

Ignacio Vargas-Baca

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Competing Effects of Chlorination on the Strength of Te...O Chalcogen Bonds Select the Structure of Mixed Supramolecular Macrocyclic Aggregates of Iso-tellurazole N-oxides. Chemistry - A European Journal, 2021, 27, 10849-10853.	3.3	8
2	Iso-Tellurazolium N-Phenoxides: A Family of Te...O Chalcogen-Bonding Supramolecular Building Blocks. Inorganic Chemistry, 2021, 60, 16726-16733.	4.0	8
3	Bis(2,1,3-benzotelluradiazolidyl)2,1,3-benzotelluradiazole: a pair of radical anions coupled by Te...N chalcogen bonding. Chemical Communications, 2020, 56, 1113-1116.	4.1	18
4	Chalcogen bonding in materials chemistry. Coordination Chemistry Reviews, 2020, 422, 213464.	18.8	77
5	Synthetic and structural investigations of bis(N-alkyl-benzoselenadiazolium) cations. Dalton Transactions, 2019, 48, 12541-12548.	3.3	8
6	Structural diversity of the complexes of monovalent metal d ¹⁰ ions with macrocyclic aggregates of iso-tellurazole N-oxides. New Journal of Chemistry, 2019, 43, 12601-12608.	2.8	8
7	3-D Spiraling Self-Trapped Light Beams in Photochemical Systems. Journal of Physical Chemistry Letters, 2019, 10, 5957-5962.	4.6	1
8	Macrocyclic complexes of Pt(II) and Rh(III) with iso-tellurazole N-oxides. Dalton Transactions, 2019, 48, 4879-4886.	3.3	13
9	8. Reagents that Contain Se-H or Te-H Bonds. , 2019, , 301-314.		0
10	Reagents that Contain Se-H or Te-H Bonds. Physical Sciences Reviews, 2019, 4, .	0.8	0
11	[(dmpe) ₂ MnH(C ₂ H ₄) ₂] as a Source of a Low-Coordinate Ethyl Manganese(I) Species: Reactions with Primary Silanes, H ₂ , and Isonitriles. Organometallics, 2018, 37, 3010-3023.	2.3	8
12	Sigma-hole interactions in the molecular and crystal structures of N-boryl benzo-2,1,3-selenadiazoles. New Journal of Chemistry, 2018, 42, 10555-10562.	2.8	20
13	Building new discrete supramolecular assemblies through the interaction of iso-tellurazole N-oxides with Lewis acids and bases. Faraday Discussions, 2017, 203, 187-199.	3.2	13
14	Synthesis and structural characterisation of the aggregates of benzo-1,2-chalcogenazole 2-oxides. Dalton Transactions, 2017, 46, 6570-6579.	3.3	60
15	The halogen bond in solution: general discussion. Faraday Discussions, 2017, 203, 347-370.	3.2	5
16	Computational approaches and sigma-hole interactions: general discussion. Faraday Discussions, 2017, 203, 131-163.	3.2	17
17	Beyond the halogen bond: general discussion. Faraday Discussions, 2017, 203, 227-244.	3.2	2
18	Nature of Bonding in Donor-Acceptor Interactions Exemplified by Complexes of N-Heterocyclic Carbenes with 1,2,5-telluradiazoles. Chemistry - A European Journal, 2017, 23, 10987-10991.	3.3	20

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19	Reversibly Trapping Visible Laser Light through the Catalytic Photo-oxidation of I ⁺ by Ru(bpy) ₃ ²⁺ . Journal of Physical Chemistry Letters, 2016, 7, 1585-1589.	4.6	3
20	Influence of acidic media on the supramolecular aggregation of iso-tellurazole N-oxides. Canadian Journal of Chemistry, 2016, 94, 453-457.	1.1	18
21	¹²⁵ Te NMR provides evidence of autoassociation of organo-ditellurides in solution. Physical Chemistry Chemical Physics, 2016, 18, 30740-30747.	2.8	16
22	Supramolecular macrocycles reversibly assembled by Te O chalcogen bonding. Nature Communications, 2016, 7, 11299.	12.8	166
23	Synthetic, structural, and computational investigations of N-alkyl benzo-2,1,3-selenadiazolium iodides and their supramolecular aggregates. Dalton Transactions, 2016, 45, 3285-3293.	3.3	22
24	Photophysical tuning of the aggregation-induced emission of a series of para-substituted aryl bis(imino)acenaphthene zinc complexes. Dalton Transactions, 2015, 44, 11984-11996.	3.3	18
25	Aggregation-Induced Emission of Bis(imino)acenaphthene Zinc Complexes: Photophysical Tuning via Methylation of the Flanking Aryl Substituents. Organometallics, 2015, 34, 2422-2428.	2.3	26
26	Imido-pyridine Ti(IV) compounds: synthesis of unusual imido-amido heterobimetallic derivatives. Dalton Transactions, 2015, 44, 11119-11128.	3.3	4
27	Experimental and computational investigations of arsenic(III) and phosphorus(III) complexes of bis(diphenylthiophosphino)l)methanediide. Journal of Organometallic Chemistry, 2014, 761, 93-97.	1.8	2
28	The size of the metal ion controls the structures of the coordination polymers of benzo-2,1,3-selenadiazole. CrystEngComm, 2013, 15, 7434.	2.6	16
29	A planar dianionic ditelluride and a cyclic tritelluride supported by P ₂ N ₂ rings. Dalton Transactions, 2013, 42, 3291-3294.	3.3	27
30	CH-NH Tautomerism in the Products of the Reactions of the Methanide [HC(PPh) ₂ NSiMe ₃] ₂ with Pnictogen and Tellurium Iodides. Organometallics, 2013, 32, 5360-5373.	2.3	10
31	Sterically Directed Functionalization of the Redox-Active Bis(imino)acenaphthene Ligand Class: An Experimental and Theoretical Investigation. Journal of the American Chemical Society, 2013, 135, 13939-13946.	13.7	13
32	The role of the Lewis acid-base properties in the supramolecular association of 1,2,5-chalcogenadiazoles. Canadian Journal of Chemistry, 2013, 91, 338-347.	1.1	35
33	Chalcogen-Nitrogen Secondary Bonding Interactions in the Gas Phase - Spectrometric Detection of Ionized Benzo-2,1,3-telluradiazole Dimers. European Journal of Inorganic Chemistry, 2013, 2013, 2751-2756.	2.0	25
34	Oxygen, sulfur, selenium, tellurium and polonium. Annual Reports on the Progress of Chemistry Section A, 2013, 109, 80.	0.8	2
35	2,2-Diiodoazobenzene. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, o3127-o3127.	0.2	1
36	Tetrakis(imino)pyracene Complexes Exhibiting Multielectron Redox Processes. Journal of the American Chemical Society, 2012, 134, 176-178.	13.7	12

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37	A push-pull azobenzene is mercurated twice at the ring with less electron density. <i>Journal of Organometallic Chemistry</i> , 2012, 716, 11-18.	1.8	1
38	Oxygen, sulfur, selenium, tellurium and polonium. <i>Annual Reports on the Progress of Chemistry Section A</i> , 2012, 108, 113.	0.8	0
39	Experimental and Theoretical Investigations of Tellurium(IV) Methanediides and Their Insertion Products with Sulfur and Iodine. <i>Organometallics</i> , 2012, 31, 627-636.	2.3	12
40	Planar P6E6 (E = Se, S) macrocycles incorporating P2N2 scaffolds. <i>Chemical Communications</i> , 2012, 48, 6346.	4.1	43
41	S,C,S-Pnictogen bonding in pincer complexes of the methanediide [C(Ph ₂ PS) ₂] ₂ . <i>Dalton Transactions</i> , 2011, 40, 8086.	3.3	25
42	Parametrization of a Force Field for Te-N Secondary Bonding Interactions and Its Application in the Design of Supramolecular Structures Based on Heterocyclic Building Blocks. <i>Crystal Growth and Design</i> , 2011, 11, 668-677.	3.0	37
43	A survey of tellurium-centered secondary-bonding supramolecular synthons. <i>Coordination Chemistry Reviews</i> , 2011, 255, 1426-1438.	18.8	170
44	An experimental and computational investigation of the formation and structures of N-hydro and N,N'-dihydro-benzo-2,1,3-chalcogenadiazolium chlorides. <i>Main Group Chemistry</i> , 2010, 9, 117-133.	0.8	15
45	Supramolecular Chromotropism of the Crystalline Phases of 4,5,6,7-Tetrafluorobenzo-2,1,3-telluradiazole. <i>Journal of the American Chemical Society</i> , 2010, 132, 17265-17270.	13.7	69
46	Engineering Second-Order Nonlinear Optical Activity by Means of a Noncentrosymmetric Distortion of the [Te ₂ N] ₂ Supramolecular Synthon. <i>Crystal Growth and Design</i> , 2010, 10, 4959-4964.	3.0	55
47	Structure and formation of the first (O=Te=N) ₄ ring. <i>Dalton Transactions</i> , 2010, 39, 11126.	3.3	32
48	Naphthalene-Mediated Electronic Communication in Tetrakis(imino)pyracene Complexes. <i>Angewandte Chemie</i> , 2009, 121, 8519-8521.	2.0	5
49	Naphthalene-Mediated Electronic Communication in Tetrakis(imino)pyracene Complexes. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 8369-8371.	13.8	15
50	N-Triphenylboryl- and N,N'-bis(triphenylboryl)benzo-2,1,3-telluradiazole. <i>Chemical Communications</i> , 2009, , 4043.	4.1	20
51	Recent developments in the coordination chemistry of bis(imino)acenaphthene (BIAN) ligands with s- and p-block elements. <i>Dalton Transactions</i> , 2009, , 240-253.	3.3	139
52	An investigation of the formation of 1,3,5-heterosubstituted benzene rings by cyclo-condensation of acetyl-substituted organometallic complexes. <i>Journal of Organometallic Chemistry</i> , 2008, 693, 1957-1967.	1.8	10
53	Boron di- and tri-cations. <i>Dalton Transactions</i> , 2008, , 6421.	3.3	46
54	Valence Electronic Structure of Benzo-2,1,3-chalcogenadiazoles Studied by Photoelectron Spectroscopy and Density Functional Theory. <i>Inorganic Chemistry</i> , 2008, 47, 6220-6226.	4.0	35

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55	Noise Analysis of Second-Harmonic Generation in Undoped and MgO-Doped Periodically Poled Lithium Niobate. <i>Advances in OptoElectronics</i> , 2008, 2008, 1-10.	0.6	5
56	Comparison of photorefractive effects in undoped and MgO-doped PPLN. , 2007, , .		0
57	Synthesis, Structure, and Unexpected Magnetic Properties of La ₃ Re ₂ O ₁₀ . <i>Inorganic Chemistry</i> , 2007, 46, 8739-8745.	4.0	10
58	The supramolecular chemistry of 1,2,5-chalcogenadiazoles. <i>Journal of Organometallic Chemistry</i> , 2007, 692, 2654-2657.	1.8	50
59	Noise characteristics of second-harmonic generation in quasi-phase-matched periodically poled lithium niobate. , 2007, , .		0
60	Synthesis of a Heterobimetallic Rhodium-iron Complex Containing an π - π -Interaction between Rhodium and the β -Cipso-Cortho Unit of a Triarylborane. <i>Organometallics</i> , 2006, 25, 5835-5838.	2.3	60
61	The Effect of Steric Hindrance on the Association of Telluradiazoles through π -N Secondary Bonding Interactions. <i>Crystal Growth and Design</i> , 2006, 6, 181-186.	3.0	110
62	The Nature of the Supramolecular Association of 1,2,5-Chalcogenadiazoles. <i>Journal of the American Chemical Society</i> , 2005, 127, 3184-3190.	13.7	252
63	Direct Detection of Dimethylstannylene and Tetramethyldistannene in Solution and the Gas Phase by Laser Flash Photolysis of 1,1-Dimethylstannacyclopent-3-enes. <i>Journal of the American Chemical Society</i> , 2005, 127, 17469-17478.	13.7	31
64	Influence of π -Stacking on the Resonant Enhancement of the Second-Order Nonlinear Optical Response of Dipolar Chromophores. <i>Journal of Physical Chemistry B</i> , 2005, 109, 18378-18384.	2.6	6
65	Non-centrosymmetric Ba ₃ Ti ₃ O ₆ (BO ₃) ₂ . <i>Journal of Solid State Chemistry</i> , 2004, 177, 159-164.	2.9	20
66	Organogermanium Reactive Intermediates. The Direct Detection and Characterization of Transient Germylenes and Digermenes in Solution. <i>Journal of the American Chemical Society</i> , 2004, 126, 16105-16116.	13.7	73
67	N-(tert-Butyl)-S-(4-methylphenyl)thiohydroxylamine. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2003, 59, o1082-o1083.	0.2	1
68	Spectroscopic and Computational Assessment of the Rotational Barrier of a Ferrocenyl-Stabilized Cyclopentadienyl Cation: A Evidence for the First Hydroxyfulvalene Ligand. <i>Organometallics</i> , 2003, 22, 663-669.	2.3	24
69	Structural Diversity of Lithium Sulfenamides: ^7Li NMR Studies in Solution and Crystal Structures of [Li ₂ (μ -2-(CH ₃) ₃ Ca π NS π C ₆ H ₄ CH ₃ -4) ₂ (THF) ₂] and [Li ₂ (μ -1-4-CH ₃ C ₆ H ₄ π NS π C ₆ H ₄ CH ₃ -4) ₂ (THF) ₄]. <i>Inorganic Chemistry</i> , 2003, 42, 3849-3855.	4.0	7
70	Linear and nonlinear optical responses of a dye anchored to gold nanoparticles dispersed in liquid and polymeric matrixes. <i>Canadian Journal of Chemistry</i> , 2002, 80, 1625-1633.	1.1	17
71	Solid-Phase Synthesis of Transition Metal Linked, Branched Oligonucleotides. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 4629-4632.	13.8	58
72	WEAKLY BONDING INTERACTIONS IN ORGANOCHALCOGEN CHEMISTRY. Phosphorus, Sulfur and Silicon and the Related Elements, 2000, 164, 207-227.	1.6	32

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73	Eight- and 16-Membered Cyanuricâ”Sulfanuric Ring Systems:Â C2N4S2â†’ C2N3S Ring Contraction. Inorganic Chemistry, 2000, 39, 1697-1704.	4.0	12
74	Conformational isomers of 1,2,5,6-tetrathiocins and the photoisomerization of a 1,2,5,6-tetrathiocin into a 1,2,3,6-tetrathiocin: X-ray structures of (C₆X₄S₂)₂ (X = F, Cl) and C₆F₄SSSC₆F₄S. Canadian Journal of Chemistry, 1998, 76, 1093-1101.	1.1	21
75	<title>Azo-dye hybrid sol-gel glass composites for optoelectronics</title>. , 1998, , .		2
76	<title>Linear and nonlinear optical response of metal colloid heterostructures by molecular self-assembly on optical chemical benches</title>. , 1998, , .		0
77	Intramolecular redox cyclization upon oxidation of a sulfur(II)-containing diazene: X-ray structures of (Arâ€=â€4-CH3C6H4) and MeSO2N(4-CH3C6H4)CN=NC(C6H4CH3-4)NSO2Me. Canadian Journal of Chemistry, 1997, 75, 1188-1194.	4.1	8
78	Formation and X-ray Structures of Eight- and Sixteen-Membered Rings (ArC)nN2n(SPh)n [n= 2, Ar = 4-XC6H4 (X = Br, CF3); n= 4, Ar = 4-BrC6H4] and the Electronic Structures of (HC)2N4(SH)2 and (HC)2N4(SH)22-. Inorganic Chemistry, 1997, 36, 1669-1675.	4.0	7
79	Experimental and Theoretical Studies on 1,4,5,7-Dithiadiazepinyl Radicals:â€% Preparation and X-ray Structure of 5-(Trimethylsilyl)tetrachlorobenzo-1,4,5,7-dithiadiazepine. Inorganic Chemistry, 1997, 36, 4772-4777.	4.0	17
80	Experimental and Theoretical Investigations of the Formation of the Diazene PhSNC(H)NNC(H)NSPh from HCN2(SPh)3 by a Thiyl-Radical-Catalyzed Mechanism:Â Identification of the HC(NSPh)2â€Radical and X-ray Structures of HCN2(SPh)3 and PhSNC(H)NNC(H)NSPh. Inorganic Chemistry, 1996, 35, 3839-3847.	4.0	14
81	Intramolecular Chalcogenâ”Nitrogen Interactions:Â Molecular and Electronic Structures of Geometrical Isomers of the Diazenes RSNC(Râ€)NNC(Râ€)NSR. Inorganic Chemistry, 1996, 35, 5836-5842.	4.0	18
82	Photochemical isomerization of a C2N4S2 ring into a diazene. Chemical Communications, 1996, , 949.	4.1	4
83	Molecular and electronic structures of the purple chromophore RC(NH2)(NSePh) (Râ€=â€H, 4-CH3C6H4). Canadian Journal of Chemistry, 1995, 73, 1380-1385.	1.1	11
84	Preparation and Structure of a Sixteen-Membered Ring with Alternating CN and SN Groups. Phosphorus, Sulfur and Silicon and the Related Elements, 1994, 93, 455-456.	1.6	2
85	beta-Cyclodextrin Inclusion Complexes with Iodine: An Advanced and Inexpensive Undergraduate Chemistry Experiment. Journal of Chemical Education, 1994, 71, 708.	2.3	19
86	Experimental and Theoretical Investigations of 1,4,5,7 Dithiadiazepines. Phosphorus, Sulfur and Silicon and the Related Elements, 1994, 93, 445-446.	1.6	4