# Vanadium in diabetes: 100 years from Phase 0 to Phase

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Citation Report

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Vanadium, niobium and tantalum. Annual Reports on the Progress of Chemistry Section A, 2007, 103, 147. | 0.8 | 4 |
| 2 | Developing new metal-based therapeutics: challenges and opportunities. Dalton Transactions, 2007, , 4929. | 1.6 | 299 |
| 3 | Metal based drugs: from serendipity to design. Dalton Transactions, 2007, , 4903. | 1.6 | 348 |
| 4 | Dinuclear Oxovanadium(IV) Thiolate Complexes with Ferromagnetically Coupled Interaction between Vanadium Centers. Inorganic Chemistry, 2007, 46, 10467-10469. | 1.9 | 9 |
| 5 | Antidiabetic copper(II)-picolinate: Impact of the first transition metal in the metallopicolinate complexes. Bioorganic and Medicinal Chemistry, 2007, 15, 4917-4922. | 1.4 | 68 |
| 6 | Synthesis, crystal structure of polyoxovanadate complex of ciprofloxacin: V4O10(Î¼2-O)2[VO(H-Ciprof)2]2Â·13H2O by hydrothermal reaction. Inorganic Chemistry Communication, 2007, 10, 1269-1272. | 1.8 | 11 |
| 7 | Understanding the Mechanism of Action of the Novel SSAO Substrate (C7NH10)6(V10O28)Â·2H2O, a Prodrug of Peroxovanadate Insulin Mimetics. Chemical Biology and Drug Design, 2007, 69, 423-428. | 1.5 | 46 |
| 8 | The discovery of vanadyl and zinc complexes for treating diabetes and metabolic syndromes. Expert Opinion on Drug Discovery, 2007, 2, 873-887. | 2.5 | 13 |
| 9 | Vanadate-induced cell death is dissociated from H2O2 generation. Cell Biology and Toxicology, 2007, 23, 413-420. | 2.4 | 38 |
| 10 | Metallokinetic characteristics of antidiabetic bis(allixinato)oxovanadium(IV)-related complexes in the blood of rat. Journal of Biological Inorganic Chemistry, 2007, 12, 843-853. | 1.1 | 31 |
| 11 | Action mechanism of bis(allixinato)oxovanadium(IV) as a novel potent insulin-mimetic complex: regulation of GLUT4 translocation and FoxO1 transcription factor. Journal of Biological Inorganic Chemistry, 2007, 12, 1275-1287. | 1.1 | 56 |
| 12 | Reactivity of potential anti-diabetic molybdenum(VI) complexes in biological media: A XANES spectroscopic study. Journal of Inorganic Biochemistry, 2007, 101, 1586-1593. | 1.5 | 29 |
| 13 | Catalytic action of copper (II) ion on electrochemical oxidation of metformine and voltammetric determination of metformine in pharmaceuticals. Journal of Pharmaceutical and Biomedical Analysis, 2007, 44, 1192-1196. | 1.4 | 30 |
| 14 | Impairment of ascorbic acidâ€™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. | 1.5 | 22 |
| 15 | 4-Chloro-2,6-bis(hydroxymethyl)pyridinium Chloride and 4-Dimethylamino-2,6-bis(hydroxymethyl)pyridinium Chloride Hemihydrate. Journal of Chemical Crystallography, 2008, 38, 717-721. | 0.5 | 0 |
| 16 | Biological monitoring of toxic elements. Journal of Chemical Health and Safety, 2008, 15, 8-13. | 1.1 | 4 |
| 17 | Oxovanadium(IV) and (V) complexes of acetylpyridine-derived semicarbazones exhibit insulin-like activity. Polyhedron, 2008, 27, 1787-1794. | 1.0 | 60 |
| 18 | NMR and theoretical study on interactions between diperoxovanadate complex and 4-substituted pyridines. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2008, 71, 644-649. | 2.0 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Biospeciation of antidiabetic VO(IV) complexes. Coordination Chemistry Reviews, 2008, 252, 1153-1162. | 9.5 | 162 |
| 20 | Applications of heteronuclear NMR spectroscopy in biological and medicinal inorganic chemistry. Coordination Chemistry Reviews, 2008, 252, 2239-2277. | 9.5 | 76 |
| 21 | Synthesis and X-ray structural characterization of tris(l-glycinato)vanadium(III) and trans-tetraquadichlorovanadium(III) chloride. Inorganica Chimica Acta, 2008, 361, 2321-2326. | 1.2 | 6 |
| 22 | Current state for the development of metallopharmaceutics and anti-diabetic metal complexes. Chemical Society Reviews, 2008, 37, 2383. | 18.7 | 175 |
| 23 | Vanadiumâ€“vitamin B12 bioconjugates as potential therapeutics for treating diabetes. Chemical Communications, 2008, , 3783. | 2.2 | 32 |
| 24 | Effective control of blood glucose status and toxicity in streptozotocin-induced diabetic rats by orally administration of vanadate in an herbal decoction. Food and Chemical Toxicology, 2008, 46, 2996-3002. | 1.8 | 20 |
| 25 | Speciation in the aqueous peroxovanadateâ€“maltol and (peroxo)vanadateâ€“uridine systems. Dalton Transactions, 2008, , 1095. | 1.6 | 12 |
| 26 | Vanadium(V) Compounds with the Bis-(hydroxylamino)-1,3,5-triazine Ligand, H<sub>2</sub>bihyat: Synthetic, Structural, and Physical Studies of [V<sub>2</sub><sup>V</sup>O<sub>3</sub>(bihyat)<sub>2</sub>] and of the Enhanced Hydrolytic Stability Speciescis-[V<sup>V</sup>O<sub>2</sub>(bihyat)]<sup>â^'</sup>. Inorganic Chemistry, 2008, 47, 11698-11710. | 1.9 | 29 |
| 28 | Action mechanism of metallo-allixin complexes as antidiabetic agents. Pure and Applied Chemistry, 2008, 80, 2727-2733. | 0.9 | 12 |
| 30 | Sodium Orthovanadate Affects Growth of Some Human Epithelial Cancer Cells (A549, HTB44, DU145). Folia Biologica, 2008, 56, 115-121. | 0.1 | 32 |
| 32 | Assessment of Essential and Toxic Mineral Elements in Bitter Gourd (Momordica Charantia)Fruit. International Journal of Food Properties, 2009, 12, 766-773. | 1.3 | 11 |
| 34 | Dinuclear Oxidovanadium(IV) and Dioxidovanadium(V) Complexes of 5,5â€²â€Methylenebis(dibasic) Tj ETQq1 1 0.784314 rgBT /Overlo Activities. European Journal of Inorganic Chemistry, 2009, 2009, 5377-5390. | 1.0 | 51 |
| 35 | Biodistribution of antiâ€diabetic Zn(II) complexes in human serum and in vitro proteinâ€binding studies by means of CZEâ€“ICPâ€MS. Electrophoresis, 2009, 30, 4075-4082. | 1.3 | 24 |
| 36 | Controlled release of vanadium from titanium oxide coatings for improved integration of soft tissue implants. Journal of Biomedical Materials Research - Part A, 2009, 90A, 272-281. | 2.1 | 21 |
| 37 | Anti-diabetic effects of vanadium(III, IV, V)â€“chlorodipicolinate complexes in streptozotocin-induced diabetic rats. BioMetals, 2009, 22, 895-905. | 1.8 | 57 |
| 38 | Oxidovanadium(IV) complexes containing ligands derived from dithiocarbazates â€“ Models for the interaction of VO2+ with thiofunctional ligands. Inorganica Chimica Acta, 2009, 362, 1343-1347. | 1.2 | 26 |
| 39 | Calorimetric studies of the interaction between the insulin-enhancing drug candidate bis(maltolato)oxovanadium(IV) (BMOV) and human serum apo-transferrin. Journal of Inorganic Biochemistry, 2009, 103, 643-647. | 1.5 | 44 |
| 40 | Aminoacid-derivatised picolinato-oxidovanadium(IV) complexes: Characterisation, speciation and ex vivo insulin-mimetic potential. Journal of Inorganic Biochemistry, 2009, 103, 590-600. | 1.5 | 38 |

| # | Article | IF | Citations |
|---|---|---|---|
| 41 | Comparative studies on the biospeciation of antidiabetic VO(IV) and Zn(II) complexes. Journal of Inorganic Biochemistry, 2009, 103, 527-535. | 1.5 | 22 |
| 42 | Decavanadate (V10O286-) and oxovanadates: Oxometalates with many biological activities. Journal of Inorganic Biochemistry, 2009, 103, 536-546. | 1.5 | 232 |
| 43 | Vanadium treatment of type 2 diabetes: A view to the future. Journal of Inorganic Biochemistry, 2009, 103, 554-558. | 1.5 | 458 |
| 44 | Novel 3-hydroxy-4-pyridinonato oxidovanadium(IV) complexes to investigate structure/activity relationships. Journal of Inorganic Biochemistry, 2009, 103, 496-502. | 1.5 | 30 |
| 45 | Arylalkylamine vanadium salts as new anti-diabetic compounds. Journal of Inorganic Biochemistry, 2009, 103, 559-566. | 1.5 | 48 |
| 46 | Effects of decavanadate and insulin enhancing vanadium compounds on glucose uptake in isolated rat adipocytes. Journal of Inorganic Biochemistry, 2009, 103, 1687-1692. | 1.5 | 86 |
| 47 | Role of the alkali metal ion and hydrogen bonds in M[VO(O2)2bpy]Â·nH2O (M=Li+, Na+, K+ and Rb+) and Cs[VO(O2)2bpy]Â·H2O2 complexes: The X-ray crystal structures and spectroscopic properties. Polyhedron, 2009, 28, 1429-1436. | 1.0 | 13 |
| 48 | Investigation on the complex of diperoxovanadate with picolinamide. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2009, 72, 965-969. | 2.0 | 9 |
| 49 | Impaired Acid Catalysis by Mutation of a Protein Loop Hinge Residue in a YopH Mutant Revealed by Crystal Structures. Journal of the American Chemical Society, 2009, 131, 778-786. | 6.6 | 45 |
| 50 | Vanadium-induced formation of thiadiazole and thiazoline compounds. Mononuclear and dinuclear oxovanadium(v) complexes with open-chain and cyclized thiosemicarbazone ligands. Dalton Transactions, 2009, , 9914. | 1.6 | 22 |
| 51 | Assessing the Dependence of <sup>51</sup>V A<sub>z</sub> Value on the Aromatic Ring Orientation of V<sup>IV</sup>O<sup>2+</sup> Pyridine Complexes. Inorganic Chemistry, 2009, 48, 5790-5796. | 1.9 | 60 |
| 53 | Biospeciation of various antidiabetic VIVO compounds in serum. Dalton Transactions, 2009, , 2428. | 1.6 | 109 |
| 54 | Decavanadate: a journey in a search of a role. Dalton Transactions, 2009, , 9093. | 1.6 | 90 |
| 55 | 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. | 9.5 | 49 |
| 56 | Suppressive Effect of Orthovanadate on Hepatic Stellate Cell Activation and Liver Fibrosis in Rats. American Journal of Pathology, 2009, 174, 881-890. | 1.9 | 11 |
| 57 | Ternary oxovanadium(IV) complexes of ONO-donor Schiff base and polypyridyl derivatives as protein tyrosine phosphatase inhibitors: synthesis, characterization, and biological activities. Journal of Biological Inorganic Chemistry, 2009, 14, 841-851. | 1.1 | 103 |
| 59 | Overview and Frontier for the Development of Metallopharmaceutics. Journal of Health Science, 2010, 56, 129-143. | 0.9 | 26 |
| 60 | Spectroscopic investigation of the interaction between diperoxovanadate complexes and benzimidazole-like ligands. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2010, 77, 816-820. | 2.0 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 61 | Spectroscopic and theoretical study on the interaction between diperoxovanadate complexes and glycyl-histidine. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2010, 77, 825-831. | 2.0 | 1 |
| 62 | A quantitative study of the biotransformation of insulin-enhancing VO2+ compounds. Journal of Biological Inorganic Chemistry, 2010, 15, 825-839. | 1.1 | 80 |
| 63 | Vanadium compounds discriminate hepatoma and normal hepatic cells by differential regulation of reactive oxygen species. Journal of Biological Inorganic Chemistry, 2010, 15, 1087-1097. | 1.1 | 56 |
| 64 | Oxidovanadium(IV) Complexes of 3-Hydroxy-4-pyrone and 3-Hydroxy-4-pyridinone Ligands: A New Generation of Homogeneous Catalysts for the Epoxidation of Geraniol. Catalysis Letters, 2010, 135, 98-104. | 1.4 | 11 |
| 65 | Application of DFT Methods in the Study of VIVO2+-Peptide Interactions. European Journal of Inorganic Chemistry, 2010, 2010, 4697-4710. | 1.0 | 43 |
| 66 | Bioanorganische Chemie des Vanadiums. Leben ohne Vanadium?. Chemie in Unserer Zeit, 2010, 44, 322-331. | 0.1 | 16 |
| 67 | Effects of Insulin-Mimetic Vanadyl-Poly(Î³-Glutamic Acid) Complex on Diabetic Rat Model. Journal of Pharmaceutical Sciences, 2010, 99, 3041-3047. | 1.6 | 9 |
| 68 | Multinuclear NMR and theoretical investigation on interactions between diperoxovanadate complex and 4-picoline-like ligands. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2010, 75, 83-87. | 2.0 | 1 |
| 69 | NMR and theoretical study on interactions between diperoxovanadate complex and pyrazole-like ligands. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2010, 75, 1095-1099. | 2.0 | 8 |
| 70 | Vanadium compounds induced mitochondria permeability transition pore (PTP) opening related to oxidative stress. Journal of Inorganic Biochemistry, 2010, 104, 371-378. | 1.5 | 179 |
| 71 | Inhibition of acid, alkaline, and tyrosine (PTP1B) phosphatases by novel vanadium complexes. Journal of Inorganic Biochemistry, 2010, 104, 274-281. | 1.5 | 66 |
| 72 | Synthesis, characterization, and protein tyrosine phosphatases inhibition activities of oxovanadium(IV) complexes with Schiff base and polypyridyl derivatives. Journal of Inorganic Biochemistry, 2010, 104, 978-986. | 1.5 | 46 |
| 73 | A new single pot synthesis of Î¼-bis(oxido)bis{oxidovanadium(V)} dipicolinato complex with 2-aminopyridinium as counter cation: Spectroscopic, structural, catalytic and theoretical studies. Journal of Organometallic Chemistry, 2010, 695, 1722-1728. | 0.8 | 13 |
| 74 | Chimeric design, synthesis, and biological assays of a new nonpeptide insulin-mimetic vanadium compound to inhibit protein tyrosine phosphatase 1B. Drug Design, Development and Therapy, 0, , 231. | 2.0 | 4 |
| 75 | Advances in research on the accumulation, redox behavior, and function of vanadium in ascidians. Biomolecular Concepts, 2010, 1, 97-107. | 1.0 | 15 |
| 77 | Potential Use of Vanadium Compounds in Therapeutics. Current Medicinal Chemistry, 2010, 17, 3632-3642. | 1.2 | 77 |
| 78 | Transport of Therapeutic Vanadium and Ruthenium Complexes by Blood Plasma Components. Current Medicinal Chemistry, 2010, 17, 3701-3738. | 1.2 | 187 |
| 79 | Spectroscopic and DFT Study on the Interaction System of Vanadium with <scp>l</scp>-Proline in Aqueous Solution. Journal of Physical Chemistry A, 2010, 114, 5211-5216. | 1.1 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 80 | Trace elements in glucometabolic disorders: an update. Diabetology and Metabolic Syndrome, 2010, 2, 70. | 1.2 | 114 |
| 81 | Effect of vanadium on human dendritic cells. Toxicological and Environmental Chemistry, 2010, 92, 355-371. | 0.6 | 6 |
| 82 | Vanadium in the detection, prevention and treatment of cancer: The in vivo evidence. Cancer Letters, 2010, 294, 1-12. | 3.2 | 201 |
| 83 | Effects of combined vanadate and magnesium treatment on erythrocyte antioxidant defence system in rats. Environmental Toxicology and Pharmacology, 2010, 30, 153-161. | 2.0 | 24 |
| 84 | New Developments in the Comprehension of the Biotransformation and Transport of Insulin-Enhancing Vanadium Compounds in the Blood Serum. Inorganic Chemistry, 2010, 49, 174-187. | 1.9 | 95 |
| 85 | Metalloâ€“allixinate complexes with anti-diabetic and anti-metabolic syndrome activities. Metallomics, 2010, 2, 670. | 1.0 | 46 |
| 86 | Tris-(hydroxyamino)triazines: high-affinity chelating tridentate O,N,O-hydroxylamine ligand for the cis-VVO2+ cation. Dalton Transactions, 2010, 39, 9032. | 1.6 | 13 |
| 87 | Cysteine proteases as targets for metal-based drugs. Metallomics, 2010, 2, 366. | 1.0 | 126 |
| 88 | Vanadate complexes in serum: a speciation modeling study. Dalton Transactions, 2010, 39, 212-220. | 1.6 | 33 |
| 89 | The challenges of trafficking hydrolysis prone metals and ascidians as an archetype. Dalton Transactions, 2011, 40, 5827. | 1.6 | 7 |
| 90 | Synthesis and characterization of bistropolonato oxovanadium(IV and V) complexes. Journal of Coordination Chemistry, 2011, 64, 57-70. | 0.8 | 7 |
| 91 | FAB, ESI and MALDI Mass Spectrometric methods in the study of metallo-drugs and their biomolecular interactions. Metallomics, 2011, 3, 550. | 1.0 | 16 |
| 92 | Interaction of VO2+Ion and Some Insulin-Enhancing Compounds with Immunoglobulin G. Inorganic Chemistry, 2011, 50, 3717-3728. | 1.9 | 68 |
| 93 | Metal-based anti-diabetic drugs: advances and challenges. Dalton Transactions, 2011, 40, 11675. | 1.6 | 109 |
| 96 | Metal Compounds as Enzyme Inhibitors. , 2011, , 351-382. | | 20 |
| 97 | Trace elements status in diabetes mellitus type 2: Possible role of the interaction between molybdenum and copper in the progress of typical complications. Diabetes Research and Clinical Practice, 2011, 91, 333-341. | 1.1 | 110 |
| 98 | Oxidovanadium(IV) Schiff Base Complex Derived from Vitamin B<sub>6</sub>: Synthesis, Characterization, and Insulin Enhancing Properties. Inorganic Chemistry, 2011, 50, 4349-4361. | 1.9 | 66 |
| 99 | Synthesis, spectral characterization, and antidiabetic study of new furan-based vanadium(IV) complexes. Journal of Coordination Chemistry, 2011, 64, 511-524. | 0.8 | 14 |

| # | Article | IF | Citations |
|---|---|---|---|
| 100 | Biospeciation of tungsten in the serum of diabetic and healthy rats treated with the antidiabetic agent sodium tungstate. Talanta, 2011, 84, 1011-1018. | 2.9 | 11 |
| 102 | Ternary oxovanadium(IV) complexes with amino acid-Schiff base and polypyridyl derivatives: Synthesis, characterization, and protein tyrosine phosphatase 1B inhibition. Journal of Inorganic Biochemistry, 2011, 105, 1323-1328. | 1.5 | 36 |
| 103 | Investigation of the insulin-like properties of zinc(II) complexes of 3-hydroxy-4-pyridinones: Identification of a compound with glucose lowering effect in STZ-induced type I diabetic animals. Journal of Inorganic Biochemistry, 2011, 105, 1675-1682. | 1.5 | 29 |
| 104 | Synthesis and hypoglycemic activity of Bis(L-malato)oxovanadium(IV). Biochemistry (Moscow) Supplement Series B: Biomedical Chemistry, 2011, 5, 260-262. | 0.2 | 3 |
| 105 | Vanadyl bisacetylacetonate protects Î² cells from palmitate-induced cell death through the unfolded protein response pathway. Journal of Biological Inorganic Chemistry, 2011, 16, 789-798. | 1.1 | 22 |
| 106 | Recent advances in biosensory and medicinal therapeutic applications of zinc(II) and copper(II) coordination complexes. Coordination Chemistry Reviews, 2011, 255, 459-472. | 9.5 | 130 |
| 107 | The speciation of vanadium in human serum. Coordination Chemistry Reviews, 2011, 255, 2218-2226. | 9.5 | 99 |
| 108 | DFT study of vanadyl (IV) complexes with low molecular mass ligands: Picolinate, oxalate, malonate, and maltolate. International Journal of Quantum Chemistry, 2011, 111, 1395-1402. | 1.0 | 7 |
| 109 | Potentiality of vanadium compounds as anti-parasitic agents. Coordination Chemistry Reviews, 2011, 255, 2193-2203. | 9.5 | 182 |
| 110 | How environment affects drug activity: Localization, compartmentalization and reactions of a vanadium insulin-enhancing compound, dipicolinatooxovanadium(V). Coordination Chemistry Reviews, 2011, 255, 2178-2192. | 9.5 | 106 |
| 111 | Anti-diabetic effects of a series of vanadium dipicolinate complexes in rats with streptozotocin-induced diabetes. Coordination Chemistry Reviews, 2011, 255, 2258-2269. | 9.5 | 198 |
| 112 | Vibrational spectra of bis(maltolato)oxovanadium(IV): A potent insulin mimetic agent. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2011, 78, 133-135. | 2.0 | 8 |
| 113 | Metal-Based Inhibitors of Protein Tyrosine Phosphatases. Anti-Cancer Agents in Medicinal Chemistry, 2011, 11, 164-171. | 0.9 | 34 |
| 114 | Studies on the Biotransformations and Biodistributions of Metal-Containing Drugs Using X-Ray Absorption Spectroscopy. Current Topics in Medicinal Chemistry, 2011, 11, 553-571. | 1.0 | 51 |
| 115 | Silver vanadate nanoribbons: A label-free bioindicator in the conversion between human serum transferrin and apotransferrin via surface-enhanced Raman scattering. Applied Physics Letters, 2011, 98, . | 1.5 | 19 |
| 116 | Effects of Sodium Metavanadate and Germination on the Sprouting of Chickpeas and its Content of Vanadium, Formononetin and Biochanin A in the Sprouts. Journal of Dietary Supplements, 2012, 9, 34-44. | 1.4 | 6 |
| 117 | Multifunctional Ligands in Medicinal Inorganic Chemistry- Current Trends and Future Directions. Current Topics in Medicinal Chemistry, 2012, 12, 122-144. | 1.0 | 23 |
| 118 | Effect of bis(maltolato)oxovanadium (IV) (BMOV) on selenium nutritional status in diabetic streptozotocin rats. British Journal of Nutrition, 2012, 108, 893-899. | 1.2 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 119 | A Comparative Study of Relationship between Micronutrients and Gestational Diabetes. ISRN Obstetrics & Gynecology, 2012, 2012, 1-4. | 1.2 | 27 |
| 121 | Hydrothermal synthesis of lanthanide orthovanadate: EuVO4 particles and their fluorescence application. CrystEngComm, 2012, 14, 8033. | 1.3 | 13 |
| 122 | Changes in the antioxidant defence and in selenium concentration in tissues of vanadium exposed rats. Metallomics, 2012, 4, 814. | 1.0 | 22 |
| 123 | Application of Spin Labels for Research of Vanadyl Acetylacetonate Concentration in Model Bilayer Membranes by EPR Spectroscopy. Molecular Crystals and Liquid Crystals, 2012, 554, 195-208. | 0.4 | 0 |
| 124 | The anti-diabetic bis(maltolato)oxovanadium(iv) decreases lipid order while increasing insulin receptor localization in membrane microdomains. Dalton Transactions, 2012, 41, 6419. | 1.6 | 49 |
| 125 | An Evidence-Based Systematic Review of Vanadium by the Natural Standard Research Collaboration. Journal of Dietary Supplements, 2012, 9, 223-251. | 1.4 | 11 |
| 126 | A novel bioaffinity material: the systhesis, biointeraction, and electrochemical behavior of InVO4 nanoribbons. CrystEngComm, 2012, 14, 3441. | 1.3 | 5 |
| 127 | Study of the coordination and solution structures for the interaction systems between diperoxidovanadate complexes and 4-(pyridin-2-yl)pyrimidine-like ligands. Dalton Transactions, 2012, 41, 3684. | 1.6 | 14 |
| 128 | Biotransformation of BMOV in the presence of blood serum proteins. Metallomics, 2012, 4, 33-36. | 1.0 | 60 |
| 129 | A Coordination Chemistry Study of Hydrated and Solvated Cationic Vanadium Ions in Oxidation States +III, +IV, and +V in Solution and Solid State. Inorganic Chemistry, 2012, 51, 9598-9609. | 1.9 | 90 |
| 130 | Molecular dynamics simulation of the interaction between protein tyrosine phosphatase 1B and aryl diketoacid derivatives. Journal of Molecular Graphics and Modelling, 2012, 38, 186-193. | 1.3 | 7 |
| 131 | A Proline-Based Aminophosphinic Acid Ligand and Itâ€™s Vanadyl Complex: Synthesis, Characterization and In Vitro Inhibitory Effects on Î±-Amylase And Î±-Glucosidase. Phosphorus, Sulfur and Silicon and the Related Elements, 2012, 187, 1521-1527. | 0.8 | 5 |
| 132 | Transport of the anti-diabetic VO2+ complexes formed by pyrone derivatives in the blood serum. Journal of Inorganic Biochemistry, 2012, 115, 87-99. | 1.5 | 65 |
| 133 | VO(dmpp)2 normalizes pre-diabetic parameters as assessed by in vivo magnetic resonance imaging and spectroscopy. Journal of Inorganic Biochemistry, 2012, 115, 44-49. | 1.5 | 30 |
| 134 | Synthesis and evaluation of oxovanadium(iv) complexes of Schiff-base condensates from 5-substituted-2-hydroxybenzaldehyde and 2-substituted-benzenamine as selective inhibitors of protein tyrosine phosphatase 1B. Dalton Transactions, 2012, 41, 11116. | 1.6 | 38 |
| 135 | Beneficial Effects of Chromium(III) and Vanadium Supplements in Diabetes. , 2012, , 381-391. | | 4 |
| 136 | Synthesis, crystal structures, DNA binding and cleavage studies of two oxovanadium(IV) complexes of 1,10-phenanthroline and Schiff bases derived from tryptophan. Transition Metal Chemistry, 2012, 37, 783-790. | 0.7 | 17 |
| 137 | Jeju Ground Water Containing Vanadium Enhances Antioxidant Systems in Human Liver Cells. Biological Trace Element Research, 2012, 147, 16-24. | 1.9 | 11 |

| # | Article | IF | Citations |
|---|---|---|---|
| 138 | Prediction of Type-2 Diabetes Based on Several Element Levels in Blood and Chemometrics. Biological Trace Element Research, 2012, 147, 67-74. | 1.9 | 28 |
| 139 | Application of DFT methods to the study of the coordination environment of the VO2+ ion in VÂproteins. Journal of Biological Inorganic Chemistry, 2012, 17, 773-790. | 1.1 | 41 |
| 140 | Selenium interactions and toxicity: a review. Cell Biology and Toxicology, 2012, 28, 31-46. | 2.4 | 250 |
| 141 | Vanadium in inorganic chemistry: excerpts from the 8th International Vanadium Symposium. Dalton Transactions, 2013, 42, 11744. | 1.6 | 13 |
| 142 | Investigation on the Complexation of Dioxovanadium (V) with D-(-)-Quinic Acid in WaterÂ+Â1-Butyl-3-Methylimidazolium Tetrafluoroborate and WaterÂ+ÂMethanol Mixed Solvents Using the KAT Model. Journal of Solution Chemistry, 2013, 42, 1305-1319. | 0.6 | 3 |
| 143 | Influence of Vanadiumâ€“organic Ligands Treatment on Selected Metal Levels in Kidneys of STZ Rats. Biological Trace Element Research, 2013, 153, 319-328. | 1.9 | 5 |
| 144 | Bis(Î±-furancarboxylato)oxovanadium(IV) Exerts Durable Antidiabetic Effects and Suppresses Matrix Metalloproteinase-2 Activity in Spontaneous Type 2 Diabetic KKAy Mice. Biological Trace Element Research, 2013, 153, 329-339. | 1.9 | 7 |
| 145 | Role of Vanadium (V) in the Differentiation of C3H10t1/2 Cells Towards Osteoblast Lineage: A Comparative Analysis with Other Trace Elements. Biological Trace Element Research, 2013, 152, 135-142. | 1.9 | 19 |
| 146 | PTP1B: A simple enzyme for a complex world. Critical Reviews in Biochemistry and Molecular Biology, 2013, 48, 430-445. | 2.3 | 152 |
| 147 | Vanadium Biochemistry. , 2013, , 323-342. | | 2 |
| 148 | Biological Activities of V and Cr. , 2013, , 819-834. | | 1 |
| 149 | Interaction of vanadium(IV) with human serum apo-transferrin. Journal of Inorganic Biochemistry, 2013, 121, 187-195. | 1.5 | 72 |
| 150 | Vibrational spectra of bis(maltolato)zinc(II), an interesting insulin mimetic agent. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2013, 113, 337-339. | 2.0 | 6 |
| 151 | Interaction of Insulin-Enhancing Vanadium Compounds with Human Serum holo-Transferrin. Inorganic Chemistry, 2013, 52, 11975-11985. | 1.9 | 86 |
| 152 | Influence of Fructose and Fatty-Rich Diet Combined with Vanadium on Bone Marrow Cells. Biological Trace Element Research, 2013, 155, 276-282. | 1.9 | 4 |
| 153 | Effect of Lower Doses of Vanadate in Combination with Azadirachta indica Leaf Extract on Hepatic and Renal Antioxidant Enzymes in Streptozotocin-Induced Diabetic Rats. Biological Trace Element Research, 2013, 156, 202-209. | 1.9 | 11 |
| 154 | Bis(oxalato)dioxovanadate(V) and Bis(oxalato)oxoperoxo-vanadate(V) Complexes: Spectroscopic Characterization and Biological Activity. Biological Trace Element Research, 2013, 155, 295-300. | 1.9 | 10 |
| 155 | Bromoperoxidase mimic as catalysts for oxidative brominationâ€”synthesis, structures and properties of the diversified oxidation state of vanadium(iii, iv and v) complexes with pincer N-heterocycle ligands. CrystEngComm, 2013, 15, 5561. | 1.3 | 37 |

| # | Article | IF | Citations |
|---|---|---|---|
| 156 | Coordination chemistry may explain pharmacokinetics and clinical response of vanadyl sulfate in type 2 diabetic patients. Metallomics, 2013, 5, 1491. | 1.0 | 55 |
| 157 | A novel VIVOâ€“pyrimidinone complex: synthesis, solution speciation and human serum protein binding. Dalton Transactions, 2013, 42, 11841. | 1.6 | 38 |
| 158 | Raft localization of Type I FcÎµ receptor and degranulation of RBL-2H3 cells exposed to decavanadate, a structural model for V2O5. Dalton Transactions, 2013, 42, 11912. | 1.6 | 26 |
| 159 | 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. | 1.4 | 13 |
| 160 | Rapid speciation and determination of vanadium compounds using ion-pair reversed-phase ultra-high-performance liquid chromatography inductively coupled plasma-sector field mass spectrometry. Journal of Chromatography A, 2013, 1304, 121-126. | 1.8 | 11 |
| 161 | Stabilization of oxidovanadium(iv) by organic radicals. Dalton Transactions, 2013, 42, 4586. | 1.6 | 22 |
| 162 | First example of a 1:1 vanadium(IV)â€“citrate complex featuring the 2,2â€²-bipyridine co-ligand: Synthesis, X-ray crystal structure and DFT calculations. Inorganica Chimica Acta, 2013, 400, 107-114. | 1.2 | 14 |
| 163 | Effects of sodium metavanadate on in vitro neuroblastoma and red blood cells. Archives of Biochemistry and Biophysics, 2013, 535, 248-256. | 1.4 | 10 |
| 165 | VO<sup>2+</sup>â€“hydroxyapatite complexes as models for vanadyl coordination to phosphate in bone. Molecular Physics, 2013, 111, 2967-2979. | 0.8 | 14 |
| 166 | The interactions of vanadium with Phycomyces blakesleeanus mycelium: enzymatic reduction, transport and metabolic effects. Research in Microbiology, 2013, 164, 61-69. | 1.0 | 13 |
| 167 | Metal Speciation in Health and Medicine Represented by Iron and Vanadium. Inorganic Chemistry, 2013, 52, 12262-12275. | 1.9 | 128 |
| 168 | Speciation and Stability of Dioxovanadium(V) Complexes with Diethylenetriaminepentaacetic Acid at Different Ionic Strengths. Journal of Solution Chemistry, 2013, 42, 1729-1747. | 0.6 | 0 |
| 169 | Chemical Speciation of Metal Complexes from Chemical Shift Calculations: The Interaction of 2-Amino-N-hydroxypropanamide with V(V) in Aqueous Solution. Journal of Physical Chemistry B, 2013, 117, 11670-11680. | 1.2 | 0 |
| 170 | Chemical, Biochemical, and Biological Behaviors of Vanadate and Its Oligomers. Progress in Molecular and Subcellular Biology, 2013, 54, 1-18. | 0.9 | 3 |
| 171 | Nutraceuticals as therapeutic agents for holistic treatment of diabetes. International Journal of Green Pharmacy, 2013, 7, 278. | 0.1 | 7 |
| 172 | Synthesis, Characterization, and Antibacterial Studies of Pd(II) and Pt(II) Complexes of Some Diaminopyrimidine Derivatives. Bioinorganic Chemistry and Applications, 2013, 2013, 1-8. | 1.8 | 33 |
| 173 | Roles of Chromium(III), Vanadium, and Zinc in Sports Nutrition. , 2013, , 447-454. | | 4 |
| 174 | Aggravation by vanadium of magnesium deficiency in STZ-induced diabetic rats. Magnesium Research, 2013, 26, 74-82. | 0.4 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 175 | Changes in Iron Metabolism and Oxidative Status in STZ-Induced Diabetic Rats Treated with Bis(maltolato) Oxovanadium (IV) as an Antidiabetic Agent. Scientific World Journal, The, 2014, 2014, 1-6. | 0.8 | 12 |
| 176 | Coordinative interaction of microcrystalline chitosan with oxovanadium (IV) ions in aqueous solution. Chemistry Central Journal, 2014, 8, 50. | 2.6 | 12 |
| 177 | INTERACTION OF DECAVANADATE WITH INTERFACES AND BIOLOGICAL MODEL MEMBRANE SYSTEMS: CHARACTERIZATION OF SOFT OXOMETALATE SYSTEMS. Journal of Molecular and Engineering Materials, 2014, 02, 1440007. | 0.9 | 21 |
| 178 | Characterisation of Potential Antidiabetic-Related Proteins fromPleurotus pulmonarius(Fr.) QuÃ©l. (Grey Oyster Mushroom) by MALDI-TOF/TOF Mass Spectrometry. BioMed Research International, 2014, 2014, 1-9. | 0.9 | 15 |
| 179 | Protein Tyrosine Phosphatase Inhibition by Metals and Metal Complexes. Antioxidants and Redox Signaling, 2014, 20, 2210-2224. | 2.5 | 39 |
| 180 | NMR and theoretical study on the coordination interaction between peroxovanadium(V) complexes and 5-amino-1,10-phenanthroline. Journal of Coordination Chemistry, 2014, 67, 315-322. | 0.8 | 4 |
| 181 | Guanylurea metformium double salt of decavanadate, (HGU+)4(HMet+)2(V10O286â^')Â·2H2O. Inorganica Chimica Acta, 2014, 420, 85-91. | 1.2 | 22 |
| 182 | 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. | 1.5 | 55 |
| 183 | Is the Hypoglycemic Action of Vanadium Compounds Related to the Suppression of Feeding?. Biological Trace Element Research, 2014, 157, 242-248. | 1.9 | 19 |
| 184 | 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. | 1.7 | 31 |
| 185 | Therapeutic properties of VO(dmpp)2 as assessed by in vitro and in vivo studies in type 2 diabetic GK rats. Journal of Inorganic Biochemistry, 2014, 131, 115-122. | 1.5 | 22 |
| 186 | A new oxovanadium complex enhances renal function by improving insulin signaling pathway in diabetic mice. Journal of Diabetes and Its Complications, 2014, 28, 265-272. | 1.2 | 17 |
| 187 | The diagnostics of diabetes mellitus based on ensemble modeling and hair/urine element level analysis. Computers in Biology and Medicine, 2014, 50, 70-75. | 3.9 | 34 |
| 188 | Vanadium and cancer treatment: Antitumoral mechanisms of three oxidovanadium(IV) complexes on a human osteosarcoma cell line. Journal of Inorganic Biochemistry, 2014, 134, 106-117. | 1.5 | 71 |
| 189 | Metallodrugs in Medicinal Inorganic Chemistry. Chemical Reviews, 2014, 114, 4540-4563. | 23.0 | 984 |
| 190 | Role of ERK/NFÎºB in vanadium (IV) oxide mediated osteoblast differentiation in C3H10t1/2 cells. Biochimie, 2014, 101, 132-144. | 1.3 | 16 |
| 191 | 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. | 1.2 | 19 |
| 192 | Melatonin administration in diabetes: regulation of plasma Cr, V, and Mg in young male Zucker diabetic fatty rats. Food and Function, 2014, 5, 512. | 2.1 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 193 | Exposure to bis(maltolato)oxovanadium(IV) increases levels of hepcidin mRNA and impairs the homeostasis of iron but not that of manganese. Food and Chemical Toxicology, 2014, 73, 113-118. | 1.8 | 14 |
| 194 | A spectroscopic study on the coordination and solution structures of the interaction systems between biperoxidovanadate complexes and the pyrazolylpyridine-like ligands. Dalton Transactions, 2014, 43, 1524-1533. | 1.6 | 17 |
| 195 | Distinctive EPR signals provide an understanding of the affinity of bis-(3-hydroxy-4-pyridinonato) copper(<scp>ii</scp>) complexes for hydrophobic environments. Dalton Transactions, 2014, 43, 9722-9731. | 1.6 | 15 |
| 196 | Inhibition of human amylin fibril formation by insulin-mimetic vanadium complexes. Metallomics, 2014, 6, 1087-1096. | 1.0 | 40 |
| 197 | Reactivityâ€“activity relationships of oral anti-diabetic vanadium complexes in gastrointestinal media: an X-ray absorption spectroscopic study. Metallomics, 2014, 6, 1880-1888. | 1.0 | 37 |
| 198 | The structural basis of action of vanadyl (VO2+) chelates in cells. Coordination Chemistry Reviews, 2014, 279, 1-22. | 9.5 | 55 |
| 199 | Vanadium Speciation by XANES Spectroscopy: A Threeâ€Dimensional Approach. Chemistry - A European Journal, 2014, 20, 12056-12060. | 1.7 | 42 |
| 200 | Vanadium Methyl-Bipyridine Organoligand and its Influence on Energy Balance and Organs Mass. Biological Trace Element Research, 2014, 160, 376-382. | 1.9 | 1 |
| 201 | Structural variations of the adducts of insulin-enhancing VO(pic)2 compound with neutral O- and N-ligands: X-ray and DFT quantum-mechanical study. Monatshefte FÃ¼r Chemie, 2014, 145, 1263-1275. | 0.9 | 6 |
| 202 | Synthesis and Characterization of V<sup>IV</sup>O Complexes of Picolinate and Pyrazine Derivatives. Behavior in the Solid State and Aqueous Solution and Biotransformation in the Presence of Blood Plasma Proteins. Inorganic Chemistry, 2014, 53, 7960-7976. | 1.9 | 36 |
| 203 | Interaction of Antidiabetic Vanadium Compounds with Hemoglobin and Red Blood Cells and Their Distribution between Plasma and Erythrocytes. Inorganic Chemistry, 2014, 53, 1449-1464. | 1.9 | 86 |
| 204 | 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. | 1.0 | 93 |
| 205 | Vanadate complexes of 3-hydroxy-1,2-dimethyl-pyridinone: Speciation, structure and redox properties. Inorganica Chimica Acta, 2014, 420, 92-102. | 1.2 | 19 |
| 206 | Uptake of potential anti-diabetic VIVO compounds of picolinate ligands by red blood cells. Inorganica Chimica Acta, 2014, 420, 75-84. | 1.2 | 38 |
| 207 | Ultrastructural Analysis of In Vivo Hypoglycemiant Effect of Two Polyoxometalates in Rats with Streptozotocin-Induced Diabetes. Microscopy and Microanalysis, 2015, 21, 1236-1248. | 0.2 | 10 |
| 208 | Vanadium Compounds as Pro-Inflammatory Agents: Effects on Cyclooxygenases. International Journal of Molecular Sciences, 2015, 16, 12648-12668. | 1.8 | 31 |
| 209 | Vanadium Complexes with Hydrazone or Thiosemicarbazone Ligands as Potential Anti-Mycobacterium tuberculosis Agents. Current Clinical Pharmacology, 2015, 10, 66-72. | 0.2 | 5 |
| 210 | Preclinical and Clinical Studies for Sodium Tungstate: Application in Humans. Journal of Clinical & Cellular Immunology, 2015, 06, . | 1.5 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 211 | Oxovanadium(IV) complexes based onS-alkyl-thiosemicarbazidato ligands. Synthesis, characterization, electrochemical, and antioxidant studies. Journal of Sulfur Chemistry, 2015, 36, 434-449. | 1.0 | 14 |
| 212 | The potential cytotoxicity and mechanism of VO<sub>2</sub> thin films for intelligent thermochromic windows. RSC Advances, 2015, 5, 106315-106324. | 1.7 | 19 |
| 213 | Characterization and biotransformation in the plasma and red blood cells of VIVO2+ complexes formed by ceftriaxone. Journal of Inorganic Biochemistry, 2015, 147, 71-84. | 1.5 | 14 |
| 214 | Vanadyl cationic complexes as catalysts in olefin oxidation. Dalton Transactions, 2015, 44, 5125-5138. | 1.6 | 47 |
| 215 | Cyclooxygenase-1 as the Main Source of Proinflammatory Factors After Sodium Orthovanadate Treatment. Biological Trace Element Research, 2015, 163, 103-111. | 1.9 | 18 |
| 216 | High-frequency and -field electron paramagnetic resonance of vanadium(IV, III, and II) complexes. Coordination Chemistry Reviews, 2015, 301-302, 123-133. | 9.5 | 65 |
| 217 | Vanadium compounds in medicine. Coordination Chemistry Reviews, 2015, 301-302, 24-48. | 9.5 | 393 |
| 218 | Novel vanadyl complexes of alginate saccharides: Synthesis, characterization, and biological activities. Carbohydrate Polymers, 2015, 121, 86-91. | 5.1 | 19 |
| 219 | Vanadiumâ€“phosphatase complexes: Phosphatase inhibitors favor the trigonal bipyramidal transition state geometries. Coordination Chemistry Reviews, 2015, 301-302, 163-199. | 9.5 | 115 |
| 220 | Synthesis, characterization and anti-diabetic therapeutic potential of novel aminophenol-derivatized nitrilotriacetic acid vanadyl complexes. Journal of Inorganic Biochemistry, 2015, 152, 104-113. | 1.5 | 28 |
| 221 | Assessment and Application of Density Functional Theory for the Prediction of Structure and Reactivity of Vanadium Complexes. Journal of Physical Chemistry A, 2015, 119, 8537-8546. | 1.1 | 9 |
| 222 | Reactivity and Speciation of Anti-Diabetic Vanadium Complexes in Whole Blood and Its Components: The Important Role of Red Blood Cells. Inorganic Chemistry, 2015, 54, 7753-7766. | 1.9 | 67 |
| 223 | Oxidovanadium(IV) sulfate-induced glucose uptake in HepG2 cells through IR/Akt pathway and hydroxyl radicals. Journal of Inorganic Biochemistry, 2015, 149, 39-44. | 1.5 | 12 |
| 224 | Vanadium(V) and -(IV) complexes of anionic polysaccharides: Controlled release pharmaceutical formulations and models of vanadium biotransformation products. Journal of Inorganic Biochemistry, 2015, 147, 227-234. | 1.5 | 15 |
| 225 | A nano sized functionalized mesoporous silica modified carbon paste electrode as a novel, simple, robust and selective anti-diabetic metformin sensor. Sensors and Actuators B: Chemical, 2015, 221, 807-815. | 4.0 | 22 |
| 226 | Spherical Oligo-Silicic Acid SOSA Disclosed as Possible Endogenous Digitalis-Like Factor. Frontiers in Endocrinology, 2015, 5, 233. | 1.5 | 1 |
| 227 | Biotransformations of Antidiabetic Vanadium Prodrugs in Mammalian Cells and Cell Culture Media: A XANES Spectroscopic Study. Inorganic Chemistry, 2015, 54, 6707-6718. | 1.9 | 53 |
| 228 | The effect of phosphate on the nuclease activity of vanadium compounds. Journal of Inorganic Biochemistry, 2015, 147, 165-176. | 1.5 | 8 |

| # | Article | IF | Citations |
|---|---|---|---|
| 229 | Evaluating transition state structures of vanadiumâ€“phosphatase protein complexes using shape analysis. Journal of Inorganic Biochemistry, 2015, 147, 153-164. | 1.5 | 33 |
| 230 | Vanadium and proteins: Uptake, transport, structure, activity and function. Coordination Chemistry Reviews, 2015, 301-302, 49-86. | 9.5 | 166 |
| 231 | Thirty years through vanadium chemistry. Journal of Inorganic Biochemistry, 2015, 147, 4-24. | 1.5 | 122 |
| 232 | Antidiabetic, Chemical, and Physical Properties of Organic Vanadates as Presumed Transition-State Inhibitors for Phosphatases. Journal of Organic Chemistry, 2015, 80, 11899-11915. | 1.7 | 122 |
| 233 | Speciation of the Potential Antitumor Agent Vanadocene Dichloride in the Blood Plasma and Model Systems. Inorganic Chemistry, 2015, 54, 8237-8250. | 1.9 | 28 |
| 234 | Synthesis, structures and insulin-like activity of oxidovanadium(V) complexes with aroylhydrazones and ethylmaltol mixed-ligands. Polyhedron, 2015, 97, 268-272. | 1.0 | 27 |
| 235 | Oxovanadium(IV) complexes of medicinal relevance: Synthesis, characterization, and 3D-molecular modeling and analysis of some oxovanadium(IV) complexes in O,N-donor coordination matrix of sulfa drug Schiff bases derived from a 2-pyrazolin-5-one derivative. Arabian Journal of Chemistry, 2015, 8, 78-92. | 2.3 | 17 |
| 237 | Profile of Trace Elements in Selected Medicinal Plants Used for the Treatment of Diabetes in Eritrea. Scientific World Journal, The, 2016, 2016, 1-7. | 0.8 | 10 |
| 238 | Why Antidiabetic Vanadium Complexes are Not in the Pipeline of â€œBig Pharmaâ€•Drug Research? A Critical Review. Current Medicinal Chemistry, 2016, 23, 2874-2891. | 1.2 | 78 |
| 239 | In vitro studies on the pleotropic antidiabetic effects of zinc oxide nanoparticles. Nanomedicine, 2016, 11, 1671-1687. | 1.7 | 21 |
| 240 | Vanadium compounds for the treatment of human diabetes mellitus: A scientific curiosity? A review of thirty years of research. Food and Chemical Toxicology, 2016, 95, 137-141. | 1.8 | 67 |
| 241 | Synthesis, structures, and insulin-like activity of oxidovanadium(V) complexes derived from 2-chloro-Nâ€²-(3-ethoxy-2-hydroxybenzylidene)benzohydrazide. Journal of Coordination Chemistry, 2016, 69, 1371-1379. | 0.8 | 6 |
| 242 | Novel anti-diabetic and luminescent coordination compounds based on vanadium. New Journal of Chemistry, 2016, 40, 5387-5393. | 1.4 | 20 |
| 243 | Biorelevant reactions of the potential anti-tumor agent vanadocene dichloride. Metallomics, 2016, 8, 532-541. | 1.0 | 12 |
| 244 | The metal face of protein tyrosine phosphatase 1B. Coordination Chemistry Reviews, 2016, 327-328, 70-83. | 9.5 | 73 |
| 245 | Selective speciation improves efficacy and lowers toxicity of platinum anticancer and vanadium antidiabetic drugs. Journal of Inorganic Biochemistry, 2016, 165, 56-70. | 1.5 | 69 |
| 246 | Protein Tyrosine Phosphatases in Cancer. , 2016, , . | | 4 |
| 247 | PTP1B: From Metabolism to Cancer. , 2016, , 169-199. | | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 248 | Vanadium(V) Complexes with Substituted 1,5-bis(2-hydroxybenzaldehyde)carbohydrazones and Their Use As Catalyst Precursors in Oxidation of Cyclohexane. Inorganic Chemistry, 2016, 55, 9187-9203. | 1.9 | 49 |
| 249 | Influence of Primary Ligands (ODA, TDA) on Physicochemical and Biological Properties of Oxidovanadium (IV) Complexes with Bipy and Phen as Auxiliary Ligands. Biological Trace Element Research, 2016, 174, 251-258. | 1.9 | 7 |
| 250 | 14-day toxicity studies of tetravalent and pentavalent vanadium compounds in Harlan Sprague Dawley rats and B6C3F1/N mice via drinking water exposure. Toxicology Reports, 2016, 3, 531-538. | 1.6 | 18 |
| 251 | Vanadyl complexes with dansyl-labelled di-picolinic acid ligands: synthesis, phosphatase inhibition activity and cellular uptake studies. Dalton Transactions, 2016, 45, 7104-7113. | 1.6 | 4 |
| 252 | Uncovering novel 3-hydroxy-4-pyridinone metal ion complexes with potential anti-inflammatory properties. Journal of Inorganic Biochemistry, 2016, 155, 9-16. | 1.5 | 4 |
| 253 | Selenium, Vanadium, and Chromium as Micronutrients to Improve Metabolic Syndrome. Current Hypertension Reports, 2017, 19, 10. | 1.5 | 79 |
| 254 | Synthesis, characterization and antioxidant/cytotoxic activity of oxovanadium(IV) complexes of methyliminodiacetic acid and ethylenediaminetetracetic acid. Journal of Molecular Structure, 2017, 1137, 742-755. | 1.8 | 9 |
| 255 | Effect of vanadium on calcium homeostasis, osteopontin mRNA expression, and bone microarchitecture in diabetic rats. Metallomics, 2017, 9, 258-267. | 1.0 | 12 |
| 256 | Characterization and cytotoxic effect of aqua-(2,2â€²,2â€²â€²-nitrilotriacetato)-oxo-vanadium salts on human osteosarcoma cells. BioMetals, 2017, 30, 261-275. | 1.8 | 10 |
| 257 | A dioxidovanadium (V) complex of NNO-donor Schiff base as a selective inhibitor of protein tyrosine phosphatase 1B: Synthesis, characterization, and biological activities. European Journal of Medicinal Chemistry, 2017, 128, 287-292. | 2.6 | 26 |
| 258 | Stabilities and Biological Activities of Vanadium Drugs: What is the Nature of the Active Species?. Chemistry - an Asian Journal, 2017, 12, 1692-1699. | 1.7 | 68 |
| 259 | In vitro study of the antidiabetic behavior of vanadium compounds. Coordination Chemistry Reviews, 2017, 351, 118-126. | 9.5 | 76 |
| 260 | Synthesis, crystal structures and insulin-like activity of two new oxidovanadium(V) complexes with aroylhydrazones and maltol mixed-ligands. Polyhedron, 2017, 137, 321-324. | 1.0 | 3 |
| 261 | Speciation of potential anti-diabetic vanadium complexes in real serum samples. Journal of Inorganic Biochemistry, 2017, 173, 52-65. | 1.5 | 37 |
| 263 | Antitumoral effect of vanadium compounds in malignant melanoma cell lines. Journal of Inorganic Biochemistry, 2017, 174, 14-24. | 1.5 | 66 |
| 264 | Speciation in human blood of Metvan, a vanadium based potential anti-tumor drug. Dalton Transactions, 2017, 46, 8950-8967. | 1.6 | 66 |
| 265 | High cytotoxicity of vanadium(IV) complexes with 1,10-phenanthroline and related ligands is due to decomposition in cell culture medium. Journal of Biological Inorganic Chemistry, 2017, 22, 663-672. | 1.1 | 51 |
| 266 | Structure, Physicochemical and Biological Properties of an Aqua (2,2â€²,2â€²â€²-Nitrilotriacetato)â€oxidovanadium(IV) Salt with 4â€Methylpyridinium Cation. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2017, 643, 501-510. | 0.6 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 267 | Vanadium and zinc complexes of 5-cyanopicolinate and pyrazine derivatives: synthesis, structural elucidation and in vitro insulino-mimetic activity study. New Journal of Chemistry, 2017, 41, 735-746. | 1.4 | 17 |
| 268 | Speciation of metal drugs, supplements and toxins in media and bodily fluids controls in vitro activities. Coordination Chemistry Reviews, 2017, 352, 473-498. | 9.5 | 181 |
| 269 | Elucidation of Binding Site and Chiral Specificity of Oxidovanadium Drugs with Lysozyme through Theoretical Calculations. Inorganic Chemistry, 2017, 56, 12938-12951. | 1.9 | 40 |
| 270 | Synthesis and anti-diabetic activity of new N,N-dimethylphenylenediamine-derivatized nitrilotriacetic acid vanadyl complexes. Journal of Inorganic Biochemistry, 2017, 177, 291-299. | 1.5 | 19 |
| 271 | Syntheses, crystal structures, DFT calculations, protein interaction and anticancer activities of water soluble dipicolinic acid-imidazole based oxidovanadium(<scp>iv</scp>) complexes. Dalton Transactions, 2017, 46, 16682-16702. | 1.6 | 23 |
| 272 | Synthesis and characterization of oxidovanadium complexes as enzyme inhibitors targeting dipeptidyl peptidase IV. Journal of Inorganic Biochemistry, 2017, 175, 29-35. | 1.5 | 12 |
| 273 | Serum Trace Elements and Electrolytes Are Associated with Fasting Plasma Glucose and HbA1c in Postmenopausal Women with Type 2 Diabetes Mellitus. Biological Trace Element Research, 2017, 177, 25-32. | 1.9 | 22 |
| 274 | Multielemental Analysis of Human Serum by Dynamic Reaction Cellâ€“Inductively Coupled Plasma Mass Spectrometry. Analytical Letters, 2017, 50, 554-566. | 1.0 | 7 |
| 275 | Crystal structure of (acetylacetonato-Îº<sup>2</sup>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 432 Td (O,Oâ€²)-(2-amino-6-chlorob<br>Structures, 2017, 232, 1045-1047. | 0.1 | 2 |
| 277 | Vanadium Compounds as PTP Inhibitors. Molecules, 2017, 22, 2269. | 1.7 | 74 |
| 278 | A sensitive fluorescent sensing strategy for nanomolar levels of metformin using graphitic carbon nitride nanosheets as nanofluoroprobe. Analytica Chimica Acta, 2018, 1026, 117-124. | 2.6 | 30 |
| 279 | Decoding Surface Interaction of V<sup>IV</sup>O Metallodrug Candidates with Lysozyme. Inorganic Chemistry, 2018, 57, 4456-4469. | 1.9 | 28 |
| 280 | 15. IRON AND ITS ROLE IN CANCER DEFENSE: A DOUBLE-EDGED SWORD. , 2018, 18, 437-468. | | 31 |
| 281 | EPR and 51V NMR studies of prospective anti-diabetic bis(3-hydroxy-4-pyridinonato)oxidovanadium(iv) complexes in aqueous solution and liposome suspensions. New Journal of Chemistry, 2018, 42, 8088-8097. | 1.4 | 5 |
| 282 | Bis(picolinato) complexes of vanadium and zinc as potential antidiabetic agents: synthesis, structural elucidation and in vitro insulin-mimetic activity study. New Journal of Chemistry, 2018, 42, 3619-3632. | 1.4 | 22 |
| 283 | Combination Therapy Is the New Gene Therapy?. Molecular Therapy, 2018, 26, 12-14. | 3.7 | 5 |
| 284 | V<sup>IV</sup>O complexes with antibacterial quinolone ligands and their interaction with serum proteins. Dalton Transactions, 2018, 47, 2164-2182. | 1.6 | 36 |
| 285 | Binding of vanadium to human serum transferrin - voltammetric and spectrometric studies. Journal of Inorganic Biochemistry, 2018, 180, 211-221. | 1.5 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 286 | V IV O and V IV Species Formed in Aqueous Solution by the Tridentate Glutaroimideâ€“Dioxime Ligand â€“ An Instrumental and Computational Characterization. European Journal of Inorganic Chemistry, 2018, 2018, 1805-1816. | 1.0 | 9 |
| 287 | Crystal structure and biomimetic activity of homobinuclear dioxidovanadium(V) complexes containing succinoyldihydrazones ligands. Polyhedron, 2018, 139, 80-88. | 1.0 | 19 |
| 288 | Synthesis, structural characterization, DFT studies and in-vitro antidiabetic activity of new mixed ligand oxovanadium(IV) complex with tridentate Schiff base. Journal of Molecular Structure, 2018, 1153, 162-169. | 1.8 | 18 |
| 289 | Speciation in aqueous solution and interaction with low and high molecular mass blood bioligands of [V IV O(oda)(H 2 O) 2 ], a V compound with in vitro anticancer activity. Inorganica Chimica Acta, 2018, 472, 127-138. | 1.2 | 4 |
| 290 | Multi-modal Potentiation of Oncolytic Virotherapy by Vanadium Compounds. Molecular Therapy, 2018, 26, 56-69. | 3.7 | 77 |
| 291 | Vanadium: A Panacea for Resistance to Oncolytic Immunotherapy?. Molecular Therapy, 2018, 26, 9-12. | 3.7 | 6 |
| 292 | Biology of Vanadium-Based Compounds for Treatment of Diabetes. , 2018, , . | | 2 |
| 293 | Decavanadate Inhibits Mycobacterial Growth More Potently Than Other Oxovanadates. Frontiers in Chemistry, 2018, 6, 519. | 1.8 | 46 |
| 294 | New dioxido-vanadium(V) complexes containing hydrazone ligands: Syntheses, crystal structure and their catalytic application toward C H bond functionalization. Journal of Organometallic Chemistry, 2018, 876, 10-16. | 0.8 | 15 |
| 295 | Preparation of Î³-Fe2O3/hydroxyapatite/Cu(II) magnetic nanocomposite and its application for electrochemical detection of metformin in urine and pharmaceutical samples. Sensors and Actuators B: Chemical, 2018, 270, 405-416. | 4.0 | 36 |
| 296 | Essential and Non-essential Elements in Scalp Hair of Diabetics: Correlations with Glycated Hemoglobin (HbA1c). Biological and Pharmaceutical Bulletin, 2018, 41, 1034-1039. | 0.6 | 11 |
| 297 | Beneficial Effects of Chromium(III) and Vanadium Supplements in Diabetes. , 2018, , 365-374. | | 7 |
| 298 | Vanadium: History, chemistry, interactions with Î±-amino acids and potential therapeutic applications. Coordination Chemistry Reviews, 2018, 372, 117-140. | 9.5 | 92 |
| 299 | Hepatotoxicity of vanadyl sulfate in nondiabetic and streptozotocin-induced diabetic rats. Canadian Journal of Physiology and Pharmacology, 2018, 96, 1076-1083. | 0.7 | 9 |
| 300 | Vanadyl complexes discriminate between neuroblastoma cells and primary neurons by inducing cell-specific apoptotic pathways. Journal of Inorganic Biochemistry, 2018, 188, 76-87. | 1.5 | 3 |
| 301 | Synthesis, structure, solution behavior, reactivity and biological evaluation of oxidovanadium(<scp>iv</scp>/<scp>v</scp>) thiosemicarbazone complexes. Dalton Transactions, 2018, 47, 11358-11374. | 1.6 | 39 |
| 302 | Three VO 2+ complexes of the pyridoxal-derived Schiff bases: Synthesis, experimental and theoretical characterizations, and catalytic activity in a cyclocondensation reaction. Journal of Molecular Structure, 2018, 1153, 149-156. | 1.8 | 29 |
| 303 | Vanadium stimulates pepper plant growth and flowering, increases concentrations of amino acids, sugars and chlorophylls, and modifies nutrient concentrations. PLoS ONE, 2018, 13, e0201908. | 1.1 | 52 |

| # | Article | IF | Citations |
|---|---|---|---|
| 304 | Synthesis,in vitrocytotoxicity, and structureâ€“activity relationships (SAR) of multidentate oxidovanadium(<scp>iv</scp>) complexes as anticancer agents. Dalton Transactions, 2018, 47, 10035-10045. | 1.6 | 38 |
| 305 | Effect of Vanadium Supplementation on Production Performance, Nutrient Utilization, Plasma Mineral Concentration, and Mineral Balance in Lactating Goats. Biological Trace Element Research, 2019, 188, 412-418. | 1.9 | 3 |
| 306 | Chemistry of mixed-ligand oxidovanadium(IV) complexes of aroylhydrazones incorporating quinoline derivatives: Study of solution behavior, theoretical evaluation and protein/DNA interaction. Journal of Inorganic Biochemistry, 2019, 199, 110786. | 1.5 | 27 |
| 307 | Vanadium(V) tris-3,5-di-tert-butylcatecholato complex: Links between speciation and anti-proliferative activity in human pancreatic cancer cells. Journal of Inorganic Biochemistry, 2019, 201, 110815. | 1.5 | 25 |
| 308 | Syntheses, crystal structures and biological activity of oxidovanadium(V) complexes with tridentate aroylhydrazone ligands. Journal of Coordination Chemistry, 2019, 72, 3144-3155. | 0.8 | 2 |
| 309 | Synthesis, crystal structure, DFT calculations, protein interaction, anticancer potential and bromoperoxidase mimicking activity of oxidoalkoxidovanadium(<scp>v</scp>) complexes. New Journal of Chemistry, 2019, 43, 17783-17800. | 1.4 | 5 |
| 310 | The effects of a new antidiabetic glycinium [(pyridine-2, 6-dicarboxylato) oxovanadate (V)] complex in high-fat diet of streptozotocin-induced diabetic rats. Archives of Physiology and Biochemistry, 2022, 128, 80-86. | 1.0 | 2 |
| 311 | The First-Row Transition Metals in the Periodic Table of Medicine. Inorganics, 2019, 7, 111. | 1.2 | 31 |
| 312 | Vanadium compounds induced damage of human umbilical vein endothelial cells and the protective effect of berberine. BioMetals, 2019, 32, 785-794. | 1.8 | 2 |
| 313 | Redox chemistry and biological activities of chromium(III) complexes. , 2019, , 281-321. | | 5 |
| 314 | Enhancement of oncolytic virotherapy by vanadium(V) dipicolinates. BioMetals, 2019, 32, 545-561. | 1.8 | 19 |
| 315 | Interaction of Vanadium(IV) Species with Ubiquitin: A Combined Instrumental and Computational Approach. Inorganic Chemistry, 2019, 58, 8064-8078. | 1.9 | 28 |
| 316 | New thiosemicarbazide and dithiocarbazate based oxidovanadium(<scp>iv</scp>) and dioxidovanadium(<scp>v</scp>) complexes. Reactivity and catalytic potential. New Journal of Chemistry, 2019, 43, 17620-17635. | 1.4 | 19 |
| 317 | Model investigations for vanadium-protein interactions: Synthesis, characterization and antidiabetic properties. Inorganica Chimica Acta, 2019, 493, 20-28. | 1.2 | 19 |
| 318 | Integrated ESI-MS/EPR/computational characterization of the binding of metal species to proteins: vanadium drugâ€“myoglobin application. Inorganic Chemistry Frontiers, 2019, 6, 1561-1578. | 3.0 | 24 |
| 319 | Synthesis, crystal structures and insulin-like activity of three new oxidovanadium(V) complexes with aroylhydrazone ligand. Journal of Inorganic Biochemistry, 2019, 196, 110680. | 1.5 | 16 |
| 320 | Hydrophobicity may enhance membrane affinity and anti-cancer effects of Schiff base vanadium(<scp>v</scp>) catecholate complexes. Dalton Transactions, 2019, 48, 6383-6395. | 1.6 | 51 |
| 321 | Three peroxidovanadium(<scp>v</scp>) compounds mediated by transition metal cations for enhanced anticancer activity. Dalton Transactions, 2019, 48, 15160-15169. | 1.6 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 323 | DNA binding, cytotoxic effects and probable targets of an oxindolimineâ€“vanadyl complex as an antitumor agent. New Journal of Chemistry, 2019, 43, 17831-17840. | 1.4 | 6 |
| 324 | Synthesis, characterization and in vitro anti-cancer activity of vanadium-doped nanocrystalline hydroxyapatite. New Journal of Chemistry, 2019, 43, 17891-17901. | 1.4 | 14 |
| 325 | 14. CHEMICAL AND CLINICAL ASPECTS OF METAL-CONTAINING ANTIDOTES FOR POISONING BY CYANIDE. , 2019, 19, 359-392. | | 29 |
| 326 | Vanadyl sulphate ameliorates biomarkers of endothelial injury and coagulation and thrombosis in a rat model of hyperglycaemia. Archives of Physiology and Biochemistry, 2019, , 1-8. | 1.0 | 0 |
| 327 | DNA interaction and anticancer evaluation of new zinc(II), ruthenium(II), rhodium(III), palladium(II), silver(I) and platinum(II) complexes based on kojic acid; X-ray crystal structure of [Ag(ka)(PPh3)]Â·H2O. Inorganica Chimica Acta, 2019, 487, 433-447. | 1.2 | 17 |
| 328 | Oxovanadium(IV) and ruthenium(II) carbonyl complexes of ONSâ€donor ligands derived from dehydroacetic acid and dithiocarbazate: Synthesis, characterization, antioxidant activity, DNA binding and in vitro cytotoxicity. Applied Organometallic Chemistry, 2019, 33, e4655. | 1.7 | 26 |
| 329 | Role of Ligands in the Uptake and Reduction of V(V) Complexes in Red Blood Cells. Journal of Medicinal Chemistry, 2019, 62, 654-664. | 2.9 | 35 |
| 330 | Validation and Applications of Proteinâ€“Ligand Docking Approaches Improved for Metalloligands with Multiple Vacant Sites. Inorganic Chemistry, 2019, 58, 294-306. | 1.9 | 35 |
| 331 | Vanadium in Biological Action: Chemical, Pharmacological Aspects, and Metabolic Implications in Diabetes Mellitus. Biological Trace Element Research, 2019, 188, 68-98. | 1.9 | 209 |
| 332 | Roles of Chromium(III), Vanadium, Iron, and Zinc in Sports Nutrition. , 2019, , 653-664. | | 1 |
| 333 | Oxovanadium(IV) complex of 8-hydroxy quinoline and 3-acetyl-6-methyl-2H-pyran-2,4(3H)-dione: Experimental, theoretical and antibacterial evaluation. Journal of King Saud University - Science, 2019, 31, 1034-1041. | 1.6 | 9 |
| 334 | Application of HPLC to measure vanadium in environmental, biological and clinical matrices. Arabian Journal of Chemistry, 2020, 13, 1198-1228. | 2.3 | 17 |
| 335 | In vitro study of the protective effect of manganese against vanadium-mediated nuclear and mitochondrial DNA damage. Food and Chemical Toxicology, 2020, 135, 110900. | 1.8 | 14 |
| 336 | Effects of vanadium(IV) compounds on plasma membrane lipids lead to G protein-coupled receptor signal transduction. Journal of Inorganic Biochemistry, 2020, 203, 110873. | 1.5 | 14 |
| 337 | Improved In Vitro Antimycobacterial Activity of Trinuclear Complexes Cobalt(II,III) and Iron(III) with 2â€Furoic Acid against Mycolicibacterium smegmatis. ChemistrySelect, 2020, 5, 11837-11842. | 0.7 | 10 |
| 338 | 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. | 1.6 | 8 |
| 339 | Design of nalidixic acidâ€“vanadium complex loaded into chitosan hybrid nanoparticles as smart strategy to inhibit bacterial growth and quorum sensing. International Journal of Biological Macromolecules, 2020, 161, 1568-1580. | 3.6 | 25 |
| 340 | Exploring Serum Transferrin Regulation of Nonferric Metal Therapeutic Function and Toxicity. Inorganics, 2020, 8, 48. | 1.2 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 341 | Kinetic Studies of Sodium and Metforminium Decavanadates Decomposition and In Vitro Cytotoxicity and Insulin- Like Activity. Inorganics, 2020, 8, 67. | 1.2 | 14 |
| 342 | Kinetics of oxidation of antidiabetic drug metformin hydrochloride by vanadium(V) in acidic and micellar medium. SN Applied Sciences, 2020, 2, 1. | 1.5 | 4 |
| 343 | In Vitro Antioxidant and Insulin Mimetic Activities of Heteroleptic Oxovanadium(IV) Complexes with Thiosemicarbazones and Naproxen. ChemistrySelect, 2020, 5, 6245-6254. | 0.7 | 7 |
| 345 | Vanadium(V/IV)â€“Transferrin Binding Disrupts the Transferrin Cycle and Reduces Vanadium Uptake and Antiproliferative Activity in Human Lung Cancer Cells. Inorganic Chemistry, 2020, 59, 16143-16153. | 1.9 | 22 |
| 346 | Initiation of a novel mode of membrane signaling: Vanadium facilitated signal transduction. Coordination Chemistry Reviews, 2020, 416, 213286. | 9.5 | 27 |
| 347 | Biospeciation of Potential Vanadium Drugs of Acetylacetonate in the Presence of Proteins. Frontiers in Chemistry, 2020, 8, 345. | 1.8 | 11 |
| 348 | 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. | 7.2 | 46 |
| 349 | Bis(maltolato)oxovanadium(IV) Induces Angiogenesis via Phosphorylation of VEGFR2. International Journal of Molecular Sciences, 2020, 21, 4643. | 1.8 | 3 |
| 350 | ESI-MS Study of the Interaction of Potential Oxidovanadium(IV) Drugs and Amavadin with Model Proteins. Inorganic Chemistry, 2020, 59, 9739-9755. | 1.9 | 28 |
| 351 | The potentiality of vanadium in medicinal applications. Inorganica Chimica Acta, 2020, 504, 119445. | 1.2 | 47 |
| 352 | Bis(ethylmaltolato)oxidovanadium(<scp>iv</scp>) inhibited the pathogenesis of Alzheimerâ€™s disease in triple transgenic model mice. Metallomics, 2020, 12, 474-490. | 1.0 | 22 |
| 353 | The design, synthesis and in vivo biological evaluations of [V(IV)O(2,6-pyridine diacetatato) (H2O)2] (PDOV): Featuring its prolonged glucose lowering effect and non-toxic nature. Inorganica Chimica Acta, 2020, 504, 119448. | 1.2 | 3 |
| 354 | Inorganic Biomaterials for Regenerative Medicine. ACS Applied Materials & Interfaces, 2020, 12, 5319-5344. | 4.0 | 135 |
| 355 | Vanadium and insulin: Partners in metabolic regulation. Journal of Inorganic Biochemistry, 2020, 208, 111094. | 1.5 | 57 |
| 356 | Polysulfone Hydrogel Nanocomposite Alkaline Phosphatase Biosensor for the Detection of Vanadium. Electrocatalysis, 2020, 11, 374-382. | 1.5 | 7 |
| 357 | Bis(ethylmaltolato)oxidovanadium (IV) mitigates neuronal apoptosis resulted from amyloid-beta induced endoplasmic reticulum stress through activating peroxisome proliferator-activated receptor Î³. Journal of Inorganic Biochemistry, 2020, 208, 111073. | 1.5 | 14 |
| 358 | Vanadium complexes with salicylaldehyde-based Schiff base ligandsâ€”structure, properties and biological activity. Journal of Coordination Chemistry, 2020, 73, 986-1008. | 0.8 | 23 |
| 359 | Vanadium coordination compounds loaded on graphene quantum dots (GQDs) exhibit improved pharmaceutical properties and enhanced anti-diabetic effects. Nanoscale, 2020, 12, 9219-9230. | 2.8 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 360 | Vanadium: Risks and possible benefits in the light of a comprehensive overview of its pharmacotoxicological mechanisms and multi-applications with a summary of further research trends. Journal of Trace Elements in Medicine and Biology, 2020, 61, 126508. | 1.5 | 131 |
| 361 | Ruthenium compounds as potential therapeutic agents for type 2 diabetes mellitus. European Journal of Medicinal Chemistry, 2021, 213, 113064. | 2.6 | 15 |
| 362 | Miniâ€review: Role of the PI3K/Akt pathway and tyrosine phosphatases in Alzheimer's disease susceptibility. Annals of Human Genetics, 2021, 85, 1-6. | 0.3 | 19 |
| 363 | Ligand role on insulin-mimetic properties of vanadium complexes. Structural and biological studies. Inorganica Chimica Acta, 2021, 516, 120135. | 1.2 | 13 |
| 364 | Vanadium(IV)-diamine complex with hypoglycemic activity and a reduction in testicular atrophy. Journal of Inorganic Biochemistry, 2021, 216, 111312. | 1.5 | 13 |
| 365 | Sodium metavanadate treatment improves glycogen levels in multiple tissues in a model of metabolic syndrome caused by chronic cadmium exposure in Wistar rats. BioMetals, 2021, 34, 245-258. | 1.8 | 9 |
| 366 | Anticancer effect of sodium metavanadate on murine breast cancer both in vitro and in vivo. BioMetals, 2021, 34, 557-571. | 1.8 | 1 |
| 367 | Synthesis, structure, and in vitro evaluation of biological activity of CuII furancarboxylates against the non-pathogenic M. smegmatis strain. Russian Chemical Bulletin, 2021, 70, 463-468. | 0.4 | 21 |
| 368 | Vanadium Decreases Hepcidin mRNA Gene Expression in STZ-Induced Diabetic Rats, Improving the Anemic State. Nutrients, 2021, 13, 1256. | 1.7 | 4 |
| 369 | Acute Toxicity Evaluation of Non-Innocent Oxidovanadium(V) Schiff Base Complex. Inorganics, 2021, 9, 42. | 1.2 | 20 |
| 370 | Experimental and theoretical investigation of new 1,3,4-oxadiazole based dioxovanadium (VO<sup>+</sup><sub>2</sub>) complexes and their in-vitro antimicrobial potency. Materials Express, 2021, 11, 888-903. | 0.2 | 3 |
| 371 | Long-Chain Acylcarnitines Decrease the Phosphorylation of the Insulin Receptor at Tyr1151 Through a PTP1B-Dependent Mechanism. International Journal of Molecular Sciences, 2021, 22, 6470. | 1.8 | 7 |
| 372 | Bis(ethylmaltolato)oxidovanadium (IV) alleviates neuronal apoptosis through regulating peroxisome proliferator-activated receptor Î³ in a triple transgenic animal model of Alzheimerâ€™s disease. Journal of Biological Inorganic Chemistry, 2021, 26, 551-568. | 1.1 | 6 |
| 373 | Importance of Some Transition Metals and their Biological Role: A Review. International Research Journal of Pure and Applied Chemistry, 0, , 12-23. | 0.2 | 3 |
| 374 | Vanadiumâ€“Flavonoid Complexes: A Promising Class of Molecules for Therapeutic Applications. Journal of Medicinal Chemistry, 2021, 64, 12435-12452. | 2.9 | 27 |
| 375 | Vanadyl nanocomplexes enhance photothermia-induced cancer immunotherapy to inhibit tumor metastasis and recurrence. Biomaterials, 2021, 277, 121130. | 5.7 | 19 |
| 376 | Polyoxovanadates with emerging biomedical activities. Coordination Chemistry Reviews, 2021, 447, 214143. | 9.5 | 115 |
| 377 | Human transferrin: An inorganic biochemistry perspective. Coordination Chemistry Reviews, 2021, 449, 214186. | 9.5 | 26 |

| # | Article | IF | Citations |
|---|---|---|---|
| 378 | Integrated experimental/computational approaches to characterize the systems formed by vanadium with proteins and enzymes. Inorganic Chemistry Frontiers, 2021, 8, 1951-1974. | 3.0 | 24 |
| 379 | Genetic and Environmental Influence on Macro- and Microelement Accumulation in Plants of Artemisia Species. , 2020, , 389-416. | | 2 |
| 380 | Vanadium Compounds as Enzyme Inhibitors with a Focus on Anticancer Effects. 2-Oxoglutarate-Dependent Oxygenases, 2019, , 169-195. | 0.8 | 2 |
| 381 | Mononuclear Cu(II), Zn(II), and Co(II) Complexes with 2-Furoate Anions and 2,2'-Bpy: Synthesis, Structure, and Biological Activity. Russian Journal of Coordination Chemistry/Koordinatsionnaya Khimiya, 2020, 46, 787-794. | 0.3 | 26 |
| 383 | Biochemical and medical importance of vanadium compounds.. Acta Biochimica Polonica, 2012, 59, . | 0.3 | 126 |
| 384 | Is there a Role for Sodium Orthovanadate in the Treatment of Diabetes?. Current Diabetes Reviews, 2019, 15, 284-287. | 0.6 | 10 |
| 385 | Aluminium toxicosis: a review of toxic actions and effects. Interdisciplinary Toxicology, 2019, 12, 45-70. | 1.0 | 192 |
| 386 | Oxidative Toxicity in Diabetes Mellitus: The Role of Nanoparticles and Future Therapeutic Strategies. Precision Nanomedicine, 2019, 2, 382-392. | 0.4 | 4 |
| 387 | Cell-based Screening For Identification Of The Novel Vanadium Complexes With Multidirectional Activity Relative To The Cells And The Mechanisms Associated With Metabolic Disorders. Science Technology and Innovation, 2019, 4, 47-54. | 0.0 | 3 |
| 388 | Tridentate hydrazido-hydrazones vanadium complexes. Synthesis, properties and biological activity. Science Technology and Innovation, 2019, 4, 9-20. | 0.0 | 3 |
| 389 | Synthesis, structure and properties of V(III,IV and V) complexes with ONO Schiff bases. Science Technology and Innovation, 2019, 4, 37-46. | 0.0 | 4 |
| 390 | Influence of temperature on the equilibria of oxidovanadium(iv) complexes in solution. Dalton Transactions, 2021, 50, 16326-16335. | 1.6 | 3 |
| 391 | Thermodynamic Study of Oxidovanadium(IV) with Kojic Acid Derivatives: A Multi-Technique Approach. Pharmaceuticals, 2021, 14, 1037. | 1.7 | 4 |
| 392 | Synthesis, Structural Elucidation, In Vitro Antibacterial Activity and Antioxidant Property of a Novel Oxoâ€Vanadium(V) Dimer Complex Incorporating Deferasirox Ligand. ChemistrySelect, 2021, 6, 10405-10411. | 0.7 | 2 |
| 393 | THE SCOPE OF METAL COMPLEXES IN DRUG DESIGN - A REVIEW. Indian Drugs, 2012, 49, 5-12. | 0.1 | 8 |
| 394 | The effect of vanadium citrate on haematological characteristics of rats under alloxan-induced diabetes. Fiziolohichnyi Zhurnal (Kiev, Ukraine: 1994), 2018, 64, 37-42. | 0.1 | 0 |
| 395 | Thermal and long period stability of series of V(V), V(IV) and V(III) complex with Schiff base ligands in solid state. Science Technology and Innovation, 2019, 4, 30-36. | 0.0 | 1 |
| 396 | Vanadium Compounds as Indirect Activators of a G Protein-coupled Receptor. RSC Catalysis Series, 2020, , 497-513. | 0.1 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 397 | Potential Medicinal Applications of Vanadium and its Coordination Compounds in Current Research Prospects: A Review. Current Bioactive Compounds, 2020, 16, 201-209. | 0.2 | 4 |
| 398 | Convergent Protein Phosphatase Inhibitor Design for PTP1B and TCPTP: Exchangeable Vanadium Coordination Complexes on Graphene Quantum Dots. Advanced Functional Materials, 2022, 32, 2108645. | 7.8 | 12 |
| 399 | Alzheimerâ€™s Disease and Diabetes Mellitus in Comparison: The Therapeutic Efficacy of the Vanadium Compound. International Journal of Molecular Sciences, 2021, 22, 11931. | 1.8 | 8 |
| 400 | Chimeric design, synthesis, and biological assays of a new nonpeptide insulin-mimetic vanadium compound to inhibit protein tyrosine phosphatase 1B. Drug Design, Development and Therapy, 2010, 4, 231-42. | 2.0 | 5 |
| 401 | Interaction of V(V) complexes formed by picolinic and pyrazinecarboxylic acid derivatives with red blood cells. Polyhedron, 2021, 212, 115590. | 1.0 | 1 |
| 402 | Spectroscopic/Computational Characterization and the X-ray Structure of the Adduct of the V<sup>IV</sup>Oâ€“Picolinato Complex with RNase A. Inorganic Chemistry, 2021, 60, 19098-19109. | 1.9 | 12 |
| 403 | An Adequate Supply of Bis(ethylmaltolato)oxidovanadium(IV) Remarkably Reversed the Pathological Hallmarks of Alzheimerâ€™s Disease in Triple-Transgenic Middle-Aged Mice. Biological Trace Element Research, 2022, 200, 3248-3264. | 1.9 | 4 |
| 405 | V(III) and V(IV) Schiff base complexes as potential insulin-mimetic compounds â€“ Comparison, characterization and biological activity. Polyhedron, 2022, 215, 115682. | 1.0 | 10 |
| 406 | What are the prospects for using complexes of copper(<scp>ii</scp>) and zinc(<scp>ii</scp>) to suppress the vital activity of Mycolicibacterium smegmatis?. RSC Advances, 2022, 12, 5173-5183. | 1.7 | 21 |
| 407 | Targeting Breast Cancer and Their Stem Cell Population through AMPK Activation: Novel Insights. Cells, 2022, 11, 576. | 1.8 | 13 |
| 408 | Efficacy of Vanadyl Sulfate and Selenium Tetrachloride as Anti-Diabetic Agents against Hyperglycemia and Oxidative Stress Induced by Diabetes Mellitus in Male Rats. Current Issues in Molecular Biology, 2022, 44, 94-104. | 1.0 | 11 |
| 409 | A Multi-Technique Investigation of the Complex Formation Equilibria between Bis-Deferiprone Derivatives and Oxidovanadium (IV). Molecules, 2022, 27, 1555. | 1.7 | 1 |
| 410 | Mono Versus Dinuclear Vanadium(V) Complexes: Solvent Dependent Structural Versatility and Electro Syntheses of Mixed-Valence Oxovanadium(IV/V) Entities in Solution. ACS Omega, 2022, 7, 11710-11721. | 1.6 | 0 |
| 411 | Advantageous Reactivity of Unstable Metal Complexes: Potential Applications of Metal-Based Anticancer Drugs for Intratumoral Injections. Pharmaceutics, 2022, 14, 790. | 2.0 | 15 |
| 412 | Vanadium and diabetic dyslipidemia: A systematic review of animal studies. Journal of Trace Elements in Medicine and Biology, 2022, 71, 126955. | 1.5 | 4 |
| 413 | Structural investigation of annealed vanadate into hydroxyapatite crystals for biomedical applications; ultrasonic mechanical properties. Applied Physics A: Materials Science and Processing, 2022, 128, 1. | 1.1 | 2 |
| 414 | Dependency of EGFR activation in vanadium-based sensitization to oncolytic virotherapy. Molecular Therapy - Oncolytics, 2022, 25, 146-159. | 2.0 | 4 |
| 417 | New mixed ligand oxidovanadium(IV) complexes: Solution behavior, protein interaction and cytotoxicity. Journal of Inorganic Biochemistry, 2022, 233, 111853. | 1.5 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 418 | Interaction of pharmacologically active pyrone and pyridinone vanadium(IV,V) complexes with cytochrome c. Journal of Inorganic Biochemistry, 2022, 234, 111876. | 1.5 | 4 |
| 419 | Effect of Bis(maltolato)oxovanadium(IV) on Zinc, Copper, and Manganese Homeostasis and DMT1 mRNA Expression in Streptozotocin-Induced Hyperglycemic Rats. Biology, 2022, 11, 814. | 1.3 | 4 |
| 420 | Diastereomeric Separation of Chiral fac-Tricarbonyl(iminopyridine) Rhenium(I) Complexes and Their Cytotoxicity Studies: Approach toward an Action Mechanism against Glioblastoma. Journal of Medicinal Chemistry, 2022, 65, 9281-9294. | 2.9 | 8 |
| 421 | Quenching Studies as Important Toolkit for Exploring Binding Propensity of Metal Complexes with Serum Albumin and DNA (A Review). Pharmaceutical Chemistry Journal, 2022, 56, 545-558. | 0.3 | 2 |
| 422 | VANADIUM ESSENTIAL ROLE AND TOXIC EFFECTS. Ekologiya Cheloveka (Human Ecology), 2015, 22, 59-64. | 0.2 | 1 |
| 423 | Relationship between structure and cytotoxicity of vanadium and molybdenum complexes with pyridoxal derived ligands. Journal of Inorganic Biochemistry, 2022, 235, 111937. | 1.5 | 9 |
| 424 | Oxoperoxovanadium Complexes of Hetero Ligands: X-Ray Crystal Structure, Density Functional Theory, and Investigations on DNA/BSA Interactions, Cytotoxic, and Molecular Docking Studies. Bioinorganic Chemistry and Applications, 2022, 2022, 1-15. | 1.8 | 1 |
| 425 | Copper(II) Complexes with 5-Nitro-2-furoic Acid: Synthesis, Structure, Thermal Properties, and Biological Activity. Russian Journal of Inorganic Chemistry, 2022, 67, 1545-1556. | 0.3 | 13 |
| 426 | Multiple and Variable Binding of Pharmacologically Active Bis(maltolato)oxidovanadium(IV) to Lysozyme. Inorganic Chemistry, 2022, 61, 16458-16467. | 1.9 | 9 |
| 427 | Phosphatase inhibition by sodium orthovanadate displays anti-inflammatory action by suppressing AKT-IKKÎ² signaling in RAW264.7 cells. Toxicology Reports, 2022, 9, 1883-1893. | 1.6 | 1 |
| 428 | Current Insights on the Use of Insulin and the Potential Use of Insulin Mimetics in Targeting Insulin Signalling in Alzheimerâ€™s Disease. International Journal of Molecular Sciences, 2022, 23, 15811. | 1.8 | 3 |
| 429 | Therapeutic Properties of Vanadium Complexes. Inorganics, 2022, 10, 244. | 1.2 | 17 |
| 430 | Vanadium Chloro-Substituted Schiff Base Catecholate Complexes are Reducible, Lipophilic, Water Stable, and Have Anticancer Activities. Inorganic Chemistry, 2022, 61, 20757-20773. | 1.9 | 5 |
| 431 | Effect of dietary vanadium supplementation on growth performance, mineral balance and antioxidant activity in male Sahiwal calves. Indian Journal of Animal Sciences, 2019, 89, . | 0.1 | 0 |
| 432 | Vanadium in biological systems and medicinal applications. Inorganica Chimica Acta, 2023, 549, 121387. | 1.2 | 4 |
| 433 | Electrochemical Behaviour of Transition Metal Complexes. , 2011, , 248-334. | | 0 |
| 434 | The antihyperglycemic and hypolipidemic activities of a sulfur-oxidovanadium(IV) complex. Journal of Inorganic Biochemistry, 2023, , 112127. | 1.5 | 0 |
| 435 | Insulin Receptor Substrates Regulation and Clinical Responses Following Vanadium-Enriched Yeast Supplementation in Obese Type 2 Diabetic Patients: a Randomized, Double-Blind, Placebo-Controlled Clinical Trial. Biological Trace Element Research, 0, , . | 1.9 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 436 | Metformin counters oxidative stress and mitigates adverse effects of radiation exposure: An overview. Fundamental and Clinical Pharmacology, 0, , . | 1.0 | 0 |
| 437 | Polyoxidovanadates as a pharmacological option against brain aging. Journal of Chemical Neuroanatomy, 2023, 129, 102256. | 1.0 | 1 |
| 438 | Biological Consequences of Vanadium Effects on Formation of Reactive Oxygen Species and Lipid Peroxidation. International Journal of Molecular Sciences, 2023, 24, 5382. | 1.8 | 22 |
| 439 | LV<sup>V</sup>O-Ethyl Maltol-Based Metallodrugs (L<sup>2â€“</sup> = Tridentate ONO Ligands): Hydrophobicity, Hydrolytic Stability, and Cytotoxicity via ROS-Mediated Apoptosis. Inorganic Chemistry, 2023, 62, 6722-6739. | 1.9 | 5 |