

Aviva Levina

List of Publications by Year in descending order

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96
papers

4,870
citations

71102

41
h-index

95266

68
g-index

102
all docs

102
docs citations

102
times ranked

4664
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent developments in ruthenium anticancer drugs. <i>Metallomics</i> , 2009, 1, 458.	2.4	531
2	Mechanistic studies of relevance to the biological activities of chromium. <i>Coordination Chemistry Reviews</i> , 2005, 249, 281-298.	18.8	219
3	Chemical Properties and Toxicity of Chromium(III) Nutritional Supplements. <i>Chemical Research in Toxicology</i> , 2008, 21, 563-571.	3.3	190
4	Studies on the genotoxicity of chromium: from the test tube to the cell. <i>Coordination Chemistry Reviews</i> , 2001, 216-217, 537-582.	18.8	185
5	Speciation of metal drugs, supplements and toxins in media and bodily fluids controls in vitro activities. <i>Coordination Chemistry Reviews</i> , 2017, 352, 473-498.	18.8	181
6	Chemical alterations to murine brain tissue induced by formalin fixation: implications for biospectroscopic imaging and mapping studies of disease pathogenesis. <i>Analyst, The</i> , 2011, 136, 2941.	3.5	163
7	X-ray-induced photo-chemistry and X-ray absorption spectroscopy of biological samples. <i>Journal of Synchrotron Radiation</i> , 2012, 19, 875-886.	2.4	141
8	Activation of Molecular Oxygen during the Reactions of Chromium(VI/V/IV) with Biological Reductants: Implications for Chromium-Induced Genotoxicities. <i>Journal of the American Chemical Society</i> , 1998, 120, 6704-6714.	13.7	114
9	Characterization of a Ruthenium(III)/NAMI Adduct with Bovine Serum Albumin that Exhibits a High Anti-Metastatic Activity. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 1661-1664.	13.8	111
10	Metal-based anti-diabetic drugs: advances and challenges. <i>Dalton Transactions</i> , 2011, 40, 11675.	3.3	109
11	Post-translational Regulation of Human Indoleamine 2,3-Dioxygenase Activity by Nitric Oxide. <i>Journal of Biological Chemistry</i> , 2007, 282, 23778-23787.	3.4	88
12	Bonding in HNO-Myoglobin as Characterized by X-ray Absorption and Resonance Raman Spectroscopies. <i>Journal of the American Chemical Society</i> , 2005, 127, 814-815.	13.7	85
13	Enantioselective allylic oxidation in the presence of the catalytic system. <i>Tetrahedron: Asymmetry</i> , 1995, 6, 147-156.	1.8	83
14	Biomimetic Oxidation of Chromium(III): Does the Antidiabetic Activity of Chromium(III) Involve Carcinogenic Chromium(VI)?. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 4504-4507.	13.8	82
15	Three-dimensional structure determination using multiple-scattering analysis of XAFS: applications to metalloproteins and coordination chemistry. <i>Coordination Chemistry Reviews</i> , 2005, 249, 141-160.	18.8	81
16	Kinetics and Mechanism of Chromium(VI) Reduction to Chromium(III) by L-Cysteine in Neutral Aqueous Solutions. <i>Inorganic Chemistry</i> , 1996, 35, 7709-7717.	4.0	74
17	Structure and Reactivity of a Chromium(V) Glutathione Complex. <i>Inorganic Chemistry</i> , 2003, 42, 767-784.	4.0	73
18	X-ray Absorption and EPR Spectroscopic Studies of the Biotransformations of Chromium(VI) in Mammalian Cells. Is Chromodulin an Artifact of Isolation Methods?. <i>Journal of the American Chemical Society</i> , 2007, 129, 1065-1075.	13.7	72

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19	Silicon nitride as a versatile growth substrate for microspectroscopic imaging and mapping of individual cells. <i>Molecular BioSystems</i> , 2010, 6, 1316.	2.9	72
20	Stabilities and Biological Activities of Vanadium Drugs: What is the Nature of the Active Species?. <i>Chemistry - an Asian Journal</i> , 2017, 12, 1692-1699.	3.3	68
21	Time-dependent uptake, distribution and biotransformation of chromium(VI) in individual and bulk human lung cells: application of synchrotron radiation techniques. <i>Journal of Biological Inorganic Chemistry</i> , 2005, 10, 105-118.	2.6	67
22	Reactivity and Speciation of Anti-Diabetic Vanadium Complexes in Whole Blood and Its Components: The Important Role of Red Blood Cells. <i>Inorganic Chemistry</i> , 2015, 54, 7753-7766.	4.0	67
23	Solution Structures of Chromium(VI) Complexes with Glutathione and Model Thiols. <i>Inorganic Chemistry</i> , 2004, 43, 324-335.	4.0	65
24	Reactivity of Chromium(III) Nutritional Supplements in Biological Media: An X-Ray Absorption Spectroscopic Study. <i>Inorganic Chemistry</i> , 2008, 47, 4299-4309.	4.0	65
25	Stability and Ligand Exchange Reactions of Chromium(IV) Carboxylato Complexes in Aqueous Solutions. <i>Inorganic Chemistry</i> , 1997, 36, 5440-5448.	4.0	64
26	Biotransformations of Anticancer Ruthenium(III) Complexes: An X-Ray Absorption Spectroscopic Study. <i>Chemistry - A European Journal</i> , 2013, 19, 3609-3619.	3.3	63
27	In Vitro Plasmid DNA Cleavage by Chromium(V) and -(IV) 2-Hydroxycarboxylato Complexes. <i>Chemical Research in Toxicology</i> , 1999, 12, 371-381.	3.3	57
28	Carcinogenic Chromium(VI) Compounds Formed by Intracellular Oxidation of Chromium(III) Dietary Supplements by Adipocytes. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1742-1745.	13.8	54
29	Disproportionation and Nuclease Activity of Bis[2-ethyl-2-hydroxybutanoato(2-)]oxochromate(V) in Neutral Aqueous Solutions. <i>Inorganic Chemistry</i> , 2000, 39, 385-395.	4.0	53
30	Biotransformations of Antidiabetic Vanadium Prodrugs in Mammalian Cells and Cell Culture Media: A XANES Spectroscopic Study. <i>Inorganic Chemistry</i> , 2015, 54, 6707-6718.	4.0	53
31	Imaging Metals in Proteins by Combining Electrophoresis with Rapid X-ray Fluorescence Mapping. <i>ACS Chemical Biology</i> , 2010, 5, 577-587.	3.4	52
32	Studies on the Biotransformations and Biodistributions of Metal-Containing Drugs Using X-Ray Absorption Spectroscopy. <i>Current Topics in Medicinal Chemistry</i> , 2011, 11, 553-571.	2.1	51
33	High cytotoxicity of vanadium(IV) complexes with 1,10-phenanthroline and related ligands is due to decomposition in cell culture medium. <i>Journal of Biological Inorganic Chemistry</i> , 2017, 22, 663-672.	2.6	51
34	Hydrophobicity may enhance membrane affinity and anti-cancer effects of Schiff base vanadium(v) catecholato complexes. <i>Dalton Transactions</i> , 2019, 48, 6383-6395.	3.3	51
35	Binding of chromium(VI) to histones: implications for chromium(VI)-induced genotoxicity. <i>Journal of Biological Inorganic Chemistry</i> , 2006, 11, 225-234.	2.6	49
36	A Short-Lived but Highly Cytotoxic Vanadium(V) Complex as a Potential Drug Lead for Brain Cancer Treatment by Intratumoral Injections. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15834-15838.	13.8	46

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37	Charge Distribution in Chromium and Vanadium Catecholato Complexes: X-ray Absorption Spectroscopic and Computational Studies. <i>Inorganic Chemistry</i> , 2006, 45, 4743-4754.	4.0	45
38	Chromium(VI) Reduction by Catechol(amine)s Results in DNA Cleavage in Vitro: Relevance to Chromium Genotoxicity. <i>Chemical Research in Toxicology</i> , 2001, 14, 500-510.	3.3	44
39	Binding of Chromium(III) to Transferrin Could Be Involved in Detoxification of Dietary Chromium(III) Rather than Transport of an Essential Trace Element. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8104-8107.	13.8	43
40	Reactions of Chromium(VI/IV) with Bis(O-ethyl-L-cysteinato-N,S)zinc(II): A Model for the Action of Carcinogenic Chromium on Zinc-Finger Proteins. <i>Journal of the American Chemical Society</i> , 2000, 122, 6208-6216.	13.7	42
41	Vanadium Speciation by XANES Spectroscopy: A Three-Dimensional Approach. <i>Chemistry - A European Journal</i> , 2014, 20, 12056-12060.	3.3	42
42	Formation and Reactivity of Chromium(V) Thiolato Complexes: A Model for the Intracellular Reactions of Carcinogenic Chromium(VI) with Biological Thiols. <i>Journal of the American Chemical Society</i> , 2010, 132, 8720-8731.	13.7	41
43	An EPR Spectroscopic Study of Chromium(V) Oxalato Complexes in Aqueous Solutions. Mechanism of the Chromium(VI) Oxidation of Oxalic Acid. <i>Inorganic Chemistry</i> , 1998, 37, 3159-3166.	4.0	40
44	Chromium(V) Complexes of Hydroxamic Acids: Formation, Structures, and Reactivities. <i>Inorganic Chemistry</i> , 2005, 44, 2934-2943.	4.0	39
45	Characterization and X-ray Absorption Spectroscopic Studies of Bis[quinato(2-)]oxochromate(V). <i>Inorganic Chemistry</i> , 2000, 39, 990-997.	4.0	38
46	Reactivity-activity relationships of oral anti-diabetic vanadium complexes in gastrointestinal media: an X-ray absorption spectroscopic study. <i>Metallomics</i> , 2014, 6, 1880-1888.	2.4	37
47	Comparison of KP1019 and NAMI-A in tumour-mimetic environments. <i>Metallomics</i> , 2016, 8, 762-773.	2.4	37
48	X-ray Absorption Spectroscopic Studies of Chromium(V/IV/III) 2-Ethyl-2-hydroxybutanoato(2-)/1- Complexes. <i>Inorganic Chemistry</i> , 2004, 43, 1046-1055.	4.0	35
49	Synthesis and Characterization of a Chromium(V) cis-Dioxo Bis(1,10-phenanthroline) Complex and Crystal and Molecular Structures of Its Chromium(III) Precursor. <i>Inorganic Chemistry</i> , 2004, 43, 7844-7856.	4.0	35
50	Biomedical applications of X-ray absorption and vibrational spectroscopic microscopies in obtaining structural information from complex systems. <i>Radiation Physics and Chemistry</i> , 2010, 79, 176-184.	2.8	34
51	Disproportionation of a Model Chromium(V) Complex Causes Extensive Chromium(III)-DNA Binding in Vitro. <i>Chemical Research in Toxicology</i> , 2001, 14, 946-950.	3.3	32
52	A potential role for protein tyrosine phosphatase inhibition by a Ru(III)-edta complex (edta = Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	4.1	32
53	Reactivity of potential anti-diabetic molybdenum(VI) complexes in biological media: A XANES spectroscopic study. <i>Journal of Inorganic Biochemistry</i> , 2007, 101, 1586-1593.	3.5	29
54	X-ray Absorption Spectroscopic and Electrochemical Studies of Tris(catecholato(2-))chromate(V/IV/III) Complexes. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 462-465.	13.8	27

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55	Simultaneous biosynthesis of putrebactin, avaroferrin and bisucaberin by <i>Shewanella putrefaciens</i> and characterisation of complexes with iron(III), molybdenum(VI) or chromium(V). <i>Journal of Inorganic Biochemistry</i> , 2016, 162, 207-215.	3.5	27
56	On the stability of the copper- (S)-proline catalyst in the enantioselective allylic acyloxylation of alkenes. <i>Journal of Organometallic Chemistry</i> , 1995, 494, 165-168.	1.8	25
57	X-ray Absorption Spectroscopic Studies of Chromium Nitroso Complexes. Crystal and Molecular Structure of $(\text{Ph}_4\text{P})_3[\text{Cr}(\text{NO})(\text{NCS})_5] \cdot 2.4(\text{CH}_3)_2\text{CO}$. <i>Inorganic Chemistry</i> , 2003, 42, 5392-5398.	4.0	25
58	Vanadium(V) tris-3,5-di-tert-butylcatecholato complex: Links between speciation and anti-proliferative activity in human pancreatic cancer cells. <i>Journal of Inorganic Biochemistry</i> , 2019, 201, 110815.	3.5	25
59	An Investigation of the Chromium Oxidation State of a Monoanionic Chromium Tris(catecholato) Complex by X-ray Absorption and EPR Spectroscopies. <i>Inorganic Chemistry</i> , 2001, 40, 214-217.	4.0	24
60	Influence of an anti-metastatic ruthenium(iii) prodrug on extracellular protein-protein interactions: studies by bio-layer interferometry. <i>Inorganic Chemistry Frontiers</i> , 2014, 1, 44-48.	6.0	24
61	Synthesis of a Pyridinium Bis[citrato(2 $\hat{\wedge}$)]oxochromate(V) Complex and Its Ligand-Exchange Reactions. <i>Inorganic Chemistry</i> , 2003, 42, 6458-6468.	4.0	23
62	Chromium(V) Peptide Complexes: Synthesis and Spectroscopic Characterization. <i>Inorganic Chemistry</i> , 2005, 44, 1044-1053.	4.0	23
63	Redox and ligand-exchange chemistry of chromium(vi/v)-methyl glycoside systems. <i>Dalton Transactions RSC</i> , 2002, , 3206.	2.3	22
64	Vanadium(V/IV)-Transferrin Binding Disrupts the Transferrin Cycle and Reduces Vanadium Uptake and Antiproliferative Activity in Human Lung Cancer Cells. <i>Inorganic Chemistry</i> , 2020, 59, 16143-16153.	4.0	22
65	A Convenient One-Step Catalytic Method for Obtaining Optically Active 2-Cyclopentenyl Benzoate from Cyclopentene. <i>Synthetic Communications</i> , 1995, 25, 1789-1794.	2.1	21
66	Isolation, Characterization, and Nuclease Activity of Biologically Relevant Chromium(V) Complexes with Monosaccharides and Model Diols. Likely Intermediates in Chromium-Induced Cancers. <i>Inorganic Chemistry</i> , 2013, 52, 4282-4292.	4.0	19
67	Transferrin Cycle and Clinical Roles of Citrate and Ascorbate in Improved Iron Metabolism. <i>ACS Chemical Biology</i> , 2019, 14, 893-900.	3.4	17
68	XAS spectroelectrochemistry: reliable measurement of X-ray absorption spectra from redox manipulated solutions at room temperature. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 743-750.	2.4	16
69	(Pentamethylcyclopentadienato)rhodium Complexes for Delivery of the Curcumin Anticancer Drug. <i>European Journal of Inorganic Chemistry</i> , 2017, 2017, 1812-1823.	2.0	16
70	Synthesis and Characterization of a Chromium(V) <i>cis</i> -1,2-Cyclohexanediolato Complex: A Model of Reactive Intermediates in Chromium-Induced Cancers. <i>Inorganic Chemistry</i> , 2012, 51, 11238-11240.	4.0	15
71	Vanadium(V) and -(IV) complexes of anionic polysaccharides: Controlled release pharmaceutical formulations and models of vanadium biotransformation products. <i>Journal of Inorganic Biochemistry</i> , 2015, 147, 227-234.	3.5	15
72	Advantageous Reactivity of Unstable Metal Complexes: Potential Applications of Metal-Based Anticancer Drugs for Intratumoral Injections. <i>Pharmaceutics</i> , 2022, 14, 790.	4.5	15

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73	Synthesis, characterization and <i>in vitro</i> anti-cancer activity of vanadium-doped nanocrystalline hydroxyapatite. <i>New Journal of Chemistry</i> , 2019, 43, 17891-17901.	2.8	14
74	Redox chemistry and biological activities of chromium(III) complexes. , 2007, , 225-256.		13
75	Solid-State Structural Studies of Chromium(III) Nicotinate Nutritional Supplements. <i>Inorganic Chemistry</i> , 2014, 53, 10685-10694.	4.0	13
76	X-Ray absorption spectroscopic studies of the Cr(IV) 2-ethyl-2-hydroxybutanoate(1 ⁻) complex. <i>Chemical Communications</i> , 1999, , 2339-2340.	4.1	9
77	Reactivity and Transformation of Antimetastatic and Cytotoxic Rhodium(III)–Dimethyl Sulfoxide Complexes in Biological Fluids: An XAS Speciation Study. <i>Inorganic Chemistry</i> , 2019, 58, 4880-4893.	4.0	9
78	Potassium dichromate-Adogen 464/sodium percarbonate in acetonitrile: a simple, effective, catalytic and inexpensive system for the oxidative cleavage of β -functionalized benzylic alcohols. <i>Inorganica Chimica Acta</i> , 1995, 238, 183-185.	2.4	8
79	The EPR pattern of CrV complexes of d-ribose derivatives. <i>Polyhedron</i> , 2005, 24, 1079-1085.	2.2	8
80	A Short-Lived but Highly Cytotoxic Vanadium(V) Complex as a Potential Drug Lead for Brain Cancer Treatment by Intratumoral Injections. <i>Angewandte Chemie</i> , 2020, 132, 15968-15972.	2.0	8
81	Chromium in Cancer and Dietary Supplements. <i>Biological Magnetic Resonance</i> , 2009, , 551-579.	0.4	8
82	Reactive intermediates formed during the reactions of chromium(VI) with glutathione: Which species are responsible for the DNA damage?. <i>Journal of Inorganic Biochemistry</i> , 2003, 96, 177.	3.5	7
83	Carcinogenic Chromium(VI) Compounds Formed by Intracellular Oxidation of Chromium(III) Dietary Supplements by Adipocytes. <i>Angewandte Chemie</i> , 2016, 128, 1774-1777.	2.0	7
84	Synthesis, reactivities and anti-cancer properties of ruthenium(II) complexes with a thiaether macrocyclic ligand. <i>Inorganica Chimica Acta</i> , 2017, 454, 128-138.	2.4	7
85	Urea Gel Electrophoresis in Studies of Conformational Changes of Transferrin on Binding and Transport of Non-Ferric Metal Ions. <i>Gels</i> , 2022, 8, 19.	4.5	6
86	Binding of Chromium(III) to Transferrin Could Be Involved in Detoxification of Dietary Chromium(III) Rather than Transport of an Essential Trace Element. <i>Angewandte Chemie</i> , 2016, 128, 8236-8239.	2.0	5
87	Redox chemistry and biological activities of chromium(III) complexes. , 2019, , 281-321.		5
88	Ruthenium(II)–Arene Thiocarboxylates: Identification of a Stable Dimer Selectively Cytotoxic to Invasive Breast Cancer Cells. <i>ChemBioChem</i> , 2020, 21, 1188-1200.	2.6	5
89	Chromium in Biology: Toxicology and Nutritional Aspects. , 0, , 145-250.		4
90	X-ray Absorption and EPR Spectroscopic Studies of the Biotransformations of Chromium(VI) in Mammalian Cells. Is Chromodulin an Artifact of Isolation Methods? [<i>J. Am. Chem. Soc.</i> 2007,129, 1065–1075].. <i>Journal of the American Chemical Society</i> , 2007, 129, 9832-9832.	13.7	4

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91	EXAFS and EPR Studies of the Alkene Oxidation Catalyst Species trans-[CrIII(bpb)(L)2] ⁿ⁺ and CrV Oxidation Products (bpb=N,N'-Bis(2-pyridinecarboxamido)-1,2-benzene). Australian Journal of Chemistry, 2015, 68, 581.	0.9	3
92	Biospectroscopy for studying the influences of anti-diabetic metals (V, Cr, Mo, and W) to the insulin signaling pathway. AIP Conference Proceedings, 2017, , .	0.4	2
93	Biospeciation of Cr(III) Nutritional Supplements in Biological Fluids. Makara Journal of Science, 2017, 21, .	0.3	2
94	Frontispiz: A Shortâ€Lived but Highly Cytotoxic Vanadium(V) Complex as a Potential Drug Lead for Brain Cancer Treatment by Intratumoral Injections. Angewandte Chemie, 2020, 132, .	2.0	0
95	Frontispiece: A Shortâ€Lived but Highly Cytotoxic Vanadium(V) Complex as a Potential Drug Lead for Brain Cancer Treatment by Intratumoral Injections. Angewandte Chemie - International Edition, 2020, 59, .	13.8	0
96	Mass Spectrometry Analysis of Chromium-Binding Low-Molecular-Weight Serum Fractions. Journal of Pure and Applied Chemistry Research, 2017, 6, 100-111.	0.1	0