Debbie C. Crans

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1337345/publications.pdf

Version: 2024-02-01

312 papers 14,265 citations

64 h-index 30087 103 g-index

347 all docs

347 docs citations

times ranked

347

9933 citing authors

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 1 | The Chemistry and Biochemistry of Vanadium and the Biological Activities Exerted by Vanadium Compounds. Chemical Reviews, 2004, 104, 849-902. | 47.7 | 1,238 |
| 2 | Ru(II) Compounds: Next-Generation Anticancer Metallotherapeutics?. Journal of Medicinal Chemistry, 2018, 61, 5805-5821. Chemistry and insulin-like properties of variadium(IV) and variadium(V) compounds 1 This manuscript | 6.4 | 343 |
| 3 | summarizes the presentation given at the symposium â€`Biological Aspects of Vanadium Chemistry â€'' Chemistry, Biochemistry and Therapeutic Applications of Vanadium Compounds' and recently communicated in original research articles. The original research articles describing the experimental details of this work are given in Refs: [1â€"5].1. Journal of Inorganic Biochemistry, 2000, 80, | 3.5 | 240 |
| 4 | Decavanadate (V10O286-) and oxovanadates: Oxometalates with many biological activities. Journal of Inorganic Biochemistry, 2009, 103, 536-546. | 3.5 | 232 |
| 5 | Caspase-3 Promotes Genetic Instability and Carcinogenesis. Molecular Cell, 2015, 58, 284-296. | 9.7 | 202 |
| 6 | Anti-diabetic effects of a series of vanadium dipicolinate complexes in rats with streptozotocin-induced diabetes. Coordination Chemistry Reviews, 2011, 255, 2258-2269. | 18.8 | 198 |
| 7 | Effect of vanadium(IV) compounds in the treatment of diabetes: in vivo and in vitro studies with vanadyl sulfate and bis(maltolato)oxovandium(IV). Journal of Inorganic Biochemistry, 2001, 85, 33-42. | 3.5 | 197 |
| 8 | Effects of vanadium complexes with organic ligands on glucose metabolism: a comparison study in diabetic rats. British Journal of Pharmacology, 1999, 126, 467-477. | 5.4 | 184 |
| 9 | When Is Water Not Water? Exploring Water Confined in Large Reverse Micelles Using a Highly Charged Inorganic Molecular Probe. Journal of the American Chemical Society, 2006, 128, 12758-12765. | 13.7 | 181 |
| 10 | Speciation of metal drugs, supplements and toxins in media and bodily fluids controls in vitro activities. Coordination Chemistry Reviews, 2017, 352, 473-498. | 18.8 | 181 |
| 11 | Chemistry and Insulin-Mimetic Properties of Bis(acetylacetonate)oxovanadium(IV) and Derivatives1. Inorganic Chemistry, 2000, 39, 406-416. | 4.0 | 180 |
| 12 | Interaction of trace levels of vanadium(IV) and vanadium(V) in biological systems. Journal of the American Chemical Society, 1989, 111, 7597-7607. | 13.7 | 179 |
| 13 | Novel Insights into the Mechanism of Inhibition of MmpL3, a Target of Multiple Pharmacophores in Mycobacterium tuberculosis. Antimicrobial Agents and Chemotherapy, 2014, 58, 6413-6423. | 3.2 | 174 |
| 14 | Aqueous Chemistry of Ammonium (Dipicolinato)oxovanadate(V):Â The First Organic Vanadium(V) Insulin-Mimetic Compound. Inorganic Chemistry, 2000, 39, 4409-4416. | 4.0 | 153 |
| 15 | Cobalt(II) and Cobalt(III) Dipicolinate Complexes:Â Solid State, Solution, and in Vivo Insulin-like Properties. Inorganic Chemistry, 2002, 41, 4859-4871. | 4.0 | 151 |
| 16 | Aqueous Chemistry of the VanadiumIII(VIII) and the VIIIâ [^] 'Dipicolinate Systems and a Comparison of the Effect of Three Oxidation States of Vanadium Compounds on Diabetic Hyperglycemia in Rats. Inorganic Chemistry, 2005, 44, 5416-5427. | 4.0 | 142 |
| 17 | X-ray Structure of (NH4)6(Gly-Gly)2V10O28.cntdot.4H2O: Model Studies for Polyoxometalate-Protein Interactions. Inorganic Chemistry, 1994, 33, 5586-5590. | 4.0 | 141 |
| 18 | Organometallic and coordination rhenium compounds and their potential in cancer therapy. Coordination Chemistry Reviews, 2019, 393, 79-117. | 18.8 | 135 |

| # | Article | IF | Citations |
|----|--|------|-----------|
| 19 | Metal Speciation in Health and Medicine Represented by Iron and Vanadium. Inorganic Chemistry, 2013, 52, 12262-12275. | 4.0 | 128 |
| 20 | Application of time-resolved vanadium-51 2D NMR for quantitation of kinetic exchange pathways between vanadate monomer, dimer, tetramer, and pentamer. Journal of the American Chemical Society, 1990, 112, 2901-2908. | 13.7 | 125 |
| 21 | Vanadium(V)-protein model studies: solid-state and solution structure. Journal of the American Chemical Society, 1993, 115, 6769-6776. | 13.7 | 124 |
| 22 | Antidiabetic, Chemical, and Physical Properties of Organic Vanadates as Presumed Transition-State Inhibitors for Phosphatases. Journal of Organic Chemistry, 2015, 80, 11899-11915. | 3.2 | 122 |
| 23 | Characterization of Vanadium(V) Complexes in Aqueous Solutions: Ethanolamine- and Glycine-Derived Complexes. Journal of the American Chemical Society, 1994, 116, 1305-1315. | 13.7 | 115 |
| 24 | Vanadium–phosphatase complexes: Phosphatase inhibitors favor the trigonal bipyramidal transition state geometries. Coordination Chemistry Reviews, 2015, 301-302, 163-199. | 18.8 | 115 |
| 25 | Polyoxovanadates with emerging biomedical activities. Coordination Chemistry Reviews, 2021, 447, 214143. | 18.8 | 115 |
| 26 | Aqueous Chemistry of Labile Oxovanadates: Relevance to Biological Studies. Comments on Inorganic Chemistry, 1994, 16, 1-33. | 5.2 | 112 |
| 27 | Synthesis, Structure, and Biological Activity of a New Insulinomimetic Peroxovanadium Compound:Â Bisperoxovanadium Imidazole Monoanion. Journal of the American Chemical Society, 1997, 119, 5447-5448. | 13.7 | 108 |
| 28 | How environment affects drug activity: Localization, compartmentalization and reactions of a vanadium insulin-enhancing compound, dipicolinatooxovanadium(V). Coordination Chemistry Reviews, 2011, 255, 2178-2192. | 18.8 | 106 |
| 29 | Vanadium(V) Hydroxylamido Complexes:Â Solid State and Solution Properties1. Journal of the American Chemical Society, 1997, 119, 8901-8915. | 13.7 | 105 |
| 30 | Solution and Solid State Properties of [N-(2-Hydroxyethyl)iminodiacetato]vanadium(IV), -(V), and -(IV/V) Complexes1. Inorganic Chemistry, 1997, 36, 1657-1668. | 4.0 | 105 |
| 31 | Is Vanadate Reduced by Thiols under Biological Conditions? Changing the Redox Potential of $V(V)/V(IV)$ by Complexation in Aqueous Solution. Inorganic Chemistry, 2010, 49, 4245-4256. | 4.0 | 104 |
| 32 | Glycerol kinase: synthesis of dihydroxyacetone phosphate, sn-glycerol-3-phosphate, and chiral analogs. Journal of the American Chemical Society, 1985, 107, 7019-7027. | 13.7 | 100 |
| 33 | Evidence for the Distinct Vanadyl(+4)-Dependent Activating System for Manifesting Insulin-Like Effectsâ€. Biochemistry, 1996, 35, 8314-8318. | 2.5 | 99 |
| 34 | Cyclic vanadium(V) alkoxide. An analog of the ribonuclease inhibitors. Journal of the American Chemical Society, 1991, 113, 265-269. | 13.7 | 97 |
| 35 | Membrane transport of vanadium compounds and the interaction with the erythrocyte membrane. Coordination Chemistry Reviews, 2003, 237, 103-111. | 18.8 | 97 |
| 36 | Molecular Probe Location in Reverse Micelles Determined by NMR Dipolar Interactions. Journal of the American Chemical Society, 2006, 128, 4437-4445. | 13.7 | 96 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Reversible and in situ formation of organic arsenates and vanadates as organic phosphate mimics in enzymatic reactions: mechanistic investigation of aldol reactions and synthetic applications. Journal of Organic Chemistry, 1989, 54, 70-77. | 3.2 | 94 |
| 38 | Trigonal Bipyramidal or Square Pyramidal Coordination Geometry? Investigating the Most Potent Geometry for Vanadium Phosphatase Inhibitors. European Journal of Inorganic Chemistry, 2014, 2014, 4450-4468. | 2.0 | 93 |
| 39 | The Permeability and Cytotoxicity of Insulin-Mimetic Vanadium Compounds. Pharmaceutical Research, 2004, 21, 1026-1033. | 3.5 | 91 |
| 40 | Vanadium(IV) and vanadium(V) complexes of dipicolinic acid and derivatives. Synthesis, X-ray structure, solution state properties. Inorganica Chimica Acta, 2003, 356, 365-378. | 2.4 | 88 |
| 41 | Effects of decavanadate and insulin enhancing vanadium compounds on glucose uptake in isolated rat adipocytes. Journal of Inorganic Biochemistry, 2009, 103, 1687-1692. | 3.5 | 86 |
| 42 | Fifteen years of dancing with vanadium. Pure and Applied Chemistry, 2005, 77, 1497-1527. | 1.9 | 85 |
| 43 | Vanadium chemistry and biochemistry of relevance for use of vanadium compounds as antidiabetic agents. Molecular and Cellular Biochemistry, 1995, 153, 17-24. | 3.1 | 84 |
| 44 | Inhibition of protein tyrosine phosphatase 1B and alkaline phosphatase by bis(maltolato)oxovanadium (IV). Journal of Inorganic Biochemistry, 2008, 102, 1846-1853. | 3.5 | 83 |
| 45 | Enzyme Interactions with Labile Oxovanadates and Other Polyoxometalates. Comments on Inorganic Chemistry, 1994, 16, 35-76. | 5.2 | 80 |
| 46 | Synthesis of 3-Deoxy-D-manno-2-octulosonate-8-phosphate (KDO-8-P) from D-Arabinose: Generation of D-Arabinose-5-Phosphate using Hexokinase. Tetrahedron Letters, 1988, 29, 427-430. | 1.4 | 79 |
| 47 | Synthesis and reactivity of oxovanadium(V) trialkoxides of bulky and chiral alcohols. Journal of the American Chemical Society, 1992, 114, 4543-4550. | 13.7 | 79 |
| 48 | Structural and redox requirements for the action of anti-diabetic vanadium compounds. Dalton Transactions, 2014, 43, 6965-6972. | 3.3 | 78 |
| 49 | Polyoxidovanadates' interactions with proteins: An overview. Coordination Chemistry Reviews, 2022, 454, 214344. | 18.8 | 78 |
| 50 | Vanadate tetramer as the inhibiting species in enzyme reactions in vitro and in vivo. Journal of the American Chemical Society, 1990, 112, 427-432. | 13.7 | 77 |
| 51 | (4-Hydroxypyridine-2,6-dicarboxylato)oxovanadate(V)â€"a new insulin-like compound: chemistry, effects on myoblast and yeast cell growth and effects on hyperglycemia in rats with STZ-induced diabetes. Coordination Chemistry Reviews, 2003, 237, 13-22. | 18.8 | 77 |
| 52 | The Conundrum of pH in Water Nanodroplets: Sensing pH in Reverse Micelle Water Pools. Accounts of Chemical Research, 2012, 45, 1637-1645. | 15.6 | 77 |
| 53 | Multi-modal Potentiation of Oncolytic Virotherapy by Vanadium Compounds. Molecular Therapy, 2018, 26, 56-69. | 8.2 | 77 |
| 54 | A convenient synthesis of disodium acetyl phosphate for use in in situ ATP cofactor regeneration. Journal of Organic Chemistry, 1983, 48, 3130-3132. | 3.2 | 74 |

| # | Article | IF | CITATIONS |
|----|--|-----------|-----------|
| 55 | Spontaneous and reversible interaction of vanadium(V) oxyanions with amine derivatives. Inorganic Chemistry, 1988, 27, 1797-1806. | 4.0 | 72 |
| 56 | Structural and kinetic characterization of simple complexes as models for vanadate-protein interactions. Journal of the American Chemical Society, 1991, 113, 3728-3736. | 13.7 | 72 |
| 57 | Chloro-substituted dipicolinate vanadium complexes: Synthesis, solution, solid-state, and insulin-enhancing properties. Journal of Inorganic Biochemistry, 2009, 103, 575-584. | 3.5 | 72 |
| 58 | Partial Saturation of Menaquinone in <i>Mycobacterium tuberculosis</i> es Function and Essentiality of a Novel Reductase, MenJ. ACS Central Science, 2015, 1, 292-302. | 11.3 | 71 |
| 59 | Six-co-ordinated vanadium-(IV) and -(V) complexes of benzimidazole and pyridyl containing ligands. Journal of the Chemical Society Dalton Transactions, 1997, , 2799-2812. | 1.1 | 70 |
| 60 | Selective speciation improves efficacy and lowers toxicity of platinum anticancer and vanadium antidiabetic drugs. Journal of Inorganic Biochemistry, 2016, 165, 56-70. | 3.5 | 69 |
| 61 | Insulin-Mimetic Action of Vanadium Compounds on Osteoblast-like Cells in Culture. Archives of Biochemistry and Biophysics, 1997, 338, 7-14. | 3.0 | 68 |
| 62 | Levels of \hat{I}^3 -H2AX Foci after Low-Dose-Rate Irradiation Reveal a DNA DSB Rejoining Defect in Cells from Human <i>ATM</i> Heterozygotes in Two AT Families and in Another Apparently Normal Individual. Radiation Research, 2006, 166, 443-453. | 1.5 | 68 |
| 63 | 4-Hydroxypyridine-2,6-dicarboxylatodioxovanadate(V) Complexes:Â Solid State and Aqueous Chemistry. Inorganic Chemistry, 2002, 41, 6322-6331. | 4.0 | 67 |
| 64 | A Slow Exchanging Vanadium(V) Peptide Complex: Vanadium(V)-Glycine-Tyrosine. Inorganic Chemistry, 1995, 34, 2524-2534. | 4.0 | 66 |
| 65 | The permeability and cytotoxicity of insulin-mimetic vanadium (III,IV,V)-dipicolinate complexes. Journal of Inorganic Biochemistry, 2006, 100, 80-87. | 3.5 | 66 |
| 66 | Oxovanadium(V) Alkoxide Derivatives of 1,2-Diols: Synthesis and Solid-State 51V NMR Characterization. Inorganic Chemistry, 1994, 33, 2427-2438. | 4.0 | 65 |
| 67 | Stepwise Cluster Assembly Using VO2(acac) as a Precursor:Âcis-[VO(OCH(CH3)2)(acac)2], [V2O2(μ-OCH3)2(acac)2(OCH3)2], [V3O3{μ,μ-(OCH2)3CCH3}2(acac)2(OC2H5)], and [V4O4(μ-O)2(μ-OCH3)2(μ3-OCH3)2(acac)2(OCH3)2]Â-2CH3CN1. Inorganic Chemistry, 1998, 37, 5439-545 | 4.0 1. | 65 |
| 68 | High-frequency and -field electron paramagnetic resonance of vanadium(IV, III, and II) complexes. Coordination Chemistry Reviews, 2015, 301-302, 123-133. | 18.8 | 65 |
| 69 | Deprotonation of Î ² -cyclodextrin in alkaline solutions. Carbohydrate Research, 2009, 344, 250-254. | 2.3 | 64 |
| 70 | Glycerol kinase: substrate specificity. Journal of the American Chemical Society, 1985, 107, 7008-7018. | 13.7 | 63 |
| 71 | Reduction of Vanadium(V) byl-Ascorbic Acid at Low and Neutral pH:Â Kinetic, Mechanistic, and Spectroscopic Characterization. Inorganic Chemistry, 2006, 45, 1471-1479. | 4.0 | 62 |
| 72 | Anti-diabetic effects of vanadium(III, IV, V)–chlorodipicolinate complexes in streptozotocin-induced diabetic rats. BioMetals, 2009, 22, 895-905. | 4.1 | 57 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 73 | Oxovanadium(V) 1,3-propanediolate chloride complexes: tetrameric clusters. Inorganic Chemistry, 1992, 31, 4939-4949. | 4.0 | 56 |
| 74 | Metal-Carbohydrate Complexes in Solution. Progress in Inorganic Chemistry, 2007, , 837-945. | 3.0 | 55 |
| 75 | Investigating the Vanadium Environments in Hydroxylamido V(V) Dipicolinate Complexes Using ⁵¹ V NMR Spectroscopy and Density Functional Theory. Inorganic Chemistry, 2007, 46, 9285-9293. | 4.0 | 55 |
| 76 | Coordination chemistry may explain pharmacokinetics and clinical response of vanadyl sulfate in type 2 diabetic patients. Metallomics, 2013, 5, 1491. | 2.4 | 55 |
| 77 | Natural and glucosyl flavonoids inhibit poly(ADP-ribose) polymerase activity and induce synthetic lethality in BRCA mutant cells. Oncology Reports, 2014, 31, 551-556. | 2.6 | 55 |
| 78 | Effects of vanadium (III, IV, V)-chlorodipicolinate on glycolysis and antioxidant status in the liver of STZ-induced diabetic rats. Journal of Inorganic Biochemistry, 2014, 136, 47-56. | 3.5 | 55 |
| 79 | Determination of enantiomeric purity of polar substrates with chiral lanthanide NMR shift reagents in polar solvents. Journal of Organic Chemistry, 1987, 52, 2273-2276. | 3.2 | 54 |
| 80 | Antidiabetic vanadium compound and membrane interfaces: interface-facilitated metal complex hydrolysis. Journal of Biological Inorganic Chemistry, 2011, 16, 961-972. | 2.6 | 54 |
| 81 | Interaction of pyridine- and 4-hydroxypyridine-2,6-dicarboxylic acids with heavy metal ions in aqueous solutions. Heteroatom Chemistry, 2003, 14, 625-632. | 0.7 | 53 |
| 82 | Vanadium(IV/V) speciation of pyridine-2,6-dicarboxylic acid and 4-hydroxy-pyridine-2,6-dicarboxylic acid complexes: potentiometry, EPR spectroscopy and comparison across oxidation states. Journal of Inorganic Biochemistry, 2003, 95, 1-13. | 3.5 | 53 |
| 83 | Effect of Micellar and Reverse Micellar Interface on Solute Location: 2,6-Pyridinedicarboxylate in CTAB Micelles and CTAB and AOT Reverse Micelles. Langmuir, 2010, 26, 13153-13161. | 3.5 | 53 |
| 84 | Correlating Proton Transfer Dynamics To Probe Location in Confined Environments. Journal of the American Chemical Society, 2012, 134, 11904-11907. | 13.7 | 53 |
| 85 | [25] Enzymatic regeneration of adenosine 5′-triphosphate: Acetyl phosphate, phosphoenolpyruvate, methoxycarbonyl phosphate, dihydroxyacetone phosphate, 5-phospho-α-d-ribosyl pyrophosphate, uridine-5′-diphosphoglucose. Methods in Enzymology, 1987, 136, 263-280. | 1.0 | 52 |
| 86 | Open questions on the biological roles of first-row transition metals. Communications Chemistry, 2020, 3, . | 4.5 | 52 |
| 87 | Interaction of rabbit muscle aldolase at high ionic strengths with vanadate and other oxoanions. Biochemistry, 1992, 31, 6812-6821. | 2.5 | 51 |
| 88 | Structure and solution properties of a dimeric tetrahedral vanadium(V) chloride alkoxide complex. Inorganic Chemistry, 1993, 32, 247-248. | 4.0 | 51 |
| 89 | Methylation of neutral pseudotetrahedral zinc thiolate complexes: model reactions for alkyl group transfer to sulfur by zinc-containing enzymes. Journal of Biological Inorganic Chemistry, 2001, 6, 82-90. | 2.6 | 51 |
| 90 | Hydrophobicity may enhance membrane affinity and anti-cancer effects of Schiff base vanadium(<scp>v</scp>) catecholate complexes. Dalton Transactions, 2019, 48, 6383-6395. | 3.3 | 51 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 91 | Vanadate monomers and dimers both inhibit the human prostatic acid phosphatase. Biochemical and Biophysical Research Communications, 1989, 165, 246-250. | 2.1 | 50 |
| 92 | Sarcoplasmic Reticulum Calcium ATPase Is Inhibited by Organic Vanadium Coordination Compounds: Pyridine-2,6-dicarboxylatodioxovanadium(V), BMOV, and an Amavadine Analogue. Inorganic Chemistry, 2008, 47, 5677-5684. | 4.0 | 50 |
| 93 | Validation of 64Cu-ATSM damaging DNA via high-LET Auger electron emission. Journal of Radiation Research, 2015, 56, 784-791. | 1.6 | 50 |
| 94 | The Chemistry of Vanadium in Aqueous and Nonaqueous Solution. ACS Symposium Series, 1998, , 2-29. | 0.5 | 49 |
| 95 | Inelastic Neutron Scattering on Three Mixed-Valence Dodecanuclear Polyoxovanadate Clustersâ€. Inorganic Chemistry, 2002, 41, 5675-5685. | 4.0 | 49 |
| 96 | Impact of confinement and interfaces on coordination chemistry: Using oxovanadate reactions and proton transfer reactions as probes in reverse micelles. Coordination Chemistry Reviews, 2009, 253, 2178-2185. | 18.8 | 49 |
| 97 | The anti-diabetic bis(maltolato)oxovanadium(iv) decreases lipid order while increasing insulin receptor localization in membrane microdomains. Dalton Transactions, 2012, 41, 6419. | 3.3 | 49 |
| 98 | Induction of cytotoxic and genotoxic responses by natural and novel quercetin glycosides. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2015, 784-785, 15-22. | 1.7 | 49 |
| 99 | ¹ H NMR Studies of Aerosol-OT Reverse Micelles with Alkali and Magnesium Counterions: Preparation and Analysis of MAOTs. Langmuir, 2008, 24, 6027-6035. | 3.5 | 47 |
| 100 | Interaction of porcine uterine fluid purple acid phosphatase with vanadate and vanadyl cation. Biochemistry, 1992, 31, 11731-11739. | 2.5 | 46 |
| 101 | Structure of the Dimeric Ethylene Glycol-Vanadate Complex and Other 1,2-Diol-Vanadate Complexes in Aqueous Solution: Vanadate-Derived Transition-State Analog Complexes of Phosphotransferases. Journal of the American Chemical Society, 1995, 117, 6015-6026. | 13.7 | 46 |
| 102 | Factors Affecting Solution Properties of Vanadium(V) Compounds:  X-ray Structure of β-cis-NH4[VO2(EDDA)]1. Inorganic Chemistry, 1996, 35, 3599-3606. | 4.0 | 46 |
| 103 | Counterion Affects Interaction with Interfaces: The Antidiabetic Drugs Metformin and Decavanadate. European Journal of Inorganic Chemistry, 2013, 2013, 1859-1868. | 2.0 | 46 |
| 104 | Decavanadate Inhibits Mycobacterial Growth More Potently Than Other Oxovanadates. Frontiers in Chemistry, 2018, 6, 519. | 3.6 | 46 |
| 105 | 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, 15834-15838. | 13.8 | 46 |
| 106 | Chemically induced modification of cofactor specificity of glucose-6-phosphate dehydrogenase. Journal of the American Chemical Society, 1992, 114, 4926-4928. | 13.7 | 45 |
| 107 | Vanadate dimer and tetramer both inhibit glucose-6-phosphate dehydrogenase from Leuconostoc mesenteroides. Biochemistry, 1990, 29, 6698-6706. | 2.5 | 44 |
| 108 | (-)-Cryptaustoline: its synthesis, revision of absolute stereochemistry, and mechanism of inversion of stereochemistry. Journal of the American Chemical Society, 1992, 114, 8483-8489. | 13.7 | 44 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 109 | Speciation in Vanadium Bioinorganic Systems. 4. Interactions between Vanadate, Adenosine, and ImidazoleAn Aqueous Potentiometric and 51V NMR Study. Journal of the American Chemical Society, 1997, 119, 7005-7012. | 13.7 | 43 |
| 110 | Characterization of Noninnocent Metal Complexes Using Solid-State NMR Spectroscopy: <i>o</i> -Dioxolene Vanadium Complexes. Inorganic Chemistry, 2011, 50, 9794-9803. | 4.0 | 43 |
| 111 | Nonreductive interaction of vanadate with an enzyme containing a thiol group in the active site: glycerol-3-phosphate dehydrogenase. Biochemistry, 1991, 30, 6734-6741. | 2.5 | 42 |
| 112 | Diabetes-altered gene expression in rat skeletal muscle corrected by oral administration of vanadyl sulfate. Physiological Genomics, 2006, 26, 192-201. | 2.3 | 42 |
| 113 | Coordination environment changes of the vanadium in vanadium-dependent haloperoxidase enzymes. Journal of Inorganic Biochemistry, 2018, 186, 267-279. | 3.5 | 42 |
| 114 | Anti-diabetic effects of sodium 4-amino-2,6-dipicolinatodioxovanadium(V) dihydrate in streptozotocin-induced diabetic rats. Journal of Inorganic Biochemistry, 2009, 103, 585-589. | 3.5 | 41 |
| 115 | Comparison of the induction and disappearance of DNA double strand breaks and \hat{l}^3 -H2AX foci after irradiation of chromosomes in G1-phase or in condensed metaphase cells. Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis, 2008, 639, 108-112. | 1.0 | 40 |
| 116 | Syntheses, X-ray Structures, and Solution Properties of [V4O4{(OCH2)3CCH3}3(OC2H5)3] and [V4O4{(OCH2)3CCH3}2(OCH3)6]:Â Examples of New Ligand Coordination Modes. Inorganic Chemistry, 1997, 36, 1038-1047. | 4.0 | 39 |
| 117 | Vanadium(V) Complexes of Polydentate Amino Alcohols:  Fine-Tuning Complex Properties. Journal of the American Chemical Society, 1998, 120, 8069-8078. | 13.7 | 38 |
| 118 | Layered Structure of Roomâ€Temperature Ionic Liquids in Microemulsions by Multinuclear NMR Spectroscopic Studies. Chemistry - A European Journal, 2011, 17, 6837-6846. | 3.3 | 38 |
| 119 | Substituent effects in organic vanadate esters in imidazole-buffered aqueous solutions. Journal of Organic Chemistry, 1991, 56, 1266-1274. | 3.2 | 37 |
| 120 | Bis(acetylamido)oxovanadium(IV) complexes: solid state and solution studies. Dalton Transactions RSC, 2001, , 3337-3345. | 2.3 | 37 |
| 121 | What Is Inside a Nonionic Reverse Micelle? Probing the Interior of Igepal Reverse Micelles Using Decavanadate. Langmuir, 2009, 25, 5496-5503. | 3.5 | 37 |
| 122 | A kinetic method for determination of free vanadium(IV) and (V) at trace level concentrations. Analytical Biochemistry, 1990, 188, 53-64. | 2.4 | 35 |
| 123 | Vanadate interactions with bovine copper, zinc-superoxide dismutase as probed by vanadium-51 NMR spectroscopy. Journal of the American Chemical Society, 1991, 113, 7872-7881. | 13.7 | 35 |
| 124 | Do Probe Molecules Influence Water in Confinement?. Journal of Physical Chemistry B, 2008, 112, 10158-10164. | 2.6 | 35 |
| 125 | Î ³ -H2AX Foci after Low-Dose-Rate Irradiation RevealAtmHaploinsufficiency in Mice. Radiation Research, 2006, 166, 47-54. | 1.5 | 34 |
| 126 | 9. HEALTH BENEFITS OF VANADIUM AND ITS POTENTIAL AS AN ANTICANCER AGENT. , 2018, 18, 251-280. | | 34 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 127 | A defect in DNA double strand break processing in cells from unaffected parents of retinoblastoma patients and other apparently normal humans. DNA Repair, 2007, 6, 818-829. | 2.8 | 33 |
| 128 | Evaluating transition state structures of vanadium–phosphatase protein complexes using shape analysis. Journal of Inorganic Biochemistry, 2015, 147, 153-164. | 3.5 | 33 |
| 129 | Cu(II) complex formation with xylitol in alkaline solutions. Carbohydrate Research, 2004, 339, 599-605. | 2.3 | 32 |
| 130 | 4-Amino- and 4-Nitrodipicolinatovanadium(V) Complexes and Their Hydroxylamido Derivatives:  Synthesis, Aqueous, and Solid-State Properties. Inorganic Chemistry, 2007, 46, 9827-9840. | 4.0 | 32 |
| 131 | Effects of Vanadiumâ€Containing Compounds on Membrane Lipids and on Microdomains Used in Receptorâ€Mediated Signaling. Chemistry and Biodiversity, 2008, 5, 1558-1570. | 2.1 | 32 |
| 132 | Penetration of Negatively Charged Lipid Interfaces by the Doubly Deprotonated Dipicolinate. Journal of Organic Chemistry, 2008, 73, 9633-9640. | 3.2 | 32 |
| 133 | V 51 solid-state NMR and density functional theory studies of vanadium environments in $V(V)O2$ dipicolinic acid complexes. Journal of Chemical Physics, 2008, 128, 052317. | 3.0 | 32 |
| 134 | Speciation and toxicity of rhenium salts, organometallics and coordination complexes. Coordination Chemistry Reviews, 2019, 394, 135-161. | 18.8 | 32 |
| 135 | Simple Oxovanadates as Multiparameter Probes of Reverse Micelles. Langmuir, 2007, 23, 6510-6518. | 3.5 | 31 |
| 136 | Effects of metal compounds with distinct physicochemical properties on iron homeostasis and antibacterial activity in the lungs: chromium and vanadium. Inhalation Toxicology, 2010, 22, 169-178. | 1.6 | 31 |
| 137 | Correlation of Insulinâ€Enhancing Properties of Vanadiumâ€Dipicolinate Complexes in Model Membrane Systems: Phospholipid Langmuir Monolayers and AOT Reverse Micelles. Chemistry - A European Journal, 2014, 20, 5149-5159. | 3.3 | 31 |
| 138 | 15. IRON AND ITS ROLE IN CANCER DEFENSE: A DOUBLE-EDGED SWORD. , 2018, 18, 437-468. | | 31 |
| 139 | Mycobacterial MenJ: An Oxidoreductase Involved in Menaquinone Biosynthesis. ACS Chemical Biology, 2018, 13, 2498-2507. | 3.4 | 31 |
| 140 | The First-Row Transition Metals in the Periodic Table of Medicine. Inorganics, 2019, 7, 111. | 2.7 | 31 |
| 141 | Dinuclear Oxovanadium(IV)N-(Phosphonomethyl)iminodiacetate Complexes:Â Na4[V2O2{(O)2P(O)CH2N(CH2COO)2}2]·10H2O and Na8[V2O2{(O)2P(O)CH2N(CH2COO)2}2]2·16H2O1. Inorganic Chemistry, 1998, 37, 6645-6655. | 4.0 | 30 |
| 142 | Interaction of Dipicolinatodioxovanadium(V) with Polyatomic Cations and Surfaces in Reverse Micelles. Langmuir, 2005, 21, 6250-6258. | 3.5 | 30 |
| 143 | Coexisting Aggregates in Mixed Aerosol OT and Cholesterol Microemulsions. Langmuir, 2011, 27, 948-954. | 3.5 | 30 |
| 144 | 14. CHEMICAL AND CLINICAL ASPECTS OF METAL-CONTAINING ANTIDOTES FOR POISONING BY CYANIDE. , 2019, 19, 359-392. | | 29 |

| # | Article | lF | CITATIONS |
|-----|--|------|-----------|
| 145 | Genomic Instability and Telomere Fusion of Canine Osteosarcoma Cells. PLoS ONE, 2012, 7, e43355. | 2.5 | 29 |
| 146 | Tetracoordinate planar carbon: a singlet biradical. Journal of the American Chemical Society, 1980, 102, 7152-7154. | 13.7 | 28 |
| 147 | Speciation in Vanadium Bioinorganic Systems. 5. Interactions between Vanadate, Uridine, and ImidazoleAn Aqueous Potentiometric,51V,17O, and13C NMR Study. Inorganic Chemistry, 1998, 37, 6153-6160. | 4.0 | 28 |
| 148 | VARIATIONS IN RADIOSENSITIVITY AMONG INDIVIDUALS: A POTENTIAL IMPACT ON RISK ASSESSMENT?. Health Physics, 2009, 97, 470-480. | 0.5 | 28 |
| 149 | Does anion-cation organization in Na+-containing X-ray crystal structures relate to solution interactions in inhomogeneous nanoscale environments: Sodium-decavanadate in solid state materials, minerals, and microemulsions. Coordination Chemistry Reviews, 2017, 344, 115-130. | 18.8 | 28 |
| 150 | ESI-MS Study of the Interaction of Potential Oxidovanadium(IV) Drugs and Amavadin with Model Proteins. Inorganic Chemistry, 2020, 59, 9739-9755. | 4.0 | 28 |
| 151 | Transition State Analogues for Nucleotidyl Transfer Reactions:Â Structure and Stability of Pentavalent Vanadate and Phosphate Ester Dianions. Journal of Physical Chemistry B, 2006, 110, 14988-14999. | 2.6 | 27 |
| 152 | Pulmonary Immunotoxic Potentials of Metals Are Governed by Select Physicochemical Properties: Vanadium Agents. Journal of Immunotoxicology, 2007, 4, 49-60. | 1.7 | 27 |
| 153 | Monoglucosyl-rutin as a potential radioprotector in mammalian cells. Molecular Medicine Reports, 2014, 10, 10-14. | 2.4 | 27 |
| 154 | Initiation of a novel mode of membrane signaling: Vanadium facilitated signal transduction. Coordination Chemistry Reviews, 2020, 416, 213286. | 18.8 | 27 |
| 155 | Raft localization of Type I Fclµ receptor and degranulation of RBL-2H3 cells exposed to decavanadate, a structural model for V2O5. Dalton Transactions, 2013, 42, 11912. | 3.3 | 26 |
| 156 | Histone Deacetylase Inhibitor Induced Radiation Sensitization Effects on Human Cancer Cells after Photon and Hadron Radiation Exposure. International Journal of Molecular Sciences, 2018, 19, 496. | 4.1 | 26 |
| 157 | Anti-diabetic Effects of Cesium Aqua (N,N′-ethylene(salicylideneiminato)-5-sulfonato) Oxovanadium (IV) Dihydrate in Streptozotocin-induced Diabetic Rats. Biological Trace Element Research, 2008, 121, 226-232. | 3.5 | 25 |
| 158 | Novel function of HATs and HDACs in homologous recombination through acetylation of human RAD52 at double-strand break sites. PLoS Genetics, 2018, 14, e1007277. | 3.5 | 25 |
| 159 | Signatures of DNA double strand breaks produced in irradiated G1 and G2 cells persist into mitosis. Journal of Cellular Physiology, 2009, 219, 760-765. | 4.1 | 24 |
| 160 | Reduced Molybenumâ€Oxideâ€Based Core–Shell Hybrids: "Blue―Electrons Are Delocalized on the Shell. Chemistry - A European Journal, 2011, 17, 6635-6642. | 3.3 | 24 |
| 161 | 8. DEVELOPING VANADIUM AS AN ANTIDIABETIC OR ANTICANCER DRUG: A CLINICAL AND HISTORICAL PERSPECTIVE. , 2019, 19, 203-230. | | 24 |
| 162 | NADV: a new cofactor for alcohol dehydrogenase from Thermoanaerobium brockii. Journal of Organic Chemistry, 1993, 58, 2244-2252. | 3.2 | 23 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 163 | Interaction of a Biguanide Compound with Membrane Model Interface Systems: Probing the Properties of Antimalaria and Antidiabetic Compounds. Langmuir, 2014, 30, 8697-8706. | 3.5 | 23 |
| 164 | Intrinsic Radiosensitivity and Cellular Characterization of 27 Canine Cancer Cell Lines. PLoS ONE, 2016, 11, e0156689. | 2.5 | 23 |
| 165 | Impairment of ascorbic acid's anti-oxidant properties in confined media: Inter and intramolecular reactions with air and vanadate at acidic pH. Journal of Inorganic Biochemistry, 2008, 102, 1334-1347. | 3.5 | 22 |
| 166 | Acidification of Reverse Micellar Nanodroplets by Atmospheric Pressure CO ₂ . Journal of the American Chemical Society, 2011, 133, 7205-7214. | 13.7 | 22 |
| 167 | Guanylurea metformium double salt of decavanadate, (HGU+)4(HMet+)2(V10O286â^')·2H2O. Inorganica Chimica Acta, 2014, 420, 85-91. | 2.4 | 22 |
| 168 | Synthesis, structural characterization, modal membrane interaction and anti-tumor cell line studies of nitrophenyl ferrocenes. Journal of Molecular Structure, 2016, 1113, 162-170. | 3.6 | 22 |
| 169 | Polyoxometalates function as indirect activators of a G protein-coupled receptor. Metallomics, 2020, 12, 1044-1061. | 2.4 | 22 |
| 170 | NMR, CD and MCD Studies of Vanadate-Nucleoside Complexes Acta Chemica Scandinavica, 1991, 45, 456-462. | 0.7 | 22 |
| 171 | 31P NMR Examination of Phosphorus Metabolites in the Aqueous, Acidic, and Organic Extracts of Phaseolus vulgaris Seeds. Analytical Biochemistry, 1993, 209, 85-94. | 2.4 | 21 |
| 172 | Oxovanadates: aÂnovel probe forÂstudying lipid–water interfaces. Biomedicine and Pharmacotherapy, 2006, 60, 174-181. | 5.6 | 21 |
| 173 | INTERACTION OF DECAVANADATE WITH INTERFACES AND BIOLOGICAL MODEL MEMBRANE SYSTEMS: CHARACTERIZATION OF SOFT OXOMETALATE SYSTEMS. Journal of Molecular and Engineering Materials, 2014, 02, 1440007. | 1.8 | 21 |
| 174 | Vanadium oxoanions and cAMP-dependent protein kinase: an anti-substrate inhibitor. Biochemical Journal, 1997, 321, 333-339. | 3.7 | 20 |
| 175 | Editorial: Polyoxometalates in Catalysis, Biology, Energy and Materials Science. Frontiers in Chemistry, 2019, 7, 646. | 3.6 | 20 |
| 176 | Acute Toxicity Evaluation of Non-Innocent Oxidovanadium(V) Schiff Base Complex. Inorganics, 2021, 9, 42. | 2.7 | 20 |
| 177 | Spectroscopic Characterization of L-ascorbic Acid-induced Reduction of Vanadium(V) Dipicolinates: Formation of Vanadium(III) and Vanadium(IV) Complexes from Vanadium(V) Dipicolinate Derivatives. Inorganica Chimica Acta, 2014, 420, 112-119. | 2.4 | 19 |
| 178 | Enhancement of oncolytic virotherapy by vanadium(V) dipicolinates. BioMetals, 2019, 32, 545-561. | 4.1 | 19 |
| 179 | Pulmonary Immunotoxic Potentials of Metals Are Governed by Select Physicochemical Properties: Chromium Agents. Journal of Immunotoxicology, 2006, 3, 69-81. | 1.7 | 18 |
| 180 | Direct DNA and PNA probe binding to telomeric regions without classical in situ hybridization. Molecular Cytogenetics, 2013, 6, 42. | 0.9 | 18 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Size and shape trump charge in interactions of oxovanadates with self-assembled interfaces: application of continuous shape measure analysis to the decavanadate anion. New Journal of Chemistry, 2016, 40, 962-975. | 2.8 | 18 |
| 182 | A Synthetic Isoprenoid Lipoquinone, Menaquinone-2, Adopts a Folded Conformation in Solution and at a Model Membrane Interface. Journal of Organic Chemistry, 2018, 83, 275-288. | 3.2 | 18 |
| 183 | Four- and Five-Coordinate Oxovanadium(V) Alkoxides:Â Do Steric Effects or Electronic Properties Dictate the Geometry?. Inorganic Chemistry, 1996, 35, 6485-6494. | 4.0 | 17 |
| 184 | Complexation of bisphosphonates with ytterbium(III): Application of phosphate and ATP detection assay based on Yb3+–pyrocatechol violet. Journal of Inorganic Biochemistry, 2009, 103, 1652-1657. | 3.5 | 17 |
| 185 | Effect of ancillary ligand on electronic structure as probed by 51V solid-state NMR spectroscopy for vanadium–o-dioxolene complexes. CrystEngComm, 2013, 15, 8776. | 2.6 | 17 |
| 186 | Application of HPLC to measure vanadium in environmental, biological and clinical matrices. Arabian Journal of Chemistry, 2020, 13, 1198-1228. | 4.9 | 17 |
| 187 | Glycoprotein G-protein Coupled Receptors in Disease: Luteinizing Hormone Receptors and Follicle Stimulating Hormone Receptors. Diseases (Basel, Switzerland), 2020, 8, 35. | 2.5 | 17 |
| 188 | Highlighting the roles of transition metals and speciation in chemical biology. Current Opinion in Chemical Biology, 2022, 69, 102155. | 6.1 | 17 |
| 189 | Practical enzymic synthesis of adenosine 5'-0-(3-thiotriphosphate) (ATPgammaS). Journal of Organic Chemistry, 1984, 49, 1360-1364. | 3.2 | 16 |
| 190 | Inhibition of yeast growth by molybdenum-hydroxylamido complexes correlates with their presence in media at differing pH values. Journal of Inorganic Biochemistry, 2004, 98, 1837-1850. | 3.5 | 16 |
| 191 | PARP Inhibition by Flavonoids Induced Selective Cell Killing to BRCA2-Deficient Cells. Pharmaceuticals, 2017, 10, 80. | 3.8 | 16 |
| 192 | DNA Repair Deficient Chinese Hamster Ovary Cells Exhibiting Differential Sensitivity to Charged Particle Radiation under Aerobic and Hypoxic Conditions. International Journal of Molecular Sciences, 2018, 19, 2228. | 4.1 | 16 |
| 193 | Solution Characterization of Vanadium(V) and -(IV) N-(Phosphonomethyl)iminodiacetate Complexes:  Direct Observation of One Enantiomer Converting to the Other in an Equilibrium Mixture1. Inorganic Chemistry, 1999, 38, 3275-3282. | 4.0 | 15 |
| 194 | Evidence of two-step deprotonation of d-mannitol in aqueous solution. Carbohydrate Research, 2005, 340, 1553-1556. | 2.3 | 15 |
| 195 | NMR Crystallography for Structural Characterization of Oxovanadium(V) Complexes: Deriving Coordination Geometry and Detecting Weakly Coordinated Ligands at Atomic Resolution in the Solid State. Inorganic Chemistry, 2015, 54, 1363-1374. | 4.0 | 15 |
| 196 | In vitro screening of radioprotective properties in the novel glucosylated flavonoids. International Journal of Molecular Medicine, 2016, 38, 1525-1530. | 4.0 | 15 |
| 197 | Advantageous Reactivity of Unstable Metal Complexes: Potential Applications of Metal-Based Anticancer Drugs for Intratumoral Injections. Pharmaceutics, 2022, 14, 790. | 4.5 | 15 |
| 198 | Peroxo, Hydroxylamido, and Acac Derived Vanadium Complexes: Chemistry, Biochemistry, and Insulin-Mimetic Action of Selected Vanadium Compounds. ACS Symposium Series, 1998, , 82-103. | 0.5 | 14 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 199 | Interaction of pyridine-2,5-dicarboxylic acid with heavy metal ions in aqueous solutions. Heteroatom Chemistry, 2005, 16, 285-291. | 0.7 | 14 |
| 200 | Switching Off Electron Transfer Reactions in Confined Media: Reduction of [Co(dipic)2]â^ and [Co(edta)]â^ by Hexacyanoferrate(II). Inorganic Chemistry, 2012, 51, 2757-2765. | 4.0 | 14 |
| 201 | Measurement of Interpeptidic Cu(II) Exchange Rate Constants by Static Fluorescence Quenching of Tryptophan. Inorganic Chemistry, 2018, 57, 4791-4794. | 4.0 | 14 |
| 202 | Persistence of Gamma-H2AX Foci in Bronchial Cells Correlates with Susceptibility to Radiation Associated Lung Cancer in Mice. Radiation Research, 2018, 191, 67. | 1.5 | 14 |
| 203 | Effects of vanadium(IV) compounds on plasma membrane lipids lead to G protein-coupled receptor signal transduction. Journal of Inorganic Biochemistry, 2020, 203, 110873. | 3.5 | 14 |
| 204 | Synthesis of Naphthoquinone Derivatives: Menaquinones, Lipoquinones and Other Vitamin K Derivatives. Molecules, 2020, 25, 4477. | 3.8 | 14 |
| 205 | Exploiting DNA repair pathways for tumor sensitization, mitigation of resistance, and normal tissue protection in radiotherapy., 2021, 4, 244-263. | | 14 |
| 206 | PtIV- or MoVI-substituted decavanadates inhibit the growth of Mycobacterium smegmatis. Journal of Inorganic Biochemistry, 2021, 217, 111356. | 3.5 | 14 |
| 207 | Rational synthesis and X-ray structure of [Mnll4(H2O)2(AsVW9O34)2]10â^' from [Aslll4W40O140]28â^', MnO4â^' and Mn2+. Polyhedron, 2002, 21, 959-962. | 2.2 | 13 |
| 208 | Self-exchange electron transfer in high oxidation state non-oxo metal complexes: amavadin. Chemical Communications, 2006, , 4641. | 4.1 | 13 |
| 209 | Metal complexation chemistry used for phosphate and nucleotide determination: an investigation of the Yb3+–pyrocatechol violet sensor. Journal of Biological Inorganic Chemistry, 2008, 13, 1291-1299. | 2.6 | 13 |
| 210 | Vanadium in inorganic chemistry: excerpts from the 8th International Vanadium Symposium. Dalton Transactions, 2013, 42, 11744. | 3.3 | 13 |
| 211 | Stabilization of a vanadium(<scp>v</scp>)â€"catechol complex by compartmentalization and reduced solvation inside reverse micelles. New Journal of Chemistry, 2013, 37, 75-81. | 2.8 | 13 |
| 212 | Differential Radiosensitivity Phenotypes of DNA-PKcs Mutations Affecting NHEJ and HRR Systems following Irradiation with Gamma-Rays or Very Low Fluences of Alpha Particles. PLoS ONE, 2014, 9, e93579. | 2.5 | 13 |
| 213 | Synthesis and Characterization of Partially and Fully Saturated Menaquinone Derivatives. ACS Omega, 2018, 3, 14889-14901. | 3.5 | 13 |
| 214 | Oxidative stress and endoreduplication induced by blue light exposure to CHO cells. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2019, 841, 31-35. | 1.7 | 13 |
| 215 | Vanadium(IV)-diamine complex with hypoglycemic activity and a reduction in testicular atrophy. Journal of Inorganic Biochemistry, 2021, 216, 111312. | 3.5 | 13 |
| 216 | Chelation of Vanadium(V) by Difluoromethylene Bisphosphonate, a Structural Analogue of Pyrophosphate. Inorganic Chemistry, 2007, 46, 6723-6732. | 4.0 | 12 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 217 | Solid-to-Solid Oxidation of a Vanadium(IV) to a Vanadium(V) Compound: Chemisty of a Sulfur-Containing Siderophore. Inorganic Chemistry, 2012, 51, 9144-9146. | 4.0 | 12 |
| 218 | Insulin Receptors and Downstream Substrates Associate with Membrane Microdomains after Treatment with Insulin or Chromium(III) Picolinate. Cell Biochemistry and Biophysics, 2012, 62, 441-450. | 1.8 | 12 |
| 219 | Hyperthermia-induced radiosensitization in CHO wild-type, NHEJ repair mutant and HR repair mutant following proton and carbon-ion exposure. Oncology Letters, 2015, 10, 2828-2834. | 1.8 | 12 |
| 220 | Evaluating the Genotoxic and Cytotoxic Effects of Thymidine Analogs, 5-Ethynyl-2′-Deoxyuridine and 5-Bromo-2′-Deoxyurdine to Mammalian Cells. International Journal of Molecular Sciences, 2020, 21, 6631. | 4.1 | 12 |
| 221 | Convergent Protein Phosphatase Inhibitor Design for PTP1B and TCPTP: Exchangeable Vanadium Coordination Complexes on Graphene Quantum Dots. Advanced Functional Materials, 2022, 32, 2108645. | 14.9 | 12 |
| 222 | Application of NMR Spectroscopy to Studies of Aqueous Coordination Chemistry of Vanadium(V) Complexes. Advances in Chemistry Series, 1996, , 303-328. | 0.6 | 11 |
| 223 | Quantification of foscarnet with chromogenic and fluorogenic chemosensors: indicator displacement assays based on metal ion coordination with a catechol ligand moiety. New Journal of Chemistry, 2011, 35, 2877. | 2.8 | 11 |
| 224 | Cation exchange, solvent free synthesis and packing patterns of quinolinium nickel(II) dipicolinates. Inorganica Chimica Acta, 2013, 408, 204-208. | 2.4 | 11 |
| 225 | Translational Science for Energy and Beyond. Inorganic Chemistry, 2016, 55, 9131-9143. | 4.0 | 11 |
| 226 | Novel glyceryl glucoside is a low toxic alternative for cryopreservation agent. Biochemical and Biophysical Research Communications, 2016, 476, 359-364. | 2.1 | 11 |
| 227 | Introduction for the Emergent Polyoxometalates and Soft-oxometalates thematic issue. New Journal of Chemistry, 2016, 40, 882-885. | 2.8 | 11 |
| 228 | Design and evaluation of a novel flavonoid-based radioprotective agent utilizing monoglucosyl rutin. Journal of Radiation Research, 2018, 59, 272-281. | 1.6 | 11 |
| 229 | Monoenergetic 290 MeV/n carbon-ion beam biological lethal dose distribution surrounding the Bragg peak. Scientific Reports, 2019, 9, 6157. | 3.3 | 11 |
| 230 | Metallomics and other omics approaches in antiparasitic metal-based drug research. Current Opinion in Chemical Biology, 2022, 67, 102127. | 6.1 | 11 |
| 231 | Preface for the Forum on Metals in Medicine and Health: New Opportunities and Approaches to Improving Health. Inorganic Chemistry, 2013, 52, 12181-12183. | 4.0 | 10 |
| 232 | Differences in Interactions of Benzoic Acid and Benzoate with Interfaces. Langmuir, 2016, 32, 9451-9459. | 3.5 | 10 |
| 233 | Multinuclear NMR studies of aqueous vanadium–HEDTA complexes. Polyhedron, 2016, 114, 325-332. | 2.2 | 10 |
| 234 | Selenium Speciation in the Fountain Creek Watershed (Colorado, USA) Correlates with Water Hardness, Ca and Mg Levels. Molecules, 2017, 22, 708. | 3.8 | 10 |

| # | Article | IF | CITATIONS |
|-----|--|-------------|-----------|
| 235 | Palmitoyl ascorbic acid 2-glucoside has the potential to protect mammalian cells from high-LET carbon-ion radiation. Scientific Reports, 2018, 8, 13822. | 3.3 | 10 |
| 236 | A Transition-State Perspective on Y-Family DNA Polymerase \hat{l} · Fidelity in Comparison with X-Family DNA Polymerases \hat{l} » and \hat{l} ² . Biochemistry, 2019, 58, 1764-1773. | 2.5 | 10 |
| 237 | High LET-Like Radiation Tracks at the Distal Side of Accelerated Proton Bragg Peak. Frontiers in Oncology, 2021, 11, 690042. | 2.8 | 10 |
| 238 | Phytate Metabolism in Bean Seedlings duringPost-Germinative Growth. Journal of Plant Physiology, 1995, 145, 101-107. | 3. 5 | 9 |
| 239 | Insulin-like Effects of Vanadium; Reviewing In Vivo and In Vitro Studies and Mechanisms of Action. ACS Symposium Series, 1998, , 308-315. | 0.5 | 9 |
| 240 | Redox Activity in a Vanadium(V)– <i>o</i> â€Dioxolene Complex Is Modulated by Protonation State As Indicated by ⁵¹ V Solidâ€State NMR Spectroscopy and Density Functional Theory. European Journal of Inorganic Chemistry, 2012, 2012, 4644-4651. | 2.0 | 9 |
| 241 | Electron-Transfer Rate Enhancements in Nanosized Waterpools. European Journal of Inorganic Chemistry, 2014, 2014, 4537-4540. | 2.0 | 9 |
| 242 | Effects of targeted phosphorylation site mutations in the DNA-PKcs phosphorylation domain on low and high LET radiation sensitivity. Oncology Letters, 2015, 9, 1621-1627. | 1.8 | 9 |
| 243 | Data for induction of cytotoxic response by natural and novel quercetin glycosides. Data in Brief, 2016, 6, 262-266. | 1.0 | 9 |
| 244 | Radiobiological Characterization of Canine Malignant Melanoma Cell Lines with Different Types of Ionizing Radiation and Efficacy Evaluation with Cytotoxic Agents. International Journal of Molecular Sciences, 2019, 20, 841. | 4.1 | 9 |
| 245 | Investigating Substrate Analogues for Mycobacterial MenJ: Truncated and Partially Saturated Menaquinones. Biochemistry, 2019, 58, 1596-1615. | 2.5 | 9 |
| 246 | Vanadium science: chemistry, catalysis, materials, biological and medicinal studies. New Journal of Chemistry, 2019, 43, 17535-17537. | 2.8 | 9 |
| 247 | Cytotoxicity and Mutagenicity of Narrowband UVB to Mammalian Cells. Genes, 2020, 11, 646. | 2.4 | 9 |
| 248 | Ascorbic Acid 2-Glucoside Pretreatment Protects Cells from Ionizing Radiation, UVC, and Short Wavelength of UVB. Genes, 2020, 11 , 238 . | 2.4 | 9 |
| 249 | Exploring Growth of Mycobacterium smegmatis Treated with Anticarcinogenic Vanadium Compounds. Inorganics, 2022, 10, 50. | 2.7 | 9 |
| 250 | Comparing Administration Route in Rats with Streptozocin-Induced Diabetes and Inhibition of Myoblast Growth of Vanadium [V(III), V(IV), and V(V)] Dipicolinic Acid Complexes. ACS Symposium Series, 2007, , 93-109. | 0.5 | 8 |
| 251 | Electron Spin Lattice Relaxation of $V(IV)$ Complexes in Glassy Solutions between 15 and 70 K. ACS Symposium Series, 2007, , 364-375. | 0.5 | 8 |
| 252 | 51V solid-state NMR and density functional theory studies of eight-coordinate non-oxo vanadium complexes: oxidized amavadin. Dalton Transactions, 2009, , 3262-9. | 3.3 | 8 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 253 | Relative biological effectiveness in canine osteosarcoma cells irradiated with accelerated charged particles. Oncology Letters, 2016, 12, 1597-1601. | 1.8 | 8 |
| 254 | Ferrocene-based anilides: synthesis, structural characterization and inhibition of butyrylcholinesterase. Dalton Transactions, 2018, 47, 11769-11781. | 3.3 | 8 |
| 255 | 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, 15968-15972. | 2.0 | 8 |
| 256 | Interactions of oxovanadates and selected oxomolybdates with proteins. Molecular Engineering, 1993, 3, 277-284. | 0.2 | 7 |
| 257 | Applications of Paramagnetic NMR Spectroscopy for Monitoring Transition Metal Complex Stoichiometry and Speciation. ACS Symposium Series, 2003, , 304-326. | 0.5 | 7 |
| 258 | Do Vanadium Compounds Drive Reorganization of the Plasma Membrane and Activation of Insulin Receptors with Lipid Rafts?. ACS Symposium Series, 2007, , 121-134. | 0.5 | 7 |
| 259 | Electron transfer in non-oxovanadium(IV) and (V) complexes: Kinetic studies of an amavadin model. Pure and Applied Chemistry, 2009, 81, 1241-1249. | 1.9 | 7 |
| 260 | Coordination of the Ser2056 and Thr2609 Clusters of DNA-PKcs in Regulating Gamma Rays and Extremely Low Fluencies of Alpha-Particle Irradiation to GO/G1 Phase Cells. Radiation Research, 2017, 187, 259. | 1.5 | 7 |
| 261 | The Acid–Base Equilibrium of Pyrazinoic Acid Drives the pH Dependence of Pyrazinamide-Induced <i>Mycobacterium tuberculosis</i> Growth Inhibition. ACS Infectious Diseases, 2020, 6, 3004-3014. | 3.8 | 7 |
| 262 | How Interfaces Affect the Acidity of the Anilinium Ion. Chemistry - A European Journal, 2016, 22, 3873-3880. | 3.3 | 6 |
| 263 | Investigation of the relative biological effectiveness and uniform isobiological killing effects of irradiation with a clinical carbon SOBP beam on DNA repair deficient CHO cells. Oncology Letters, 2017, 13, 4911-4916. | 1.8 | 6 |
| 264 | Exploring Wells-Dawson Clusters Associated With the Small Ribosomal Subunit. Frontiers in Chemistry, 2019, 7, 462. | 3.6 | 6 |
| 265 | <i>Mycobacterium tuberculosis</i> Survival in J774A.1 Cells Is Dependent on MenJ Moonlighting Activity, Not Its Enzymatic Activity. ACS Infectious Diseases, 2020, 6, 2661-2671. | 3.8 | 6 |
| 266 | In Silico/In Vitro Hit-to-Lead Methodology Yields SMYD3 Inhibitor That Eliminates Unrestrained Proliferation of Breast Carcinoma Cells. International Journal of Molecular Sciences, 2020, 21, 9549. | 4.1 | 6 |
| 267 | Role of various DNA repair pathways in chromosomal inversion formation in CHO mutants. International Journal of Radiation Biology, 2015, 91, 925-933. | 1.8 | 5 |
| 268 | Molecular dynamics simulation of telomeric single-stranded DNA and POT1. Polymer Journal, 2016, 48, 189-195. | 2.7 | 5 |
| 269 | Hypersensitivity of BRCA2 deficient cells to rosemary extract explained by weak PARP inhibitory activity. Scientific Reports, 2017, 7, 16704. | 3.3 | 5 |
| 270 | Effect of hydroxyl group position in flavonoids on inducing single‑stranded DNA damage mediated by cupric ions. International Journal of Molecular Medicine, 2018, 42, 658-664. | 4.0 | 5 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 271 | Human Lymphocyte Metaphase Chromosome Preparation for Radiation-Induced Chromosome Aberration Analysis. Methods in Molecular Biology, 2019, 1984, 1-6. | 0.9 | 5 |
| 272 | Characterizing the Role of SMYD2 in Mammalian Embryogenesisâ€"Future Directions. Veterinary Sciences, 2020, 7, 63. | 1.7 | 5 |
| 273 | Measurement of Interpeptidic Cu ^{II} Exchange Rate Constants of Cu ^{II} -Amyloid-β Complexes to Small Peptide Motifs by Tryptophan Fluorescence Quenching. Inorganic Chemistry, 2021, 60, 7650-7659. | 4.0 | 5 |
| 274 | Solution- and gas-phase behavior of decavanadate: implications for mass spectrometric analysis of redox-active polyoxidometalates. Inorganic Chemistry Frontiers, 2022, 9, 1556-1564. | 6.0 | 5 |
| 275 | The Chemistry and Biochemistry of Vanadium and the Biological Activities Exerted by Vanadium Compounds. ChemInform, 2004, 35, no. | 0.0 | 4 |
| 276 | Role of LET and chromatin structure on chromosomal inversion in CHO10B2 cells. Genome Integrity, 2014, $5,1.$ | 1.0 | 4 |
| 277 | Selenium speciation in the Fountain Creek Watershed and its effects on fish diversity. Journal of Biological Inorganic Chemistry, 2017, 22, 751-763. | 2.6 | 4 |
| 278 | Probing of ferrocenylanilines on model micelle/reverse micelle membrane and their enhanced reactivity for reactive oxidants. Applied Organometallic Chemistry, 2018, 32, e4334. | 3.5 | 4 |
| 279 | Structure Dependence of Pyridine and Benzene Derivatives on Interactions with Model Membranes. Langmuir, 2018, 34, 8939-8951. | 3.5 | 4 |
| 280 | Sister Chromatid Exchange as a Genotoxic Stress Marker. Methods in Molecular Biology, 2019, 1984, 61-68. | 0.9 | 4 |
| 281 | DIFFERENCE IN DEGREE OF SUB-LETHAL DAMAGE RECOVERY BETWEEN CLINICAL PROTON BEAMS AND X-RAYS. Radiation Protection Dosimetry, 2019, 183, 93-97. | 0.8 | 4 |
| 282 | The Effect of Green and Black Tea Polyphenols on BRCA2 Deficient Chinese Hamster Cells by Synthetic Lethality through PARP Inhibition. International Journal of Molecular Sciences, 2019, 20, 1274. | 4.1 | 4 |
| 283 | Vanadium chemistry and biochemistry of relevance for use of vanadium compounds as antidiabetic agents., 1995,, 17-24. | | 4 |
| 284 | Cytotoxicity and genotoxicity of blue LED light and protective effects of AA2G in mammalian cells and associated DNA repair deficient cell lines. Mutation Research - Genetic Toxicology and Environmental Mutagenesis, 2021, 872, 503416. | 1.7 | 4 |
| 285 | The Interfacial Interactions of Glycine and Short Glycine Peptides in Model Membrane Systems. International Journal of Molecular Sciences, 2021, 22, 162. | 4.1 | 4 |
| 286 | Biological Effects of Monoenergetic Carbon lons and Their Associated Secondary Particles. Frontiers in Oncology, 2022, 12, 788293. | 2.8 | 4 |
| 287 | Structural Analysis of SMYD3 Lysine Methyltransferase for the Development of Competitive and Specific Enzyme Inhibitors. Diseases (Basel, Switzerland), 2022, 10, 4. | 2.5 | 4 |
| 288 | Spectrometric and electrochemical investigation of vanadium(V) and vanadium(IV) tartrate complexes in solution. Journal of the Brazilian Chemical Society, 2006, 17, 895-904. | 0.6 | 3 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 289 | Vanadium compounds promote biocatalysis in cells through actions on cell membranes. Catalysis Today, 2022, 388-389, 216-223. | 4.4 | 3 |
| 290 | Location of menaquinone and menaquinol headgroups in model membranes. Canadian Journal of Chemistry, 2020, 98, 307-317. | 1.1 | 3 |
| 291 | Interactions of Truncated Menaquinones in Lipid Monolayers and Bilayers. International Journal of Molecular Sciences, 2021, 22, 9755. | 4.1 | 3 |
| 292 | Organic Vanadium Compounds - Transition State Analogy with Organic Phosphorus Compounds. Phosphorus, Sulfur and Silicon and the Related Elements, 1996, 109, 245-248. | 1.6 | 2 |
| 293 | Tetravanadate, Decavanadate, Keggin and Dawson Oxotungstates Inhibit Growth of S. cerevisiae. Nanostructure Science and Technology, 2002, , 181-195. | 0.1 | 2 |
| 294 | Confinement Effects on Chemical Equilibria: Pentacyano(Pyrazine)Ferrate(II) Stability Changes within Nanosized Droplets of Water. Molecules, 2018, 23, 858. | 3.8 | 2 |
| 295 | PNA Telomere and Centromere FISH Staining for Accurate Analysis of Radiation-Induced Chromosomal Aberrations. Methods in Molecular Biology, 2019, 1984, 95-100. | 0.9 | 2 |
| 296 | G2 Chromosomal Radiosensitivity Assay for Testing Individual Radiation Sensitivity. Methods in Molecular Biology, 2019, 1984, 39-45. | 0.9 | 2 |
| 297 | Coordination Chemistry of a Controlled Burst of Zn ² ⁺ in Bulk Aqueous and Nanosized Water Droplets with a Zincon Chelator. Inorganic Chemistry, 2020, 59, 184-188. | 4.0 | 2 |
| 298 | Vanadium Compounds as Enzyme Inhibitors with a Focus on Anticancer Effects. 2-Oxoglutarate-Dependent Oxygenases, 2019, , 169-195. | 0.8 | 2 |
| 299 | Solution Radioactivated by Hadron Radiation Can Increase Sister Chromatid Exchanges. PLoS ONE, 2015, 10, e0144619. | 2.5 | 2 |
| 300 | Electron Transport Lipids Fold Within Membrane-Like Interfaces. Frontiers in Chemistry, 2022, 10, 827530. | 3.6 | 2 |
| 301 | Gel Formulation Containing Mixed Surfactant and Lipids Associating with Carboplatin. Chemistry and Biodiversity, 2011, 8, 2195-2210. | 2.1 | 1 |
| 302 | Modern Coordination Chemistry 100 Years after Werner. European Journal of Inorganic Chemistry, 2014, 2014, 4413-4416. | 2.0 | 1 |
| 303 | Preface: Celebrating vanadium science with leading bioinorganic contributions from the 9th International Vanadium Symposium. Journal of Inorganic Biochemistry, 2015, 147, 1-3. | 3.5 | 1 |
| 304 | Reciprocal Translocation Analysis with Whole Chromosome Painting for FISH. Methods in Molecular Biology, 2019, 1984, 117-122. | 0.9 | 1 |
| 305 | In Situ DNA Damaging Foci Analysis on Metaphase Chromosomes. Methods in Molecular Biology, 2019, 1984, 87-93. | 0.9 | 1 |
| 306 | Electron Scattering in Conventional Cell Flask Experiments and Dose Distribution Dependency. Scientific Reports, 2020, 10, 482. | 3.3 | 1 |

| # | Article | IF | CITATIONS |
|-----|--|------|-----------|
| 307 | The effect of vanadate on growth and phospholipid levels in the root and hypocotyl of bean seedlings (Phaseolus vulgaris L.)., 1995,, 181-187. | | 1 |
| 308 | Fifteen Years of Dancing with Vanadium. ChemInform, 2006, 37, no. | 0.0 | 0 |
| 309 | Micronuclei Formation Analysis After Ionizing Radiation. Methods in Molecular Biology, 2019, 1984, 23-29. | 0.9 | 0 |
| 310 | 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 |
| 311 | 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 |
| 312 | Interactions of Oxovanadates and Selected Oxomolybdates with Proteins. Topics in Molecular Organization and Engineering, 1994, , 401-408. | 0.1 | 0 |