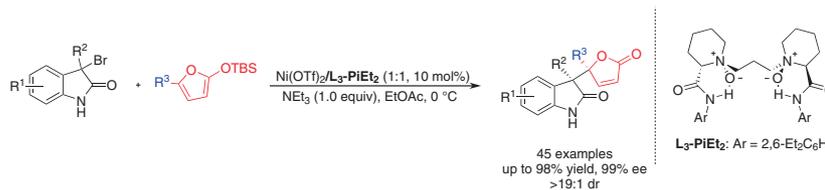
Z. Li  
Z. Zeng  
Q. Tang  
Z. Zhong  
X. Liu\*  
X. Feng\*

Sichuan University, P. R. of China

## Asymmetric Synthesis of 3-Lactone-Substituted 2-Oxindoles with Vicinal Quaternary Carbon Centers through Vinylogous Conjugate Addition

Cluster

2405

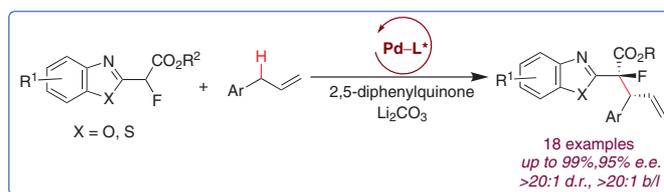
J.-H. Wei  
Y.-X. Jin  
P.-S. Wang\*  
L.-Z. Gong\*

University of Science and Technology of China, P. R. of China

## Access to Fluorinated Quaternary Stereogenic Centers via Palladium-Catalyzed Asymmetric Allylic C–H Alkylation

Cluster

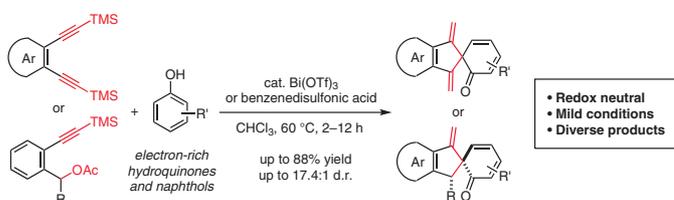
2411

N. Ding  
Z. Li\*  
ShanghaiTech University, P. R. of China

## Acid-Catalyzed [4+1]-Dearomatization Spiroannulation of Hydroquinones and Naphthols

Cluster

2417



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Synlett 2023, 34, 2423–2428  
DOI: 10.1055/a-2179-5916

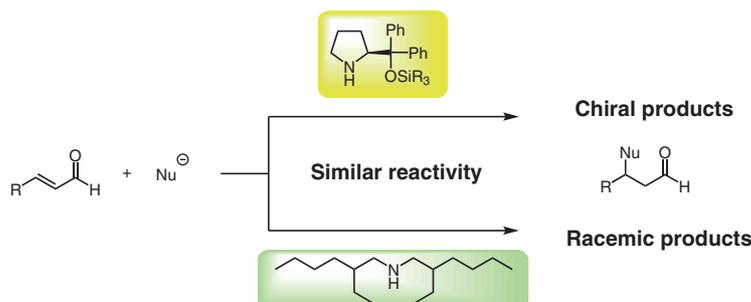
Y. Hayashi\*  
X. Han  
N. Mori

Tohoku University, Japan

Bis(2-ethylhexyl)amine as an Effective Organocatalyst for the Racemic Reactions of  $\alpha,\beta$ -Unsaturated Aldehydes Involving an Iminium Ion

Cluster

2423



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Synlett 2023, 34, 2429–2438  
DOI: 10.1055/s-0042-1751496

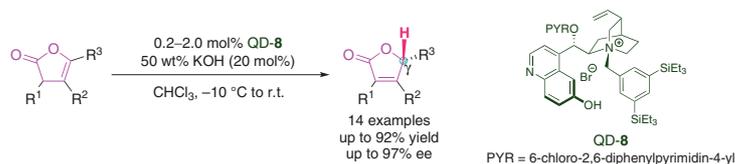
Y. Zeng  
C. Fei  
X. Zhou  
J. Luo\*  
L. Deng\*

Westlake University, P. R. of China

Chiral Betaine-Mediated Efficient Organocatalytic Asymmetric Isomerization of  $\beta,\gamma$ -Unsaturated Butenolides

Cluster

2429



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Synlett 2023, 34, 2433–2438  
DOI: 10.1055/a-2103-9629

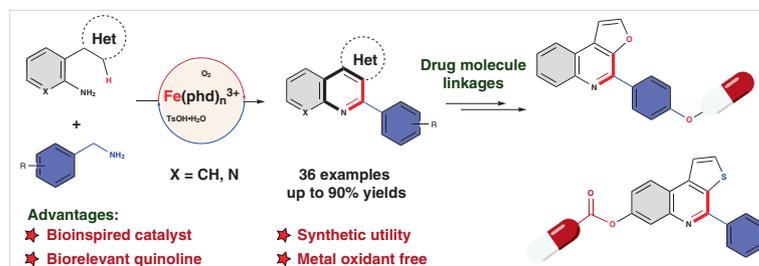
P. R. Thorve  
B. Maji\*

Indian Institute of Science  
Education and Research Kolkata,  
India

Synthesis of Furo- and Thienoquinolines by Using an Amine Oxidase-Inspired Catalyst

Cluster

2433



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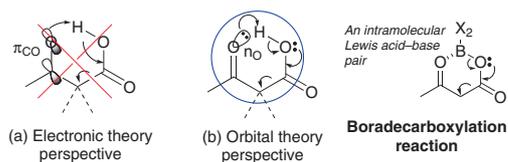
Synlett 2023, 34, 2439–2442  
DOI: 10.1055/a-2070-1767Y. Naruse\*  
A. Takamori  
K. Oda  
T. Kosugi

Gifu University, Japan

Lone Pair Participation in a Decarboxylation Reaction:  
A New Design of a Boradecarboxylation Reaction

Cluster

2439



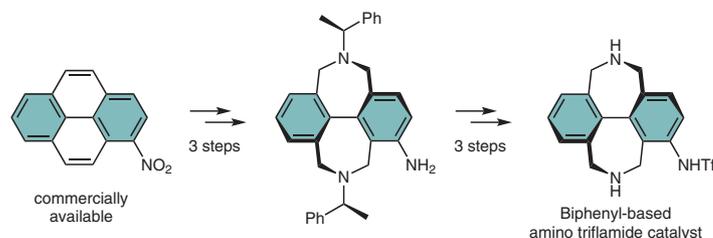
The orbital theory perspective is more appropriate.

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Synlett 2023, 34, 2443–2446  
DOI: 10.1055/a-2091-0986Y. Uwaso  
N. Yokoyama  
T. Kano\*Tokyo University of Agriculture  
and Technology, JapanShort Synthesis of a Biphenyl-Based Amino Triflamide Catalyst and Its  
Application in Enamine Catalysis

Cluster

2443

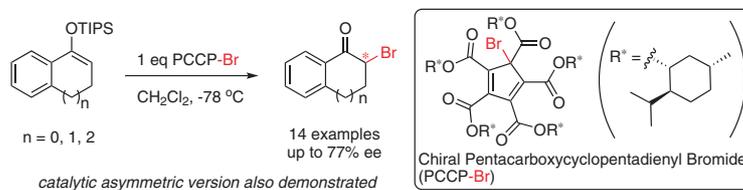


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Synlett 2023, 34, 2447–2450  
DOI: 10.1055/a-2088-9219G. Liu  
P. Li\*  
Beijing University of Chemical  
Technology, P. R. of ChinaEnantioselective Bromination of Silyl Enol Ethers with Chiral  
Pentacarboxycyclopentadienyl Bromide

Cluster

2447



Synlett

Synlett 2023, 34, 2451–2454  
DOI: 10.1055/s-0042-1752736H. Mizoguchi\*  
R. Yoshida  
H. Ikeda  
A. Sakakura\*

Okayama University, Japan

## Visible-Light-Photoexcited Palladium-Catalyzed Silylmethylation of Benzyl Alcohol Derivatives

Cluster

2451



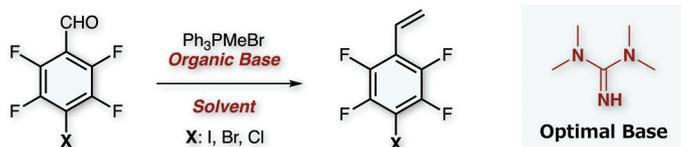
Synlett

Synlett 2023, 34, 2455–2460  
DOI: 10.1055/a-2118-6813T. Hori  
S. Kakinuma  
N. Ohtsuka  
T. Fujinami  
T. Suzuki  
N. Momiyama\*Institute for Molecular Science,  
Japan  
SOKENDAI (The Graduate  
University for Advanced  
Studies), Japan

## Synthesis of Halogen-Bond-Donor-Site-Introduced Functional Monomers through Wittig Reaction of Perfluorohalogenated Benzaldehydes: Toward Digitalization as Reliable Strategy in Small-Molecule Synthesis

Cluster

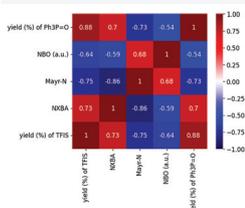
2455



Systematic Study

Correlation Analysis

Key Factor Identification

Experiments  
&  
Computations

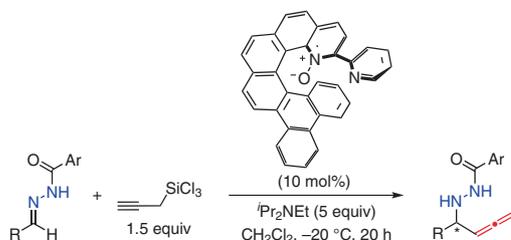
1. Highly negative charge
2. Low nucleophilicity
3. High XB acceptor ability

Synlett

Synlett 2023, 34, 2461–2464  
DOI: 10.1055/s-0042-1751478C. Xu  
P. Nader  
J. Xavier  
N. Takenaka\*Florida Institute of Technology,  
USAAsymmetric Allenylation of *N*-Acylhydrazones with Propargyltrichlorosilane Catalyzed by Helical Chiral 2,2'-Bipyridine *N*-Monoxide

Cluster

2461



## Synlett

Synlett 2023, 34, 2465–2470  
DOI: 10.1055/a-2102-7866

S. L. Mondal

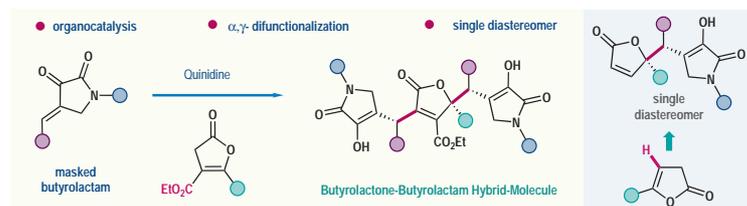
K. Patra

R. Yadav

M. Baidya\*

Indian Institute of Technology  
Madras, India

## Organocatalyzed Regioselective $\alpha,\gamma$ -Difunctionalization of Deconjugated Butenolides: Synthesis of Butyrolactone–Butyrolactam Hybrid Molecules



## Synlett

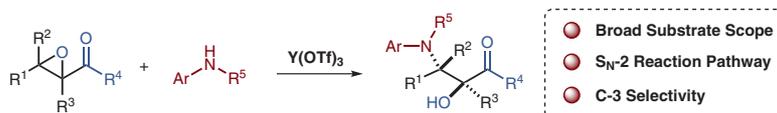
Synlett 2023, 34, 2471–2475  
DOI: 10.1055/a-2077-5084

H. Yao

C. Wang\*

University of Science and Technology  
of China, P. R. of China

## Yttrium-Catalyzed Regioselective Aminolysis of 2,3-Epoxy Esters and Amides



## Synlett

Synlett 2023, 34, 2476–2480  
DOI: 10.1055/a-2117-8816

Y. Nakahara

R. Hirokawa

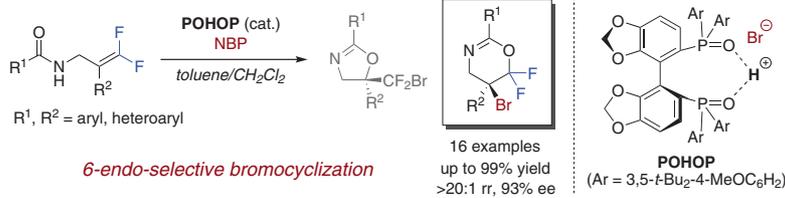
S. Uchida

K. Yamashita

Y. Hamashima\*

University of Shizuoka, Japan

## Switching Regioselectivity in the Asymmetric Bromocyclization of Difluoroalkenes Catalyzed by a Chiral Bisphosphine Oxide

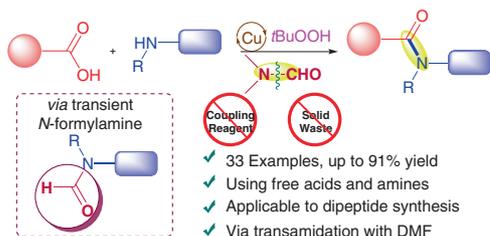


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Synlett 2023, 34, 2481–2485  
DOI: 10.1055/a-2145-5986A. Rahaman  
S. Bhadra\*CSIR-Central Salt and Marine  
Chemicals Research Institute,  
India  
Academy of Scientific and  
Innovative Research (AcSIR),  
IndiaCopper-Catalyzed Construction of Amide Linkages via Coupling  
between Unactivated Acids and Amines

Cluster

2481



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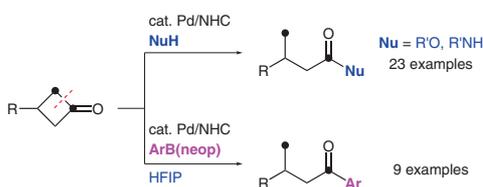
Synlett 2023, 34, 2486–2490  
DOI: 10.1055/s-0042-1751474Y. Ano\*  
D. Takahashi  
K. Yo  
R. Nagamune  
N. Chatani

Osaka University, Japan

Palladium-Catalyzed Ring Opening of Cyclobutanones with Carbon-  
and Heteroatom-Centered Nucleophiles

Cluster

2486

*Pd*-catalyzed C–C bond functionalization via ring opening

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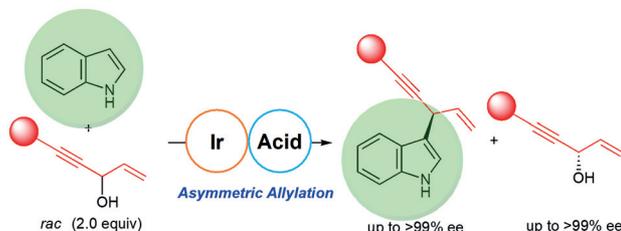
Synlett 2023, 34, 2491–2495  
DOI: 10.1055/a-2108-9720T. Sawano  
Y. Yasumura  
K. Kuwabara  
H. Sugiura  
K. Takahashi  
E. Ishikawa  
R. Takeuchi\*

Aoyama Gakuin University, Japan

Iridium-Catalyzed Asymmetric Allylation of Indoles via Kinetic Resolu-  
tion of 1-Alken-4-yn-3-ols

Cluster

2491

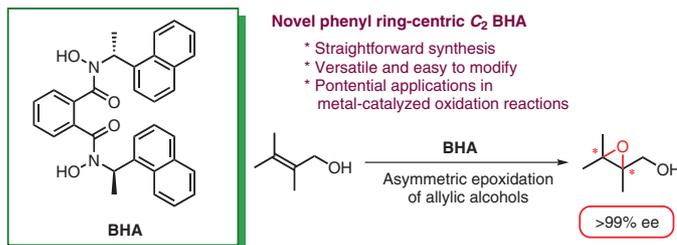


Synlett

Synlett 2023, 34, 2496–2502  
DOI: 10.1055/s-0042-1751481T. J. Pawar  
M. F. Valtierra-Galvan  
A. Rodríguez-Hernández  
A. Reyes-Luna  
I. Bonilla-Landa  
O. García-Barradas  
F. Barrera-Méndez  
J. L. Olivares-Romero\*Clúster Científico y Tecnológico  
BioMimic del Instituto de  
Ecología, MéxicoSynthesis of Novel C<sub>2</sub> Bishydroxamic Acid Ligands and their Application in Asymmetric Epoxidation Reactions

Cluster

2496

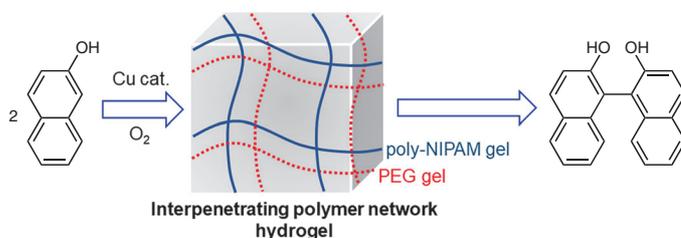


Synlett

Synlett 2023, 34, 2503–2507  
DOI: 10.1055/s-0042-1751454M. Chen  
T. Watanabe  
S. Habaue\*  
Chubu University, JapanSmart Hydrogel Reactor of Poly(*N*-isopropylacrylamide)/Polyethylene Glycol Interpenetrating Polymer Networks for Oxidative Coupling of 2-Naphthol

Cluster

2503



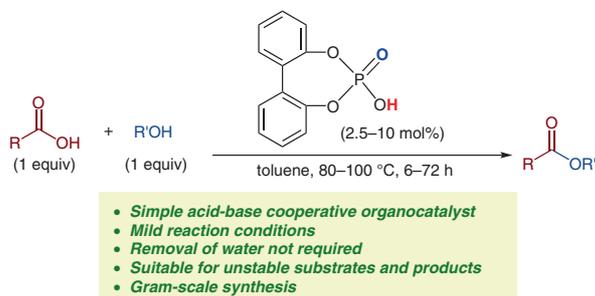
Synlett

Synlett 2023, 34, 2508–2514  
DOI: 10.1055/s-0042-1752738M. Hatano\*  
C. Nishioka  
A. Mimura  
R. Kimura  
Y. Okuda  
T. Yamada  
K. Sakata\*Kobe Pharmaceutical University,  
Japan  
Toho University, Japan

## 2,2'-Biphenol-Derived Phosphoric Acid Catalyst for the Dehydrative Esterification of Carboxylic Acids with Alcohols

Cluster

2508



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Asymmetric  $\alpha$ -Cyanation of  $\beta$ -Keto Esters Catalyzed by Chiral Tin Alkoxides

Cluster

2515

Synlett 2023, 34, 2515–2519  
DOI: 10.1055/a-2093-9069A. Yanagisawa\*  
Y. Hinata  
K. Midorikawa  
T. Watanabe

Chiba University, Japan



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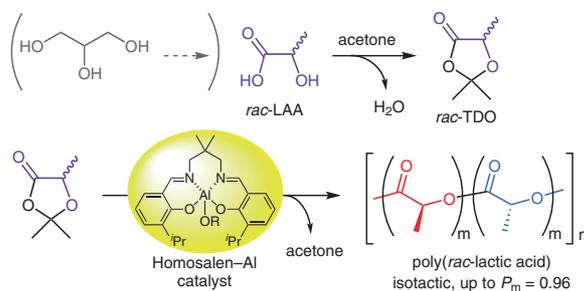
Stereoselective Ring-Opening Deacetonation Polymerization of Raccemic 2,2,5-Trimethyl-1,3-dioxolan-4-one by Using Homosalen–Aluminum Complexes: A Novel Approach to Isotactic Poly(*rac*-lactic acid)

Cluster

2520

Synlett 2023, 34, 2520–2524  
DOI: 10.1055/s-0042-1751472K. Sakai  
Y. Yagi  
N. Nomura\*

Nagoya University, Japan



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Visible-Light-Induced Oxidative Generation of *o*-Quinone Methides for Inverse-Electron-Demand [4+2] Cycloaddition Reactions

Cluster

2525

Synlett 2023, 34, 2525–2529  
DOI: 10.1055/a-2158-8648S. Nohara  
S. Iwai  
N. Yamaguchi  
Y. Asada  
Y. Kamiyama  
Y. Tanaka  
K. Tanaka\*  
Y. Hoshino\*Yokohama National University,  
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Okayama University, Japan