

生物有机与分子工程学院 2010 年度汇报

1、本年度新增项目和合同经费数（万元）

			209972003	2010.01-2012.12	35
			20832003	2009.1-2012.12	160
			2010CB833200	2010.01-2011.12	50
		NSFC () ())	20920102030	2010.01-2012.12	99 万元
			21072009	2011.1-2013.12	38
	[3+2]		21072013	2009.1-2012.12	38
			51073001	2011.1-2013.12	38
			20925207	2010.01-2013.12	200
			21072010	2011.01-2013.12	38
	SPR		20975006	2010.1-2012.12	35
			2009AA035200	2010.1-2012.12	20

()		863			
			20975004	2010.1-2012.12	35
	The Protective Effect of Flavonoids and Flavonoid Containing Toothpastes on Human Oral Mucosal Cells			2010.8-2010.12	16.04
			21027012	2011.01-2013.12	200
				2010.01-2011.12	90
			20975007B050905	2010.1-2012.12	36
				2010.01-2011.12	90 30
			21002003	2011.1-2013.12	21
	HDAC		91013003	2011.1-2013.12	70
	DNA	“ ”		2009.12	200
			2009ZX09301-01	2010.10-2011.8	15

			0-P1-11		
		973	2011CB809100	2011.1-2013.12	125
			22		1580 04

2、本年度获奖情况（其中：国家级奖，省部级奖）

	2010		1
			1

3、本年度申请及授权专利数，请按如下格式排版：

申请(授权)号	申请(授权)日	申请(授 权)人	发明人	发明名称
201010177872.7	2010 5 14	王剑波	, ,	
201010177935.9	2010 5 14	王剑波		
PCT/CN2010/001301	2010 8 27	王剑波		
2010101107436	2010 2 9	张新祥		
201010226278.2	2010 7 14	张新祥		
ZL200610011570.6	2006 3 28	赵美萍		

	2010 1 20			
ZL200810114618.5	2008 6 11 2010 6 12	赵美萍		
201010554288.9	2010 11 19	赵美萍		α

4、人才培养情况：在站博士后、在读博士生、硕士生人数

毕业 博士研究生	在读 博士研究生	在读 硕士研究生	出站 博士后	在站 博士后
22	77	25	6	7

5、本年度发表论文，请严格按照如下格式排版：

- 1 Jianxin Zhang, Dazhi Yang, Zuo Xiao, Liangbing Gan*
The Chemistry of Open-cage Fullerene, Hydroxylamine Mediated Hole-closing and -opening Reactions,
2010, 1673-1677.
- 2 Zhongping Jiang, Zuo Xiao, Gaihong Zhang, Liangbing Gan,* Dian Wang, Wenxiong Zhang*,
Fullerenyl azide: synthesis and reactivity,
2010, 415-417.
- 3 Gang Zhang, Yun Liu, Dehai Liang,* Liangbing Gan,* Yuliang Li,
Facile Synthesis of Isomerically Pure Fullerenols and Formation of Spherical Aggregates from C-60(OH)(8),
2010, 5293-5295.
- 4 Dazhi Yang, Lijun Shi, Huan Huang, Jianxin Zhang, Liangbing Gan*,
Synthesis and Reactivity of 2H-Pyran Moiety in [60]Fullerene Cage Skeleton,
2010, 4567-4573.
- 5 Liangbing Gan,* Dazhi Yang, Qianyan Zhang, Huan Huang,
Preparation of Open-Cage Fullerenes and Incorporation of Small Molecules Through Their Orifices,
2010, 1498-1507.

- 6 Zuo Xiao, Jiayao Yao, Yuming Yu, Zhenshan Jia, Liangbing Gan*
Carving two adjacent holes on [60]fullerene through two consecutive epoxide to diol to dione transformations,
Chem. Commun. **2010**, 8365–8367.
- 7 Qianyan Zhang, Tobias Pankewitz, Shuming Liu, Wim Klopper,* Liangbing Gan*
Switchable Open-Cage Fullerene for Water Encapsulation,
Chem. Commun. **2010**, 9935–9938.
- 8 Development of New Stereodiverse Diaminocyclitols as Inhibitors of Influenza Virus Neuraminidase
Yi Cui, Zhaodong Jiao, Jianxian Gong, Quan Yu, Xiaofeng Zheng, Junmin Quan, Ming Luo and Zhen Yang
Chem. Commun. **2010**, 4–7.
- 9 Construction of All-Carbon Quaternary Center by R₂AlCl–Mediated Ring-Opening Reaction of Oxacycles
Chao Che, Lianzhu Liu, Jianxian Gong, Yunfang Yang, Guoxin Wang, Junmin Quan and Zhen Yang
Chem. Commun. **2010**, 488–491.
- 10 Benzo[e]isoindole-1,3-diones as Potential Inhibitors of Glycogen Synthase Kinase-3 (GSK-3). Synthesis, Kinase Inhibitory Activity, Zebrafish Phenotype, and Modeling of Binding Mode
Haixia Zou, Liyan Zhou, Yuanzhen Li, Yi Cui, Hanbing Zhong, Zhengying Pan, Zhen Yang and Junmin Quan
Chem. Commun. **2010**, 994–1003.
- 11 A Thiourea-Oxazoline Library with Axial Chirality: Ligand Synthesis and Studies of the Palladium-Catalyzed Enantioselective Bis(methoxycarbonylation) of Terminal Olefins
Yingxiang Gao, Le Chang, Hang Shi, Bo Liang, Kittiya Wongkhan, Duangduan Chaiyaveij, Andrei.S. Batsanov, Todd.B. Marder, Chuangchuang Li, Zhen Yang and Yong Huang
Chem. Commun. **2010**, 1955–1966.
- 12 An unprecedented silver salt effect switches the facial selectivity in the vinylogous Mukaiyama aldol reaction
Yufan Liang, Lin Wang, Rong Zhu, Lujiang Deng, Yunfang Yang, Junmin Quan, Jiahua Chen and Zhen Yang
Chem. Commun. **2010**, 2387–2393.

- 13 Asymmetric Total Synthesis of Caribenol A
Lianzhu Liu, Jingchun Han, Guozong Yue, Chuangchuang Li and Zhen Yang
2010, 13608-13609.
- 14 Total Synthesis of ($\pm$) Maoecrystal V
Jianxian Gong, Guang Lin, Wenbo Sun, Chuang-Chuang Li and Zhen Yang
2010, 16745-16746.
- 15 1,4-Dilithio-1,3-dienes: Reaction and Synthetic Applications
Zhenfeng Xi*
2010, 1342-1351.
- 16 Cleavage and Re-organization of Zr-C/Si-C Bonds Leading to Zr/Si-N
Organometallic and Heterocyclic Compounds
Shaoguang Zhang, Wen-Xiong Zhang, Jing Zhao, and Zhenfeng Xi*
2010, 14042-14045.
- 17 Efficient One-Pot Synthesis of N-Containing Heterocycles by Multicomponent
Coupling of Silicon-Tethered Dienes, Nitriles, and Isocyanides through
Intramolecular Cyclization of Iminoacyl-Zr Intermediates
Shaoguang Zhang, Wen-Xiong Zhang, and Zhenfeng Xi*
2010, 8419-8426. (VIP Highlight)
- 18 Selective synthesis of dibenzo[a,c]cyclooctatetraenes via palladium-catalyzed
[4+4] cyclic homocoupling of borylvinyl iodobenzene derivatives
Hui-jun Zhang, Junnian Wei, Fei Zhao, Yun Liang, Zitao Wang, Zhenfeng Xi*
2010, 7439-7441.
- 19 Formation of α -Lithio Siloles from Silylated 1,4-Dilithio-1,3-butadienes:
Mechanism and Applications
Qian Luo, Chao Wang, Li Gu, Wen-Xiong Zhang, and Zhenfeng Xi*
2010, 1120-1128.
- 20 Isolation and X-ray Structure of a Trimeric 1,4-Dilithio-1,3-butadiene and a
Dimeric Me₃Si-Substituted 1,4-Dilithio-1,3-butadiene
Lantao Liu, Wen-Xiong Zhang,* Qian Luo, Heng Li, and Zhenfeng Xi*
2010, 278-281.
- 21 Zn(OTf)₂-Catalyzed Addition of Amines to Carbodiimides: Efficient Synthesis of
Guanidines and Unpredicted Formation of Zn-N Amido Species
Dongzhen Li, Jie Guang, Wen-Xiong Zhang,* Yang Wang, and Zhenfeng Xi*
2010, 1816-1820.
- 22 Advances in the syntheses of six-membered metallacycles

- Qifeng Wang, Chen Lin, Zhenfeng Xi*
2010, , 157–166.
- 23** Advances in the Synthesis and Reactivity of 2-Pyranylidene Carbene Complexes
Qifeng Wang, Wen-xiong Zhang, Chen Lin, and Zhenfeng Xi*
. **2010**, , 2915-2923.
- 24** Lei Zhou, Fei Ye, Yan Zhang, Jianbo Wang*
Pd-Catalyzed Three-Component Coupling of N-Tosylhydrazone, Terminal Alkyne, and Aryl Halide
2010, , 13590-13591.
- 25** Changkun Li, Yi Zeng, Hang Zhang, Jiajie Feng, Yan Zhang and Jianbo Wang*
Gold(I)-Catalyzed Cycloisomerization of Enynes Containing Cyclopropenes
2010, , 6413-6417.
- 26** Changkun Li, Hang Zhang, Jiajie Feng, Yan Zhang and Jianbo Wang*
Rh(I)-catalyzed carbonylative carbocyclization of tethered ene- and yne-cyclopropenes
2010, , 3082-3085.
- 27** Di Qiu, Fanyang Mo, Zhitong Zheng, Yan Zhang and Jianbo Wang*
Gold(III)-Catalyzed Halogenation of Aromatic Boronates with N-Halosuccinimides
2010, , 5474-5477.
- 28** Xia Zhao, Guojiao Wu, Chong Yan, Kui Lu, Hui Li, Yan Zhang and Jianbo Wang*
Microwave-Assisted, Pd(0)-Catalyzed Cross-Coupling of Diazirines with Aryl Halides
2010, , 5580-5583.
- 29** Jie Ma, Lingling Peng, Xiu Zhang, Zhe Zhang, Melody Campbell and Jianbo Wang*
InI₃- or ZnI₂-Catalyzed Reaction of Hydroxylated 1,5-Allenynes with Thiols: a New Access to 3,5-Disubstituted Toluene Derivatives
2010, (10), 2214-2220.
- 30** Guobing Yan, Yubo Jiang, Chunxiang Kuang,* Shuai Wang, Haichao Liu, Yan Zhang and Jianbo Wang*
Nano-Fe₂O₃-catalyzed Direct Borylation of Arenes
2010 , 3170-3172.
- 31** Guobing Yan, Chunxiang Kuang, Yan Zhang and Jianbo Wang*

Palladium-Catalyzed Direct Cyanation of Indoles with $K_4[Fe(CN)_6]$
2010, , 1052-1055.

- 32** Fanyang Mo, Yubo Jiang, Di Qiu, Yan Zhang and Jianbo Wang*
Direct Conversion of Arylamines to the Pinacol Boronates: A Metal-Free
Borylation Process
2010, , 1846-1849.
- 33** Fanyang Mo, Jerry Mingtao Yan, Di Qiu, Fei Li, Yan Zhang and Jianbo Wang*
Gold-Catalyzed Halogenation of Aromatics by α -Halosuccinimides
2010, , 2028-2032.
- 34** Fanyang Mo, Fei Li, Di Qiu and Jianbo Wang*
Enantioselective Synthesis of Condensed and Transannular Ring Skeletons
Containing Pyrrolidine Moiety
, **2010**, , 1274-1279.
- 35** Fangyang Mo, Fei Li and Jianbo Wang*
Diastereoselective Addition of Lithium Enolate of γ -Substituted α -
Diazoacetoacetate to α -Sulfinyl Imines
2010, 55, 2847-2854.
- 36** Xia Zhao, Jing Jing, Kui Lu, Yan Zhang and Jianbo Wang*
Pd-Catalyzed Oxidative Cross-Coupling of α -Tosylhydrazones with
Arylboronic Acids
2010, , 1724-1726.
- 37** Zhenhua Zhang, Yiyang Liu, Mingxing Gong, Xiaokun Zhao, Yan Zhang and
Jianbo Wang*
Palladium-Catalyzed Carbonylation/Acyl Migratory Insertion Sequence.
2010, , 1139-1142.
- 38** Yan Zhang and Jianbo Wang*
Catalytic [2,3]-Sigmatropic Rearrangement of Sulfur Ylide Derived from Metal
Carbene
2010, , 941-953.
- 39** Zhenhua Zhang, Weifeng Shi, Jian Zhang, Bo Zhang, Bingge Liu, Yiyang Liu
Bo Fan, Fengping Xiao, Feng Xu and Jianbo Wang*
Rh(II)-Catalyzed Reaction of α -Diazocarbonyl Compounds bearing
 β -Trichloroacetyl amino Substituent: C-H Insertion versus 1,2-H Shift
2010, , 1112-1119.
- 40** Cheng Peng, Guobin Yan, Yan Wang, Yubo Jiang, Yan Zhang and Jianbo Wang*

Palladium-Catalyzed Coupling Reaction of α -Diazocarbonyl Compounds with

Changxia Yuan, Lei Jiao, and Zhi-Xiang Yu*

2010, 51, 5674.

- 49** Highly Efficient and Color-Stable Deep-Blue Organic Light-Emitting Diodes Based on a Solution-Processible Dendrimer

Lei Wang, Yang Jiang, Jia Luo, Yan Zhou, Junhong Zhou, Jian Wang,* Jian Pei,* and Yong Cao

2009, , 4854-4857.

- 50** High-Performance Organic Field-Effect Transistors from Organic Single-Crystal Microribbons Formed by a Solution Process

Yan Zhou, Ting Lei, Lei Wang, Jian Pei,* Yong Cao, and Jian Wang*

2010, , 1484-1487.

- 51** Surface Modification of Self-Assembled One-Dimensional Organic Structures: White-Light Emission and Beyond

Xiao Wang, Jing Yan, Yan Zhou, and Jian Pei

2010, 15872–15874.

- 52** Solution-Processable Flower-Shaped Hierarchical Structures: Self-Assembly, Formation, and State Transition of Biomimetic Superhydrophobic Surfaces

Jie Yin, Jing Yan, Ming He, Yanlin Song,* Xiaoguang Xu, Kai Wu,* and Jian Pei*

2010, 7309-7318.

- 53** Smart Macrocyclic Molecules: Induced Fit and Ultrafast Self-Sorting Inclusion Behavior through Dynamic Covalent Chemistry

Ji-Ming Han, Jin-Long Pan, Ting Lei, Chenjiang Liu,* and Jian Pei

2010, 13850-13861.

- 54** Structural-Property Relationship in Pyrazino[2,3-g]quinoxaline Derivatives: Morphology, Photophysical, and Waveguide Properties

Xiao Wang, Yan Zhou, Ting Lei, Nan Hu, Er-Qing Chen,* and Jian Pei*

2010, 3735–3745.

- 55** CdSe/ZnS Nanoparticle Composites with Amine-Functionalized Polyfluorene Derivatives for Polymeric Light-Emitting Diodes: Synthesis, Photophysical Properties, and the Electroluminescent Performance

Zhen-Shan Guo, Lihua Zhao, Jian Pei,* Zhang-Lin Zhou,* Gary Gibson, James Brug, Sity Lam,[‡] and Samuel S. Mao*

2010, 1860–1866.

- 56** A photoswitch based on self-assembled single microwire of a phenyleneethynylene macrocycle

Jia Luo, Qifan Yan, Yan Zhou, Ting Li, Ninbo Zhu, Chuanjiang Bai, Yong Cao, Jian Wang,* Jian Pei,* and Dahui Zhao*

2010, 5725–5727.

- 57** Copper-free cycloaddition of azide and alkyne in crystalline state facilitated by arene-perfluoroarene interactions

Ben-Bo Ni, Chong Wang, Huixian Wu, Jian Pei,* and Yuguo Ma*

2010, 782–784.

- 58** Polycyclic Imide Derivatives: Synthesis and Effective Tuning of Lowest Unoccupied Molecular Orbital Levels through Molecular Engineering

Lin Ding, Han-Ze Ying, Yan Zhou, Ting Lei, and Jian Pei*

2010, 5522-5525.

- 59** Benzothiadiazole-Based D- π -A- π -D Organic Dyes with Tunable Band Gap: Synthesis and Photophysical Properties

Jin-Liang Wang, Qi Xiao, and Jian Pei*

2010, 12,4164-4167.

- 60** Solution-Processed Bulk-Heterojunction Photovoltaic Cells Based on Dendritic and Star-Shaped D- π -A Organic Dyes

Jin-Liang Wang, Zhicai He, Hongbin Wu, Haibo Cui, Yan Li, Qihuang Gong,* Yong Cao,* and Jian Pei*

2010 5

- 61** Solution-processed bulk heterojunction photovoltaic cells from gradient π -conjugated thienylene vinylene dendrimers

Jin-Liang Wang, Chengmei Zhong, Zheng-Ming Tang, Hongbin Wu, Yuguo Ma,* Yong Cao,* and Jian Pei*

. **2010,**

- 62** Benzothiadiazole Containing D- π -A Conjugated Compounds for Dye-Sensitized Solar Cells: Synthesis, Properties, and Photovoltaic Performances

Zheng-Ming Tang, Ting Lei, Ke-Jian Jiang,* Yan-Lin Song, and Jian Pei*

2010, , 1911-1917.

- 63** Solvent-Controlled 2D Host-Guest (2,7,12-Trihexyloxytruxene/Coronene) Molecular Nanostructures at Organic Liquid/Solid Interface Investigated by Scanning Tunneling Microscopy

J. Liu, X. Zhang, H. -J. Yan, D. Wang, Jie-Yu Wang, Jian Pei,* and Li-Jun Wan*

2010, 8195–8200.

- 64** A Solution Process for Size-Controlled Growth and Transfer of Organic Nanostructures with Manufacture Scalability

Qili Niu, Yan Zhou, Lei Wang, C. Luo, Jia Luo, Junbiao Peng, Yong Cao, Jian Pei,* and Jian Wang*
2010, 5213–5216.

- 65** Star-Shaped Donor- π -Acceptor Conjugated Molecules: Synthesis, Properties, and Modification of Their Absorptions Features
Zheng-Ming Tang, Ting Lei, Jin-Liang Wang, Yuguo Ma,* and Jian Pei*
2010, 3644–3655.
- 66** Highly stable blue light-emitting materials with a three-dimensional architecture: improvement of charge injection and electroluminescence performance
Ting Lei, Jia Luo, Lei Wang, Yuguo Ma,* Jian Wang,* Yong Cao, and Jian Pei*
2010, 699–707.
- 67** A co-assembly system of an aromatic donor and acceptor: charge transfer, electric bistability and photoconductivity
Jia Luo, L Chen, Jie-Yu Wang, Ting Lei, Li-Yi Li, Jia Pei,* and Yanlin Song*
2010, 2530–2533.
- 68** Chromophore-functionalized dendrimers for sensing applications
Jing Yan, and Jian Pei*
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- 69** Organopalladium(IV) Chemistry
Lin-Min Xu, Bi-Jie Li, Zhen Yang and Zhang-Jie Shi
2010, 712-733.
- 70** Biaryl Construction through Kumada Coupling with Diaryl Sulfates as One-by-One Electrophiles under Mild Conditions
Bing-Tao Guan, Xin-Yu Lu, Yand Zheng, Da-Gang Yu, Tong Wu, Kun-Lin Li, Bi-Jie Li and Zhang-Jie Shi
2010, 396-399.
- 71** Pd-Catalyzed C-H Functionalizations of α -Methyl Oximes with Arylboronic Acids.
Chang-Liang Sun, Na Liu, Bi-Jie Li, Da-Gang Yu, Yang Wang and Zhang-Jie Shi,
2010, 184-187.
- 72** Pd-Catalyzed oxidative coupling with organometallic reagents via C-H activation.
Chang-Liang Sun, Bi-Jie Li and Zhang-Jie Shi
2010, 677-685.

- 73 Nickel-Catalyzed Efficient and Practical Suzuki-Miyaura Coupling of Alkenyl and Aryl Carbamates with Aryl Boroxines
Li Xu, Bi-Jie Li, Zhen-Hua Wu, Xin-Yu Lu, Bing-Tao Guan, Bi-Qin Wang, Ke-Qing Zhao and Zhang-Jie Shi
2010, , 884-887
- 74 Construction of Polysubstituted Olefins through Ni-Catalyzed Direct Activation of Alkenyl C-O of Substituted Alkenyl Acetates.
Chang-Liang Sun, Yang Wang, Xiao Zhou, Zhen-Hua Wu, Bi-Jie Li, Bing-Tao Guan and Zhang-Jie Shi
2010, , 5844-5847.
- 75 Direct Application of Phenolic Salts to Nickel-Catalyzed Cross-Coupling Reactions with Aryl Grignard Reagents
Da-Gang Yu, Bi-Jie Li, Shua-Fang Zheng, Bing-Tao Guan, Bi-Qin Wang and Zhang-Jie Shi
Angew. Chem. Int. Ed. **2010**, *49*, 4566-4570.
- 76 Oxidative dimerization of N-protected and free indole derivatives toward 3,3'-biindoles Pd-catalyzed direct C-H transformations.
Yand Li , Wen-Hua Wang, Shang-Dong Yang, Bi-Jie Li, Chun Feng and Zhang-Jie Shi
2010, , 4553-4555
- 77 An efficient organocatalytic method for constructing biaryls through aromatic C-H activation.
Chang-Liang Sun, Hu Li, Da-Gang Yu, Miao Yu, Xiao Zhou, Xin-Yu Lu, Kun Huang, Shu-Fang Zheng, Bi-Jie Li and Zhang-Jie Shi
2010, , 1044-1049.
- 78 LiCl-Promoted Pd(II)-catalyzed ortho carbonylation of N,N-dimethylbenzylamines
Hu Li, Gui-Xin Cai and Zhang-Jie Shi
2010, 39, 10442-10446. (Invited)
- 79 Palladium-Catalyzed C—C Bonds Formation Reactions via Selective C—H Bonds Functionalization
Hu Li and Zhang-Jie Shi
2010, , 1414-1433. (Invited)
- 80 An unexpected palladium migration from vinylic sp^2 carbon to allylic sp^3 carbon
Bi-Jie Li and Zhang-Jie Shi
2010, , 2807-2810. (Invited)

- 81 Amplified QCM-D Biosensor for Protein Based on Aptamer-Functionalized Gold Nanoparticles
Qiang Chen, Wei Tang, Dingzhong Wang, Xiaojie Wu, Na Li, Feng Liu*
2010, , 575–579.
- 82 Direct Determination of Urinary Lysozyme Using Surface Plasmon Resonance Light-Scattering of Gold Nanoparticles
Xinyi Wang, Yao Xu, Xiao Xu; Ke Hu, Minghui Xiang, Limei Li, Feng Liu, Na Li*
2010, , 693–697.
- 83 Quantitative Detection of Trace Systemins in Solanaceous Plants by Immunoaffinity Purification combined with LC/ESI QTOF MS
Fuyou Du, Yu Bai, Yu Bai, Huwei Liu
2010 9374–9383
- 84 Lipid profiling of rat peritoneal surface layers by online, normal- and reverse-phase 2D LC QToF-MS
Honggang Nie, Ranran Liu, Youyou Yang, Yu Bai, Yafeng Guan, Daqing Qian , Tao Wang , and Huwei Liu
2010 2833-2844
- 85 On-line concentration and determination of tobacco-specific N-nitrosamines by cation-selective exhaustive injection-sweeping-micellar electrokinetic chromatography
Youyou Yang, Honggang Nie, Chenchen Li, Yu Bai, Ning Li, Jie Liao, Huwei Liu
. **2010**, 82, 1797-1801
- 86 Fragmentation study of two brassinolides by ion trap multiple mass spectrometry
Feifeng Huo, Yu Bai, Huwei Liu
2010 2219–2224
- 87
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2010 1459-1464.
- 88 Determination strategies of phytohormones: recent advances
Yu Bai, Fuyou Du, Yu Bai and Huwei Liu
2010, , 1867–1873
- 89 Recent advances of chromatography and mass spectrometry in lipidomics

Min Li, Zhigui Zhou, Honggang Nie, Yu Bai, Huwei Liu

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- 90** Electrospray ionization mass spectrometry probing of formation and recognition of the G-quadruplex in the proximal promoter of the human vascular endothelial growth factor gene
Huihui Li, Gu Yuan*
., **2010**, , 2030-2034.
- 91** Probing the binding affinity of small-molecule natural products to the G-quadruplex in C-myc oncogene by electrospray ionization mass spectrometry
Yiquan Liu, Bo Zheng, Xiaojie Xu and Gu Yuan*
., **2010**, , 3071-3075.
- 92** Investigation of the formation and recognition of a dimeric G-quadruplex in the promoter of Bcl-2 proto-oncogene by electrospray ionization mass spectrometry,
Huihui Li, Qiang Zhang, Gu Yuan*
2010, , 393-395.
- 93** , , *, , G-
., **2010**, , 1082-1086.
- 94** Chemiluminescently labeled aptamers as the affinity probe for interaction analysis by capillary electrophoresis
Hong-Yi Li, Qin-Pei Deng, De-Wen Zhang, Ying-Lin Zhou, Xin-Xiang Zhang
2010, , 2452–2460.
- 95** Determination of epitestosterone in human urine by off-line immunoaffinity solid-phase extraction coupled with high performance liquid chromatography
Li Xu, Shuang Qiu, Cui-Jin Sun, Qin-Pei Deng, Hong-Xu Chen, Ying-Lin Zhou, Xin-Xiang Zhang
, **2010**, , 1443–1448.
- 96** Pseudo-homogeneous immunoextraction of epitestosterone from human urine samples based on gold-coated magnetic nanoparticles,
Shuang Qiu, Li Xu, Yi-Ran Cui, Qin-Pei Deng, Wei Wang, Hong-Xu Chen, Xin-Xiang Zhang
, **2010**, , 819–823.
- 97** Micropillar array chips toward new immunodiagnosis

Hong-Yi Li, Virginie Dauriac, Valerie Thibert, Helene Senechal, Gabriel Peltre, Xin-Xiang Zhang, Stephanie Descroix
, **2010**, , 2597–2604.

- 98** Fabrication of Biezymatic Glucose Biosensor Based on Novel Gold Nanoparticles-Bacteria Cellulose Nanofibers Nanocomposite
Wei Wang, Hong-Yi Li, De-Wen Zhang, Jing Jiang, Yi-Ran Cui, Shuang Qiu, Ying-Lin Zhou,* Xin-Xiang Zhang
, **2010**, , 2543-2550.

- 99** Biotemplated Synthesis of Gold Nanoparticle–Bacteria Cellulose Nanofiber Nanocomposites and Their Application in Biosensing
Taiji Zhang, Wei Wang, Dayong Zhang, Xinxiang Zhang, Yurong Ma, Yinglin Zhou, Limin Qi
2010, , 1152–1160

- 100** pH-Sensitive Water-soluble Nanospheric Imprinted Hydrogels Prepared as Horseradish Peroxidase Mimetic Enzyme
Zhiyong Chen, Li Xu, Yuan Liang, and Meiping Zhao
2010, 1488-1492.

- 101** Development of a High-throughput Screening Platform for DNA 3'-Phosphatases and Their Inhibitors Based on a Universal Molecular Beacon and Quantitative Real-time PCR
Chen Song, Chen Zhang, Meiping Zhao
2010, 1146-1151.

- 102** A simple and rapid competitive enzyme-linked immunosorbent assay (cELISA) for high-throughput measurement of secretory immunoglobulin A (sIgA) in saliva
Dan Wang, Jun-Qiao Zhuo, Mei-Ping Zhao
2010, 432-436.

- 103** Class-specific immunoaffinity monolith for efficient on-line clean-up of pyrethroids followed by high-performance liquid chromatography analysis
Yuan Liang, Shuang Zhou, Liming Hu, Lin Li, Meiping Zhao, Huwei Liu
2010, 278-282.

- 104**
2010, , 140-147.

- 105** Drug discovery by DNA programming
Yizhou Li, Zheng Zhu, and Xiaoyu Li

2010,
, ISBN-10: 184973125X. pp257-301.