



生物有机与分子工程教育部重点实验室

2006 年度工作报告

2006 年 12 月 20 日

2006 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

副主任：

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 16 项，获得合同经费 1004 万元。

2、本年度获奖情况（其中：国家级奖，省部级奖）

1)、王剑波：第二届“中国礼来科学贡献奖”

2)、席振峰：北京大学“正大”特等奖教金

3)、施章杰：Synthesis/Synlett Journal Award.

4)、施章杰：中国化学会青年化学家奖

3、本年度发表论文数（其中：SCI, EI 论文数）

本年度发表 SCI 论文 89 篇，其中影响因子大于 3.0 的论文 34 篇。

4、本年度申请及授权专利数：

本年度申请专利 2 项：

1) 席振峰：从 1, 4-二卤-1, 3-丁二烯和氯化亚铜合成 2, 4-己二烯二腈的方法，申请号：200610011698. 2.

2) 席振峰：从 1, 4-二卤-1, 4-二（三甲基硅基）-1, 3-丁二烯衍生物制备 1, 1, 4, 4-四卤代-1, 3-丁二烯衍生物的方法，申请号：200610089527. 1.

二、 队伍建设与人才培养

1、人才队伍情况：

总人数：20 人（教授 13 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：

在站博士后：14 人

在读博士生：65 人（其中 5 人是与中科院化学所联合培养）

在读硕士生人数：30 人

三、 开放交流与运行管理

1、开放课题情况（项数，总经费）

2、承办学术会议情况

承办了 *The 4th Sino-Australia Organic Chemistry Symposium* (Beijing, 9.26-28, 2006.)

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，期待新化学南楼建成后可以缓解这种情况。

近两年来，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。

由于时间安排等问题，本年度仍未能够召开学术委员会会议。争取在 2007 年召开一次重点实验室学术会议。

每年下拨的实验室主任基金在大部分用作资助各课题组论文发表费后所剩无几，已经不能再提供开放项目或进行实验室装修等工作。希望依托单位和主管部门加大对实验室的投入，为实验室能提供更好的条件。

五、 实验室主任基金使用情况：

总经费	实验室 改建	2005 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	0.7 万	16.6 万	0.5 万	0.5 万	-3.3 万

*2006 年主任基金拨款 15 万元。

附件一、2006 年重点实验室发表研究论文

附件二、2006 年度实验室来访讲学

附件一、2006 年度重点实验室发表研究论文：

- 1) β -Tosylamino and β -Hydroxyl Substituted α -Diazocarbonyl Compounds: X-ray Structure and 1,2-Migrations under Photochemical Condition
Ming Ma, Zhao Yan, Shiwei Zhang and Jianbo Wang*
Chin. J. Chem., **2006**, 24, 138-140.
- 2) New Approaches to Polysubstituted Pyrroles and γ -Lactams based on Nucleophilic Addition of Ti(IV) Enolates Derived from α -Diazo- β -keto Carbonyl Compounds to *N*-Tosylimines Changqing Dong, Guisheng Deng and Jianbo Wang*
J. Org. Chem., **2006**, 71, 5560-5564.
- 3) 2,3-Migration in Rh(II)-Catalyzed Reaction of β -Trifluoroacetamido α -Diazocarbonyl Compounds
Feng Xu, Shiwei Zhang, Xiangnan Wu, Yu Liu, Weifeng Shi and Jianbo Wang*
Org. Lett. 2006, **8**, 3207-3210.
- 4) 1,2-Migration in Rh(II) Carbene Transfer Reaction: Remarkable Steric Effect on Migratory Aptitude
Fengping Xiao and Jianbo Wang*
J. Org. Chem., **2006**, 71, 5789-5791.
- 5) Synthesis of Oxygen-containing Heterocyclic Compounds Based on the Intramolecular O-H Insertion and Wolff Rearrangement of α -Diazocarbonyl Compounds
Mingyi Liao, Suwei Dong, Guisheng Deng, Jianbo Wang*
Tetrahedron Lett. **2006**, 47, 3927-3929.
- 6) Preparation of Cyclic *N*-*tert*-Butylsulfonyl Enamines with Rh(II)-mediated Ring Expansion Reaction of α -Diazoesters
Shufeng Chen, Yonghua Zhao and Jianbo Wang*
Synthesis, **2006**, No. 10, 1905-1710.
- 7) Dehydroxymethylation: An Unusual Reverse Reaction of Nucleophilic Addition to Formaldehyde
Lingling Peng, Ming Ma, Xiu Zhang, Shiwei Zhang and Jianbo Wang*
Tetrahedron Lett. **2006**, 47, 8175-8178.
- 8) CuSO₄-Catalyzed Diazo Decomposition in Water: A Practical Synthesis of β -Keto Esters
Mingyi Liao, Jianbo Wang*
Tetrahedron Lett. **2006**, 47, 8859-8861.
- 9) Dearomatizing Anionic Cyclization of 1-Lithio-4-naphthyl-1,3-butadienes Leading to the Formation of Spiro Cyclopentadiene Derivatives

Zhihui Wang, Zhenfeng Xi*

Synlett. **2006**, 1275-1277.

- 10) Partially fluorinated naphthalene derivatives from 1,4-dilithio-1,3-dienes and C₆F₆
Zhihui Wang, Chao Wang and Zhenfeng Xi*
Tetrahedron Lett. **2006**, 47, 4157-4160.
- 11) Reactions of 4-methyl, 4-phenyl and 4-hydrogen substituted
1-lithio-1,3-butadienes with aldehydes: Preparation of multiply substituted
Cyclopentadienes
Zhihui Wang, Hongyun Fang and Zhenfeng Xi*
Tetrahedron **2006**, 62, 6967-6972.
- 12) Metal-mediated Efficient Synthesis, Structural Characterization and Skeletal
Rearrangement of Octa-substituted Semibullvalenes
Chao Wang, Jian Yuan, Guotao Li, Zitao Wang, Shiwei Zhang, Zhenfeng Xi*
J. Am. Chem. Soc. **2006**, 128, 4564-4565.
- 13) Preparation of Partially Substituted 1-Halo- and 1,4-Dihalo-1,3-dienes via
Reagent-Controlled Desilylation of Halogenated 1,3-dienes
Zhenfeng Xi,* Zhiyi Song, Guangzhen Liu, Xiaozhong Liu, Tamotsu
Takahashi*
J. Org. Chem. **2006**, 70, 3154-3158.
- 14) Cycloaddition Reactions of 1-Lithio-1,3-dienes with Organonitriles Affording
Multiply Substituted Pyridines, Pyrroles and Linear Butadienylimines
Congyang Wang, Zhihui Wang, Lantao Liu, Chao Wang, Guangzhen Liu, and
Zhenfeng Xi*
J. Org. Chem. **2006**, 70, 8565-8571.
- 15) Asymmetric conjugate addition of nitroalkanes to nitroalkenes catalyzed by
C₂-symmetric tridentate bis(oxazoline) and bis(thiazoline) zinc complexes
Shao-Feng Lu, Da-Ming Du*, Jiaxi Xu, Shi-Wei Zhang
J. Am. Chem. Soc. **2006**, 128(23), 7418–7419.
- 16) Enantioselective Friedel-Crafts alkylation of indoles with nitroalkenes catalyzed by
bifunctional tridentate bis(oxazoline)-Zn(II) complex
Shao-Feng Lu, Da-Ming Du*, Jiaxi Xu
Org. Lett. **2006**, 8(10), 2115–2118.
- 17) Structurally well-defined, recoverable C₃-symmetric tris(β -hydroxy phosphoramido)-catalyzed enantioselective borane reduction of ketones
Da-Ming Du*, Tao Fang, Jiaxi Xu, Shi-Wei Zhang
Org. Lett. **2006**, 8(7), 1327–1330.

- 18) Highly enantioselective borane reduction of prochiral ketones catalyzed by C3-symmetric tripodal β -hydroxy amides
Tao Fang, Jiaxi Xu, Da-Ming Du*
Synlett **2006**, (10), 1559–1563.
- 19) Facile synthesis of C3-symmetric tripodal β -hydroxy amide ligands and their Ti (IV) complex-catalyzed asymmetric addition of diethylzinc to aldehydes
Tao Fang, Jiaxi Xu, Da-Ming Du*
Lett. Org. Chem. **2006**, 3(10), 780-786.
- 20) Lewis acid promoted preparation of isomerically pure fullerenols from fullerene peroxides C-60(OOt-Bu)(6) and C-60(O)(OOt-Bu)(6)
Wang, Fudong; Xiao, Zuo; Yao, Zhipeng; Jia, Zhenshan; Huang, Shaohua; Gan, Liangbing; Zhou, Jiang; Yuan, Gu; Zhang, Shiwei
J. Org. Chem. **2006**, 71 (12): 4374-4382.
- 21) Fullerene peroxidesComptes Rendus
Gan, LB
Chim., **2006**, 9 (7-8): 1001-1004.
- 22) Preparation of covalent-bound iodofullerene through selective opening of fullerene epoxide to form halohydrin fullerene derivatives
Huang, Shaohua; Yang, Xiaobing; Zhang, Xiang; Hu, Xiangqing; Gan, Liangbing; Zhang, Shiwei
SynLett **2006**, (8): 1266-1268.
- 23) Fullerene peroxides in cage-opening reactions
Gan, LB
Pure and Applied Chem., **2006**, 78 (4): 841-845.
- 24) Preparation of fullerendione through oxidation of vicinal fullerendiol and intramolecular coupling of the dione to form hemiketal/ketal moieties
Huang, SH; Wang, FD; Gan, LB; Yuan, G; Zhou, J; Zhang, SW.
Org. Lett. **2006**, 8 (2): 277-279.
- 25) Application of RCM Reaction in the Construction of ABC Ring of Micrandilactone A
Yan-Dong Zhang, Ye-Feng Tang, Tuo-Ping Luo, Juan Shen, Jia-Hua Chen, and Zhen Yang
Org. Lett., **2006**, 8, 107-110.
- 26) Development of a Concise and Diversity-Oriented Approach for the Synthesis of Plecomacrolides via the Diene-Ene RCM
Lu, K.; Huang, M.; Xiang, Z.; Liu, Y.; Chen, J.; Yang, Z.
Org. Lett., **2006**, 8, 1193-1196.

- 27) Synthetic Study of 1,3-Butadiene-Based IMDA Approach to Construct a [5-7-6] Tricyclic Core and Its Application to the Total Synthesis of C8-epi-Guanacastepene O
Li, C.-C.; Wang, C.-H.; Liang, B.; Zhang, X.-H.; Deng, L.-J.; Liang, S.; Chen, J.-H.;
Wu, Y.-D.; Yang, Z.,
J. Org. Chem. **2006**, 71, 6892 – 6897.
- 28) Synthesis of Functionalized Quinolines via Ugi and Pd-Catalyzed Intramolecular Arylation Reactions
Ma, Z.; Xiang, Z.; Luo, T.; Lu, K.; Xu, Z.; Chen, J.; Yang, Z.,
J. Comb. Chem. **2006**, 8(5); 696-704.
- 29) Facile synthesis of 1,1-disubstituted taurines
Huang, Jiaxing; Du, Da-Ming; Xu, Jiaxi*
Synthesis, **2006**, (2), 315-319.
- 30) A versatile method for the synthesis of 3-alkoxycarbonyl β -lactam derivatives Jiao, Lei;
Zhang,Qianfeng; Liang, Yong; Zhang, Shiwei; Xu, Jiaxi
J. Org. Chem., **2006**, 71(2), 815-818.
- 31) Further investigation on the rearrangement mechanism in the reaction of
1,5-benzothiazepines and ethoxycarbonylcarbene
Wu, Cunzan; Huang, Jiaxing; Zhang, Qihan; Xu, Jiaxi
Chem. Res. Chin. Univ., **2006**, 22(1), 36-39.
- 32) (S)-2-Aryl-4,4-diphenyl-3,1,2-oxazaboro[3.3.0]octanes: Efficient catalysts for the
asymmetric borane reduction of electron-deficient ketones
Liu, Han.; Xu, Jiaxi
J. Mol. Cat. A: Chem., **2006**, 244(1-2), 68-72.
- 33) Catalyst-free, high-yield, and stereospecific synthesis of 3-phenylthio β -lactam
derivatives
Jiao, Lei; Liang, Yong; Zhang, Qianfeng; Zhang, Shiwei; Xu, Jiaxi
Synthesis, **2006**, (4), 659-665.
- 34) Facile synthesis of phosphonamide and phosphonate-linked phosphonopeptides
Nan, Yanfu; Zhang, Qihan; Duan, Lifang; Xu, Jiaxi
J. Peptide Sci., **2006**, 12(4), 303-309.
- 35) 新型含硫肿瘤坏死因子类肽抑制剂的合成与活性
王鼎, 张奇涵, 许家喜*
高等学校化学学报, **2006**, 27(4), 669-671.

- 36) 在不对称氮杂环丙烷化中双噁唑啉配位空间大小对对映选择性的影响
马琳鸽,杜大明,许家喜
有机化学, **2006**, 26(4), 568-572.
- 37) Asymmetric synthesis of N-protected chiral 1-aminoalkylphosphonic acids and synthesis of side-chain functionalized depsiphosphonopeptides
Liu, Han; Cai, Shuzong, Xu, Jiaxi
J. Peptide Sci., **2006**, 12(5), 337-340.
- 38) Origin of the relative stereoselectivity of the β -lactam formation in the Staudinger reaction
Jiao, Lei; Liang, Yong; Xu, Jiaxi
J. Am. Chem. Soc., **2006**, 128(18), 6060-6069.
- 39) Microwave-assisted one-pot synthesis of 1-indanones from arenes and α,β -unsaturated acyl chlorides
Yin, Wei; Ma, Yuan; Xu, Jiaxi; Zhao, Yufen
J. Org. Chem., **2006**, 71(11), 4312-4315.
- 40) Comparative study on mass spectrometric fragmentation of linear chiral secondary alcohols (R)-1-(4-alkylphenyl) and (R)-1-(4-alkoxyl/thiophenyl) alcohols
Zhang, Qihan; Su, Xianbin; Xu, Jiaxi
Chem. Res. Chin. Univ., **2006**, 22(3), 347-350.
- 41) Effect of the secondary reduction on the enantioselectivity and function of additives in the chiral oxazaborolidine-catalyzed asymmetric borane reduction of ketones.
Liu, Han; Du, Daming; Xu, Jiaxi
Helv. Chim. Acta, **2006**, 89(5), 1067-1074.
- 42) Asymmetric aziridination of 1,3-dienes catalyzed by bisoxazoline-copper complexes
Ma, Linge; Du, Daming; Xu, Jiaxi
Chirality, **2006**, 18(8), 575-580.
- 43) 多烯化合物的 Cope 重排反应: [5,5] σ 迁移、串联[3,3] σ 迁移与自由基重排机理
许家喜
大学化学, **2006**, 21(3), 28-33.
- 44) Solvent-free, AlCl₃-promoted tandem Friedel-Crafts reaction of arenes and aldehydes
Wang, Xiao; Wang, Yikai; Du, Daming; Xu, Jiaxi
J. Mol. Cat. A: Chem., **2006**, 255(1-2), 31-35.
- 45) Mass spectrometric fragmentation of 1-(benzyloxycarbonyl)amino-2-alkyl/cycloalkyl thioacetates: A thioester pyrolysis-type rearrangement under electron impact ionization

Xu, Shu; Xu, Jiaxi
Chin. Chem. Lett., **2006**, 17(8), 1069-1072.

- 46) Do reaction conditions affect the stereoselectivity in the Staudinger reaction?
Wang, Yikai; Liang, Yong; Jiao, Lei; Du, Da-Ming; Xu, Jiaxi
J. Org. Chem., **2006**, 71(18), 6983-6990.
- 47) [3,3] σ 迁移反应过渡态立体化学过程的新观点
许家喜
大学化学, **2006**, 21(4), 40-44.
- 48) 微波对烯酮和亚胺形成 β -内酰胺顺反选择性的影响
王一恺, 杜大明, 许家喜
辽宁石油化工大学学报, **2006**, 26(4), 94-95.
- 49) Mass spectral fragmentation of 1,8-bis[4-substituted (oxazolin-2-yl)]anthracenes: ring-contraction rearrangement of oxazoline ring under electron impact ionization conditions
Jiao, Peng; Ma, Linge; Zhang, Qihan; Xu Jiaxi
Chem. Res. Chin. Univ., **2006**, 22(6), 753-755.
- 50) Mass spectral fragmentation and cyclization of (S,S)-N,N'-bis[1-(hydroxymethyl)alkyl]anthracene/ naphthalene-1,8-dicarboxamides under electron impact ionization conditions
Jiao, Peng; Zhang, Qihan; Xu Jiaxi
Chem. Res. Chin. Univ., **2006**, 22(6), 756-759.
- 51) Synthesis and photo-induced DNA cleaving activities of conjugates of halophenyl derivative and polyamide containing N-methylimidazoles
Liu D, Yuan G, Hu JM
Journal of Photochemistry and Photobiology B-Biology, **2006**, 82 (3), 187-193.
(IF=1.597)
- 52) Synthesis of homoallylic alcohols from ketones in water
Wang J, Yuan G
Synthetic Communications, **2006**, 36 (3), 401-405. (IF=0.86)
- 53) Investigation of noncovalent complexes between beta-cyclodextrin and polyamide acids containing N-methylpyrrole and N-methylimidazole by electrospray ionization mass spectrometry
Li HH, Zhou J, Tang FL, Yuan G
J. Am. Soc. Mass. Spectrom. **2006**, 17 (1), 9-14. (IF=3.625)

- 54) Estimation of binding constants for complexes of polyamides and human telomeric DNA sequences by electrospray ionization mass spectrometry
Zhou J, Yuan G, Tang FL
Rapid in Mass Spectrometry, **2006**, 20 (15): 2365-2367.(IF=3.087)
- 55) Site-selective DNA cleavage by a novel complex of copper-conjugate of Phen and polyamide containing N-methylimidazole rings
Liu D , Zhou J , Li HH , Zheng B , Yuan G
Bioorganic & Medicinal Chemistry Letters, **2006**, 16 (19),5032-5035. (IF=2.478)
- 56) Investigation of non-covalent complexes of HIV-1 promoter DNA and polyamides containing N-methylpyrrole by electrospray ionization mass spectrometry
Li HH, Yuan G
Rapid Communication in Mass Spectrometry, **2006**, 20 (11) 1736-1740.(IF=3.087)
- 57) Electrospray ionization mass spectral characteristics and fragmentation mechanisms of Angiotensin II and its analogues
Li HH, Yuan G
International Journal of Mass Spectrometry, **2006**, 252 (1), 54-60. (IF=2.09)
- 58) Evaluation of Binding Selectivity of a Polyamide Probe to Single Base-Pair Different DNA in A·T-Rich Region by Electrospray Ionization Mass Spectrometry
Huihui Li and Gu Yuan
J. Am. Soc. Mass. Spectrom. **2006**, 17, 1742–1748.(IF=3.625)
- 59) Formation and Stability of G-Quadruplexes Self-Assembled from Guanine-Rich Strands
Jiang Zhou, Gu Yuan, Junjun Liu, Chang-Guo Zhan
Chem. Eur. J., **2006**, Published Online, 11 Oct (If=4.907)
- 60) Fabrication and characterization of stable ultrathin film micropatterns containing DNA and photosensitive polymer diazoresin
Bing Yu, Hai-Lin Cong, Hu-Wei Liu*, Cong-Hua Lu, Fang Wei, Wei-Xiao Cao *Anal. Bioanal Chem.*, **2006**, 384, 385–390.
- 61) Study on Separation of Aristolochic Acid I and II by Micellar Electrokinetic Capillary Chromatography and Competition Mechanism between SDS and β -Cyclodextrin
Wei Li, Zheng Chen, Yiping Liao, Huwei Liu *
Electrophoresis, **2006**, 27, 837–841.
- 62) Determination of tobacco-specific N-nitrosamines in rabbit serum by capillary zone electrophoresis and capillary electrophoresis-electrospray ionization-mass spectrometry with solid-phase extraction
Chenchen Li, Zheng Chen, Dawei Wen, Jianxun Zhang, Bing Yu, Huwei Liu*
Electrophoresis, **2006**, 27, 2152-2163.

- 63) Analysis of phospholipid species in the peritoneal surface layer of rats by high-performance liquid chromatography coupled with electrospray ionization ion-trap tandem mass spectrometry
Fei Gao, Tianxin Kui, Tao Wang*, Huwei Liu*
Biochimica et Biophysica Acta (BBA)/Molecular and Cell Biology of Lipids, **2006**, 1761, 667-676.
- 64) Fragmentation study and analysis of benzoylurea insecticides and their analogs by liquid chromatography-electrospray ionization-mass spectrometry
Xia Yang, Yan Xia, Xun Liao, Yumin Zuo, Yiping Liao*, Huwei Liu *
Talanta, **2006**, 70, 75-87.
- 65) Separation of phospholipids by capillary zone electrophoresis with indirect ultraviolet detection
Fei Gao1, Juan Dong, Wei Li, Tao Wang, Jie Liao, Yiping Liao, Huwei Liu*
J. Chromatogr. A , **2006**, 1130, 259-264.
- 66) Separation of hydrophobic solutes by organic-solvent-based micellar electrokinetic chromatography using cation surfactants
Suxuan Gong, Fujia Liu, Wei Li, Fei Gao, Chunjin Gao, Yiping Liao, Huwei Liu*
J. Chromatogr. A, **2006**, 1121, 274-279.
- 67) Determination of Evodiamine and Rutecarpine in Human Serum by Liquid Chromatography – tandem Mass Spectrometry
Dawei Wen, Chenchen Li, Yuping Liu, Yiping Liao, Huwei Liu*
Anal. Bioanal Chem., **2006**, 385(6), 1075-1081.
- 68) Application of nanomaterials in liquid chromatography: The opportunity for separation with high efficiency and selectivity
Zhengxiang Zhang, Zhiyong Wang, Yiping Liao, Huwei Liu*
J. Sep. Sci., **2006**, 29 (12), 1872-1878.
- 69) Fragmentation study of hexanitrodostilbene by ion trap multiple mass spectrometry and analysis by liquid chromatography-mass spectrometry
Xiaofang Fu, Yong Zhang, Shenhua Shi, Fei Gao , Dawei Wen , Yiping Liao, Huwei Liu*
Rapid Commun. Mass Spectrom., **2006**, 20, 2906-2914.
- 70) Study of the metabolism on tobacco-specific N-nitrosamines in the rabbit by solid-phase extraction and liquid chromatography?Ctandem mass pectrometry
Chenchen Li, Dawei Wen, Jianxun Zhang, Zheng Chen, Weihong Cong, Zhihua Rao, Huwei Liu*
Anal. Bioanal. Chem., **2006**, 386, 1985-1993.

- 71) Universal molecular beacon-based tracer system for real-time polymerase chain reaction
Li XM, Huang Y, Guan Y, Zhao MP, Li YZ
Anal. Chem., **2006**, 78 (22), 7886-7890.
- 72) The role of molecular recognition in regulating the catalytic activity of peroxidase-like polymers imprinted by a reductant substrate
Cheng ZY, Li YZ
J. Mol. Catal. A-Chemical, **2006**, 256 (1-2), 9-15.
- 73) 邻苯二甲酸-Cu(Ac)(2)分子印迹聚合物分子识别特性的研究
王俊, 吕恬, 赵美萍, 李元宗
高等学校化学学报, **2006**, 27 (8), 1566-1569.
- 74) Determination of nucleic acids based on the fluorescence quenching of Hoechst 33258 at pH 4.5
Guan Y, Zhou W, Yao XH, Zhao MP, Li YZ
Anal. Chim. Acta, **2006**, 570 (1), 21-28.
- 75) A novel one cycle allele specific primer extension—Molecular beacon displacement method for DNA point mutation detection with improved specificity
Li XM, Huang Y, Guan Y, Zhao MP, Li YZ
Anal. Chim. Acta, **2006**, doi:10.1016/j.aca.2006.11.016
- 76) Rigid Linear and Star-Shaped π -Conjugated 2,2':6',2"-Terpyridine Ligands With Blue-Emission
S.-C. Yuan, H.-B. Chen, Y. Zhang, J. Pei
Org. Lett., **2006**, 8
- 77) Selective Oxidative Cyclization by FeCl₃ in the Construction of 10H-Indeno[1,2-b]triphenylene Skeletons in Polycyclic Aromatic Hydrocarbons
Y. Zhou, W.-J. Liu, W. Zhang, X.-Y. Cao, Q.-F. Zhou, Y. Ma, J. Pei
J. Org. Chem., **2006**,
- 78) Large Rigid Blue-Emitting π -Conjugated Stilbenoid-Based Dendrimers: Synthesis and Properties
Y. Jiang, J.-Y. Wang, Y. Ma, Y.-X. Cui, Q.-F. Zhou, J. Pei
Org. Lett., **2006**, 8 (11), 4287-4290.
- 79) Nanosized Gradient π -Conjugated Thienylethynylene Dendrimers for Light-Harvesting: Synthesis and Properties
J.-L. Wang, J. Luo, L.-H. Liu, Q.-F. Zhou, Y. Ma, J. Pei
Org. Lett., **2006**, 8 (11), 2281-2284.

- 80) Nanosized Rigid π -Conjugated Molecular Heterojunctions with Multi [60]Fullerenes: Facile Synthesis and Photophysical Properties
J.-L. Wang, X.-F. Duan, B. Jiang, L.-B. Gan, J. Pei, C. He, Y.-F. Li
J. Org. Chem., **2006**,
- 81) Effect of Fluorenone Units on the Property of Polyfluorene and Oligofluorene Derivatives: Synthesis, Structure-Properties Relationship, and Electroluminescence
X.-H. Zhou, Y. Zhang, Y.-Q. Xie, Y. Cao, J. Pei
Macromolecules, **2006**, 39 (11), 3830-3840.
- 82) Helical polycyclic aromatics containing thiophene: synthesis and properties
J. Pei, W.-Y. Zhang, J. Mao, X.-H. Zhou
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2006 年 4 月 7 日
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2006 年 4 月 7 日
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- 4) 张希 教授, 清华大学
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- 5) Prof. Dr. Baogang Jonathan Xu, 美国 Department of Cancer Biology at the Vanderbilt University Cancer Center
Imaging Mass Spectrometry Can Aid in Cancer Diagnosis, Prognosis, and Therapy
2006 年 5 月 20 日
- 6) Dr. Shigeru SHIMADA, National Institute of Advanced Industrial Science and Technology (AIST)
Synthesis and structure of organobismuth compounds and their application to organic synthesis
2006 年 5 月 25 日
- 7) Richard R. Schrock 教授, 美国 Massachusetts Institute of Technology, Chemistry Department, 诺贝尔奖获得者
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2006 年 9 月 18 日

8) Masahiro Murakami 教授, 日本京都大学

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2006 年 9 月 20 日

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2006 年 9 月 20 日

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