

PUBLICATION LIST

PROF. CHRISTIAN HARTINGER

Research and Review Articles

- [1] Christian Hartinger, Alexey A. Nazarov, Thomas H. Brehmer, Gerald Giester, Markus Galanski, Bernhard K. Keppler
Synthesis and New Crystal Structure of 1,1,3,3-Tetramethyl-1,3-disila-2-oxa[3]-ferrocenophane
Phosphorus, Sulfur and Silicon and the Related Elements **2001**, 169(1), 289–292.
- [2] Alexey A. Nazarov, Christian G. Hartinger, Thomas H. Brehmer, Gerald Giester, Markus Galanski, Bernhard K. Keppler
New C₂-chiral 1,1'-Bis(oxazoline-2-yl)-ferrocenes – Synthesis and Crystal Structure
Phosphorus, Sulfur and Silicon and the Related Elements **2001**, 169(1), 141–144
- [3] Christian Hartinger, Thomas H. Brehmer, Gerald Giester, Markus Galanski, Alexey A. Nazarov, Stephan M. Luther, Bernhard K. Keppler
1,1,3,3-Tetramethyl-1,3-disila-2-oxa[3]ferrocenophane: Improved Synthesis and New Crystal Structure
Inorganica Chimica Acta **2002**, 328, 237–240.
- [4] Christian G. Hartinger, Alexey A. Nazarov, Vladimir B. Arion, Gerald Giester, Michael Jakupc, Markus Galanski, Bernhard K. Keppler
Novel Glucose-ferrocenyl Derivatives: Synthesis and Properties
New Journal of Chemistry **2002**, 26, 671–673.
- [5] Alexey A. Nazarov, Christian G. Hartinger, Vladimir B. Arion, Gerald Giester, Bernhard K. Keppler
Synthesis of Ferrocenylglucose Phosphonite and Bisphosphinite: Pd(II)- and Pt(II)-Complexes, Pd-catalyzed Allylic Alkylation
Tetrahedron **2002**, 58, 8489–8492.
- [6] Christian G. Hartinger, Alexey A. Nazarov, Vladimir Chevchenko, Vladimir B. Arion, Markus Galanski, Bernhard K. Keppler
Synthesis, Crystal Structures, and Electrospray Ionisation Mass Spectrometry Investigations of Ether- and Thioether-substituted Ferrocenes
Dalton Transactions **2003**, 15, 3098–3102.
- [7] Christian G. Hartinger, Petra Schluga, Markus Galanski, Christian Baumgartner, Andrei R. Timerbaev, and Bernhard K. Keppler
Tumor-inhibiting Platinum(II) Complexes with Aminoalcohol Ligands: Comparison of the Mode of Action by Capillary Electrophoresis and Electrospray Ionization Mass Spectrometry
Electrophoresis **2003**, 24, 2038–2044.

- [8] Christian G. Hartinger, Andrei R. Timerbaev, and Bernhard K. Keppler
Capillary Electrophoresis in Anti-cancer Metalloc drug Research: Advances and Future Challenges
Electrophoresis **2003**, 24, 2023-2037.
- [9] Vladimir B. Arion, Alexey A. Nazarov, Christian G. Hartinger, Gerald Giester, Bernhard K. Keppler
Crystal Structure of 1-Bromo-1'-[*(2S*)-N-(1-hydroxy-3-methylbutane-2-yl]-ferroceneamide
Applied Organometallic Chemistry **2003**, 17, 723-724.
- [10] Martina Pongratz, Petra Schluga, Michael A. Jakupc, Vladimir B. Arion, Christian G. Hartinger, Günter Allmaier, Bernhard K. Keppler
Transferrin Binding and Transferrin-Mediated Cellular Uptake of the Ruthenium Coordination Compound KP1019, Studied by Means of AAS, ESI-MS and CD Spectroscopy
Journal of Analytical Atomic Spectrometry **2004**, 19, 46-51.
- [11] Markus Galanski, Christian Baumgartner, Kristof Meelich, Vladimir B. Arion, Madeleine Fremuth, Michael A. Jakupc, Petra Schluga, Christian G. Hartinger, Nikolai Graf v. Keyserlingk, Bernhard K. Keppler
Synthesis, Crystal Structure and pH Dependent Cytotoxicity of (*SP*-4-2)-Bis(2-aminoethanolato-κ²N,O)platinum(II) – A Representative of Novel pH Sensitive Anticancer Platinum Complexes
Inorganica Chimica Acta **2004**, 357, 3237-3244.
- [12] Francesca Piccioli, Sara Sabatini, Luigi Messori, Pier Luigi Orioli, Christian G. Hartinger, Bernhard K. Keppler
A Comparative Study of the Adduct Formation between the Anticancer Ruthenium(III) Compound HInd trans-[RuCl₄(Ind)₂] and Serum Proteins
Journal of Inorganic Biochemistry **2004**, 98, 1135-1142.
- [13] Andrei R. Timerbaev, Svetlana S. Alekseenko, Kasia Polec-Pawlak, R. Ruzik, Olga Semenova, Christian G. Hartinger, Slawomir Oszwaldowski, Markus Galanski, Maciej Jarosz, Bernhard K. Keppler
Platinum Metalloc drug-Protein Binding Studies by Capillary Electrophoresis-Inductively Coupled Plasma-Mass Spectrometry: Characterization of Interactions between Pt(II) Complexes and Human Serum Albumin
Electrophoresis **2004**, 25, 1988-1995.
- [14] Ulrich Warnke, Christina Rappel, Heiko Meier, Charlotte Kloft, Markus Galanski, Christian G. Hartinger, Bernhard K. Keppler, Ulrich Jaehde
Analysis of Platinum Adducts with DNA Nucleotides and Nucleosides by Capillary Electrophoresis Coupled to ESI-MS: Indications of Guanosine 5'-Monophosphate O⁶-N7 Chelation
ChemBioChem **2004**, 5, 1543-1549.
- [15] Alexey A. Nazarov, Mikhail P. Koroteev, Christian G. Hartinger, Bernhard K. Keppler, Eduard E. Nifant'ev
On the Coordination Properties of New Bicyclophosphite-Carbohydrates
Chemical Monthly **2005**, 136(2), 137-146.
- [16] Christian G. Hartinger, Alexey A. Nazarov, Vladimir B. Arion, Gerald Giester, Maxim L. Kuznetsov, Markus Galanski, Bernhard K. Keppler
1,1'-Bis(oxazolin-2-yl)ferrocenes: An Investigation of their Complexation Behavior Toward [Pd(*n*³-allyl)Cl]₂
European Journal of Inorganic Chemistry **2005**, 1589-1600.
- [17] Alexander V. Rudnev, Svetlana S. Alekseenko, Olga Semenova, Christian G. Hartinger, Andrei R. Timerbaev, Bernhard K. Keppler
Determination of Binding Constants and Stoichiometries for Platinum Anticancer Drugs and Serum Transport Proteins by Capillary Electrophoresis Using the Hummel-Dreyer Method
Journal of Separation Science **2005**, 28(2), 121-127.

- [18] Michael A. Jakupc, Erwin Reisner, Anna Eichinger, Martina Pongratz, Vladimir B. Arion, Markus Galanski, Christian Hartinger, Bernhard K. Keppler
Redox-Active Antineoplastic Ruthenium Complexes with Indazole: Correlation of in Vitro Potency and Reduction Potential
Journal of Medicinal Chemistry **2005**, *48*(8), 2831-2837.
- [19] Christian G. Hartinger, Stephan Hann, Gunda Koellensperger, Michael Sulyok, Michael Groessl, Andrei R. Timerbaev, Alexander V. Rudnev, Gerhard Stigeder, Bernhard K. Keppler
Interactions of a Novel Ruthenium-based Anticancer Drug (KP1019 or FFC14a) with Serum Proteins – Significance for the Patient
International Journal of Clinical Pharmacology and Therapeutics **2005**, *43*(12), 583-585.
- [20] Petra Schluga, Christian G. Hartinger, Markus Galanski, Kristof Meelich, Andrei Timerbaev, Bernhard K. Keppler
Tumour-inhibiting Platinum(II) Complexes with Aminoalcohol Ligands: Biologically Important Transformations Studied by Micellar Electrokinetic Chromatography, Nuclear Magnetic Resonance Spectroscopy and Mass Spectrometry
The Analyst **2005**, *130*, 1383-1389.
Platinum Metals Review **2006**, *50*(1), 46-49.
- [21] Christian G. Hartinger, Alexey A. Nazarov, Markus Galanski, Michael Reithofer, Bernhard K. Keppler
Glucose Ferrocenyl-oxazolines: Coordination Behavior Toward [Pd(η^3 -allyl)Cl]₂ Studied by ESI-MS
Journal of Organometallic Chemistry **2005**, *690*(14), 3301-3308.
- [22] Michael Sulyok, Stephan Hann, Christian G. Hartinger, Bernhard K. Keppler, Gerhard Stigeder, Gunda Koellensperger
Two Dimensional Separation Schemes for Investigation of the Interaction of an Anticancer Ruthenium(III) Compound with Plasma Proteins
Journal of Analytical Atomic Spectrometry **2005**, *20*(9), 856-863.
- [23] Alexey A. Nazarov, Mikhail P. Koroteev, Christian G. Hartinger, Bernhard K. Keppler, Eduard E. Nifant'ev
Bis- and Tris-bicycophosphites of D-Glucofuranoside. Unexpected Catalysis of Oxidation of P(III/V) Oxidation by Triethylamine.
Tetrahedron **2005**, *61*(46), 10943-10950.
- [24] Andrei R. Timerbaev, Alexander V. Rudnev, Olga Semenova, Christian G. Hartinger, Bernhard K. Keppler
Comparative Binding of Antitumor Indazolium [*trans*-Tetrachlorobis(1H-indazole)ruthenate(III)] to Serum Transport Proteins Assayed by Capillary Zone Electrophoresis
Analytical Biochemistry **2005**, *341*(2), 326-333.
- [25] Petra Schluga, Christian G. Hartinger,* Alexander Egger, Erwin Reisner, Markus Galanski, Michael A. Jakupc, Bernhard K. Keppler*
Redox Behavior of Tumor-Inhibiting Ruthenium(III) Complexes and Effects of Physiological Reductants on their Binding to GMP
Dalton Transactions **2006**, *14*, 1796-1802.
Chemical Biology Virtual Journal **2006**, *7*.
- [26] Andrei R. Timerbaev, Christian G. Hartinger,* Svetlana S. Alekseenko, Bernhard K. Keppler*
Interactions of Antitumor Metallodrugs with Serum Proteins: Advances in Characterization Using Modern Analytical Methodology
Chemical Reviews **2006**, *106*(6), 2224-2248. No. 13 among the Most-Cited Articles in 2006 in Chemical Reviews

- [27] Christian G. Hartinger, Maria G. Ferri-Mendoza, Alexey A. Nazarov, Bernhard K. Keppler
Electrospray Ionization Mass Spectrometric Study on the Coordination Behavior of Dacarbazine toward Transition Metal Ions
Polyhedron **2006**, 25(9), 1971-1978.
- [28] Kasia Polec-Pawlak, Jan K. Abramski, Olga Semenova, Christian G. Hartinger, Andrei R. Timerbaev, Bernhard K. Keppler, Maciej Jarosz
Platinum Group Metallocdrug-Protein Binding Studies by Capillary Electrophoresis-Inductively Coupled Plasma-Mass Spectrometry: A Further Insight into the Reactivity of a Novel Antitumor Ruthenium(III) Complex toward Human Serum Proteins
Electrophoresis **2006**, 27, 1128–1135.
- [29] Christian G. Hartinger,* Stefanie Zorbas-Seifried, Michael A. Jakupec, Bernd Kynast, Haralabos Zorbas, Bernhard K. Keppler*
From Bench to Bedside – Preclinical and Early Clinical Development of the Anticancer Agent Indazolium *trans*-[Tetrachlorobis(1H-indazole)ruthenate(III)] (KP1019 or FFC14A)
Journal of Inorganic Biochemistry **2006**, 100(5-6), 891-904.
 Special Issue Containing Contributions from the 12th International Conference on Biological Inorganic Chemistry
- [30] Andrei R. Timerbaev, Christian G. Hartinger, Bernhard K. Keppler
Metallocdrug Research and Analysis Using Capillary Electrophoresis
Trends in Analytical Chemistry **2006**, 25(9), 868–875.
- [31] Stefanie Zorbas-Seifried, Christian G. Hartinger, Kristof Meelich, Markus Galanski, Bernhard K. Keppler, Haralabos Zorbas
DNA Interactions of pH Sensitive, Antitumor Bis(aminoalcohol)dichloroplatinum(II) Complexes
Biochemistry **2006**, 45(49), 14817-14825.
- [32] Stefanie Zorbas-Seifried,* Michael A. Jakupec, Nikolay V. Kukushkin, Michael Groessl, Christian Hartinger, Olga Semenova, Haralabos Zorbas, Vadim Yu. Kukushkin, Bernhard K. Keppler*
Reversion of Structure-Activity Relationships of Antitumor Platinum Complexes by Acetoxime but not Hydroxylamine Ligands
Molecular Pharmacology **2007**, 71, 357-365.
- [33] Svetlana S. Alekseenko, Christian G. Hartinger, Olga Semenova, Kristof Meelich, Andrei R. Timerbaev*, Bernhard K. Keppler*
Characterization of Interactions Between Human Serum Albumin and Tumor-inhibiting Aminoalcohol Platinum(II) Complexes Using Capillary Electrophoresis
Journal of Chromatography A **2007**, 1155(2), 218-221.
- [34] Isabella Berger, Alexey A. Nazarov*, Christian G. Hartinger, Michael Groessl, Seied-M. Valiahdi, Michael A. Jakupec, Bernhard K. Keppler*
A Glucose Derivative as Natural Alternative to the Cyclohexane-1,2-diamine Ligand in the Anticancer Drug Oxaliplatin?
ChemMedChem **2007**, 2(4), 505–514. Cover Picture *ChemMedChem* **2007**, 2(4), 385.
- [35] Michael Groessl, Erwin Reisner, Christian G. Hartinger*, Rene Eichinger, Olga Semenova, Andrei R. Timerbaev, Michael A. Jakupec, Vladimir B. Arion, Bernhard K. Keppler*
Structure-Activity Relationships for NAMI-A-type Complexes – (HL)[*trans*-RuCl₄L(S-dmso)ruthenate(III)] (L = Imidazole, Indazole, 1,2,4-Triazole, 4-Amino-1,2,4-triazole, and 1-Methyl-1,2,4-triazole): Aquation, Redox Properties, Protein Binding, and Antiproliferative Activity
Journal of Medicinal Chemistry **2007**, 50(9), 2185-2193.

- [36] Andrei R. Timerbaev,* Lidia S. Foteva, Alexander V. Rudnev, Jan K. Abramski, Katarzyna Połeć-Pawlak, Christian G. Hartinger, Maciej Jarosz, Bernhard K. Keppler
Probing the Stability of Serum Protein–Ruthenium(III) Drug Adducts in the Presence of Extracellular Reductants using CE
Electrophoresis **2007**, 28(13), 2235-2240
- [37] Christian G. Hartinger,* Bernhard K. Keppler*
CE in Anticancer Metallodrug Research – an Update
Electrophoresis **2007**, 28, 3436-3446.
- [38] Christian G. Hartinger,* Wee Han Ang, Angela Casini, Luigi Messori, Bernhard K. Keppler, Paul J. Dyson
Mass Spectrometric Analysis of Ubiquitin–Platinum Interactions of Leading Anticancer Drugs: MALDI versus ESI
Journal of Analytical Atomic Spectrometry **2007**, 22(8), 960-967.
Chemical Biology Virtual Journal **2007**, 9.
- [39] Claudine Scolaro, Adrian B. Chaplin, Christian G. Hartinger, Alberta Bergamo, Moreno Cocchietto, Bernhard K. Keppler, Gianni Sava, Paul J. Dyson*
Tuning the Hydrophobicity of Ruthenium(II)-Arene (RAPTA) Drugs to Modify Uptake, Biomolecular Interactions and Efficacy
Dalton Transactions **2007**, 43, 5065-5072.
Chemical Biology Virtual Journal **2007**, 12.
- [40] Ladislav Habala, Claudia Dworak, Alexey A. Nazarov,* Christian G. Hartinger, Sergey A. Abramkin, Vladimir B. Arion, Wolfgang Lindner, Markus Galanski,* Bernhard K. Keppler
Methyl-substituted trans-1,2-Cyclohexanediamines as New Ligands for Oxaliplatin-type Complexes
Tetrahedron **2008**, 64(1), 137-146.
- [41] Christian G. Hartinger,* Yury O. Tsybin, Jens Fuchser, Paul J. Dyson*
Characterization of Platinum Anticancer Drug Protein-Binding Sites Using a Top-Down Mass Spectrometric Approach
Inorganic Chemistry **2008**, 47(1), 17-19.
- [42] Maria-Grazia Mendoza-Ferri, Christian G. Hartinger,* Rene E. Eichinger, Natalya Stolyarova, Kay Severin, Michael A. Jakupec, Alexey A. Nazarov,* Bernhard K. Keppler
Influence of the Spacer Length on the *in Vitro* Anticancer Activity of Dinuclear Ruthenium-Arene Compounds
Organometallics **2008**, 27(11), 2405-2407.
- [43] Angela Casini, Christian Hartinger, Chiara Gabbiani, Enrico Mini, Paul J. Dyson, Bernard K. Keppler, Luigi Messori*
Gold(III) Compounds as Anticancer Agents: Relevance of Gold-Protein Interactions for their Mechanism of Action
Journal of Inorganic Biochemistry **2008**, 102, 564-575. (listed in the most cited articles published since 2007 in JIB)
- [44] Michael A. Jakupec,* Markus Galanski, Vladimir B. Arion, Christian G. Hartinger, Bernhard K. Keppler*
Antitumour Metal Compounds: More than Theme and Variations
Dalton Transactions **2008**, 183-194. Top ten of the most accessed paper from Dalton Transactions online (till 2009)
Top ten most cited articles in 2009 published in Dalton Transactions during 2007 to 2008
Chemical Biology Virtual Journal **2008**, 2.

- [45] Michael Groessl, Christian G. Hartinger,* Paul J. Dyson, Bernhard K. Keppler*
CZE-ICP-MS as a Tool for Studying the Hydrolysis of Ruthenium Anticancer Drug Candidates and their Reactivity towards the DNA Model Compound dGMP
Journal of Inorganic Biochemistry **2008**, *102*, 1060-1065.
- [46] Antoine Dorcier, Christian G. Hartinger,* Rosario Scopelliti, Richard H. Fish, Bernhard K. Keppler, Paul J. Dyson*
Studies on the Reactivity of Organometallic Ru-, Rh- and Os-pta Complexes with DNA Model Compounds
Journal of Inorganic Biochemistry **2008**, *102*, 1066-1076. (listed in the most cited articles published since 2007 in JIB)
- [47] Christian G. Hartinger*
Dalton Discussion 10 – Applications of Metals in Medicine and Healthcare: Applications of Platinum Group Metals in Cancer and HIV Treatment
Platinum Metals Review **2008**, *52*(2), 96–99.
- [48] Adrian B. Chaplin, Zoltan Beni, Christian Hartinger, Hisham Ben Hamidane, Andrew D. Phillips, Rosario Scopelliti, Paul J. Dyson*
Linked metal-cluster systems: Isolation and characterisation of {anti-[*p*-cymene)RuCl]- μ -[κ^2 -*P,P'*; κ^1 -*P''*-(PPh₂CH₂)₃CMe]-[AuPt₃(CO)₃(PCy₃)₃](PF₆)₂
Journal of Cluster Science **2008**, *19*(1), 295-309.
- [49] Michael Groessl, Christian G. Hartinger,* Kasia Połec-Pawlak, Maciej Jarosz, Bernhard K. Keppler*
Capillary Electrophoresis Hyphenated to Inductively Coupled Plasma-Mass Spectrometry: a Novel Approach for the Analysis of Anticancer Metallodrugs in Human Serum and Plasma
Electrophoresis **2008**, *29*(10), 2224-2232.
- [50] Christian G. Hartinger,* Michael A. Jakupc, Stefanie Zorbas-Seifried, Michael Groessl, Alexander Egger, Walter Berger, Haralabos Zorbas, Paul J. Dyson, Bernhard K. Keppler*
KP1019, a New Redox-Active Anticancer Agent – Preclinical Development and Results of a Clinical Phase I Study in Tumor Patients
Chemistry & Biodiversity **2008**, *5*(10), 2140-2155.
- [51] Michael Groessl, Christian G. Hartinger,* Kasia Połec-Pawlak, Maciej Jarosz, Paul J. Dyson, Bernhard K. Keppler*
Elucidation of the Interactions of an Anticancer Ruthenium Complex in Clinical Trials with Biomolecules Utilizing Capillary Electrophoresis Hyphenated to Inductively Coupled Plasma-Mass Spectrometry
Chemistry & Biodiversity **2008**, *5*(8), 1609-1614.
- [52] Shaheen M. Ashraf, Isabella Berger, Alexey A. Nazarov,* Christian G. Hartinger,* Mikhail P. Koroteev, Eduard E. Nifant'ev, Bernhard K. Keppler
Phosphite-derivatized Ruthenium-Carbohydrate Complexes in the Catalytic Hydration of Nitriles
Chemistry & Biodiversity **2008**, *5*(8), 1640-1644.
- [53] Shaheen M. Ashraf, Wolfgang Kandioller, Maria-Grazia Mendoza-Ferri, Alexey A. Nazarov,* Christian G. Hartinger,* Bernhard K. Keppler
The Hydration of Chloroacetonitriles Catalyzed by Mono- and Dinuclear Ru(II)- and Os(II)-Arene Complexes
Chemistry & Biodiversity **2008**, *5*(10), 2060-2066
- [54] Maria G. Mendoza-Ferri, Christian G. Hartinger,* Alexey A. Nazarov,* Wolfgang Kandioller, Kay Severin, Bernhard K. Keppler
Modifying the Structure of Dinuclear Ruthenium Complexes with Antitumor Activity
Applied Organometallic Chemistry **2008**, *22*, 326–332.

- [55] Claudine Scolaro, Christian G. Hartinger,* Claire Allardyce, Bernhard K. Keppler, Paul J. Dyson
Hydrolysis Study of the Bifunctional Antitumour Compound RAPTA-C, [Ru(η^6 -*p*-cymene)Cl₂(pta)]
Journal of Inorganic Biochemistry **2008**, *102*, 1743-1748.
- [56] Isabella Berger, Muhammad Hanif, Alexey A. Nazarov,* Christian G. Hartinger,* Roland John, Maxim L. Kuznetsov, Michael Groessl, Frederic Schmitt, Olivier Zava, Florian Biba, Vladimir B. Arion, Markus Galanski, Michael A. Jakupec, Lucienne Juillerat-Jeanneret, Paul J. Dyson, Bernhard K. Keppler
In Vitro Anticancer Activity and Biologically-Relevant Metabolization of Organometallic Ruthenium Complexes with Carbohydrate-based Ligands
Chemistry – A European Journal **2008**, *14*(29), 9046-9057.
- [57] Petra Heffeter, Ute Jungwirth, Michael Jakupec, Christian Hartinger, Markus Galanski, Leonilla Elbling, Michael Micksche, Bernhard Keppler, Walter Berger*
Resistance Against Novel Anticancer Metal Compounds: Differences and Similarities
Drug Resistance Updates **2008**, *11*, 1-16.
- [58] Soumya Chatterjee, Subhadip Kundu, Arindam Bhattacharyya,* Christian G. Hartinger, Paul J. Dyson*
The Ruthenium(II)-Arene Compound RAPTA-C Induces Apoptosis in EAC Cells through Mitochondrial and p53-JNK Pathways
Journal of Biological Inorganic Chemistry **2008**, *13*, 1149–1155.
- [59] Alexander E. Egger, Christian G. Hartinger,* Hisham Ben Hamidane, Yury O. Tsybin, Bernhard K. Keppler, Paul J. Dyson
High Resolution Mass Spectrometry for Studying the Interactions of Cisplatin with Oligonucleotides
Inorganic Chemistry **2008**, *47*(22), 10626-10633.
- [60] Angela Casini, Chiara Gabbiani, Francesca Sorrentino, Maria Pia Rigobello, Alberto Bindoli, Tilman J. Geldbach, Alessandro Marrone, Nazzareno Re, Christian G. Hartinger, Paul J. Dyson, Luigi Messori*
Emerging Protein Targets for Anticancer Metallodrugs: Inhibition of Thioredoxin Reductase and Cathepsin B by Antitumor Ruthenium(II)-Arene Compounds
Journal of Medicinal Chemistry **2008**, *51*(21), 6773-6781.
- [61] Christian G. Hartinger,* Alexey A. Nazarov,* Shaheen M. Ashraf, Paul J. Dyson, Bernhard K. Keppler
Carbohydrate-Metal Complexes and their Potential as Anticancer Agents
Current Medicinal Chemistry **2008**, *15*(25), 2574-2591.
- [62] Xue Yang, Zhaofu Fei, Tilman J. Geldbach, Andrew D. Phillips, Christian G. Hartinger, Yongdan Li,* Paul J. Dyson*
Suzuki Coupling Reactions in Ether-Functionalized Ionic Liquids: The Importance of Weakly Interacting Cations
Organometallics **2008**, *27*(15), 3971-3977.
- [63] Christian G. Hartinger, Angela Casini, Céline Duhot, Yury O. Tsybin, Luigi Messori, Paul J. Dyson
Stability of an Organometallic Ruthenium-Ubiquitin Adduct in the Presence of Glutathione: Relevance to Antitumour Activity
Journal of Inorganic Biochemistry **2008**, *102*(12), 2136-2141.
- [64] Alexander E. Egger, Christina Rappel, Michael A. Jakupec*, Christian G. Hartinger, Petra Heffeter, Bernhard K. Keppler*
Development of an Experimental Protocol for Uptake Studies of Metal Compounds in Adherent Tumor Cells
Journal of Analytical Atomic Spectrometry **2009**, *24*(1), 51-61.
- [65] Olga Nováková, Alexey A. Nazarov, Christian G. Hartinger, Bernhard K. Keppler, Viktor Brabec*
DNA Interactions of Dinuclear Ru^{II} Arene Antitumor Complexes in Cell-free Media
Biochemical Pharmacology **2009**, *77*(3), 364-374.

- [66] Frederike Lentz, Anne Drescher, Andreas Lindauer, Magdalena Henke, Ralf A. Hilger, Christian G. Hartinger, Max E. Scheulen, Christian Dittrich, Bernhard K. Keppler, and Ulrich Jaehde*
Pharmacokinetics of a Novel Anticancer Ruthenium Complex (KP1019, FFC14A) in a Phase I Dose-escalation Study
Anti-Cancer Drugs **2009**, *20*(2), 97–103.
- [67] Christian G. Hartinger,* Paul J. Dyson*
Bioorganometallic Chemistry – From Teaching Paradigms to Medicinal Applications
Chemical Society Reviews **2009**, *38*, 391–401.
Chemical Biology **2009**, *3*
- [68] Wolfgang Kandioller, Christian G. Hartinger,* Alexey A. Nazarov,* Johanna Kasser, Roland John, Michael A. Jakupc, Vladimir B. Arion, Paul J. Dyson, Bernhard K. Keppler
Tuning the Anticancer Activity of Maltol-derived Ruthenium Complexes by Derivatization of the 3-Hydroxy-4-pyrone Moiety
Journal of Organometallic Chemistry **2009**, *694*, 922–929.
- [69] Anna K. Renfrew, Andrew D. Phillips, Alexander Egger, Christian G. Hartinger, Sylvain S. Bosquain, Alexey A. Nazarov, Bernhard K. Keppler, Luca Gonsalvi, Maurizio Peruzzini, Paul J. Dyson*
Influence of Structural Variation on the Anticancer Activity of RAPTA-type Complexes: ptn versus pta
Organometallics **2009**, *28*(4), 1165–1172. Highlighted in the ACS Thematic Collection: Chemistry for Preventing & Combating Disease, 2010-06-17
- [70] Maria G. Mendoza-Ferri, Christian G. Hartinger,* Marco A. Mendoza, Michael Groessl, Alexander Egger, Rene E. Eichinger, John B. Mangrum, Nicholas P. Farrell, Magdalena Maruszak, Patrick J. Bednarski, Franz Klein, Michael A. Jakupc, Alexey A. Nazarov,* Kay Severin, Bernhard K. Keppler
Transferring the Concept of Multinuclearity to Ruthenium Complexes for Improvement of Anticancer Activity
Journal of Medicinal Chemistry **2009**, *52*(4), 916–925.
Nature **2009**, *458*, 389 (Paul J. Dyson, Journal Club)
- [71] Muhammad Ashraf Shaheen, Christian G. Hartinger, M. Nawaz Tahir, Ahmad Awan Shafiq, Bernhard K. Keppler
5-Hydroxy-2-methyl-4H-pyran-4-one
Acta Crystallographica, Section E: Structure Reports Online **2009**, *E65*(2), o437.
- [72] Johanna Kasser, Alexey A. Nazarov,* Christian G. Hartinger,* Brigitte Wdziekonski, Christian Dani, Maxim L. Kuznetsov, Vladimir B. Arion, Bernhard K. Keppler
A One Step/One Pot Synthesis of N,N-Bis(phosphonomethyl)amino acids and their Effects On Adipogenic and Osteogenic Differentiation of Human Mesenchymal Stem Cells
Bioorganic and Medicinal Chemistry **2009**, *17*, 3388–3393.
- [73] Michael Groessl, Anna Bytzek, Christian G. Hartinger*
The Serum Protein Binding of Pharmacologically Active Gallium(III) Compounds Assessed by Hyphenated CE–MS Techniques
Electrophoresis **2009**, *30*(15), 2720–2727.
- [74] Anna K. Bytzek, Éva A. Enyedy,* Tamás Kiss, Bernhard K. Keppler, Christian G. Hartinger*
Biodistribution of Antidiabetic Zn(II) Complexes in Human Serum and *in Vitro* Protein Binding Studies by Means of CZE–ICP–MS
Electrophoresis **2009**, *30*, 4075–4082.

- [75] Wolfgang Kandioller, Christian G. Hartinger*, Alexey A. Nazarov*, Maxim L. Kuznetsov, Roland John, Caroline Bartel, Michael A. Jakupec, Vladimir B. Arion, Bernhard K. Keppler
From Pyrone to Thiopyrone Ligands – Rendering Maltol-Derived Ruthenium(II)-Arene Complexes That Are Anticancer Active in Vitro
Organometallics **2009**, 28(15), 4249–4251.
- [76] Florian Biba, Michael Groessl,* Alexander Egger, Alexander Roller, Christian G. Hartinger, Bernhard K. Keppler
New Insights into the Chemistry of the Antineoplastic Lanthanum Complex Tris(1,10-phenanthroline)tris(thiocyanato- κN)lanthanum(III) (KP772) and Its Interaction with Biomolecules
European Journal of Inorganic Chemistry **2009**, 28, 4282-4287.
- [77] Wolfgang Kandioller, Christian G. Hartinger*, Alexey A. Nazarov*, Caroline Bartel, Matthias Skocic, Michael A. Jakupec, Vladimir B. Arion, Bernhard K. Keppler
Maltol-derived ruthenium-cymene complexes with tumor inhibiting properties: The impact of ligand-metal bond stability on the anticancer activity
Chemistry – A European Journal **2009**, 15, 12283-12291.
- [78] Maria G. Mendoza-Ferri, Christian G. Hartinger,* Alexey A. Nazarov,* Rene E. Eichinger, Michael A. Jakupec, Kay Severin, Bernhard K. Keppler
Influence of the Arene Ligand, the Number and Type of Metal Centers and the Leaving Group on the in Vitro Antitumor Activity of Polynuclear Organometallic Compounds
Organometallics **2009**, 28(21), 6260-6265. Highlighted in the ACS Thematic Collection: Chemistry for Preventing & Combating Disease, 2010-06-17
- [79] Yugang Cui, Ilaria Biondi, Xue Yang, Zhaofu Fei, Christian G. Hartinger, Yongdan Li, Cinzia Chiappe, Paul J. Dyson*
Nitrile functionalized pyrrolidinium ionic liquids as effective solvents for cross coupling reactions involving in situ generated nanoparticle catalyst reservoirs.
Physical Chemistry Chemical Physics **2010**, 12(8), 1834-1841.
- [80] Johanna H. Kasser, Wolfgang Kandioller, Christian G. Hartinger,* Alexey A. Nazarov, Vladimir B. Arion, Paul J. Dyson, Bernhard K. Keppler
Mannich products of kojic acid and N-heterocycles, and their Ru(II)-arene complexes: synthesis, characterization and stability
Journal of Organometallic Chemistry **2010**, 695, 875-881.
- [81] Anna K. Bytzek, Michael R. Reithofer, Markus Galanski, Michael Groessl, Bernhard K. Keppler, Christian G. Hartinger*
The first example of MEEKC–ICP-MS coupling and its application for the analysis of anticancer platinum complexes
Electrophoresis **2010**, 31(7), 1144-1150. Cover picture *Electrophoresis* **2010**, 31(7), 1127.
- [82] Muhammad Hanif, Alexey A. Nazarov,* Christian G. Hartinger,* Wolfgang Kandioller, Michael A. Jakupec, Vladimir B. Arion, Paul J. Dyson, Bernhard K. Keppler
Osmium(II) versus Ruthenium(II)-Arene Carbohydrate-based Anticancer Compounds: Similarities and Differences
Dalton Transactions **2010**, 39(31), 7345-7352.
- [83] Michael Groessl,* Yury O. Tsybin, Christian G. Hartinger, Bernhard K. Keppler, Paul J. Dyson
Ruthenium versus Platinum: Interactions of Anticancer Metallodrugs with Duplex Oligonucleotides Characterised by Electrospray Ionisation Mass Spectrometry
Journal of Biological Inorganic Chemistry **2010**, 15(5), 677-688.

- [84] Zhaofu Fei, Dun-Ru Zhu, Xue Yang, Lingjie Meng, Qinghua Lu, Wee Han Ang, Rosario Scopelliti, Christian G. Hartinger, Paul J. Dyson*
An Internal Fluorescent Probe Based on Anthracene to Evaluate Cation-Anion Interactions in Imidazolium Salts
Chemistry – A European Journal **2010**, *16*(22), 6473-6481. Cover picture: *Chemistry – A European Journal* **2010**, *16*(22), 6397.
- [85] Meral Görmen, Pascal Pigeon, Siden Top*, Elizabeth A. Hillard*, Michel Huché, Christian G. Hartinger, Frédéric de Montigny, Marie-Aude Plumont, Anne Vessières, Gérard Jaouen
Synthesis, cytotoxicity and COMPARE analysis of ferrocene and [3]ferrocenophane tetrasubstituted olefin derivatives against human cancer cells
ChemMedChem **2010**, *5*, 2039-2050.
- [86] Alexander E. Egger, Christian G. Hartinger,* Anna K. Renfrew, Paul J. Dyson
Metabolization of $[\text{Ru}(\eta^6\text{-C}_6\text{H}_5\text{CF}_3)(\text{pta})\text{Cl}_2]$: a cytotoxic RAPTA-type complex with a strongly electron-withdrawing arene ligand
Journal of Biological Inorganic Chemistry **2010**, *15*, 919-927.
- [87] Anna K. Renfrew, Alexander E. Egger, Rosario Scopelliti, Christian G. Hartinger, Paul J. Dyson*
Synthesis and characterisation of the water soluble bis-phosphine complex $[\text{Ru}(\eta^6\text{-cymene})\text{Cl}(\kappa\text{-PPh}_2(o\text{-C}_6\text{H}_4\text{O}))(\text{pta})]^+$ and an investigation of its cytotoxic effects
Comptes rendus chimie **2010**, *13*(8-9), 1144-1150.
- [88] Sergey A. Abramkin, Seied M. Valiahdi, Claudia Dworak, Ladislav Habala, Kristof Meelich, Ute Jungwirth, Walter Berger, Michael A. Jakupec, Christian G. Hartinger, Alexey A. Nazarov,* Markus Galanski,* Bernhard K. Keppler*
{(1R,2R,4R)-4-Methyl-1,2-cyclohexanediamine}-oxalatoplatinum(II) – a novel enantiomerically pure oxaliplatin derivative showing improved anticancer activity *in vivo*
Journal of Medicinal Chemistry **2010**, *53*(20), 7356-7364.
- [89] Muhammad Hanif, Helena Henke, Samuel M. Meier, Sanela Martic, Mahmoud Labib, Wolfgang Kandioller, Michael A. Jakupec, Vladimir B. Arion, Heinz-Bernhard Kraatz, Bernhard K. Keppler, Christian G. Hartinger*
Is the Reactivity of M(II)-Arene Complexes of 3-Hydroxy-2(1*H*)-pyridones to Biomolecules the Anticancer Activity Determining Parameter?
Inorganic Chemistry **2010**, *49*(17), 7953-7963.
- [90] Muhammad Hanif, Patricia Schaaf, Wolfgang Kandioller, Michaela Hejl, Michael A. Jakupec, Alexander Roller, Bernhard K. Keppler, Christian G. Hartinger*
Influence of the Arene Ligand and the Leaving Group on the Anticancer Activity of (Thio)maltol Ruthenium^{II}-(η^6 -Arene) Complexes
Australian Journal of Chemistry **2010**, *63*, 1521–1528. (invited)
- [91] Christian G. Hartinger*
Trapping Unstable Benzoquinone Analogues by Coordination to a $[(\eta^5\text{-C}_5\text{Me}_5)\text{Ir}]$ Fragment and the Anticancer Activity of the Resulting Complexes
Angewandte Chemie **2010**, *49*, 8304-8305.
- [92] Michael R. Reithofer, Anna K. Bytzek, Seied M. Valiahdi, Christian R. Kowol, Michael Groessl, Christian G. Hartinger, Michael A. Jakupec, Markus Galanski*, Bernhard K. Keppler*
Tuning of Lipophilicity and Cytotoxic Potency by Structural Variation of Anticancer Platinum(IV) Complexes
Journal of Inorganic Biochemistry **2011**, *105*, 46–51.

- [93] Muhammad Hanif, Samuel M. Meier, Wolfgang Kandioller, Anna Bytzek, Michaela Hejl, Christian G. Hartinger,* Alexey A. Nazarov,* Vladimir B. Arion, Michael A. Jakupec, Paul J. Dyson, Bernhard K. Keppler
From Hydrolytically Labile to Hydrolytically Stable Ru(II)-Arene Anticancer Complexes with Carbohydrate-Derived Co-ligands
Journal of Inorganic Biochemistry **2011**, *105*(2), 224-231.
- [94] Wolfgang Kandioller,* Andrea Kurzwernhart, Muhammad Hanif, Samuel M. Meier, Helena Henke, Bernhard K. Keppler, Christian G. Hartinger*
(Thio)Pyr(id)ones and metals: from natural products to metal-based drugs
Journal of Organometallic Chemistry **2011**, *696*, 999-1010. Special issue to ISBOMC'10
- [95] Helge Gehrke, Joanna Pelka, Christian G. Hartinger, Holger Blank, Reinhard Schneider, Dagmar Gerthsen, Michael Türk, Doris Marko*
DNA-associated platinum measured by ICP-MS after incubation of human colon carcinoma cells with platinum nanoparticles
Archives in Toxicology **2011**, *85*, 799-812.
- [96] Bin Wu, Michelle S. Ong, Paul J. Dyson, Christian G. Hartinger and Curt A. Davey*
A Ruthenium Antitumour Agent Forms Specific Histone Protein Adducts in the Nucleosome Core Chemistry – A European Journal **2011**, *17*, 3562-3566
- [97] Éva A. Enyedy, László Horváth, Anasztázia Hetényi, Tiziano Tuccinardi, Christian G. Hartinger, Bernhard K. Keppler, Tamás Kiss
Interactions of the carrier ligands of antidiabetic metal complexes with human serum albumin: A combined spectroscopic and separation approach with molecular modeling studies
Bioorganic & Medicinal Chemistry **2011**, *19*, 4202–4210.
- [98] Christian G. Hartinger,* Andrew D. Phillips,* Alexey A. Nazarov*
Polynuclear Ruthenium, Osmium and Gold Complexes. The Quest for Innovative Anticancer Chemotherapeutics
Current Topics in Medicinal Chemistry **2011**, *11*, 2688-2702.
- [99] Ute Junwgirth, Christian R. Kowol, Bernhard K. Keppler, Christian Hartinger, Walter Berger,* Petra Heffeter*
Anticancer Activity of Metal Complexes: Involvement of Redox Processes
Antioxidants & Redox Signaling **2011**, *15*(4), 1085-1127.
- [100] Anna K. Bytzek, Katharina Boeck, Stephan Hann, Bernhard K. Keppler, Christian G. Hartinger,* Gunda Koellensperger*
LC- and CZE-ICP-MS approaches for the in vivo analysis of the anticancer drug candidate sodium trans-[tetrachloridobis(1H-indazole)ruthenate(III)] (KP1339) in mouse plasma
Metalomics **2011**, *3*, 1049-1055.
- [101] Jakob Kljun, Anna K. Bytzek, Wolfgang Kandioller, Caroline Bartel, Michael A. Jakupec, Christian G. Hartinger, Bernhard K. Keppler, Iztok Turel*
Physicochemical Studies and Anticancer Potency of Ruthenium η^6 -p-Cymene Complexes Containing Antibacterial Quinolones
Organometallics **2011**, *30*(9), 2506-2512.
- [102] Helena Henke, Wolfgang Kandioller, Muhammad Hanif, Bernhard K. Keppler, Christian G. Hartinger*
Organometallic Ru and Os compounds of 2- and 4-Pyridones as Potential Anticancer Agents
Chemistry & Biodiversity, **2012**, *9*(9), 1718-1727.

- [103] Samuel M. Meier, Yury O. Tsybin, Paul J. Dyson, Bernhard K. Keppler, Christian G. Hartinger*
Fragmentation Methods on the Balance: Unambiguous Top-Down Mass Spectrometric Characterization of Oxaliplatin-Ubiquitin Binding Sites
Analytical and Bioanalytical Chemistry **2012**, *402*, 2655-2662.
- [104] Muhammad Hanif, Alexey A. Nazarov,* Christian G. Hartinger*
Synthesis of $[\text{Ru}^{\text{II}}(\eta^6\text{-}p\text{-cymene})(\text{PPh}_3)(\text{L})\text{Cl}]\text{PF}_6$ complexes with carbohydrate-derived phosphites, imidazole or indazole co-ligands
Inorganica Chimica Acta **2012**, *380*, 211-215.
- [105] Caroline Bartel, Anna K. Bytzek, Yulia Yu. Scaffidi-Domianello, Gerlinde Grabmann, Michael A. Jakupec, Christian G. Hartinger, Vadim Yu. Kukushkin, Markus Galanski, Bernhard K. Keppler
Cellular accumulation and DNA interaction studies of active trans-platinum anticancer compounds
Journal of Biological Inorganic Chemistry **2012**, *17*, 465-474.
- [106] Samuel M. Meier, Muhammad Hanif, Wolfgang Kandioller, Bernhard K. Keppler, Christian G. Hartinger*
Biomolecule Binding vs. Anticancer Activity: Reactions of Ru(arene)[(thio)pyr(id)one] Compounds with Amino Acids and Proteins
Journal of Inorganic Biochemistry **2012**, *108*, 91-95.
- [107] Rosana Hudej, Jakob Kljun, Wolfgang Kandioller, Urška Repnik, Boris Turk, Christian G. Hartinger, Bernhard K. Keppler, Damijan Miklavčič, Iztok Turel*
Synthesis and Biological Evaluation of the Thionated Derivative of Antibacterial Agent Nalidixic Acid and its Organoruthenium(II) Complex
Organometallics **2012**, *31*(16), 5867-5874. Most read article in the last 12 months in Organometallics (July 2013)
- [108] Gerlinde Grabmann, Samuel M. Meier, Yulia Y. Scaffidi-Domianello, Markus Galanski, Bernhard K. Keppler, Christian G. Hartinger*
CZE and CZE-ESI-MS Studies on the Behavior of Anticancer cis- and trans-[Dihalidobis(2-propanone oxime)platinum(II)] Complexes in Aqueous Solutions
Journal of Chromatography A **2012**, *1267*, 156-161.
- [109] Andrea Kurzwernhart, Wolfgang Kandioller, Caroline Bartel, Simone Bächler, Robert Trondl, Gerhard Mühlgassner, Michael A. Jakupec, Vladimir B. Arion, Doris Marko, Bernhard K. Keppler, Christian G. Hartinger*
Targeting the DNA-topoisomerase complex in a double-strike approach with a topoisomerase inhibiting moiety and covalent DNA binder
Chemical Communications **2012**, *48*(40), 4839-4841.
- [110] Éva A. Enyedy,* Orsolya Dömötör, Erika Varga, Tamás Kiss, Robert Trondl, Christian G. Hartinger, Bernhard B. Keppler
Comparative solution equilibrium studies of anticancer gallium(III) complexes of 8-hydroxyquinoline and hydroxy(thio)pyrone ligands
Journal of Inorganic Biochemistry **2012**, *117*, 189-197.
- [111] Christian G. Hartinger,* Nils Metzler-Nolte,* Paul J. Dyson*
Challenges and opportunities in the development of organometallic anticancer drugs
Organometallics **2012**, *31*(16), 5677-5685.
- [112] Anna K. Bytzek, Christian G. Hartinger*
Capillary Electrophoretic Methods in the Development of Metal-based Therapeutics and Diagnostics: New Methodology and Applications
Electrophoresis **2012**, *33*, 622-634.

- [113] Andrea Kurzwernhart, Wolfgang Kandioller, Simone Bächler, Caroline Bartel, Sanelia Martic, Magdalena Maruszak, Gerhard Mühlgassner, Michael A. Jakupc, Bernie Kraatz, Patrick J. Bednarski, Vladimir B. Arion, Doris Marko, Bernhard K. Keppler, Christian G. Hartinger*
Structure-activity relationships of targeted Ru^{II}(η⁶-*p*-cymene) anti-cancer complexes with flavonol-derived ligands
Journal of Medicinal Chemistry **2012**, 55(23), 10512-10522
- [114] Muhammad Hanif, Alexey A. Nazarov, Anton Legin, Michael Groessl, Vladimir B. Arion, Michael A. Jakupc, Yury O. Tsybin, Paul Dyson, Bernhard K. Keppler, Christian G. Hartinger
Maleimide-functionalized Organometallic Ruthenium Anticancer Agents for the Delivery of Cytotoxic Moieties to the Tumour Tissue
Chemical Communications **2012**, 48(10), 1475-1477. Cover *Chem. Commun.* **2012**, 48(10), 1326
<http://blogs.rsc.org/cc/2012/01/31/chemcomm-emerging-investigators-issue-2012/>
HEC Outstanding Research Awards 2014 (1 out of 20 awards/year, 500 USD)
- [115] Alexey A. Nazarov,* Julie Risse, Wee Han Ang, Frederic Schmitt, Olivier Zava, Rosario Scopelitti, Lucienne Juillerat-Jeanneret, Christian G. Hartinger and Paul J. Dyson*
Anthracene-tethered Ru(II)-arene Complexes as Tools to Visualize Cellular Accumulation of Putative Organometallic Anticancer Compounds
Inorganic Chemistry **2012**, 51(6), 3633-3639.
- [116] Ute Jungwirth, Dimitris Xanthos, Johannes Gojo, Anna K Bytzek, Winfried Körner, Petra Heffeter, Sergey A. Abramkin, Michael A. Jakupc, Christian G. Hartinger, Ursula Windberger, Markus Galanski, Bernhard K Keppler, Walter Berger*
Methyl-substituted oxaliplatin analogues with improved therapeutic features: complex impact of stereoisomerism
Molecular Pharmacology **2012**, 81, 719-728.
- [117] Joanna Pelka, Helge Gehrke, Anja Rechel, Manfred Kappes, Frank Hennrich, Christian G. Hartinger, Doris Marko*
DNA damaging properties of single walled carbon nanotubes in human colon carcinoma cells
Nanotoxicology **2013**, 7(1), 2–20.
- [118] Muhammad Hanif, Samuel M. Meier, Alexey A. Nazarov, Julie Risse, Anton Legin, Angela Casini, Michael A. Jakupc, Bernhard K. Keppler, Christian G. Hartinger*
Influence of the π-coordinated arene on the anticancer activity of ruthenium(II) carbohydrate organometallic complexes
Frontiers in Inorganic Chemistry **2013**, 1, 27-1-7. Inaugural Article as Associate Editor
- [119] Anastasia De Luca, Christian Hartinger, Paul J. Dyson, Mario Lo Bello, Angela Casini
A new target for gold(I) compounds: Glutathione-S-transferase inhibition by Auranofin
Journal of Inorganic Biochemistry **2013**, 119, 38-42.
- [120] Christian G. Hartinger,* Michael Groessl, Samuel M. Meier, Angela Casini, Paul J. Dyson*
Application of Mass Spectrometric Techniques to Delineate the Modes-of-Action of Anticancer Metallodrugs
Chemical Society Reviews **2013**, 42(14), 6186-6199.
- [121] Gerlinde Grabmann, Bernhard K. Keppler, Christian G. Hartinger*
A Systematic Capillary Electrophoresis Study on the Effect of the Buffer Composition on the Reactivity of the Anticancer Drug Cisplatin to the DNA Model 2'-Deoxyguanosine 5'-monophosphate (dGMP)
Analytical and Bioanalytical Chemistry **2013**, 405(20), 6417-6424.

- [122] Andrea Kurzwernhart; Wolfgang Kandioller; Eva A. Enyedy; Maria Novak; Michael A. Jakupec; Bernhard K. Keppler; Christian G. Hartinger
3-Hydroxyflavones vs. 3-hydroxyquinolinones: structure-activity relationships and stability studies on Ru(II)(arene) anticancer complexes with biologically active ligands
Dalton Transactions **2013**, 42(17), 6193–6202.
- [123] Seied Mojtaba Valiahdi, Alexander E. Egger, Walter Miklos, Ute Jungwirth, Kristof Meelich, Petra Schluga, Walter Berger, Christian G. Hartinger, Markus Galanski, Michael A. Jakupec, Bernhard K. Keppler*
Influence of extracellular pH on the cytotoxicity, cellular uptake and DNA interaction of new pH-sensitive cisplatin derivatives
Journal of Biological Inorganic Chemistry **2013**, 18(2), 249-260.
- [124] Wolfgang Kandioller,* Evelyn Balsano, Samuel M. Meier, Ute Jungwirth, Simone Göschl, Alexander Roller, Michael A. Jakupec, Walter Berger, Bernhard K. Keppler, Christian G. Hartinger*
Organometallic anticancer complexes of lapachol: metal centre-dependent formation of reactive oxygen species and correlation with cytotoxicity
Chemical Communications **2013**, 49(32), 3348-3350.
Themed issue Medicinal Inorganic Chemistry
- [125] Maria V. Babak, Samuel M. Meier, Anton A. Legin, Mahsa S. Adib Razavia, Alexander Roller, Michael A. Jakupec, Bernhard K. Keppler, Christian G. Hartinger*
Am(m)ines make the Difference: Organometallic Ruthenium Am(m)ine Complexes and Their Chemistry in Anticancer Drug Development
Chemistry—A European Journal **2013**, 19(13), 4308-4318.
- [126] Orsolya Dömötör, Anna K. Bytzek, Christian G. Hartinger,* Tamás Kiss, Bernhard K. Keppler, Éva A. Enyedy*
Interaction of the anticancer ruthenium(III) complexes KP1019 and KP1339 with human serum albumin via competition studies
Journal of Biological Inorganic Chemistry **2013**, 18, 9-17.
- [127] Éva A. Enyedy, Éva Sija, Tamás Jakusch,* Christian G. Hartinger, Wolfgang Kandioller, Bernhard K. Keppler, Tamás Kiss*
Solution Equilibria of Anticancer Ruthenium(II)-(η⁶-p-Cymene)-Hydroxy(thio)pyr(id)one Complexes: Impact of Sulfur vs. Oxygen Donor Systems on the Speciation and Bioactivity
Journal of Inorganic Biochemistry **2013**, 127, 161-168.
- [128] Samuel M. Meier, Muhammad Hanif, Zenita Adhireksan, Verena Pichler, Maria Novak, Elisabeth Jirkovsky, Michael A. Jakupec, Vladimir B. Arion, Curt A. Davey, Bernhard K. Keppler, Christian G. Hartinger*
Novel Metal(II) Arene 2-Pyridinecarbothioamides: A Rationale to Orally Active Organometallic Anticancer Agents
Chemical Science **2013**, 4, 1837-1846.
- [129] Eva A. Enyedy, Gabriella M. Bognar, Tamas Kiss, Muhammad Hanif, Christian G. Hartinger,
Solution equilibrium studies on anticancer ruthenium(II)-η⁶-p-cymene complexes of 3-hydroxy-2(1H)-pyridones
Journal of Organometallic Chemistry **2013**, 734, 38-44.
- [130] Michael Groessl, Christian G. Hartinger
Anticancer metallodrug research analytically painting the "omics" picture – current developments and future trends
Analytical and Bioanalytical Chemistry **2013**, 405(6), 1791–1808.

- [131] Martina B. Schwarz, Andrea Kurzwernhart, Alexander Roller, Wolfgang Kandioller, Bernhard K. Keppler, Christian G. Hartinger
Rhodium(Cp*) Compounds with Flavone-derived Ligand Systems: Synthesis and Characterization
Zeitschrift für Allgemeine und Anorganische Chemie **2013**, 639(8-9), 1648-1654.
- [132] Samuel M. Meier, Maria Novak, Wolfgang Kandioller, Michael A. Jakupc, Vladimir B. Arion, Nils Metzler-Nolte, Bernhard K. Keppler, Christian G. Hartinger*
Identification of the Structural Determinants for Anticancer Activity of a Ruthenium Arene Peptide Conjugate
Chemistry—A European Journal **2013**, 19(28), 9297-9307.
- [133] Éva Sija, Christian G. Hartinger, Bernhard K. Keppler, Tamás Kiss, Éva A. Enyedy*
Solution Equilibrium Studies of Anticancer Ruthenium(II)- η^6 -p-cymene Complexes of Pyridinecarboxylic Acids
Polyhedron **2014**, 67, 51-58.
- [134] Alexey A. Nazarov,* Christian G. Hartinger,* Paul J. Dyson*
Opening the lid on piano-stool complexes: an account of ruthenium(II)-arene complexes with medicinal applications
Journal of Organometallic Chemistry **2014**, 751, 251-260. Silver certificate for the second most cited paper in the period 2013-2014
- [135] Samuel M. Meier, Maria S. Novak, Wolfgang Kandioller, Michael A. Jakupc, Alexander Roller, Bernhard K. Keppler, Christian G. Hartinger*
Aqueous Chemistry and Antiproliferative Activity of a Pyrone-based Phosphoramidate Ru(Arene) Anticancer Agent
Dalton Transactions **2014**, 43(26), 9851-9855.
- [136] Samuel M. Meier, Maria Babak, Bernhard K. Keppler, Christian G. Hartinger
Efficiently Detecting Metallodrug-Protein Adducts: Ion Trap vs. Time-of-Flight Mass Analyzer
ChemMedChem **2014**, 9(7), 1351-1355.
- [137] Muhammad Hanif,* Maria V. Babak, Christian G. Hartinger*
Development of Anticancer Agents: Wizardry with Osmium
Drug Discovery Today **2014**, 19(10), 1640-1648. top 25% of cited articles published by the journal
- [138] Orsolya Dömötör, Sabine Aicher, Melanie Schmidlehner, Maria S. Novak, Alexander Roller, Michael A. Jakupc, Wolfgang Kandioller, Christian G. Hartinger, Bernhard K. Keppler, Éva A. Enyedy
Antitumor Pentamethylcyclopentadienyl Rhodium Complexes of Maltol and Allomaltol: Synthesis, Solution Speciation and Bioactivity
Journal of Inorganic Biochemistry **2014**, 134, 57-65.
- [139] Alexander E. Egger, Sarah Theiner, Christoph Kornauth, Petra Heffeter, Walter Berger, Bernhard K. Keppler, Christian G. Hartinger
Quantitative bioimaging by LA-ICP-MS: a methodological study on the distribution of Pt and Ru in viscera originating from cisplatin- and KP1339-treated mice
Metallomics **2014**, 6(9), 1616-1625.
- [140] Farhana Aman, Muhammad Hanif, Waseeq Ahmad Siddiqui, Adnan Ashraf, Lukas K. Filak, Jóhannes Reynisson, Tilo Söhnel, Stephen M. F. Jamieson, Christian G. Hartinger
Anticancer Ruthenium(η^6 -p-cymene) Complexes of Non-steroidal Anti-inflammatory Drug Derivatives
Organometallics **2014**, 33(19), 5546-5553.

- [141] Muhammad Hanif, Muhammad Azhar Hayat Nawaz, Maria V. Babak, Jamshed Iqbal, Alexander Roller, Bernhard K. Keppler, Christian G. Hartinger
Ruthenium^{II}(η⁶-arene) Complexes of Thiourea Derivatives: Synthesis, Characterization and Urease Inhibition
Molecules **2014** *19*(6), 8080-8092.
- [142] Alexey A. Nazarov, Samuel M. Meier, Olivier Zava, Yulia N. Nosova, Elena R. Milaeva, Christian G. Hartinger, Paul J. Dyson
Protein rutenation and DNA alkylation: chlorambucil-functionalized RAPTA complexes and their anticancer activity
Dalton Transactions **2015**, *44*, 3614 – 3623 listed as highlight in the themed issue: Metal Interactions with Nucleic Acids
- [143] Sally Moon, Muhammad Hanif,* Mario Kubanik, Hannah Holtkamp, Tilo Söhnel, Stephen M. F. Jamieson, Christian G. Hartinger*
Organoruthenium and Osmium Anticancer Complexes Bearing a Maleimide Functional Group: Reactivity to Cysteine, Stability, and Cytotoxicity
ChemPlusChem **2015**, *80*, 231 – 236. Among the 25 most accessed articles for the last 12 months (02/2015 to 01/2016)
- [144] Hannah Holtkamp, Christian G. Hartinger*
Capillary Electrophoresis in Metallodrug Development
Drug Discovery Today: Technologies **2015**, *16*, 16-22.
- [145] Kubanik, Mario; Holtkamp, Hannah; Sohnle, Tilo; Jamieson, Stephen M. F.; Hartinger, Christian G.
Impact of the Halogen Substitution Pattern on the Biological Activity of Organoruthenium 8-Hydroxyquinoline Anticancer Agents
Organometallics **2015**, *34*(23), 5658-5668.
- [146] Maria V. Babak, Samuel M. Meier, Kilian Huber, Jóhannes Reynisson, Anton A. Legin, Michael A. Jakupc, Alexander Roller, Alexey Stukalov, Manuela Gridling, Keiryn L. Bennett, Jacques Colinge, Walter Berger, Paul J. Dyson, Giulio Superti-Furga, Bernhard K. Keppler, Christian G. Hartinger*
Target profiling of an antimetastatic RAPTA agent by chemical proteomics: relevance to the mode of action
Chemical Science **2015**, *6*, 2449-2456.
- [147] Maria V. Babak, Damian Plazuk, Samuel M. Meier, Homayon John Arabshahi, Jóhannes Reynisson, Błażej Rychlik, Andrzej Błażuś, Muhammad Hanif, Sebastian Ströbl, Bernhard K. Keppler, Christian G. Hartinger*
Half-sandwich Ruthenium(II) Biotin Conjugates as Biological Vectors to Cancer Cells
Chemistry – A European Journal **2015**, *21*(13), 5110-5117.
- [148] Wolfgang Kandioller, Mario Kubanik, Anna K. Bytzek, Michael A. Jakupc, Vladimir B. Arion, Bernhard K. Keppler, Christian G. Hartinger*
The rearrangement of tosylated flavones to 1'-(alkylamino)aurones with primary amines
Tetrahedron **2015**, *71*, 8953-8959.
- [149] Alexander E. Egger, Christoph Kornauth, Werner Haslik, Stephan Hann, Sarah Theiner, Günther Bayer, Christian G. Hartinger, Bernhard K. Keppler, Ursula Pluschnig, Robert M. Mader*
Extravasation of Pt-based Chemotherapeutics – Bioimaging of their Distribution in Resectates by Laser Ablation-Inductively Coupled Plasma-Mass Spectrometry (LA-ICP-MS)
Metallomics **2015**, *7*(3), 508-515.
- [150] Meder Kamalov, Paul W.R. Harris, Christian G. Hartinger, Gordon M. Miskelly, Garth J. S. Cooper, Margaret A. Brimble
Physicochemical Studies on the Copper(II) Binding by Glycated Collagen Telopeptides
Organic & Biomolecular Chemistry **2015**, *13*(10), 3058-3063.

- [151] Mario Kubanik, Jason Keng-Ying Tu, Tilo Söhnle, Michaela Hejl, Michael A. Jakupc, Wolfgang Kandioller, Bernhard K. Keppler, Christian G. Hartinger*
Expanding on the Structural Diversity of Flavone-Derived Ruthenium^{II}(η^6 -arene) Anticancer Agents
Metallodrugs **2015**, *1*, 24-35.
- [152] Adnan Ashraf, Waseeq Ahmad Siddiqui,* Jamshed Akbar, Ghulam Mustafa, Harald Krautscheid, Nazif Ullah, Bushra Mirza, Falak Sher, Muhammad Hanif,* Christian G. Hartinger
Metal Complexes of Benzenesulfonamide: Synthesis, Molecular Structure and Antimicrobial Activity
Inorganica Chimica Acta **2016**, *443*, 179-185.
- [153] Andrea Kurzwernhart, Stephan Mokesch, Erik Klapproth, Mahsa S. Adib-Ravazi, Michael A. Jakupc, Christian G. Hartinger, Wolfgang Kandioller,* Bernhard K. Keppler
Flavonoid-based organometallics with different metal centers -investigations of the effects on reactivity, and cytotoxicity
European Journal of Inorganic Chemistry **2016**, *2016*(2), 240-246.
- [154] Cheyenne M. A. Muller, Maria V. Babak, Mario Kubanik, Muhammad Hanif, Stephen M. F. Jamieson, Christian G. Hartinger,* L. James Wright*
Pt(II) pyridinium amide (PYA) complexes: Preparation and in vitro anticancer activity studies
Inorganica Chimica Acta **2016**, *450*, 124-130. Special Issue dedicated to Karen J. Brewer
- [155] Anna K. Bytzek, Gunda Koellensperger,* Bernhard K. Keppler, Christian G. Hartinger*
Biodistribution of the novel anticancer drug sodium trans-[tetrachloridobis(1H-indazole)ruthenate(III)] KP-1339/IT139 in nude BALB/c mice and implications on its mode of action
Journal of Inorganic Biochemistry **2016**, *160*, 250–255.
- [156] Benjamin S. Murray, Maria V. Babak, Christian G. Hartinger, Paul J. Dyson
The Development of RAPTA Compounds for the Treatment of Tumors
Coordination Chemistry Reviews **2016**, *306*, 86–114.
- [157] Muhammad Hanif, Christian G. Hartinger, Muhammad Ashraf Shaheen, Muhammad Nawaz Tahir
N-(4-Benzoylphenyl)pyridine-2-carbothioamide
IUCrData **2016**, *1*, x160471.
- [158] Muhammad Hanif, Sally Moon, Matthew P. Sullivan, Sanam Movassaghi, Mario Kubanik, David C. Goldstone, Tilo Söhnle, Stephen M. F. Jamieson, Christian G. Hartinger*
Anticancer activity of Ru- and Os(arene) compounds of a maleimide-functionalized bioactive pyridinecarbothioamide ligand
Journal of Inorganic Biochemistry **2016**, *165*, 100-107.
- [159] Mario Kubanik, Wolfgang Kandioller, Kunwoo Kim, Robert F. Anderson, Erik Klapproth, Michael A. Jakupc, Alexander Roller, Tilo Söhnle, Bernhard K. Keppler, Christian G. Hartinger*
Towards targeting anticancer drugs: Ruthenium(II)-arene complexes with biologically active naphthoquinone-derived ligand systems
Dalton Transactions **2016**, *45*, 13091-13103. Themed issue: Metallodrugs: Activation, Targeting, and Delivery
- [160] Adnan Ashraf, Mario Kubanik, Farhana Aman, Hannah Holtkamp, Tilo Söhnle, Stephen M. F. Jamieson, Muhammad Hanif,* Waseeq Ahmad Siddiqui,* Christian G. Hartinger*
Ru^{II}(η^6 -*p*-cymene) Complexes of Bioactive 1,2-Benzothiazines: Protein Binding vs. Antitumor Activity
European Journal of Inorganic Chemistry **2016**, 1376–1382
- [161] Anna Wieczorek, Andrzej Błażej, Aleksandra Żal, Homayon John Arabshahi, Jóhannes Reynisson, Christian G. Hartinger, Błażej Rychlik,* Damian Plażuk*
Ferrocenyl-Paclitaxel and -Docetaxel Derivatives: Impact of an Organometallic Moiety on the Mode of Action of Taxanes
Chemistry – A European Journal **2016**, *22*(32), 11413-11421.

- [162] Hannah Holtkamp, Gerlinde Grabmann, Christian Hartinger*
Electrophoretic separation techniques and their hyphenation to mass spectrometry in biological inorganic chemistry
Electrophoresis **2016**, 37(7-8), 959-972.
- [163] Muhammad Hanif, Samuel M. Meier, Zenita Adhireksan, Helena Henke, Sanelia Martic, Sanam Movassaghi, Mahmoud Labib, Wolfgang Kandioller, Stephen M. F. Jamieson, Michaela Hejl, Michael A. Jakupc, Heinz-Bernhard Kraatz, Curt A. Davey, Bernhard K. Keppler, and Christian G. Hartinger*
The Functionalization of Ru^{II}(η⁶-p-cymene)(3-hydroxy-2-pyridone) Complexes with (Thio)Morpholine: Synthesis and Bioanalytical Studies
ChemPlusChem **2017**, *in press*.
- [164] Hannah U. Holtkamp, Stuart J. Morrow, Mario Kubanik, Christian G. Hartinger*
Cobalt complexes as internal standards for capillary zone electrophoresis-mass spectrometry studies in biological inorganic chemistry
Journal of Biological Inorganic Chemistry **2017**, *in press*.
- [165] Farhana Aman, Muhammad Hanif, Mario Kubanik, Adnan Ashraf, Tilo Söhnel, Stephen M. F. Jamieson, Waseeq Ahmad Siddiqui, Christian G. Hartinger*
Antiinflammatory Oxicams as Multi-donor Ligand Systems: pH and Solvent Dependent Coordination Modes of Meloxicam and Piroxicam to Ru and Os
Chemistry – A European Journal **2017**, <http://dx.doi.org/10.1002/chem.201700263>.
- [166] Adnan Ashraf, Muhammad Hanif,* Mario Kubanik, Tilo Söhnel, Stephen M. F. Jamieson, Arindam Bhattacharyya, Christian G. Hartinger*
Aspirin-inspired Organometallic Compounds: Structural Characterization and Cytotoxicity
Journal of Organometallic Chemistry **2017**, *in press* ISBOMC Moscow special issue
- [167] Matthew P. Sullivan, Michael Groessl, Samuel M. Meier, Richard L. Kingston, David C. Goldstone, Christian G. Hartinger*
The metalation of hen egg white lysozyme impacts protein stability as shown by ion mobility mass spectrometry, differential scanning calorimetry, and X-ray crystallography
Chemical Communications **2017**, *in press*.
- [168] Shahida Parveen, Muhammad Hanif,* Sanam Movassaghi, Matthew Sullivan, Mario Kubanik, Muhammad Ashraf Shaheen, Tilo Söhnel, Stephen M. F. Jamieson, Christian G. Hartinger*
Cationic Ru(η⁶-p-cymene) Complexes of 3-Hydroxy-4-pyr(id)ones - Lipophilic Triphenylphosphine as Co-Ligand Is Key to Highly Stable and Cytotoxic Anticancer Agents
European Journal of Inorganic Chemistry **2017**, *in press*.
- [169] Samuel M. Meier,* Dominique Kreutz, Lilli Winter, Matthias H.M. Klose, Klaudia Cseh, Tamara Weiss, Andrea Bileck, Beatrix Alte, Johanna C. Mader, Michael Jakupc, Petra Heffeter, Walter Berger, Christian G. Hartinger, Bernhard K. Keppler, Gerhard Wiche, Christopher Gerner*
An Organoruthenium Anticancer Agent Shows Unexpected Target Selectivity For Plectin
Angewandte Chemie **2017**, *in press*.

Book Chapters

- [1] Erwin Reisner, Vladimir B. Arion, Christian G. Hartinger, Michael A. Jakupc, Armando J. L. Pombeiro, Bernhard K Keppler*
From Synthesis to Antitumor Activity – NAMI-A and KP1019, Two Ruthenium Complexes in Clinical Trials
Education in Advanced Chemistry, Perspectives of Coordination Chemistry; Trzeciak, A.M., Ed.; 2005, Vol. 9, 215–229.
- [2] Angela Casini, Christian G. Hartinger, Alexey A. Nazarov, Paul J. Dyson*
Organometallic antitumour agents with alternative modes of action.
Springer Topics in Bioorganometallic Chemistry, Vol. 32 Medicinal Organometallic Chemistry (Ed. N. Metzler-Nolte) 2010, 1st Edition, 200 p., Hardcover, ISBN: 978-3-642-13184-4
- [3] Ioannis Bratsos, Teresa Gianferrara, Enzo Alessio,* Christian G. Hartinger, Michael A. Jakupc, Bernhard K. Keppler*
Ruthenium and Other Non-Platinum Anticancer Compounds
Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim, Germany. Bioinorganic Medicinal Chemistry (Ed. E. Alessio) 2011, doi: 10.1002/9783527633104.ch5, 151-174.
- [4] Ingo Ott,* Christophe Biot,* Christian G. Hartinger*
AAS, XRF and MS Methods in Chemical Biology of Metal Complexes
John Wiley & Sons, Ltd, UK. Inorganic Chemical Biology: Principles, Techniques and Applications (Ed. Gilles Gasser) 2014, ISBN: 978-1-11851-002-5.
- [5] Maria V. Babak, Margaux Airey, Christian G. Hartinger*
Metal Compounds as Kinase and Phosphatase Inhibitors in Drug Development: The Role of the Metal and Ligands
Wiley-VCH Verlag GmbH & Co. Kinomics: Approaches and Applications (Eds. Heinz-Bernhard Kraatz and Sanela Martic) 2015, 368 p., ISBN: 978-3-527-33765-1.
- [6] Muhammad Hanif, Christian G. Hartinger*
Ruthenium anticancer agents en route to the tumor: From plasma protein binding agents to targeted delivery
Wiley-VCH Verlag GmbH & Co. Ruthenium Complexes – Photochemical and Biomedical Applications (Editors: Alvin A. Holder, Jimmie L. Bullock Jr., Wesley R. Browne, Marc A. Lawrence, Lothar Lilge) 2017, in press.
https://books.google.com/books/about/Ruthenium_Complexes_Photochemical_and_Bi.html?id=lUsmrgEACAAJ&redir_esc=y
- [7] Matthew P. Sullivan, Hannah U. Holtkamp, Samuel M. Meier, Christian G. Hartinger
The Analysis of Therapeutic Metal Complexes and their Biomolecular Interactions
Elsevier. Inorganic and Organometallic Transition Metal Complexes with Biological Molecules and Living Cells (Editor: Kenneth Lo) 2017, 406 p., ISBN: 9780128038147.
<https://www.elsevier.com/books/inorganic-and-organometallic-transition-metal-complexes-with-biological-molecules-and-living-cells/lo/978-0-12-803814-7>

- [8] Matthew P. Sullivan, Hannah U. Holtkamp, Christian G. Hartinger
Ru Protein targeting anticancer agents
Springer. Metal Ions in Life Sciences (Editor: A. Sigel) **2017**, *in press*.
- [9] Muneebah Adams, Muhammad Hanif, Christian G. Hartinger
Ru anticancer agents
Encyclopedia of Inorganic and Bioinorganic Chemistry **2017**, *in press*.