



中山大學 化学学院

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基本情况

姓名：毛宗万

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职位：

现任中山大学化学与化学工程学院院长，教授，博士生导师

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教育经历

- 1982年获四川大学学士学位；
- 1991年获南京大学硕士学位；



- 1994年获南京大学博士学位；
- 1995—1996年在中山大学作博士后研究；
- 1997—1998年在德国埃尔兰根-纽伦堡大学作洪堡访问学者。

工作经历

曾任中山大学化学与化学工程学院院长，教授，博士生导师。

讲授课程

《无机化学》、《配位化学与生物无机化学》、《综合化学实验》、《现代化学研究方法与技术》等本科生、研究生课程，参加编写《生物无机化学》研究生教材（科学出版社，2006），获中山大学许崇清教学奖，获省部级教学成果奖励2项。

科研方向

金属酶结构与功能的关系及其模拟、疾病诊断试剂及金属药物等。

科研项目

目前在研项目有：国家自然科学基金重点项目1项、港澳青年学者合作研究基金项目1项、广东省自然科学基金面上项目1项。

已在国内外各类杂志上发表论文50余篇，获专利1项。

获省部级科技成果奖励1项。

多次在国内外会议作邀请报告，多次参与组织国际性和全国性的学术会议。

获奖情况

获省部级科技成果奖励1项。

论著一览

1. Fu H, Zhou YH, Chen WL, Deqing ZG., Tong ML, Ji LN, **Mao ZW***, ‘Complexation, structure and SOD activity of the imidazolate-bridged dinuclear copper moiety with β -cyclodextrin and its guanidinium-containing derivative’ *J. Am.Chem. Soc.* 2006, in press.
2. An Y, Tong ML, Ji LN **Mao ZW***, ‘Double-strand DNA cleavage by copper complexes of



- 2,2' -dipyridyl with electropositive pendants' . J. Chem. Soc., **Dalton Trans.** 2006, in press.
3. Ding BB, Weng YQ, **Mao ZW**, Lam CK, Chen XM, Ye BH, 'Pillared-layer microporous metal-organic frameworks constructed by robust hydrogen bonds. Synthesis, characterization, and magnetic and adsorption properties of 2,2 '-biimidazole and carboxylate complexes' , **Inorg. Chem.** 2005, 28, 8836.
4. Liu XW, Li J, Deng H, Zheng KC, **Mao ZW**, Ji LN, 'Experimental and DFT studies on the DNA-binding trend and spectral properties of complexes [Ru(bpy)2L]2+' . **Inorg. Chem. Acta**, 2005, 358, 3311.
5. Fu H, Chen WL, Fu DG, Tong ML, Chen XM, Ji LN, **Mao ZW***, 'Synthesis, structure and magnetism of a \square 3-carbonato bridged nickel(II) complex with 2, 2' , 2' ' -tris(2-aminoethyl)amine ligand: a new coordination mode of carbonato bridge' . **Inorg. Chem. Commun.** 2004, 7, 1285.
6. Fu H, Liu XW, Zhou ZY, **Mao ZW***, Zheng KC, Chen XM*, 'A novel perchlorate-bridged tetranuclear zinc(II) structure with tris(2-aminoethyl)amine ligand' . **Inorg. Chem. Commun.** 2004, 7, 906.
7. Xu XM, Yao JH, **Mao ZW***, Yu KB, Ji LN*, 'DNA cleavage by a novel acyclic copper(II) complex' . **Inorg. Chem. Commun.** 2004, 7, 803.
8. Wei QH, Yin GQ, Zhang LY, Shi LX, **Mao ZW***, Chen ZN*, 'Luminescent AgI-CuI Heterometallic Hexa-, Octa-, and Hexadecanuclear Alkynyl Complexes" . **Inorg. Chem.** 2004, 43, 3484.
9. Xu XM, **Mao ZW***, Ji LN, 'Syntheses, characteriation and DNA cleavage studies of acyclic copper(II) complexes' .**Transition Metal Chem.** 2004, 29, 658.
10. Wang L, Cai JW, **Mao ZW**, Feng XL, Huang JW, 'Dinickel complexes bridged by unusual (N,O,O ')-coordinated alpha-amino acids: syntheses, structural characterization and magnetic properties' . **Transition Metal Chem.** 2004, 29, 411.



11. **Mao ZW**, Fu H, Xu XM, Li J, Liu SD, Deng SY, Ji LN. 'Model study for the bio-coordination sphere of active center in carbonic anhydrase and application into DNA cleavage study' . *J. Inorg. Biochem.* 2003, 96, 59.
12. Lu TB, Chen S, **Mao ZW**, Martell AE, Ji LN. 'Macrocyclic dinuclear copper(II) complex with a novel chloride bridged zigzag chain' . *Inorg. Chem. Commun.* 2003, 6, 1068.
13. Erras-Hanauer H, **Mao ZW**, Liehr G, Clark T, van Eldik R. 'Structures of carbonato and bicarbonato complexes of bis(1,10-phenanthroline)zinc(II): Experiment and theory' . *Eur. J. Inorg. Chem.* 2003, 1562.
14. Lu TB, Xiang H, Luck RL, Jiang L, **Mao ZW**, Ji LN. '[NiL](3)[BTC](2)center dot 14H(2)O [L=3,10-bis(2-ethyl)-1,3,5,8,10,12-exaaazacyclotetradecane, BTC = 1,3,5-benzenetricarboxylate]: synthesis, structure and unique selective guest molecule absorption properties' . *New J. Chem.* 2002, 26, 969.
15. Chen S, Lu TB, Feng XL, Li YW, **Mao ZW**, Ji LN. 'Synthesis, structure and stability of binuclear metal complexes with macrocyclic ligand' . *Chem. J. Chinese U.* 2002, 23, 1004.
16. Liu J, Lu TB, Xiang H, **Mao ZW**, Ji LN. 'Synthesis and X-ray crystal structures of one-dimensional coordination polymers of macrocyclic copper(II) and nickel(II) complexes' . *CrystEngComm*, 2002, 1.
17. **Mao ZW**, Heinemann FW, Liehr G, van Eldik R, , Complex-formation reactions of Cu(II) and Zn(II) 2,2'-bipyridine and 1,10-phenanthroline complexes with bicarbonate. Identification of different carbonate coordination modes' . *J Chem Soc Dalton Trans.* 2001, 3652.
18. Chen HJ, **Mao ZW**, Gao S, Chen XM., 'Ferrimagnetic-like ordering in a unique three-dimensional coordination polymer featuring mixed azide/carboxylate-bridged trinuclear manganese(II) clusters as subunits. *Chem Commun'* . 2001, 2320.
19. Lu TB, Xiang H, Luck RL, **Mao ZW**, Wang D, Chen C, Ji LN. 'A two-dimensional coordination polymer with a brick wall structure and hydrophobic channels: synthesis and



- structure of a macrocyclic nickel(II) complex with 1,3,5-benzenetricarboxylate' . **Crystengcomm**, 2001, 41.
20. Xiang H, Gao S, Lu TB, Luck RL, **Mao ZW**, Chen XM, Ji LN. '[NiL1](3)[Cr(CN)(6)](2)center dot 18H(2)O [L-1=3,10-bis(2-hydroxyethyl)- 1,3,5,8,10,12-hexaazacyclotetradecane]: a two-dimensional bimetallic assembly exhibiting antiferromagnetic ordering and metamagnetic behavior' . **New J. Chem.** 2001, 25, 875.
21. **Mao ZW**, Liehr G, van Eldik R 'Structural and mechanistic information on the reaction of bicarbonate with Cu(II) and Zn(II) complexes of tris(2-aminoethyl)amine. Identification of intermediate and product species' . **J. Chem. Soc. Dalton Trans.** 2001, 1593.
22. Lu TB, Xiang H, Ouyang FQ, **Mao ZW**, Ji LN. 'Synthesis, crystal structure and magnetic behaviour of three dimensional iron-cerium cyanide bridged bimetallic assembly' . **J. Rare Earth**: 2001, 19, 81.
23. Xiang H, Lu TB, Chen S, **Mao ZW**, Feng XL, Yu KB. 'Macrocyclic nickel(II) complexes with a folded conformation. Synthesis, properties and structures of [NiL(en)][Ni(en)(3)] (ClO₄)₄ and [(NiL)₂(mu-ox)](ClO₄)₂ (L=3,10-bis(2-hydroxyethyl) 1,3,5,8,10,12- hexaazacyclotetradecane, en = ethylenediamine, ox = ...' . **Polyhedron** 2001, 20, 313.
24. Lu TB, Xiang H, Su CY, Cheng P, **Mao ZW**, Ji LN. '[NiL](2)[Fe(CN)(6)]center dot 4H(2)O [L=3,10-bis(2-hydroxyethyl)- 1,3,5,8,10,12-hexaazacyclotetradecane]: a novel three-dimensional iron(II)-nickel(II) cyanide-bridged bimetallic assembly with a vat-like structure' . **New J. Chem.** 2001, 25, 216.
25. **Mao ZW**, Liehr G, van Eldik R 'Isolation and characterization of the first stable bicarbonato complexes of bis(1,10-phenanthroline)copper(II). Identification of Lipscomb- and Lindskog-like intermediates' . **J. Am. Chem. Soc.** 2000, 122, 4839.

相关成果



先后承担了省部级项目7项。

目前在研项目有：国家自然科学基金重点项目1项、港澳青年学者合作研究基金项目1项、广东省自然科学基金面上项目1项。

已在国内外各类杂志上发表论文50余篇，获专利1项。

获省部级科技成果奖励1项。

多次在国内外会议作邀请报告，多次参与组织国际性和全国性的学术会议。

