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### 教育背景

2000年9月–2003年7月 南开大学，无机化学专业，博士学位  
 1991年9月–1994年7月 天津师范大学，无机化学专业，硕士学位  
 1987年9月–1991年7月 天津师范大学，化学专业，学士学位

### 工作经历

2014年5月–2021年3月 药学院副院长、药学院党委委员  
 2010年7月–2011年7月 美国麻省理工学院 (MIT) 化学系，访问教授  
 2004年9月–2005年8月 德国李比希大学 (Justus-Liebig-University), DFG 资助，博士后  
 2003年10月–2004年9月 法国巴黎十一大学 (University Paris-sub XI) 分子材料研究所，博士后  
 2006年10月–至今 天津医科大学药学院，教授、博士生导师  
 2001年10月–2006年9月 天津医科大学药学院，副教授  
 1996年10月–2001年9月 天津医科大学药学院，讲师  
 1994年9月–1996年9月 天津医科大学药学院，助教

### 研究成果（本人具有代表性的论著、论文及主持的科研项目）

论著及编著

1. 《无机化学》(第7版) 人民卫生出版社 2016 ISBN 978-7-117-22036-1, 国家卫计委“十三五”规划教材, 全国高等医药教材建设研究会“十三五”规划教材, 全国高等学校药学类专业第八轮规划教材, 副主编。
2. 《无机化学学习指导与习题集》(第4版) 人民卫生出版社 ISBN 978-7-117-22402-4, 国家卫计委“十三五”规划教材, 全国高等医药教材建设研究会“十三五”规划教材, 全国高等学校药学类专业第八轮规划教材, 参编。
3. 《Activating Unreactive Substrates》WILEY-VCH, 2009年, ISBN 978-3-527-31823-0, 参编。

1. Xue-Qing Song,<sup>†</sup> Rui-Ping Liu,<sup>†</sup> Shu-Qing Wang,<sup>†</sup> Zhe Li, Zhong-Ying Ma, Ran Zhang, Cheng-Zhi Xie, Xin Qiao, and **Jing-Yuan Xu\***. Anticancer Melatplatin Prodrugs: High Effect and Low Toxicity, MT1-ER-Target and Immune Response In Vivo. *Journal of Medicinal Chemistry*, 2020, 63(11), 6096–6106.
2. Ran Zhang, Xue-Qing Song, Rui-Ping Liu, Zhong-Ying Ma, and **Jing-Yuan Xu\***. Fuplatin: an Efficient and Low-toxic Dual-prodrug. *Journal of Medicinal Chemistry*, 2019, 62(9), 4543–4554.
3. Xue-Qing Song<sup>1</sup>, Zhong-Ying Ma<sup>1</sup>, Yi-Gang Wu<sup>1</sup>, Miao-Liang Dai, Dong-Bo Wang, **Jing-Yuan Xu\***, Yangzhong Liu\*. New NSAID-Pt(IV) prodrugs to suppress metastasis and invasion of tumor cells and enhance anti-tumor effect *in vitro* and *in vivo*. *European Journal of Medicinal Chemistry*, 2019, 167, 377–387.
4. Zhen-Lei Zhang<sup>1</sup>, Chun-Lai Zhao<sup>1</sup>, Qian Chen, Kai Xu, Xin Qiao\*, **Jing-Yuan Xu\***. Targeting RNA polymerase I transcription machinery in cancer cells by a novel monofunctional platinum-based agent. *European Journal of Medicinal Chemistry*, 2018, 155, 434–444.
5. Zhong-Ying Ma<sup>1</sup>, Dong-Bo Wang<sup>1</sup>, Xue-Qing Song<sup>1</sup>, Qian Chen, Yi-Gang Wu, Chun-Lai Zhao, Jing-Yi Li, Shi-Hao Cheng, **Jing-Yuan Xu\***. Chlorambucil-conjugated platinum(IV) prodrugs to treat triple-negative breast cancer *in vitro* and *in vivo*. *European Journal of Medicinal Chemistry*, 2018, 157, 1292–1299.
6. Xue-Qing Song<sup>1</sup>, Ya-Hong Liu<sup>1</sup>, Jia Shao<sup>1</sup>, Zhen-Lei Zhang, Cheng-Zhi Xie, Xin Qiao, Wei-Guo Bao\*, **Jing-Yuan Xu\***. Rapid induction of apoptosis in tumor cells treated with a new platinum(II) complex based on amino-thiazolidinone. *European Journal of Medicinal Chemistry*, 2018, 157, 188–197.
7. Xiao-Jing Yan<sup>1</sup>, Zhe Li<sup>1</sup>, Hai-Bo Liu<sup>1</sup>, Zhi-Gang Wang, Jing Fan, Cheng-Zhi Xie\*, Qing-Zhong Li, **Jing-Yuan Xu\***. A chromone hydrazide Schiff base fluorescence probe with high selectivity and sensitivity for the detection and discrimination of human serum albumin (HSA) and bovine serum albumin (BSA). *Journal of Photochemistry and Photobiology A: Chemistry*, 2022, 422: 113576.
8. Xin Qiao<sup>1</sup>, Yu-Yang Gao<sup>1</sup>, Li-Xia Zheng, Xiao-Jing Ding, Ling-Wen Xu, Juan-Juan Hu, Wei-Zhen Gao\*, **Jing-Yuan Xu\***. Targeting ROS-AMPK pathway by multi-action Platinum(IV) prodrugs containing hypolipidemic drug bezafibrate. *European Journal of Medicinal Chemistry*, 2021, 223, 113730.
9. Wen-Hui Liao, Xue-Qing Song, Yan-Jie Kong, Rui-Dan Bao, Fang-Fang Li, Jie Zhou, Qi-Hua Zhao, **Jing-Yuan Xu\***, Ni Xie\*, Ming-Jin Xie\*. A novel Schiff base cobalt(III) complex induces a synergistic effect on cervical cancer cells by arresting early apoptosis stage. *BIOMETALS*, 2021, 34, 277-289.
10. Yong-Po Zhang<sup>1</sup>, Zhong-Ying Ma<sup>1</sup>, Pei-Pei Qiao, Chun-Yan Gao\*, Jin-Lei Tian\*, Jin-Zhong Zhao, Wei-Jun Du, Jing-Yuan Xu\*, Shi-Ping Yan. Design and biological evaluations of mono- and di-nuclear copper(II) complexes: Nuclease activity, cytotoxicity and apoptosis. *Polyhedron*, 2021, 193, 114880.
11. Zhong-Ying Ma<sup>1</sup>, Xue-Qing Song<sup>1</sup>, Juan-Juan Hu<sup>1</sup>, Dong-Bo Wang, Xiao-Jing Ding, Rui-Ping Liu, Miao-Liang Dai, Fan-Yin Meng, **Jing-Yuan Xu\***. Ketoplatin in triple-negative breast cancer cells MDA-MB-231: High efficacy and low toxicity, and positive impact on inflammatory microenvironment. *Biochemical Pharmacology*, 2021, 188, 114523.

12. Yong-Po Zhang, Zhong-Ying Ma, Pei-Pei Qiao, Chun-Yan Gao\*, Jin-Lei Tian\*, Jin-Zhong Zhao, Wei-Jun Du, **Jing-Yuan Xu\***, Shi-Ping Yan. Copper based metallonucleases as potential antitumor drugs: Synthesis, Structure, in vitro Cytotoxicity and Apoptosis inducing properties, *JOURNAL OF MOLECULAR STRUCTURE*, 2021, 1236, 130278.
13. Xiao-Jing Yan, Yu-Yang Gao, Hai-Bo Liu, Xin Qiao, Cheng-Zhi Xie\*, Qing-Zhong Li, Wei-Zhen Gao, Hua-Bing Sun\*, **Jing-Yuan Xu\***. A novel double target fluorescence probe for Al<sup>3+</sup>/Mg<sup>2+</sup> detection with distinctively different responses and its applications in cell imaging. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 261 (2021) 120067.
14. Ming Liu,<sup>1</sup> Xue-Qing Song,<sup>1</sup> Yuan-Di Wu, Jing Qian\* Jing-Yuan Xu\*, Cu(II)-TACN complexes selectively induce antitumor activity in HepG-2 cells via DNA damage and mitochondrial-ROS-mediated apoptosis. *Dalton Trans.*, 2020, 49, 114–123.
15. Zhi-Gang Wang<sup>1</sup>, Xiao-Jing Ding<sup>1</sup>, Yu-Ying Huang, Xiao-Jing Yan, Bin Ding Qing-Zhong Li, Cheng-Zhi Xie\*, Jing-Yuan Xu\*. The development of coumarin Schiff base system applied as highly selective fluorescent/colorimetric probes for Cu<sup>2+</sup> and tumor biomarker glutathione detection. *Dyes and Pigments*, 2020, 175, 108156–58.
16. Xiao-Jing Ding,<sup>1</sup> Ran-Zhang,<sup>1</sup> Rui-Ping Liu,<sup>1</sup> Xue-Qing Song, Xin Qiao, Cheng-Zhi Xie, Xiu-He Zhao, **Jing-Yuan Xu\***. A class of Pt(IV) triple-prodrugs targeting nucleic acid, thymidylate synthase and histone deacetylases, *Inorg. Chem. Front.*, 2020, 7, 1220–1228.
17. Rui-Dan Bao<sup>1</sup>, Xue-Qing Song<sup>1</sup>, Yan-jie Kong<sup>1</sup>, Fang-Fang Li, Wen-Hui Liao, Jie Zhou, Ji-hong Zhang, Qi-Hua Zhao, **Jing-Yuan Xu\***, Ce-shi Chen\*, Ming-Jin Xie\*. A new Schiff base copper(II) complex induces cancer cell growth inhibition and apoptosis by multiple mechanisms. *Journal of Inorganic Biochemistry*, 2020, 208, 111103.
18. Xue-Qing Song, Zhi-Gang Wang, Yang Wang, Yu-Ying Huang, Yu-Xuan Sun, Yan Ouyang, Cheng-Zhi Xie\* and **Jing-Yuan Xu\***. Syntheses, characterization, DNA/HSA binding ability, and antitumor activities of a family of isostructural binuclear lanthanide complexes containing hydrazine Schiff base. *Journal of Biomolecular Structure and Dynamics*, 2020, 38(3), 733–743.
19. Zhi-Gang Wang, Hai-Bo Liu, De-Long Zhang, Wei Liu, Cheng-Zhi Xie\*, Qing-Zhong Li, Jing-Yuan Xu\*, A novel hydrazide Schiff base self-assembled nanoprobe for selective detection of human serum albumin and its applications in renal disease surveillance, *Journal of Materials Chemistry B*, 2020, 8, 8346–8355.
20. Ling-Wen Xu<sup>1</sup>, Xin-Tian Wang<sup>1</sup>, Yun-Hong Zou, Xu-Ya Yu, Cheng-Zhi Xie, Xin Qiao\*, Qing-Zhong Li, Jing-Yuan Xu\*. Novel 2-hydroxynaphthalene-based fluorescent turn-on sensor for highly sensitive and selective detection of Al<sup>3+</sup> and its application in imaging *in vitro* and *in vivo*, *Appl. Organometal. Chem.* 2020, 34(10): e5812.
21. Xiao-Jing Yan, Zhi-Gang Wang, Yang Wang, Yu-Ying Huang, Hai-Bo Liu, **Cheng-Zhi Xie\***, Qing-Zhong Li, **Jing-Yuan Xu\***. A dual-functional fluorescent probe for sequential determination of Cu<sup>2+</sup>/S<sup>2-</sup> and its applications in biological systems. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 2020, 243, 118797.
22. Zhi-Gang Wang, Yang Wang, Xiao-Jing Ding, Yu-Xuan Sun, Hai-Bo Liu, Cheng-Zhi Xie\*, Jing Qian, Qing-Zhong Li, **Jing-Yuan Xu\***. A highly selective colorimetric and fluorescent probe for quantitative detection of Cu<sup>2+</sup>/Co<sup>2+</sup>: The unique ON-OFF-ON fluorimetric detection strategy and applications in living cells/zebrafish. *Spectrochimica Acta Part A:*

*Molecular and Biomolecular Spectroscopy*, 2020, 228, 117763.

23. Yue Liu<sup>†</sup>, Xue-Qing Song<sup>†</sup>, Si-Tong Li, Xin Liu, Jin-Lei Tian\*, **Jing-Yuan Xu\***, Shi-Ping Yan, Three pairs of enantiomers bearing mitochondria-targeted TPP<sup>+</sup> groups as potential anti-cancer agents. *Appl. Organometal. Chem.* 2019, 33(6), e4920.
24. Yang Wang, Zhi-Gang Wang, Xue-Qing Song, Qian Chen, He Tian, Cheng-Zhi Xie\*, Qing-Zhong Li, **Jing-Yuan Xu\***. Dual functional turn-on non-toxic chemosensor for highly selective and sensitive visual detection of Mg<sup>2+</sup> and Zn<sup>2+</sup>: solvent-controlled recognition effect and bio-imaging application. *Analyst*, 2019, 144, 4024–4032.
25. Yi-Gang Wu<sup>1</sup>, Dong-Bo Wang<sup>1</sup>, Juan-Juan Hu, Xue-Qing Song, Cheng-Zhi Xie, Zhong-Ying Ma\* and **Jing-Yuan Xu\***. An iron(III) complex selectively mediated cancer cell death: crystal structure, DNA targeting and *in vitro* antitumor activities[J]. *Inorg. Chem. Front.*, 2019, 6, 1040–1049.
26. He Tian<sup>1</sup>, Xin Qiao<sup>1</sup>, Zhen-Lei Zhang, Cheng-Zhi Xie, Qing-Zhong Li, **Jing-Yuan Xu\***. A high performance 2-hydroxynaphthalene Schiff base fluorescent chemosensor for Al<sup>3+</sup> and its applications in imaging of living cells and zebrafish *in vivo*. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 2019, 207, 31–38.
27. Jia Shao\*, Jin-Xia Wei, Yi Zhang, **Jing-Yuan Xu\***. Spectroscopic investigations of the interactions of potential antitumor amino-thiazolidinone platinum(II) compounds with human serum albumin. *Inorganic Chemistry Communications*, April 2019, 102, 35–39.
28. Yang Wang, Zhong-Ying Ma, De-Long Zhang, Jia-Li Deng, Xiong Chen, Cheng-Zhi Xie\*, Xin Qiao, Qing-Zhong Li, **Jing-Yuan Xu\***. Highly selective and sensitive turn-on fluorescent sensor for detection of Al<sup>3+</sup> based on quinoline-base Schiff base. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 2018, 195, 157–164.
29. Jing-Jing Suo<sup>1</sup>, Zhong-Ying Ma<sup>1</sup>, **Jing-Yuan Xu**, Jin-Lei Tian\* and Xin Liu. Preparation, characterization and biological evaluation of two chiral binuclear copper(II) complexes. *Appl. Organometal. Chem.* 2018, 32, e3911.
30. Xu-Dong Lin, Ya-Hong Liu<sup>1</sup>, Cheng-Zhi Xie, Wei-Guo Bao, Jun Shen\* and **Jing-Yuan Xu\***. Three Pt(II) complexes based on Thiosemicarbazone: synthesis, HSA interaction, cytotoxicity, apoptosis and cell cycle arrest. *RSC Advances*, 2017, 7, 26478–26486.
31. Zhong-Ying Ma<sup>1</sup>, Zheng Qiao<sup>1</sup>, Ang Li, Ya-Hong Liu, Cheng-Zhi Xie, Zhao-Yan Qiang, **Jing-Yuan Xu\***. A new mixed-ligand copper(II) complex inhibits growth and induces apoptosis by DNA targeting in human epithelial cervical cancer cells. *Appl. Organometal. Chem.* 2017, 31(7), e3651.
32. He Tian<sup>1</sup>, Xin Qiao<sup>1</sup>, Cheng-Zhi Xie, Yan Ouyang\*, **Jing-Yuan Xu\***. Synthesis, Characterization, and Magnetochemical Properties of Two Mn<sup>4</sup> Clusters Derived from 2-Pyridinecarboxaldehyde Schiff Base Ligands. *J. Coord. Chem.*, 2017, 70(7), 1207–1220.
33. Wen-Jing Lian,<sup>1</sup> Xin-Tian Wang,<sup>1</sup> He Tian, Xue-Qing Song, Xin Qiao,\* Cheng-Zhi Xie, and **Jing-Yuan Xu\***. Mixed-ligand copper(II) Schiff base complexes: the role of co-ligand in DNA binding, DNA cleavage, protein binding and cytotoxicity. *Dalton Trans.*, 2016, 45, 9073–9087.
34. Ya-Hong Liu<sup>1</sup>, Ang Li<sup>1</sup>, Jia Shao, Xue-Qing Song, Cheng-Zhi Xie, Wei-Guo Bao, **Jing-Yuan Xu\***. Four Cu(II) complexes based on antitumor chelators: synthesis, structure, DNA binding/

- damage, HSA interaction and enhanced cytotoxicity. *Dalton Trans.*, 2016, 45, 8036–8049.
35. Xu-Dong Lin, Biao Peng, Shao-Yong Li, Qing-Zhong Li, Cheng-Zhi Xie,\* **Jing-Yuan Xu\***. Novel Zn(II)-thiazolone-based Solid Fluorescent Chemosensors: Naked-eye Detection for Acid/Base and Toluene. *RSC Advances*, 2016, 6, 52310–52317.
  36. Yong-Po Zhang,<sup>‡</sup> Zhong-Ying Ma,<sup>‡</sup> Chun-Yan Gao, Xin Qiao, Jin-Lei Tian\*, Wen Gu, Xin Liu, **Jing-Yuan Xu\***, Jin-Zhong Zhao and Shi-Ping Yan. Two dpa-based zinc(II) complexes as potential anticancer agents: nuclease activity, cytotoxicity and apoptosis studies. *New J. Chem.*, 2016, 40, 7513-7521.
  37. Ang Li<sup>1</sup>, Ya-Hong Liu<sup>1</sup>, Ling-Zhi Yuan, Zhong-Ying Ma, Chun-Lai Zhao, Cheng-Zhi Xie, Wei-Guo Bao, **Jing-Yuan Xu\***. Association of structural modifications with bioactivity in three new copper(II) complexes of Schiff base ligands derived from 5-chlorosalicylaldehyde and amino acids. *Journal of Inorganic Biochemistry*, 2015, 146, 52–60.
  38. Chun-Yan Gao,<sup>1</sup> Zhong-Ying Ma,<sup>1</sup> Yong-Po Zhang, Si-Tong Li, Wen Gu, Xin Liu, Jin-Lei Tian,\* **Jing-Yuan Xu\***, Jin-Zhong Zhao and Shi-Ping Yan. Four related mixed-ligand nickel(II) complexes: effect of steric encumbrance on the structure, DNA/BSA binding, DNA cleavage and cytotoxicity. *RSC Adv.*, 2015, 5, 30768–30779.
  39. Jia Shao<sup>1</sup>, Zhong-Ying Ma<sup>1</sup>, Ang Li, Ya-Hong Liu, Cheng-Zhi Xie, Zhao-Yan Qiang, **Jing-Yuan Xu\***. Thiosemicarbazone Cu(II) and Zn(II) Complexes as Potential Anticancer Agents: Syntheses, Crystal Structure, DNA Cleavage, Cytotoxicity and Apoptosis Induction Activity. *Journal of Inorganic Biochemistry*, 2014, 136, 13–23.
  40. Xin Qiao, Zhong-Ying Ma, Jia Shao, **Jing-Yuan Xu\***, Zhao-Yan Qiang, Jian-Shi Lou\* and Wei-Guo Bao. Biological evaluation of a cytotoxic 2-substituted benzimidazole copper(II) complex: DNA damage, antiproliferation and apoptotic induction activity in human cervical cancer cells. *Biometals*, 2014, 27:155–172.
  41. Jia Shao, Wei-Guo Bao, He Tian, Bing Li, Xiao-Fei Zhao, Xin Qiao, **Jing-Yuan Xu\***. Nuclease activity and protein-binding properties of a novel tetranuclear thiosemicarbazide Pt(II) complex. Nuclease activity and protein-binding properties of a novel tetranuclear thiosemicarbazide Pt(II) complex. *Dalton Trans.*, 2014, 43, 1663–1671.
  42. Xiao-Fei Zhao,<sup>1</sup> Yan Ouyang,<sup>1</sup> Qiang Ge, Ling-Zhi Yuan, He Tian, Qiao-Juan Su, Cheng-Zhi Xie and **Jing-Yuan Xu\***. Two Polypyridyl Copper(II) Complexes: Synthesis, Crystal Structure and Interaction with DNA and Serum Protein in vitro. *New J. Chem.*, 2014, 38, 955-965.
  43. **Jing-Yuan Xu**, Hai-Bin Song, Gong-Feng Xu, Xin Qiao, Shi-Ping Yan, Dai-Zheng Liao, Yves Journaux\* and Joan Cano. A New Enneanuclear Nickel(II) Cluster with a Rectangular Face-Centered Trigonal Prism Structure and Cluster Glass Behavior. *Chem. Commun.*, 2012, 48, 1015–1017.
  44. Fei Xue, Cheng-Zhi Xie, Yan-Wen Zhang, Zheng Qiao, Xin Qiao, **Jing-Yuan Xu\***, Shi-Ping Yan. Two new dicopper(II) complexes with oxamido-bridged ligand: Synthesis, crystal structures, DNA binding/cleavage and BSA binding activity. *J. Inorg. Biochem.*, 2012, 115, 78-86.
  45. Zhong-Ying Ma, Cheng-Zhi Xie, Xin Qiao, Jia Shao, **Jing-Yuan Xu\***, Zhao-Yan Qiang, Jian-Shi Lou. Activities of a novel Schiff Base copper(II) complex on growth inhibition and apoptosis induction toward MCF-7 human breast cancer cells via mitochondrial pathway. *J. Inorg. Biochem.*, 2012, 117, 1-9.

	<p>46. Xin Qiao, Zhong-Ying Ma, Fei Xue, Cheng-Zhi Xie, <b>Jing-Yuan Xu*</b>, Zhao-Yan Qiang, Jian-Shi Lou, Gong-Jun Chen, Shi-Ping Yan. Study on potential antitumor mechanism of a novel Schiff Base copper(II) complex: synthesis, crystal structure, DNA binding, cytotoxicity and apoptosis induction activity, <i>J. Inorg. Biochem.</i>, <b>2011</b>, 105, 728-737.</p> <p>47. <b>Jing-Yuan Xu*</b>, Cheng-Zhi Xie, Fei Xue, Lan-Fang Hao, Zhong-Ying Ma, Dai-Zheng Liao, and Shi-Ping Yan. Directed Assembly and Characterization of 1D Polymers Based on <math>[M^{II}(\text{BMA})]^{2+}</math> Node (M = Cu, Mn, Ni and Zn; BMA = N,N-bis (benzimidazol-2-yl-methyl)amine) with Linear Bridging Dicyanamide and Terephthalate Ligands, <i>Dalton Trans.</i>, <b>2010</b>, 39, 7159-7166.</p> <p>48. <b>Jing-Yuan Xu</b>, Xin Qiao, Hai-Bin Song, Shi-Ping Yan, Dai-Zheng Liao, Song Gao, Yves Journaux and Joan Cano. Self-assembly and magnetic properties of a <math>\text{Ni(II)}_8(\mu_4\text{-hydroxo})_6</math> cube with <math>\mu_2</math>-Pyrazolate as exogeneous anchillary ligand, <i>Chem. Commun.</i>, 2008, 6414-6416.</p> <p>49. <b>Jing-Yuan Xu</b>, Bin Zhao, He-Dong Bian, Wen Gu, Shi-Ping Yan, Peng Cheng, Dai-Zheng Liao, and Pan-Wen Shen. Syntheses, Structures and Properties of Novel Cage-Like Complexes Based on Dodecanuclear Lanthanide with a Large Cavity. Syntheses, Structures and Properties of Novel Cage-Like Complexes Based on Dodeca-nuclear Lanthanide with a Large Cavity. <i>Crystal Growth &amp; Design</i> 2007, 7(6), 1044-1048.</p> <p>50. <b>Jing-Yuan Xu</b>, Simon Foxon, Michal Leibold Frank Hampel, Frank Heinemann, Olaf Walter and Siegfried Schindler. Iron(III) Complexes with the Ligands N',N'-bis[(2-pyridyl)methyl]ethylene diamine (uns-penp) and the Amide N-Acetyl-N',N'-bis[(2-pyridyl)methyl]ethylenediamine (acetyl-uns-penp)". <i>Eur. J. Inorg. Chem.</i> 2006, 1601-1610.</p>
科研项目	<ol style="list-style-type: none"> <li>1. 国家自然科学基金面上项目“Pt(IV)前药靶向性、协同性调整及分子机制研究”(No. 21977080), 66 万, 2020.1-2023.12 主持</li> <li>2. 天津市自然科学基金重点项目“具有降低肿瘤耐药性及增强免疫识别功能的多靶标 Pt(IV)前药分子研究”(No. 17JCZDJC33100), 20 万, 2017.4-2020.3, 主持。</li> <li>3. 国家自然科学基金面上项目“铂类组蛋白去乙酰化酶抑制剂的设计合成、抑制肿瘤细胞活性及其靶向作用机制研究”(No.21371135), 80 万, 2014.1-2017.12, 主持。</li> <li>4. 天津市自然科学基金重点项目“新型铂类抗肿瘤配合物的设计合成及其细胞代谢机制研究”(No.13JCZDJC28200), 20 万, 2013.4-2016.3, 主持。</li> <li>5. 国家自然科学基金面上项目“基于光动力疗法的金属基型光敏剂的设计合成、DNA 作用及其抗肿瘤细胞活性的研究”(No. 20971099), 35 万, 2010.1-2012.12, 主持。</li> <li>6. 天津市中青年骨干创新人才培养计划项目, 45 万, 2012.12-2015.11, 主持。</li> <li>7. 国家自然科学基金面上项目“低维配合物型磁性分子的设计、合成及磁构关系研究”(No.20771084), 已结题, 8 万, 2008.1-2008.12, 主持。</li> <li>8. 教育部留学回国人员科研启动基金“高自旋配合物分子磁性材料的研究”, 2 万, 2008.1-2009.12, 主持。</li> <li>9. 天津自然科学基金面上项目“分子基型药物磁性靶向材料的研究”(06YFJMJC12700), 8 万, 2006.9 - 2009.8, 主持。</li> <li>10. 天津教委基金项目“人工核酸切割试剂的分子设计及其 DNA 作用的研究”(No.20020106), 2005.1-2007.3, 1 万, 主持。</li> </ol>
荣誉奖励	

2020年，天津医科大学校聘一级重点岗  
2019年，天津市自然科学三等奖，获奖人员排名第一  
2019年，天津市教学名师  
2017年，天津市高校学科领军人才（药学）  
2017年，天津市级教学团队负责人（药学基础化学）  
2018年，天津医科大学巾帼建功标兵荣誉称号  
2012年，天津市高校中青年骨干创新人才  
2011年，天津医科大学校聘一级关键岗位  
2009年，天津医科大学药学院优秀教师  
2009年，天津医科大学校聘二级关键岗位  
2007年，天津市自然科学三等奖，获奖人员排名第一  
2007年，天津医科大学优秀教师  
2007年，天津医科大学“十一五”新世纪人才  
1999年，天津医科大学优秀教师

#### 其他事项

国家自然科学基金、教育部学位论文、多省部级自然科学/人才项目评审专家，中国化疗药理学会委员。J. Med. Chem., Euro. J. Med. Chem.等国际期刊审稿人。指导本、硕、博学生获得国家级、省部级以上科研、竞赛奖励 20 余项。