



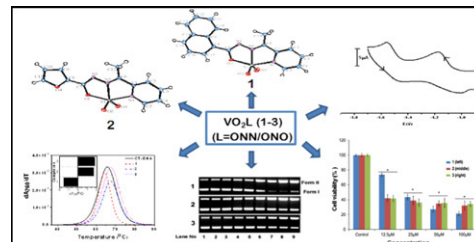
## Contents

**Subhashree P. Dash, Alok K. Panda, Sagarika Pasayat, Sudarshana Majumder, Ashis Biswas, Werner Kaminsky, Subhadip Mukhopadhyay, Sujit K. Bhutia, Rupam Dinda**

*Journal of Inorganic Biochemistry* 144 (2015) 1–12

Evaluation of the cell cytotoxicity and DNA/BSA binding and cleavage activity of some dioxidovanadium(V) complexes containing aroylhydrazones

Synthesis, characterization of three dioxidovanadium(V) complexes  $[\text{VO}_2\text{L}^{1-3}]$  (1–3) of aroylhydrazones and their interaction with DNA and BSA is reported. The complexes are also screened for the evaluation of *in vitro* cell cytotoxicity.

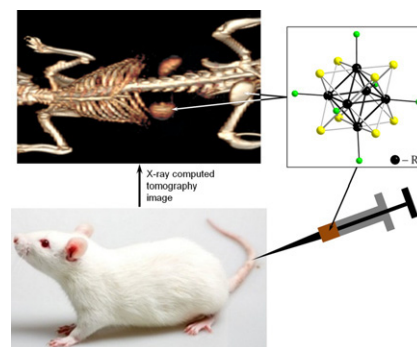


**Anna A. Krasilnikova, Michael A. Shestopalov, Konstantin A. Brylev, Irina A. Kirilova, Olga P. Khripko, Kristina E. Zubareva, Yuri I. Khripko, Valentina T. Podorognaya, Lidiya V. Shestopalova, Vladimir E. Fedorov, Yuri V. Mironov**

*Journal of Inorganic Biochemistry* 144 (2015) 13–17

Prospects of molybdenum and rhenium octahedral cluster complexes as X-ray contrast agents

The applicability of the hexanuclear metal cluster complexes as agents for X-ray contrast media was demonstrated. The highly radiopaque cluster cores  $\{\text{M}_6\text{Q}_8\}$  along with high tuning ability of the outer ligand environment allow creating a complex with low toxicity and rapid renal excretion.

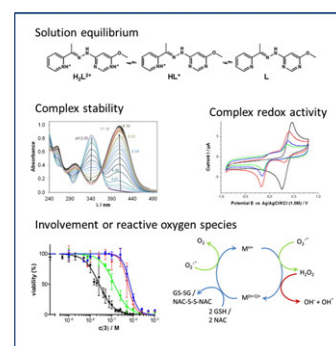


**Veronika F.S. Pape, Dóra Türk, Pál Szabó, Michael Wiese, Eva A. Enyedy, Gergely Szakács**

*Journal of Inorganic Biochemistry* 144 (2015) 18–30

Synthesis and characterization of the anticancer and metal binding properties of novel pyrimidinylhydrazone derivatives

Three novel pyrimidinylhydrazones were synthesized and investigated for their anticancer potential. The most active derivative showed toxicity in the submicromolar range and was further investigated regarding the role of Fe(III) and Cu(II) complexation and reactive oxygen species in its mechanism of action.

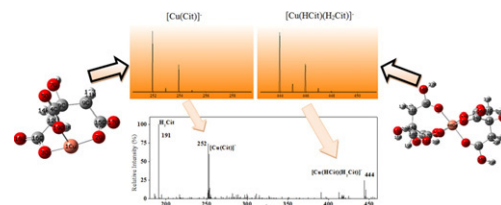


**Alexandre C. Bertoli, Ruy Carvalho, Matheus P. Freitas, Teodorico C. Ramalho, Daiana T. Mancini, Maria C. Oliveira, Amarilis de Varennes, Ana Dias**

*Journal of Inorganic Biochemistry* 144 (2015) 31–37

Structural determination of Cu and Fe–Citrate complexes: theoretical investigation and analysis by ESI-MS

Structures were proposals for the complex citrate- $\text{Cu}^{2+}$  and identified by ESI-MS.

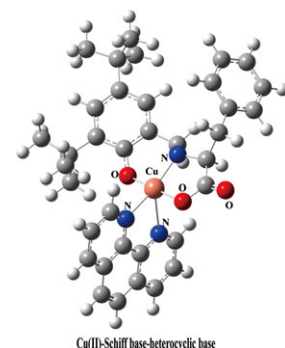


**Tieliang Ma, Jun Xu, Yuan Wang, Hao Yu, Yong Yang, Yang Liu, Weiliang Ding, Wenjiao Zhu, Ruhua Chen, Zhijun Ge, Yongfei Tan, Lei Jia, Taofeng Zhu**

*Journal of Inorganic Biochemistry* 144 (2015) 38–46

Ternary copper(II) complexes with amino acid chains and heterocyclic bases: DNA binding, cytotoxic and cell apoptosis induction properties

Three new ternary copper(II) complexes which have potential chemotherapy characteristics with reduced Schiff base ligand and heterocyclic bases, and the ternary copper(II) complexes had significant cytotoxic activity against the human cancer cell lines. They also can induce the cancer cell apoptosis.

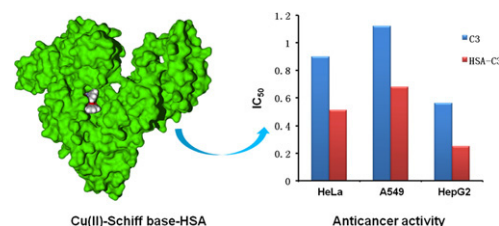


**Yi Gou, Yao Zhang, Jinxu Qi, Zuping Zhou, Feng Yang, Hong Liang**

*Journal of Inorganic Biochemistry* 144 (2015) 47–55

Enhancing the copper(II) complexes cytotoxicity to cancer cells through bound to human serum albumin

Anticancer activities of copper complexes are improved through bound to IIA sub-domain of HSA.

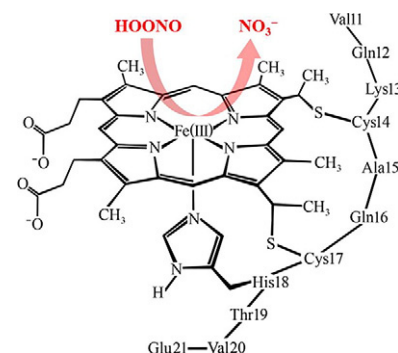


**Paolo Ascenzi, Loris Leboffe, Roberto Santucci, Massimo Coletta**

*Journal of Inorganic Biochemistry* 144 (2015) 56–61

Ferric microperoxidase-11 catalyzes peroxynitrite isomerization

Microperoxidase-11 (MP11) is an undecapeptide derived from cytochrome c offering the possibility to investigate the reactivity of the heme group unshielded by the protein. In fact, ferric penta-coordinated MP11 catalyzes peroxynitrite isomerization to  $\text{NO}_3^-$  whereas hexa-coordinated cytochrome c is unreactive. MP11 may represent the active site of chimeric proteins and play a relevant role(s) in biotechnological applications.



**Abstracting Services**

**This journal is cited by the following abstracting services: Biological Abstracts, CABS/Current Awareness in Biological Sciences, Chemical Abstracts, Current Contents/Life Sciences, EMBASE, EMBiology, Index Medicus/MEDLINE, International Abstracts in Biological Sciences, PASCAL, Scopus®; ScienceDirect®**

The Publisher encourages the submission of articles in electronic form thus saving time and avoiding rekeying errors. Please refer to the online version of the Guide for Authors at <http://www.elsevier.com/locate/jinorgbio>

---

**ScienceDirect**

Fulltext of this journal is available, on-line from **ScienceDirect**. Visit **[www.sciencedirect.com](http://www.sciencedirect.com)** for more information.

---