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Chemistry Authors Up Close

399

Making Spiroketal-based Diphosphine (SKP) Ligands via a Catalytic Asymmetric Approach

Xiaoming Wang, Kuiling Ding*

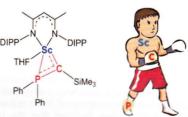
The catalytic asymmetric synthesis of chiral aromatic spiroketals and the development of chiral spiroketal-based diphosphine (SKP) ligands have been summarized.

Breaking Reports

904

Are Sc—C and Sc—P-Bonds Reactive in Scandium Phosphinoalkylidene Complex? Insights on a Versatile Reactivity

Weiqing Mao, Li Xiang, Carlos Alvarez Lamsfus, Laurent Maron,* Xuebing Leng, Yaofeng Chen* Punch or Kick?





The peculiar electronic structure of scandium phosphinoalkylidene complex [LSc{C(SiMe₃)PPh₂}THF] (L = [MeC(NDIPP)Me]⁻), DIPP = 2,6-('Pr)₂C₆H₃) leads to an interesting versatile reactivity, which is demonstrated both experimentally and computationally.

909

Electrochemical Synthesis of (Aza)indolines via Dehydrogenative [3+2] Annulation: Application to Total Synthesis of (\pm) -Hinckdentine A

Zhong-Wei Hou, Hong Yan, Jin-Shuai Song, Hai-Chao Xu*

- ☑ Di-, tri- and tetrasubstituted alkenes
- ☑ Indoline and azaindoline products
- Cascade radical cyclization
- ☑ Decagram scale

(±)-hinckdentine A [12 steps (LLS)]

Concise Reports

916

Nickel-Catalyzed Direct Coupling of Allylic Alcohols with Organoboron Reagents

Gaonan Wang, Yi Gan, Yuanhong Liu*

OH + Ar-BR₂
$$\frac{\text{cat. Ni(cod)}_2, \text{ cat. K}_2\text{CO}_3}{\text{MeCN, 50 °C}}$$
 R¹

ligand and activator-free 37 examples

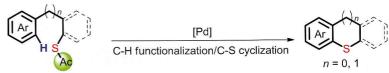
 $Ar-BR_2 = ArB(OH)_2$, ArB(pin), ArB(nep), $(ArBO)_3$, Ar_3B

simple system
high efficiency
wide FG group tolerance

Content

921

Pd-Catalyzed C—S Cyclization via C—H Functionalization Strategy: Access to Sulfur-containing Benzoheterocyclics



- ♦ slow-releasing of thiol strategy
- ♦ H₂O and oxidant compatibility
- material molecules synthesis

(Semiconductor Material molecules)

Shihao Chen, Ming Wang, Xuefeng Jiang*

A C—H functionalization/carbon-sulfur cyclization protocol of thioacetates to access the mutiple sulfur-containing benzoheterocyclics was developed.

925

Asymmetric Fluorinative Dearomatization of Tryptophol Derivatives by Chiral Anion Phase-Transfer Catalysis

Xiao-Wei Liang, Yue Cai, Shu-Li You*

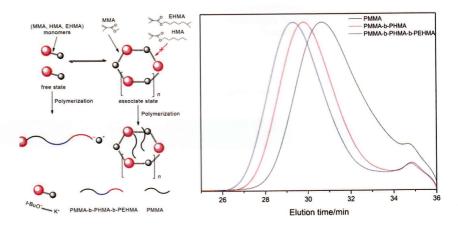
929

Palladium-Catalyzed Cascade Double C—N Bond Activation: A New Strategy for Aminomethylation of 1,3-Dienes with Aminals

Cuifang Qiao, Anrong Chen, Bingjian Gao, Yang Liu, Hanmin Huang*

A new palladium-catalyzed selective aminomethylation of conjugated 1,3-dienes with aminals via double C—N bond activation is described. This simple method provides an effective and rapid approach for the synthesis of linear α,β -unsaturated allylic amines with perfect regioselectivity. Mechanistic studies disclosed that the reaction proceeds via a cascade double C—N bond activation, in which one sigle palladium-catalyst realized two distinct C—N bond activation.

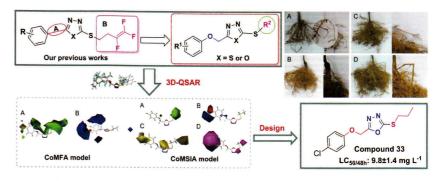
934 Synthesis of Block Copolymers of 2-Ethylhexyl Methacrylate, n-Hexyl Methacrylate and Methyl Methacrylate via Anionic Polymerization at Ambient Temperature



Guijin Zou, Anna Zheng, Dafu Wei,* Zheng Li, Ling Su, Tongyuan Zhang, Xiang Xu, Yong Guan* The PMMA-b-PHMA-b-PEHMA block copolymer with narrow MWD was synthesized with t-BuOK as initiator in THF at 0 $^{\circ}$ C via anionic polymerization.

939

Synthesis, Nematicidal Activity, and 3D-QSAR of Novel 1,3,4-Oxadiazole/Thiadiazole Thioether Derivatives



Jixiang Chen, Xiuhai Gan, Chongfen Yi, Shaobo Wang, Yuyuan Yang, Fangcheng He, Deyu Hu, Baoan Song* Compound **33** was designed based on the CoMFA and CoMSIA models, which exhibited excellent nematicidal acivity against *Tylenchulus semipenetrans* and was better than avermectin and fosthiazate.

945

Palladium(0)-Catalyzed Si—Si Bond Insertion by the Terminal Nitrogen of Diazo Compounds

Zhenxing Liu, Tianren Fu, Jingfeng Huo, Sheng Feng, Jianbo Wang*

Nitrogen insertion into cyclic Si—Si bonds has been achieved with *N*-tosylhydrazones/diazo compounds as the nitrogen source under Pd(0)-catalyzed conditions.

Recent Advances

950

Transition Metal Catalyzed Direct Oxidative Borylation of C—H Bonds

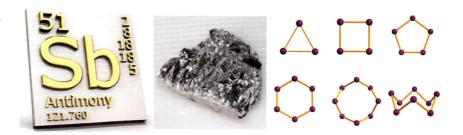
Zhong-Tao Jiang, Bi-Qin Wang, Zhang-Jie Shi*



Direct borylation of C-H bonds became one of the most straightforward methods to provide the organoborane reagents from easily available chemicals. In this article we accounted the recent advances in the direct oxidative borylation from C-H bonds.

955

Recent Advancés in Aromatic Antimony Clusters

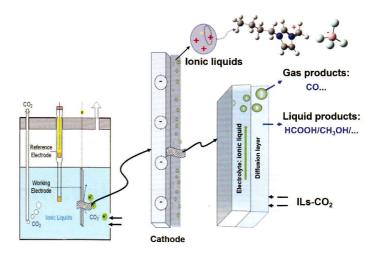


Lei-Jiao Li, Basharat Ali, Zhongfang Chen,* Zhong-Ming Sun*

The Sb_n clusters feature unique chemical bonding, fascinating structures, and special stabilities that can be well rationalized by aromaticity or antiaromaticity.

961

CO₂ Electroreduction in Ionic Liquids: A Review



CO₂ electrochemical reduction in ILs system.

Jianpeng Feng, Shaojuan Zeng, Jiaqi Feng, Haifeng Dong, Xiangping Zhang*

Critical Review

When Kinases Meet PROTACs

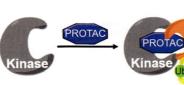


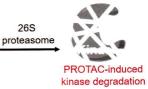




26S

Conventional kinase inhibition





Li Tan,* Nathanael S. Gray*

Corrigendum

Nanostructured Catalyst for Fischer-Tropsch **Synthesis**

Wa Gao, Qingshan Zhu, Ding Ma*

Chin. J. Chem. 2018, 36, 798-808.

DOI: 10.1002/cjoc.201800146

The second author "Qingshan Zhu" and his affiliation "Fritz-Haber-Institut der Max-Planck-Gesellschaft, Faradayweg 4-6, D-14195 Berlin, Germany" should be corrected as "Qingjun Zhu" and "National Institute of Clean-and-Low-Carbon Energy Future Science City, Changping District, Beijing 102211, China", respectively.