Christian Kowol

List of Publications by Year in descending order

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83 papers 4,162 citations

32 h-index 63 g-index

84 all docs 84 docs citations

84 times ranked 5218 citing authors

#	Article	IF	CITATIONS
1	NKP-1339, the first ruthenium-based anticancer drug on the edge to clinical application. Chemical Science, 2014, 5, 2925-2932.	3.7	552
2	Anticancer Activity of Metal Complexes: Involvement of Redox Processes. Antioxidants and Redox Signaling, 2011, 15, 1085-1127.	2.5	420
3	Metal Drugs and the Anticancer Immune Response. Chemical Reviews, 2019, 119, 1519-1624.	23.0	237
4	Gallium(III) and Iron(III) Complexes of α-N-Heterocyclic Thiosemicarbazones:  Synthesis, Characterization, Cytotoxicity, and Interaction with Ribonucleotide Reductase. Journal of Medicinal Chemistry, 2007, 50, 1254-1265.	2.9	145
5	Impact of Metal Coordination on Cytotoxicity of 3-Aminopyridine-2-carboxaldehyde Thiosemicarbazone (Triapine) and Novel Insights into Terminal Dimethylation. Journal of Medicinal Chemistry, 2009, 52, 5032-5043.	2.9	143
6	Anticancer Thiosemicarbazones: Chemical Properties, Interaction with Iron Metabolism, and Resistance Development. Antioxidants and Redox Signaling, 2019, 30, 1062-1082.	2.5	137
7	Mechanisms underlying reductant-induced reactive oxygen species formation by anticancer copper(II) compounds. Journal of Biological Inorganic Chemistry, 2012, 17, 409-423.	1.1	120
8	An albumin-based tumor-targeted oxaliplatin prodrug with distinctly improved anticancer activity in vivo. Chemical Science, 2017, 8, 2241-2250.	3.7	114
9	Tuning of lipophilicity and cytotoxic potency by structural variation of anticancer platinum(IV) complexes. Journal of Inorganic Biochemistry, 2011, 105, 46-51.	1.5	107
10	Ribonucleotide reductase inhibition by metal complexes of Triapine (3-aminopyridine-2-carboxaldehyde) Tj ETQqr Biochemistry, 2011, 105, 1422-1431.	0 0 0 rgBT 1.5	/Overlock 10 105
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	Biochemistry, 2011, 105, 1422-1431. Preclinical characterization of anticancer gallium(III) complexes: Solubility, stability, lipophilicity and	1.5	105
11	Biochemistry, 2011, 105, 1422-1431. Preclinical characterization of anticancer gallium(III) complexes: Solubility, stability, lipophilicity and binding to serum proteins. Journal of Inorganic Biochemistry, 2006, 100, 1819-1826. Maleimide-functionalised platinum(iv) complexes as a synthetic platform for targeted drug delivery.	1.5	100
11 12	Biochemistry, 2011, 105, 1422-1431. Preclinical characterization of anticancer gallium(III) complexes: Solubility, stability, lipophilicity and binding to serum proteins. Journal of Inorganic Biochemistry, 2006, 100, 1819-1826. Maleimide-functionalised platinum(iv) complexes as a synthetic platform for targeted drug delivery. Chemical Communications, 2013, 49, 2249. Fluorescence properties and cellular distribution of the investigational anticancer drugTriapine (3-aminopyridine-2-carboxaldehyde thiosemicarbazone) and its zinc(ii) complex. Dalton Transactions,	1.5	100
11 12 13	Biochemistry, 2011, 105, 1422-1431. Preclinical characterization of anticancer gallium(III) complexes: Solubility, stability, lipophilicity and binding to serum proteins. Journal of Inorganic Biochemistry, 2006, 100, 1819-1826. Maleimide-functionalised platinum(iv) complexes as a synthetic platform for targeted drug delivery. Chemical Communications, 2013, 49, 2249. Fluorescence properties and cellular distribution of the investigational anticancer drugTriapine (3-aminopyridine-2-carboxaldehyde thiosemicarbazone) and its zinc(ii) complex. Dalton Transactions, 2010, 39, 704-706. Novel tetracarboxylatoplatinum(<scp>iv</scp>) complexes as carboplatin prodrugs. Dalton	1.5 1.5 2.2	100 100 84 77
11 12 13	Biochemistry, 2011, 105, 1422-1431. Preclinical characterization of anticancer gallium(III) complexes: Solubility, stability, lipophilicity and binding to serum proteins. Journal of Inorganic Biochemistry, 2006, 100, 1819-1826. Maleimide-functionalised platinum(iv) complexes as a synthetic platform for targeted drug delivery. Chemical Communications, 2013, 49, 2249. Fluorescence properties and cellular distribution of the investigational anticancer drugTriapine (3-aminopyridine-2-carboxaldehyde thiosemicarbazone) and its zinc(ii) complex. Dalton Transactions, 2010, 39, 704-706. Novel tetracarboxylatoplatinum(⟨scp⟩iv⟨/scp⟩) complexes as carboplatin prodrugs. Dalton Transactions, 2012, 41, 14404-14415. Comparative Solution Equilibrium Study of the Interactions of Copper(II), Iron(II) and Zinc(II) with Triapine (3â€Aminopyridineâ€2â€earbaldehyde Thiosemicarbazone) and Related Ligands. European Journal of	1.5 1.5 2.2 1.6	100 84 77 76
11 12 13 14	Biochemistry, 2011, 105, 1422-1431. Preclinical characterization of anticancer gallium(III) complexes: Solubility, stability, lipophilicity and binding to serum proteins. Journal of Inorganic Biochemistry, 2006, 100, 1819-1826. Maleimide-functionalised platinum(iv) complexes as a synthetic platform for targeted drug delivery. Chemical Communications, 2013, 49, 2249. Fluorescence properties and cellular distribution of the investigational anticancer drugTriapine (3-aminopyridine-2-carboxaldehyde thiosemicarbazone) and its zinc(ii) complex. Dalton Transactions, 2010, 39, 704-706. Novel tetracarboxylatoplatinum(⟨scp⟩iv⟨/scp⟩) complexes as carboplatin prodrugs. Dalton Transactions, 2012, 41, 14404-14415. Comparative Solution Equilibrium Study of the Interactions of Copper(II), Iron(II) and Zinc(II) with Triapine (3â€Aminopyridineâ€2â€earbaldehyde Thiosemicarbazone) and Related Ligands. European Journal of Inorganic Chemistry, 2010, 2010, 1717-1728. Effect of metal ion complexation and chalcogen donor identity on the antiproliferative activity of 2-acetylpyridine N,N-dimethyl(chalcogen)semicarbazones. Journal of Inorganic Biochemistry, 2007, 101,	1.5 1.5 2.2 1.6 1.6	100 84 77 76

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19	Tumorâ€Targeting of EGFR Inhibitors by Hypoxiaâ€Mediated Activation. Angewandte Chemie - International Edition, 2014, 53, 12930-12935.	7.2	55
20	Synthesis and Reactivity of the Aquation Product of the Antitumor Complex <i>trans</i> -[Ru ^{III} Cl ₄ (indazole) ₂] ^{â^'} . Inorganic Chemistry, 2008, 47, 6513-6523.	1.9	50
21	Another step toward DNA selective targeting: Ni ^{II} and Cu ^{II} complexes of a Schiff base ligand able to bind gene promoter G-quadruplexes. Dalton Transactions, 2016, 45, 7758-7767.	1.6	49
22	The First Metal-Based Paullone Derivative with High Antiproliferative Activity in Vitro. Inorganic Chemistry, 2006, 45, 1945-1950.	1.9	46
23	Synergistic Anticancer Activity of Arsenic Trioxide with Erlotinib Is Based on Inhibition of EGFR-Mediated DNA Double-Strand Break Repair. Molecular Cancer Therapeutics, 2013, 12, 1073-1084.	1.9	46
24	A Dogma in Doubt: Hydrolysis of Equatorial Ligands of Pt ^{IV} Complexes under Physiological Conditions. Angewandte Chemie - International Edition, 2019, 58, 7464-7469.	7.2	46
25	Complexâ€Formation Ability of Salicylaldehyde Thiosemicarbazone towards Zn ^{II} , Cu ^{II} , Fe ^{II} , Fe ^{III} and Ga ^{III} lons. European Journal of Inorganic Chemistry, 2012, 2012, 4036-4047.	1.0	44
26	Ruthenium(II) Complexes of Thiosemicarbazones: The First Water-Soluble Complex with pH-Dependent Antiproliferative Activity. European Journal of Inorganic Chemistry, 2007, 2007, 2870-2878.	1.0	43
27	Impact of Stepwise NH ₂ -Methylation of Triapine on the Physicochemical Properties, Anticancer Activity, and Resistance Circumvention. Journal of Medicinal Chemistry, 2016, 59, 6739-6752.	2.9	42
28	The thiosemicarbazone Me2NNMe2 induces paraptosis by disrupting the ER thiol redox homeostasis based on protein disulfide isomerase inhibition. Cell Death and Disease, 2018, 9, 1052.	2.7	38
29	Nanoformulation Improves Activity of the (pre)Clinical Anticancer Ruthenium Complex KP1019. Journal of Biomedical Nanotechnology, 2014, 10, 877-884.	0.5	36
30	Multi-scale imaging of anticancer platinum(<scp>iv</scp>) compounds in murine tumor and kidney. Chemical Science, 2016, 7, 3052-3061.	3.7	36
31	Triapine and a More Potent Dimethyl Derivative Induce Endoplasmic Reticulum Stress in Cancer Cells. Molecular Pharmacology, 2014, 85, 451-459.	1.0	35
32	Poly(lactic acid) nanoparticles of the lead anticancer ruthenium compound KP1019 and its surfactant-mediated activation. Dalton Transactions, 2014, 43, 1096-1104.	1.6	35
33	Bacterial ghosts as adjuvant to oxaliplatin chemotherapy in colorectal carcinomatosis. Oncolmmunology, 2018, 7, e1424676.	2.1	35
34	Unsymmetric Mono- and Dinuclear Platinum(IV) Complexes Featuring an Ethylene Glycol Moiety: Synthesis, Characterization, and Biological Activity. Journal of Medicinal Chemistry, 2012, 55, 11052-11061.	2.9	34
35	Structure–Activity Relationships of Triple-Action Platinum(IV) Prodrugs with Albumin-Binding Properties and Immunomodulating Ligands. Journal of Medicinal Chemistry, 2021, 64, 12132-12151.	2.9	34
36	Intrinsic fluorescence of the clinically approved multikinase inhibitor nintedanib reveals lysosomal sequestration as resistance mechanism in FGFR-driven lung cancer. Journal of Experimental and Clinical Cancer Research, 2017, 36, 122.	3.5	33

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37	Cancer Cell Resistance Against the Clinically Investigated Thiosemicarbazone COTI-2 Is Based on Formation of Intracellular Copper Complex Glutathione Adducts and ABCC1-Mediated Efflux. Journal of Medicinal Chemistry, 2020, 63, 13719-13732.	2.9	33
38	Synthesis and biological evaluation of biotin-conjugated anticancer thiosemicarbazones and their iron(III) and copper(II) complexes. Journal of Inorganic Biochemistry, 2019, 190, 85-97.	1.5	32
39	A platinum(IV) prodrug strategy to overcome glutathione-based oxaliplatin resistance. Communications Chemistry, 2022, 5, .	2.0	31
40	Improving the Stability of Maleimide–Thiol Conjugation for Drug Targeting. Chemistry - A European Journal, 2020, 26, 15867-15870.	1.7	29
41	High Copper Complex Stability and Slow Reduction Kinetics as Key Parameters for Improved Activity, Paraptosis Induction, and Impact on Drug-Resistant Cells of Anticancer Thiosemicarbazones. Antioxidants and Redox Signaling, 2020, 33, 395-414.	2.5	28
42	Calpain-Mediated Integrin Deregulation as a Novel Mode of Action for the Anticancer Gallium Compound KP46. Molecular Cancer Therapeutics, 2014, 13, 2436-2449.	1.9	25
43	Triapine-mediated ABCB1 induction via PKC induces widespread therapy unresponsiveness but is not underlying acquired triapine resistance. Cancer Letters, 2015, 361, 112-120.	3.2	24
44	Albumin-targeting of an oxaliplatin-releasing platinum(<scp>iv</scp>) prodrug results in pronounced anticancer activity due to endocytotic drug uptake <i>in vivo</i> . Chemical Science, 2021, 12, 12587-12599.	3.7	24
45	EGFR-targeting peptide-coupled platinum(IV) complexes. Journal of Biological Inorganic Chemistry, 2017, 22, 591-603.	1.1	23
46	A comparative study of \hat{l}_{\pm} - N -pyridyl thiosemicarbazones: Spectroscopic properties, solution stability and copper(II) complexation. Inorganica Chimica Acta, 2018, 472, 264-275.	1.2	22
47	Nanoformulations of anticancer FGFR inhibitors with improved therapeutic index. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 2632-2643.	1.7	22
48	Complex formation and cytotoxicity of Triapine derivatives: a comparative solution study on the effect of the chalcogen atom and NH-methylation. Dalton Transactions, 2020, 49, 16887-16902.	1.6	22
49	Enhanced Anticancer Activity and Circumvention of Resistance Mechanisms by Novel Polymeric/Phospholipidic Nanocarriers of Doxorubicin. Journal of Biomedical Nanotechnology, 2014, 10, 1369-1381.	0.5	21
50	Vanadium(IV/V) complexes of Triapine and related thiosemicarbazones: Synthesis, solution equilibrium and bioactivity. Journal of Inorganic Biochemistry, 2015, 152, 62-73.	1.5	20
51	Differences in protein binding and excretion of Triapine and its Fe(III) complex. Journal of Inorganic Biochemistry, 2016, 160, 61-69.	1.5	20
52	Comparative studies on the human serum albumin binding of the clinically approved EGFR inhibitors gefitinib, erlotinib, afatinib, osimertinib and the investigational inhibitor KP2187. Journal of Pharmaceutical and Biomedical Analysis, 2018, 154, 321-331.	1.4	20
53	The coordination modes of (thio)semicarbazone copper(II) complexes strongly modulate the solution chemical properties and mechanism of anticancer activity. Journal of Inorganic Biochemistry, 2022, 231, 111786.	1.5	19
54	Investigation of amino acid containing [FeFe] hydrogenase models concerning pendant base effects. Journal of Inorganic Biochemistry, 2009, 103, 1236-1244.	1.5	18

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55	Targeting a Targeted Drug: An Approach Toward Hypoxiaâ€Activatable Tyrosine Kinase Inhibitor Prodrugs. ChemMedChem, 2016, 11, 2410-2421.	1.6	18
56	Multifunctional α _v β ₆ Integrin-Specific Peptide–Pt(IV) Conjugates for Cancer Cell Targeting. Bioconjugate Chemistry, 2017, 28, 2429-2439.	1.8	18
57	Understanding the metabolism of the anticancer drug Triapine: electrochemical oxidation, microsomal incubation and in vivo analysis using LC-HRMS. Analyst, The, 2017, 142, 3165-3176.	1.7	18
58	A quantitative structure–activity approach for lipophilicity estimation of antitumor complexes of different metals using microemulsion electrokinetic chromatography. Journal of Pharmaceutical and Biomedical Analysis, 2011, 55, 409-413.	1.4	17
59	Complexes of pyridoxal thiosemicarbazones formed with vanadium(IV/V) and copper(II): Solution equilibrium and structure. Inorganica Chimica Acta, 2018, 472, 243-253.	1.2	17
60	Critical assessment of different methods for quantitative measurement of metallodrug-protein associations. Analytical and Bioanalytical Chemistry, 2018, 410, 7211-7220.	1.9	17
61	Impact of terminal dimethylation on the resistance profile of \hat{l} ±-N-heterocyclic thiosemicarbazones. Biochemical Pharmacology, 2012, 83, 1623-1633.	2.0	16
62	Lipid dropletâ€mediated scavenging as novel intrinsic and adaptive resistance factor against the multikinase inhibitor ponatinib. International Journal of Cancer, 2020, 147, 1680-1693.	2.3	16
63	Loss of phosphodiesterase 4D mediates acquired triapine resistance via Epac-Rap1-Integrin signaling. Oncotarget, 2016, 7, 84556-84574.	0.8	15
64	Hydroxy and ether functionalized dithiolanes: Models for the active site of the [FeFe] hydrogenase. Journal of Organometallic Chemistry, 2011, 696, 1084-1088.	0.8	14
65	Synthesis and Cytotoxicity of Water-Soluble Dual- and Triple-Action Satraplatin Derivatives: Replacement of Equatorial Chlorides of Satraplatin by Acetates. Inorganic Chemistry, 2019, 58, 16676-16688.	1.9	13
66	Elemental analysis: an important purity control but prone to manipulations. Inorganic Chemistry Frontiers, 2022, 9, 412-416.	3.0	13
67	Comparison of metabolic pathways of different $\hat{l}\pm$ -N-heterocyclic thiosemicarbazones. Analytical and Bioanalytical Chemistry, 2018, 410, 2343-2361.	1.9	12
68	Nanoformulations of anticancer thiosemicarbazones to reduce methemoglobin formation and improve anticancer activity. RSC Advances, 2016, 6, 55848-55859.	1.7	11
69	Improving the Stability of EGFR Inhibitor Cobalt(III) Prodrugs. Inorganic Chemistry, 2020, 59, 17794-17810.	1.9	11
70	Development and biological investigations of hypoxia-sensitive prodrugs of the tyrosine kinase inhibitor crizotinib. Bioorganic Chemistry, 2020, 99, 103778.	2.0	11
71	Synthetic and Electrochemical Studies of [2Fe2S] Complexes Containing a 4â€Aminoâ€1,2â€dithiolaneâ€4â€earboxylic Acid Moiety. European Journal of Inorganic Chemistry, 2010, 2010, 5079-5086.	1.0	9
72	Synthesis, Characterization and <i>inâ€vitro</i> Studies of a Cathepsin Bâ€Cleavable Prodrug of the VEGFR Inhibitor Sunitinib. Chemistry and Biodiversity, 2019, 16, e1800520.	1.0	9

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73	Landomycins as glutathione-depleting agents and natural fluorescent probes for cellular Michael adduct-dependent quinone metabolism. Communications Chemistry, 2021, 4, .	2.0	9
74	Tumorspezifische, Hypoxieâ€basierte Aktivierung von EGFRâ€Inhibitoren. Angewandte Chemie, 2014, 126, 13144-13149.	1.6	8
75	Lysosomal Sequestration Impairs the Activity of the Preclinical FGFR Inhibitor PD173074. Cells, 2018, 7, 259.	1.8	8
76	Structure elucidation and quantification of the reduction products of anticancer Pt(<scp>iv</scp>) prodrugs by electrochemistry/mass spectrometry (EC-MS). Analyst, The, 2018, 143, 1997-2001.	1.7	6
77	Reactive Oxygen Species (ROS)-Sensitive Prodrugs of the Tyrosine Kinase Inhibitor Crizotinib. Molecules, 2020, 25, 1149.	1.7	6
78	Development of a cobalt(<scp>iii</scp>)-based ponatinib prodrug system. Inorganic Chemistry Frontiers, 2021, 8, 2468-2485.	3.0	6
79	Zweifel an einem Dogma: Hydrolyse äuatorialer Liganden von Pt ^{IV} â€Komplexen unter physiologischen Bedingungen. Angewandte Chemie, 2019, 131, 7542-7547.	1.6	5
80	Liposomal formulations of anticancer copper(<scp>ii</scp>) thiosemicarbazone complexes. Dalton Transactions, 2021, 50, 16053-16066.	1.6	5
81	Comparative Studies on the Human Serum Albumin Binding of the Investigational EGFR Inhibitor KP2187, Its Hypoxia-Activated Cobalt Complex, and a Series of Clinically Approved Inhibitors. Proceedings (mdpi), 2019, 22, .	0.2	0
82	Metal Drugs. , 2015, , 2782-2785.		0
83	Metal Drugs. , 2015, , 1-4.		О