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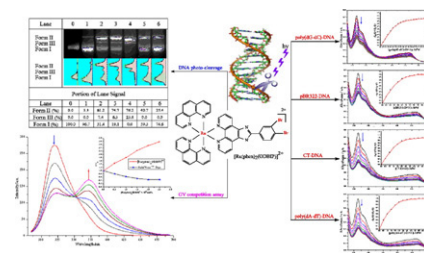
Feature Articles

Hai-tao Wang, Hai-hang Li, Mian-qi Huang, Wen-xiu Huang, Chen-sheng Ma, Ming-liang Wang, Chuan-xin He, Jian-hong Liu, Qian-ling Zhang

Inorganic Chemistry Communications 55 (2015) 30–35

Photocleavage of DNA and adenine–thymine inclined binding by a novel ruthenium(II) complex with 3,4-dibromo-imidazo[4,5-f][1,10]phenanthroline ligand

A new ruthenium(II) complex $[\text{Ru}(\text{phen})_2(\text{ODBIP})]^{2+}$ has been synthesized. Binding of this complex to poly(dG–dC) DNA, pBR322-DNA, CT-DNA and poly(dA–dT) DNA was studied and the complex preferentially bound to DNA at adenine–thymine base pairs by intercalation. The multi-wavelength visible-light induced more efficient photocleavage of DNA by complex than UV-light (upper-left). The competition assays performed with GoldView™ nucleic acid dye instead of ethidium bromide (EB) (lower-left) provided further evidence for the intercalative binding mode between the complex and DNA.

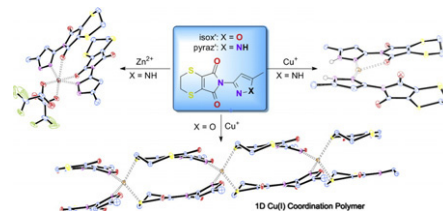


Neudo Urdaneta, Vanessa R. Landaeta, Rafael E. Rodríguez-Lugo, Carlos Díaz, Gustavo Santiso-Quinones, Jairo Quiroga, Braulio Insuasty

Inorganic Chemistry Communications 55 (2015) 43–47

Synthesis and characterization of Cu(I) and Zn(II) complexes with new sulfur-bearing isoxazole- or pyrazole-based ligands

The synthesis of the new nitrogen-based ligands isox' and pyraz', and their coordination chemistry toward Cu(I) and Zn(II), is described. The solid state structures of isox', $[\text{Cu}(\text{pyraz}')_2]\text{OTf}$ and $[\text{Zn}(\text{OOCF}_3)_2(\text{pyraz}')_2]$ were determined. Isox' can also coordinate as an N–S bridge, forming a 1D coordination polymer, as evidenced by its solid state structure.

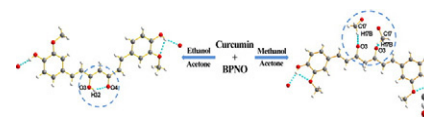


Hongmin Su, Hongming He, Yuyang Tian, Nian Zhao, Fuxing Sun, Xiaoming Zhang, Qing Jiang, Guangshan Zhu

Inorganic Chemistry Communications 55 (2015) 92–95

Syntheses and characterizations of two curcumin-based cocrystals

Two pharmaceutical cocrystals, JUC-C14 and JUC-C15, which were composed of curcumin and 4, 4'-bipyridine-N, N'-dioxide, were successfully prepared under the similarly synthetic conditions. It is indicated that JUC-C14 exhibits 1D chain structure, while JUC-C15 is a 2D net structure linked via hydrogen bonds and π – π packing interactions. Additionally, in the structure of JUC-C15 curcumin existed in a di-keto form which is rare in other reported curcumin polymorphs.



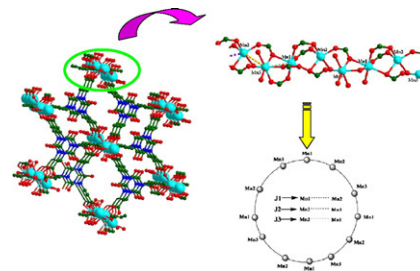
Short Communications

**Huijun Li, Hongxin Cai, Zhouqing Xu,
Yaxin Cai, Xin Li, Hongwei Hou**

Inorganic Chemistry Communications 55
(2015) 1–4

Alternating chains with the new $J1J2J3J1\cdots$ sequence in a three-dimensional MnII complex

A three-dimensional carboxylate-bridged MnII compound $[\text{Mn}_6(\text{tci})_4(\text{H}_2\text{O})_3] \cdot 7\text{H}_2\text{O}$ (**1**) containing unique manganese chains have been synthesized. The first example of such alternating Mn chain was arranged as $J1J2J3J1\cdots$ mode. Magnetic susceptibility measurement reveals an antiferromagnetism behavior derived from the topology of the chain.

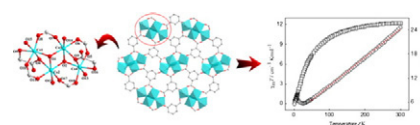


Yang Yang, Huan-Cheng Hu, Bin Zhao

Inorganic Chemistry Communications 55
(2015) 5–7

A tetranuclear $[\text{Co}_4]$ cluster-based metal-organic framework: Synthesis, structure and magnetic property

A novel One (6,3)-connected 2D Co^{II} coordination polymer based on Co_4 cluster, $\{[\text{Co}_4(\text{CIPA})_2(\mu_3\text{-OH})_2(\text{H}_2\text{O})_4] \cdot 4\text{H}_2\text{O}\}_n$ (**1**), has been obtained and characterized structurally. Thermogravimetric analysis suggests high thermal stability of compound **1**, and magnetic property measurement indicates that antiferromagnetic couplings exist between neighboring Co^{II} centers.

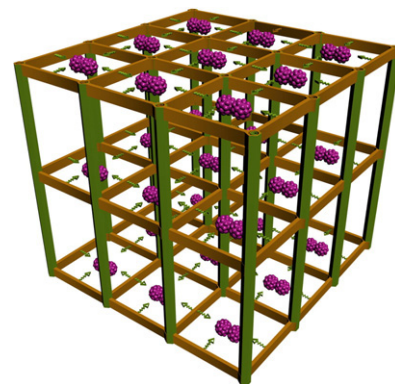


**Qing-Lin Li, Jia-Ping Wang, Wei-Cong Liu,
Xiao-Yi Zhuang, Jian-Qiang Liu,
Gui-Ling Fan, Bao-Hong Li, Wei-Na Lin,
Jian-Hui Man**

Inorganic Chemistry Communications 55
(2015) 8–10

A new (4,8)-connected topological MOF as potential drug delivery

An unusual 4,8-connected 3D net with $(4^6)_2(4^{12} \cdot 6^{12} \cdot 8^4)$ topology has been synthesized. 5-Fu is released in a highly controlled and progressive fashion with 92% of the drug released after 120 h.



Kamran Akhbari, Ali Morsali

Inorganic Chemistry Communications 55
(2015) 11–13

Structural conversion of cubane-type thallium complex to hexagon silver complex by solid-state mechanochemical reaction

Solid-state structural transformation of three-dimensional Tl^{I} supramolecular polymer comprised from cubane-type thallium complexes of $[\text{Tl}_4(\mu_3\text{-4-BN})_4]$ (**1**) to Ag^{I} coordination polymer with trinuclear units of $[\text{Ag}_3(\mu_3\text{-4-BN})_2(\mu_4\text{-4-BN})]$ (**2**) has been observed upon solid-state reaction of compound **1** with AgNO_3 .



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