



生物有机与分子工程教育部重点实验室

2007 年度工作报告

2007 年 12 月 29 日

2007 年度重点实验室总结报告

重点实验室名称：生物有机与分子工程教育部重点实验室

实验室主任：王剑波 教授

副主任：袁谷 教授，李元宗 教授

学术委员会主任：张礼和 院士

秘书：陈家华、张秀

填报人：张秀

总结报告内容：

一、 研究水平与贡献

1、本年度新增项目和合同经费数（万元）

本年度新增项目 8 项，获得合同经费 537 万元。

2、本年度获奖情况（其中：国家级奖，省部级奖）

1)、余志祥：Thieme Synlett/Synthesis Journal Award

2)、袁 谷：中国分析测试协会二等奖

3、本年度发表论文数（其中：SCI, EI 论文数）

本年度发表 SCI 论文 85 篇，其中影响因子大于 10.0 的论文 4 篇，大于 5.0 的论文 4 篇，大于 3.0 的论文 27 篇。

4、本年度申请及授权专利数：

本年度申请专利 8 项：

1) 席振峰：一种多取代硅杂环己二烯及其合成方法，申请号：200710090393.X.

2) 席振峰：一种合成多取代噻咯的方法，申请号：200710090214.2.

3) 裴 坚：用于有机电致发光二极管的具有三维骨架的纯蓝光有机材料的合成和应用，申请号：2007100900058

4) 杜大明：手性五元杂环化合物及其高对映选择性制备方法，申请号：200710003416.9

5) 杜大明：一种有机磷酸催化剂及其制备方法和应用，200710175800.7

6) 许家喜：一种取代牛磺酸的制备方法，CN 200710175915.6

7) 许家喜：亚膦酰胺及其制备方法，CN 200710086598.0

8) 许家喜：牛磺酸及其衍生物的制备，CN 200710064146.2

二、 队伍建设与人才培养

1、人才队伍情况：

总人数：19 人（教授 12 人，副教授 5 人），其中院士：0 人、长江学者：3 人、杰出青年人数：5 人。

- 2、人才培养情况：
 出站博士后：2人
 在站博士后：6人
 毕业博士生：17人
 在读博士生：73人

三、 开放交流与运行管理

- 1、开放课题情况（项数，总经费）
无。
- 2、承办学术会议情况
无。
- 3、实验室内部规章制度是否健全（是否有年报、简报等）
健全。
- 4、本年度召开学术委员会会议情况
未召开。

四、 问题及建议

近一年来在学校 985 二期的支持下，实验室购置了一批新的仪器，使得实验室仪器设备的使用条件有了一定程度的改善，但是由于实验室面积不足，造成了实验室比较拥挤的现状，随着新化学南楼的建成，有望缓解这种情况。

近两多来，通过不断强调论文的规范标注，实验室成员在论文的规范标注方面有了很大的提高，使得实验室的论文发表数逐年增多，特别是影响因子大于 3.0 的论文数目在逐年增多。

目前实验室主任基金的绝大部分仍用于资助各课题组论文发表，随着近年来实验室发表论文的质量逐年提高，按照以前的资助办法，每年下拨的实验室主任基金只用作资助各课题组论文发表费均已不够，更没有经费用来提供开放项目或进行实验室装修等工作了。

五、 实验室主任基金使用情况：

总经费	实验室 改建	2006 年资助各课 题组论文发表费	实验室仪器 运转	杂费	结余*
15 万	0 万	19.3 万	1.0 万	0.65 万	-5.95 万

*2007 年主任基金拨款 15 万元。

附件一、2007 年重点实验室发表研究论文

附件二、2007 年度实验室来访讲学

附件一、2007 年度重点实验室发表研究论文:

- 1** Metal mediated synthesis of substituted cyclooctatetraenes
Chao Wang and Zhenfeng Xi*
Chem. Commun. **2007**, 5119-5133. (Feature Article)
- 2** Lewis Acid-Promoted Tandem Intermolecular Diels-Alder/ Intramolecular Allylation Reactions of Silyl-Substituted 1,3-Butadienes Leading to Multi-Substituted 7-Norbornenones and Related Polycyclic Compounds
Dongzhen Li, Guangzhen Liu, Qiaoshu Hu, Chao Wang, and Zhenfeng Xi*
Org. Lett. **2007**, 9, 5433-5436.
- 3** Isolation and Synthetic Applications of 2,5-Bis(alkynylsilyl) Zirconacyclopentadienes
Junhui Liu, Wen-Xiong Zhang, Xiangyu Guo, Zhaomin Hou,* and Zhenfeng X*
Organometallics **2007**, 26, 6812-6820
- 4** A novel reaction of titanacyclopentenes and aldehydes with and without Lewis acids,
Qiaoshu Hu, Dongzhen Li, Huijun Zhang, and Zhenfeng Xi*
Tetrahedron Lett. **2007**, 48, 6167-6170.
- 5** Highly Efficient Synthesis of Stereo-defined Multi-substituted 1,4-Dicyano- and 1-Cyano-1,3-butadienes and Their Reactions with Organolithium Reagents,
Congyang Wang, Chao Wang, Qifeng Wang, Zhihui Wang, Hui Sun, Xiangyu Guo, and Zhenfeng Xi*
Chem. Eur. J. **2007**, 13, 6484-6494.
- 6** Lithio Siloles: Facile Synthesis and Applications
Chao Wang, Qian Luo, Hui Sun, Xiangyu Guo, and Zhenfeng Xi*
J. Am. Chem. Soc. **2007**, 129, 3094-3095.
- 7** Synthesis of Multiply Substituted Alkylidene Silacyclohexadiene Derivatives *via* Palladium-Catalyzed Insertion of Alkynes into Alkylidene Silacyclobutenes
Junhui Liu, Xiaohua Sun, Mikihiro Miyazaki, Lantao Liu, Congyang Wang, and Zhenfeng Xi*
J. Org. Chem. **2007**, 72, 3137-3140.
- 8** Dearomatizing Anionic Cyclization and Novel Skeletal Rearrangement: High Yield Formation of Multiply Substituted Bicyclic or polycyclic Spirocyclopentadienes and Phenanthrene Derivatives from 4-Aryl 1-lithio-1,3-butadienes
Lantao Liu, Zhihui Wang, Fei Zhao, and Zhenfeng Xi*
J. Org. Chem. **2007**, 72, 3484-3491.

- 9 Formation of stable enols from 1,4-dilithio-1,3-dienes and acid chlorides by a de-aromatization/Michael addition/re-aromatization domino process
Qiaoshu Hu, Chao Wang, Dongzhen, Li, and Zhenfeng Xi*
Org. Biomol. Chem. **2007**, *5*, 2114-2118.
- 10 Lewis Acid-Controlled Reactions of Zirconacyclopentadienes with Isocyanates and Isothiocyanates. One-Pot Three- or Four-Component Synthesis of Multiply Substituted Iminocyclopentadienes and Butadiene-bridged 1,6-Bisamides and Electrophilic Cyclization,
Qiaoshu Hu, Jiang Lu, Congyang Wang, Chao Wang, and Zhenfeng Xi*
Tetrahedron **2007**, *63*, 6614-6624. (创刊 50 周年纪念特邀)
- 11 卤代- 1, 3-丁二烯衍生物的合成研究进展
刘光臻, 宋志毅, 王超, 席振峰*
有机化学 **2007**, *27*, 837-846。
- 12 Co-operative effect of Lewis acids with transition metals for organic synthesis
Congyang Wang and Zhenfeng Xi*
Chem. Soc. Rev. **2007**, *36*, 1395-1406.
- 13 1-Lithio-1,3-dienes: Useful Building Blocks for Cyclic Compounds
Zhenfeng Xi*
Bull. Chem. Soc. Jpn. **2007**, *80*, 1021-1036. (日本化学会志 80 周年纪念特邀综述)
- 14 1-Zircona-2-cyclohexenes: Novel Synthesis and Preliminary Reactions
Qifeng Wang, Hongtao Fan, and Zhenfeng Xi*
Organometallics **2007**, *26*, 775-777.
- 15 Facile synthesis of multiply substituted cyclopentadienes and conjugated dienals from the reaction of 1,4-dilithio-1,3-dienes with carboxylic acid derivatives including acid chlorides, anhydrides, and DMF
Chao Wang, Guoliang Mao, Zhihui Wang, and Zhenfeng Xi*
Eur. J. Org. Chem. **2007**, 1267-1263.
- 16 Investigation on Ru(II)-catalyzed Reaction of [2,3]-Sigmatropic Rearrangement of Sulfur Ylide Generated from Metal Carbene
Qing Xiao and Jianbo Wang*
Acta Chim. Sinica **2007**, *65*, 1733-1735.
- 17 Lewis Acid-Catalyzed Propargylation of Arenes with O-Propargyl Trichloroacetimidates: Synthesis of 1,3-Diarylpropynes
Changkun Li and Jianbo Wang*
J. Org. Chem. **2007**, *72*, 7431-7434.

- 18** Palladium-Catalyzed Cross-Coupling of Aryl or Vinyl Iodides with Ethyl Diazoacetate
Cheng Peng, Jiajia Cheng, and Jianbo Wang*
J. Am. Chem. Soc. **2007**, *129*, 8708-8709.
- 19** One-pot Synthesis of α -Iodo Substituted β -Unsaturated Aldehydes from Propargylic Alcohols
Shufeng Chen and Jianbo Wang*
J. Org. Chem. **2007**, *72*, 4993-4996.
- 20** 1,2-Sulfanyl Group Migration as Driving Force: New Approach to Pyrroles by Reaction of Allenic Aldehydes with Amines
Lingling Peng, Xiu Zhang, Jie Ma, Zhenzhen Zhong, and Jianbo Wang*
Org. Lett. **2007**, *9*, 1445-1448.
- 21** CuCl-catalyzed Cleavage of S-Triphenylmethyl Thioether: A New Detritylation Method for Thio Group
Ming Ma, Xiu Zhang, Lingling Peng, and Jianbo Wang*
Tetrahedron Lett. **2007**, *48*, 1095-1097.
- 22** DBU-Catalyzed Condensation of Acyldiazomethanes to Aldehydes in Water and a New Approach to Ethyl α -Hydroxy β -Arylacrylates
Fengping Xiao, Yu Liu, and Jianbo Wang*
Tetrahedron Lett. **2007**, *48*, 1147-1149.
- 23** Au-Catalyzed Reaction of Propargylic Sulfides and Dithioacetals
Lingling Peng, Xiu Zhang, Shiwei Zhang, and Jianbo Wang*
J. Org. Chem. **2007**, *72*, 1192-1197.
- 24** Transition Metal Catalyzed Rearrangement of Allenyl Sulfides: A New Approach to Furan Derivatives
Lingling Peng, Xiu Zhang, Ming Ma, and Jianbo Wang*
Angew. Chem. Int. Ed. **2007**, *46*, 1905-1908.
- 25** Highly Efficient [2,3]-Sigmatropic Rearrangement of Sulfur Ylide Derived from Rh (II) Carbene and Sulfides in Water
Mingyi Liao and Jianbo Wang*
Green Chem. **2007**, *9*, 184-188.
- 26** Mechanism of Rhodium-Catalyzed Carbene Formation from Diazo Compounds,
Freeman M. Wong, Jianbo Wang, Alvan Hengge*, Weiming Wu*
Org. Lett. **2007**, *9*, 1663-1665.
- 27** Synthesis of [59]Fullerenones through Peroxide-Mediated Stepwise Cleavage of Fullerene Skeleton Bonds and X-ray Structures of Their Water-Encapsulated Open-Cage

Complexes

Zuo Xiao, Jiayao Yao, Dazhi Yang, Fudong Wang, Shaohua Huang, Liangbing Gan,*
Zhenshan Jia, Zhongping Jiang, Xiaobing Yang, Bo Zheng, Gu Yuan, Shiwei Zhang, and
Zheming Wang*

J. Am. Chem. Soc. **2007**, *129*, 16149-16162.

- 28** Boomerang Type Substitution Reaction, Reactivity of Fullerene Epoxide and Halofullerenol
Zhenshan Jia, Xiang Zhang, Gaihong Zhang, Shaohua Huang, Hao Fang, Xiangqing Hu,
Yuliang Li, Liangbing Gan,* Shiwei Zhang,* and Daoben Zhu
Chem. Asian. J. **2007**, *2*, 290-300.
- 29** Amination of [60]Fullerene by Ammonia, Primary and Secondary Aliphatic Amines.
Preparation of Amino[60]fullerene Peroxides
Xiangqing Hu, Zhongping Jiang, Zhenshan Jia, Shaohua Huang, Xiaobing Yang, Yuliang
Li, Liangbing Gan,* Shiwei Zhang,* and Daoben Zhu
Chem. Eur. J. **2007**, *13*, 1129-1141.
- 30** From Fullerene-Mixed Peroxide to Open-Cage Oxafulleroid C₅₉(O)₃(OH)₂(OOtBu)₂
Embedded with Furan and Lactone Motifs
Fudong Wang, Zuo Xiao, Liangbing Gan,* , Zhenshan Jia, Zhongping Jiang, Shiwei
Zhang,* Bo Zheng, and Yuan Gu
Org. Lett. **2007**, *9* (9), 1741-1743.
- 31** Efficient conversion of bromofullerene to alkoxyfullerenes through either homolytic or
heterolytic cleavage of C60–Br bond
Zhenshan Jia, Qianyan Zhang, Yuliang Li, Liangbing Gan,* Bo Zheng, Gu Yuan, Shiwei
Zhang,* and Daoben Zhu
Tetrahedron **2007**, *63*, 9120-9123.
- 32** Effect of Lithium Chloride on Tuning the Reactivity of Pauson-Khand Reactions
Catalyzed by Palladium-Tetramethylthiourea
Lujian Deng, Jing Liu, Jiqing.Huang, Yanhe Hu, Mao Chen, Yu Lan, Jiahua Chen,
Aiwen Lei, and Zhen Yang*
Synthesis **2007**, *16*, 2565-2570.
- 33** Synthesis of Thiourea-Oxazolines, a New Class of Chiral S,N-Heterobi- dentate Ligands:
Application in Pd-Catalyzed Asymmetric Bis (methoxycar- bonylation) of Terminal
Olefins
Bo Liang, Jing Liu, Yingxiang Gao, Kittiya Wongkhan, Dongxu Shu, Yu Lan, Ang Li,
Andrei S. Batsanov, Judith A. Howard, Todd B. Marder, Jiahua Chen, and Zhen Yang*
Organometallics **2007**, *26*, 4756-4762.
- 34** An Efficient One-Pot Asymmetric Synthesis of Biaryl Compounds via

- Diels-Alder/Retro-Diels-Alder Cascade Reactions
Yongxiang Liu, Kui Lu, Mingji Dai, Kai Wang, Wanqing Wu, Jiahua Chen, Junmin Quan, and Zhen Yang*
Org. Lett. **2007**, *9*, 805-808
- 35** Synthesis of Giant Rigid π -Conjugated Dendrimers
Yang Jiang, Yi-Xuan Lu, Yu-Xin Cui, Qi-Feng Zhou, Yuguo Ma and Jian Pei*
Org. Lett. **2007**, *9*, 4539-4542.
- 36** Single Sub-micrometer Wire Transistors of Thiophene-containing Oligoacenes by Direct Solution Process
Yan Zhou, Wen-Jun Liu, Yuguo Ma, Hailiang Wang, Limin Qi, Yong Cao, Jian Wang and Jian Pei*
J. Am. Chem. Soc. **2007**, *129*, 12386-12387.
- 37** Three-Dimensional Architectures for Highly Stable Pure Blue Emission
Jia Luo, Yan Zhou, Zhi-Qiang Niu, Qi-Feng Zhou, Yuguo Ma and Jian Pei*
J. Am. Chem. Soc. **2007**, *129*, 11314-11315.
- 38** Thin Film Organic Transistors from Air-Stable Heteroarenes: Anthra-[1,2-b:4,3-b':5,6-b'':8,7-b''']tetrathiothiophene Derivatives
Wen-Jun Liu, Yan Zhou, Yuguo Ma, Yong Cao, Jian Wang and Jian Pei*
Org. Lett. **2007**, *9*, 4187-4190.
- 39** Chiral Helical Polyfluorene Derivatives: Synthesis, Chiroptical Properties, and Investigation of the Structure-Property Relationships
Jichao Yan, Xu Cheng, Qilin Zhou and Jian Pei*
Macromolecules **2007**, *40*, 832-839.
- 40** The Photophysical Properties and Electropolymerization of Regioregular Head-to-Tail Oligothiophenes-Functionalized 9,9'-Spirobifluorene Derivatives
Weihong Jin, Jing Ni, Yihin Lai and Jian Pei*
Acta Physico-Chimica Sinica **2007**, *23*, 459-465.
- 41** Star-Shaped Oligo(*p*-phenylene)-Functionalized Truxenes as Blue Light-Emitting Materials: Synthesis, and The Structure-Property Relationship
W.-B. Zhang, W.-H. Jin, X.-H. Zhou and Jian Pei*
Tetrahedron **2007**, *63*, 2907-2914.
- 42** An Unexpected Role of A Trace Amount of Water in Catalyzing Proton Transfer in Phosphine-Catalyzed (3+2) Cycloaddition of Allenes and Alkenes
Yuanzhi Xia, Yong Liang, Yuanyuan Chen, Ming Wang, Lei Jiao, Feng Huang, Song Liu, Yahong Li, and Zhi-Xiang Yu*
J. Am. Chem. Soc. **2007**, *129*, 3470.

- 43** A Computationally Designed Rh(I)-Catalyzed Two-Component [5+2+1] Cycloaddition of Ene-Vinylcyclopropanes and CO for the Synthesis of Cyclooctenones
Yuanyuan Wang, Jingxin Wang, Jiachun Su, Feng Huang, Lei Jiao, Yong Liang, Dazhi Yang, Shiwei Zhang, Paul A. Wender, and Zhixiang Yu*
J. Am. Chem. Soc. **2007**, *129*, 10060.
- 44** Mechanistic Twist of the [8+2] Cycloadditions of Dienylisobenzofurans and Dimethyl Acetylenedicarboxylate: Stepwise [8+2] vs. [4+2]/[1,5]-Vinyl Shift Mechanisms Revealed Through a Theoretical and Experimental Study
Yuanyuan Chen, Siyu Ye, Lei Jiao, Yong Liang, Dilip K. Sinha-Mahapatra, James, W. Herndon, and Zhixiang Yu*
J. Am. Chem. Soc. **2007**, *129*, 10773.
- 45** DFT Study of the Mechanisms of In Water Au(I)-Catalyzed Tandem [3,3]-Rearrangement/Nazarov Reaction/[1,2]-Hydrogen Shift of Enynyl Acetates: A Proton-Transport Catalysis Strategy in the Water-Catalyzed [1,2]-Hydrogen
Fuqiang Shi, Xin Li, Yuanzhi Xia, Liming Zhang, and Zhixiang Yu*
J. Am. Chem. Soc. **2007**, *129*, 15503.
- 46** Suzuki-Miyaura Coupling Reaction by PdII-Catalyzed Aromatic C-H Bond Activation Directed by an N-Alkyl Acetamino Group
Zhangjie Shi*, Bijie Li, Xiaobin Wan, Jiang Cheng, Zhao Fang, Bin Cao, Changming Qin, and Yang Wang
Angew. Chem. Int. Ed. **2007**, *46*, 5554-5558. (highlighted by *Naturechina*)
- 47** *Ortho* Arylation of Acetanilides with Trialkoxy Phenylsilane via Pd(II)-Catalyzed C-H Functionalization
Shangdong Yang, Bijie Li, Xiaobing Wan, and Zhangjie Shi*
J. Am. Chem. Soc. **2007**, *129*, 6066-6067. (4# hot paper of JACS)
- 48** Indirect *Ortho* Functionalization of Substituted Toluenes through *Ortho* Olefination of N,N-Dimethylbenzylamines Tuned by Acidity of Reaction Conditions
Guixin Cai, Ye Fu, Yizhou Li, Xiaobing Wan, and Zhangjie Shi*
J. Am. Chem. Soc. **2007**, *129*, 7666-7673.
- 49** Asymmetric Friedel-Crafts Alkylation of Methoxyfuran with Nitroalkenes Catalyzed by Diphenylamine-tethered Bis(oxazoline)-Zn(II) Complexes
Han Liu, Jiayi Xu and Daming Du*
Org. Lett. **2007**, *9*(23), 4725-4728.
- 50** Synthesis and mass spectrometry of 2-hydroxyethyl 1-aryl-1-(N-benzoxycarbonylamino)methylphosphonate monoesters
Shuzong Cai, Wei Yin, Yuan Ma, Han Liu, Yufen Zhao and Jiayi Xu* *Phosphorus Sulfur Silicon Relat. Elem.* **2007**, *182*(1), 25-33.

- 51** Notable and obvious ketene substituent-dependent effect of temperature on the stereoselectivity in the Staudinger reaction
Bonan Li, Yikai Wang, Daming Du, Jiayi Xu*
J. Org. Chem. **2007**, 72(3), 990-997.
- 52** Ligand and substrate pi-stacking interaction controlled enantioselectivity in the asymmetric aziridination
Linge Ma, Peng Jiao, Qihan Zhang, Daming Du, Jiayi Xu*
Tetrahedron: Asymmetry **2007**, 18(7), 878-884.
- 53** 微波与有机化学反应的选择性
许家喜
化学进展 **2007**, 19(5), 700-712.
- 54** Synthesis of phosphinopeptides via the Mannich ligation
Bonan Li, Shuzong Cai, Da-Ming Du, Jiayi Xu*
Org. Lett. **2007**, 9(12), 2257-2260.
- 55** Efficient synthesis of taurine and structurally diverse substituted taurines from aziridines
Libo Hu, Hui Zhu, Daming Du, Jiayi Xu *
J. Org. Chem. **2007**, 72(12), 4543-4546.
- 56** Diastereoselectivity in the Staudinger reaction: A useful probe for investigation on nonthermal microwave effects
Libo Hu, Yikai Wang, Bonan Li, Daming Du, Jiayi Xu*
Tetrahedron **2007**, 63(38), 9387-9392.
- 57** 3-(噻吩-2-基)- β -内酰胺的合成及其立体化学
李伯男, 梁勇, 焦雷, 胡立博, 杜大明, 许家喜
化学学报 **2007**, 65(16), 1649-1653.
- 58** Effect of the borane source on the enantioselectivity in the chiral oxazaborolidine-catalyzed asymmetric borane reduction of ketones.
Wang, Xiao; Du, Juanjuan; Liu, Han; Du, Da-ming; Xu, Jiayi.
Heterat. Chem. **2007**, 18(7), 740-746.
- 59** Specific recognition of human telomeric G-quadruplex DNA with small molecules and the conformational analysis by ESI mass spectrometry and circular dichroism spectropolarimetry.
Jiang Zhou, Gu Yuan*
Chem. Eur. J. **2007**, 13, 5018-5023.
- 60** Formation and stability of G-quadruplexes self-assembled from guanine-rich strands,

- Jiang Zhou, Gu Yuan*, JJ. Liu
Chem. Eur. J. **2007**, *13*, 945-949.
- 61** DNA-mediated charge transport by minor groove-binding polyamide
Ji ZH, Li JJ, Zhu B, Yuan G, Cai SM
Electrochem Commun. **2007**, *9*, 1667-1671.
- 62** 溶液pH 和阳离子对端粒G-四链体DNA形成和结构的影响
周江, 袁谷*
化学学报 **2007**, *65(16)*, 1728~1732.
- 63** 电喷雾质谱法研究聚酰胺、酰亚胺衍生物与HIV-1基因DNA的相互作用
李卉卉, 韩德伟, 袁谷*
化学学报 **2007**, *65(16)*, 1543~1547.
- 64** 合成对HIV-1 基因启动子TATA 区具有识别功能的寡聚酰胺
裴云鹏, 袁谷*
中国科技论文在线 **2007**, *10*, 12.
- 65** 一个八聚丝氨酸的合成
饥振江, 袁谷
中国科技论文在线 **2007**, *10*, 23.
- 66** What Is Responsible for the Initiating Chemistry of Iron-Mediated Lipid Peroxidation: An Update
Zhiyong Cheng and Yuanzong Li
Chem. Rev. **2007**, *107*, 748-766.
- 67** Catalytic oxidation of styrene by molecularly imprinted polymer with phenylacetic acid as template and hemin as co-monomer
Jun Wang, Zhiyong Chen, Meiping Zhao, Yuanzong Li
Chinese Chemical Letters **2007**, *18*, 981-984.
- 68** Molecularly imprinted soluble nanogels as a peroxidase-like catalyst in the oxidation reaction of homovanillic acid under aqueous conditions
Zhiyong Chen, Zhendong Hua, Jun Wang, Yuan Guan, Meiping Zhao, Yuanzong Li
Applied Catalysis A: General **2007**, *328*, 252-258.
- 69** Multiple Binding modes for dicationic Hoechst 33258 to DNA
Yuan guan, Ruina Shi, Xiaomin Li, Meiping Zhao, Yuanzong Li
J. Phys. Chem. B **2007**, *111*, 7336-7344.
- 70** Enzyme-linked immunosorbent assays for insulin-like growth factor-I using six-histidine tag fused proteins

- Yong Huang, Ruina Shi, Xuefei Zhong, Dan Wang, Meiping Zhao, Yuanzong Li
Analytica Chimica Acta **2007**, 596, 116–123.
- 71** Production and characterization of monoclonal antibody (IgM) against recombinant human erythropoietin
Jiebo Mi, Jin Yan, Xiaojie Ding, Zhenquan Guo, Meiping Zhao, Wenbao Chang
Biomedical and Environmental Sciences **2007**, 20, 184-188.
- 72** Several concerns about the primer design in the universal molecular beacon real-time PCR assay and its application in HBV DNA detection
Xiaomin Li, Yong Huang, Chen Song, Meiping Zhao and Yuanzong Li
Anal Bioanal Chem. **2007**, 388, 979-985.
- 73** Imidazole as a catalyst for in vitro refolding of enhanced green fluorescent protein
Ruina Shi, Qiong Pan, Yuan Guan, Zhendong Hua, Yong Huang, Meiping Zhao, Yuanzong Li
Archives of Biochemistry and Biophysics **2007**, 459, 122–128.
- 74** A novel one cycle allele specific primer extension—Molecular beacon displacement method for DNA point mutation detection with improved specificity
Xiaomin Li, Yong Huang, Yuan Guan, Meiping Zhao, Yuanzong Li,
Analytica Chimica Acta **2007**, 584, 12–18.
- 75** Tris(2,2'-bipyridyl)ruthenium(II) electrochemiluminescence (ECL) enhanced by rutin on platinum electrode
Da Xu, Zhong Lan Gao, Na Li*, Ke'an Li
Chinese Chemical Letters **2007**, 18 (5), 561-564.
- 76** Fluorescence property of tris (2, 2'-bipyridine) ruthenium (II) dichloride immobilized in the gallery of gamma-zirconium phosphates
Minghui Xiang, Xianbo Shi, Na Li*, Ke'an Li
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- 84** Analysis of phospholipids by nonaqueous capillary electrophoresis with on-line electrospray ionization mass spectrometry, 1Beijing National Laboratory for Molecular Sciences
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- 85** Online Concentration of Aristolochic Acid I and II in Chinese medicine preparation by Micellar Electrokinetic Chromatography
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附件二、2007 年度实验室来访讲学

- 1) Pierre H. Dixneuf 教授, 法国 The University of Rennes 1
New catalytic methods to make C-C bonds: Controlled oxidative couplings and atom economy
2007 年 3 月 16 日
- 2) 刘育 教授, 南开大学
五彩缤纷的超分子化学
2007 年 3 月 16 日
- 3) Hiroshi Nakazawa 教授, Osaka City University
C-C Bond Activation of Organonitriles Promoted by a Silyl Iron Complex
2007 年 4 月 23 日
- 4) 黄乃正 教授, 香港中文大学
Synthesis of Naturally Occurring Molecules Using Furans
2007 年 4 月 24 日
- 5) Joel S. Miller 教授, Department of Chemistry, University of Utah
I. Recent Advances in Molecule -based Magnets
II. Long C-C Bonds - What is a Bond?
2007 年 5 月 8 日、10 日
- 6) Paul R. Carlier 教授, Virginia Polytechnic Institute and State University
Transiently Non-racemic Enolates: Synthesis of Enantiopure 'Quaternary' Benzodiazepines
2007 年 5 月 14 日
- 7) 燕红 教授, 南京大学
含硼的金属有机化合物的反应性及潜在应用性
2007 年 5 月 16 日
- 8) 李朝军 教授, 加拿大 McGill University
Green Chemistry
2007 年 5 月 21 日

- 9) Laren M. Tolbert 教授 (Associate Editor of JACS), 美国 Georgia Institute of Technology
Electron Transport in Linked Ferrocenes
2007 年 5 月 24 日,
- 10) Ronald Breslow 教授 (美国科学院院士, 美国化学会前主席), Columbia University
A Successful New Approach to Cancer Treatment
2007 年 6 月 7 日
- 11) George A. Olah 教授 (1994 年诺贝尔化学奖获得者), 美国 University of Southern California
China and The Methanol Economy
2007 年 7 月 27 日
- 12) Yasushi Nishihara 教授, 日本冈山大学
The first cyanoesterification of norbornenes and its application towards novel optoelectronic materials by ROMP
2007 年 9 月 13 日
- 13) Yamaguchi 教授, 日本 Nagoya University
New pi-Conjugated Materials with Main Group Elements
2007 年 9 月 19 日
- 14) Steven E. Rokita 教授, 美国 The University of Maryland
Migration of Electrons and Electrophiles in DNA
2007 年 10 月 8 日
- 15) Kenji Uneyama 教授, 日本冈山大学
C-F Bond Activation for Synthetic Organic Chemistry
2007 年 10 月 22 日
- 16) Uwe Rosenthal Leibniz 教授, 德国 The University of Rostock
Unusual three- and five-membered metallacycles of Ti, Zr and Hf as homogeneous catalysts
2007 年 10 月 23 日
- 17) Professor Gregory L Verdine, 美国 Harvard University
Chemical Biology Approaches Toward New Classes of Drugs
2007 年 10 月 30 日

18) Max Malacria 教授, 法国 The University of Pierre and Marie Curie.

Platinum and gold catalyzed cycloisomerization of enynes, allenynes and Allenedienes

2007 年 11 月 15 日

19) E. Negishi 教授, 美国 Purdue University

Recent Advances in Zirconium-Catalysed Asymmetric Carboalumination (“ZACA” Reaction) Efficient Protocols for Catalytic Asymmetric Carbon-Carbon Bond Formation

2007 年 11 月 21 日

20) Matthias Selke 教授, 美国 California State University, Los Angeles

Chemistry of Singlet Oxygen with Heteroatoms and Organometallics: From New Photosensitizers to Unusual Oxidants

2007 年 12 月 24 日