

CJC

Chinese Journal of Chemistry

中国化学 - An International Journal

www.cjc.wiley-vch.de

Volume 37 | Number 3 | March 2019

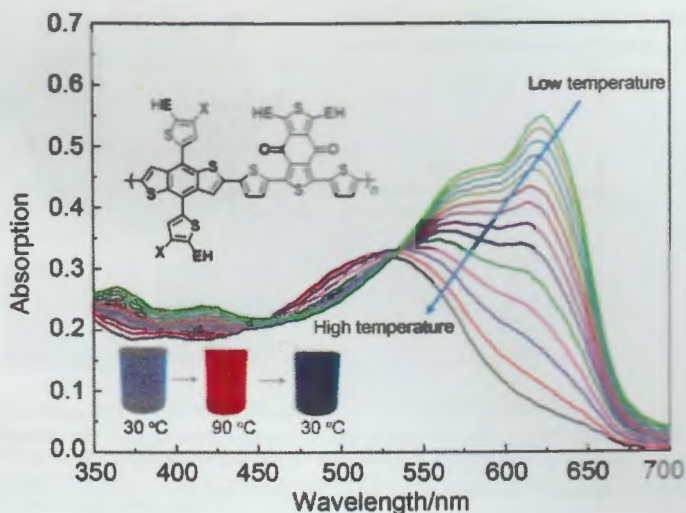


WILEY-VCH SIOC CCS

CJOCEV 37(3) 197-304 (2019)
ISSN 1001-604X • CN 31-1547/O6
mc.manuscriptcentral.com/cjoc

Chemistry Authors Up Close

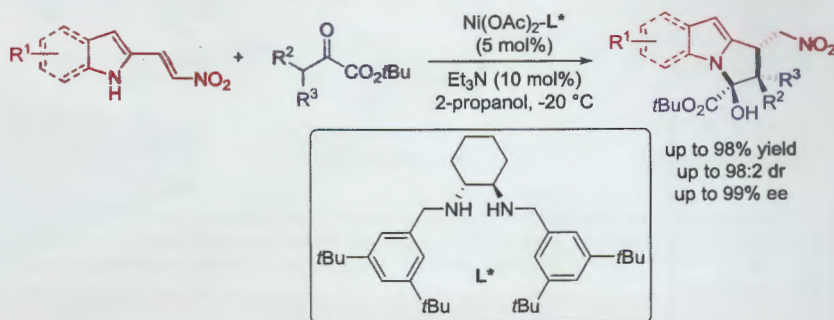
207

Recent Advances in Fullerene-free Polymer
Solar Cells: Materials and Devices

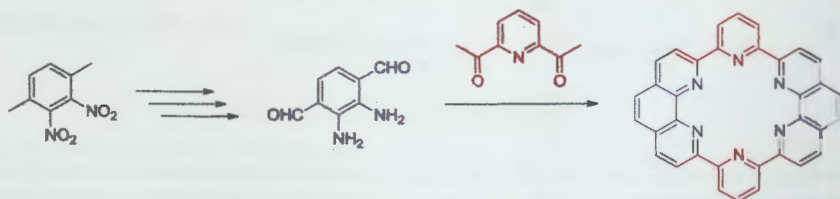
Ye Xu, Huifeng Yao, Jianhui Hou*

Concise Reports

216

Nickel(II)-Catalyzed Diastereo- and Enantio-
selective [3+2] Cycloaddition of α -Ketoesters
with 2-Nitrovinylindoles and 2-Nitrovinylpyr-
rolesWu-Lin Yang, Zhong-Tao Sun, Hao Sun, Wei-Ping
Deng*Nickel(II)-catalyzed asymmetric [3+2] cycloaddition of α -ketoesters with 2-nitrovinylindoles was established, affording pyrrolo[1,2-*a*]indoles bearing three stereocenters in high yields and stereoselectivities.

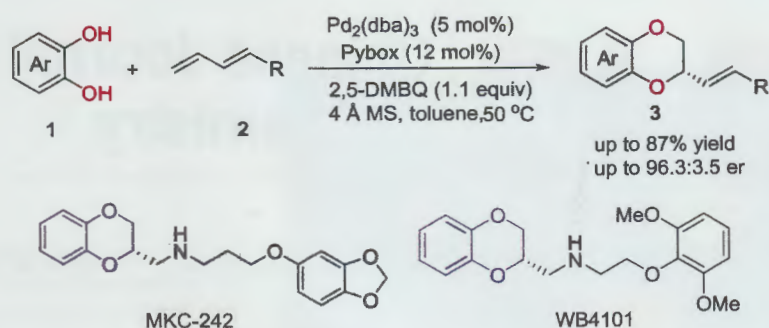
221

Preparation of a New Friedländer Synthon,
2,3-Diaminobenzene-1,4-dicarbaldehyde, and Its
Application towards Synthesis of 1,10-Phenanthro-
lines and Related Cyclophane

Yang Lu, Yurongdong Jahng*

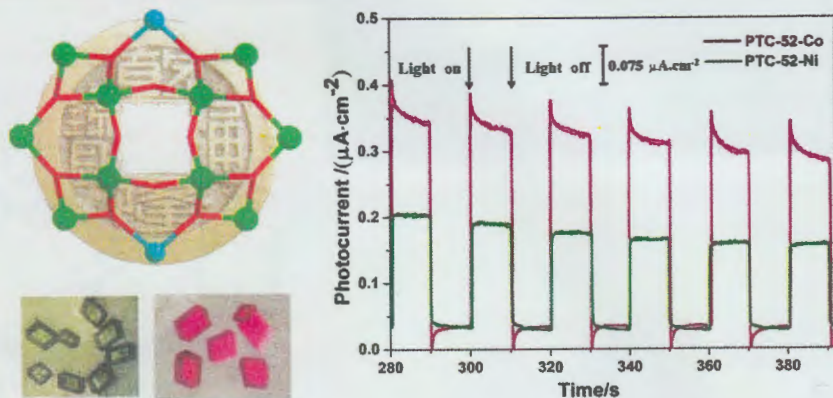
226

Palladium-Catalyzed Asymmetric Dihydroxylation of 1,3-Dienes with Catechols

Tao Fan, Hong-Cheng Shen, Zhi-Yong Han,*
Liu-Zhu Gong*

A Pd(II)-catalyzed asymmetric dihydroxylation of 1,3-dienes with catechols was developed for the efficient synthesis of chiral 1,4-benzodioxanes.

233

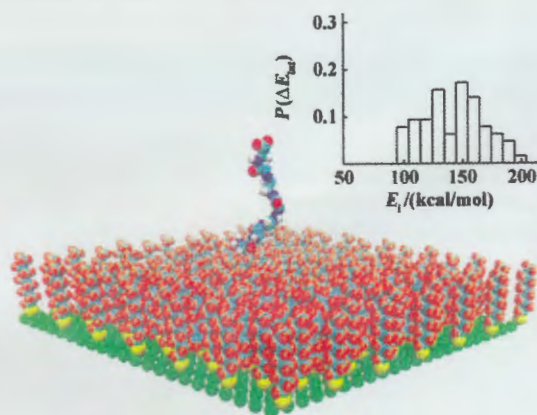
Wheel-Shape Heterometallic Ti_{10}M_2 -oxo Clusters (M = Ni, Co) with Effective Visible Light Absorption

Xiao-Xue Liu, Wei-Hui Fang,* Shumei Chen, Lei Zhang,* Jian Zhang

Herein, we report the synthesis and structures of two wheel-shaped heterometallic Ti_{10}M_2 -oxo clusters (M = Ni, Co). The absorption bands of these two compounds shift effectively toward the visible-light region.

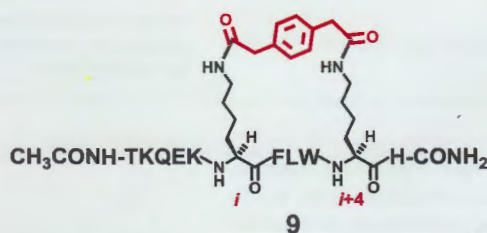
237

Energy Transfer of Peptide Ions Colliding with a Self-Assembled Monolayer Surface. The Influence of Peptide Ion Size



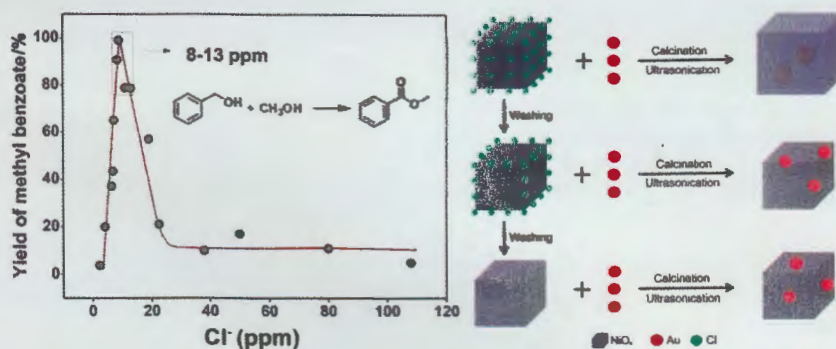
Meng Gu, Li Yang,* William L Hase, Jianmin Sun,* Jiayu Zhang*

244

Bis-Lactam Peptide [*i*, *i*+4]-StaplingThe bis-lactam [*i*, *i*+4]-stapling with N^ϵ -*para*-phenylenediacetyl-lysine on our model peptide sequence (as in the 11-mer 9) was found to afford a respectable % α -helicity value of $\sim 64.1\%$ (25°C). This finding suggests that high % α -helicity is obtainable with the bis-lactam [*i*, *i*+4]-stapling and would facilitate its use as an alternative efficacious peptide stapling mode in biomedical research.

Xiao Hu, Bo Wu, Weiping Zheng*

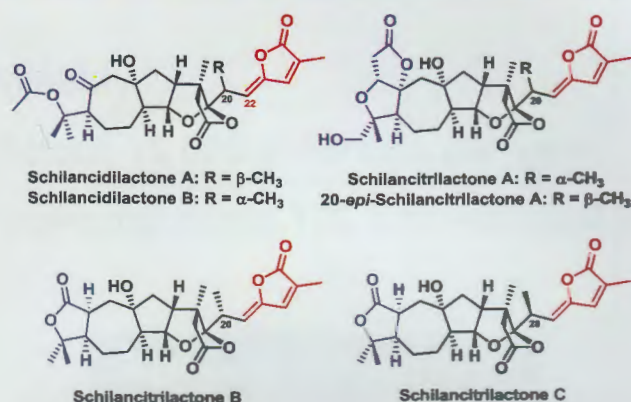
249
Chloride-Induced Highly Active Au Catalyst for Methyl Esterification of Alcohols



Chengming Zhang,* Yongzhao Wang

Comprehensive Reports

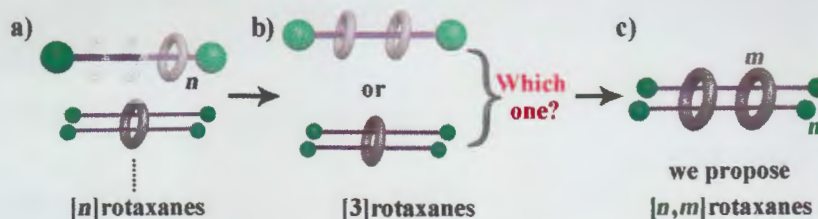
255
Collective Synthesis of Schilancidilactones A, B and Schilancitrilactones A, B, C, 20-*epi*-Schilancitrilactone A



Hengtao Wang, Liang Wang, Yihang Li, Xiunan Zhang, Pingping Tang*

The collective total synthesis of schilancidilactones A, B, schilancitrilactones A, B, C, and 20-*epi*-schilancitrilactone A were accomplished. The key steps include intermolecular radical cyclization, late-stage halogenation, intermolecular cross coupling of alkyl halide with vinyl stannane.

269
Pseudo[*n,m*]rotaxanes of Cucurbit[7/8]uril and Viologen-Naphthalene Derivative: A Precise Definition of Rotaxane

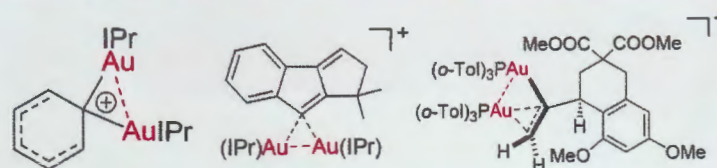


Beilin Zhang, Yunhong Dong, Jie Li, Yang Yu, Chenyang Li, Liping Cao*

A precise definition of (pseudo)[*n,m*]rotaxane is proposed for accurately describing the two kinds of (pseudo)rotaxanes structures, which are self-assembled from cucurbit[7/8]uril (CB[7/8]) and viologen-naphthalene derivative, respectively.

Critical Review

276
Synthesis, Structures and Properties of C(sp²)-Centered Homo- and Hetero-Nuclear Gold Complexes



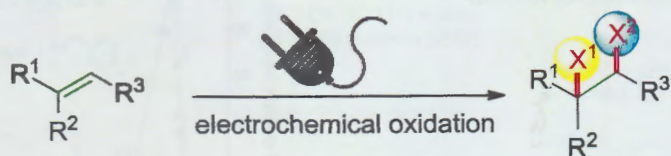
Carbon(sp²) poly-gold complexes

C(sp²)-centered homo- and hetero-nuclear gold complexes have attracted widespread interest in recent decades. In this review, recent results of the synthesis, structural characteristics, properties and applications of C(sp²)-centered homo- and hetero-nuclear gold complexes are summarized according to the classification of the structures of different complexes.

Cui-Cui Li, Liang Zhao*

292

Recent Advances on the Electrochemical Difunctionalization of Alkenes/Alkynes

Haibo Mei, Zizhen Yin, Jiang Liu, Hailong Sun,*
Jianlin Han*

The recent advances on the electrochemical difunctionalization of alkenes/alkynes were comprehensively summarized in this review. This review focused on the discussion of the electrochemical cyclization, functionalization of unsaturated C—C bonds, as well as the related electrochemical reaction mechanism.