Dino Villagran

List of Publications by Year
in descending order

65 papers	2,797 citations	172457 29 h-index	175258 52 g-index
66 all docs	66 docs citations	66 times ranked	3818 citing authors

#	Article	IF	Citations
1	Effect of surface functionalization of Fe3O4 nano-enabled electrodes on the electrochemical reduction of nitrate. Separation and Purification Technology, 2022, 282, 119771.	7.9	27
2	Design of nanomaterials for the removal of per- and poly-fluoroalkyl substances (PFAS) in water: Strategies, mechanisms, challenges, and opportunities. Science of the Total Environment, 2022, 831, 154939.	8.0	17
3	Free-base porphyrin polymer for bifunctional electrochemical water splitting. Chemical Science, 2022, 13, 8597-8604.	7.4	10
4	Cobalt porphyrin intercalation into zirconium phosphate layers for electrochemical water oxidation. Sustainable Energy and Fuels, 2021, 5, 430-437.	4.9	14
5	Earth-Abundant Electrocatalysts for the Oxygen Evolution Reaction of Water Splitting Using Nanostructured Layered Inorganic Materials. ECS Meeting Abstracts, 2021, MA2021-01, 1827-1827.	0.0	0
6	Superparamagnetic nanoadsorbents for the removal of trace As(III) in drinking water. Environmental Advances, 2021, 4, 100046.	4.8	9
7	Utilizing the broad electromagnetic spectrum and unique nanoscale properties for chemical-free water treatment. Current Opinion in Chemical Engineering, 2021, 33, 100709.	7.8	3
8	Magnetically recoverable carbon-coated iron carbide with arsenic adsorptive removal properties. SN Applied Sciences, 2020, 2, 1.	2.9	6
9	Magnetic Inâ€“Pd catalysts for nitrate degradation. Environmental Science: Nano, 2020, 7, 2681-2690.	4.3	8
10	Opportunities for nanotechnology to enhance electrochemical treatment of pollutants in potable water and industrial wastewater â€“ a perspective. Environmental Science: Nano, 2020, 7, 2178-2194.	4.3	74
11	Disparities between experimental and environmental conditions: Research steps toward making electrochemical water treatment a reality. Current Opinion in Electrochemistry, 2020, 22, 9-16.	4.8	108
12	Water Splitting Electrocatalysis within Layered Inorganic Nanomaterials. , 2020, , .		3
13	Redox Potential Tuning of Dimolybdenum Systems through Systematic Substitution by Guanidinate Ligands. Inorganic Chemistry, 2020, 59, 3091-3101.	4.0	0
14	Hydrogen Evolution Catalyzed by a Metal-Free Corrole: An Experimental and Theoretical Mechanistic Study. Journal of Physical Chemistry C, 2020, 124, 10265-10271.	3.1	9
15	Superparamagnetic MOF@GO Ni and Co based hybrid nanocomposites as efficient water pollutant adsorbents. Science of the Total Environment, 2020, 738, 139213.	8.0	35
16	Silica Removal Using Magnetic Ironâ€“Aluminum Hybrid Nanomaterials: Measurements, Adsorption Mechanisms, and Implications for Silica Scaling in Reverse Osmosis. Environmental Science & Technology, 2019, 53, 13302-13311.	10.0	22
17	Bottom-up biofilm eradication using bacteriophage-loaded magnetic nanocomposites: a computational and experimental study. Environmental Science: Nano, 2019, 6, 3539-3550.	4.3	19
18	Synthesis of high surface area transition metal sponges and their catalytic properties. New Journal of Chemistry, 2019, 43, 10045-10055.	2.8	13

#	Article	IF	Citations
19	Mesoporous Composite Nanomaterials for Dye Removal and Other Applications. , 2019, , 265-293.		17
20	Transition Metal-Modified Exfoliated Zirconium Phosphate as an Electrocatalyst for the Oxygen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 3561-3567.	5.1	21
21	Electrocatalytic Production of Hydrogen Gas by a Cobalt Formamidinate Complex. Journal of the Mexican Chemical Society, 2019, 63, .	0.6	1
22	High dispersions of carbon nanotubes on cotton-cellulose benzoate fibers with enhanced electrochemical generation of reactive oxygen species in water. Journal of Environmental Chemical Engineering, 2018, 6, 1027-1032.	6.7	14
23	Hydrogen gas generation using a metal-free fluorinated porphyrin. Chemical Science, 2018, 9, 4689-4695.	7.4	38
24	Magnetic and electrocatalytic properties of transition metal doped MoS2 nanocrystals. Journal of Applied Physics, 2018, 124, .	2.5	42
25	Emerging opportunities for nanotechnology to enhance water security. Nature Nanotechnology, 2018, 13, 634-641.	31.5	627
26	Efficient electrocatalytic hydrogen gas evolution by a cobaltâ€“porphyrin-based crystalline polymer. Dalton Transactions, 2018, 47, 8801-8806.	3.3	19
27	Introducing Students to Inner Sphere Electron Transfer Concepts through Electrochemistry Studies in Diferrocene Mixed-Valence Systems. Journal of Chemical Education, 2017, 94, 526-529.	2.3	9
28	3D Printing of BaTiO₃/PVDF Composites with Electric In Situ Poling for Pressure Sensor Applications. Macromolecular Materials and Engineering, 2017, 302, 1700229.	3.6	127
29	Electrocatalytic hydrogen gas generation by cobalt molybdenum disulfide (CoMoS2) synthesized using alkyl-containing thiomolybdate precursors. International Journal of Hydrogen Energy, 2017, 42, 20669-20676.	7.1	19
30	[U(bipy)₄]: A Mistaken Case of U⁰?. Chemistry - A European Journal, 2016, 22, 1931-1936.	3.3	25
31	Green synthesis of magnetic MOF@GO and MOF@CNT hybrid nanocomposites with high adsorption capacity towards organic pollutants. Chemical Engineering Journal, 2016, 304, 774-783.	12.7	339
32	Enhanced charge carrier efficiency and solar light-induced photocatalytic activity of TiO2 nanoparticles through doping of silver nanoclusters and Câ€“Nâ€“S nonmetals. Journal of Industrial and Engineering Chemistry, 2016, 35, 132-139.	5.8	36
33	Unprecedented W₂(0) quadruply bonded complex supported by Ï€-donor ligands. Chemical Communications, 2016, 52, 3974-3976.	4.1	4
34	Band gap and Schottky barrier engineered photocatalyst with promising solar light activity for water remediation. RSC Advances, 2016, 6, 15678-15685.	3.6	10
35	Synthesis of cysteine, cobalt and copper-doped TiO 2 nanophotocatalysts with excellent visible-light-induced photocatalytic activity. Materials Science in Semiconductor Processing, 2016, 41, 168-176.	4.0	43
36	In,V-codoped TiO2 nanocomposite prepared via a photochemical reduction technique as a novel high efficiency visible-light-driven nanophotocatalyst. RSC Advances, 2015, 5, 78128-78135.	3.6	10

#	Article	IF	Citations
37	Stabilization of a W26+ bimetallic complex supported by two N,Nâ€²,Nâ€³-triphenylguanidinate ligands. Inorganica Chimica Acta, 2015, 424, 286-292.	2.4	4
38	Manipulating Magnetism: Ru₂⁵⁺ Paddlewheels Devoid of Axial Interactions. Journal of the American Chemical Society, 2014, 136, 9580-9589.	13.7	24
39	Synthesis, characterization, and evaluation of cis-diphenyl pyridineamine platinum(II) complexes as potential anti-breast cancer agents. Journal of Biological Inorganic Chemistry, 2014, 19, 967-979.	2.6	9
40	Pacman and Hangman Metal Tetraazamacrocycles. ChemSusChem, 2013, 6, 1541-1544.	6.8	15
41	Iron in a Trigonal Tris(alkoxide) Ligand Environment. Inorganic Chemistry, 2013, 52, 3159-3169.	4.0	30
42	Dinitrogen binding at vanadium in a tris(alkoxide) ligand environment. Chemical Communications, 2011, 47, 10242.	4.1	38
43	Decarbonylation of ethanol to methane, carbon monoxide and hydrogen by a [PNP]Ir complex. Chemical Communications, 2010, 46, 79-81.	4.1	34
44	Pseudotetrahedral d0, d1, and d2Metalâˆ'Oxo Cores within a Tris(alkoxide) Platform. Inorganic Chemistry, 2010, 49, 10759-10761.	4.0	36
45	Synthesis, Structures, and Properties of 1,2,4,5-Benzenetetrathiolate Linked Group 10 Metal Complexes. Inorganic Chemistry, 2009, 48, 10591-10607.	4.0	42
46	A Convergent Approach to the Synthesis of Multimetallic Dithiolene Complexes. Inorganic Chemistry, 2008, 47, 5570-5572.	4.0	13
47	Inelastic neutron scattering study of a quantum spin trimer. Physical Review B, 2007, 75, .	3.2	7
48	How Small Variations in Crystal Interactions Affect Macroscopic Properties. Journal of the American Chemical Society, 2007, 129, 12666-12667.	13.7	34
49	A Fractional Bond Order of 1/2 in Pd25+âˆ'Formamidinate Species; The Value of Very High-Field EPR Spectra. Journal of the American Chemical Society, 2007, 129, 1393-1401.	13.7	49
50	Facilitating Access to the Most Easily Ionized Molecule:â€‰ an Improved Synthesis of the Key Intermediate, W2(hpp)4Cl2, and Related Compounds. Inorganic Chemistry, 2006, 45, 201-213.	4.0	40
51	Uniquely Strong Electronic Communication between [Mo2] Units Linked by Dioxolene Dianions. Journal of the American Chemical Society, 2006, 128, 3281-3290.	13.7	45
52	Metalâˆ'Metal Bonding in Mixed Valence Ni25+ Complexes and Spectroscopic Evidence for a Ni26+ Species. Inorganic Chemistry, 2006, 45, 4396-4406.	4.0	48
53	Strong Electronic Interaction between Two Dimolybdenum Units Linked by a Tetraazatetracene. Inorganic Chemistry, 2006, 45, 767-778.	4.0	30
54	A Diamagnetic Dititanium(III) Paddlewheel Complex with No Direct Metalâˆ'Metal Bond. Inorganic Chemistry, 2006, 45, 4328-4330.	4.0	27

#	Article	IF	Citations
55	Modeling Spin Interactions in a Cyclic Trimer and a Cuboidal Co4O4Core with Co(II) in Tetrahedral and Octahedral Environments. Journal of the American Chemical Society, 2005, 127, 4895-4902.	13.7	73
56	Strong Electronic Coupling between Mo2n+ Units: The Oxidation Products of [Mo2(DAniF)3]2(Î¼â˜'H)2 and Mo2(DAniF)4. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2005, 631, 2606-2612.	1.2	26
57	Expeditious Access to the Most Easily Ionized Closed-Shell Molecule, W2(hpp)4. Journal of the American Chemical Society, 2005, 127, 10808-10809.	13.7	47
58	Structural and Magnetic Evidence Concerning Spin Crossover in Formamidinate Compounds with Ru25+ Cores. Journal of the American Chemical Society, 2005, 127, 5008-5009.	13.7	51
59	Dicarboxylato-bridged diruthenium units in two different oxidation states: the first step towards the synthesis of Creutzâ€"Taube analogs with dinuclear Ru2n+ species. Inorganic Chemistry Communication, 2004, 7, 9-13.	3.9	46
60	Paramagnetic Precursors for Supramolecular Assemblies:Â Selective Syntheses, Crystal Structures, and Electrochemical and Magnetic Properties of Ru2(O2CMe)4-n(formamidinate)nCl Complexes,n= 1â˜'4. Inorganic Chemistry, 2004, 43, 8290-8300.	4.0	45
61	Reaction Products of W(CO)6with Formamidines; Electronic Structure of a W2(Î¼-CO)2Core with Unsymmetric Bridging Carbonyls. Inorganic Chemistry, 2004, 43, 6954-6964.	4.0	18
62	Paramagnetism at Ambient Temperature, Diamagnetism at Low Temperature in a Ru26+Core:Â Structural Evidence for Zero-Field Splitting. Inorganic Chemistry, 2004, 43, 8373-8378.	4.0	35
63	Strong Electronic Coupling between Dimolybdenum Units Linked by theN,Nâ€˜-Dimethyloxamidate Anion in a Molecule Having a Heteronaphthalene-like Structure. Journal of the American Chemical Society, 2004, 126, 14822-14831.	13.7	46
64	Finite Group Theory for Large Systems. 2. Generating Relations and Irreducible Representations for the Icosahedral Point Group,h. Journal of Chemical Information and Computer Sciences, 2003, 43, 1763-1770.	2.8	4
65	Modifying Electronic Communication in Dimolybdenum Units by Linkage Isomers of Bridged Oxamidate Dianions. Journal of the American Chemical Society, 2003, 125, 13564-13575.	13.7	102