

## PERSONAL:

Name: **Hua Wu**  
Department: Department of Chemistry, College of Sciences  
Gender: Female  
Degree: Ph.D.  
Title: Professor  
Major: Inorganic Chemistry  
Graduated: Northeast Normal University  
University:  
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## RESEARCH INTERESTS:

Metal-Organic Materials Synthesis;

Novel Metal-Organic Materials Discovery: focus on crystal and nanometer size metal-organic materials with novel structure and excellent performance including optical properties, magnetic properties, and the electrochemical performance of supercapacitor, Li-ion batteries and oxygen evolution reaction.

1. Design and synthesis of novel crystal and nanometer metal-organic coordination complexes.
2. Design and synthesis of novel metal-organic materials based on polyoxometalates.
3. Synthetic technology of nanometer metal-organic materials drug molecules for biological application.

## PROFESSIONAL EXPERIENCE:

2012-now Full professor, College of Sciences, Nanjing Agricultural University

2011-2012 Full professor, Department of Base, Heilongjiang Agricultural Vocational and Technical College

2004-2011 Associate professor, Department of Base, Heilongjiang Agricultural Vocational and Technical College

1998-2004 Lecturer, Department of Base, Heilongjiang Agricultural Vocational and Technical College

1993-1998 Teaching assistant, Department of Base, Heilongjiang Agricultural Vocational and Technical College

## HONORS AND AWARDS:

2016 "Middle-aged Academic Leader" by Qing-Lan Project (Jiangsu province)

2012 Outstanding talent of professional and technical by the 6th group of Jiamusi city (Heilongjiang province)

## TEACHING:

- 《Inorganic Chemistry》
- 《Experimental Chemistry I》
- 《Basic Chemistry》
- Edited Books: 《Basic Chemistry》; 《Inorganic and Analytical Chemistry》 (Editor in Chief:

Hua Wu).

- Take responsibility for several SRT of Jiangsu province and National innovation projects, have supervised more than 30 undergraduate students to complete their graduation dissertations.

### RESEARCH PROJECTS:

- (7) Establishment and catalytic performance study of new types based on “azabig ring-polyoxometalate” coordination complexes. (Natural Science Foundation of Jiangsu province, BK20131314, 2013.7-2016.7, done);
- (6) Sponsored as a middle-aged academic leader by “Qing Lan Project” of the Education Department of Jiangsu Province in 2016.
- (5) The study of construction and catalytic performance of macrocyclic polyamine-polyoxometalate host-guest self-assembly system. (National Natural Science Foundation, 2013.1-2015.12, 21371098, done)
- (4) Research of the synthesis, structure and antimicrobial activity based on multi-azole pesticide and polyoxometalate (Fundamental Research Funds for the Central Universities, KYZ201323, 201301~201612, done)
- (3) Study of construction and properties of polyoxometalate complexes modified by aza-crown containing phenolic hydroxyl group. (China Postdoctoral Science Foundation, No. 2015M570430, 2015.7-2017.7, done)
- (2) Synthesis and property of aza-crown ether containing polyoxometalate. (Jiangsu Postdoctoral Science Foundation, No. 1401007C, 2015.4-2017.4, done)
- (1) Synthesis and photocatalysis based on new type of “Robson big ring-polyoxometalate” coordination complexes. (State Key Laboratory of Coordination Chemistry, Nanjing University, 2014.2-2016.1, done)

### PUBLICATIONS:

- (21) Wang, K.; Wang, Z.; Wang, X.; Zhou, X.; Tao, Y.; **Wu, H.\*** Flexible long-chain-linker constructed Ni-based metal-organic frameworks with 1D helical channel and their pseudo-capacitor behavior studies. *Journal of Power Sources.*, **2018**, 377: 44–51.
- (20) Wang, K.; Cao, X.; Wang, S.; Zhao, W.; Xu, J.; Wang, Z.; **Wu, H.\*** Interpenetrated and polythreaded Co<sup>II</sup>-organic frameworks as a supercapacitor electrode material with ultrahigh capacity and excellent energy delivery efficiency. *ACS Appl. Mater. Interfaces.* **2018**, 10, 9104–9115.
- (19) Zhang, X.; Xi, R.; Yin, S.; Cao, X.; Zhang, Y.; Lin, L.; Chen, R.; **Wu, H.\*** Three inorganic-organic hybrid complexes based on isopolymolybdate and derivatives of 1H-4-nitroimidazole. *Journal of Solid State Chemistry.*, **2018**, 258: 737–743.
- (18) Shi, C.; Wang, Z.; Chen, Y.; **Wu, H.\*** Structural diversity of four coordination polymers based on 5-nitro-1,2,3-benzenetricarboxylic acid (H<sub>3</sub>nbt): Solvothermal syntheses, structural characterizations and properties. *Journal of Solid State Chemistry.*, **2017**, 253: 35-42.

- (17) Tao, Y.; Zhou, X.; Wang, Z.; Shi, Y.; Guo, Y.; **Wu, H.\*** Two Cd<sup>II</sup>-containing coordination polymers based on trinuclear and dodecanuclear clusters. *Inorganic Chemistry Communications.*, **2016**, *70*, 90–94.
- (16) **Wu, H.\***; Shi, C.; Zhao, Y.; Jiang, Y.; Tao, Y. Three coordination polymers based on different carboxylates, metals and a tri(4-imidazolylphenyl)amine ligand. *Journal of Molecular Structure.*, **2015**, *1086*, 276–281.
- (15) **Wu, H.\***; Lu X; Yang, C.-L.; Dong, C.-X.; Wu, M.-S. Diverse topologies of seven d<sup>10</sup> coordination polymers constructed from a long ligand and different carboxylates. *CrystEngComm.*, **2014**, 992 – 1000.
- (14) **Wu, H.\*** Lu, X.-L.; Lü, B.; Dong, C.-X.; Wu, M.-S. A novel three-dimensional Ag<sup>I</sup> coordination polymer based on mixed naphthalene-1,5-disulfonate and aminoacetate ligands. *Acta Cryst. C69*.**2013**.
- (13) **Wu, H.**; Yang, J.\* Liu, Y.-Y.; Ma, J.-F.\* pH-Controlled assembly of two unusual entangled motifs based on a tridentate ligand and octamolybdate clusters: 1D + 1D → 3D poly-pseudorotaxane and 2D → 2D → 3D polycatenation. *Crystal Growth & Design.*, **2012**,*12*, 2272–2276.
- (12) **Wu, H.**; Yang, J.\* Ma, J.-F.\* Liu, Y.-Y.; Xie, T.-F. Syntheses, structures and photoelectronic properties of a series of tri- and tetra-nuclear metal complexes based on a ligand. *Polyhedron*, **2012**, *31*, 136–142.
- (11) **Wu, H.**; Yang, J.\* Su, Z.-M.; Stuart, R. B.; Ma, J.-F.\* An Exceptional 54-fold interpenetrated coordination polymer with 10<sup>3</sup>-srs network topology. *J. Am. Chem. Soc.*, **2011**, *133*, 11406–11409.
- (10) **Wu, H.**; Liu, H.-Y.; Liu, Y.-Y.; Yan, J.\* Liu, B.; Ma, J.-F.\* An unprecedented 2D - 3D metal–organic polyrotaxane framework constructed from cadmium and a flexible star-like ligand. *Chem. Commun.*, **2011**, 47, 1818–1820.
- (9) **Wu, H.**; Liu, H.-Y.; Yang, J.\* Liu, B.; Ma, J.-F.\* Liu, Y.-Y.; Liu, Y.-Y. Series of coordination polymers based on different carboxylates and a tri(4-imidazolylphenyl) amine ligand: entangled structures and photoluminescence. *Crystal Growth & Design*, **2011**, *11*, 2317–2324.
- (8) **Wu, H.**; Liu, H.-Y.; Liu, B.; Yang, J.\* Liu, Y.-Y.; Ma, J.-F.\* Bai, H.-Y. Two unprecedented 3D metal–organic polyrotaxane frameworks based on a new flexible tri(imidazole) ligand. *CrystEngComm*, **2011**, *13*, 3402–3407.
- (7) **Wu, H.**; Liu, B.; Yang, J.\* Liu, H.-Y.; Ma, J.-F.\* A new type of entangled motif: from 2D polyrotaxane layers to a 3D polythreaded framework. *CrystEngComm*, **2011**, *13*, 3661–3664.
- (6) **Wu, H.**; Ma J.-F.\* Liu, Y.-Y.; Yang, J.\* Liu, H.-Y. Diverse topologies of six coordination polymers constructed from a tris(4-imidazolylphenyl)amine ligand and different carboxylates. *CrystEngComm*, **2011**,*13*, 7121-7128.

- (5) **Wu, H.;** Dong, X.-W.; Liu, H.-Y.; Ma, J.-F.\* Liu, Y.-Y.; Liu, Y.-Y.; Yang, J.\* Construction of a series of inorganic–organic hybrid coordination polymers based on hexamethylenetetramine and sulfonate ligands. *Inorganica Chimica Acta*, **2011**, 373, 19–26.
- (4) Liu, H.-Y.; **Wu, H.;** Yang, J.\* Liu, Y.-Y.; Liu, B.; Liu, Y.-Y.; Ma, J.-F.\* pH-Dependent assembly of 1D to 3D octamolybdate hybrid materials based on a new flexible bis-[(pyridyl)-benzimidazole] ligand. *Crystal Growth & Design*, **2011**, 11, 2920–2927.
- (3) Liu, H.-Y.; **Wu, H.;** Yang, J.\* Liu, Y.-Y.; Ma, J.-F.\* Bai, H.-Y. Solvothermal assembly of a series of organic-inorganic hybrid materials constructed from keggin polyoxometalate clusters and copper(I)-organic frameworks. *Crystal Growth & Design*, **2011**, 11, 1786-1797.
- (2) **Wu, H.;** Dong, X.-W.; Ma, J.-F.\* Liu, H.-Y. Yang, J.\* Bai, H.-Y. Influence of anionic sulfonate-containing and nitrogen-containing mixed-ligands on the structures of silver coordination polymers. *Dalton Trans.*, **2009**, 3162–3174.
- (1) **Wu, H.;** Dong, X.-W.; Liu, H.-Y. Ma, J.-F.\* Li, S.-L. Yang, J. Liu, Y.-Y. Su, Z.-M. Influence of anionic sulfonate-containing co-ligands on the solid structures of silver complexes supported by 4,4'-bipyridine bridges. *Dalton Trans.*, 2008, 5331–5341.