



2005

2005 12 20

2005

- 1
- 2
- 3

1

2. 希望依托单位协助实验室做好研究队伍的整合工作，进一步提高实验室承担国家重大研究项目的能力。
3. 希望在学术委员会的指导下进一步明确实验室的定位和发展方向，向更高的目标努力。

2006

总经费	实验室 改建	2004 年论文奖 励	实验室仪器 运转	杂费	结余*
15	0	13.9 万	0.5 万	0.6 万	0 万

*2005 年主任基金拨款 15 万元。

2005

- 1) Nucleophilic Addition to C=O and C=N Bonds by the Nucleophiles Containing Diazo Group.
Yonghua Zhao, Jianbo Wang
2005, 2886-2892.
- 2) Reaction of β -Trimethylsiloxy α -Diazocarbonyl Compounds with Trimethylsilyl Halide: A Novel Diazo Decomposition Process.
Fengping Xiao, Zhenhua Zhang, Jian Zhang, Jianbo Wang
2005, , 8873–8875.
- 3) A new method for the synthesis of 2-cyclopenten-1-one-5-carboxylic ester derivatives via $\text{Rh}_2(\text{OAc})_4$ -mediated intramolecular C–H insertion reaction of 4 - β -vinyl- α -diazo- β - ketoesters.
Guisheng Deng,* Baihua Xu, Jianbo Wang
, 2005, , 10811-10817.
- 4) Highly Stereoselective [2,3]-Sigmatropic Rearrangement of Sulfur Ylide Generated through Cu(I) Carbene and Sulfides.
Ming Ma, Lingling Peng, Changkun Li, Xiu Zhang, Jianbo Wang
2005, , 15016-15017.
- 5) Stereoselective Intramolecular 1,3 C-H Insertion in Rh(II) Carbene Reactions.
Weifeng Shi, Bo Zhang, Jian Zhang, Bing Li, Shiwei Zhang, Jianbo Wang
2005, , 3103-3106.
- 6) Concise and Diastereoselective Approach to - and α -Hydroxy β -Amino Acid Derivatives
Yonghua Zhao, Nan Jiang, Shufeng Chen, Cheng Peng, Xiaomei Zhang, Yaping Zou, Shiwei Zhang and Jianbo Wang
2005, , 6546-6552.
- 7) 1,2-Vinyl and 1,2-Acetylenyl Migration in Rh(II) Carbene Reaction: Remarkable Bystander Effect
Weifeng Shi, Fengping Xiao and Jianbo Wang
2005, , 4218-4322.
- 8) 1,2-Thio Group Migration in Rh(II) Carbene Reactions
Feng Xu, Weifeng Shi, and Jianbo Wang
2005, , 4191-4194.
- 9) An Efficient Synthesis of Aryl α -Keto Esters
Ming Ma, Changkun Li, Lingling Peng, Fang Xie, Xiu Zhang and Jianbo Wang
2005, , 3927-3929.

- 10) 1,2-Shift in Organic Reactions
Weifeng Shi, Fengping Xiao, Jianbo Wang

2005, , 109-114.
- 11) Regioselective 1, 2-Addition of Ti(IV)-Enolate to α , β -Unsaturated Compounds
Guisheng Deng, Mingyi Liao, Xue Tian, Jianbo Wang
2005 589-592.
- 12) Zirconocene-mediated intermolecular coupling of Si-tethered diynes with alkynes, ketones, aldehydes, and isocyanates via novel skeletal rearrangement of zirconacyclobutene-silacyclobutene and zirconacyclohexadiene-silacyclobutene fused ring intermediates
Tao Yu, Xiaohua Sun, Congyang Wang, Liang Deng, and Zhenfeng Xi*
. 2005, , 1895-1902.
- 13) Cleavage of C-Si bond by intramolecular nucleophilic attack: lithiation-promoted formation of siloles from 1-bromo-4-tetrasubstituted silyl-1,3-butadiene derivatives
Zhihui Wang, Hongyun Fang, and Zhenfeng Xi*
. 2005, , 499-501.
- 14) Preparation and Electrophilic Cyclization of Multi-substituted Dienamides Leading to Cyclic Iminoethers
Congyang Wang, Jiang Lu, Guoliang Mao, and Zhenfeng Xi*
. 2005, , 5150-5156.
- 15) Lewis acid-promoted reactions of zirconacyclopentadienes with isocyanates. One-pot three-component synthesis of multiply substituted iminocyclopentadienes from one isocyanate and two Alkynes
Jiang Lu, Guoliang Mao, Wenxiong Zhang, and Zhenfeng Xi*
. 2005, 4848-4850.
- 16) New Methods for the Preparation of Multiply Substituted Cyclopentadienes and Related Compounds
Zhenfeng Xi*
2005, , 63-71.
- 17) Concise Synthesis of Multiply Substituted Stereodefined , -2,4-diene-1,6-dials, , -2,4-diene-1,6-diols and further applications
Guoliang Mao, Congyang Wang, Jinglong Chen, Ayako Muramatsu, and Zhenfeng Xi*
2005, , 5369-5372.
- 18) Tetramethyl Thiourea/ $\text{C}_{60}(\text{CO})_8$ -Catalyzed Pauson-Khand Reaction under Balloon Pressure of CO
Yefeng Tang, Lujiang Deng, Yandong Zhang, Guangbin dong, Jiahua Chen, and Zhen Yang
2005, , 593-595.

- 19) Copper-Free Sonogashira Coupling Reaction with PdCl₂ in –Water under Aerobic Conditions Bo Liang, Mingji Dai, Jiahua Chen, and Zhen Yang
2005, , 391-393.
- 20) A Highly Efficient Synthesis of the FGH Ring of Micrandilactone A. Application of Thioureas as Ligands in the Co-Catalyzed Pauson-Khand Reaction and Pd-Catalyzed Carbonylative Annulation Yefeng Tang, Yandong Zhang, Mingji Dai, Tuoping Luo, Lujiang Deng, Jiahua Chen, and Zhen Yang
2005, , 885-888.
- 21) Thioureas as Ligands in the Pd-Catalyzed Intramolecular Pauson- Khand Reaction Yefeng Tang, Lujiang Deng, Yandong Zhang, Guangbin dong, Jiahua Chen, and Zhen Yang
2005, , 1657-1659.
- 22) Pd-Catalyzed Copper-Free Carbonylative Sonogashira Reaction of Aryl Iodides with Alkynes for the Synthesis of Alkynyl Ketones and Flavones by Using Water as Solvern Bo Liang, Mengwei Huang, Zejin You, Zhengchang Xiong, Kui Lu, Reza Fathi, Jiahua Chen, and Zhen Yang
2005, , 6097-6100.
- 23) Exploring an Expedient IMDA Reaction Approach to Construct the Guanacastepene Core Chuang-Chuang Li, Shuang Liang, Xin-Hao Zhang, Zhi-Xiang Xie, Jia-Hua Chen, Yun-Dong Wu, and Zhen Yang
2005, , 3709-3712.
- 24) Linear -symmetric polycyclic benzodithiophene: efficient, highly diversified approaches and the optical properties Cui-Hua Wang, Rong-Rong Hu, Shuang Liang, Jia-Hua Chen, Zhen Yang and Jian Pei
2005, , 8153-8157.
- 25) A Concise and Diversity-Oriented Strategy for the Synthesis of Benzofurans and Indoles via Ugi and Diels-Alder Reactions Kui Lu, Tuoping Luo, Zheng Xiang, Zejin You, Reza Fathi, Jiahua Chen, and Zhen Yang
2005, 958-967.
- 26) Oligothiophene-Functionalized Truxene: Star-Shaped Compounds for Organic Field-Effect Transistors Yanming Sun, Kai Xiao, Yunqi Liu, Jinliang Wang, Jian Pei, Gui Yu, and Daoben Zhu
2005, ,
- 27) Nanosized π -Conjugated Molecules Based on Truxene and Porphyrin: Synthesis and High Fluorescence Quantum Yields Xiaofei Duan, Jinliang Wang, and Jian Pei
2005, , 4071-4074.

- 28) Single-Molecule Nanosized Polycyclic Aromatics with Alternant Five- and Six-Membered Rings: Synthesis and Optical Properties
Wei Zhang, Xiaoyu Cao, Hong Zi, and Jian Pei
2005, , 959-962.

- 29) Star-Shaped and Linear Nanosized Molecules Functionalized with Hexa- -hexabenzocoronene: Synthesis and Optical Properties
Xiaoyu Cao, Hong Zi, Wei Zhang, Hua Lu, and Jian Pei
2005, , 3645-3653.

- 30) Novel Highly fluorescent dendritic chiral amines: synthesis and optical properties
Hui Wang, Jinliang Wang, Sichun Yuan, Jian Pei, Weiwei Pei
, **2005**, , 8465-8474.

- 31) Linear C₂-symmetric polycyclic benzodithiophene: efficient highly diversified approaches and the optical properties
Cuihua Wang, Rongrong Hu, Shuang Liang, Jiahua Chen, Zhen Yang, and Jian Pei
, **2005**, , 8153-8157.

- 32) Preparation of [5,6]- and [6,6]-oxahomofullerene derivatives and their interconversion by lewis acid assisted reactions of fullerene mixed peroxides
Huang, SH; Xiao, Z; Wang, FD; Zhou, J; Yuan, G; Zhang, SW; Chen, ZF; Thiel, W; Schleyer, PV; Zhang, X; Hu, XQ; Chen, BC; Gan, LB
. **2005**, , 5449-5456.

- 33) Regiochemistry of [70]fullerene: Preparation of C-70((OOBu)-Bu-t)(n), (n = 2, 4, 6, 8, 10) through both equatorial and cyclopentadienyl addition modes
Xiao, Z; Wang, FD; Huang, SH; Gan, LB; Zhou, J; Yuan, G; Lu, MJ; Pan, JQ
. **2005**, , 2060-2066.

- 34) Asymmetric Henry reaction catalyzed by C₂-symmetric tridentate bis(oxazoline) and bis(thiazoline) complexes: metal-controlled reversal of enantioselectivity
Du, Da-Ming*; Lu, Shao-Feng; Fang, Tao; Xu, Jiayi*
2005, (9), 3712-3715.

- 35) Synthesis of C₃-Symmetric tris(β -hydroxy amide) ligands and their Ti(IV) complex-catalyzed enantioselective alkynylation of aldehydes
Fang, Tao; Du, Da-Ming*; Lu, Shao-Feng; Xu, Jiayi*
2005, (11), 2081-2084.

36)

- 45) Selective carbonyl propargylation mediated by SnCl₂/NiCl₂-KL in water
Wang J, Miao XP, Yuan G.
., 2005, (8), 611-614.
- 46) DNA
2005 834-840
- 47) N-DNA
2005 2267-2269
- 48) Microwave and photoirradiation-induced Staudinger reactions of cyclic imines and ketenes generated from α -diazoketones. A further investigation into the Stereochemical process
Liang, Yong; Jiao, Lei; Zhang, Shiwei; **Xu, Jiaxi**.
., 2005, , 334-337.
- 49) Mildly and highly selective reductive deoxygenation of -di- and monoalkylaminophenyl ketones by borane
Wei, Tiezheng; Lan, Yu; **Xu, Jiaxi**.
., 2005, , 2-5.
- 50) Rationale on abnormal effect of temperature on the enantioselectivity in the asymmetric borane reduction of ketones catalyzed by prolinol
Xu, Jiaxi; Wei, Tiezheng; Lin, Shrong-Shi; Zhang, Qihan
., 2005, , 180-186.
- 51) A structurally diverse heterocyclic library: A benzothiazepine-fused β -lactam library derived from reaction of 2,3-dihydro-1,5-benzothiazepines and acyl chlorides: synthesis and stereochemistry
Xu, Jiaxi.
., 2005, , 45-49.
- 52) Negative ion electrospray ionization mass spectrometry of -benzyloxycarbonyl protected 1-substituted and cyclic taurines
Xu, Jiaxi; Ma, Yuan; Xu, Shu; Zhao, Yufen
., 2005, , 1835-1838.
- 53) Differentiation of constitutional isomer of 2,2a,3,4-tetrahydro-4-methyl-2a-phenyl-2-(thiophen-2-yl)-1-azeto[2,1-[1,5]benzothiazepin-1-one-5-oxide and fragmentations of 2,3-dihydro-2,4-diphenyl-1,5-benzothiazepine-1-oxide/-1,1-dioxide
Xu, Jiaxi; Zuo, Gang; Liang, Bo
., 2005, , 274-279.

- 54) A new and expeditious synthesis of 1-substituted and cyclic taurines
Huang, Jiaxing; Wang, Fei; Du, Daming; **Xu, Jiaxi**
, 2005, , 2122-2128.
- 55) Mass spectrometry of 2a,4-disubstituted
5-benzoyl-2a,3,4,5-tetrahydro-2-phenoxy-azeto[1,2-][1,5]benzodiazepin-1(2)-ones under
electron impact ionization conditions
Xu, Jiaxi; Huang, Xu
, 2005, , 452-456.
- 56) Convenient and efficient synthesis of 1,1-bis-(4-alkylthiophenyl)-1-alkenes via tandem
Friedel-Crafts acylation and alkylation of sulfides and acyl chlorides
Xu, Jiaxi; Xia, Jiakun; Lan, Yu
, 2005, , 2347-2353.
- 57) The first synthesis of optically active 1-substituted taurines
Xu, Jiaxi; Xu, Shu; Zhang, Qihan
, 2005, , 466-471.
- 58) Chiral oxazaborolidine-catalyzed asymmetric borane reduction of alkyl 1-(4-dialkylaminophenyl)
ketones
Xu, Jiaxi; Lan, Yu; Wei, Tiezheng; Zhang, Qihan
, 2005, , 1457-1461.
- 59) Rational tuning chelate size of bis-oxazoline ligands to improve enantioselectivity in the
asymmetric aziridination of chalcones
Ma, Linge; Du, Daming; **Xu, Jiaxi**
, 2005, (24), 10155-10158.
- 60) Rigid backbone 1,8-anthracene-linked bis-oxazolines (AnBOXes): design, synthesis, application
and characteristics in catalytic asymmetric aziridination
Ma, Linge; Jiao, Peng; Zhang, Qihan; **Xu, Jiaxi**.
, 2005, , 3718-3734.
- 61) Mass spectrometric fragmentation of 2a,4-disubstituted
2,2a,3,4-tetrahydro-2-phenyl-1 -azeto[2,1-][1,5]benzothiazepin-1-ones under electron impact
ionization conditions and comparison with their 2-heteroatom substituted analogues
Xu, Jiaxi; Wang, Chao
, 2005, , 2779-2785.
- 62) Synthesis of 1-(-ethoxycarbonylamino)alkylphosphonic monoesters
Liu, H.; **Xu, Jiaxi**
, 2005, , 241-243.

- 63 Theoretical and experimental study of nicotinamide molecularly imprinted polymers with different porogens
Wu LQ, Zhu KC, Zhao WP, **Li YZ**.
 , 2005, 549 (1-2): 39-44.
- 64 Molecularly imprinted polymer with salicylaldehyde-Cu(OAc)(2) as template
Yang ML, **Li YZ**.
 , 2005, 18 (1): 103-108.
- 65) Sample preparation for pharmaceutical analysis
Xiaofang Fu, Yiping Liao and Huwei Liu*
 , 2005, , 75-77.
- 66) Separation and detection of erythropoietin (EPO) by CE and CE-MS
Bing Yu, Hailin Cong, Huwei Liu *, Yuanzong Li and Feng Liu
 , 2005, (4), 350-357.
- 67) Separation Methods for Toxic Components in Traditional Chinese Medicines
Wei Li, Weining Yue, Zheng Chen, Yiping Liao, Huwei Liu*
 , 2005, (9) 1019-1029.
- 68) Ionene-dynamically coated capillary for analysis of urinary and recombinant human erythropoietin by capillary electrophoresis and online electrospray ionization mass spectrometry
Bing Yu, Hailin Cong, Huwei Liu*, Yuanzong Li, Feng Liu
 , 2005, , 2390-2400.
- 69) A UNIVERSAL METHOD FOR THE DETERMINATION OF PHENOLIC ACIDS IN COMPOUND HERBAL DRUGS BY HPLC
Dawei Wen, Yuping Liu, Huwei Liu*
 , 2005, (17): 6624-6629.
- 70) 6,6-ionene CE CE-ESI-MS
*
 2005, , 487-491.
- 71) Ionic liquid-based aqueous two-phase system, a sample pretreatment procedure prior to high-performance liquid chromatography of opium alkaloids
Li, SH; He, CY; Liu, HW; Li, K; Liu, F
 , 2005, (1-2): 58-62.

- 72) Ionic liquid-salt aqueous two-phase system, a novel system for the extraction of abused drugs
Li, SH; He, CY; Liu, HW; Li, KA; Liu, F
, **2005**, (8): 1074-1076.
- 73) Extraction of testosterone and epitestosterone in human urine using aqueous two-phase systems of ionic liquid and salt
He, CY; Li, SH; Liu, HW; Li, K; Liu, F
, **2005**, (2): 143-149.
- 74) Selection of ligands for affinity chromatography using quartz crystal biosensor
Liu, Y; Tang, XL; Liu, F; Li, K
, **2005**, (13): 4248-4256.
- 75) Highly Selective Aerobic Oxidation of Alcohol Catalyzed by a Gold(I) Complex with an Anionic Ligand
Bingtao Guan, Dong Xing, Guixing Cai, Xiaobin Wan, Nan Yu, Zhao Fang, Liping Yang, and Zhangjie Shi
2005, , 18004-18005.
- 76) Novel efficient blue light-emitting conjugated polymers: synthesis, optical properties, and thermal optical stability
X.-Y. Cao, H. Zi, H. Lu, J. Pei
, **2005**, , 7-16.

2005

- 1 Lyle Isaacs Department of Chemistry and Biochemistry University of Maryland
Asymmetric heterofunctionalization of olefins: From hydrosilylation to hydrophosphination.
2005 1 11
- 2 Aiwen Lei Stanford University
Transition-metal Catalyzed Alder-ene Type Cycloisomerization of Enynes
2005 2 28
- 3 Kotohiro Nomura Nara Institute of Science and Technology
(Arylimido)vanadium complexes that exhibits unique characteristics for olefin coordination/insertion and metathesis polymerization. - First isolation example of "olefin metathesis active" vanadium-alkylidene
2005 2 28

- 4 Junzo Otera Okayama University of Science
Fluorous Organotin Catalysts
 2005 4 1
- 5 Wenyuan Qian UCLA, The Scripps Research Institute Amgen
From Molecular Surgery on C60 to Total Synthesis of "Unnatural" Natural Product -- Azaspiracid
 2005 4 22
- 6 Henri Rudler Laboratoire de Chimie Organique Universite P. et M. Curie
Biomimetic reduction of carbene complexes of tungsten and chromium. Synthesis of butenolides
 2005 4 27
- 7 I. P.
The 3D-structure of Glu-endopeptidase from B. Intermedius and its similarity to some viral enzymes
 2005 4 27
- 8 Ken S. Feldman The Pennsylvania State University, USA
Reaction Development and Natural Products Synthesis
 2005 5 12
- 9) Antonio Togni Swiss Federal Institute of Technology (ETH), Switzerland
Asymmetric heterofunctionalization of olefins: From hydrosilylation to hydrophosphination
 2005 5 20
- 10
Target-based Drug Discovery and Molecular Medicine
 2005 5 23
- 11 Wenfang Sun North Dakota State University
Development and Characterization of Metallo-Organic Complexes for Optical Limiting Applications
 2005 5 25
- 12 Armido Studer University of Munster, Germany
Radical Reactions in Organic Synthesis
 2005 5 27

13

1 Design and Synthesis of New Materials with Photodegradability and Light Emitting Capability

2 Modern Silicon-Controlled Organic Reactions and Their Mechanisms

2005 5 31

14 Dr. Qing Dai

Chemical Approach to Syntheses of Stable and Depurinating Adducts of o-Quinones with Deoxyadenosine and deoxyguanosine

2005 6 23

15 The Pennsylvania State University, USA

2005 7 6

16 Charles H. Winter Wayne State University, USA

Group 1 and 2 Metal Complexes Containing Nitrogen Rich Ligands

2005 7 8

17 University of Texas, USA

Bioorganic Chemistry of Enzyme Catalysis

2005 7 13

18 X. Peter Zhang , ,

Bio-Inspired Carbene and Nitrene Transfer Reactions by Metalloporphyrins

2005 7 27

19 Gregory C. Fu ,

Asymmetric Catalysis with "Planar -Chiral" Heterocycles

2005 8 15

20 RIKEN (The Institute of Physical and Chemical Research), JAPAN

Cationic Rare Earth Metal Alkyl Complexes as Novel Catalysts for Olefin Polymerization and Copolymerization

2005 8 19

21 CNRS, France

2005 8 19

22 Ran Hong Brandeis University, USA

Asymmetric Catalysis Enabled Biomimetic Synthesis of Sorbicillinoids

2005 9 21

23 Claude Lapinte CNRS- University of Rennes, France

Information Transfer in Ditopic Organometallic Complexes Mediated by Carbon Rich Bridges

2005 10 10

24 Johannes Teunis Zuilhof Wageningen University, Netherlands

Stability of Cations and Conjugated Materials

2005 10 12

25 Keiji Maruoka

Catalytic Asymmetric Synthesis with Designer Chiral Organocatalysts

2005 10 12

26 Feihe Huang () Virginia Polytechnic Institute & State University, USA

Supramolecular Chemistry with Cryptands: Improved Complexation of Paraquat Derivatives by the Formation of Cryptand Structures

2005 11 1

27 Hisashi Yamamoto

Acid Catalysis for Selective Organic Synthesis

2005 11 7

28

aldol

2005 11 8

29) Francine Agbossou-Niedercorn ; Laboratoire de Catalyse de Lille, France

Chiral auxiliaries from Amino Acids, Enantioselective Catalysis, and Key Intermediates: Recent Developments

2005 11 8

30

2005 11 17

31) Kuniaki Tatsuta

Total Synthesis and Developments of Bioactive Natural Products

2005 12 6

32 Weiping Tan

Palladium Catalyzed Enantioselective Synthesis of Bioactive Targets Chemical Genetic Dissection of Histone Modifications

2005 12 23
