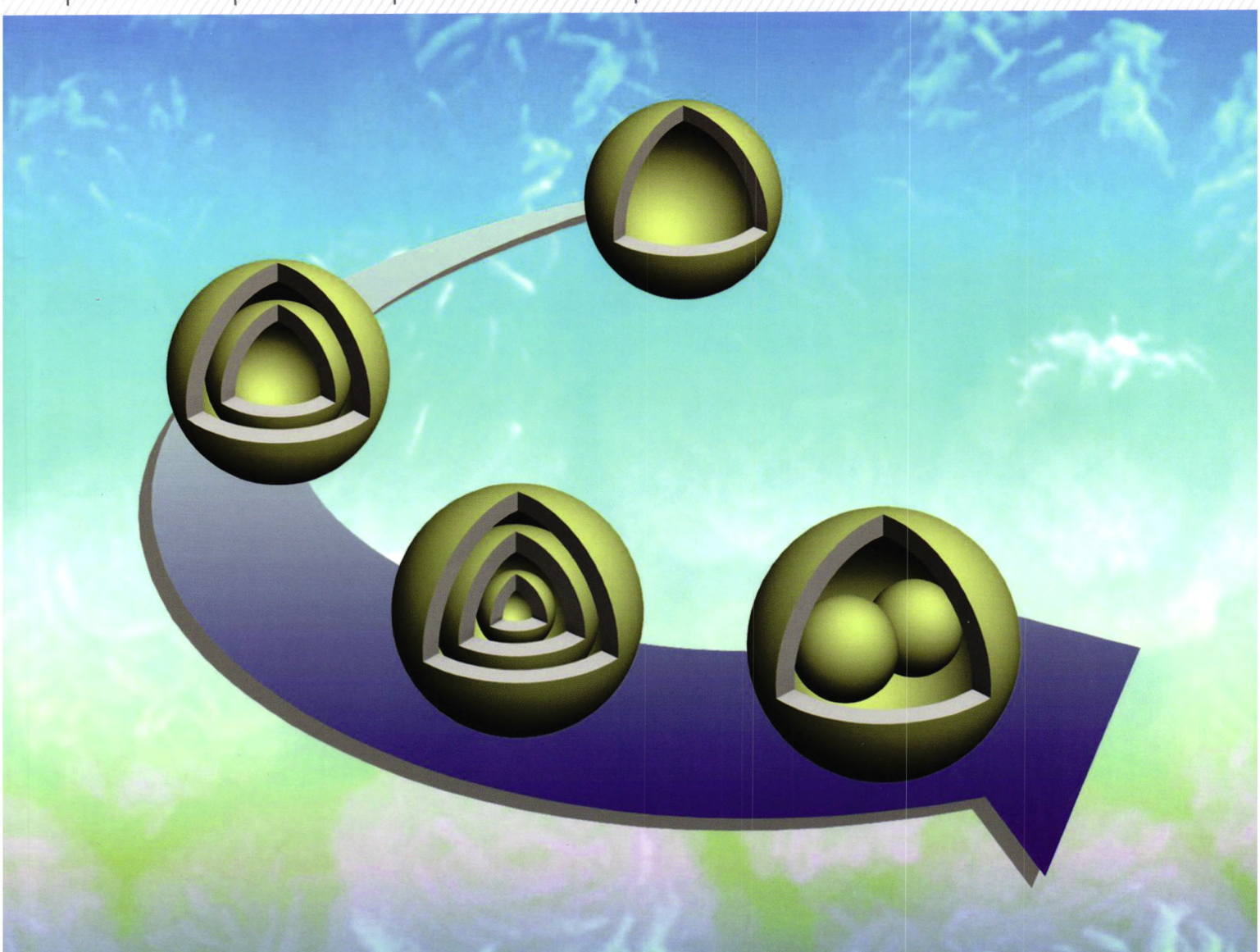
ISSN 1001-8417
CN 11-2710/O6

CCL

Chinese Chemical Letters

| Volume 24 | Number 1 | JANUARY 2013 |



ELSEVIER

1001-8417(201301)24:1;1-J

Chinese Chemical Society

Contents lists available at SciVerse ScienceDirect

Chinese Chemical Letters

journal homepage: www.elsevier.com/locate/cclet

Graphical Abstracts/Chin Chem Lett 24 (2013) i-ix

Review

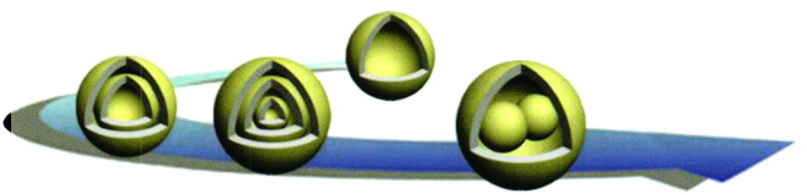
Chinese Chemical Letters, 24 (2013) 1

Controlled synthesis of multi-shelled transition metal oxide hollow structures through one-pot solution route

Xi Wang, Yi-Jun Yang, Ying Ma, Jian-Nian Yao

Beijing National Laboratory for Molecular Sciences (BNLMS), CAS Key Laboratory of Photochemistry, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China

Recent advances in one-pot solution synthesis of multi-shelled transition metal oxide hollow structures are highlighted here.



Original articles

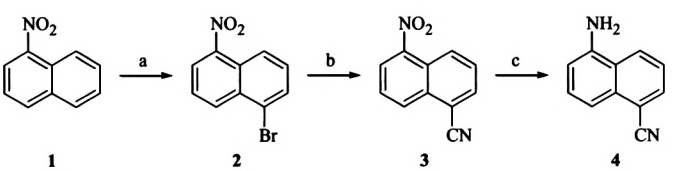
Chinese Chemical Letters, 24 (2013) 7

A scalable synthesis of 1-amino-5-cyanonaphthalene, a precursor for a nitric oxide probe (NO550) designed *via* the "dye assembly" principle

Yan-Ming Shen, Lin-Lin Song, Xu-Hong Qian, You-Jun Yang

Shanghai Key Laboratory of Chemical Biology, School of Pharmacy, East China University of Science and Technology, Shanghai 200237, China

A convenient synthesis of 1-amino-5-cyanonaphthalene was reported.



Chinese Chemical Letters, 24 (2013) 9

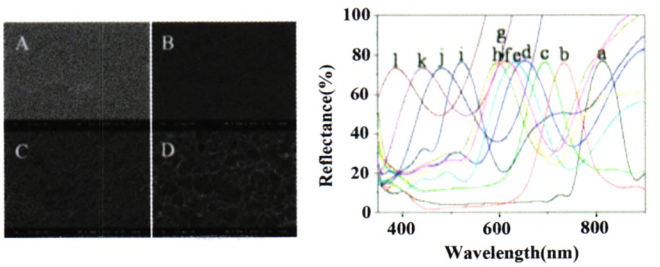
Optical monitoring the degradation of PLGA inverse opal film

Li-Guo Sun[a,b], Zhuo-Ying Xie[a], Yuan-Jin Zhao[a], Hong-Mei Wei[a], Zhong-Ze Gu[a]

[a]*State Key Laboratory of Bioelectronics, Southeast University, Nanjing 210096, China*

[b]*School of Chemistry and Materials, Heilongjiang University, Harbin 150080, China*

PLGA inverse opal films at different degradation stages were monitored with reflection spectrum changes.



doi:10.1016/S1001-8417(13)00070-3

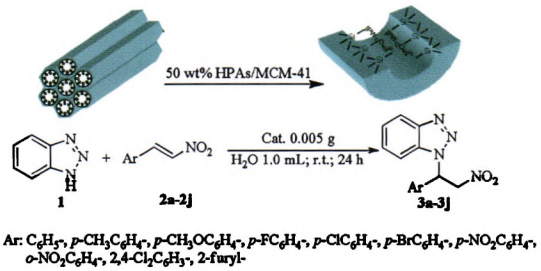
Chinese Chemical Letters, 24 (2013) 28

Aza-Michael addition reactions between nitroolefins and benzotriazole catalyzed by MCM-41 immobilized heteropoly acids in water

Shao-Lei Xie, Yong-Hai Hui, Xiang-Ju Long, Chang-Chun Wang, Zheng-Feng Xie

Key Laboratory of Oil & Gas Fine Chemicals, Ministry of Education & Xinjiang Uyghur Autonomous Region, College of Chemistry and Chemical Engineering, Xinjiang University, Urumqi 830046, China

MCM-41 immobilized heteropoly acids (HPAs) catalysts were synthesized, characterized and their catalytic activities were evaluated in the aza-Michael addition reaction of nitroolefins and benzotriazole in water at room temperature.



Ar: C_6H_5-, *p*-$CH_3C_6H_4$-, *p*-$CH_3OC_6H_4$-, *p*-FC_6H_4-, *p*-ClC_6H_4-, *p*-BrC_6H_4-, *p*-$NO_2C_6H_4$-, *o*-$NO_2C_6H_4$-, 2,4-$Cl_2C_6H_3$-, 2-furyl-

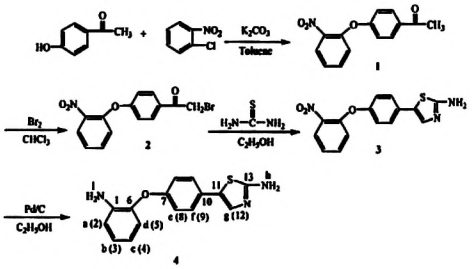
Chinese Chemical Letters, 24 (2013) 31

Synthesis and characterization of novel polyimides derived from unsymmetrical diamine: 2-Amino-5-[4-(2′-aminophenoxy)phenyl]-thiazole

Xin Zhao, Qing-Fen Geng, Tian-Hong Zhou, Xiang-Hu Gao, Gang Liu

Center of Eco-materials and Green Chemistry, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, China

A new kind of thiazole-containing unsymmetrical *ortho*-diamine monomer and corresponding novel polyimide were synthesized. The resulting polyimide exhibits excellent solubility, film-forming capability and high thermal and thermo-oxidative stability.



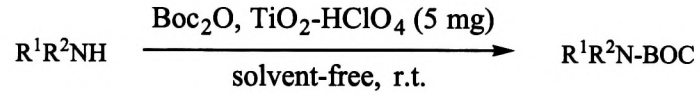
Chinese Chemical Letters, 24 (2013) 34

Nanocrystalline TiO_2–$HClO_4$: A novel, efficient and recyclable catalyst for the chemoselective *N*-Boc protection of amines under solvent-free conditions

Farhad Shirini, Seyyed Vahid Atghia, Mojtaba Ghazi Jirdehi

Department of Chemistry, College of Science, University of Guilan, Rasht 41335, Islamic Republic of Iran

Nanocrystalline TiO_2–$HClO_4$, as newly reported catalyst, has been used as an efficient and reusable catalyst for the chemoselective *N*-Boc protection of amines.



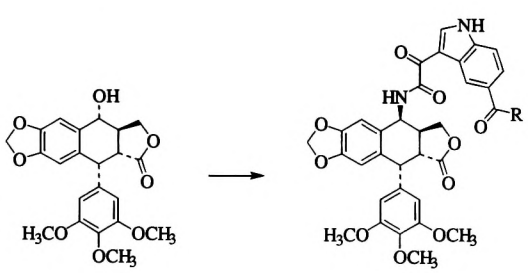
Chinese Chemical Letters, 24 (2013) 37

Synthesis and anti-tumor activity evaluation of novel podophyllotoxin derivatives

Ting Ai[a,b], Shao-Yu Shi[a,b], Li-Ting Chen[a], Ling Li[b], Bo Cao[b], Ying Gao[b], Hong Chen[a,b], Jing Zhou[a]

[a]*Tianjin Key Laboratory on Technologies Enabling Development of Clinical Therapeutics and Diagnostics, School of Pharmacy, Tianjin Medical University, Tianjin 300070, China*
[b]*Tianjin Key Laboratory for Biomarkers of Occupational and Environmental Hazard, Department of Pharmacognosy, Logistics University of Chinese People's Armed Police Forces, Tianjin 300162, China*

Based on the medical chemistry combination principles, seven novel C4-*N*-substituted novel podophyllotoxin derivatives were synthesized. Among them, several analogs showed an improved anti-tumor activity than podophyllotoxin.



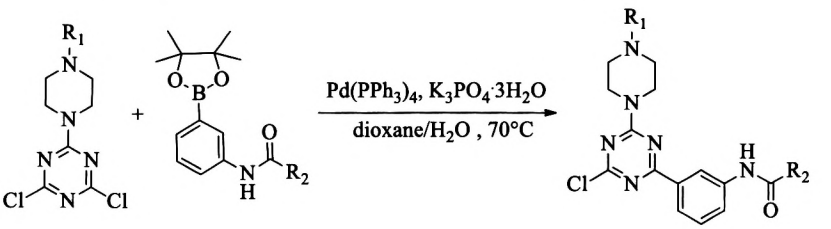
Chinese Chemical Letters, 24 (2013) 41

Selective mono-arylation in palladium-catalyzed cross-coupling reaction of dichlorotriazines with phenylboronate ester derivatives

Jin-Fu Dong[a], Xin Yu[b], Cheng-Qing Ning[a], Liang Hu[a], Nie-Fang Yu[a]

[a]*School of Pharmaceutical Sciences, Central South University, Changsha 410013, China*
[b]*School of Pharmaceutical Sciences, Sun Yat-sen University, Guangzhou 51006, China*

A practical procedure for selective mono-arylation of dichlorotriazines was successfully developed.



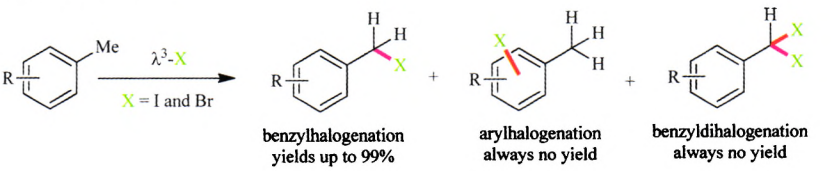
Chinese Chemical Letters, 24 (2013) 45

Effective synthesis of benzyl halides triggered by *in situ* prepared hypervalent halides

Xue-Ge Ling, Yan Xiong, Shu-Ting Zhang, Ruo-Feng Huang, Xiao-Hui Zhang

School of Chemistry and Chemical Engineering, Chongqing University, Chongqing 400030, China

Effective benzylhalogenation triggered by *in situ* prepared hypervalent halide.



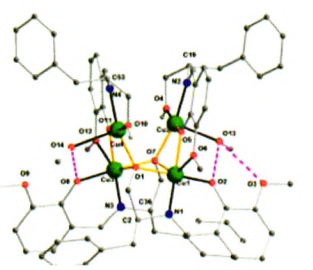
Chinese Chemical Letters, 24 (2013) 49

Synthesis and characterization of a tetranuclear copper(II) complex with a chiral Schiff base ligand

Hua Xiang[a], Long Jiang[b], Huan-Yong Li[b], Xiao-Dan Zheng[b], Yu Li[c]

[a]*Department of Media and Communication, Guangdong Industry Technical College, Guangzhou 510300, China*
[b]*School of Chemistry and Chemical Engineering, Sun Yat-Sen University, Guangzhou 510275, China*
[c]*Department of Chemical Engineering, Guangdong Industry Technical College, Guangzhou 510300, China*

The title complex *l*-[Cu^{II}_4(Hvap)$_2$(vap)$_2$(MeOH)$_2$](ClO$_4$)$_2$ 1 has been synthesized and characterized by EA, IR, TGA, solid-state CD spectra and X-ray single-crystal analyses. Complex 1 contains a boat-shaped {Cu_4O_4} motif. The solid-state CD spectra confirm the chiral nature of complex 1.



Chinese Chemical Letters, 24 (2013) 52

Highly efficient Knoevenagel condensation reactions catalyzed by a proline-functionalized polyacrylonitrile fiber

Guo-Wei Li, Jia Xiao, Wen-Qin Zhang

Department of Chemistry, School of Sciences, Tianjin University, Tianjin 300072, China

A new proline-functionalized fiber catalyst was used as a highly efficient and reusable supported catalyst for catalyzing Knoevenagel condensation reactions between aromatic aldehydes and ethyl cyanoacetate or malononitrile.