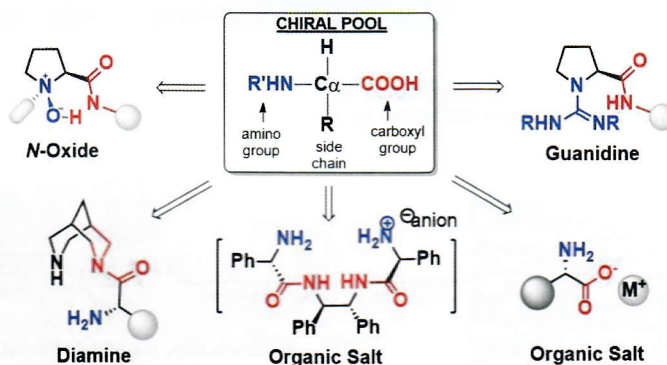


Chemistry Authors Up Close

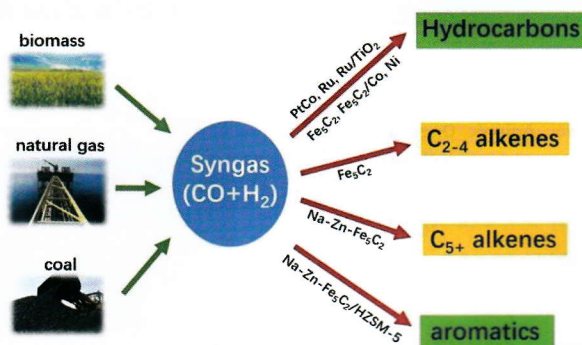
791
Chiral Amino Acids-Derived Catalysts and Ligands



Xiaohua Liu, Shunxi Dong, Lili Lin, Xiaoming Feng*

A journey towards developing chiral amino acids-derived catalysts and ligands for asymmetric catalysis is introduced. The catalysts included *N,N'*-dioxides, guanidine-amides, bispidine-based diamines, and other organic salts.

798
Nanostructured Catalyst for Fischer-Tropsch Synthesis

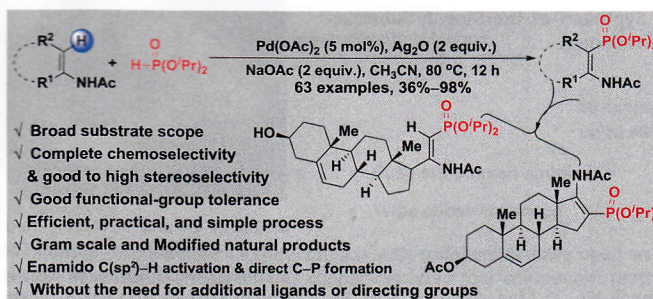


Wa Gao, Qingshan Zhu, Ding Ma*

In this account, we highlight some of our progress toward the design/fabrication of nanostructured Fe, Co and Ru catalysts to improve FTS activity at the low temperature and to change the product selectivity and confine the product distribution into a certain range.

Breaking Reports

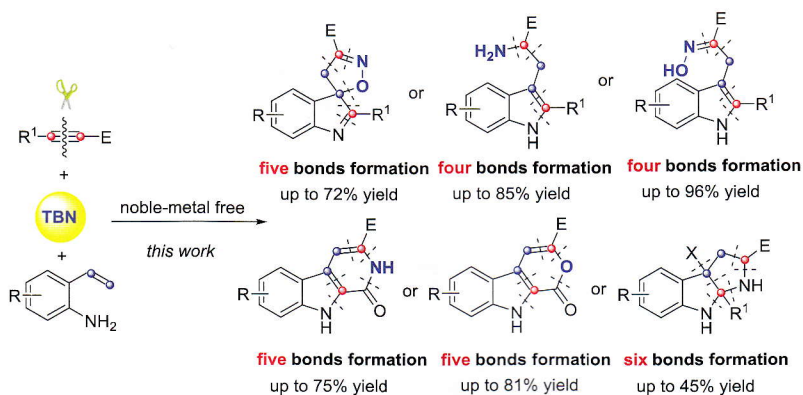
809
Pd(II)-Catalyzed Phosphorylation of Enamido $C(sp^2)-H$ Bonds: A General Route to β -Amido-vinylphosphonates



Baokun Qiao, Hao-Qiang Cao, Yin-Jun Huang, Yue Zhang, Jing Nie, Fa-Guang Zhang,* Jun-An Ma*

815

Direct Synthesis of Structurally Divergent Indole Alkaloids from Simple Chemicals

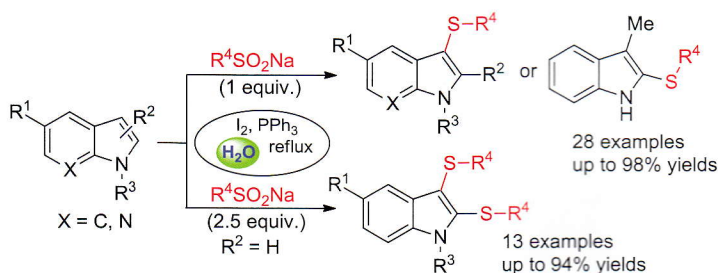


Tao Shen, Bencong Zhu, Fengguirong Lin, Jun Pan, Jialiang Wei, Xiao Luo, Jianzhong Liu, Ning Jiao*

Comprehensive Reports

819

Metal Free Mono- and 2,3-Bis-sulfonylation of Indoles in Water with Sodium Sulfinates as a Sulfur Source



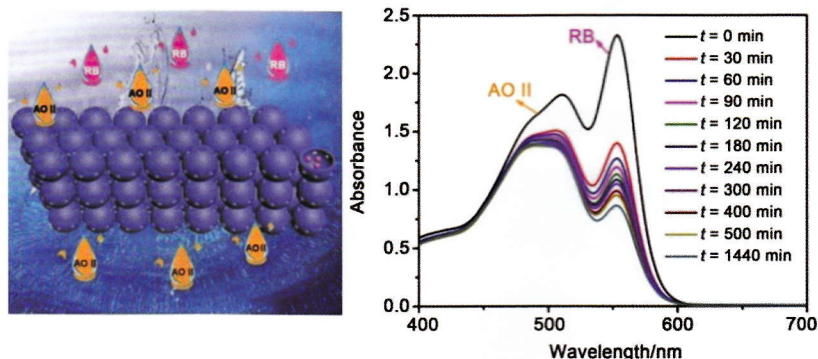
An iodine- PPh_3 mediated sulfonylation of indoles in water with stable and odorless sodium sulfinates as the sulfur source is described. The reaction could afford monosulfonylated indoles in moderate to excellent yields under metal free conditions. Moreover, double C—H sulfonylation of indoles at 2- and 3-positions has also been achieved by using excess sodium sulfinates under the optimized reaction conditions.

Changqing Liu, Jian Fan, Manyi Wu, Jiahui Chen, Yiming Zhao, Meihua Xie*

Concise Reports

826

Sulfonated Hollow Covalent Organic Polymer: Highly-Selective Adsorption toward Cationic Organic Dyes over Anionic Ones in Aqueous Solution

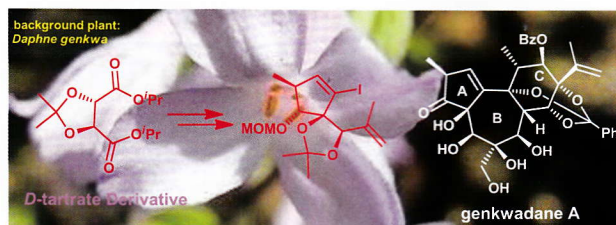


Jian-Hong Wang, Yue Zhang, Lian-Cai An, Wen-He Wang, Ying-Hui Zhang,* Xian-He Bu*

A sulfonated hollow covalent organic polymer (sh-COP-P) exhibits excellent adsorption capacity toward cationic dyes as well as adsorption selectivity of cationic dyes over anionic ones.

831

Asymmetric Synthesis of the Ring A Substructure of Genkwadane A

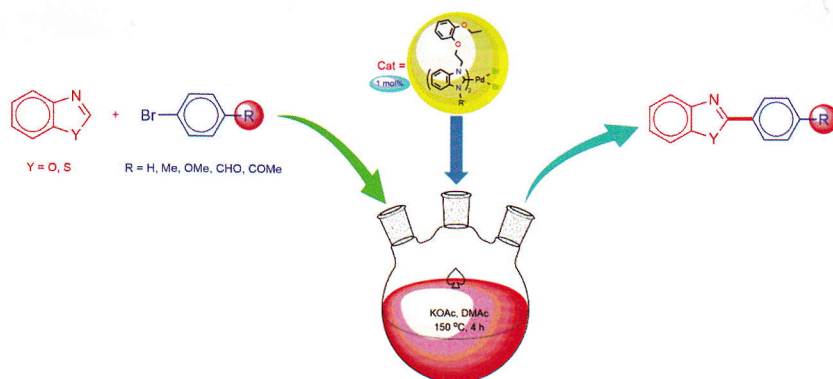


Asymmetric synthesis of the ring A substructure of genkwadane A has been accomplished in 10 steps from *D*-tartrate derivative. The key steps feature the Mukaiyama aldol reaction to introduce the quaternary chiral center at C4 and VO(acac)₂-mediated enantioselective Jackson-Ellman-Bolm sulfoxidation to furnish a *R*-configured sulfoxide. The crucial Dieckmann-type condensation was well applicable to the *R*-configured sulfoxide, which successfully delivered the five-membered skeleton under the condition of KHMDS. The ring A substructure was finally accomplished through Barton iodination condition.

Jing Feng, Hongli Yin, Yi Man, Shaomin Fu,* Bo Liu*

837

Direct C—H Bond Activation of Benzoxazole and Benzothiazole with Aryl Bromides Catalyzed by Palladium(II)-N-heterocyclic Carbene Complexes

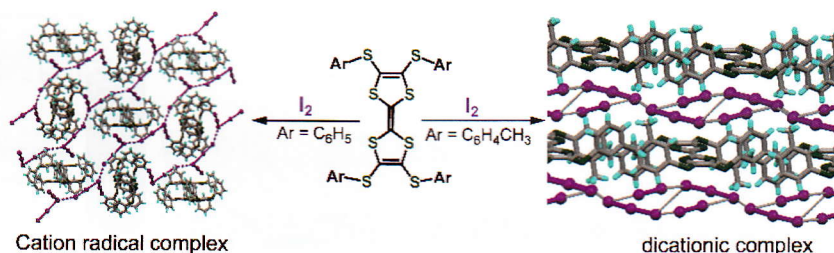


Six new palladium(II)-NHC complexes with the general molecular formula $[\text{PdBr}_2(\text{NHC})_2]$, (NHC = 1,3-dialkylbenzimidazol-2-ylidene) were synthesized. The obtained complexes were fully characterized by analytical and spectral methods such as elemental analysis, FT-IR, ^1H NMR and ^{13}C NMR. The catalytic activity of all the palladium(II)-NHC complexes have been evaluated in the C—H bond activation of benzoxazole and benzothiazole with aryl bromides in moderate to high yields.

Murat Kaloğlu, Nazan Kaloğlu, İsmail Özdemir*

845

Building up 1-D, 2-D, and 3-D Polyiodide Frameworks by Finely Tuning the Size of Aryls on Ar-S-TTF in the Charge-Transfer (CT) Complexes of Ar-S-TTFs and Iodine



Cation radical complex

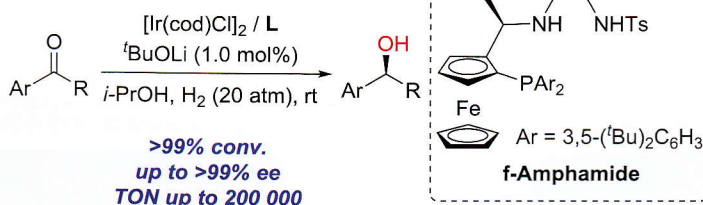
dicationic complex

Longfei Ma, Haili Peng, Xiaofeng Lu, Lei Liu, Xiangfeng Shao*

The charge-transfer (CT) between Ar-S-TTFs and I_2 is investigated. It is found that Ar-S-TTFs in CT complexes carry charges higher than those observed by mixing them with I_2 in solution, and the structures of polyiodides can be finely tuned by varying the aryls on Ar-S-TTFs.

851

Scope and Mechanism on Iridium-f-Amphamide Catalyzed Asymmetric Hydrogenation of Ketones

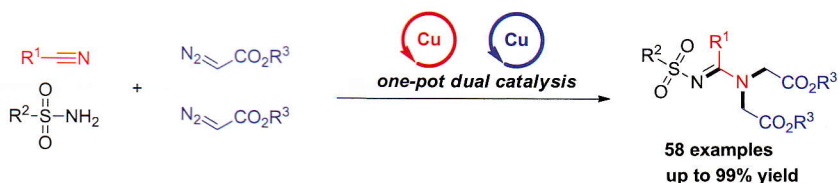


Zhiqin Liang, Tilong Yang, Guoxian Gu, Li Dang,* Xumu Zhang*

A series of novel and easily accessed ferrocene-based amino-phosphine-sulfonamide (f-Amphamide) ligands have been developed and applied in Ir-catalyzed asymmetric hydrogenation of aryl ketones, affording the corresponding chiral secondary alcohols with excellent results (up to >99% conversion, >99% ee and TON up to 200 000). DFT calculations suggest an activating model involving an alkali cation Li^+ .

857

In Situ Generation of Oxazole Ylide and Interception with Sulfonamide: Construction of Amidines Using Two Diazo Molecules



- Oxazole ylide formation and interception
- Excellent selectivity
- Fully substituted amidines
- Wide substrate scope

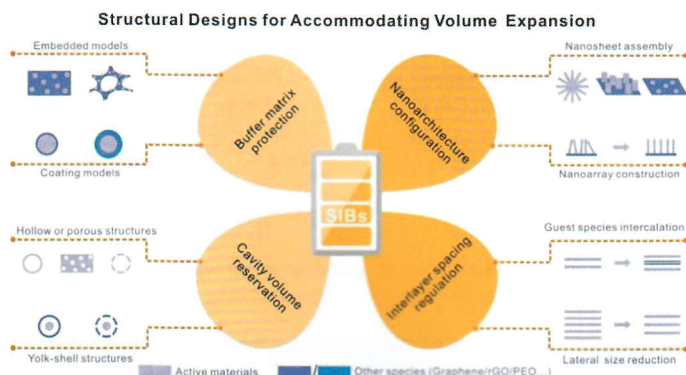
Jijun Chen, Wenhao Long, Yanwei Zhao, Haiyan Li, Yonggao Zheng, Pengcheng Lian, Xiaobing Wan*

A novel generation of oxazole ylide and interception with sulfonamide have been well developed to construct fully substituted amidines. This copper-catalyzed four-component reaction incorporates two diazo molecules to target amidines and shows broad substrate scope, excellent functional groups tolerance and good to excellent yields.

Recent Advances

866

Structural Designs for Accommodating Volume Expansion in Sodium Ion Batteries

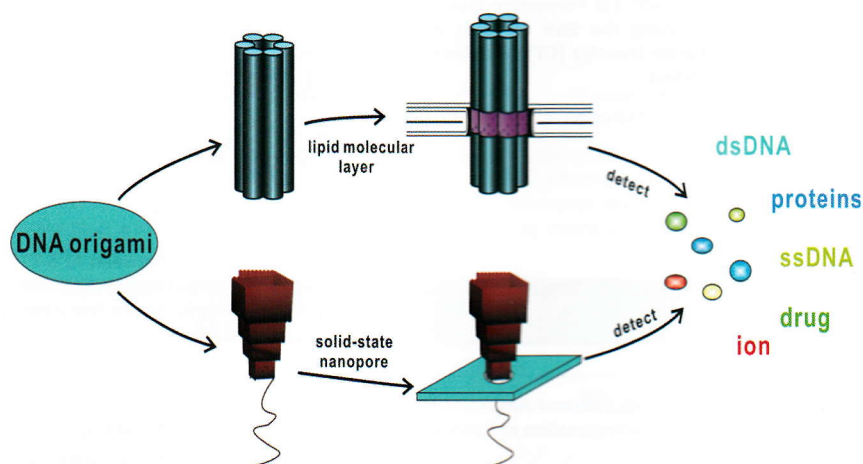


Aiming at alloying/conversion materials, various structural designs are divided into four parts, namely, nanoarchitecture configuration, buffer matrix protection, cavity volume reservation, and interlayer spacing regulation. Comparing with their controllable morphologies, components, and action mechanisms, the review discusses the merit and demerit of these methods. Finally, we present the forecast to in situ characterizations and studies of stress variations.

Wenjie Wang, Xiaohui Zhu, Yujing Zhang, Yongjun Liu, Qin Zhang, Lei Fu*

875

Advances in DNA Origami Nanopores: Fabrication, Characterization and Applications



DNA origami can be used to synthesize hybrid nanopore and protein-like DNA nanopore, which have attained great interest of molecular detection and drug delivery.

Yong-An Ren, Han Gao, Xiangyuan Ouyang*

Corrigendum

886

Synthesis of Cyclic Carbonate Catalyzed by DBU Derived Basic Ionic Liquids

Wei Li, Weiguo Cheng, Xia Yang, Qian Su, Lihui Dong, Pan Zhang, Yunan Yi, Bin Li,* Suojiang Zhang*

Chin. J. Chem. **2018**, *36*, 293–298.

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The author's affiliation "Chemical Synthesis and Pollution Control Key Laboratory of Sichuan Province, College of Chemistry & Chemical Engineering, China West Normal University, Nanchong, Sichuan 637002, China" is wrong, and it should be "Guangxi Key Laboratory of Petrochemical Resource Processing and Process Intensification Technology, School of Chemistry and Chemical Engineering, Guangxi University, Nanning, Guangxi 530004, China".