Maria Rangel

List of Publications by Year
in descending order

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114 papers	2,213 citations	201575 27 h-index	289141 40 g-index
117 all docs	117 docs citations	117 times ranked	2731 citing authors

#	Article	IF	Citations
1	In vitro study of the insulin-mimetic behaviour of vanadium(IV, V) coordination compounds. Journal of Biological Inorganic Chemistry, 2002, 7, 384-396.	1.1	220
2	ER Stress-Inducible Factor CHOP Affects the Expression of Hepcidin by Modulating C/EBPalpha Activity. PLoS ONE, 2009, 4, e6618.	1.1	88
3	Spectroscopic and Potentiometric Characterization of Oxovanadium(IV) Complexes Formed by 3-Hydroxy-4-Pyridinones. Rationalization of the Influence of Basicity and Electronic Structure of the Ligand on the Properties of VIVO Species in Aqueous Solution. Inorganic Chemistry, 2006, 45, 8086-8097.	1.9	73
4	In vitro study of the insulin-like action of vanadyl-pyrone and -pyridinone complexes with a VO(O4) coordination mode. Journal of Biological Inorganic Chemistry, 2001, 6, 128-132.	1.1	68
5	Structural characterization of inclusion complexes between cyanidin-3-O-glucoside and Î²-cyclodextrin. Carbohydrate Polymers, 2014, 102, 269-277.	5.1	61
6	Hypoxia enhances the malignant nature of bladder cancer cells and concomitantly antagonizes proteinO-glycosylation extension. Oncotarget, 2016, 7, 63138-63157.	0.8	58
7	Targeted Oâ€glycoproteomics explored increased sialylation and identified MUC16 as a poor prognosis biomarker in advancedâ€stage bladder tumours. Molecular Oncology, 2017, 11, 895-912.	2.1	50
8	A novel fluorescein-based dye containing a catechol chelating unit to sense iron(III). Dyes and Pigments, 2012, 93, 1447-1455.	2.0	49
9	Vanadyl cationic complexes as catalysts in olefin oxidation. Dalton Transactions, 2015, 44, 5125-5138.	1.6	47
10	Synthesis and characterization of 3-hydroxy-4pyridinone-oxovanadium(IV) complexes. Polyhedron, 1997, 16, 789-794.	1.0	42
11	Non-Transferrin-Bound Iron (NTBI) Uptake by T Lymphocytes: Evidence for the Selective Acquisition of Oligomeric Ferric Citrate Species. PLoS ONE, 2013, 8, e79870.	1.1	42
12	Hydroxypyranones, hydroxypyridinones, and their complexes. Advances in Inorganic Chemistry, 2008, 60, 167-243.	0.4	41
13	Identification of a new hexadentate iron chelator capable of restricting the intramacrophagic growth of Mycobacterium avium. Microbes and Infection, 2010, 12, 287-294.	1.0	40
14	Fluorescent 3-hydroxy-4-pyridinone hexadentate iron chelators: intracellular distribution and the relevance to antimycobacterial properties. Journal of Biological Inorganic Chemistry, 2010, 15, 861-877.	1.1	38
15	Physiological implications of NTBI uptake by T lymphocytes. Frontiers in Pharmacology, 2014, 5, 24.	1.6	36
16	Lactoferricin Peptides Increase Macrophages' Capacity To Kill Mycobacterium avium. MSphere, 2017, 2, .	1.3	33
17	Rhodamine labeling of 3-hydroxy-4-pyridinone iron chelators is an important contribution to target Mycobacterium avium infection. Journal of Inorganic Biochemistry, 2013, 121, 156-166.	1.5	32
18	Microwaveâ€Assisted Synthesis and Spectroscopic Properties of 4â€²â€Substituted Rosamine Fluorophores and Naphthyl Analogues. European Journal of Organic Chemistry, 2012, 2012, 5810-5817.	1.2	31

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19	Novel 3-hydroxy-4-pyridinonato oxidovanadium(IV) complexes to investigate structure/activity relationships. Journal of Inorganic Biochemistry, 2009, 103, 496-502.	1.5	30
20	NMR structural analysis of epigallocatechin gallate loaded polysaccharide nanoparticles. Carbohydrate Polymers, 2010, 82, 861-866.	5.1	30
21	Discrimination of fluorescence light-up effects induced by pH and metal ion chelation on a spirocyclic derivative of rhodamine B. Dalton Transactions, 2013, 42, 6110.	1.6	30
22	Structural characterization of functionalized gold nanoparticles for drug delivery in cancer therapy: a NMR based approach. Physical Chemistry Chemical Physics, 2015, 17, 18971-18979.	1.3	30
23	Anthelmintic, Antibacterial and Cytotoxicity Activity of Imidazole Alkaloids fromPilocarpus microphyllusLeaves. Phytotherapy Research, 2017, 31, 624-630.	2.8	30
24	Structural study of the interaction of vanadate with the ligand 1,2-dimethyl-3-hydroxy-4-pyridinone (Hdmpp) in aqueous solution. Journal of Inorganic Biochemistry, 2000, 80, 177-179.	1.5	29
25	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
26	Exploiting the use of 3,4-HPO ligands as nontoxic reagents for the determination of iron in natural waters with a sequential injection approach. Talanta, 2013, 108, 38-45.	2.9	29
27	Study of the oxidation products of the VO(dmpp)2 complex in aqueous solution under aerobic conditions: comparison with the vanadateâ€“dmpp system. Inorganica Chimica Acta, 2003, 356, 142-154.	1.2	27
28	Effect of tris(3-hydroxy-4-pyridinonate) iron(III) complexes on iron uptake and storage in soybean (Glycine max L.). Plant Physiology and Biochemistry, 2016, 106, 91-100.	2.8	27
29	Human transferrin: An inorganic biochemistry perspective. Coordination Chemistry Reviews, 2021, 449, 214186.	9.5	26
30	Nickel(II) and Cobalt(II) 3-Hydroxy-4-pyridinone Complexes: Synthesis, Characterization and Speciation Studies in Aqueous Solution. European Journal of Inorganic Chemistry, 2011, 2011, 131-140.	1.0	25
31	Chlorogenic acidâ€“arabinose hybrid domains in coffee melanoidins: Evidences from a model system. Food Chemistry, 2015, 185, 135-144.	4.2	25
32	Iron speciation by microsequential injection solid phase spectrometry using 3-hydroxy-1(H)-2-methyl-4-pyridinone as chromogenic reagent. Talanta, 2015, 133, 15-20.	2.9	25
33	Microwave-assisted synthesis of 3-hydroxy-4-pyridinone/naphthalene conjugates. Structural characterization and selection of a fluorescent ion sensor. Tetrahedron, 2010, 66, 8544-8550.	1.0	23
34	Interaction of 5-Fluorouracil Loaded Nanoparticles with 1,2-Dimyristoyl-sn-glycero-3-phosphocholine Liposomes Used as a Cellular Membrane Model. Journal of Physical Chemistry B, 2012, 116, 667-675.	1.2	23
35	Isoxazolidine-fused meso-tetraarylchlorins as key tools for the synthesis of mono- and bis-annulated chlorins. Organic and Biomolecular Chemistry, 2015, 13, 7131-7135.	1.5	23
36	Antimycobacterial activity of rhodamine 3,4-HPO iron chelators against Mycobacterium avium: analysis of the contribution of functional groups and of chelator's combination with ethambutol. MedChemComm, 2015, 6, 2194-2203.	3.5	22

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37	Iron speciation in natural waters by sequential injection analysis with a hexadentate 3-hydroxy-4-pyridinone chelator as chromogenic agent. Talanta, 2016, 148, 633-640.	2.9	21
38	Antibacterial activity of naphthyl derived bis-(3-hydroxy-4-pyridinonate) copper(II) complexes against multidrug-resistant bacteria. Journal of Inorganic Biochemistry, 2019, 197, 110704.	1.5	20
39	Pyridinone oxovanadium(IV) complexes: a new class of insulin mimetic compounds. Transition Metal Chemistry, 2001, 26, 219-223.	0.7	19
40	Influence of structural factors on the enhanced activity of moxifloxacin: a fluorescence and EPR spectroscopic study. Analytical and Bioanalytical Chemistry, 2007, 387, 1543-1552.	1.9	19
41	A 1000-year-old mystery solved: Unlocking the molecular structure for the medieval blue from Chrozophora tinctoria , also known as folium. Science Advances, 2020, 6, eaaz7772.	4.7	19
42	NMR Insight into the Supramolecular Structure of Daunorubicin Loaded Polymer Nanoparticles. Journal of Physical Chemistry B, 2011, 115, 902-909.	1.2	18
43	Microsequential injection lab-on-valve system for the spectrophotometric bi-parametric determination of iron and copper in natural waters. Talanta, 2017, 167, 703-708.	2.9	18
44	The glycation site specificity of human serum transferrin is a determinant for transferrin's functional impairment under elevated glycaemic conditions. Biochemical Journal, 2014, 461, 33-42.	1.7	17
45	Mean copper-ligand binding enthalpies in copper(II) complexes of dimethylglyoxime, glycine, acetic acid and 4-phenylamino-3-penten-2-one. Thermochimica Acta, 1990, 160, 267-280.	1.2	16
46	Photolysis Primary Products of Alkylcobaloximes Controlled by the Cobaltâ^'Carbon Bond Strength. Organometallics, 1999, 18, 3451-3456.	1.1	16
47	Novel tetradentate chelators derived from 3-hydroxy-4-pyridinone units: synthesis, characterization and aqueous solution properties. Tetrahedron, 2011, 67, 4009-4016.	1.0	16
48	Design of a water soluble 1,8-naphthalimide/3-hydroxy-4-pyridinone conjugate: Investigation of its spectroscopic properties at variable pH and in the presence of Fe3+, Cu2+ and Zn2+. Dyes and Pigments, 2013, 98, 201-211.	2.0	16
49	Street-Like Synthesis of Krokodil Results in the Formation of an Enlarged Cluster of Known and New Morphinans. Chemical Research in Toxicology, 2017, 30, 1609-1621.	1.7	16
50	The (Bio)Chemistry of Non-Transferrin-Bound Iron. Molecules, 2022, 27, 1784.	1.7	16
51	New lipophilic 3-hydroxy-4-pyridinonate iron(iii) complexes: synthesis and EXAFS structural characterisation. Dalton Transactions, 2006, , 1313-1321.	1.6	15
52	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
53	Electron spin resonance study of the cobalt(II) species formed after room-temperature photolysis of aqua(sec-butyl)bis(dimethylglyoximato)cobalt(III) in the presence of N-donor bases. Journal of the Chemical Society Dalton Transactions, 1994, , 369.	1.1	14
54	Synthesis and coordination studies of 5-(4â€²-carboxyphenyl)-10,15,20-tris(pentafluorophenyl)porphyrin and its pyrrolidine-fused chlorin derivative. New Journal of Chemistry, 2018, 42, 8169-8179.	1.4	14

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55	Tuning the limits of pH interference of a rhodamine ion sensor by introducing catechol and 3-hydroxy-4-pyridinone chelating units. Dyes and Pigments, 2014, 110, 193-202.	2.0	13
56	Synthesis and characterization of a 3-hydroxy-4-pyridinone chelator functionalized with a polyethylene glycol (PEG) chain aimed at sequential injection determination of iron in natural waters. Polyhedron, 2015, 101, 171-178.	1.0	13
57	1,3-Dipolar cycloadditions with meso-tetraarylchlorins â€“ site selectivity and mixed bisadducts. Organic Chemistry Frontiers, 2017, 4, 534-544.	2.3	13
58	EPR characterization of the photolysis and thermolysis products of alkylcobaloximes with symmetric phosphines and phosphites. Factors that stabilize the cobalt homolysis fragments. Organometallics, 1991, 10, 3848-3855.	1.1	12
59	Use of a porphyrin platform and 3,4-HPO chelating units to synthesize ligands with N4 and O4 coordination sites. Tetrahedron, 2011, 67, 7821-7828.	1.0	12
60	Use of an ether-derived 3-hydroxy-4-pyridinone chelator as a new chromogenic reagent in the development of a microfluidic paper-based analytical device for Fe(III) determination in natural waters. Talanta, 2020, 214, 120887.	2.9	12
61	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
62	Relevant Interactions of Antimicrobial Iron Chelators and Membrane Models Revealed by Nuclear Magnetic Resonance and Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2014, 118, 14590-14601.	1.2	11
63	New hydrophilic 3-hydroxy-4-pyridinone chelators with ether-derived substituents: Synthesis and evaluation of analytical performance in the determination of iron in waters. Polyhedron, 2019, 160, 145-156.	1.0	11
64	Synthesis, characterization, and cellular investigations of porphyrinâ€“ and chlorinâ€“indomethacin conjugates for photodynamic therapy of cancer. Organic and Biomolecular Chemistry, 2021, 19, 6501-6512.	1.5	11
65	An electron spin resonance spectral study of bis(dimethylglyoximato)-cobalt(II) and some phosphine and phosphite adducts. Journal of the Chemical Society Dalton Transactions, 1990, , 3311.	1.1	10
66	NMR study of the supramolecular structure of dual drug-loaded poly(butylcyanoacrylate) nanoparticles. Physical Chemistry Chemical Physics, 2013, 15, 16657.	1.3	10
67	Biomembrane simulations of 12 lipid types using the general amber force field in a tensionless ensemble. Journal of Biomolecular Structure and Dynamics, 2014, 32, 88-103.	2.0	10
68	Greener and wide applicability range flow-based spectrophotometric method for iron determination in fresh and marine water. Talanta, 2020, 216, 120925.	2.9	10
69	Photolysis Secondary Products of Cobaloximes and Imino/Oxime Compounds Controlled by Steric Hindrance Imposed by the Lewis Base. Organometallics, 2005, 24, 3500-3507.	1.1	9
70	NMR study of the interaction of fluorescent 3-hydroxy-4-pyridinone chelators with DMPC liposomes. Physical Chemistry Chemical Physics, 2016, 18, 5027-5033.	1.3	9
71	The influence of functional groups on the permeation and distribution of antimycobacterial rhodamine chelators. Journal of Inorganic Biochemistry, 2017, 175, 138-147.	1.5	9
72	Tuning the Anti(myco)bacterial Activity of 3-Hydroxy-4-pyridinone Chelators through Fluorophores. Pharmaceuticals, 2018, 11, 110.	1.7	9

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73	Synthesis of Pyridyl and Nâ€Methylpyridinium Analogues of Rosamines: Relevance of Solvent and Charge on Their Photophysical Properties. Chemistry - A European Journal, 2019, 25, 15073-15082.	1.7	9
74	The Influence of the Amide Linkage in the Fe^{III}â€Binding Properties of Catecholâ€Modified Rosamine Derivatives. Chemistry - A European Journal, 2015, 21, 15692-15704.	1.7	8
75	Binding selectivity of vitamin K3 based chemosensors towards nickel(II) and copper(II) metal ions. Journal of Molecular Structure, 2017, 1143, 495-514.	1.8	8
76	New fluorescent rosamine chelator showing promising antibacterial activity against Gram-positive bacteria. Bioorganic Chemistry, 2018, 79, 341-349.	2.0	8
77	A DFT quantum mechanical study of 3-hydroxy-4-pyrone and 3-hydroxy-4-pyridinone based oxidovanadium(IV) complexes. Structural Chemistry, 2011, 22, 697-706.	1.0	7
78	Silica nanostructures synthesis and CdTe quantum dots immobilization for photocatalytical applications. RSC Advances, 2014, 4, 59697-59705.	1.7	7
79	EPR spin trapping studies of H2O2 activation in metaloporphyrin catalyzed oxygenation reactions: Insights on the biomimetic mechanism. Molecular Catalysis, 2019, 475, 110500.	1.0	7
80	Synthesis and spectroscopic characterization of a new tripodal hexadentate iron chelator incorporating catechol units. Polyhedron, 2015, 87, 1-7.	1.0	6
81	Determination of iron(III) in water samples by microsequential injection solid phase spectrometry using an hexadentate 3-hydroxy-4-pyridinone chelator as reagent. Talanta, 2019, 191, 409-414.	2.9	6
82	Characterization of the photolysis products of sec-butylcobaloximes with imidazole and benzimidazole bases. Journal of Organometallic Chemistry, 2001, 632, 85-93.	0.8	5
83	Microwave-Enhanced Synthesis of Novel Pyridinone-Fused Porphyrins. Synlett, 2009, 2009, 1009-1013.	1.0	5
84	Synthesis and structural characterization, by spectroscopic and computational methods, of two fluorescent 3-hydroxy-4-pyridinone chelators bearing sulphorhodamine B and naphthalene. RSC Advances, 2016, 6, 4200-4211.	1.7	5
85	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
86	A combined physiological and biophysical approach to understand the ligandâ€dependent efficiency of 3â€hydroxyâ€4â€pyridinone Feâ€chelates. Plant Direct, 2020, 4, e00256.	0.8	5
87	Foliar application of 3â€hydroxyâ€4â€pyridinone Feâ€chelate [Fe(mpp) ₃] induces responses at the root level amending iron deficiency chlorosis in soybean. Physiologia Plantarum, 2021, 173, 235-245.	2.6	5
88	Synthesis of a highly emissive carboxylated pyrrolidine-fused chlorin for optical sensing of TATP vapours. Dyes and Pigments, 2021, 195, 109721.	2.0	5
89	XAFS studies of pyranonate and pyridinone metal(III) complexes. Journal of Synchrotron Radiation, 1999, 6, 579-581.	1.0	4
90	EPR Study of the Photolysis of Methyl- and Adenosylcobinamides in the Presence of Phosphine and Pyridine Bases. Evidence for the Need of a Judicious Choice of Irradiation Temperature and Solvent to Assess Ligand Binding. Organometallics, 2008, 27, 2536-2543.	1.1	4

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91	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
92	Study of the effect of thiourea and N-ethyl groups on antibacterial activity of rhodamine-labeled 3,4-HPO iron chelators against Gram (+/â˜) bacteria. Medicinal Chemistry Research, 2018, 27, 1472-1477.	1.1	4
93	Determining the glycation site specificity of human holo-transferrin. Journal of Inorganic Biochemistry, 2018, 186, 95-102.	1.5	4
94	Membrane partition of bis-(3-hydroxy-4-pyridinonato) zinc(ii) complexes revealed by molecular dynamics simulations. RSC Advances, 2018, 8, 27081-27090.	1.7	4
95	A computational study on the redox properties and binding affinities of iron complexes of hydroxypyridinones. Journal of Molecular Modeling, 2019, 25, 172.	0.8	4
96	Synthesis of Catechol Derived Rosamine Dyes and Their Reactivity toward Biogenic Amines. Molecules, 2021, 26, 5082.	1.7	4
97	Characterization of a Î¼â€oxoâ€bridged diiron porphyrin by ESIâ€LTQâ€Orbitrapâ€MS. Journal of Mass Spectrometry, 2014, 49, 763-765.	0.7	3
98	Design of a Water Soluble Fluorescent 3-Hydroxy-4-Pyridinone Ligand Active at Physiological pH Values. Journal of Fluorescence, 2016, 26, 1773-1785.	1.3	3
99	Synthesis and characterization of two fluorescent isophthalate rosamines: From solution to immobilization in solid substrates. Dyes and Pigments, 2018, 157, 405-414.	2.0	3
100	Integrated Flow-based System Displaying an In-line Mini Soil Column to Monitor Iron Species in Soils Leachates. Communications in Soil Science and Plant Analysis, 2020, 51, 1089-1100.	0.6	3
101	Oneâ€Pot Synthesis of Xanthone by Carbonylative Suzuki Coupling Reaction. ChemistrySelect, 2021, 6, 4511-4514.	0.7	3
102	Ruthenium complexes of 3-hydroxy-4-pyranones and of 3-hydroxy-4-pyridinones. Transition Metal Chemistry, 2008, 33, 553-561.	0.7	2
103	EPR and XANES studies of anaerobic photolysis of iso-propilpyridinecobaloxime: Elucidation of the reactivity of the Co(II) primary product. Journal of Organometallic Chemistry, 2014, 760, 11-18.	0.8	2
104	Insights on the relationship between structure vs. toxicological activity of antibacterial rhodamine-labelled 3-hydroxy-4-pyridinone iron(III) chelators in HepG2 cells. Interdisciplinary Toxicology, 2018, 11, 189-199.	1.0	2
105	Sequential injection method for bi-parametric determination of iron and manganese in soil leachates. Analytical Methods, 2022, 14, 180-187.	1.3	2
106	A combined experimental and computational study to discover novel tyrosinase inhibitors. Journal of Inorganic Biochemistry, 2022, 234, 111879.	1.5	2
107	identification of a complex mixture of opioids on krokodil street-like samples. Toxicology Letters, 2016, 258, S300.	0.4	1
108	Ohmic heating-assisted synthesis and characterization of Zn(<scp>ii</scp>), Cu(<scp>ii</scp>) and Pd(<scp>ii</scp>) complexes of heterocyclic-fused chlorins. Dalton Transactions, 2022, 51, 3520-3530.	1.6	1

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109	Insight on the Diverse Cellular Pathways of Two Novel Chelators from Liposome Partition Studies. Biophysical Journal, 2009, 96, 147a.	0.2	0
110	Interaction of a Novel Iron Chelator with Model Membranes. Biophysical Journal, 2010, 98, 273a.	0.2	0
111	Tagging 3-Hydroxy-4-Pyridinone Iron Chelators with Rhodamine B Derivatives is Essential to Target Mycobacterium Avium Infection. Biophysical Journal, 2013, 104, 251a.	0.2	0
112	(Aminophenyl)porphyrins as precursors for the synthesis of porphyrin-modified siloxanes. Journal of Porphyrins and Phthalocyanines, 2019, 23, 1001-1012.	0.4	0
113	NMR Study of Partition and Permeation Properties of Ga(III) Chelates. Biophysical Journal, 2019, 116, 510a.	0.2	0
114	Functionalization of Rhodamine Platforms with 3-Hydroxy-4-pyridinone Chelating Units and Its Fluorescence Behavior towards Fe(III). Molecules, 2022, 27, 1567.	1.7	0