Curriculum Vitae

1. Personal Data

Name: **Sui-Jun Liu** Gender: Male Date of Birth: 10/28/1986

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Address: Department of Applied Chemistry, Jiangxi University of Science and Technology, No.156, Kejia Ave, Ganzhou341000, Jiangxi Province, P.R. China,

2. Educational Background

- **09/2009 – 06/2014**: Department of Chemistry, Nankai University, Ph.D. in Inorganic Chemistry, Advisor: Prof. Xian-He Bu, Research direction: Coordination Chemistry.
- **09/2005 – 06/2009**: Department of Chemistry, Nanchang University, Bachelor of Science in Chemistry.

3. Research Experiences and Research Interests

- **06/2014 – Present**, Joining in Department of Applied Chemistry, Jiangxi University of Science and Technology as a lecturer of Chemistry, Research Interest: Construction and magnetocaloric effect regulation of molecule-based rare earth cryogenic magnetorefrigerant materials.
- **09/2009 – 06/2014**, Department of Chemistry and Tianjin Key Lab of Metal- and Molecule-Based Material Chemistry, Nankai University, Tianjin 300071.

  Advisor: Prof. Xian-He Bu.

  Research interest: Synthesis, structures and properties of molecule-based magnetic complexes derived from carboxylate ligands
- **10/2008 – 06/2009**, Department of Chemistry, Nanchang University.

  Advisors: Prof. Xiao-Ming Liu and Dr. Zhi-Mei Li.

  Research interest: Synthesis of novel model complexes of [FeFe]-hydrogenase containing ferrocenyl and its electrochemical investigations

4. Publications and Patents

Publications

[1]. **Sui-Jun Liu**, Jiong-Peng Zhao, Jun Tao, Ji-Min Jia, Song-De Han, Yue Li, Yan-Cong Chen, Xian-He Bu,* An unprecedented decanuclear Gd^{III} cluster for magnetic refrigeration, *Inorg. Chem.*, **2013**, 52(16), 9163-9165.

[2]. **Sui-Jun Liu**, Jiong-Peng Zhao, Wei-Chao Song, Song-De Han, Zhong-Yi Liu, Xian-He Bu,* Slow magnetic relaxation in two new 1D/0D Dy^{III} complexes with a sterically hindered carboxylate ligand, *Inorg. Chem.*, **2013**, 52(4), 2103-2109.

[3]. **Sui-Jun Liu**, Chen-Chao Xie, Ji-Min Jia, Jiong-Peng Zhao, Song-De Han, Yu Cui, Yue Li, Xian-He Bu,* Low-dimensional carboxylate-bridged Gd^{III} complexes for magnetic refrigeration, *Chem. Asian J.*, **2014**, 9(4), 1116-1122.

[4]. **Sui-Jun Liu**, Yong-Fei Zeng, Li Xue, Song-De Han, Ji-Min Jia, Tong-Liang Hu*, Xian-He Bu, Tuning the magnetic behaviors in $[Fe^{III}_{12}Ln^{III}_{4}]$ clusters with aromatic carboxylate ligands, *Inorg. Chem. Front.*, **2014**, 1(2), 200-206.

[5]. Ji-Min Jia,† **Sui-Jun Liu**,† Yu Cui, Song-De Han, Tong-Liang Hu, Xian-He Bu,* 3D Gd^{III} complex containing Gd_{16} macrocycles exhibiting large magnetocaloric effect. *Cryst. Growth Des.*, **2013**, 13(11), 4631-4634. (†J.-M.J. and S.-J.L. contributed equally to this work)

[6]. **Sui-Jun Liu**,* Chen Cao, Fan Yang, Mei-Hui Yu, Shu-Li Yao, Teng-Fei Zheng,* Wei-Wei He, Hai-Xia Zhao, Tong-Liang Hu,* Xian-He Bu, High proton conduction in two Co^{II} and Mn^{II} anionic metal–organic frameworks derived from 1,3,5-benzenetricarboxylic acid, *Cryst. Growth Des.*, **2016**, 16(12), 6776-6780.

[7]. **Sui-Jun Liu**, Li Xue, Tong-Liang Hu,* Xian-He Bu, Two new Co^{II} coordination polymers based on carboxylate-bridged di- and trinuclear clusters with a pyridinedicarboxylate ligand: synthesis, structures and magnetism, *Dalton Trans.*, **2012**, 41(22), 6813-6819.

[8]. **Sui-Jun Liu**,* Chen Cao, Chen-Chao Xie, Teng-Fei Zheng, Xiao-Lan Tong, Jin-Sheng Liao, Jing-Lin Chen, He-Rui Wen,* Ze Chang,* Xian-He Bu, Tricarboxylate-based Gd^{III} coordination polymers exhibiting large magnetocaloric effects, *Dalton Trans.*, **2016**, 45(22), 9209-9215.

[9]. **Sui-Jun Liu**,* Chen Cao, Shu-Li Yao, Teng-Fei Zheng, Zheng-Xiang Wang, Chao Liu, Jin-Sheng Liao, Jing-Lin Chen, Yun-Wu Li,* He-Rui Wen*, Temperature- and vapor-induced

reversible single-crystal-to-single-crystal transformations of three 2D/3D Gd^{III}-organic frameworks exhibiting significant magnetocaloric effects, *Dalton Trans.*, **2017**, 46(1), 64-70.

[10]. **Sui-Jun Liu**, Song-De Han, Ji-Min Jia, Li Xue, Yu Cui, Shu-Ming Zhang, Ze Chang*, Step-by-step synthesis of one Fe_6 wheel and two Fe_{10} clusters derived from a multidentate triethanoamine ligand, *CrystEngComm*, **2014**, 16(24), 5212-5215.

[11]. **Sui-Jun Liu**,* Xin-Rong Xie, Teng-Fei Zheng, Jun Bao, Jin-Sheng Liao, Jing-Lin Chen, He-Rui Wen*. Three-dimensional two-fold interpenetrated Cr^{III}-Gd^{III} heterometallic framework as an attractive cryogenic magnetorefrigerant, *CrystEngComm*, **2015**, 17(38), 7270-7275. (Front Cover Paper)

[12]. Zi-Yi Du, Ling Zhang, Bao-Ying Wang, **Sui-Jun Liu**,* Bo Huang, Cai-Ming Liu,* Wei-Xiong Zhang,* Two magnetic Δ-chain-based Mn(II) and Co(II) coordination polymers with mixed carboxylate-phosphinate and μ_3-OH^- bridges, *CrystEngComm*, **2017**, 19(7), 1011-1136.

[13]. **Sui-Jun Liu**,* Teng-Fei Zheng, Jun Bao, Piao-Ping Dong, Jin-Sheng Liao, Jing-Lin Chen, He-Rui Wen,* Jian Xu,* Xian-He Bu, Two Gd^{III} complexes derived from dicarboxylate ligands as cryogenic magnetorefrigerants, *New J. Chem.*, **2015**, 39(9), 6970-6975.

[14]. **Sui-Jun Liu**, Song-De Han, Ze Chang,* Xian-He Bu, Cluster- and chain-based magnetic MOFs derived from 3*d* metal ions and 1,3,5-benzenetricarboxylate, *New J. Chem.*, **2016**, 40(3), 2680-2686.

[15]. Ying Zeng, **Sui-Jun Liu**,* Cai-Ming Liu,* Yong-Rong Xie, Zi-Yi Du*, Diversified magnetic behaviors in new nickel(II) and copper(II) azido coordination polymers templated by diethyl or triethyl amines, *New J. Chem.*, **2017**, 41(3), 1212-1218.

[16]. **Sui-Jun Liu**, Wei-Chao Song, Li Xue, Song-De Han, Yong-Fei Zeng, Li-Fu Wang, Xian-He Bu*, Three new Cu(II)-Ln(III) heterometallic coordination polymers constructed from quinolinic acid and nicotinic acid: synthesis, structures, and magnetic properties, *Sci. China Chem.*, **2012**, 55(6), 1064-1072.

[17]. **Sui-Jun Liu**, Yong-Fei Zeng, Xin Hu, Li Xue, Song-De Han, Ji-Min Jia, Tong-Liang Hu*, Five new Mn(II)/Co(II) coordination polymers constructed from flexible multicarboxylate ligands with varying magnetic properties, *J. Solid State Chem.*, **2013**, 204, 197-204.

[18]. **Sui-Jun Liu**, Ji-Min Jia, Yu Cui, Song-De Han, Ze Chang*, Luminescent pillared Ln^{III}-Zn^{II} heterometallic coordination frameworks with two kinds of *N*-heterocyclic carboxylate ligands, *J. Solid State Chem.*, **2014**, 212, 58-63.

[19]. Guo-Jian Ren, Yan-Qing Liu, **Sui-Jun Liu***, Two novel metal-organic frameworks based on linear dicarboxylic acid and 5-(4-Pyridyl)tetrazole, *J. Solid State Chem.*, **2015**, 232, 79-82.

[20]. Teng-Fei Zheng, Chen Cao, Piao-Ping Dong, **Sui-Jun Liu**,* Feng-Feng Wang,* Xiao-Lan Tong, Jin-Sheng Liao, Jing-Lin Chen, He-Rui Wen*, Synthesis, structures and magnetocaloric properties of two dinuclear Gd^{III} Clusters derived from monocarboxylate ligands, *Polyhedron*, **2016**, 113, 96-101.

[21]. Jing-Lin Chen,***** Yi-Liang Xiao, Yong Xia, Lu Qu, Li-Hua He, **Sui-Jun Liu,*** He-Rui Wen, Effects of substituents and phosphine auxiliaries on the structures of Cu(I) clusters with functionalized 2,2′-bipyridyl tetrazole ligands, *Polyhedron*, **2016**, 112, 130-136.

[22]. **Sui-Jun Liu**,* Shu-Li Yao, Chen Cao, Teng-Fei Zheng, Cao Liu, Zheng-Xiang Wang, Qiang Zhao,* Jin-Sheng Liao, Jing-Lin Chen, He-Rui Wen*, Two di- and trinuclear Gd(III) clusters derived from monocarboxylates exhibiting significant magnetic entropy changes, *Polyhedron*, **2017**, 121, 180-184.

[23]. Shi-Yong Zhang, Fu-Yong Liang, He-Rui Wen,* **Sui-Jun Liu**,* Xiao-Neng Lu, Zi-Yi Du, 2*p*-4*f* MOFs based on naphthalene-1,4,5,8-tetracarboxylate with magnetocaloric effect and slow magnetic relaxation properties, *Polyhedron*, **2017**, DOI: 10.1016/j.poly.2017.04.027.

[24]. He-Rui Wen,* Piao-Ping Dong, Fu-Yong Liang, **Sui-Jun Liu**,* Xin-Rong Xie, Yun-Zhi Tang, A family of 2D lanthanide complexes based on flexible thiodiacetic acid with magnetocaloric or ferromagnetic properties, *Inorg. Chim. Acta*, **2017**, 455, 190-196.

[25]. He-Rui Wen,* Fu-Yong Liang, Zheng-Gang Zou, **Sui-Jun Liu**,* Jin-Sheng Liao, Jing-Lin Chen, Mononuclear Dy(III) complex based on bipyridyl-tetrazolate ligand with field-induced single-ion magnet behavior and luminescent properties, *Inorg. Chem. Commun.*, **2017**, 79, 41-45.

[26]. **Sui-Jun Liu**, Yu Cui, Wei-Chao Song, Qing-Lun Wang, Xian-He Bu*, Carboxylate-bridged tetranuclear lanthanide clusters: magnetocaloric effect and slow magnetic relaxation, *Chinese J. Inorg. Chem.*, **2015**, 31(9), 1894-1902.

Patent:

1. Xian-He Bu, **Sui-Jun Liu**, Jiong-Peng Zhao, Song-De Han，一种具有大的磁热效应的高核钆簇配合物及其制备方法 (Preparation method of a high-nuclear gadolinium cluster complex with a large magnetocaloric effect)。Patent No. ZL201210546500.6 (In Chinese)

2. **Sui-Jun Liu**, Teng-Fei Zheng, Chen Cao, Jing-Lin Chen, He-Rui Wen，一种低场大磁熵变的二维钆配位聚合物及其制备方法 (Preparation method of a two-dimensional coordination polymer with a large magnetic entropy change under low field)。Application No. 201610306895.0 (In Chinese)