Carl J Carrano

List of Publications by Year
in descending order

68 papers	3,328 citations	201674 27 h-index	149698 56 g-index
69 all docs	69 docs citations	69 times ranked	3829 citing authors

#	Article	IF	Citations
1	The effect of iron on Chilean Alexandrium catenella growth and paralytic shellfish toxin production as related to algal blooms. BioMetals, 2022, 35, 39-51.	4.1	0
2	Halogens in Seaweeds: Biological and Environmental Significance. Phycology, 2022, 2, 132-171.	3.6	12
3	New insights on <i>Laminaria digitata</i> ultrastructure through combined conventional chemical fixation and cryofixation. Botanica Marina, 2021, 64, 177-187.	1.2	3
4	Laminaria kelps impact iodine speciation chemistry in coastal seawater. Estuarine, Coastal and Shelf Science, 2021, 262, 107531.	2.1	6
5	Photoactive siderophores: Structure, function and biology. Journal of Inorganic Biochemistry, 2021, 221, 111457.	3.5	12
6	Loss of Motility as a Non-Lethal Mechanism for Intercolony Inhibition (â€œSibling Rivalryâ€) in Marinobacter. Microorganisms, 2021, 9, 103.	3.6	0
7	The influence of marine algae on iodine speciation in the coastal ocean. Algae, 2020, 35, 167-176.	2.3	10
8	Distribution of dissolved iron and bacteria producing the photoactive siderophore, vibrioferrin, in waters off Southern California and Northern Baja. BioMetals, 2019, 32, 139-154.	4.1	6
9	Key aspects of the iodine metabolism in brown algae: a brief critical review. Metallomics, 2019, 11, 756-764.	2.4	29
10	Emission of volatile halogenated compounds, speciation and localization of bromine and iodine in the brown algal genome model Ectocarpus siliculosus. Journal of Biological Inorganic Chemistry, 2018, 23, 1119-1128.	2.6	24
11	Iron and Harmful Algae Blooms: Potential Algal-Bacterial Mutualism Between Lingulodinium polyedrum and Marinobacter algicola. Frontiers in Marine Science, 2018, 5, .	2.5	18
12	Iron uptake and storage in the HAB dinoflagellate Lingulodinium polyedrum. BioMetals, 2017, 30, 945-953.	4.1	4
13	MÃ¶ssbauer Spectroscopic Characterization of Iron(III)â€“Polysaccharide Coordination Complexes: Photochemistry, Biological, and Photoresponsive Materials Implications. Inorganic Chemistry, 2017, 56, 11524-11531.	4.0	12
14	Some aspects of the iodine metabolism of the giant kelp Macrocystis pyrifera (phaeophyceae). Journal of Inorganic Biochemistry, 2017, 177, 82-88.	3.5	14
15	The potential role of kelp forests on iodine speciation in coastal seawater. PLoS ONE, 2017, 12, e0180755.	2.5	15
16	Correction: Surface binding, localization and storage of iron in the giant kelp Macrocystis pyrifera. Metallomics, 2016, 8, 551-551.	2.4	2
17	Surface binding, localization and storage of iron in the giant kelp Macrocystis pyrifera. Metallomics, 2016, 8, 403-411.	2.4	9
18	A Family of Homoâ€•and Heteroscorpionate Ligands: Applications to Bioinorganic Chemistry. European Journal of Inorganic Chemistry, 2016, 2016, 2377-2390.	2.0	21

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19	Boron uptake, localization, and speciation in marine brown algae. Metallomics, 2016, 8, 161-169.	2.4	14
20	Surface-bound iron: a metal ion buffer in the marine brown alga<i>Ectocarpus siliculosus</i>?. Journal of Experimental Botany, 2014, 65, 585-594.	4.8	16
21	Evaluation of photo-reactive siderophore producing bacteria before, during and after a bloom of the dinoflagellate Lingulodinium polyedrum. Metallomics, 2014, 6, 1156-1163.	2.4	13
22	Detection of photoactive siderophore biosynthetic genes in the marine environment. BioMetals, 2013, 26, 507-516.	4.1	17
23	Synthesis, Characterization, and Dynamic Behaviour of Triosmium Clusters Containing the Tridentate Ligand {Ph2PCH2CH2}2S (PSP). European Journal of Inorganic Chemistry, 2013, 2013, 2447-2459.	2.0	10
24	Atypical iron storage in marine brown algae: a multidisciplinary study of iron transport and storage in Ectocarpus siliculosus. Journal of Experimental Botany, 2012, 63, 5763-5772.	4.8	24
25	A multidisciplinary study of iron transport and storage in the marine green alga Tetraselmis suecica. Journal of Inorganic Biochemistry, 2012, 116, 188-194.	3.5	13
26	Iron transport and storage in the coccolithophore: Emiliania huxleyi. Metallomics, 2012, 4, 1160.	2.4	11
27	Iron transport in the genus Marinobacter. BioMetals, 2012, 25, 135-147.	4.1	32
28	Siderophore-mediated iron uptake in two clades of Marinobacter spp. associated with phytoplankton: the role of light. BioMetals, 2012, 25, 181-192.	4.1	27
29	The Ectocarpus genome and the independent evolution of multicellularity in brown algae. Nature, 2010, 465, 617-621.	27.8	774
30	Directed Synthesis of the Triangular Mixed-Metal Cluster H₂RhRe₂Cp*(CO)₉: Ligand Fluxionality and Facile Cluster Fragmentation in the Presence of CO, Halogenated Solvents, and Thiols. Organometallics, 2010, 29, 61-75.	2.3	11
31	Photolysis of ironâ€"siderophore chelates promotes bacterialâ€"algal mutualism. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17071-17076.	7.1	446
32	Boron and Marine Life: A New Look at an Enigmatic Bioelement. Marine Biotechnology, 2009, 11, 431-440.	2.4	48
33	Î±-Diimine Ligand Coordination and Câ€"H Bond Activation in the Reaction of Os3(CO)10(MeCN)2 with 6-R-2,2â€²-Bipyridine (where RÂ=ÂEt, Ph): X-ray Diffraction Structures of the Ortho-Metalated Hydride Clusters HOs3(CO)9(N2C10H6-6-R). Journal of Chemical Crystallography, 2009, 39, 820-826.	1.1	2
34	Ferric Stability Constants of Representative Marine Siderophores: Marinobactins, Aquachelins, and Petrobactin. Inorganic Chemistry, 2009, 48, 11466-11473.	4.0	38
35	Vibrioferrin, an Unusual Marine Siderophore: Iron Binding, Photochemistry, and Biological Implications. Inorganic Chemistry, 2009, 48, 11451-11458.	4.0	77
36	Boron Binding by a Siderophore Isolated from Marine Bacteria Associated with the Toxic DinoflagellateGymnodiniumcatenatum. Journal of the American Chemical Society, 2007, 129, 478-479.	13.7	70

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37	Synthesis and characterization of heteroscorpionate dioxo-tungsten(VI) complexes. Inorganica Chimica Acta, 2007, 360, 1961-1969.	2.4	9
38	Oxidation-state and metal-ion dependent stereoisomerization in oxo molybdenum and tungsten complexes of a bulky alkoxy heteroscorpionate ligand. Dalton Transactions, 2006, , 3822.	3.3	20
39	Photoreactivity of Iron(III)â^'Aerobactin:Â Photoproduct Structure and Iron(III) Coordination. Inorganic Chemistry, 2006, 45, 6028-6033.	4.0	91
40	H-Bonding Interactions and Control of Thiolate Nucleophilicity and Specificity in Model Complexes of Zinc Metalloproteins. Inorganic Chemistry, 2005, 44, 2012-2017.	4.0	65
41	A Family of Dioxoâ^'Molybdenum(VI) Complexes of N2X Heteroscorpionate Ligands of Relevance to Molybdoenzymes. Inorganic Chemistry, 2004, 43, 7800-7806.	4.0	54
42	Isomerization and Oxygen Atom Transfer Reactivity in Oxoâ^'Mo Complexes of Relevance to Molybdoenzymes. Inorganic Chemistry, 2004, 43, 7573-7575.	4.0	39
43	Title is missing!. Journal of Chemical Crystallography, 2003, 33, 431-436.	1.1	5
44	Synthesis and characterization of several zinc(II) complexes containing the bulky heteroscorpionate ligand bis(5-tert-butyl-3-methylpyrazol-2-yl)acetate: relevance to the resting states of the zinc(II) enzymes thermolysin and carboxypeptidase A. Inorganica Chimica Acta, 2003, 346, 227-238.	2.4	50
45	Control of Thiolate Nucleophilicity and Specificity in Zinc Metalloproteins by Hydrogen Bonding:Â Lessons from Model Compound Studies. Journal of the American Chemical Society, 2003, 125, 868-869.	13.7	92
46	Donor Atom Dependent Geometric Isomers in Mononuclear Oxoâ^'Molybdenum(V) Complexes:Â Implications for Coordinated Endogenous Ligation in Molybdoenzymes. Inorganic Chemistry, 2003, 42, 5999-6007.	4.0	28
47	Synthesis, Characterization, Electrochemistry, Electronic Structure, and Isomerization of Mononuclear Oxoâ^'Molybdenum(V) Complexes: The Serine Gate Hypothesis in the Function of DMSO Reductases. Inorganic Chemistry, 2002, 41, 1281-1291.	4.0	34
48	Metal complexes of 3-carboxyethyl substituted trispyrazolylborates: interactions with the ester carbonyl oxygens. Dalton Transactions RSC, 2002, , 3374-3380.	2.3	16
49	Zinc complexes of hydrogen bond accepting ester substituted trispyrazolylborates. Inorganica Chimica Acta, 2002, 341, 33-38.	2.4	25
50	New H-bond accepting tris(pyrazolyl)borates: stabilization of metal aquo species as models for the vicinal oxygen chelate enzyme superfamily. Dalton Transactions RSC, 2001, , 1448-1451.	2.3	24
51	Geometric Control of Reduction Potential in Oxomolybdenum Centers:Â Implications to the Serine Coordination in DMSO Reductase. Inorganic Chemistry, 2001, 40, 2632-2633.	4.0	28
52	Methylation of (2-Methylethanethiol-bis-3,5-dimethylpyrazolyl)methane Zinc Complexes and Coordination of the Resulting Thioether:Â Relevance to Zinc-Containing Alkyl Transfer Enzymes. Inorganic Chemistry, 2001, 40, 919-927.	4.0	74
53	Methylation of neutral pseudotetrahedral zinc thiolate complexes: model reactions for alkyl group transfer to sulfur by zinc-containing enzymes. Journal of Biological Inorganic Chemistry, 2001, 6, 82-90.	2.6	51
54	Heterobactins: A new class of siderophores from Rhodococcus erythropolis IGTS8 containing both hydroxamate and catecholate donor groups. BioMetals, 2001, 14, 119-125.	4.1	77

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55	The structure and characterization of zinc heteroscorpionate complexes containing pentafluorothiophenol. Inorganica Chimica Acta, 2000, 300-302, 427-433.	2.4	13
56	Methylation of (2-methylethanethiol-bis-3,5-dimethylpyrazolyl)methane zinc complexes and coordination of the resulting thioether: relevance to zinc-containing alkyl transfer enzymes. Chemical Communications, 2000, , 1635-1636.	4.1	49
57	Structure and physical properties of several pseudotetrahedral zinc complexes containing a new alkyl thiolate heteroscorpionate ligand. Dalton Transactions RSC, 2000, , 3304-3309.	2.3	43
58	Synthesis and Characterization of Pseudotetrahedral N2O and N2S Zinc(II) Complexes of Two Heteroscorpionate Ligands:â€‰ Models for the Binding Sites of Several Zinc Metalloproteins. Inorganic Chemistry, 1999, 38, 4593-4600.	4.0	88
59	A new class of biomimetically relevant â€˜Scorpionateâ€™ ligands III. The bis(pyrazolyl)methane(phen-2â€²-ol)s: Synthesis and structural characterization of mono and dinuclear copper(II) complexes. Inorganica Chimica Acta, 1998, 273, 14-23.	2.4	22
60	Homo- and Heterometallic Mono-, Di-, and Trinuclear Co2+, Ni2+, Cu2+, and Zn2+Complexes of the â€œHeteroscorpionateâ€•Ligand (2-Hydroxyphenyl)bis(pyrazolyl)methane and Its Derivatives. Inorganic Chemistry, 1998, 37, 1473-1482.	4.0	23
61	A New Class of Biomimetically Relevant â€œScorpionateâ€•Ligands. 2. The (2-Hydroxyphenyl)bis(pyrazolyl)methanes:Â Structural Characterization of a Series of Mono-, Di-, and Trinuclear Nickel(II) Complexes. Inorganic Chemistry, 1997, 36, 298-306.	4.0	80
62	A New Class of Biomimetically Relevant â€œScorpionateâ€•Ligands. 1. The (2-Hydroxyphenyl)bis(pyrazolyl)methanes:Â Synthesis and Structural Characterization of Some Cobalt(II) Complexes. Inorganic Chemistry, 1997, 36, 291-297.	4.0	86
63	Coordination Chemistry of the Carboxylate Type Siderophore Rhizoferrin:Â The Iron(III) Complex and Its Metal Analogs. Inorganic Chemistry, 1996, 35, 6429-6436.	4.0	81
64	Fungal ferritins: The ferritin from mycelia ofAbsidia spinosais a bacterioferritin. FEBS Letters, 1996, 390, 261-264.	2.8	29
65	Specificity and mechanism of rhizoferrin-mediated metal ion uptake. BioMetals, 1996, 9, 185.	4.1	10
66	Base-Free Monomeric Organogallium Hydrides. Angewandte Chemie International Edition in English, 1994, 33, 1253-1255.	4.4	18
67	Basenfreie monomere Organogalliumhydride. Angewandte Chemie, 1994, 106, 1354-1356.	2.0	5
68	Coordination chemistry of microbial iron transport compounds. 16. Isolation, characterization, and formation constants of ferric aerobactin. Journal of the American Chemical Society, 1979, 101, 2722-2727.	13.7	156