



2009

2010 1 18

# 2009

---

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

学术委员会主任：张礼和 院士

秘书：陈家华、张艳

填报人：陈洪培、王剑波

2009

2009

82

3.0

54

JACS

5

Angew. Chem.

3

2009

6

2009

20 ,

1 ,

2

,

1699.5

2009

6

3

3

2009

2009 11

2008

985

2008

2009

,

2009

2009

20

96

2009

Hisashi Yamamoto

MIT

Gregory C. Fu

Gregory L. Verdine  
Erick M. Carreira      Eiichi Nakamura      Mark Lautens  
ChemComm

2010 6

附件一、本年度新增项目和合同经费数（万元）

		20972003	2010.1-2012.12	35	
	C-H	20832002	2009.1-2012.12	220	
		20902005	2010.01-2012.12	20	
			2009.12	3	
		20832003	2009.01-2012.12	160	
			2010,1-2013,12	200	
		20821062	200901-201112	450	
		2092201020 30	201001-201212	99	
		20972006	201001-201212	35	

			0809	200912-201212	9
				200903-201212	2
			20825205	2009 12-2012 .12	200
			20805002	2009.1-2011.12	25
2			30890142	2009.1-2012.12	230 60
	STAT3 RLX		90913004	2010-2012	50
		973	2007CB511 903	2009.1-2011.12	40
	TNT	GF	PKU-PY200 9 007	2009.9-2010.8	12
			2008004	2009.5-2011.5	1.5
			20975005	2010-2012	39

			20905005	2010-2011	9
			2009EG1502 93	2009.01-2011.1 2	30
					1699.5

**附件二、本年度获奖情况（其中：国家级奖，省部级奖）**

	(2009)		
	(2009)		
			1
	2009 CAIA		1

**附 三、本年度申请及授权专利数，请按如下格式排版**

( )	( )	( )		
200910091335.8	2009 8 18		Jerry Yan	
200910093548.4	2009 9 25			
200910081871.X	2009 4 14			
200910092120.8	2009 9 1			2 3- -4 1H -
ZL 200610089527.1	2009 8 12			1 4- -1 4- -1 3- 1,1,4,4- -1 3-

ZL 200610011698.2	2009 6 24			1 4- -1 3- 2 4-
----------------------	-----------	--	--	--------------------

#### 附件四、人才培养情况：在站博士后、在读博士生、硕士生人数

20	73	23	3	12

#### 附件五、实验室经费使用情况

总经费	实验室 改建	2006 年资 助各课题 组科研费	实验室仪器运 转	学术会议, OPSS	结余*
89.5 万 (包括 2008 70.5 4.0 ; 15 )	0 万	57.63 万	0 万	2.66 万	27.61 万

\*

#### 附件六、本年度发表论文

1) Switched role of fullerene in the Diels-Alder reaction: facile addition of dienophiles to the conjugated fullerene diene moiety

Jiayao, Yao, Zuo Xiao, Jianxin Zhang, Xiaobing Yang, Liangbing Gan\*; Wenxiong Zhang\*  
*Chem. Commun.* **2009**, 4, 401-403.

2) Synthesis of Fullerene Oxides Containing Both 6,6-Closed Epoxide and 5,6-Open Ether Moieties through Thermolysis of Fullerene Peroxides

Jiayao Yao, Dazhi Yang, Zuo Xiao, Liangbing Gan, \* Zheming Wang\*  
*J. Org. Chem.* **2009**, 74, 3528-3531.

3) Efficient Cage-Opening Cascade Process for the Preparation of Water-Encapsulated [60]Fullerene Derivatives

Qianyan Zhang, Zhenshan Jia, Shuming Liu, Gang Zhang, Zuo Xiao, Dazhi Yang, Liangbing Gan, \* Zheming Wang, \* Yuliang Li  
*Org. Lett.* **2009**, 11, 2772-2774.

4) Direct functionalization of benzylic C-Hs with vinyl acetates via Fe-catalysis

Chunxiao Song, Guixin Cai, Thomas R. Farrell, Zhongping Jiang, Hu Li, Liangbing Gan\*,

Zhangjie Shi\*

*Chem. Commun.* **2009**, *40*, 6002-6004.

5 One-Dimensional Microwires Formed by the Co-Assembly of Complementary Aromatic Donors and Acceptors

Jie-Yu Wang, Jing Yan, Lin Ding, Yuguo Ma, Jian Pei\*

*Adv. Funct. Mater.* **2009**, *19*, 1746-1752.

6 pi-Conjugated Dendrimers as Stable Pure-Blue Emissive Materials: Photophysical, Electrochemical, and Electroluminescent Properties

Yang Jiang, Lei Wang, Yan Zhou, Yu-Xin Cui, Jian Wang,\* Yong Cao, Jian Pei\* *Chem.-Asia. J.* **2009**, *4*, 548-553.

7 A Mechanically Interlocked [3]Rotaxane as Light-Harvesting Antenna: Synthesis, Characterization, and Intramolecular Energy Transfer

Jie-Yu Wang, Ji-Min Han, Jing Yan, Yuguo Ma,\* Jian Pei\*

*Chem.-Eur. J.*, **2009**, *15*, 3585-3594.

8) New Fused Heteroarenes for High-Performance Field-Effect Transistors

Jie-Yu Wang, Yan Zhou, Jing Yan, Lin Ding, Yuguo Ma,\* Yong Cao, Jian Wang,\* Jian Pei\*

*Chem. Mater.* **2009**, *21*, 2595-2597.

9) Highly Fluorescent Rigid Supramolecular Polymeric Nanowires Constructed Through Multiple Hydrogen Bonds

Jia Luo, Ting Lei, Lei Wang, Yuguo Ma,\* Yong Cao, Jian Wang,\* Jian Pei\*

*J. Am. Chem. Soc.* **2009**, *131*, 2076-2077.

10) Solution-Processable Gradient Red-Emitting pi-Conjugated Dendrimers Based on Benzothiadiazole as Core: Synthesis, Characterization, and Device Performances

Jin-Liang Wang, Yi Zhou, Yong-Fang Li,\* Jian Pei\*

*J. Org. Chem.* **2009**, *74*, 7449-7456.

11) Self-Assembly of Benzodithiophene Derivatives on Graphite: Effects of Substitution Alkoxy Chain Number and Location

Xiaoguang Xu, Jie Yin, Heng Li, Yan Zhou, Jianlong Li, Jian Pei,\* Kai Wu\*

*J. Phys. Chem. C.* **2009**, *113*, 8844-8852.

12) Single Organic Microtwist with Tunable Pitch

Haibo Chen, Yan Zhou, Jie Yin, Jing Yan, Yuguo Ma,\* Lei Wang, Yong Cao, Jian Wang,\* Jian Pei\*

*Langmuir* **2009**, *25*, 5459-5462. (Highlighted by Chemical Engineering News)

13) Electrospun Nanofibrous Film Doped with a Conjugated Polymer for DNT Fluorescence Sensor

Yuanyuan Long, Haibo Chen, Yu Yang, Huaming Wang, Yufei Yang, Na Li, Kean Li, Jian Pei,\* Feng Liu\*

*Macromolecules* **2009**, *42*, 6501-6509.

14) Star-Shaped D-pi-A Conjugated Molecules: Synthesis and Broad Absorption Bands

Jin-Liang Wang, Zheng-Ming Tang, Qi Xiao, Yuguo Ma,\* Jian Pei\*

*Org. Lett.* **2009**, *11*, 863-866.

15) Amine Groups-Functionalized Alcohol-Soluble Polyfluorene Derivatives: Synthesis, Photophysical Properties, and Self-Assembly Behaviors

Zeng-Shan Guo, Jian Pei,\* Zhang-Lin\* Zhou, Lihua Zhao, Gary Gibson, Sity Lam, James Brug

*Polymer* **2009**, *50*, 4794-4780.

16) Star-Shaped Oligo(fluorene ethynylene)-Functionalized Truxene Derivatives: Synthesis, Characterization, and Their Size Effects

Si-Chun Yuan, Qingjiang Sun, Ting Lei, Bin Du, Yong-Fang Li,\* Jian Pei\*

*Tetrahedron* **2009**, *65*, 4165-4172.

17) Organic Supernanostructures Self-Assembled via Solution Process for Explosive Detection

Lei Wang, Yan Zhou, Jing Yan, Jian Wang,\* Jian Pei,\* Yong Cao

*Langmuir* **2009**, *25*, 1306-1310.

18) In Situ Growing and Patterning of Aligned Organic Nanowire Arrays via Dip Coating

Nanliu Liu, Yan Zhou, Lei Wang, Junbiao Pe

Yan Zhang and Jianbo Wang  
*Chem. Commun.* **2009**, 5350–5361.

23 Recent Progress in Pd-Catalyzed Reactions of Diazo Compounds  
Guobing Yan, Chunxiang Kuang, Cheng Peng and Jianbo Wang  
*Chin. J. Org. Chem.* **2009**, 29, 813–821.

24 Au(PPh<sub>3</sub>)Cl–AgSbF<sub>6</sub>-catalyzed rearrangement of propargylic 1,3-dithianes: formation of 8-membered 1,3-bisthio-substituted cyclic allenes  
Xia Zhao, Zhenzhen Zhong, Lingling Peng, Wenxiong Zhang and Jianbo Wang  
*Chem. Commun.* **2009**, 2535–2537.

25 Au-catalyzed isomerization of cyclopropenes: a novel approach to indene derivatives  
Changkun Li, Yi Zeng and Jianbo Wang  
*Tetrahedron Lett.* **2009**, 50, 2956–2959.

26 Gold(I)-catalyzed arylmethylation of terminal alkynes  
Changkun Li, Weibin Li and Jianbo Wang  
*Tetrahedron Lett.* **2009**, 50, 2533–2535.

27 Arylation and Vinylation of alpha-Diazocarbonyl Compounds with Boroxines  
Cheng Peng, Wei Zhang, Guobing Yan and Jianbo Wang  
*Org. Lett.* **2009**, 11, 1667–1670.

28 Formal Total Synthesis of N-Methylmaysenine  
Lin Wang, Jianxian Gong, Lujiang Deng, Zheng Xiang, Zhixing Chen, Yuefan Wang, Jiahua Chen and Zhen Yang\*  
*Org. Lett.* **2009**, 11, 1809–1812.

29 Direct functionalization of benzylic C–Hs with vinyl acetates via Fe-catalysis. Chun-Xiao Song, Gui-Xin Cai, Thomas R. Farrell, Zhong-Ping Jiang, Hu Li, Liang-Bing Gan\* and Zhang-Jie Shi\*  
*Chem. Comm.* **2009**, 6002–6004.

30 Cross-Coupling of Alkenyl/Aryl Carboxylates with Grignard Reagent via Fe-Catalyzed C–O Bond Activation.  
Bi-Jie Li, Li Xu, Zhen-Hua Wu, Bing-Tao Guan, Chang-Liang Sun, Bi-Qin Wang, and Zhang-Jie Shi\*  
*J. Am. Chem. Soc.* **2009**, 131, 14656–14657.

31 Carbon–Carbon Formation via Ni-Catalyzed Suzuki–Miyaura Coupling through C–CN Bond Cleavage of Aryl Nitrile.  
Dang-Gang Yu, Miao Yu, Bing-Tao Guan, Bi-Jie Li, Yang Zheng, Zhen-Hua Wu and

Zhang-Jie Shi\*

*Org. Lett.* **2009**, *11*, 3374-3377.

32 Direct Imidation to Construct 1H-Benzo[d]imidazole through Pd(II)-Catalyzed C-H Activation Promoted by Thiourea.

Qing Xiao, Wen-Hua Wang, Gang Liu, Fan-Ke Meng, Jia-Hua Chen, Zhen Yang\*, and Zhang-Jie Shi\*

*Chem. Eur. J.* **2009**, *15*, 7292-7296.

33 Cross Dehydrogenative Arylation (CDA) of a Benzylic C-H Bond with Arenes by Iron Catalysis.

Yi-Zhou Li, Bi-Jie Li, Xin-Yu Lu, Song Lin, and Zhang-Jie Shi.

*Angew. Chem. Int. Ed.* **2009**, *48*, 3817-3820.

34 One-pot Multi-Component Synthesis of Azaindoles and Pyrroles from One Molecule of Si-Tethered Diyne and Three or Two Molecules of Organonitriles Mediated by Zirconocene Shaoguang Zhang, Xiaohua Sun, Wen-Xiong Zhang, Zhenfeng Xi\*

*Chem. Eur. J.* **2009**, *15*, 12608 – 12617.

35 Efficient One-Pot Synthesis of 2,3-Dihydropyrimidinethiones via Multicomponent Coupling of Terminal Alkynes, Elemental Sulfur and Carbodiimides

Zitao Wang, Yang Wang, Wen-Xiong Zhang,\* Zhaomin Hou, Zhenfeng Xi\*

*J. Am. Chem. Soc.* **2009**, *131*, 15108-15109.

36 Isolation, Structural Characterization and Synthetic Application of Oxy-cyclopentadienyl Dianions

Lantao Liu, Wen-Xiong Zhang, Chao Wang, Congyang Wang, Zhenfeng Xi\*

*Angew. Chem. Int. Ed.* **2009**, *48*, 8111-8114.

37 Zirconium- and Silicon-Containing Intermediates with Three Fused Rings in a Zirconocene-Mediated Intermolecular Coupling Reaction

Wen-Xiong Zhang, Shaoguang Zhang, Xiaohua Sun, Masayoshi Nishiura, Zhaomin Hou,\* Zhenfeng Xi\*

*Angew. Chem. Int. Ed.* **2009**, *48*, 7227-7231.

38 Hydride-Induced Cleavage of C-O Bond in Pyran Ring of 2-Pyranylidene Carbene Complexes: Mechanism and Synthetic Application

Qifeng Wang, Lantao Liu, Chen Lin, Hui Sun, Wenxiong Zhang, Zhenfeng Xi \*

*Dalton Trans.* **2009**, 10433-10435.

39 Ruthenium Catalysts for Structurally Controlled Mono- and Bis-Allylation of Active Methylene Compounds with Aliphatic Allylic Substrates

Hui-Jun Zhang, Bernard Demerseman, Zhenfeng Xi,\* Christian Bruneau\*

*Adv. Synth. Catal.* **2009**, *351*, 2724-2728..

40 Hydride-induced Novel Cyclization of Dienedinitriles Leading to Multi-functionalized Cyclopentadienes

Hui-jun Zhang, Tianhao Meng, Bernard Demerseman, Christian Bruneau\*, Zhenfeng Xi\*  
*Org. Lett.* **2009**, *11*, 4458-4461.

41 Synthesis of functionalized siloles from Si-tethered diynes

Qian Luo, Li Gu, Chao Wang, Junhui Liu, Wenxiong Zhang and Zhenfeng Xi\*  
*Tetrahedron Lett.* **2009**, *50*, 3213-3215.

42 Ruthenium-Catalyzed Nucleophilic Allylic Substitution Reactions from  $\beta$ -Silylated Allylic Carbonates

Hui-Jun Zhang, Bernard Demerseman, Loic Toupet, Zhenfeng Xi,\* Christian Bruneau\*  
*Organometallics* **2009**, *28*, 5173-5182.

43 Alkyl Aluminum Catalyzed Addition of Amines to Carbodiimides: A Highly Efficient Route to Substituted Guanidines

Wen-Xiong Zhang,\* Dongzhen Li, Zitao Wang, Zhenfeng Xi\*  
*Organometallic* **2009**, *28*, 882-887.

44 Star-shaped Silacyclobutene-Containing  $\pi$ -Systems: Synthesis and Optical Properties

Junhui Liu, Shaoguang Zhang, Wenxiong Zhang, and Zhenfeng Xi\*  
*Organometallic* **2009**, *28*, 413-417.

45

\*

**2009** *12* 1487-1493.

46

\*

**2009** *12* 1475-1486.

47

\*

**2009** *29* 491-503.

48 Efficient ruthenium-catalyzed synthesis of [3]dendralenes from 1,3-dienic allylic carbonates

Kassem Beydoun, Hui-Jun Zhang, Basker Sundararaju, Bernard Demerseman, Mathieu Achard, Zhenfeng Xi Christian Bruneau\*  
*Chem. Commun.* **2009**, 6580-6582.

49 Skeletal rearrangement of all-carbon spiro skeletons mediated by Lewis acid

Fei Zhao, Chao Wang, Lantao Liu, Wen-Xiong Zhang, Zhenfeng Xi\*  
*Chem. Commun.* **2009**, 6569-6571.

50 Zirconocene-Mediated Ligand-Switched Selective Cleavage of Active and Inert Carbon-Carbon Bonds in Allylcyclopropanes

Chao Wang, Liang Deng, Jun Yan, Hailin Wang, Qian Luo Zhenfeng Xi\*  
*Chem. Commun.* **2009**, 4414-4416.

51 1-Lithio-1,3-dienes as Useful Building Blocks in Organic Synthesis

Wen-Xiong Zhang, Zhenfeng Xi\*

*Pure and Applied Chemistry (account)*, **2009**, 81, 235-246.

52 An Expeditious and High-Yield Formal Synthesis of Hirsutene Using Rh(I)-Catalyzed [(5+2)+1] Cycloaddition

Xiaohui Fan, Min-Xian Tang, Lian-Gang Zhuo, Y. Q. Tu, Zhi-Xiang Yu\*  
*Tetrahedron Lett.* **2009**, 50, 155-157.

53 Formal Syntheses of Asterisca-3(15),6-diene and Pentalenene Using Rh(I)-Catalyzed [(5+2)+1] Cycloaddition

Xiaohui Fan, Lian-Gang Zhuo, Y. Q. Tu, Zhi-Xiang Yu\*

*Tetrahedron*, **2009**, 65, 4709-4713.

54 New Insights into the Torquoselectivity of Staudinger Reaction

Yong Liang, Lei Jiao, Zhi-Xiang Yu,\* and Jiaxi Xu\*

*J. Am. Chem. Soc.* **2009**, 131, 1542-1549.

55 Mechanisms of Cascade Reactions in the Syntheses of Camptothecin-Family Alkaloids: Intramolecular [4+ + 2] Reactions of N-Arylimidates and Alkynes

Yong Liang, Xing Jiang, Zhi-Xiang Yu\*

*Org. Lett.* **2009**, 11, 5302-5305.

56 Why Is Copper(I) Complex More Competent Than Dirhodium(II) Complex in Catalytic Asymmetric O–H Insertion Reactions? A Computational Study of the Metal Carbenoid O–H Insertion into Water

Yong Liang, Haolai Zhou, Zhi-Xiang Yu\*

*J. Am. Chem. Soc.* **2009**, 131, 17783-17785.

57 Phosphine and Water Cocatalyzed [3+2] Cycloaddition Reactions of

2-Methyl-2,3-butadienoate with Fumarates: A Computational and Experimental Study

Yong Liang, Song Liu, Zhi-Xiang Yu\*

*Synlett.* **2009**, 905-909.

58 Quantification of Testosterone and Epitestosterone in Biological samples by Capillary Electrophoresis with Immunoaffinity Extraction

Hongxu Chen, Qinpei Deng, Liwei Zhang, Xin-Xiang Zhang \*  
*Talanta*, **2009**, 78, 464–470.

59 Immunoaffinity Extraction of Testosterone by Antibody Immobilized Monolithic Capillary

Hongxu Chen, Ting Huang, Xin-Xiang Zhang\*  
*Talanta*, **2009**, 78, 259–264.

60 Spectroscopy Probing of the Formation, Recognition, and Conversion of a G-Quadruplex in the Promoter Region of the bcl-2 Oncogene

Huihui Li Yiquan Liu Sen Lin Gu Yuan\*,  
*Chem. Eur. J.*, **2009**, 15, 2445-2452.

61 Collision-induced Dissociation of Dimeric G-quadruplexes of HIV-1 Integrase Inhibitors and Their Complexes by Tandem-in-time Mass Spectrometry

Huihui Li Gu Yuan\*  
*Eur. J. Mass Spectrom.*, **2009**, 15, 731-737.

62 Discrimination of Cyclic Peptide Diastereomers by Electrospray Ionization Tandem Mass Spectrometry

Bo Zheng, Yiquan Liu, Huihui Li, Yunhua Ye, Xingming Gao, Gu Yuan\*  
*J. Mass Spectrom.*, **2009**, 44, 1478-1481.

63 DNA-Recognition of Cyclic Peptides in Regulatory Region of HIV-1 Gene by Electrospray Ionization Mass Spectrometry,

Huihui Li, Bo Zheng, Yunhua Ye, Gu Yuan\*  
*Acta Chimica Sinica*, **2009**, 67, 1869-1874.

64 Investigation of the Interaction between HIV-1 DNA and Cyclic Peptides by Electrospray Ionization Mass Spectrometry

Yiquan Liu, Huihui Li, Yunhua Ye, Gu Yuan\*  
*Chin. Chem. Lett.*, **2009**, 20, 330-333.

65 ESI-MS/MS

\*, , , , , ,  
, **2009**, 30 ( ), 9-10.

66 Highly Efficient and Low-Cost Purification of Lysozyme: A Novel Tris(hydroxymethyl)aminomethane Immobilized Affinity Column

Li Quan, Qing Cao, Zhiyu Li, Na Li, Kean Li, Feng Liu\*  
*J. Chromatogr. B*, **2009**, 877, 594-598.

67 Real-time Molecular Recognition between Protein and Photosensitizer of Photodynamic Therapy by Quartz Crystal Microbalance Sensor

Yu Yang, Yuanyuan Long, Zhiyu Li, Na Li, Kean Li, Feng Liu\*  
*Anal. Biochem.* **2009**, *392*, 22-27.

68 A Simple Fabrication of Electrospun Nanofiber Sensing Materials Based on Fluorophore-doped Polymer

Yufei Yang, Xing Fan, Yuanyuan Long, Kai Su, Dechun Zou, Na Li, Jiang Zhou, Kean Li, Feng Liu\*  
*J. Mater. Chem.* **2009**, *19*, 7290-7295.

69 Determination of Human Urinary Kanamycin in One Step Using Urea-enhanced Surface Plasmon Resonance Light-Scattering of Gold Nanoparticles

Xinyi Wang, Mingjian Zou, Xiao Xu, Rong Lei, Kean Li, Na Li\*  
*Anal. Bioanal. Chem.* **2009**, *395*, 2397-2403.

70 Gold Nanoparticle Based Plasmon Resonance Light-Scattering Method as a New Approach for Glycogen-Biomacromolecule Interactions

Minghui Xiang, Xiao Xu, Feng Liu, Na Li\*, Kean Li  
*J. Phys. Chem. B*, **2009**, *113*, 2734-2738.

71 Electrogenerated Chemiluminescence of Ruthenium (II) Bipyridyl Complex Directly Immobilized on Glassy Carbon Electrodes

Minghui Xiang, Rong Lei, Na Li\*, Kean Li\*  
*J. Appl. Electrochem.* **2009**, *39*, 921-925.

72 CE-MS analysis of heroin and its basic impurities using charged polymer-protected gold nanoparticles-coated capillary

Zhengxiang Zhang, Bo Yan, Kelin Liu, Yiping Liao, Huwei Liu\*  
*Electrophoresis*, **2009**, *30*, 379–387.

73 Chiral separation of Ralitrexed by cyclodextrin-modified micellar electrokinetic chromatography

Yi Liu, Xiaofang Fu, Chao Ma, Jiasheng Zhong, Huwei Liu\*  
*Anal. Bioanal. Chem.*, **2009**, *393*, 321–326.

74 Enantioseparation of zolmitriptan and determination of binding constants and thermodynamic parameters by CD-modified CZE

NanNan Pang, Zhengxiang Zhang, Huwei Liu\*  
*Anal. Bioanal. Chem.*, **2009**, *393*, 313-320.

75 Analysis of aristolochic acids by capillary electrophoresis - mass spectrometry with carboxymethyl chitosan-coated capillary

Xiaofang Fu, Yi Liu, Wei Li, Yu Bai, Maolin Zhai, Huwei Liu\*  
*Electrophoresis* **2009**, *30*, 1783–1789.

76 Real-Time Monitoring of the Activity and Kinetics of T4 Polynucleotide Kinase by a Singly Labeled DNA-Hairpin Smart Probe Coupled with Exonuclease Cleavage  
Chen Song, Meiping Zhao\*  
*Anal. Chem.*, **2009**, *81*, 1383–1388.

77 Combination of On-Chip Field Amplification and Bovine Serum Albumin Sweeping for Ultra-Sensitive Detection of Green Fluorescent Protein  
Qiong Pan, Meiping Zhao\*, Shaorong Liu\*  
*Anal. Chem.*, **2009**, *81*, 5333-5341.

78 Fabrication of a surface imprinted hydrogel shell over silica microspheres using bovine serum albumin as a model protein template  
Zhendong Hua, Shuang Zhou, Meiping Zhao\*  
*Biosens. Bioelectron.* **2009**, *25*, 615-622.

79 Singly labeled smart probes for real-time monitoring of the kinetics of dNTP misincorporation and single nucleotide extension in DNA intra-molecular polymerization  
Chen Song, Chen Zhang, Meiping Zhao\*  
*Biosens. Bioelectron.* **2009**, *25*, 301-305.

80 Cupric ion enhanced molecular imprinting of bovine serum albumin in hydrogel  
Shenghua Li, Jun Wang, Meiping Zhao\*  
*J. Sep. Sci.* **2009**, *32*, 3359-3363.

81 Molecular imprinting of protein by coordinate interaction  
Jun Wang, Zhen Dong Hua, Zhi Yong Chen, Yuan Zong Li, Meiping Zhao\*  
*Chin. Chem. Lett.* **2009**, *20*, 747-750.

82

\*

**2009** 37 1232-1239